VOGEL GERMANY

Precision Measuring Tools and Test Instruments

MANUFACTURERS · since 1949 · OF MEASURING TOOLS

certified QM-System VOGEL GERMANY DIN EN ISO 9001



EDITION 2016/2017

JOIN US FOR SUCCESS

Logos and registered trademarks
of Vogel Germany:

VOGEL GERMANY

Vmade

VBLUE-LINE

VBLACK-LINE

VSILVER-LINE

VDIGI PLUS-LINE

VGOLD-LINE

VRED-LINE

VSTANDARD-LINE

VMASTER-LINE

VSUPER-LINE

VONLINE

VOCOM-S

1 2 3 JOIN US FOR SUCCESS 8 9 10

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VOGEL®
GERMANY

Precision Measuring Tools and Test Instruments

We like to express our gratitude to our partners in germany and in over 75 countries worldwide for the confidence in the quality of Vogel Germany Precision Measuring Tools and Test Instruments.

1 2 3 **JOIN US FOR SUCCESS** 8 9 10

Bernhard Vogel — Concept and direction

Bernhard Vogel, Alexander Hülse — Layout

Welcome to the world of VOGEL GERMANY

Dear customers and business partners,

We are very pleased to hand out new issue of the Vogel Germany main catalogue “EDITION 2016/2017”.
Please see more than 300 pages including approximately 11.000 products divided into 11 product groups.
We are offering as you know precision measuring tools and test instruments state-of-the-art.
Distributors, traders or industry: You will find the tools you need.

Your requests and ideas are important for us and a daily as well as a long term challenge.
Vogel Germany, Manufacturers of Precision Measuring Tools, based in Kevelaer since 1949,
has a long history and offers a wide range of highly interesting product innovations to its market partners
in more than 75 countries. Without the successful completion of our 11-point quality screening,
we accept no supplier; neither in production nor in purchase of products.
So we ensure high quality on all levels 365 days a year.

In this year again we offer a lot of new products and product developments.
We are utterly convinced Vogel Germany meets your needs.

Of course you have the opportunity in downloading all printed sales tools. Please have a look
at our website. Make your choice. – In addition to that please ask for your dealer access code
and learn more about what your benefits in cooperating with Vogel Germany are. – Learn more
about our outstanding service! – Please ask for scheduling your special product learning lessons!

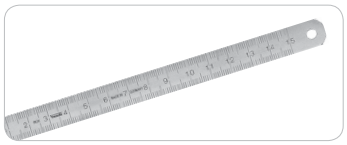
The Vmade®-team accepts thanks for your trust in our products, your further cooperation
and is very happy providing you with words and deeds for the future.

We invite you with our slogan:

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Vogel Germany
-Management-

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Quality management...

Our certified QM-System is constantly controlled and improved by internal and external Audits of **TÜV Rheinland**.



VBLUE-LINE®

Quality measuring tools, manufactured according to DIN / ISO or comparable international quality standards.

VSILVER-LINE®



High precision measuring tools, manufactured to the highest standard specifications DIN / ISO etc., providing the best available quality by carefully controlled finish and accuracy. We provide these products marked with an identification-number together with our test certificate.

VDIGI PLUS-LINE®



Electronical high precision measuring tool program with LCD display and possible data output for electronical data processing of measuring and quality control. Manufactured to the highest standard specifications DIN / ISO etc., providing the best available quality by carefully controlled finish and accuracy. We provide these products marked with an identification-number together with our test certificate.

Calibration certificates for our products on request, please!

TC

General Workshop Test Certificate

Scope: Confirmation of the accuracy control and the final inspection of mechanical and electronic parts, confirmation of traceability to national normal, indicating an identification number.

Validity: In general for VSILVER-LINE® and VDIGI PLUS-LINE® series.

Price: free of charge

CC

Workshop Calibration Certificate in german or english language, acc. to DIN/ISO etc.

Scope: Calibration certificate indicating the deviation and limits of normal and with the test curve(s) for the measured according to the criteria of standards, confirmation of their performance. Confirmation of traceability to national normal, indicating an identification number.

Validity: Individually for each single instrument/device. Period of validity in accordance with your quality management manual (usually 12 month)

Price: See our price list, prices valid only for initial delivery from the factory, price for re-calibration on request, please.

DAkkS

Calibration test report by an accredited testing laboratory

Scope: As mentioned above, calibration test report as mentioned above, but accredited by testing laboratory.

Validity: Individually for each single instrumen/device. Period of validity in accordance with your quality management manual (usually 12 month)

Price: See our price list, prices valid only for initial delivery from the factory, price for re-calibration on request, please.

Explanations

In our catalogue you will find several pictograms beside the text description.
They should be helpful for a quick and easier explanation of the articles and their attributes.

Protection (IP-Code) acc. to DIN 40050 / IEC 60529 etc.

IP 40	Protected against solid particles Ø > 1 mm
IP 41	Protected against solid particles Ø > 1 mm and drop water resistant
IP 44	Splash water resistant
IP 51	Drop water resistant
IP 52	Drop water resistant
IP 53	Dust and spray water resistant
IP 54	Dust and spray water resistant
IP 62	Dust and drop water proof
IP 63	Dust and spray water proof
IP 64	Dust and splash water proof
IP 65	Dust and jet water proof
IP 67	Water and oil tight (at times)
IP 68	Water and oil tight (permanent)
Ex	Article is explosion proof
UL	Article with UL-certificate (american safety norm)

Manufacturing process

	Article with laser engraved scale / graduation
	Article with etched scale / graduation
	Article with printed scale / graduation (Pad print)
	Hardened
	Carbide measuring faces
INOX	Stainless steel

Icons for data process

RS232 C	RS232 data output by data cable
OPTO RS232 C	Opto RS232 data output
PROXIMITY	Proximity data output, inductive, contactless
	Data output by USB and data cable
VOCOM-s Duo data output	Data output by USB and Mini USB (compatible with Mitutoyo Digimatic)
	wireless communication (WiFi / WLAN) possible
Bluetooth	wireless communication via Bluetooth possible
	Software on CD-Rom

Several Icons

ART NO	Article-Number
	Reading / Resolution
KG	Weight in kg
	Cross section of the article
max.	Max. total accuracy(±)
	Repeatability (±)
	Individual measuring range
mm	Article dimension
UNIT	Measuring- and weighing-unit selectable or swichtable
	Corresponding battery included
	Corresponding battery included
LR41 1,5V	Corresponding cell battery included
LR44 1,5V	Corresponding cell battery included
CR1632 Lithium 3V	Corresponding lithium battery included
CR2032 Lithium 3V	Corresponding lithium battery included
	Accu
~ 230V	Power supply
	Laser protection class
	Magnet power
	Induction
	Laser wavelength
	Shock proof
	Stand out
mm/inch	Reading in mm and inch
cm/inch	Reading in cm and inch
ABS/INC	Article with ABS/INC measuring system
ABSOLUTE	Article with ABSOLUTE measuring function
WARRANTY	Warranty 1, 2 or 3 years

ATTENTION
We charge transport and packing costs
for articles marked with *!

About the Certification:
We are also able to quote all DIN measuring tools with a certificate to VDI/VDE/DGQ 2618. Measuring tools manufactured at works standard will be certificated according to this norm. The calibrations will be done by an external calibration laboratory. The delivery time for external calibration will take approx one week. Calibration orders can´t be cancelled and calibrated goods are excluded from sale of return. Whether you expect a calibration by laboratory of your choice, we are unable to guarantee for passing. Compensation of refund of costs are also impossible.

Norms, accuracy-classes, regulations

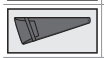
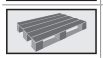
EC I	Article fulfils the respective EC Class standard
EC II	Article fulfils the respective EC Class standard
E1	Article fulfils the respective verification standard
CC	Workshop calibration certificate, inclusive
TC	Article with test certificate, marked with Ident.-No.
CE	Article with CE classification
MID CODE	Directive of the European Parliament and of the council on measuring instruments
T2	Article with strengths tolerances acc. to DIN 2275
T3	Article with strengths tolerances acc. to DIN 2275
ASTM	Article fulfils the respective American standard
BS	Article fulfils the respective British standard
JIS K	Article fulfils the respective Japanese standard
DIN	Article fulfills the respective DIN standard
DIN EN	Article fulfils the respective DIN EN standard
ISO	Article fulfils the respective ISO standard
DIN ISO	Article fulfils the respective DIN ISO standard
NORM	Article manufactured acc. to tolerances of workshop standard
TÜV GS	Article with seal: “TÜV/Geprüfte Sicherheit (GS)“
VdTÜV	Article with seal: “TÜV“
IEC / EN	Article fulfils the respective norm standard

Workshop or „DAkkS“-Calibration
(German Calibration Service)
Calibrated instruments available for extra charge.
Please send us your specific inquiry.

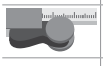
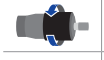
Quality categories

★★★★★	Product for highest demands
★★★★☆	Industry and craft
★★★☆☆	Craft
★★☆☆☆	DIY and training

Art of package for each article

	Article will be packed in a carton box
	Article will be packed in a sturdy box
	Article will be packed in a leatherette pouch
	Article will be packed in a PVC pouch
	Article will be packed in a sleeve
	Article will be sealed in a foil
	Article will be packed in a DIY plastic pouch with hanging card
	Article will be packed in a plastic film pouch with hanging card
	Article comes with wall hanging card
	Article will be packed in a blister packing
	Article will be packed a clear plastic box
	Carry bag, for outdoor use
	Article delivered on a pallet

Product specifications

	Caliper jaw length
	Measuring internal dimension
	Caliper jaws (cross shape)
	Caliper jaws (knife shape)
	Depth Gauge
	Thumbroll
	Fine adjustment
	Thread pitch
	Measuring inside
	Measuring outside
	Pointer rotation
	Setting gauge


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Advantages of our Stainless Steel Rules

We use very high quality German steel from steel plants

- steel code 1.4310
- due to the high chromium content has this steel best stainless steel attributes

Our stainless steel rules are permitted in food industry and medical technology

- because we only use high quality steel (1.4310)
- because we have a special process for scaling / marking (etching technology)

Our etching technology does not require aggressive acids and no toxic paints.

Our environmental friendly etching technology is developed in 1993 by our own engineers.
For this reason we do have the permission to supply our stainless steel rules to the food industry and medical technology.
Other steel rule standards are not approved for these field in Europe.

Many manufacturers etch the scales and steel rules with aggressive acid. Afterwards the graduation is colored with toxic paint (mainly in black and red). But the color may be dissolved slowly in liquids.
That means these steel rules are not permitted in the tank construction and boiler industry: not for the drinks-, food industry and not for medical technology at all.

Unique in the world:
Lengths from 4 -16 meter in one piece, with high repeatability, acc. to workshop standard

- due to our unique production process we can provide you with extra ordinary lengths, with a high grade of repeatability

Production of special-scales

- we offer interesting special scales for e.g. mechanical engineering, shipbuilding, container, tank- and boiler construction
- scales as desired, e.g. reading from bottom to top or from top to bottom (see page 24)
- scales according to your specifications and drawings

Accuracy of our steel rules and scales

- we manufacture acc. DIN 2004/22 class I and II, or acc. to workshop grade
- lengths from 300 - 4.000 mm acc. DIN 2004/22/ECII with MID available

Any questions?
We are pleased to advise!

Calibration Certificates on request

tolerances according to EC Class I

total length graduation in ± mm	500	1000	1500	2000	3000	4000
permitted tolerance in ± mm	0.15	0.20	0.25	0.30	0.40	0.50

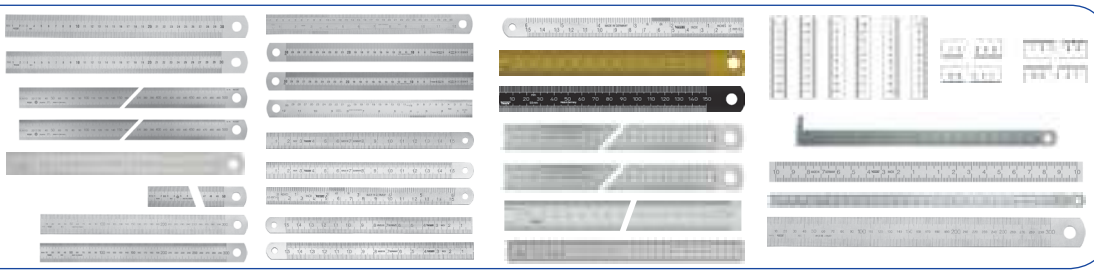
tolerances according to EC Class II

total length graduation in ± mm	500	1000	1500	2000	3000	4000
permitted tolerance in ± mm	0.40	0.50	0.60	0.70	0.90	1.10

tolerances according to British Standard (BS 4372:1968)

total length graduation in ± mm	150	300	500	1000
permitted tolerance in ± mm	0.10	0.10	0.20	0.25

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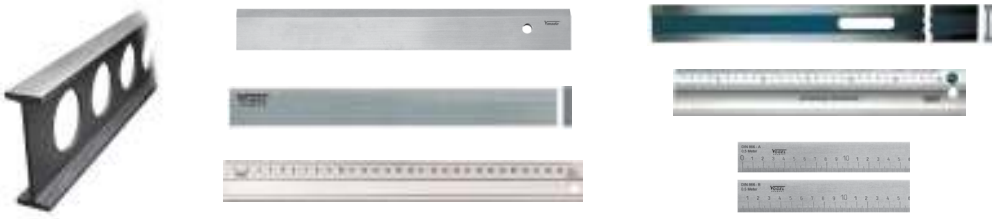
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BLUE-LINE Stainless Steel Rules

acc. to DIN 2004/22/ECII

- **reading from left to right**

- flexible version, small section
- stainless spring steel
- non glare, matt surface
- etched graduation for a clear reading

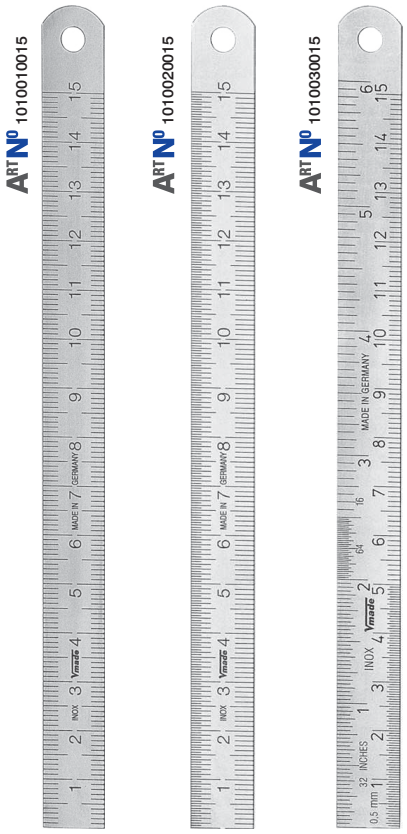
type A= mm / mm top and bottom 1/1 mm graduation

type B= ½ mm / mm top ½ mm and bottom 1/1 mm graduation

type C= inch / mm top 1/64 ; 1/32 and 1/16 inch graduation, bottom ½ mm and 1/1 mm

Our steel rules from 500 mm up to 4000 mm are marked with the EC Code.
These steel rules conform to EC Class II and are qualified as reference pieces.
Therefore please order our calibration certificate together with the rule.

type A type B type C



INOX | EC II | DIN | WARRANTY 2 YEARS

ART Nº type A	ART Nº type B	ART Nº type C	mm		KG	ART Nº CC
1010010010	1010020010	1010030010	100	13 x 0.5	0.006	1094001
1010010015	1010020015	1010030015	150	13 x 0.5	0.008	1094001
1010010020	1010020020	1010030020	200	13 x 0.5	0.010	1094001
1010010025	1010020025	1010030025	250	13 x 0.5	0.012	1094001
1010010030	1010020030	1010030030	300	13 x 0.5	0.015	1094001
1012010015	1012020015	1012030015	150	18 x 0.5	0.013	1094001
1012010030	1012020030	1012030030	300	18 x 0.5	0.023	1094001
1012010040	1012020040	1012030040	400	18 x 0.5	0.028	1094005
1012010050	1012020050	1012030050	500	18 x 0.5	0.034	1094005
1012010100	1012020100	1012030100	1000	18 x 0.5	0.070	1094010
1012010150	1012020150	1012030150	1500	18 x 0.5	0.080	1094015
1012010200	1012020200	1012030200	2000	18 x 0.5	0.115	1094020
1012010250	1012020250	1012030250	2500	18 x 0.5	0.140	1094025
1012010300	1012020300	1012030300	3000	18 x 0.5	0.180	1094030
1012010350	1012020350	1012030350	3500	18 x 0.5	0.200	1094035
1012010400	1012020400	1012030400	4000	18 x 0.5	0.225	1094040
1012010500	1012020500	-	5000	18 x 0.5	0.275	1094050
1012010600	1012020600	-	6000	18 x 0.5	0.355	1094060
1016010050	1016020050	1016030050	500	20 x 1.0	0.080	1094005
1016010100	1016020100	1016030100	1000	20 x 1.0	0.150	1094010
1016010150	1016020150	1016030150	1500	20 x 1.0	0.230	1094015
1016010200	1016020200	1016030200	2000	20 x 1.0	0.280	1094020
1016010250	1016020250	1016030250	2500	20 x 1.0	0.370	1094025
1016010300	1016020300	1016030300	3000	20 x 1.0	0.450	1094030
1016010350	1016020350	1016030350	3500	20 x 1.0	0.530	1094035
1016010400	1016020400	1016030400	4000	20 x 1.0	0.610	1094040
1016010500	1016020500	-	5000	20 x 1.0	0.730	1094050
1016010600	1016020600	-	6000	20 x 1.0	0.890	1094060

BLUE-LINE® Stainless Steel Rules

acc. to DIN 2004/22/ECII

- **reading from right to left**

- flexible version, cross section
- stainless spring steel
- non glare, matt surface
- etched graduation for a clear reading

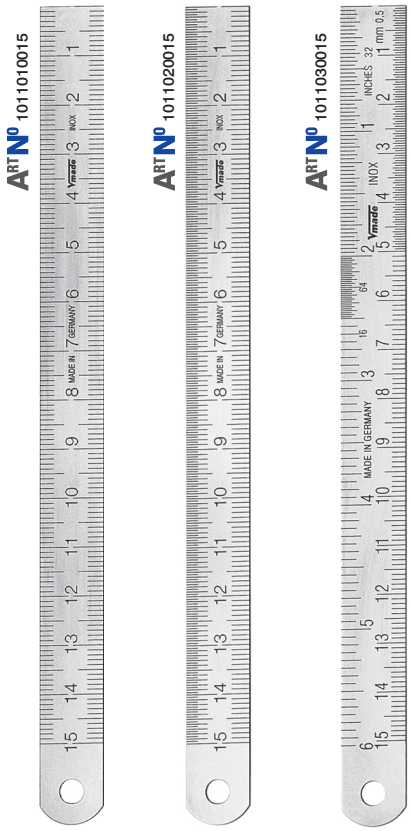
type A= mm / mm top and bottom 1/1 mm graduation

type B= ½ mm / mm top ½ mm and bottom 1/1 mm graduation

type C= inch / mm top 1/64 ; 1/32 and 1/16 inch graduation, bottom ½ mm and 1/1 mm

Our steel rules from 500 mm up to 4000 mm are marked with the EC Code.
These steel rules conform to EC Class II and are qualified as reference pieces.
Therefore please order our calibration certificate together with the rule.

type A type B type C



INOX | EC II | DIN | WARRANTY 2 YEARS

ART N° type A	ART N° type B	ART N° type C	mm		KG	ART N° CC
1011010010	1011020010	1011030010	100	13 x 0.5	0.006	1094001
1011010015	1011020015	1011030015	150	13 x 0.5	0.008	1094001
1011010020	1011020020	1011030020	200	13 x 0.5	0.010	1094001
1011010025	1011020025	1011030025	250	13 x 0.5	0.012	1094001
1011010030	1011020030	1011030030	300	13 x 0.5	0.015	1094001
1013010015	1013020015	1013030015	150	18 x 0.5	0.013	1094001
1013010030	1013020030	1013030030	300	18 x 0.5	0.023	1094001
1013010040	1013020040	1013030040	400	18 x 0.5	0.028	1094005
1013010050	1013020050	1013030050	500	18 x 0.5	0.034	1094005
1013010100	1013020100	1013030100	1000	18 x 0.5	0.070	1094010
1013010150	1013020150	1013030150	1500	18 x 0.5	0.080	1094015
1013010200	1013020200	1013030200	2000	18 x 0.5	0.115	1094020
1013010250	1013020250	1013030250	2500	18 x 0.5	0.140	1094025
1013010300	1013020300	1013030300	3000	18 x 0.5	0.180	1094030
1013010350	1013020350	1013030350	3500	18 x 0.5	0.200	1094035
1013010400	1013020400	1013030400	4000	18 x 0.5	0.225	1094040
1013010500	1013020500	-	5000	18 x 0.5	0.275	1094050
1013010600	1013020600	-	6000	18 x 0.5	0.355	1094060
1017010050	1017020050	1017030050	500	20 x 1.0	0.080	1094005
1017010100	1017020100	1017030100	1000	20 x 1.0	0.150	1094010
1017010150	1017020150	1017030150	1500	20 x 1.0	0.230	1094015
1017010200	1017020200	1017030200	2000	20 x 1.0	0.280	1094020
1017010250	1017020250	1017030250	2500	20 x 1.0	0.370	1094025
1017010300	1017020300	1017030300	3000	20 x 1.0	0.450	1094030
1017010350	1017020350	1017030350	3500	20 x 1.0	0.530	1094035
1017010400	1017020400	1017030400	4000	20 x 1.0	0.610	1094040
1017010500	1017020500	-	5000	20 x 1.0	0.730	1094050
1017010600	1017020600	-	6000	20 x 1.0	0.890	1094060

BLUE-LINE Stainless Steel Rules

acc. to DIN 2004/22/ECII

- **reading from left to right**

- semi rigid version, with wide cross section
- stainless spring steel
- non glare, matt surface
- etched graduation for a clear reading
- up to 2000 mm in a vinyl bag

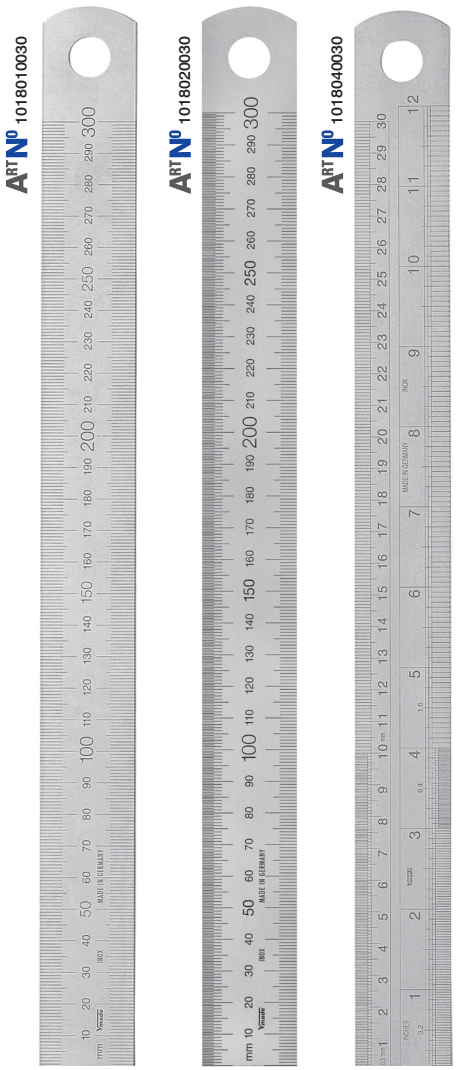
type A= mm / mm top and bottom 1/1 mm graduation

type B= ½ mm / mm top ½ mm and bottom 1/1 mm graduation

type D= inch / mm top 1/64 ; 1/32 and 1/16 inch graduation, bottom ½ mm and 1/1 mm

Our steel rules from 500 mm up to 4000 mm are marked with the EC Code.
These steel rules conform to EC Class II and are qualified as reference pieces.
Therefore please order our calibration certificate together with the rule.

type A type B type D



INOX | EC II | DIN | WARRANTY 2 YEARS

ART Nº type A	ART Nº type B	ART Nº type D	mm		KG	ART Nº CC
1018010030	1018020030	1018040030	300	30 x 1.0	0.070	1094001
1018010050	1018020050	1018040050	500	30 x 1.0	0.115	1094005
1018010060	1018020060	1018040060	600	30 x 1.0	0.140	1094010
1018010100	1018020100	1018040100	1000	30 x 1.0	0.245	1094010
1018010150	1018020150	1018040150	1500	30 x 1.0	0.360	1094015
1018010200	1018020200	1018040200	2000	30 x 1.0	0.480	1094020
1018010300	1018020300	1018040300	3000	30 x 1.0	0.710	1094030
1018010400	1018020400	1018040400	4000	30 x 1.0	0.950	1094040
1018010500	1018020500	-	5000	30 x 1.0	1.180	1094050
1018010600	1018020600	-	6000	30 x 1.0	1.410	1094060
1018010700	1018020700	-	7000	30 x 1.0	1.650	1094070
1018010800	1018020800	-	8000	30 x 1.0	1.890	1094080
1018010900	1018020900	-	9000	30 x 1.0	2.115	1094090
1018011000	1018021000	-	10000	30 x 1.0	2.350	1094100
1018011100	1018021100	-	11000	30 x 1.0	2.585	1094110
1018011200	1018021200	-	12000	30 x 1.0	2.820	1094120
1024010050	1024020050	1024040050	500	40 x 2.0	0.340	1094005
1024010100	1024020100	1024040100	1000	40 x 2.0	0.650	1094010
1024010150*	1024020150*	1024040150*	1500	40 x 2.0	0.950	1094015
1024010200*	1024020200*	1024040200*	2000	40 x 2.0	1.250	1094020

BLUE-LINE® Stainless Steel Rules

acc. to DIN 2004/22/ECII

- **reading from right to left**

- semi rigid version, with wide cross section
- stainless spring steel
- non glare, matt surface
- etched graduation for a clear reading
- up to 2000 mm in a vinyl bag

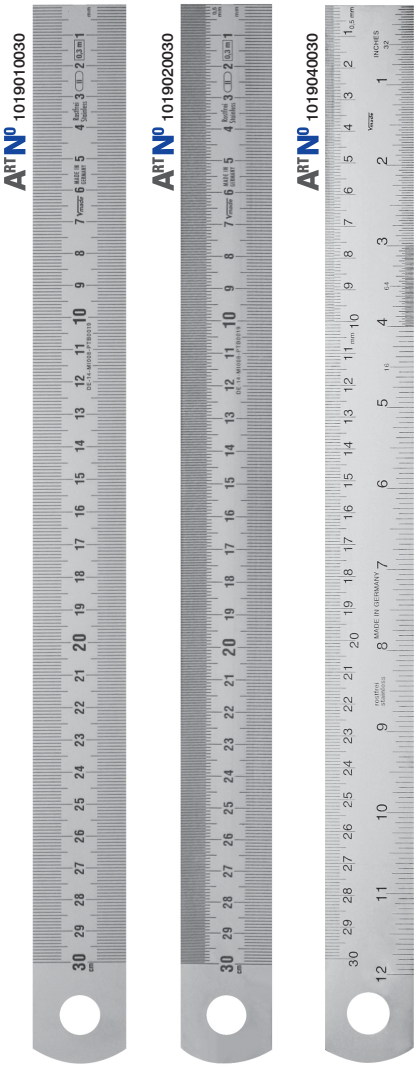
type A= mm / mm top and bottom 1/1 mm graduation

type B= ½ mm / mm top ½ mm and bottom 1/1 mm graduation

type D= inch / mm top 1/64 ; 1/32 and 1/16 inch graduation, bottom ½ mm and 1/1 mm

Our steel rules from 500 mm up to 4000 mm are marked with the EC Code.
These steel rules conform to EC Class II and are qualified as reference pieces.
Therefore please order our calibration certificate together with the rule.

type A type B type D



INOX | EC II | DIN | WARRANTY 2 YEARS

ART N° type A	ART N° type B	ART N° type D	mm		KG	ART N° CC
1019010030	1019020030	1019040030	300	30 x 1.0	0.070	1094001
1019010050	1019020050	1019040050	500	30 x 1.0	0.115	1094005
1019010060	1019020060	1019040060	600	30 x 1.0	0.140	1094010
1019010100	1019020100	1019040100	1000	30 x 1.0	0.245	1094010
1019010150	1019020150	1019040150	1500	30 x 1.0	0.360	1094015
1019010200	1019020200	1019040200	2000	30 x 1.0	0.480	1094020
1019010300	1019020300	1019040300	3000	30 x 1.0	0.710	1094030
1019010400	1019020400	1019040400	4000	30 x 1.0	0.950	1094040
1019010500	1019020500	-	5000	30 x 1.0	1.180	1094050
1019010600	1019020600	-	6000	30 x 1.0	1.410	1094060
1019010700	1019020700	-	7000	30 x 1.0	1.650	1094070
1019010800	1019020800	-	8000	30 x 1.0	1.890	1094080
1019010900	1019020900	-	9000	30 x 1.0	2.115	1094090
1019011000	1019021000	-	10000	30 x 1.0	2.350	1094100
1019011100	1019021100	-	11000	30 x 1.0	2.585	1094110
1019011200	1019021200	-	12000	30 x 1.0	2.820	1094120
1025010050	1025020050	1025040050	500	40 x 2.0	0.340	1094005
1025010100	1025020100	1025040100	1000	40 x 2.0	0.650	1094010
1025010150*	1025020150*	1025040150*	1500	40 x 2.0	0.950	1094015
1025010200*	1025020200*	1025040200*	2000	40 x 2.0	1.250	1094020

BLACK-LINE Stainless Steel Rules, matt chromed

acc. to DIN 2004/22/ECII

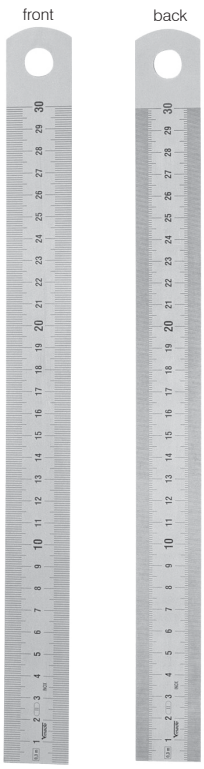
- **graduations on front and back**

- graduation deeply etched and black chromed
- matt chromed, non glare surface
- stainless spring steel

front top and bottom 1/1 mm graduation

back top ½ mm and bottom ½ mm graduation

ART NO 1001040030



INOX | EC II | DIN | WARRANTY 3 YEARS

ART NO	mm		KG	ART NO CC
1001040015	150	13x0.5	0.008	1094001
1001040030	300	13x0.5	0.015	1094001
1001240050	500	18x0.5	0.034	1094005
1001240100	1000	18x0.5	0.070	1094010
1001260030	300	30x1.0	0.070	1094001
1001260050	500	30x1.0	0.115	1094005
1001260100	1000	30x1.0	0.245	1094010

RED-LINE Stainless Steel Rules, with laser engraving

acc. to DIN 2004/22/ECII

- **reading from left to right or right to left**

- precise, deep graduation with laser engraved
- non glare, matt surface
- stainless spring steel
- with identification-no.

ART NO 1018060030



Our steel rules up to 2000 mm conform to EC Class I and are qualified as reference pieces.
Therefore please order our calibration certificate together with the rule.
Because of the deep graduation, these rules are suitable especially
where a high stress is required to scale.

INOX | EC I | DIN | TC | WARRANTY 3 YEARS

ART NO	mm		KG	ART NO CC
graduation in mm/mm from left to right				
1010060015	150	13 x 0.5	0.008	1094001
1010060030	300	13 x 0.5	0.015	1094001
1012060050	500	20 x 0.5	0.038	1094005
1012060100	1000	20 x 0.5	0.082	1094010
1018060030	300	30 x 1.0	0.070	1094001
1018060050	500	30 x 1.0	0.115	1094005
1018060100	1000	30 x 1.0	0.245	1094010
1018060200	2000	30 x 1.0	0.480	1094020
graduation in mm/mm from right to left				
1011060015	150	13 x 0.5	0.008	1094001
1011060030	300	13 x 0.5	0.015	1094001
1013060050	500	20 x 0.5	0.038	1094005
1013060100	1000	20 x 0.5	0.082	1094010
1019060030	300	30 x 1.0	0.070	1094001
1019060050	500	30 x 1.0	0.115	1094005
1019060100	1000	30 x 1.0	0.245	1094010
1019060200	2000	30 x 1.0	0.480	1094020

MASTER-LINE Stainless Steel Rules, with laser engraving

acc. to DIN 2004/22/ECII

- reading from left to right
- semi rigid version, with wide cross section
- stainless spring steel, with non glare, matt surface
- precise, deep graduation with laser engraved
- with identifications-no. and calibration certificate

type A= mm / mm top and bottom 1/1 mm graduation

type B= ½ mm / mm top ½ mm and bottom 1/1 mm graduation

type A



type B



Our steel rules from 500 mm up to 4000 mm are marked with the EC Code. These steel rules conform to EC Class II and are qualified as reference piece. Therefore please order our calibration certificate together with the rule. Because of the deep graduation, these rules are suitable especially where a high stress is required to scale.

INOX | EC II | CC | WARRANTY 3 YEARS

ART Nº type A	ART Nº type B	mm		KG	CC
1001810050	**1001820050**	500	30 x 2.0	0.220	inclusive
1001810100	**1001820100**	1000	30 x 2.0	0.490	inclusive
1001810150*	**1001820150***	1500	30 x 2.0	0.715	inclusive
1001810200*	**1001820200***	2000	30 x 2.0	0.950	inclusive
1002410100	**1002420100**	1000	40 x 2.0	0.650	inclusive
1002410200*	**1002420200***	2000	40 x 2.0	1.250	inclusive

tolerances according to EC II						
total length in mm	500	1000	1500	2000	2500	3000
permitted tolerances in mm	0.40	0.50	0.60	0.70	0.80	0.90

RED-LINE Stainless Steel Rules, with laser engraving

acc. BS

ART Nº 1026440050



- reading from left to right
- metric graduations conform to the tolerance requirements of British Standard (BS 4372:1968)
- stainless spring steel, with non glare, matt surface
- precise, deep graduation with laser engraved
- with identifications-no.

INOX | BS | TC | WARRANTY 3 YEARS

ART Nº	mm		KG	ART Nº CC
1026440050	500	30 x 2.0	0.220	1094205
1026440100	1000	30 x 2.0	0.490	1094210

MASTER-LINE Stainless Steel Rules, with etched scale

- **Tolerance EC II, conform to MID-Code, CE**

- precise, etched scale, with clear reading
- stainless steel, non-glare, matt surface
- semi-rigid, with wide cross-section

Option
- Workshop calibration certificate and Ident.-No. with surcharge

These Steel Rules are manufactured acc. to the MID and are qualified as reference or master pieces. Tolerance Class EC II.

ART NO 1018110050



ART NO 1019110050



type A = **mm / mm** top and bottom with 1/1 mm graduation

type B = **½ mm / mm** top with 1/2 mm and bottom with 1/1 mm graduation

INOX | EC II | MID CODE | CE | WARRANTY 2 YEARS

ART NO type A	ART NO type B	ART NO type A	ART NO type B	mm		KG	ART NO CC
graduation left to right		graduation right to left					
1018110050	1018120050	1019110050	1019120050	500	30 x 1.0	0.115	1094305
1018110100	1018120100	1019110100	1019120100	1000	30 x 1.0	0.245	1094310
1018110150	1018120150	1019110150	1019120150	1500	30 x 1.0	0.360	1094315
1018110200	1018120200	1019110200	1019120200	2000	30 x 1.0	0.480	1094320
1018110300	1018120300	1019110300	1019120300	3000	30 x 1.0	0.710	1094330
1018110400	1018120400	1019110400	1019120400	4000	30 x 1.0	0.950	1094340
1024110050	1024120050	1025110050	1025120050	500	40 x 2.0	0.340	1094305
1024110100	1024120100	1025110100	1025120100	1000	40 x 2.0	0.650	1094310
1024110200*	1024120200*	1025110200*	1025120200*	2000	40 x 2.0	1.250	1094320

MASTER-LINE Stainless Steel Rules, with laser engraved scale

- **Tolerance EC II, conform to MID-Code, CE**

- precise and deep, laser engraved scale, with clear reading
- stainless steel, non-glare, matt surface
- semi-rigid, with wide cross-section

Option
- Workshop calibration certificate and Ident.-No. with surcharge

These Steel Rules are manufactured acc. to the MID and are qualified as reference or master pieces. Tolerance Class EC II.

ART NO 1008110050



ART NO 1009110050



type A = **mm / mm** top and bottom with 1/1 mm graduation

type B = **½ mm / mm** top with 1/2 mm and bottom with 1/1 mm graduation

INOX | EC II | MID CODE | CE | WARRANTY 3 YEARS

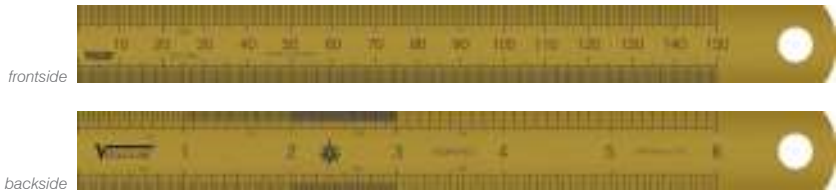
ART NO type A	ART NO type B	ART NO type A	ART NO type B	mm		KG	ART NO CC
graduation left to right		graduation right to left					
1008110050	1008120050	1009110050	1009120050	500	30 x 1.0	0.115	1094305
1008110100	1008120100	1009110100	1009120100	1000	30 x 1.0	0.245	1094310
1008110150	1008120150	1009110150	1009120150	1500	30 x 1.0	0.360	1094315
1008110200	1008120200	1009110200	1009120200	2000	30 x 1.0	0.480	1094320
1004110050	1004120050	1005110050	1005120050	500	40 x 2.0	0.340	1094305
1004110100	1004120100	1005110100	1005120100	1000	40 x 2.0	0.650	1094310
1004110200*	1004120200*	1005110200*	1005120200*	2000	40 x 2.0	1.250	1094320

VGOLD-LINE® Stainless Steel Rules, gold plated

Tolerance acc. to EC II (2004/22/EC)

- **graduation on front- and rearside**
- **reading from left to right**

- precise, deep laser engraved scale
- non-glare, matt surface, with clear reading
- sea water resistant, stainless steel
- with gold plated surface, ~24 Carat



frontside 1/1 mm and 1/2 mm

backside 1/10; 1/16; 1/20; 1/32; 1/64; 1/50; 1/100 inch

EC II | BS | TC | WARRANTY 3 YEARS

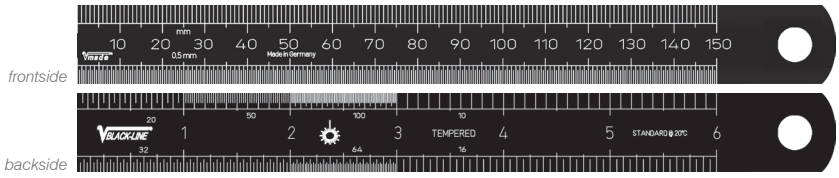
ART NO	mm / inch		KG	ART NO CC
1026432015	150 / 6	18 x 0.5	0.013	1094300
1026432030	300 / 12	30 x 1.0	0.070	1094301

VBLACK-LINE® Stainless Steel Rules, black anodized

Tolerance acc. to EC II (2004/22/EC)

- **graduation on front- and rearside**
- **reading from left to right**

- precise, deep laser engraved scale
- non-glare, matt surface, with clear reading
- carbon spring steel, with black anodized surface



frontside 1/1 mm and 1/2 mm

backside 1/10; 1/16; 1/20; 1/32; 1/64; 1/50; 1/100 inch

EC II | BS | TC | WARRANTY 3 YEARS

ART NO	mm / inch		KG	ART NO CC
1026431015	150 / 6	18 x 0.5	0.013	1094300
1026431030	300 / 12	30 x 1.0	0.070	1094301
1026431045	450 / 18	30 x 1.0	0.105	1094302
1026431060	600 / 24	30 x 1.0	0.140	1094303
1026431100	1000 / 40	30 x 1.0	0.245	1094304

VMASTER-LINE® Stainless Steel Rules, with magnetic inserts

Tolerance acc. to EC II (2004/22/EC)

- **graduation on front- and rearside**
- **reading from left to right**

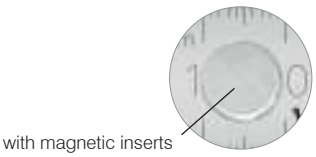
- with two straight ends without whole
- precise, deep laser engraved scale
- non-glare, matt surface, with clear reading
- with detachable magnetic inserts
- stainless steel



frontside 1/2 mm und 1/1 mm



backside 1/32 und 1/64 inch



EC II | BS | TC | WARRANTY 3 YEARS

ART NO	mm / inch		KG	ART NO CC
1026433015	150 / 6	20 x 1.0	0.030	1094300
1026433030	300 / 12	30 x 1.0	0.070	1094301
1026433060	600 / 24	30 x 1.0	0.155	1094302
1026433090	900 / 36	30 x 1.0	0.210	1094303
1026433120	1200 / 48	30 x 1.0	0.280	1094304

BLUE-LINE Stainless Steel Rules

metric graduations acc. to BS

- **reading from left to right**
- **graduation on front- and rearside**

- stainless spring steel
- non glare, matt surface
- etched graduation for a clear reading

ART NO 1026330030



front



back

front top ½ mm and bottom 1/1 mm graduation

back top 1/16; 1/32; 1/64 inch – bottom 1/10; 1/20; 1/50; 1/100 inch

INOX | BS | WARRANTY 2 YEARS

ART NO	mm / inch		KG	ART NO CC
1026330015	150 / 6	13 x 0.5	0.008	1094201
1026330030	300 / 12	13 x 0.5	0.015	1094201
1026430015	150 / 6	18 x 0.5	0.013	1094201
1026430030	300 / 12	30 x 1.0	0.070	1094201

tolerances according to British Standard (BS 4372: 1968)				
total length graduation in ± mm	150	300	500	1000
permitted tolerance in ± mm	0.10	0.10	0.20	0.25

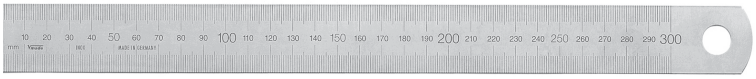
BLUE-LINE Stainless Steel Rules

acc. to DIN 2004/22/ECII

- **reading from left to right**
- **with conversion table on the backside**

- etched graduation for a clear reading
- non glare, matt surface
- stainless spring steel

ART NO 1055030030



type A • front



type A • back

type A = **mm / mm** top and bottom 1/1 mm graduation

type B = **½ mm / mm** top ½ mm and bottom 1/1 mm graduation

type C = **½ mm / mm/inch** top ½ mm and 1/1 mm, bottom 1/64 ; 1/32 and 1/16 inch graduation

INOX | EC II | DIN | WARRANTY 2 YEARS

ART NO			mm type A + B	mm type C		KG	ART NO CC
type A	type B	type C					
1055030030	1055050030	1055040030	300	300 / 12	30 x 1.0	0.070	1094001
1055030050	1055050050	1055040050	500	500 / 20	30 x 1.0	0.115	1094005
1055030100	1055050100	1055040100	1000	1000 / 40	30 x 1.0	0.245	1094010
1055030200	1055050200	1055040200	2000	2000 / 80	30 x 1.0	0.480	1094020

BLUE-LINE Stainless Steel Rules with Hook 90° NEW

acc. to DIN 2004/22/ECII

- **with hook 90°**
- **reading from left to right**

- flexible design because of narrow cross section
- stainless spring steel
- non glare, matt surface
- front: top 1/1 mm and bottom 1/1 mm graduation
- back: top ½ mm and bottom ½ mm graduation
- etched graduation for a clear reading

1/1 mm
1/1 mm



front

1/2 mm
1/2 mm



back

INOX | EC II | DIN | WARRANTY 2 YEARS

ART NO	mm		KG	ART NO CC
1033010020	200	13 x 0.5	0.007	1094001
1033010030	300	13 x 0.5	0.009	1094001
1034010050	500	18 x 0.5	0.011	1094001

BLUE-LINE Stainless Steel Rules

acc. to workshop grade

- stainless spring steel
- non glare, matt surface
- etched graduation for a clear reading
- graduation reading from left to right, zero-point in the middle
- top and bottom 1/1 mm graduation

ART Nº 1018010030-0-



ART Nº 1010010020-0-



INOX | NORM | WARRANTY 2 YEARS

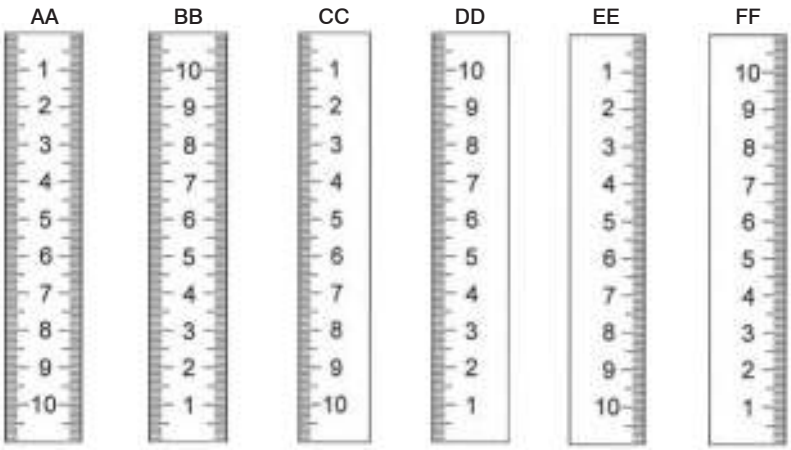
ART Nº	mm		KG	ART Nº CC
1010010010-0-	50 - 0 - 50	13 x 0.5	0.006	1094001
1010010015-0-	75 - 0 - 75	13 x 0.5	0.008	1094001
1010010020-0-	100 - 0 - 100	13 x 0.5	0.010	1094005
1010010030-0-	150 - 0 - 150	13 x 0.5	0.015	1094005
1010010040-0-	200 - 0 - 200	13 x 0.5	0.020	1094005
1010010050-0-	250 - 0 - 250	13 x 0.5	0.025	1094010
1010010060-0-	300 - 0 - 300	13 x 0.5	0.030	1094010
1010010080-0-	400 - 0 - 400	13 x 0.5	0.040	1094015
1010010100-0-	500 - 0 - 500	13 x 0.5	0.050	1094020
1012010010-0-	50 - 0 - 50	18 x 0.5	0.010	1094001
1012010015-0-	75 - 0 - 75	18 x 0.5	0.013	1094001
1012010020-0-	100 - 0 - 100	18 x 0.5	0.015	1094005
1012010030-0-	150 - 0 - 150	18 x 0.5	0.023	1094005
1012010040-0-	200 - 0 - 200	18 x 0.5	0.028	1094010
1012010050-0-	250 - 0 - 250	18 x 0.5	0.034	1094010
1012010060-0-	300 - 0 - 300	18 x 0.5	0.041	1094010
1012010080-0-	400 - 0 - 400	18 x 0.5	0.056	1094015
1012010100-0-	500 - 0 - 500	18 x 0.5	0.069	1094020
1016010010-0-	50 - 0 - 50	20 x 1.0	0.016	1094001
1016010015-0-	75 - 0 - 75	20 x 1.0	0.024	1094001
1016010020-0-	100 - 0 - 100	20 x 1.0	0.032	1094005
1016010030-0-	150 - 0 - 150	20 x 1.0	0.048	1094005
1016010040-0-	200 - 0 - 200	20 x 1.0	0.071	1094010
1016010050-0-	250 - 0 - 250	20 x 1.0	0.075	1094010
1016010060-0-	300 - 0 - 300	20 x 1.0	0.096	1094010
1016010080-0-	400 - 0 - 400	20 x 1.0	0.128	1094015
1016010100-0-	500 - 0 - 500	20 x 1.0	0.150	1094020
1018010010-0-	50 - 0 - 50	30 x 1.0	0.023	1094001
1018010015-0-	75 - 0 - 75	30 x 1.0	0.035	1094001
1018010020-0-	100 - 0 - 100	30 x 1.0	0.047	1094005
1018010030-0-	150 - 0 - 150	30 x 1.0	0.070	1094005
1018010040-0-	200 - 0 - 200	30 x 1.0	0.095	1094010
1018010050-0-	250 - 0 - 250	30 x 1.0	0.123	1094010
1018010060-0-	300 - 0 - 300	30 x 1.0	0.140	1094010
1018010070-0-	350 - 0 - 350	30 x 1.0	0.165	1094015
1018010080-0-	400 - 0 - 400	30 x 1.0	0.196	1094015
1018010100-0-	500 - 0 - 500	30 x 1.0	0.246	1094020
1018010120-0-	600 - 0 - 600	30 x 1.0	0.280	1094020
1018010150-0-	750 - 0 - 750	30 x 1.0	0.360	1094020
1018010200-0-	1000 - 0 - 1000	30 x 1.0	0.492	1094030
1018010250-0-	1250 - 0 - 1250	30 x 1.0	0.606	1094030
1018010300-0-	1500 - 0 - 1500	30 x 1.0	0.720	1094030
1018010400-0-	2000 - 0 - 2000	30 x 1.0	0.985	1094030
1018010500-0-	2500 - 0 - 2500	30 x 1.0	1.231	1094030

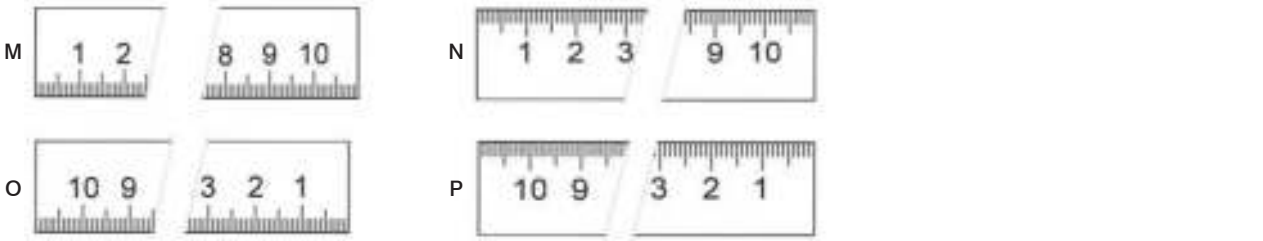
Rules in Special Design

BLUE-LINE Stainless Steel Rules

acc. to workshop grade

- stainless spring steel
- non glare, matt surface
- etched graduation for a clear reading





INOX | NORM | WARRANTY 2 YEARS

ART NO type AA	type BB	type CC	type DD	type EE	type FF	mm		KG	ART NO CC
1030110030	1040110030	1030100030	1040100030	1030010030	1040010030	300	18 x 0.5	0.019	1094001
1030110040	1040110040	1030100040	1040100040	1030010040	1040010040	400	18 x 0.5	0.027	1094005
1030110050	1040110050	1030100050	1040100050	1030010050	1040010050	500	18 x 0.5	0.034	1094005
1030110080	1040110080	1030100080	1040100080	1030010080	1040010080	800	18 x 0.5	0.052	1094010
1030110100	1040110100	1030100100	1040100100	1030010100	1040010100	1000	18 x 0.5	0.070	1094010
1030110150	1040110150	1030100150	1040100150	1030010150	1040010150	1500	18 x 0.5	0.080	1094015
1030110200	1040110200	1030100200	1040100200	1030010200	1040010200	2000	18 x 0.5	0.115	1094020
1030110250	1040110250	1030100250	1040100250	1030010250	1040010250	2500	18 x 0.5	0.140	1094025
1030110300	1040110300	1030100300	1040100300	1030010300	1040010300	3000	18 x 0.5	0.180	1094030
1030110350	1040110350	1030100350	1040100350	1030010350	1040010350	3500	18 x 0.5	0.200	1094035
1030110400	1040110400	1030100400	1040100400	1030010400	1040010400	4000	18 x 0.5	0.225	1094040
1030110500	1040110500	1030100500	1040100500	1030010500	1040010500	5000	18 x 0.5	0.275	1094050
1030110600	1040110600	1030100600	1040100600	1030010600	1040010600	6000	18 x 0.5	0.355	1094060
1030110800	1040110800	1030100800	1040100800	1030010800	1040010800	8000	18 x 0.5	0.450	1094080
1030111000	1040111000	1030101000	1040101000	1030011000	1040011000	10000	18 x 0.5	0.710	1094100

ART NO type M	type N	type O	type P	mm		KG	ART NO CC
1026150015	1026160015	1027150015	1027160015	150	13 x 0.5	0.008	1094001
1026150030	1026160030	1027150030	1027160030	300	13 x 0.5	0.015	1094001
1026250050	1026260050	1027250050	1027260050	500	18 x 0.5	0.034	1094005
1026250100	1026260100	1027250100	1027260100	1000	18 x 0.5	0.070	1094010
1026250150	1026260150	1027250150	1027260150	1500	18 x 0.5	0.080	1094015
1026250200	1026260200	1027250200	1027260200	2000	18 x 0.5	0.115	1094020
1026250250	1026260250	1027250250	1027260250	2500	18 x 0.5	0.140	1094025
1026250300	1026260300	1027250300	1027260300	3000	18 x 0.5	0.180	1094030
1026250350	1026260350	1027250350	1027260350	3500	18 x 0.5	0.200	1094035
1026250400	1026260400	1027250400	1027260400	4000	18 x 0.5	0.225	1094040
1026250500	1026260500	1027250500	1027260500	5000	18 x 0.5	0.275	1094050
1026250600	1026260600	1027250600	1027260600	6000	18 x 0.5	0.355	1094060

BLUE-LINE® Circumference Measuring Tape „UFM“

acc. to DIN 2004/22/ECI or ECII

- **with etched or laser engraved scale**
- **for measuring diameters and circumferences**
- **application areas are among others manufacturers of: pipelines, boiler and tank construction, tire industry, forestry, etc.**

- graduation in mm or inch available
- accuracy of total length with etched metric graduation according to EC II
- accuracy of total length with laser engraved metric graduation according to EC I
- hardened spring steel or stainless steel

ART NO 181601





Graduation: **mm**
Version: **etched**

EC II | DIN | NORM | WARRANTY 2 YEARS

ART NO stainless	ART NO carbon steel	circumference mm	diameter mm	mm		KG	ART NO CC
181601	**181611**	60 - 950	20 - 300	0.1	16 x 0.20	0.080	1894001
181602	**181612**	940 - 2200	300 - 700	0.1	16 x 0.20	0.110	1894002
181603	**181613**	2190 - 3460	700 - 1100	0.1	16 x 0.20	0.160	1894003
181604	**181614**	3450 - 4720	1100 - 1500	0.1	16 x 0.20	0.190	1894004
181605	**181615**	4710 - 5980	1500 - 1900	0.1	16 x 0.20	0.215	1894005
181606	**181616**	5960 - 7230	1900 - 2300	0.1	16 x 0.20	0.250	1894006
181607	**181617**	7220 - 8500	2300 - 2700	0.1	16 x 0.20	0.285	1894007
181608	**181618**	8480 - 9760	2700 - 3100	0.1	16 x 0.20	0.305	1894008
181609	**181619**	9730 - 11010	3100 - 3500	0.1	16 x 0.20	0.350	1894009

Graduation: **mm**
Version: **laser engraved**

EC I | DIN | NORM | WARRANTY 3 YEARS

ART NO stainless	ART NO carbon steel	circumference mm	diameter mm	mm		KG	ART NO CC
181801	**181811**	60 - 950	20 - 300	0.1	16 x 0.20	0.080	1894001
181802	**181812**	940 - 2200	300 - 700	0.1	16 x 0.20	0.110	1894002
181803	**181813**	2190 - 3460	700 - 1100	0.1	16 x 0.20	0.160	1894003
181804	**181814**	3450 - 4720	1100 - 1500	0.1	16 x 0.20	0.190	1894004
181805	**181815**	4710 - 5980	1500 - 1900	0.1	16 x 0.20	0.215	1894005
181806	**181816**	5960 - 7230	1900 - 2300	0.1	16 x 0.20	0.250	1894006
181807	**181817**	7220 - 8500	2300 - 2700	0.1	16 x 0.20	0.285	1894007
181808	**181818**	8480 - 9760	2700 - 3100	0.1	16 x 0.20	0.305	1894008
181809	**181819**	9730 - 11010	3100 - 3500	0.1	16 x 0.20	0.350	1894009

Graduation: **inch**
Version: **laser engraved**

NORM | WARRANTY 3 YEARS

ART NO stainless	ART NO carbon steel	circumference inch	diameter inch	inch		KG	ART NO CC
181901	**181911**	2.0 - 38.0	0.8 - 12.0	0.002 / 0.01	16 x 0.20	0.080	1894001
181902	**181912**	37.0 - 87.0	12.0 - 28.0	0.002 / 0.01	16 x 0.20	0.110	1894002
181903	**181913**	86.0 - 136.5	28.0 - 43.5	0.002 / 0.01	16 x 0.20	0.160	1894003
181904	**181914**	136.0 - 186.0	43.5 - 59.0	0.002 / 0.01	16 x 0.20	0.190	1894004
181905	**181915**	185.5 - 236.0	59.0 - 75.0	0.002 / 0.01	16 x 0.20	0.215	1894005
181906	**181916**	235.5 - 285.0	75.0 - 91.0	0.002 / 0.01	16 x 0.20	0.250	1894006

Digital Measuring Wheel

DIGI PLUS-LINE Electr. Digital Measuring Wheel • IP51

• lightweight construction made of black lacquered steel

- rugged foldable construction, for outdoor use, with battery
- large LCD display, 12 mm height of digits, with back-light
- dust- and drop-water resistant key panel
- On/Off-button, autom. shut-off after approx. 3 min.
- “Smart Wheel”-function (autom. includes wheel-diameter for accurate wall-to-wall measuremments)
- Start/Stop Mode, prevents accidental measurements
- HOLD function, memory function, reset button
- reading in Meter / Feet / Yard / m² / feet² / yard² / m³ / feet³ / yard³
- plastic made measuring wheel with rubber cover and stand for parking
- area of application from up -10° ~ +60°C, handle made of ABS plastic
- incl. 4x 1.5 V battery (type AAA, art.-no.: 609283), with operation manual
- delivery with carrying bag with lanyard



measuring wheel folded



operation panel





ART NO	m / ft	m	max. ± %	measuring wheel ø mm	mm	KG
140210	999,999 / 999,999.9	0.1	0.5	318	1122 x 318 x 85	1.600

Special Rules, Scales, Verniers

We manufacture
special rules, scales, verniers, nameplates, etc.
according to your specifications and drawings.

Our company has focused on the special needs of our customers. Request our brochure „scales“, we‘ll show you therein a wide range of measuring scales etc., which are already as a standard in our program.

We produce according to an environment friendly etching method and with innovative laser technology in our own laser center.

You are welcome to visit us. Our team will help you with pleasure!







The individual advantages of ...

...echting: ✓ effective process for large quantities

...laser technique:
- ✓ for small quantities
- ✓ flexible in layout design
- ✓ deep engraving, cannot be falsified
- ✓ low initial costs for the prepress stage
- ✓ engravings on various materials





VBLUE-LINE® Steel Measuring Tape

- e.g. for machine industry, workbenches, etc.
- polyamid coated • adhesive
- wear off resistant and non corrosive graduation

Other length and graduations are available on request!



WARRANTY 2 YEARS

ART NO	inch	mm		KG
graduation from left to right				
1211310100	-	1000	13 x 0.5	0.050
1211310200	-	2000	13 x 0.5	0.100
1211310300	-	3000	13 x 0.5	0.150
1211310400	-	4000	13 x 0.5	0.200
1211310500	-	5000	13 x 0.5	0.250
1211310600	-	6000	13 x 0.5	0.300
1212310100	40	-	13 x 0.5	0.050
1212310200	80	-	13 x 0.5	0.100
1212310300	120	-	13 x 0.5	0.150
1212310400	160	-	13 x 0.5	0.200
1212310500	200	-	13 x 0.5	0.250
1212310600	240	-	13 x 0.5	0.300
graduation from right to left				
1211410100	-	1000	13 x 0.5	0.050
1211410200	-	2000	13 x 0.5	0.100
1211410300	-	3000	13 x 0.5	0.150
1211410400	-	4000	13 x 0.5	0.200
1211410500	-	5000	13 x 0.5	0.250
1211410600	-	6000	13 x 0.5	0.300
1212410100	40	-	13 x 0.5	0.050
1212410200	80	-	13 x 0.5	0.100
1212410300	120	-	13 x 0.5	0.150
1212410400	160	-	13 x 0.5	0.200
1212410500	200	-	13 x 0.5	0.250
1212410600	240	-	13 x 0.5	0.300

VBLUE-LINE® Wood Folding Rule

EC III acc. to MID, CE

- surface coated with a water repellant, environmentally friendly UV-finish
- absolutely professional top tool, extremly sturdy and durable

- with double mm graduation on front and back or with double mm graduation on front and inch graduation on back
- with 10 links, closely spaced fins, fitting springs back
- with standard angle imprint at the 2nd link
- assembled with special 3mm rivets
- precise 90° angle locking and ruler function
- optimal leverage and handy to use

Other colours are available on request.
Also with advertising available, on request, please!







ART NO 1312010200





EC III | MID CODE | CE | WARRANTY 2 YEARS

ART NO	mm / inch	colour	each link	L x W in total	number of links	KG
1312010200	2000 / -	white	3.2 x 16	235 x 35	10	0.105
1312030200	2000 / 80	white	3.2 x 16	235 x 35	10	0.105

Pocket Measuring Tapes

BLUE-LINE Pocket Measuring Tape

EC II

- exceptional tape stability
- suitable for craftsmen and industry
- ergonomic design
- lies save and non slip in your hand

- rugged and rubber covered housing with stainless metal clip and lanyard
- yellow coated blade, high rubb-off resistant and kink resistant
- self adjusting end-hook, with magnetic dots
- long-life spring made of special steel, automatic blade return and blade stop
- black/red figures, black scale
- from up to 25 mm blade with 3 rivets fixed



with hanging card





EC II | MID CODE | CE | WARRANTY 2 YEARS

ART NO	order quantity	ART NO	order quantity		max. ± mm	mm	mm	mm	KG
graduation in mm									
141003	1 - 120	**141003/121**	121 - >	3 m	0.9	16	65x65x35	1400	0.148
141005	1 - 120	**141005/121**	121 - >	5 m	1.3	19	65x73x35	1750	0.254
141008	1 - 60	**141008/61**	61 - >	8 m	1.8	25	80x85x40	2100	0.426
141010	1 - 60	**141010/61**	61 - >	10 m	1.8	25	80x85x40	2100	0.525
graduation in mm/inch									
141103	1 - 120	**141103/121**	121 - >	3 m / 10 ft	0.9	16	65x65x35	1400	0.148
141105	1 - 120	**141105/121**	121 - >	5 m / 16 ft	1.3	19	65x73x35	1750	0.254
141108	1 - 60	**141108/61**	61 - >	8 m / 27 ft	1.8	25	80x85x40	2100	0.426
141110	1 - 60	**141110/61**	61 - >	10 m / 33 ft	1.8	25	80x85x40	2100	0.525

BLUE-LINE Pocket Measuring Tape, in stainless steel metal housing

EC II

- exceptional tape stability
- suitable for craftsmen and industry
- with graduation on front- a. backside
- backside with crosswise graduation for comfortable vertical reading
- autom. blade-stop
- lies save and non slip in your hand

- rugged and rubber covered housing, with stainless metal clip and lanyard
- yellow coated blade, high rubb-off resistant and kink resistant
- self adjusting end-hook, with magnetic dots
- long-life spring made of special steel, automatic blade return and blade stop
- black/red figures, black scale
- from up to 25 mm blade with 3 rivets fixed



Empfehlung Test 05/2011 selber machen

with robust hanging card



backside: vertical reading

EC II | MID CODE | CE | WARRANTY 2 YEARS

ART NO	order quantity	ART NO	order quantity		max. ± mm	mm	mm	mm	KG
141403	1 - 120	**141403/121**	121 - >	3	0.9	19	80 x 75 x 35	1750	0.200
141405	1 - 120	**141405/121**	121 - >	5	1.3	25	80 x 75 x 42	2100	0.310
141408	1 - 60	**141408/61**	61 - >	8	1.8	25	80 x 75 x 42	2100	0.470

VDIGI PLUS-LINE Electr. Digital Measuring Tape

- exceptional tape stability • LCD display with clear digits
- weatherproof housing • lies save and non slip in your hand

- rugged and rubber covered housing with stainless metal clip and lanyard
- yellow coated blade, high rubb-off resistant
- self adjusting end-hook, automatic blade return and blade stop
- adjustable readout in display from either side of the housing, mm/inch switchable
- black/red figures, black graduation, no holes punched in the blade
- zero setting at any position, with data hold function, On/Off button
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), and operation manual



ART NO	mm / inch	mm	± mm	mm	mm	mm		
140105	5 m / 16 ft	1	1.5	19	75 x 70 x 32	1700	0.212	1494105

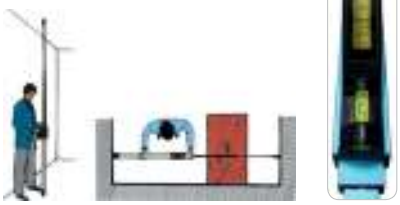
VBLUE-LINE Telescopic Measuring Rod

NEW

with analoguous reading display at eye level

- for distance measurement
- suitable for craftsmen and construction

- made of weatherproof aluminium, elements can be locked individually
- with two vials, for adjustment of horizontal and vertical reading
- window for reading the measuring length





ART NO	mm	pushed together, mm	
143003.2	655 - 3040	655 x 120 x 40	1.300
143005.2	910 - 5010	910 x 120 x 40	1.800

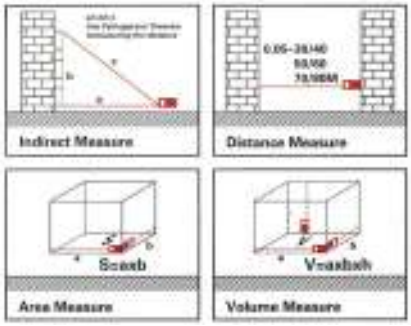
VDIGI PLUS-LINE Laser Distance Meter • IP41

- modern device with colour display
- the instrument measures distance, area and volume
- distances can be added or subtracted
- indirect measuring for height measuring
- calculation of angles and triangular areas, trapezoidal faces and much more
- Pythagoras-Function 1: calculation of distance using two related measurements
- Pythagoras-Function 2: calculation of distance using two related measurements

- „low-battery-display“, with backlight, memory function for 20 measurements
- measuring in meter, inch or engl. feet, measurement speed 0.5 sec.
- autom. power off: laser beam after ~20 sec., device after ~5 min.
- operation temperature -10° ~ +40°C, storage temperature -20° ~ +60° C
- user-friendly rubber buttons, sound signal by pressing the buttons
- laser class II, FCC test part 15, EN 60825-1:2007 and others
- laser parameter 620 - 660nm, output max.1mW
- carrying bag with belt loop, hand loop, 2 x 1.5 V battery (type AAA, art. no. 609283) and operation manual









ART NO	m	m	± mm	nm	mW	mm		
140130	0.5 - 80	0.001	2	650	max. 1	120 x 50 x 25	0.130	1494100

Measuring Tape with aluminium diagonal frame

BLUE-LINE

EC II

- in a robust and rigid aluminium diagonal frame
- ergonomic handle
- crank core with metal shaft, ensures fatigue-free measurement work
- lasting ease of the tape when rolling in and out
- with different beginnings for the tapes
- measuring tape in steel, white lacquered or in stainless Cr-Ni steel available
- graduation in mm, onesided

ART Nº 142511





steel, white lacquered



stainless, Cr-Ni steel

beginning of tape

type A

type B



EC II | WARRANTY 3 YEARS

ART Nº	type	m	mm	KG
142501	type A steel, white lacquered	20	13	0.700
142502		30	13	0.800
142503		50	13	1.200
142511	type B steel, white lacquered	20	13	0.700
142512		30	13	0.800
142513		50	13	1.200
142601	type A stainless, Cr-Ni steel	20	13	0.700
142602		30	13	0.800
142603		50	13	1.200
142611	type B stainless, Cr-Ni steel	20	13	0.700
142612		30	13	0.800
142613		50	13	1.200

Measuring Tape with aluminium diagonal triangle frame

BLUE-LINE

EC II

- in a robust and rigid aluminium diagonal triangle frame
- ergonomic handle
- crank core with metal shaft, ensures fatigue-free measurement work
- lasting ease of the tape when rolling in and out
- with different beginnings for the tapes
- measuring tape in white fiberglass or in yellow steel/polyamid available
- graduation in cm, onesided

ART Nº 142711





fiberglass, white



steel/polyamid, yellow

beginning of tape

type A

type B





fiberglass with metal ring



steel/polyamid with plastic ring

EC II | WARRANTY 3 YEARS

ART Nº	type	m	mm	KG
142701	type A fiberglass, white	20	13	0.600
142702		30	13	0.700
142703		50	13	0.900
142711	type B fiberglass, white	20	13	0.600
142712		30	13	0.700
142713		50	13	0.900
142801	type A steel/polyamid, yellow	20	13	0.700
142802		30	13	0.900
142803		50	13	1.400
142811	type B steel/polyamid, yellow	20	13	0.700
142812		30	13	0.900
142813		50	13	1.400

BLUE-LINE® Measuring Tape with aluminium diagonal frame

- **for measurements of tanks and depths**
- **plumbs are connected by swivel snap hook with the band**

- in a robust and rigid aluminium diagonal frame
- ergonomic handle
- crank core with metal shaft, ensures fatigue-free measurement work
- lasting ease of the tape when rolling in and out
- with different plumbs made of brass
- measuring tape made of carbon steel or stainless steel available
- graduation high etched
- graduation on front in mm/cm, on back in inch/Ft



type plumb 1



type plumb 2



type plumb 3



plumb, no. 1
brass, cylindrical, double-sided flattened, 70 mm long, ø 25 mm, graduation: mm/-, mm/mm, mm/inch, weight: 240 g



plumb no. 2
brass, cylindrical, 120 mm long, ø 20 mm, without graduation, weight: 260 g



plumb no. 3
brass, cylindrical, double-sided flattened, 170 mm long, ø 25 mm, graduation: mm/-, mm/mm, mm/inch, weight: 470 g



steel, high etched



stainless steel, high etched

WARRANTY 3 YEARS

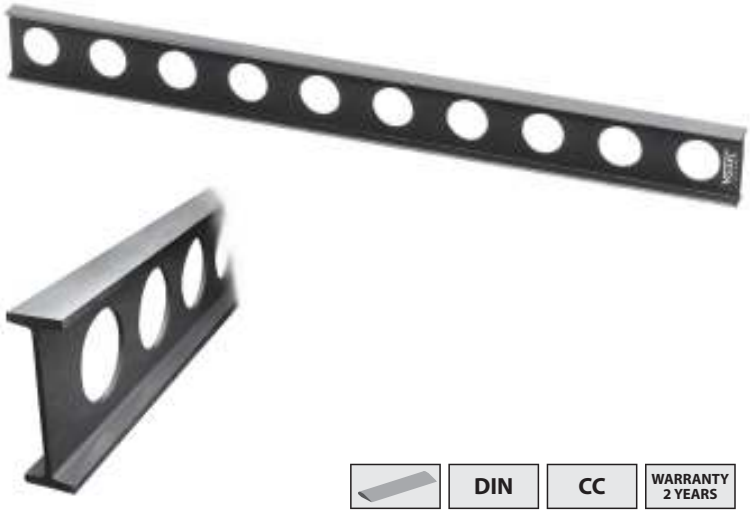
ART NO	type	m / Ft.	mm	KG
142521	plumb 1 carbon steel	10 / 32	13	0.800
142522		20 / 65	13	0.900
142523		30 / 98	13	1.100
142525		50 / 164	13	1.500
142531	plumb 2 carbon steel	10 / 32	13	0.800
142532		20 / 65	13	1.000
142533		30 / 98	13	1.100
142535		50 / 164	13	1.500
142541	plumb 3 carbon steel	10 / 32	13	1.000
142542		20 / 65	13	1.200
142543		30 / 98	13	1.400
142545		50 / 164	13	1.800
142621	plumb 1 stainless steel	10 / 32	13	0.800
142622		20 / 65	13	0.900
142623		30 / 98	13	1.100
142625		50 / 164	13	1.500
142631	plumb 2 stainless steel	10 / 32	13	0.800
142632		20 / 65	13	1.000
142633		30 / 98	13	1.200
142635		50 / 164	13	1.500
142641	plumb 3 stainless steel	10 / 32	13	1.000
142642		20 / 65	13	1.200
142643		30 / 98	13	1.400
142645		50 / 164	13	1.800

Notice
We charge transport- and packing-costs for article marked with *!

SILVER-LINE Precision Straight Edge
DIN 874

- **accuracy acc. to DIN 874 page 1, accuracy GG 0**
- **made of steel**

- shaped in I-form
- with weight reducing holes
- measuring surfaces extra fine ground
- with wide flat sides for resting spirit levels
- incl. calibration certificate



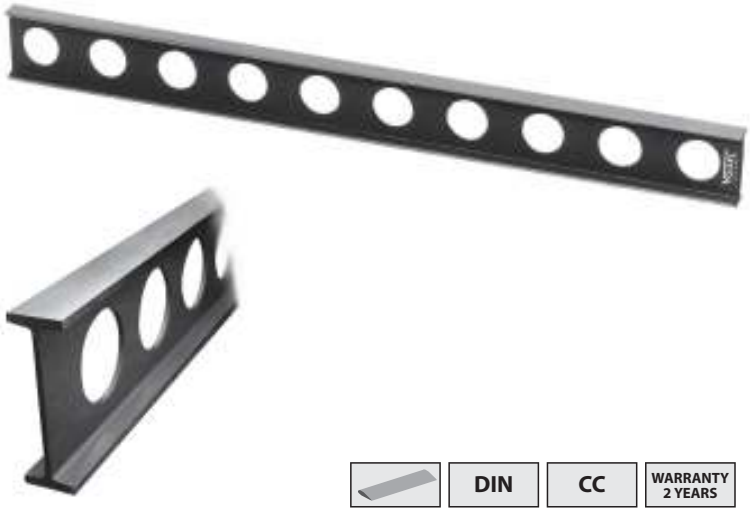
DIN | CC | WARRANTY 2 YEARS

ART NO DIN 874 GG 0			KG	CC	ART NO wooden case
1580010100*	1000	160 x 50	12.500	inclusive	15998100*
1580010150*	1500	160 x 50	19.000	inclusive	15998150*
1580010200*	2000	160 x 50	25.000	inclusive	15998200*
1580010250*	2500	160 x 50	32.000	inclusive	15998250*
1580010300*	3000	180 x 60	45.000	inclusive	15998300*
1580010400*	4000	180 x 60	59.000	inclusive	15998400*
1580010500*	5000	200 x 80	100.000	inclusive	15998500*

SILVER-LINE Precision Straight Edge
DIN 874

- **accuracy acc. to DIN 874 page 1, accuracy GG 1**
- **made of steel**

- shaped in I-form
- with weight reducing holes
- measuring surfaces extra fine grinded
- with wide flat sides for resting spirit levels
- incl. calibration certificate



DIN | CC | WARRANTY 2 YEARS

ART NO DIN 874 GG 1			KG	CC	ART NO wooden case
1581010100*	1000	100 x 30	5.000	inclusive	15998100/1*
1581010150*	1500	100 x 30	9.500	inclusive	15998150/1*
1581010200*	2000	120 x 40	16.000	inclusive	15998200/1*
1581010250*	2500	120 x 40	21.000	inclusive	15998250/1*
1581010300*	3000	140 x 40	34.000	inclusive	15998300/1*
1581010400*	4000	140 x 40	48.000	inclusive	15998400/1*
1581010500*	5000	160 x 40	60.000	inclusive	15998500/1*

Precision Straight Edge
DIN 874

- **Quality DIN 874 page 1, accuracy GG 0**
- **made of steel**

- edges and flat sides extra fine ground
- stainless and carbon steel quality available
- incl. calibration certificate
- from up 2000 mm length shaped in I-form, with hand slots

- **Quality DIN 874 page 1, accuracy GG 1**
- **made of steel**

- edges and flat sides finely ground
- stainless and carbon steel quality available
- incl. calibration certificate
- from up 2000 mm length shaped in I-form, with hand slots

- **accuracy acc. to DIN 874 page 1, accuracy GG 2**
- **made of steel**

- edges finely ground and flat sides ground
- stainless and carbon steel quality available
- incl. calibration certificate
- from up 4000 mm length shaped in I-form, with hand slots



Notice
We charge transport and packing costs for articles marked with *!

DIN | CC | WARRANTY 2 YEARS

ART NO DIN 874 GG 0 INOX	ART NO DIN 874 GG 0			KG	CC	ART NO wooden case
1590000050	1590010050	500	50 x 10	2.0	inclusive	15990050
1590000100*	1590010100*	1000	60 x 12	5.7	inclusive	15990100*
1590000150*	1590010150*	1500	70 x 15	12.4	inclusive	15990150*
1590000200*	1590010200*	2000	80 x 15	13.0	inclusive	15990200*
1590000300*	1590010300*	3000	120 x 18	36.0	inclusive	15990300*
1590000400*	1590010400*	4000	140 x 20	62.0	inclusive	15990400*
1590000500*	1590010500*	5000	140 x 20	77.0	inclusive	15990500*
DIN 874 GG 1 INOX	**DIN 874 GG 1**					
1591000050	1591010050	500	40 x 8	1.3	inclusive	15990050/1
1591000100*	1591010100*	1000	50 x 10	4.0	inclusive	15990100/1*
1591000150*	1591010150*	1500	60 x 12	8.4	inclusive	15990150/1*
1591000200*	1591010200*	2000	70 x 15	12.0	inclusive	15990200/1*
1591000300*	1591010300*	3000	100 x 16	26.0	inclusive	15990300/1*
1591000400*	1591010400*	4000	120 x 18	48.0	inclusive	15990400/1*
1591000500*	1591010500*	5000	140 x 20	77.0	inclusive	15990500/1*
DIN 874 GG 2 INOX	**DIN 874 GG 2**					
1592000050	1592010050	500	30 x 6	0.7	inclusive	15990050/2
1592000100*	1592010100*	1000	40 x 8	2.5	inclusive	15990100/2*
1592000150*	1592010150*	1500	50 x 10	5.8	inclusive	15990150/2*
1592000200*	1592010200*	2000	60 x 12	11.2	inclusive	15990200/2*
1592000300*	1592010300*	3000	80 x 15	28.2	inclusive	15990300/2*
1592000400*	1592010400*	4000	100 x 16	35.0	inclusive	15990400/2*

SILVER-LINE

Precision Straight Edge

DIN 874

- cross-section in I-form
- made of aluminium



characteristics and advantages compared to steel:

- very light, good handling, midsection lacquered
- high accuracy- and pliability-values
- HC-coated and compressed, coating thickness 50µ ± 5µ
- high grade of abrasion resistance, high grade of corrosion resistant
- hardness 500 – 550 HV, top gliding, low thermal conductivity
- for grade 0 and 1 from 2000 mm with hand slots, grade 2 from up 2500 mm
- incl. calibration certificate

quality DIN 874 page 1, accuracy GG 0
quality DIN 874 page 1, accuracy GG 1
quality DIN 874 page 1, accuracy GG 2

Notice
We charge transport- and packing-costs for article marked with *!

DIN | CC | WARRANTY 2 YEARS

ART NO DIN 874 GG 0			KG	CC	ART NO wooden case
1593000050	500	60 x 12	0.7	inclusive	15991050
1593000100*	1000	60 x 12	1.4	inclusive	15991100*
1593000150*	1500	100 x 15	4.3	inclusive	15991150*
1593000200*	2000	100 x 15	5.9	inclusive	15991200*
1593000250*	2500	100 x 15	7.5	inclusive	15991250*
1593000300*	3000	150 x 20	15.9	inclusive	15991300*
1593000400*	4000	150 x 20	21.3	inclusive	15991400*
1593000500*	5000	150 x 20	26.7	inclusive	15991500*
DIN 874 GG 1					
1593010050	500	60 x 12	0.7	inclusive	15991050
1593010100*	1000	60 x 12	1.4	inclusive	15991100*
1593010150*	1500	100 x 15	4.3	inclusive	15991150*
1593010200*	2000	100 x 15	5.9	inclusive	15991200*
1593010250*	2500	100 x 15	7.5	inclusive	15991250*
1593010300*	3000	150 x 20	15.9	inclusive	15991300*
1593010400*	4000	150 x 20	21.3	inclusive	15991400*
1593010500*	5000	150 x 20	26.7	inclusive	15991500*
1593010600*	6000	150 x 20	32.1	inclusive	15991600*
DIN 874 GG 2					
1593020050	500	60 x 12	0.7	inclusive	15991050
1593020100*	1000	60 x 12	1.4	inclusive	15991100*
1593020150*	1500	60 x 12	2.1	inclusive	15991150*
1593020200*	2000	60 x 12	2.8	inclusive	15991200*
1593020250*	2500	100 x 15	7.5	inclusive	15991250*
1593020300*	3000	100 x 15	8.7	inclusive	15991300*
1593020400*	4000	100 x 15	11.6	inclusive	15991400*
1593020500*	5000	150 x 20	26.7	inclusive	15991500*
1593020600*	6000	150 x 20	32.1	inclusive	15991600*

BLUE-LINE® Precision Graduated Straight Edge

DIN 866

quality DIN 866 form A

- mm graduation on bottom edge
- 5 mm protection space on both ends
- flat side finely ground
- vertical edges finely ground, can be used as a rule
- stainless or carbon steel quality available

form A



quality DIN 866 form B

- mm graduation on bottom edge
- without protection-space end, at left side
- flat side ground
- vertical edges ground
- stainless or carbon steel quality available

form B



Notice

We charge transport- and packing-costs for article marked with *!

DIN | WARRANTY 3 YEARS

ART NO DIN 866 / A INOX	ART NO DIN 866 / A			KG	ART NO CC graduation only DIN 2004/22/ECII	ART NO CC acc. to DIN 866	ART NO wooden case
1691000050	1691010050	500	30 x 6	0.8	1694005	1694005/866	1699050/A
1691000100	1691010100	1000	40 x 8	2.5	1694010	1694010/866	1699100/A
1691000150	1691010150	1500	40 x 8	3.7	1694015	1694015/866	1699150/A
1691000200*	1691010200*	2000	50 x 10	7.5	1694020	1694020/866	1699200/A*
1691000300*	1691010300*	3000	50 x 10	12.0	1694030	1694030/866	1699300/A*
1691000400*	1691010400*	4000	60 x 12	25.6	1694040	1694040/866	1699400/A*
1691000500*	1691010500*	5000	70 x 15	33.5	1694050	1694050/866	1699500/A*
DIN 866 / B INOX	DIN 866 / B						
1692000050	1692010050	500	25 x 5	0.5	1694005	1694005/866	1699050/B
1692000100	1692010100	1000	30 x 6	1.5	1694010	1694010/866	1699100/B
1692000150	1692010150	1500	30 x 6	2.1	1694015	1694015/866	1699150/B
1692000200*	1692010200*	2000	40 x 8	4.8	1694020	1694020/866	1699200/B*
1692000300*	1692010300*	3000	40 x 8	7.5	1694030	1694030/866	1699300/B*
1692000400*	1692010400*	4000	50 x 10	15.0	1694040	1694040/866	1699400/B*
1692000500*	1692010500*	5000	60 x 12	32.0	1694050	1694050/866	1699500/B*

Tolerances according to DIN 866

total length graduation mm	500	1000	1500	2000	3000	4000	5000
tolerance form A	0.030	0.04	0.05	0.06	0.08	0.10	0.12
tolerance form B	0.075	0.10	0.125	0.15	0.20	0.25	0.30

Straight Edges with bevel

BLUE-LINE Straight Edge with bevel

- for simple workshop use
- made of steel

- chromed version
- type A = without graduation, type B = with mm graduation
- graduation black etched, bevel edge matt chrome finish

Notice
We charge transport- and packing-costs for article marked with *!

type A ART NO 1794200030



type B ART NO 1794300030





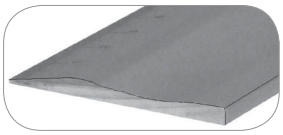
ART NO type A	ART NO type B	mm	mm	KG
1794200030	1794300030	300	40 x 5	0.500
1794200050	1794300050	500	40 x 5	0.780
1794200080	1794300080	800	40 x 5	1.200
1794200100	1794300100	1000	40 x 5	1.500
1794200150*	1794300150*	1500	40 x 5	2.300
1794200200*	1794300200*	2000	40 x 5	3.100

BLUE-LINE Straight Edge with bevel

- for technicians
- made of hard aluminium, anodized quality

- with black cm graduation, printed







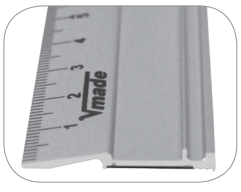
ART NO	mm	mm	KG
1795300030	300	50 x 5	0.186
1795300060	600	50 x 5	0.350
1795300100	1000	50 x 5	0.600
1795300180	1800	50 x 5	1.060

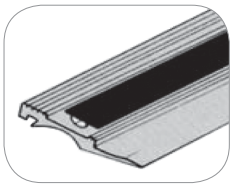
BLUE-LINE Straight Edge with bevel

- e.g. for school, education, DIY and craftsmen
- made of hard aluminium, anodized quality

- with mm graduation, pad printing
- back with anti-slip foam rubber glued









ART NO	mm	mm	KG
1796300030	300	35 x 1.5	0.055
1796300060	600	35 x 1.5	0.110
1796300100	1000	35 x 1.5	0.185

VOGEL DIGI PLUS-LINE® Electr. Digital Scale • IP54

- **spray water resistant measurement system**
- **in horizontal and vertical version**
- **for mounting on machine tools, milling machines, pillar drills and many other applications**

- large LCD display with clear reading, digit height 15 mm
- rail out of anodized aluminium, max. traversing speed 2 m/sec.
- with mini USB data output to connect the Electr. Digital Display Unit, with On/Of switch
- zero setting at any position
- unit of measurement switchable mm/inch
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual

type H horizontal design

type V vertical design

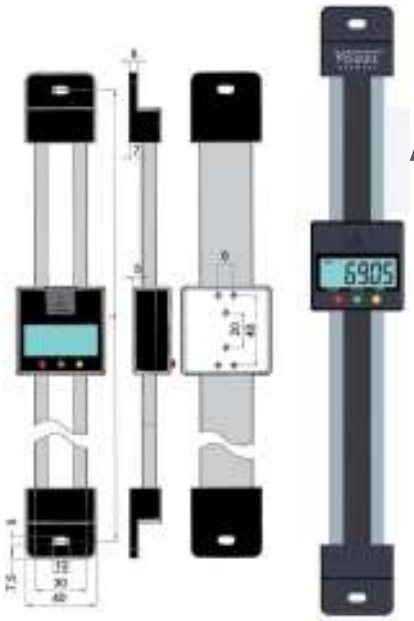
type H

ART NO 102900



type V

ART NO 102910





ART NO type H	ART NO type V	mm / inch	mm / inch	mm	max. mm	L mm	KG	ART NO CC
102900	**102910**	200 / 8	0.01 / 0.0005	0.01	0.03	330	0.195	1094101
102901	**102911**	300 / 12	0.01 / 0.0005	0.01	0.04	430	0.255	1094101
102903	**102913**	500 / 20	0.01 / 0.0005	0.01	0.05	630	0.360	1094101
102904	**102914**	600 / 24	0.01 / 0.0005	0.01	0.06	730	0.400	1094101
102906	**102916**	999 / 39	0.01 / 0.0005	0.01	0.08	1130	0.570	1094101

VOGEL DIGI PLUS-LINE® Electr. Digital Display Unit

- **for Electr. Digital Scale**

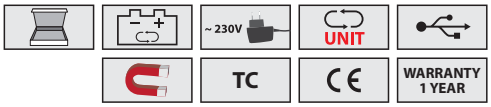
- large LCD display with clear reading, digit height 12 mm
- different versions to choose: with X- or with X + Y- axis
- housing with magnetic back and backlight
- unit of measurement switchable mm/inch, zero setting at any position
- with USB signal transmitter cable (approx. 2m) for connection to the scale unit
- incl. 2x 1.5 V battery (rechargeable), with charger and operation manual

ART NO 2029500



ART NO 2029501





ART NO	type X-axis	type X + Y-axis	mm	mm	KG
2029500	✓	-	0.01	130 x 60 x 20	0.135
2029501	-	✓	0.01	130 x 80 x 20	0.157

Digital Scales, Display Units

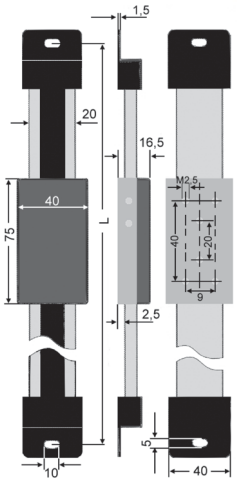
VOGEL DIGI PLUS-LINE® Electr. Digital Scale

- **in horizontal and vertical version**
- **stainless steel, hardened rail**
- **with electronic unit and separate LCD display**
- **for mounting on machine tools, milling-, drilling machines and for many other purposes**
- **with VOCOM-S duo data output, top model (connectivity also for Digimatic measuring devices)**

- large LCD-display with clear reading, digit height 18 mm
- rugged plastic housing, with with built-in magnet in the back side
- incl. fixture for wall mounting of the LCD display, with accessories
- flexible application, in horizontal and vertical position
- expandable with additional electronic units and LCD displays
- On/Off switch, zero setting at any position, data hold function
- Preset-, Origin-, Inc-switch
- unit switchable in mm/inch/fraction in inch
- incl. 2x 3V battery (type CR2032, art. no.: 2002093), with operation manual

Options
- data box with USB port, art. no. 2420194
- footswitch for data box, art.-no. 209011
- transmitter for wireless communication via WiFi, art.-no. 209006, see page 306
- receiver for wireless communication via WiFi, art.-no. 209007, see page 306
- transmitter and receiver for wireless communication as set, art.-no. 2040101, see page 306





Option: Transmitter
art.-no.: 209006



Option: Receiver
art.-no.: 209007



INOX | ABS/INC | UNIT | NORM | TC | CE | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm	L mm	KG rail + display	ART NO CC
102920	150 / 6	0.01 / 0.0005	0.01	0.06	190	0.225 + 0.225	1094101
102921	200 / 8	0.01 / 0.0005	0.01	0.08	240	0.295 + 0.225	1094101
102922	300 / 16	0.01 / 0.0005	0.01	0.10	340	0.445 + 0.225	1094101
102923	600 / 24	0.01 / 0.0005	0.01	0.15	640	0.888 + 0.225	1094101
102924	1000 / 40	0.01 / 0.0005	0.01	0.20	1040	1.482 + 0.225	1094101

VOGEL DIGI PLUS-LINE® Electr. Digital Display Unit

- **for electr. scale series 102920 - 102924**

- large LCD-display with clear reading, digit height 18 mm
- rugged plastic housing, with built-in magnet in the back side
- incl. fixture for wall mounting of the LCD display, with accessories
- flexible application, in horizontal and vertical position
- expandable with additional electronic units and LCD displays
- On/Off switch, zero setting at any position, data hold function
- Preset-, Origin-, Inc-switch
- unit switchable in mm/inch/fraction in inch
- incl. 2x 3V battery (type CR2032, art. no.: 2002093), with operation manual



ART NO 2029550



Option: expandable for X / Y / Z-Axes

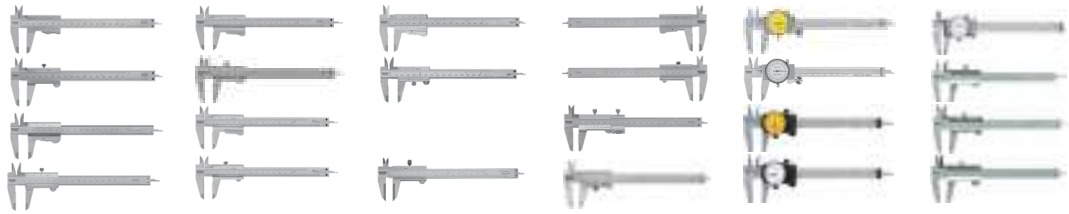
ABS/INC | UNIT | TC | CE | WARRANTY 2 YEARS

ART NO	mm / inch	mm	KG
2029550	0.01 / 0.0005	130 x 45 x 22	0.225

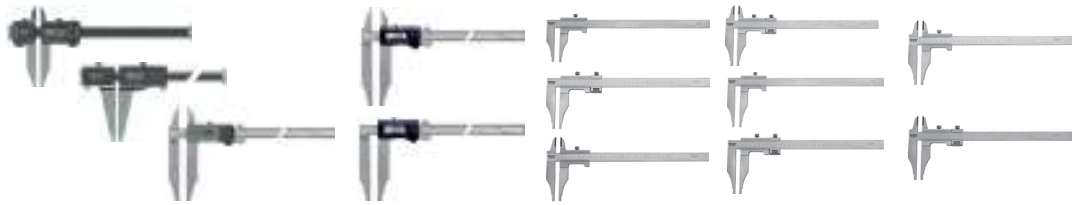
2 a
Page
38 - 43



2 b
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44 - 48



2 c
Page
49 - 54



2 d
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2 e
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67 - 73



2 f
Page
74 - 75



2 g
Page
76



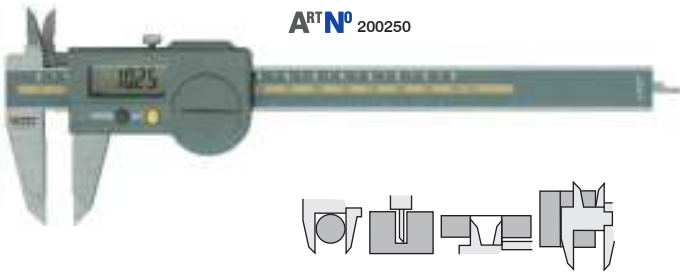
Precision Digital Calipers

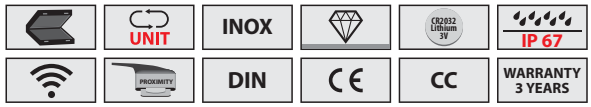
Electr. Digital Caliper • IP67

DIN 862

- **professional model for high standards**
- **water and coolant proof acc. to DIN 40050 / IEC 60529**
- **with Sylvac electronic, with proximity data output**

- proximity USB / RS232
- stainless steel, hardened
- LCD display with clear reading, 7 mm digit height
- jaws finely ground and lapped, flat and round depth gauge
- smart inductive sensor (S.I.S.):
  - autom. On/Off, autom. stand-by mode
  - ORIGIN saved
- zero setting at any position, SET-button, MODE-button
- unit of measurement switchable mm/inch
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual
- incl. calibration certificate





Option

- Transmitter and receiver via WiFi (art.-no. 2023105 + 2023106), see page 115

ART Nº	mm / inch	mm / inch	mm	max. mm				KG	CC
200250	150 / 6	0.01 / 0.0005	0.01	0.02	40	16	flat	0.170	inclusive
200251	200 / 8	0.01 / 0.0005	0.01	0.03	50	19	flat	0.190	inclusive
200252	300 / 12	0.01 / 0.0005	0.01	0.03	64	19	-	0.215	inclusive
200253	150 / 6	0.01 / 0.0005	0.01	0.02	40	16	round	0.170	inclusive

Electr. Digital Caliper • IP67

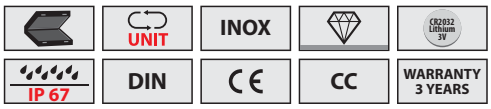
DIN 862

- **top model for industry purposes**
- **water and coolant proof acc. to DIN 40050 / IEC 60529**
- **with Sylvac electronic, without data output**

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 8 mm digit height
- jaws finely ground and lapped, flat depth gauge
- On/Off button, SET button, MODE button
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual
- incl. calibration certificate







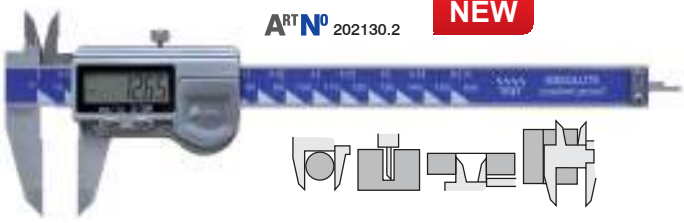
ART Nº	mm / inch	mm / inch	mm	max. mm				KG	CC
202120	150 / 6	0.01 / 0.0005	0.01	0.02	40	16.5	flat	0.170	inclusive
202121	200 / 8	0.01 / 0.0005	0.01	0.03	50	19.5	flat	0.200	inclusive
202122	300 / 12	0.01 / 0.0005	0.01	0.03	60	20.5	flat	0.280	inclusive

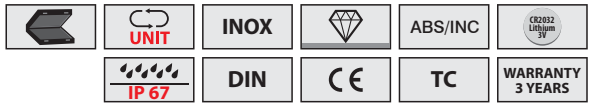
"Absolute" Electr. Digital Caliper • IP67

DIN 876

- **standard model, without data output**
- **with metal housing and metal function buttons**
- **water- a. coolant proof acc. to DIN 40050 / IEC 60529**

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped
- On/Off button, autom. shutdown, with ABS/INC measuring system
- With locking screw, with screwed battery compartment cover
- mm/inch switchable, zero setting at any position
- incl. 1 x 3 V battery (type CR1632, art.-no.. 2002193), with operation manual





ART Nº	mm / inch	mm / inch	mm	max. mm				KG	ART Nº CC
202130.2	150 / 6	0.01 / 0.0005	0.01	0.03	40	16	flat	0.205	2094101
202131.2	200 / 8	0.01 / 0.0005	0.01	0.03	50	19.5	flat	0.235	2094101
202132.2	300 / 12	0.01 / 0.0005	0.01	0.03	60	20.5	flat	0.305	2094101

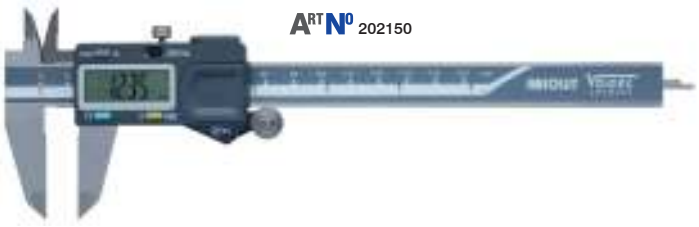
VOGEL DIGI PLUS-LINE "Absolute" Electr. Digital Caliper • IP54

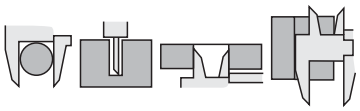
DIN 862

- top model for industry purposes
- with glass rail for more accuracy
- spray water proof acc. to DIN 40050 / IEC 60529
- with VOCOM-s duo data output, top model (connectivity also for Digimatic measuring devices)

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped, with fixing screw
- On/Off button, with „ORIGIN“ system, with thumbroll
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

ART NO 202150





UNIT | INOX | VOCOM-s Duo-Datenausgang | ABSOLUTE | CR2032 Lithium 3V | IP 54 | DIN | CE | TC | WARRANTY 3 YEARS

Options

- transmitter for wireless communication via WiFi, art.-no. 209006, see page 306
- receiver for wireless communication via WiFi, art.-no. 209007, see page 306
- transmitter and receiver for wireless communication as set, art.-no. 2040101, see page 306

ART NO	mm / inch	mm / inch	mm	max. mm				KG	CC
202150	150 / 6	0.01 / 0.0005	0.01	0.02	40	16	flat	0.165	2094101
202151	200 / 8	0.01 / 0.0005	0.01	0.02	50	19.5	flat	0.195	2094101
202152	300 / 12	0.01 / 0.0005	0.01	0.03	60	20.5	flat	0.230	2094101

VOGEL DIGI PLUS-LINE Electr. Digital Caliper • IP54

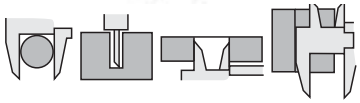
DIN 862

- top model for industry purposes
- with glass rail for more accuracy
- spray water proof acc. to DIN 40050 / IEC 60529

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped, with fixing screw
- On/Off button, with ABS/INC measuring system
- graduation in mm or inch, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

ART NO 202160.2 NEW





UNIT | INOX | ABS/INC | CR2032 Lithium 3V | IP 54 | DIN | CE | TC | WARRANTY 3 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm				KG	CC
202160.2	150 / 6	0.01 / 0.0005	0.01	0.02	40	16	flat	0.160	2094101
202161.2	200 / 8	0.01 / 0.0005	0.01	0.03	50	19.5	flat	0.195	2094101
202162.2	300 / 12	0.01 / 0.0005	0.01	0.03	60	20.5	flat	0.230	2094101

VOGEL DIGI PLUS-LINE Electr. Digital Caliper

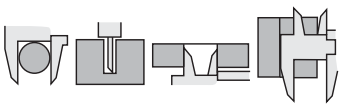
DIN 862

- top model for professional workshop use
- with glass rail for more accuracy
- housing with metal cover and metal buttons
- with data output (mini USB)

- sturdy quality, stainless steel, hardened
- with or without thumbroll (included, for self installation)
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped
- On/Off-button, with flat or round depth gauge
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

ART NO 202040.3





UNIT | INOX | CR2032 Lithium 3V | DIN | CE | TC | WARRANTY 2 YEARS

Option

- Measurement data transmission system (art.-no. 209001 + 2040100), see page 304 + 306

ART NO	mm / inch	mm / inch	mm	max. mm				KG	CC
202040.3	150 / 6	0.01 / 0.0005	0.01	0.02	40	16.5	flat	0.165	2094101
202041.3	200 / 8	0.01 / 0.0005	0.01	0.03	50	19.5	flat	0.195	2094101
202042.3	300 / 12	0.01 / 0.0005	0.01	0.03	60	20.5	flat	0.230	2094101
202043.3	150 / 6	0.01 / 0.0005	0.01	0.02	40	16.5	round	0.165	2094101

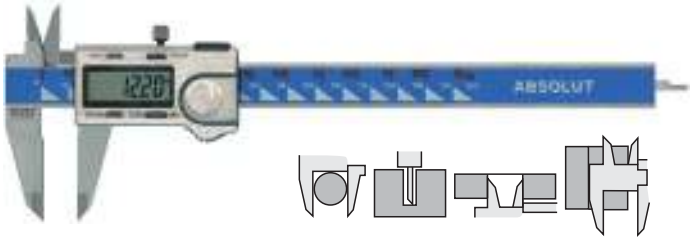
„Absolute“ Electr. Digital Caliper

DIN 862

- **with metal housing**
- **with data output (mini USB)**

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 8 mm digit height
- jaws finely ground and lapped, with fixing screw
- On/Off button, with „ORIGIN“ system
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR1632, art.-no.: 2002193), with operation manual

Option
- Measurement data transmission system see page 304 + 306 (art.-no. 209001 + 2040100)



UNIT | INOX | ABSOLUTE | CR1632 Lithium 3V | DIN | CE | TC | WARRANTY 3 YEARS

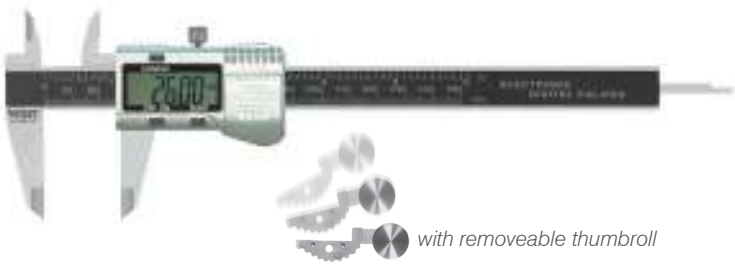
ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202110	150 / 6	0.01 / 0.0005	0.01	0.03	40	16.5	flat	0.150	2094101
202111	200 / 8	0.01 / 0.0005	0.01	0.03	50	19.5	flat	0.190	2094101
202112	300 / 12	0.01 / 0.0005	0.01	0.04	60	20.5	flat	0.230	2094101

Electr. Digital Caliper

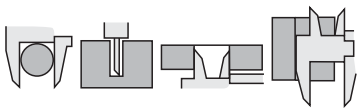
DIN 862

- **with plastic housing**

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped, with fixing screw
- On/Off button
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual



with removeable thumbroll



UNIT | INOX | CR2032 Lithium 3V | DIN | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202011.2	150 / 6	0.01 / 0.0005	0.01	0.04	40	16.5	flat	0.150	2094101
202012.2	200 / 8	0.01 / 0.0005	0.01	0.05	50	19.5	flat	0.175	2094101
202013.2	300 / 12	0.01 / 0.0005	0.01	0.05	60	20.5	flat	0.215	2094101

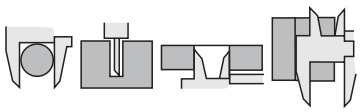
Electr. Digital Caliper

DIN 862

- **with metal housing and metal buttons**
- **without data output**

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 8 mm digit height
- jaws finely ground and lapped, with fixing screw
- On/Off button
- mm/inch switchable, zero setting at any position
- incl. 2x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual





UNIT | INOX | LR44 1.5V | DIN | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202140	100 / 4	0.01 / 0.0005	0.01	0.02	30.5	12.5	flat	0.115	2094101

Electr. Digital Caliper

DIN 862

NEW

- **with metal housing and metal buttons**
- **standard model for larger measuring range**

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped, with fixing screw
- On/Off button, with battery status display
- with ABS/INC measuring system
- mm/inch switchable, zero setting at any position
- incl. 2x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual



UNIT · INOX · ABS/INC · DIN · CE · TC · WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202007.2	450 / 18	0.01 / 0.0005	0.01	0.04	100	38	-	0.935	2094101
202006.2	600 / 24	0.01 / 0.0005	0.01	0.04	100	38	-	1.070	2094105

Electr. Digital Caliper

DIN 862

- **jaws and measuring tips with carbide**
- **with metal cover and metal buttons**
- **with data output (mini USB)**

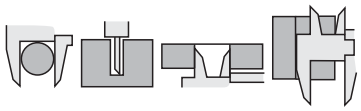
- sturdy quality, stainless steel, hardened
- with or without thumbroll (included, for self installation)
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped, with fixing screw
- On/Off button
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Option

- Measurement data transmission system see page 304 + 306 (art.-no. 209001 + 2040100)



with removeable thumbroll



UNIT · INOX · DIN · CE · TC · WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202020.3	150 / 6	0.01 / 0.0005	0.01	0.03	40	16.5	flat	0.155	2094101

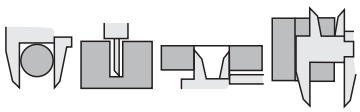
Electr. Digital Caliper

DIN 862

- **for left hand use**

- stainless, hardened
- large LCD display with clear reading, 10 mm digit height
- jaws finely ground and lapped
- On/Off button, with flat depth gauge
- mm/inch switchable, zero setting at any position
- incl. 2x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual





UNIT · INOX · LR44 1.5V · DIN · CE · TC · WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202035	150 / 6	0.01 / 0.0005	0.01	0.03	40	16.5	flat	0.150	2094101
202036	200 / 8	0.01 / 0.0005	0.01	0.03	50	19.5	flat	0.190	2094101

Data cables and other equipment for data processing on PC or printer are available on page 304
Batteries for our Digital Gauges are available on page 308

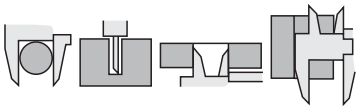
Precision Digital Calipers

VDIGI PLUS-LINE® Electr. Digital Caliper

- **made of carbon fiberglass, non conductive and especially made for the electronic and sensitive purposes, like the food sector and automotive parts**
- **with fraction number reading system**

- large LCD display with clear reading, 13 mm digit height
- Zero/On button and autom. shutdown
- mm/inch switchable, zero setting at any position
- with flat depth gauge made of carbon fiberglass
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual







display with fraction number in inches

UNIT | CR2032 Lithium 3V | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm				KG
202201	150 / 6	0.01 / 0.0005	0.1	0.2	40	16	flat	0.060

VBLUE-LINE® Accessories for Digital Calipers

NEW

- **for many purposes**

- 6 pairs of different probes
- 2 adapter pairs, different sizes
- with measuring force testing system (for permanent uniform pressure)





measuring force testing system



WARRANTY 2 YEARS

ART NO	description	KG
209333	Accessories for Digital Calipers	0.325

VBLUE-LINE® Digital Caliper with Accessories

NEW

- **for many purposes**

- with caliper art.-no. 202160.2
- with measuring bridge art.-no. 2002092
- 6 pairs of different probes
- 2 adapter pairs, different sizes
- with measuring force testing system (for permanent uniform pressure)
- in sturdy box



WARRANTY 2 YEARS

ART NO	description	KG
209334	Digital Caliper with Accessories	1.010

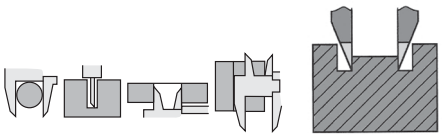
Electr. Digital Pointed Caliper

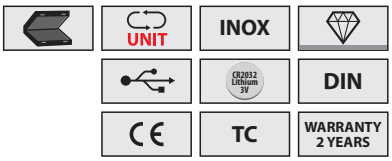
- **to measure narrow groove widths etc.**
- **with metal cover and metal button**
- **with data output (mini USB)**

- sturdy quality, stainless steel, hardened
- with or without thumbroll (included, for self installation)
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped
- On/Off button, with flat depth gauge
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Option
- Measurement data transmission system see page 304 + 306 (art.-no. 209001 + 2040100)


with removeable thumbroll





ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202025	150 / 6	0.01 / 0.0005	0.01	0.03	40	16	flat	0.165	2094101

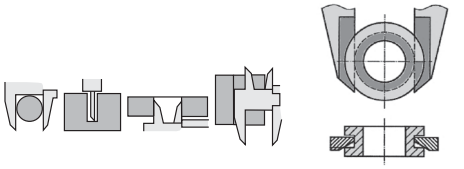
Electr. Digital Splines Caliper

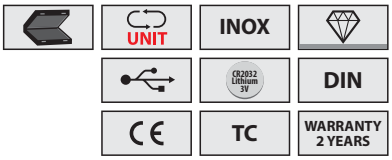
- **to measure narrow penetration usw.**
- **with metal cover and metal button**
- **with data output (mini USB)**

- sturdy quality, stainless steel, hardened
- with or without thumbroll (included, for self installation)
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped
- On/Off button, with flat depth gauge
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Option
- Measurement data transmission system see page 304 + 306 (art.-no. 209001 + 2040100)


with removeable thumbroll





ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202026	150 / 6	0.01 / 0.0005	0.01	0.03	40	16.5	flat	0.165	2094101

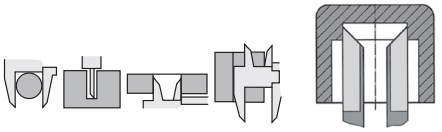
Electr. Digital Special Caliper

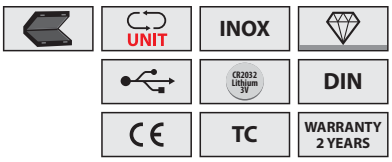
- **to measure especially deep penetrations etc.**
- **with metal cover and metal button**
- **with data output (mini USB)**

- sturdy quality, stainless steel, hardened
- with or without thumbroll (included, for self installation)
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped
- On/Off button, with flat depth gauge
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Option
- Measurement data transmission system see page 304 + 306 (art.-no. 209001 + 2040100)


with removeable thumbroll





ART NO	mm / inch	mm / inch	mm	max. mm				KG	ART NO CC
202027	150 / 6	0.01 / 0.0005	0.01	0.04	40	45	flat	0.165	2094101

We also manufacture special calipers to your needs.
Please ask us or send us your drawings. We are happy to help you!

Precision Pocket Vernier Calipers

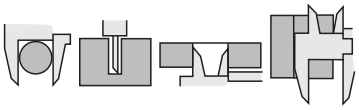
Precision Pocket Vernier Caliper

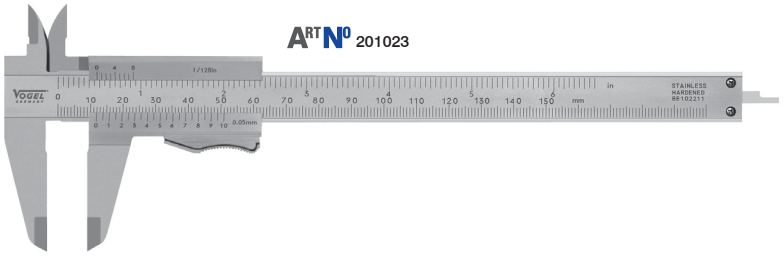
SILVER-LINE

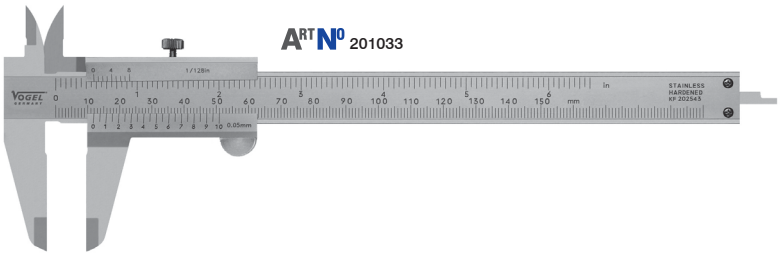
DIN 862

- **for professional industry purposes**

- stainless steel, hardened
- reading in mm/inch, scale laser engraved
- reading satin chrome finish
- jaws fine ground and lapped
- mono-block vernier
- flat depth gauge







mm/inch | INOX | DIN | TC | WARRANTY 3 YEARS

ART NO	type	mm / inch	mm bottom	inch top				KG	ART NO CC
201023	thumb locking	150 / 6	0.05	1/128	40	16	flat	0.150	2094001
201033	fixing screw	150 / 6	0.05	1/128	40	16	flat	0.150	2094001

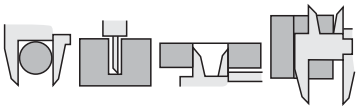
Pocket Vernier Caliper

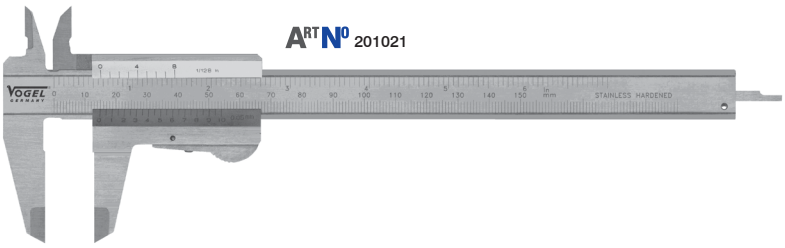
BLUE-LINE

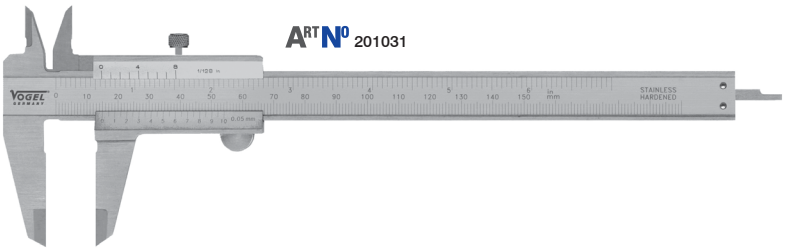
DIN 862

- **suitable for workshop use (standard)**

- stainless steel, hardened
- reading in mm/inch, scale laser engraved
- reading satin chrome finish
- jaws fine ground and lapped
- mono-block vernier
- flat or round depth gauge







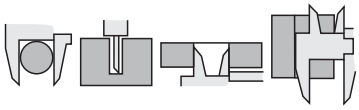
mm/inch | INOX | DIN | WARRANTY 2 YEARS

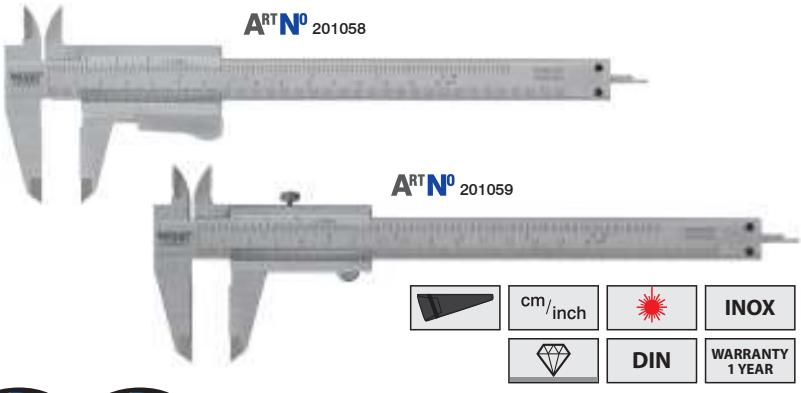
ART NO thumb locking	ART NO fixing screw	mm / inch	mm bottom	inch top				KG	ART NO CC
201021	**201031**	150 / 6	0.05	1/128	40	16	flat	0.150	2094001
201022	**201032**	150 / 6	0.05	1/128	40	16	round	0.150	2094001
201024	**201034**	200 / 8	0.05	1/128	50	19	flat	0.170	2094001
201025	**201035**	150 / 6	0.02	1/1000	40	16	flat	0.150	2094001
201026	**201036**	200 / 8	0.02	1/1000	40/50	16/19	flat	0.170	2094001
-	**201038**	200 / 8	0.05	1/128	40	16	round	0.170	2094001
-	**201013**	300 / 12	0.05	1/128	60	20	flat	0.250	2094001
-	**201015**	300 / 12	0.02	1/1000	64	20	flat	0.250	2094001

BLUE-LINE Pocket Vernier Caliper
DIN 862

- **for craftsmen**

- stainless, hardened
- reading in cm/inch, scale laser engraved
- scale and vernier satin chrome finish
- jaws fine ground, flat depth gauge
- mono-block vernier



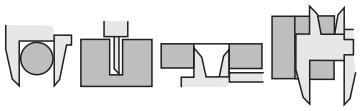


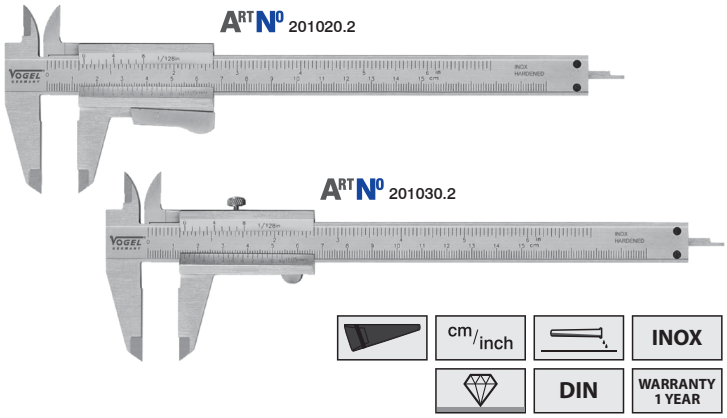
ART NO thumb locking	ART NO fixing screw	mm / inch	mm bottom	inch top				KG	ART NO CC
201058	**201059**	150 / 6	0.05	1/128	40	16	flat	0.155	2094001

BLUE-LINE Pocket Vernier Caliper
DIN 862

- **simple quality for DIY and training purposes**

- inox, hardened
- graduation in cm/inch, scale etched
- reading satin chrome finish, flat depth gauge
- jaws finely ground and lapped



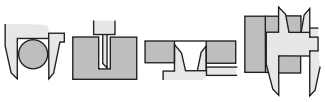


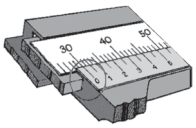
ART NO thumb locking	ART NO fixing screw	mm / inch	mm bottom	inch top				KG
201020.2	**201030.2**	150 / 6	0.05	1/128	40	16	flat	0.155

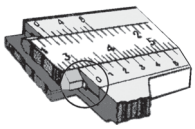
BLUE-LINE Pocket Vernier Caliper
DIN 862

- **with parallaxfree reading**
- **art.-no. 201060 with double-prism guide**

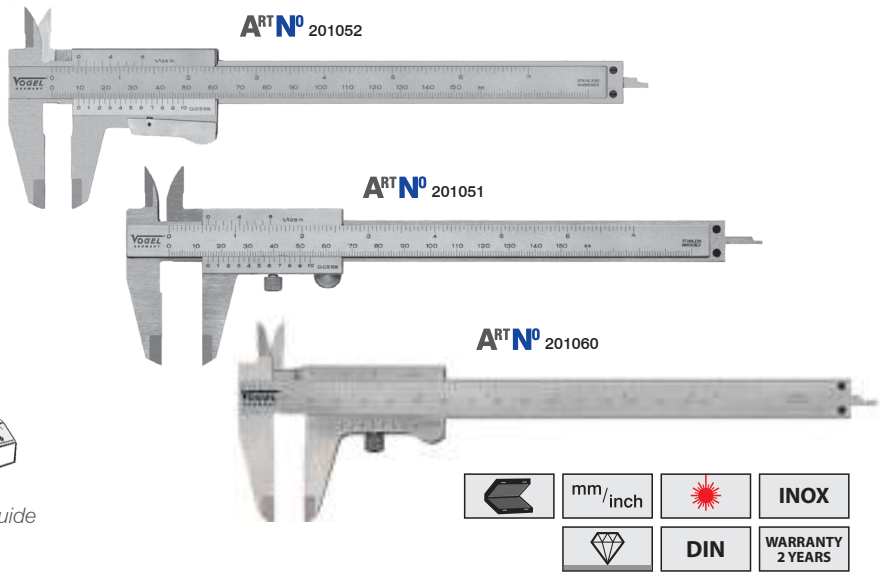
- stainless steel, hardened
- graduation in mm/inch, laser engraved scale
- reading satin chrome finish
- jaws finely ground and lapped, flat depth gauge
- mono-block vernier







with double-prism guide



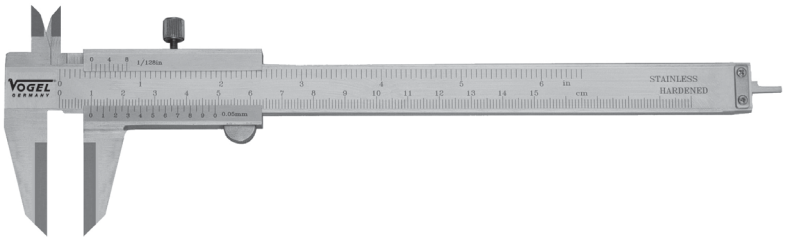
ART NO thumb locking	ART NO fixing screw	mm / inch	mm bottom	inch top				KG	ART NO CC
★★★★★ **201052**	★★★★★ **201051**	150 / 6	0.05	1/128	40	16	flat	0.155	2094001
★★★★★ **201054**	★★★★★ **201053**	150 / 6	0.02	1/1000	40	16	flat	0.155	2094001
-	★★★★★ **201060**	150 / 6	0.05	1/128	40	16	flat	0.155	2094001

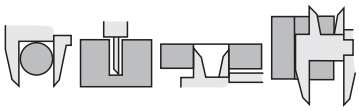
Pocket Vernier Calipers

BLUE-LINE Pocket Vernier Caliper
DIN 862

- **with tungsten carbide measuring jaws and tips**

- stainless steel, hardened
- graduation in mm/inch, laser engraved scale
- scale and vernier satin chrome finish
- jaws finely ground and lapped
- mono block vernier





cm/inch | INOX | DIN | WARRANTY 2 YEARS

ART NO	mm / inch	mm bottom	inch top				KG	ART NO CC
201039	150 / 6	0.05	1/128	40	16	flat	0.165	2094001

BLUE-LINE Pocket Vernier Caliper
DIN 862

- **for left-handed use**

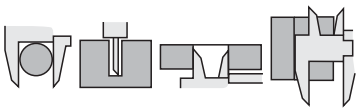
- stainless steel, hardened
- graduation in mm/inch, laser engraved scale
- scale and vernier satin chrome finish
- jaws finely ground and lapped
- mono block vernier

ART NO 201027



ART NO 201037





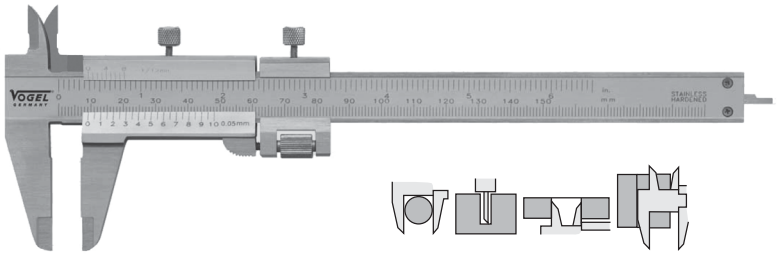
mm/inch | INOX | DIN | WARRANTY 2 YEARS

ART NO thumb locking	ART NO fixing screw	mm / inch	mm bottom	inch top				KG	ART NO CC
201027	**201037**	150 / 6	0.05	1/128	40	16	flat	0.155	2094001

BLUE-LINE Pocket Vernier Caliper
workshop grade

- **with fine adjustment and long jaws**

- stainless steel, hardened
- graduation in mm/inch, laser engraved scale
- scale and vernier satin chrome finish
- jaws finely ground and lapped
- mono block vernier
- with fine adjustment



mm/inch | INOX | NORM | WARRANTY 2 YEARS

ART NO	mm / inch	mm bottom	inch top				KG	ART NO CC
201062	130 / 5	0.05	1/128	40	16.5	flat	0.164	2094015
201063	130 / 5	0.02	1/1000	40	16.5	flat	0.164	2094015
201064	180 / 7	0.05	1/128	50	19.5	flat	0.200	2094020
201065	180 / 7	0.02	1/1000	50	19.5	flat	0.200	2094020

BLUE-LINE Dial Caliper • IP40

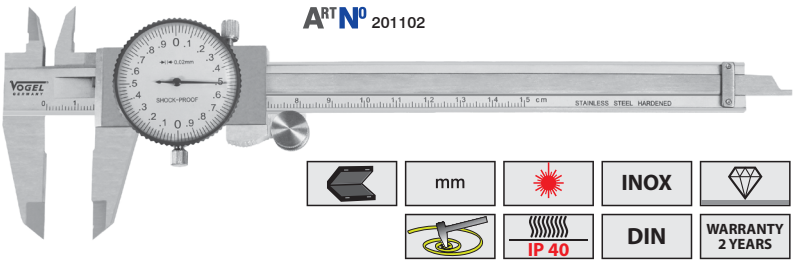
DIN 862

- **economic model, shock proof mechanics**
- **for fast and accurate reading**

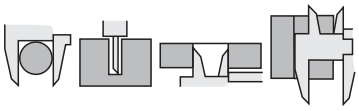
- stainless steel, hardened
- measuring rail matt chrome finish, laser engraved scale
- jaws finely ground and lapped
- dust proof housing, flat depth gauge
- with thumb roll for fine adjustment
- with fixing screw



ART NO 201101



ART NO 201102



mm | INOX | IP 40 | DIN | WARRANTY 2 YEARS

ART NO	mm	mm	mm				KG	CC
201101	150	0.01	1	40	16.5	flat	0.160	2094001
201108	200	0.01	1	48	19.5	flat	0.240	2094001
201109	300	0.01	1	62	22.0	flat	0.320	2094001
201102	150	0.02	2	40	16.5	flat	0.160	2094001
201103	200	0.02	2	48	19.5	flat	0.240	2094001
201104	300	0.02	2	62	22.0	flat	0.320	2094001

SILVER-LINE Precision Dial Caliper • IP40

DIN 862

- **top model, shock proof mechanics**
- **for fast and accurate reading**

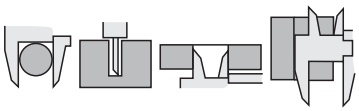
- stainless steel, hardened
- measuring rail matt chrome finish, laser engraved scale
- jaws finely ground and lapped
- dust proof housing, flat depth gauge
- with fixing screw
- incl. calibration certificate



ART NO 200130



ART NO 200140



mm | INOX | IP 40 | DIN | CC | WARRANTY 3 YEARS

ART NO	mm	mm	mm				KG	CC
200130	150	0.01	1	40	16	flat	0.215	inclusive
200131	200	0.01	1	50	19	flat	0.250	inclusive
200132	300	0.01	1	60	18	flat	0.330	inclusive
200140	150	0.02	2	40	16	flat	0.215	inclusive
200141	200	0.02	2	50	19	flat	0.250	inclusive
200142	300	0.02	2	60	18	flat	0.330	inclusive

Dial and Small Pocket Vernier Calipers

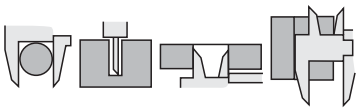
BLUE-LINE Dial Caliper • IP40

DIN 862

- **with inch graduation, dust proof**
- **for fast and accurate reading**

- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale
- jaws finely ground and lapped
- shock proof housing
- with fixing screw





inch | INOX | IP 40 | DIN | WARRANTY 2 YEARS

ART NO	inch	inch	inch				KG	ART NO CC
200081	6	0.001	0.1	40	16	flat	0.160	2094001
200082	8	0.001	0.1	50	19	flat	0.240	2094001
200083	12	0.001	0.1	60	18	flat	0.320	2094001

BLUE-LINE Small Pocket Vernier Caliper

DIN 862

- **for craftsmen or as promotional item**

- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale
- jaws finely ground and lapped
- with fixing screw

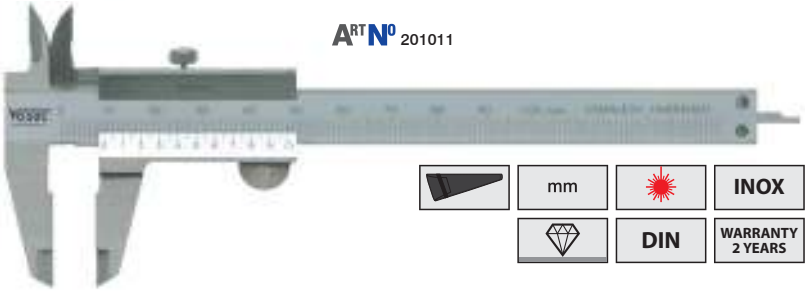
ART NO 201009

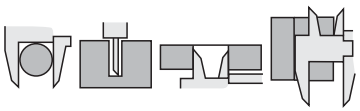


ART NO 201010



ART NO 201011





mm | INOX | DIN | WARRANTY 2 YEARS

ART NO	mm	mm					KG	ART NO CC
★★★★☆ **201009**	70	0.05	20	9	flat		0.023	2094001
★★☆☆☆ **201010**	100	0.05	30	13	flat		0.040	2094001
★★★☆☆ **201011**	100	0.05	30	13	flat		0.040	2094001

DIGI PLUS-LINE Electr. Digital Workshop Caliper

workshop grade

- **with two moveable, exchangeable jaws**
- **modern design, lightweight model, made of anodized hard aluminium**

- stainless, hardened measuring jaws and tips
- jaws finely ground
- with two adjustable, exchangeable measuring jaws
- LCD display with clear reading, digit height 10 mm
- On/Off button, mm/inch switchable, zero setting at any position
- slides perfectly because of double-prismatic-lead
- rail and electronic housing made of anodized aluminium
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B) with operation manual

Options

- **art.-no. 200891**
  measuring jaw-pair, jaw lenght 125 mm, exchangeable
- **art.-no. 200892**
  measuring jaw-pair, jaw lenght 150 mm, exchangeable



Two moveable jaws for measurements in inaccessible places!



measuring jaw-pair

LR44 1,5V | UNIT | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm			ø mm	KG	ART NO CC
200880	300 / 12	0.01 / 0.0005	0.01	0.04	90	40	10	0.500	2094103
200881	500 / 20	0.01 / 0.0005	0.01	0.05	90	40	10	0.600	2094105
200882	800 / 32	0.01 / 0.0005	0.01	0.06	90	40	10	1.000	2094110

DIGI PLUS-LINE Electr. Digital Workshop Caliper

workshop grade

- **with two adjustable, exchangeable measuring jaws**
- **modern design, lightweight model, made of anodized hard aluminium, with Sylvac electronic**

- stainless, hardened measuring jaws
- jaws finely ground, offset jaws for inside measurements
- with two adjustable, exchangeable measuring jaws
- LCD display with clear reading, digit height 7 mm
- On/Off button, mm/inch switchable, zero setting at any position
- with pre-select-, Min/Max-, REF-I, REF-II and tolerance-function
- slides perfectly because of double-prismatic-lead
- rail and electronic housing made of anodized aluminium
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093) with operation manual

Option

- measuring jaws are also available according to your drawing specifications!



Two moveable jaws for measurements in inaccessible places!

CR2032 Lithium 3V | UNIT | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm		ø mm	KG	ART NO CC
200942	1000 / 40	0.01 / 0.0005	0.01	0.06	150	20	1.700	2094110
200942/1	1000 / 40	0.01 / 0.0005	0.01	0.06	200	20	1.830	2094110
200943*	1500 / 60	0.01 / 0.0005	0.01	0.10	150	20	2.000	2094115
200943/1*	1500 / 60	0.01 / 0.0005	0.01	0.10	200	20	2.130	2094115
200944*	2000 / 80	0.01 / 0.0005	0.01	0.13	150	20	2.400	2094120
200944/1*	2000 / 80	0.01 / 0.0005	0.01	0.13	200	20	2.530	2094120

DIGI PLUS-LINE

Electr. Digital Workshop Caliper • IP66

workshop grade

- **water and coolant proof acc. to DIN 40050 / IEC 60529**

- stainless steel, hardened
- large LCD display with clear reading, digit height 11 mm
- jaws finely ground and lapped
- offset jaws for inside measurements
- On/Off button, automatic shutdown, mm/inch switchable
- zero setting at any position, with REL-, ABS- and PRESET-mode
- function buttons made of metal
- with fine adjustment, with or without knife points
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093) with operation manual
- incl. calibration certificate



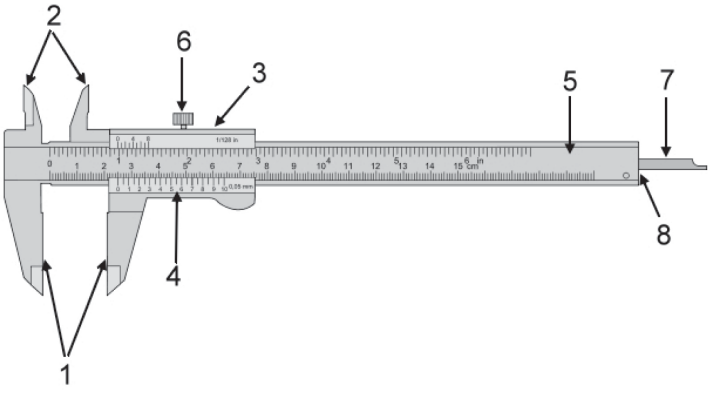


UNIT | INOX | IP 66 | NORM | CE | CC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm			ø mm	KG	CC
207040	500 / 20	0.01 / 0.0005	0.01	0.06	100	56	20	1.370	inclusive
207041	500 / 20	0.01 / 0.0005	0.01	0.06	150	56	20	1.550	inclusive
207140	500 / 20	0.01 / 0.0005	0.01	0.06	100	-	20	1.050	inclusive
207141	500 / 20	0.01 / 0.0005	0.01	0.06	150	-	20	1.180	inclusive
207144	800 / 32	0.01 / 0.0005	0.01	0.07	150	-	20	1.685	inclusive
207145	800 / 32	0.01 / 0.0005	0.01	0.07	200	-	20	1.880	inclusive
207146	1000 / 40	0.01 / 0.0005	0.01	0.07	150	-	20	2.290	inclusive
207147	1000 / 40	0.01 / 0.0005	0.01	0.08	200	-	20	2.400	inclusive
207048	1000 / 40	0.01 / 0.0005	0.01	0.07	150	67	20	2.420	inclusive
207049	1000 / 40	0.01 / 0.0005	0.01	0.08	200	67	20	2.530	inclusive

Important components of a mechanical caliper

1) measuring jaws for external measurement
2) measuring tips for inside measurement
3) vernier slide
4) vernier
5) measurement rail with scale
6) locking screw
7) depth gauge
8) measuring surface for depth measurement



DIGI PLUS-LINE

Electr. Digital Workshop Caliper

workshop grade

- **with data output (mini USB)**

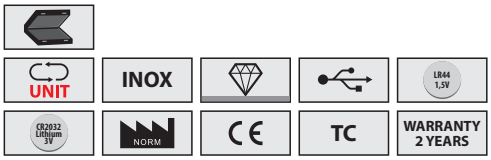
- stainless steel, hardened
- large LCD display with clear reading, digit height 11 mm
- jaws finely ground and lapped
- offset jaws for inside measurements
- On/Off button, mm/inch switchable, zero setting at any position
- from 500 mm with INC-, ABS- and PRESET-mode
- with fine adjustment, with or without knife points
- up to 300 mm incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B) from 500 mm incl. 1x 3 V battery (type CR2032, art.-no.: 2002093) with operation manual



housing for 300 mm







ART Nº	mm / inch	mm / inch	mm	max. mm			ø mm	KG	ART Nº CC
207021	300 / 12	0.01 / 0.0005	0.01	0.05	90	45	10	0.375	2094103
207022	500 / 20	0.01 / 0.0005	0.01	0.06	150	56	20	1.180	2094105
207023	600 / 24	0.01 / 0.0005	0.01	0.06	150	80	20	1.255	2094106
207024	1000 / 40	0.01 / 0.0005	0.01	0.08	200	67	20	2.400	2094110
207121	300 / 12	0.01 / 0.0005	0.01	0.05	90	-	10	0.375	2094103
207122	500 / 20	0.01 / 0.0005	0.01	0.06	150	-	20	1.180	2094105
207123	600 / 24	0.01 / 0.0005	0.01	0.06	150	-	20	1.255	2094106
207124	1000 / 40	0.01 / 0.0005	0.01	0.08	200	-	20	2.400	2094110

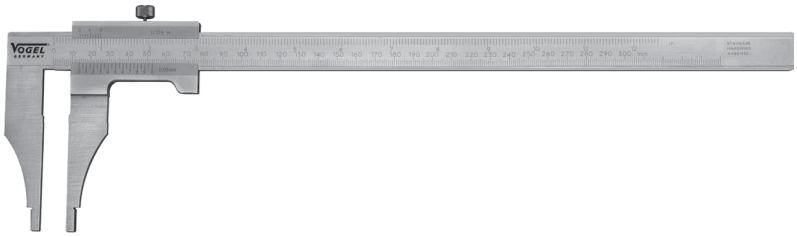
BLUE-LINE Workshop Caliper

DIN 862

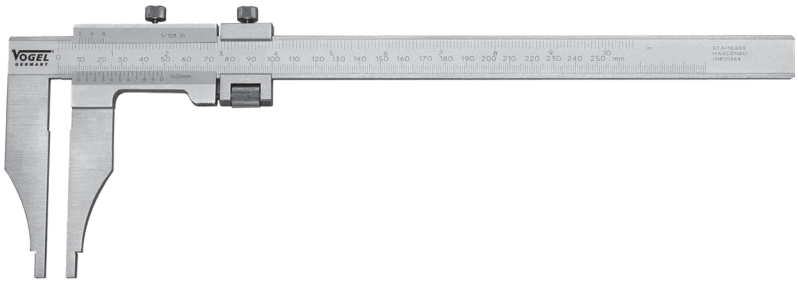
- **for standard workshop purpose**

- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale
- jaws finely ground
- offset jaws for inside measurements
- with or without fine adjustment, with or without knife points
- with fixing screw
- mono block vernier

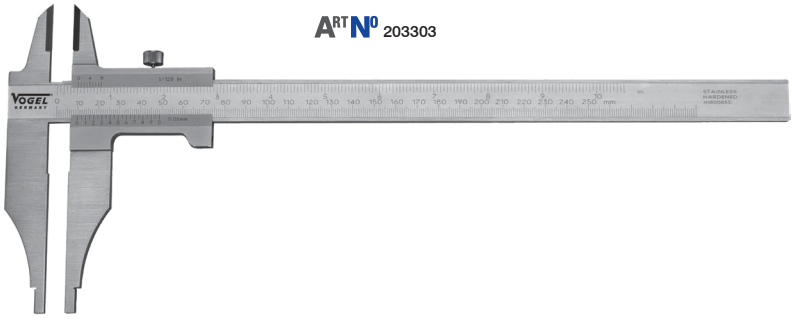
ART NO 203203



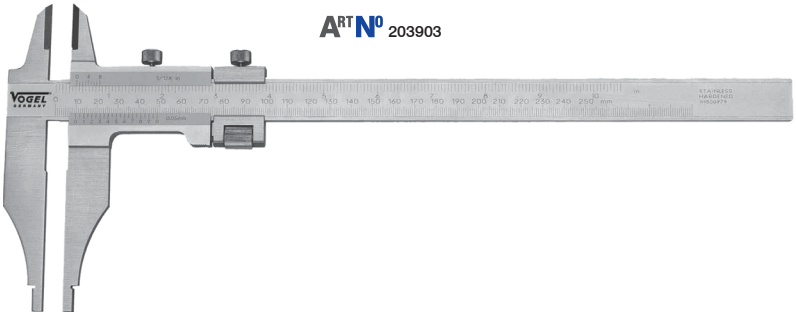
ART NO 203803



ART NO 203303



ART NO 203903



mm/inch | INOX | DIN | WARRANTY 2 YEARS

ART NO	ART NO	mm / inch	mm bottom	mm top			ø mm	KG	ART NO CC
203201	203801	200 / 8	0.05	1/128	65	-	10	0.310	2094020
203202	203802	250 / 10	0.05	1/128	80	-	10	0.385	2094025
203203	203803	300 / 12	0.05	1/128	100	-	10	0.390	2094030
203204	203804	400 / 16	0.05	1/128	100	-	20	0.455	2094040
203205	203805	500 / 20	0.05	1/128	150	-	20	0.530	2094050
with knife points									
203301	203901	200 / 8	0.05	1/128	65	32	10	0.310	2094020
203302	203902	250 / 10	0.05	1/128	80	32	10	0.385	2094025
203303	203903	300 / 12	0.05	1/128	100	32	10	0.390	2094030
203304	203904	400 / 16	0.05	1/128	100	32	20	0.455	2094040
203305	203905	500 / 20	0.05	1/128	150	67	20	0.530	2094050
-	204901	200 / 8	0.02	1/1000	65	32	10	0.310	2094020
-	204902	250 / 10	0.02	1/1000	80	32	10	0.385	2094025
-	204903	300 / 12	0.02	1/1000	100	32	10	0.390	2094030

SILVER-LINE

Workshop Caliper

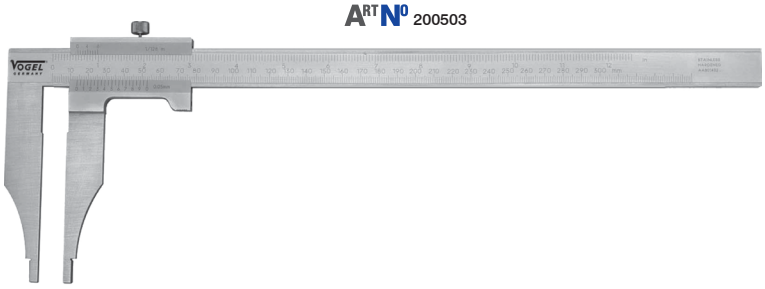
DIN 862 or in special sizes
acc. to workshop grade

- **precision class**

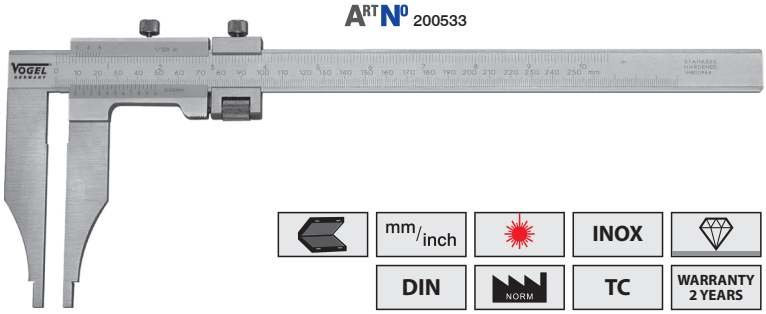
- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale
- jaws finely ground
- offset jaws for inside measurements
- with or without fine adjustment, without knife points
- with fixing screw
- mono block vernier
- up to 1000 mm in plastic case, other sizes in wooden case
- with identification number

Spare parts and accessories for our calipers can be found on page 74 + 75

ART NO 200503



ART NO 200533



mm/inch | INOX | DIN | NORM | TC | WARRANTY 2 YEARS

ART NO	ART NO	mm / inch	bottom mm	top inch			ø mm	KG	ART NO CC
200501	200531	200 / 8	0.05	1/128	65	-	10	0.360	2094020
200502	200532	250 / 10	0.05	1/128	80	-	10	0.390	2094025
200503	200533	300 / 12	0.05	1/128	100	-	10	0.415	2094030
-	200533/1	300 / 12	0.05	1/128	150	-	20	0.850	2094030
200504	200534	400 / 16	0.05	1/128	100	-	20	0.950	2094040
200505	200535	500 / 20	0.05	1/128	150	-	20	1.495	2094050
-	200535/1	500 / 20	0.05	1/128	200	-	20	1.980	2094050
200505/2	200535/2	500 / 20	0.05	1/128	300	-	20	6.040	2094050
200506	200536	600 / 24	0.05	1/128	150	-	20	1.655	2094060
-	200536/1	600 / 24	0.05	1/128	200	-	20	2.180	2094060
-	200536/2	600 / 24	0.05	1/128	300	-	20	6.315	2094060
200508	200538	800 / 32	0.05	1/128	150	-	20	2.735	2094080
-	200538/1	800 / 32	0.05	1/128	200	-	20	3.210	2094080
-	200538/2	800 / 32	0.05	1/128	300	-	20	4.150	2094080
200510	200540	1000 / 40	0.05	1/128	150	-	20	3.110	2094100
-	200541	1000 / 40	0.05	1/128	200	-	20	3.350	2094100
-	200542	1000 / 40	0.05	1/128	300	-	20	3.790	2094100
-	200543	1000 / 40	0.05	1/128	500	-	20	4.250	2094100
-	200551	1250 / 50	0.05	1/128	200	-	20	3.050	2094100
200512*	200552*	1500 / 60	0.05	1/128	200	-	20	3.550	2094150
-	200552/1*	1500 / 60	0.05	1/128	300	-	20	4.100	2094150
200513*	200553*	2000 / 80	0.05	1/128	200	-	20	7.000	2094200
-	200553/1*	2000 / 80	0.05	1/128	300	-	20	7.500	2094200
200514*	200554*	2500 /100	0.05	1/128	200	-	20	9.100	2094250
200515*	200555*	3000 /120	0.05	1/128	200	-	20	12.550	2094300
-	200555/1*	3000 /120	0.05	1/128	300	-	20	13.000	2094300

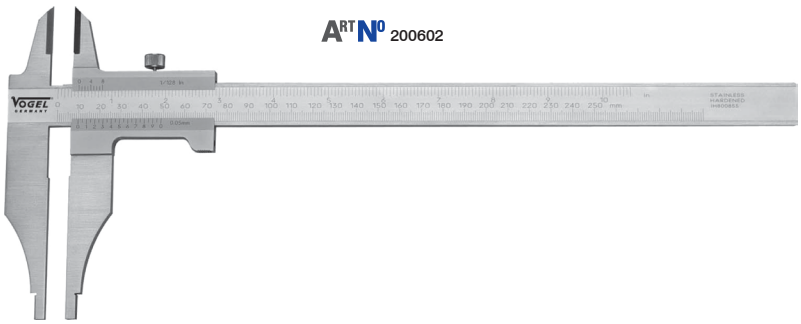
SILVER-LINE

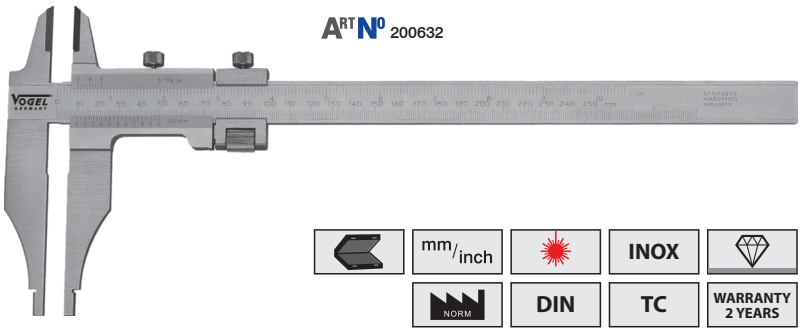
Workshop Caliper

DIN 862 or in special sizes
acc. to workshop grade

- **precision class**

- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale
- jaws finely ground
- offset jaws for inside measurements
- with or without fine adjustment, with knife points
- with fixing screw
- mono block vernier
- up to 1000 mm in plastic case, other sizes in wooden case





Spare parts and accessories for our calipers can be found on page 74+75

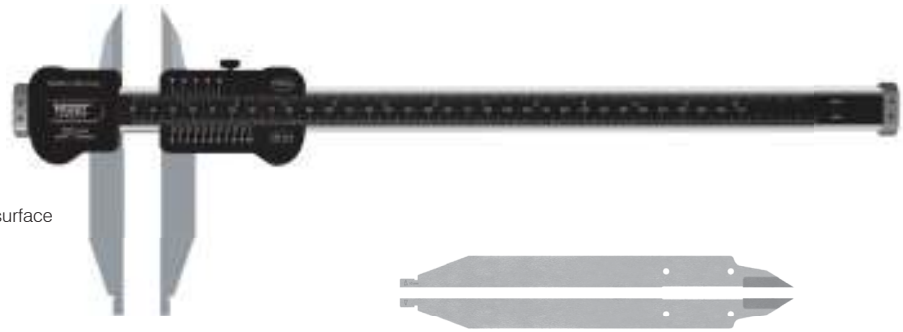
mm/inch | INOX | NORM | DIN | TC | WARRANTY 2 YEARS

ART NO	ART NO	mm / inch	bottom mm	top inch			ø mm		ART NO CC
200601	200631	200 / 8	0.05	1/128	65	32	10	0.365	2094020
200602	200632	250 / 10	0.05	1/128	80	32	10	0.400	2094025
200603	200633	300 / 12	0.05	1/128	100	32	10	0.425	2094030
200604	200634	400 / 16	0.05	1/128	100	32	20	0.880	2094040
200605	200635	500 / 20	0.05	1/128	150	67	20	1.540	2094050
200606	200636	600 / 24	0.05	1/128	150	67	20	1.600	2094060
200608	200638	800 / 32	0.05	1/128	150	67	20	2.760	2094080
200610	200640	1000 / 40	0.05	1/128	150	67	20	3.260	2094100
200612*	200652*	1500 / 60	0.05	1/128	200	80	20	3.400	2094150
200613*	200653*	2000 / 80	0.05	1/128	200	80	20	7.120	2094200
200614*	200654*	2500 / 100	0.05	1/128	200	80	20	9.150	2094250
200615*	200655*	3000 / 120	0.05	1/128	200	80	20	9.460	2094300
200616*	200656*	3000 / 120	0.05	1/128	300	80	20	9.650	2094300
200617*	200657*	3500 / 140	0.05	1/128	200	80	20	11.000	2094350
200618*	200658*	3500 / 140	0.05	1/128	300	80	20	11.200	2094350

SILVER-LINE Workshop Caliper

DIN 862

- **parallaxfree finished, with flat vernier**
- **with exchangeable jaws**
- **modern design, lightweight model, made of anodized hard aluminium**
- stainless, hardened measuring jaws and tips
- jaws finely ground
- good contrast scaling because of white on black surface
- reading in mm and inch
- slides perfectly because of double-prismatic-lead
- rail and housing made of anodized aluminium
- with operation manual





measuring jaw-pair

Options

- **art. no. 200890**
  measuring jaw-pair, jaw length 90 mm, exchangeable
- **art. no. 200891**
  measuring jaw-pair, jaw length 125 mm, exchangeable
- **art. no. 200892**
  measuring jaw-pair, jaw length 150 mm, exchangeable

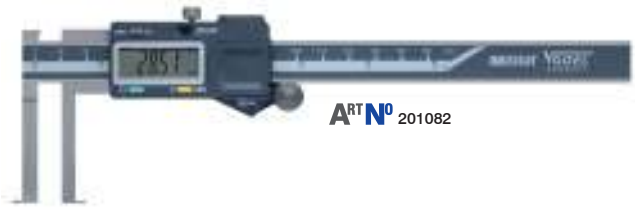
mm/inch | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm bottom	inch top			ø mm	KG	ART NO CC
200831	300 / 12	0,05	1/128	90	40	10	0.500	2094030
200832	500 / 20	0,05	1/128	90	40	10	0.600	2094050
200833	700 / 28	0,05	1/128	90	40	10	0.700	2094080
200834	900 / 36	0,05	1/128	90	40	10	0.800	2094100

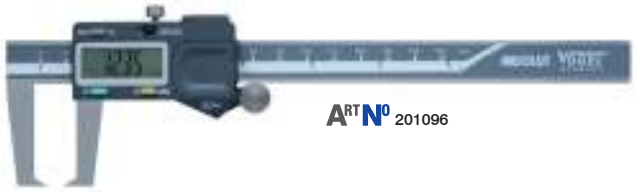
DIGI PLUS-LINE „Absolute“ Digital Caliper for Inside or Outside Grooves • IP54 NEW

DIN 862

- **art.-no. 201082 - 201084 for inside groove measuring**
- **art.-no. 201096 - 201098 for outside groove measuring**
- **top model for industry purposes**
- **with glass rail for more accuracy**
- **spray water proof acc. to DIN 40050 / IEC 60529**
- **with VOCOM-S duo data output, top model (connectivity also for Digimatic measuring devices)**



ART NO 201082

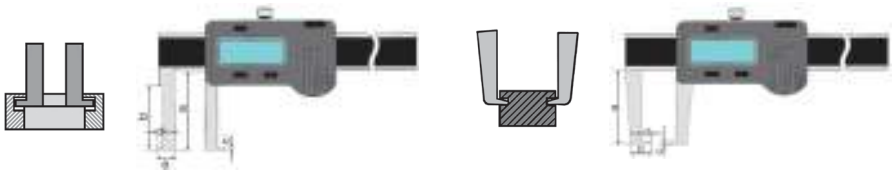


ART NO 201096

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 9 mm digit height
- jaws finely ground and lapped, with fixing screw
- On/Off button, with „ORIGIN“ system, with thumbroll
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Options

- transmitter for wireless communication via WiFi, art.-no. 209006, see page 306
- receiver for wireless communication via WiFi, art.-no. 209007, see page 306
- transmitter and receiver for wireless communication as set, art.-no. 2040101, see page 306



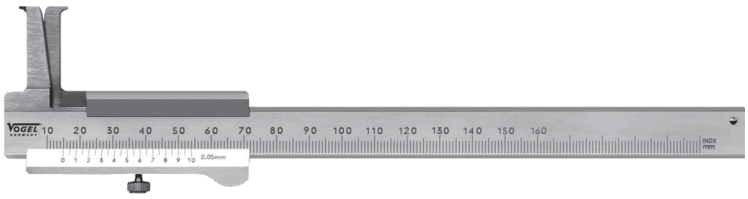
UNIT | INOX | VOCOM-S Duo-Datenausgang | ABSOLUTE | CR2032 Lithium 3V | IP 54 | DIN | CE | TC | WARRANTY 3 YEARS

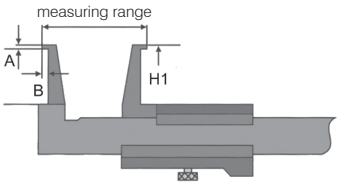
ART NO	type	mm / inch	mm / inch	mm	max. mm / inch	A mm	B mm	C mm	D mm	KG
201082	inside	20-150 / 0-6	0.01 / 0.0005	0.01	0.03 / 0.0015	36	10	1	4	0.170
201083	inside	25-200 / 0-8	0.01 / 0.0005	0.01	0.03 / 0.0015	36	10	1	4	0.200
201084	inside	30-300 / 0-12	0.01 / 0.0005	0.01	0.04 / 0.002	36	10	1	4	0.225
201096	outside	0-150 / 0-6	0.01 / 0.0005	0.01	0.03 / 0.0015	40	15	1	5	0.170
201097	outside	0-200 / 0-8	0.01 / 0.0005	0.01	0.03 / 0.0015	40	15	1	5	0.200
201098	outside	0-300 / 0-12	0.01 / 0.0005	0.01	0.04 / 0.002	40	15	1	5	0.225

BLUE-LINE Groove Caliper

- **to measure groove dimensions**

- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale
- with fixing screw





mm | INOX | NORM | WARRANTY 2 YEARS

ART NO	mm	mm	A mm	B mm	H1 mm	KG	ART NO CC
201075	10 - 160	0.05	0.9	3.0	25	0.160	2094075
201076	20 - 160	0.05	2.0	5.0	40	0.210	2094075
201077	26 - 200	0.05	3.0	7.0	60	0.295	2094075
201085	30 - 250	0.05	4.0	8.5	80	0.350	2094075
201086	35 - 300	0.05	5.0	10.0	105	0.500	2094075

DIGI PLUS-LINE Electr. Digital Universal Caliper

workshop grade

- **a handy, lightweight measuring instrument**
- **for internal and external measurements**
- **with exchangeable probes**
- **modern design, lightweight model, made of anodized hard aluminium**

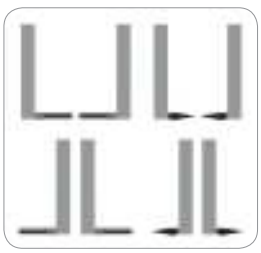


- LCD with clear reading
- mm/inch switchable
- with fine adjustment
- slides perfectly because of double-prismatic-lead
- rail and electronic housing made of anodized aluminium
- probe shaft with M 2.5 thread
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual





internal and external measurements



UNIT | CR2032 Lithium 3V | NORM | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm		KG
200990	0.01 / 0.0005	300 / 12	0.01	0.04	100	1.000
200991	0.01 / 0.0005	500 / 20	0.01	0.04	100	1.100
200992	0.01 / 0.0005	800 / 32	0.01	0.05	100	1.200
200993	0.01 / 0.0005	1000 / 40	0.01	0.05	100	1.300

DIGI PLUS-LINE® Electr. Digital Universal Gauge Set NEW



- **Universal Gauge (extension compatible version)**
- **with Electr. Digital Indicator • IP51, water proof**

- for internal and external measurement, with extensive accessories
- cylindrical beam without guideway (standard version)
  dial indicator features:
- mechanic in stainless steel, hardened
- data output Proximity-USB / RS232, with optional built-in Bluetooth
- large LCD display with clear reading, digit height 12 mm
- autom. On-/Off, autom. sleep mode, ABSOLUTE system
- mm/inch switchable, storage of original value
- „0"-setting at any position, ± preset function
- with extensive basic equipment:
  Universal Gauge (art.-no. 200901)
  digital indicator with protection cover (art.-no. 2009001)
  clamping inserts (art.-no. 2009003)
  spherical contacts (art.-no. 2009005)
  1 pair of measuring arm 50 mm (art.-no. 2009006)
  1 pair of depth stop (art.-no. 20090010)
- inclusive 1 x 3 V battery (CR2032, art.-no. 2002093),
  with operation manual



application sample

Options
- Bluetooth or wireless data transmission WiFi (see page 306)
- extensive offer of adaptors or contacts for standard measurements of threads, grooves, splines, gears, hole centers and many others are available as standard
- extensions and accessories find on page 58
- more unusual applications are available on request

UNIT · IP 51 · Bluetooth · NORM · CE · TC · WARRANTY 3 YEARS

ART NO without Bluetooth	ART NO with Bluetooth	mm internal	mm external	mm anvil travel	mm / inch	max. mm	KG	ART NO CC for dial indicator
200900	**200900-BT**	30 - 250	0 - 215	15	0.001 / 0.00005	0.004	1.400	2494200

DIGI PLUS-LINE® Electr. Digital Universal Gauge Set NEW



- **Universal Gauge, beam with guideway**
  (not compatible for extensions)
- **with Electr. Digital Indicator • IP51, water proof**

- for internal and external measurement, with extensive accessories
- cylindrical beam with guideway (slide guideway version)
  dial indicator features:
- mechanic in stainless steel, hardened
- data output Proximity-USB / RS232, with optional built-in Bluetooth
- large LCD display with clear reading, digit height 12 mm
- autom. On-/Off, autom. sleep mode, ABSOLUTE system
- mm/inch switchable, storage of original value
- „0"-setting at any position, ± preset function
- with extensive basic equipment:
  Universal Gauge (art.-no. 200901)
  digital indicator with protection cover (art.-no. 2009001)
  clamping inserts (art.-no. 2009003)
  spherical contacts (art.-no. 2009005)
  1 pair of measuring arm 50 mm (art.-no. 2009006)
  1 pair of depth stop (art.-no. 20090010)
- inclusive 1 x 3 V battery (CR2032, art.-no. 2002093),
  with operation manual



slide guideway



application example

Options
- Bluetooth or wireless data transmission WiFi (see page 306)
- extensive offer of adaptors or contacts for standard measurements of threads, grooves, splines, gears, hole centers and many others are available as standard
- more unusual applications are available on request

UNIT · IP 51 · Bluetooth · NORM · CE · TC · WARRANTY 3 YEARS

ART NO without Bluetooth	ART NO with Bluetooth	mm internal	mm external	mm anvil travel	mm / inch	max. mm	KG	ART NO CC for dial indicator
200903	**200903-BT**	30 - 335	0 - 300	15	0.001 / 0.00005	0.004	1.800	2494200

DIGI PLUS-LINE® Universal Gauge (Basic Devices)

- **Universal Gauge (extension compatible version) or Universal Gauge (slide guideway version)**
- for internal- and external measurements
- delivery without dial/digital indicator

Options
- large range of accessories for standard measurement of threads, grooves, splines, diameters, lengths, shallow spigots, recess diameters, etc.
- extensions special anvil design available on request



art.-no. 200901 (cylindrical beam version)



art.-no. 200904 (slide guideway version)



slide guideway

TC | WARRANTY 3 YEARS

ART NO	mm (internal)	mm (external)	KG
200901	30 - 250	0 - 215	2.100
200904	30 - 335	0 - 300	3.000

Extensions for Universal Gauge in compatible version only

ART NO	mm (internal)	mm (external)
20090033	30 - 400	0 - 365
20090032	30 - 750	0 - 715



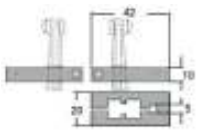
Measuring Arms

ART NO	A internal
2009006	50
2009007	75
2009008	100



Adjustable depth stops for measuring arms

ART NO
20090010



Protection cover with or without electr. digital indicator

ART NO indicator with cover
2009001 2009001-BT

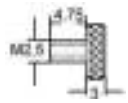


ART NO protection cover
2009002



Clamping insert for measuring arms

ART NO
2009003



Vee support for length measurement

ART NO
20090022



Flat Tips

ART NO flat
2009004



Spherical Tips

ART NO spherical
2009005



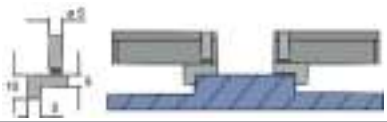
Mounting attachments for use with following anvils

ART NO
2009009



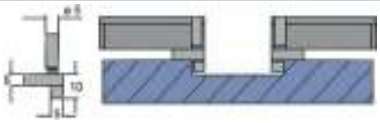
Shoulder Anvils, flat outside spigot diameter

ART NO
20090011



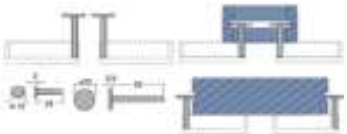
Semi cylindrical anvils for inside register diameters

ART NO
20090012



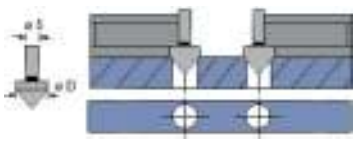
Disc Anvils for measuring groove diameters

ART NO	ø mm
20090013	20
20090014	12



Cone Anvils for measuring hole centre distance

ART NO	D ø mm
20090019	13
20090020	25
20090021	50





Modern technologies for high precision!

Special scales, your logotypes, pictures, drafts etc. - There is nothing impossible.

Laser engraving has a lot of advantages.
One is the top quality, high accuracy and the long-life cycle.

Flexibility is an asset of Vogel Germany for your needs
because manufacturing is on a low cost level.

Laser engravings we can do at:

- ✓ **steel, high-grade steel, stainless steel**
- ✓ **cast iron**
- ✓ **non-ferrous metal**
- ✓ **special plastic material**



Measuring Tool Set

- selection need-based compilations

ART NO SET	pieces	consisting of	article	box type
209904 BLUE-LINE	4	**Precision Vernier Caliper** • 150 x 0.05 mm • stainless • hardened	201021	WARRANTY 2 YEARS
		Micrometer • 0-25 mm x 0.01 mm • with carbide surfaces	231351	
		Dial Indicator • 0-10 mm x 0.01 mm • metal housing, matt chrome finish	241101	
		Stainless Steel Rule • 150 x 18 x 0.5 mm • stainless • graduation 1/2 mm / mm	1012020015	

ART NO 209904



ART NO SET	pieces	consisting of	article	box type
330002 DIGI PLUS-LINE	9	**Electr. Digital Caliper** stainless steel, 150 x 0.01 mm / 6 x 0.0005“	202011.2	WARRANTY 2 YEARS
		Marking Gauge stainless steel, 200 x 0,1 mm, hardened carbide scriber	335070	
		Digital Angle Sensor „Level Box“ +/- 180 x 0.1°	320010	
		Digital Protractor 0-360 x 0.05°, 200 x 200 mm	320021	
		Workshop Square with back special steel, 100 x 70 mm	312473	
		Carbide Marker with clip, exchangeable tips, push technic	334615	
		Pocket Measuring Tape 3 meter, self adjusting end-hook, with magnetic dots and lanyard	141003	
		Radius Gauge Set 1-15 mm	472108	
		Wood Folding Rule white, 2 meter, 10 links	1312010200	

ART NO 330002



ART NO SET	pieces	consisting of	article	box type
202090 DIGI PLUS-LINE	3	**Digital Caliper** • 200 x 0.01 mm • mm / inch • stainless • hardened	202012.2	WARRANTY 2 YEARS
		Measuring Bridge • 75 mm • stainless • hardened	2002092	
		Stainless Steel Rule • 150 x 18 x 0.5 mm • stainless • graduation 1/2 mm / mm	1012020015	

ART NO 202090



ART NO SET	pieces	consisting of	article	box type
202091 DIGI PLUS-LINE	3	**Digital Caliper** • 150 x 0.01 mm • mm / inch • stainless • hardened	202011.2	WARRANTY 2 YEARS
		Measuring Bridge • 75 mm • stainless • hardened	2002092	
		Stainless Steel Rule • 150 x 13 x 0.5 mm • stainless • graduation mm/mm	1010010015	

ART NO 202091



Other combinations available on request, please!

ART NO SET	pieces	consisting of	article	box type
239900 ☆☆☆☆☆ VBLUE-LINE®	2	**Precision Vernier Caliper** • 150 x 0.05 mm • stainless • hardened	201020.2	WARRANTY 2 YEARS
		Micrometer • 0-25 mm x 0.01 mm • with carbide surfaces	231351	

ART NO 239900



ART NO SET	pieces	consisting of	article	box type
239908 ☆☆☆☆☆ VBLUE-LINE®	8	**Precision Vernier Caliper** • 150 x 0.05 mm • mm / inch • stainless • hardened	201020.2	WARRANTY 2 YEARS
		Micrometer • 0-25 mm x 0.01 mm • with carbide surfaces	231351	
		Flat Square, DIN 875/2 • 100 x 70 mm	310062	
		Knife straight edge, bevelled edge • 100 mm	310323	
		Spring Divider • 125 mm	302421	
		Carbide Steel Scriber • 150 mm	334608	
		Stainless Steel Rule • 200 x 13 x 0.5 mm • stainless • graduation mm/mm	1010010020	
		Center Punch • 120 x ø 10 mm	239999	

ART NO 239908



ART NO SET	pieces	consisting of	article	box type
239909 ☆☆☆☆☆ VDIGI PLUS-LINE®	4	**Digital Caliper** stainless, 150x0.01 mm / 6 x 0.0005“	202160	WARRANTY 2 YEARS
		Micrometer • 0-25 mm x 0.01 mm • with carbide surfaces	231351	
		Dial Indicator • 0-10 mm x 0.01 mm • metal housing, matt chrome finish	241101	
		Stainless Steel Rule • 150 x 18 x 0.5 mm • stainless • graduation 1/2 mm / mm	1012020015	

ART NO 239909



ART NO SET	pieces	consisting of	article	box type
239911 ☆☆☆☆☆ VBLUE-LINE®	4	**Vernier Caliper** • 150 x 0.05 mm • stainless • hardened	201000	WARRANTY 1 YEAR
		Micrometer • 0-25 mm x 0.01 mm • with carbide surfaces	231300	
		Square, bevelled edge • 100 x 70 mm • chromed	3102131	
		Stainless Steel Rule • 150 x 18 x 0.5 mm • stainless • graduation mm/inch	111001	

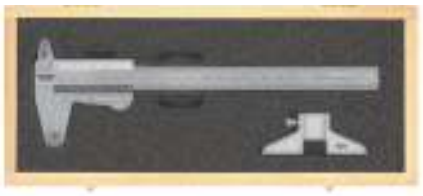
ART NO 239911



Measuring Tool Sets

ART NO SET	pieces	consisting of	article	box type
202096 ★★★★★ BLUE-LINE®	2	**Precision Vernier Caliper** • 150 x 0.05 mm • stainless • hardened	201021	WARRANTY 2 YEARS
		Measuring Bridge • 75 mm • stainless • hardened	2002092	

ART NO 202096



ART NO SET	pieces	consisting of	article	box type
202097 ★★★★★ DIGI PLUS-LINE®	3	**Digital Caliper** stainless, 150x0.01 mm / 6 x 0.0005“	202160	WARRANTY 2 YEARS
		Digital Micrometer • 0-25 mm x 0.001 mm • with USB data output, with carbide surfaces	230130	
		Flat Square, DIN 875/2 • 100 x 70 mm	310062	

ART NO 202097



ART NO SET	pieces	consisting of	article	box type
479901 ★★★★★ BLUE-LINE®	4	**Welding Gauge** stainless steel, fan shape, quantity of blades 12, 3-12 mm	474401	WARRANTY 1 YEAR
		Precision Welding Gauge stainless steel, hardened and fine ground, with vernier reading, scale matt chromed, with fixing screw	474403	
		Precision Welding Gauge stainless steel, hardened and fine ground, reading through a window by a reference line	474404	
		Pipe Welding Gauge / Edge Offset Gauge with opposite movable measuring jaws, for pipe welds up to 35 mm wall thickness, stainless, hardened, reading 1.0 mm	474409	

ART NO 479901



Explore our website!



Any questions?
We are pleased to advise!

ART NO SET	pieces	consisting of	article	box type
479904 ☆☆☆☆☆ BLUE-LINE	4	**Magnet Lifter** top model for technical purposes, with quick release, with telescope bar, ~650 mm	474441	WARRANTY 1 YEAR
		Professional Inspection Mirror stainless steel telescope bar, with 360° rotateable and swivel joint, with insulated handle	474454	
		LED Handheld Magnifier aplanatic lense, scratch-resistant and solvent-resistant, size of lense ø 30 mm, magnification 10x	600166	
		LED Flashlight professional, splash-proof light, sturdy, acid-proof aluminium housing, 3 Watt, 120 Lumen, beam range 120 m	601805	

ART NO 479904



ART NO SET	pieces	consisting of	article	box type
479905 ☆☆☆☆☆ BLUE-LINE	5	**Magnifier with LED Lamp** in pocket size, with 3 magnifying lenses, 3x / 5x / 7x, with one extra bright LED lamp, in a rugged ABS-plastic housing	601230	WARRANTY 1 YEAR
		Magnetic Lifter with Marking Tip with telescopic rod, 143 mm	334614	
		Jet Gauge, 0.45 - 1.50 mm with hardened steel pins, in plastic holders mounted	472201	
		Feeler Gauge Set, 13 blades blades made of hardened spring steel, conical shaped blades, length 100 mm, nickel plated case, with lock nut, sizes in mm and inch on each blade, 0.05 - 1.00 mm	411005	
		LED Flashlight professional, water resistant torch, sturdy, acid- and oil-resistant aluminium housing, 3 Watt, 120 luminous flux, lighting range 120 m	601805	

ART NO 479905



ART NO SET	pieces	consisting of	article	box type
509901.2 ☆☆☆☆☆ BLUE-LINE	5	**Carpenter´s Try Square** with black anodized aluminum blade and elocated aluminium handle, 300 mm	504034.2	WARRANTY 2 YEARS
		Bevel Square carbon steel blade, with angle graduation on the handle, 250 mm	504853	
		Digital Angle Measurer Spirit Level sturdy, anodized aluminum housing with adjustable spirit level, 0° - 360°, 305 x 52 x 23	711025	
		Carpenter's Pencil 175 mm, red, unsharpened	509910	
		Wood Folding Rule with double mm graduation on front and back, with 10 links, 2000 mm	1312010200	

ART NO 509901.2

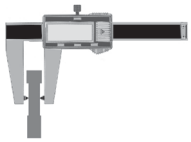


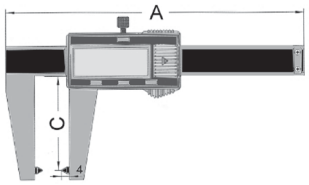
DIGI PLUS-LINE® Electr. Digital Brake Disc Caliper

workshop grade

- **fast and easy measurement of the brake disc thickness**

- stainless steel, hardened
- LCD display with clear reading, digit height 9 mm
- conical, hardened knife points
- zero setting at any position, mm/inch switchable
- On/Off button, with HOLD function
- fixing screw
- incl. 2x 1.5 V battery (type LR44, art.-no. 2020192/B), with operation manual







UNIT | INOX | LR44 1,5V | NORM | CE | TC | WARRANTY 2 YEARS

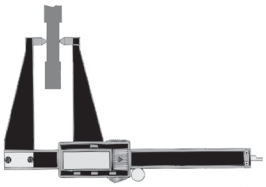
ART NO	mm / inch	mm / inch	mm	max. mm	A mm	C mm	KG	ART NO CC
206020	60 / 2.4	0.01 / 0.0005	0.01	0.04	158	50	0.165	2094101

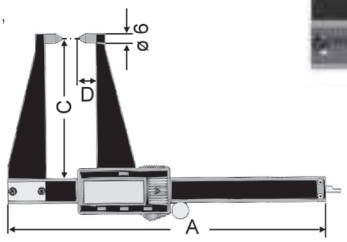
DIGI PLUS-LINE® Electr. Digital Brake Disc Caliper

workshop grade

- **fast and easy measurement of the brake disc thickness**

- stainless steel, hardened
- LCD display with clear reading, digit height 9 mm
- conical, hardened knife points, measuring jaws made of lacquered sheet steel
- zero setting at any position, mm/inch switchable
- depth gauge
- On/Off button, with HOLD function
- incl. 2x 1.5 V battery (type LR44, art.-no. 2020192/B), with operation manual







UNIT | INOX | LR44 1,5V | NORM | CE | TC | WARRANTY 2 YEARS

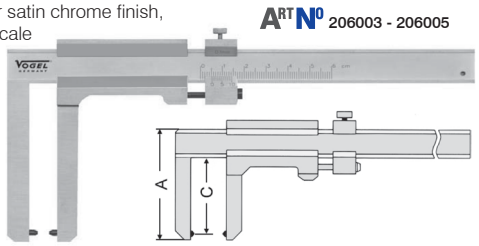
ART NO	mm / inch	mm / inch	mm	max. mm	A mm	C mm	D mm	KG	ART NO CC
206021	100 / 4	0.01 / 0.0005	0.01	0.05	208	91.5	11.5	0.165	2094101

BLUE-LINE® Brake Disc Caliper

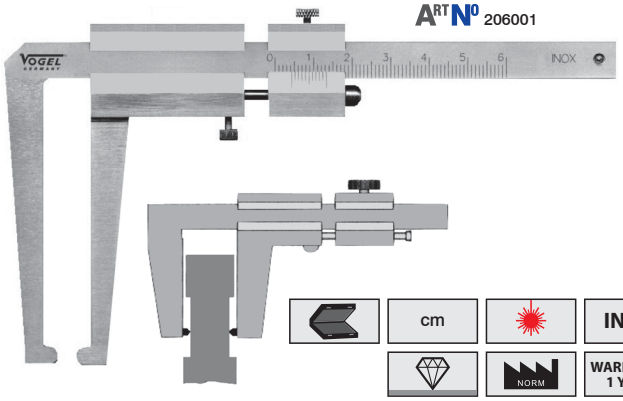
- **with drag pointer**
- **for measuring the thickness of installed brake discs**

- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale

ART NO 206003 - 206005



ART NO 206001



cm | INOX | NORM | WARRANTY 1 YEAR

ART NO	mm	mm	A mm	C mm	mm	KG	ART NO CC
★★★★☆ 206001	0 - 60	0.10	86	74	77	0.120	2094601
★★★★★ 206003	0 - 60	0.10	67	50	55	0.130	2094601
★★★★☆ 206004	0 - 60	0.10	102	79	83	0.250	2094601
★★★★☆ 206005	0 - 90	0.10	142	119	120	0.325	2094601

VDIGI PLUS-LINE Electr. Digital Thickness Caliper

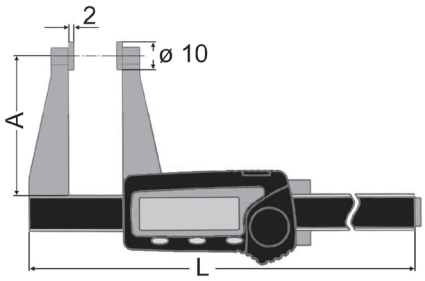
workshop grade

- **with autom. return spring on the right measuring jaw**

- stainless steel, hardened
- LCD display with clear reading, digit height 9 mm
- carbide measuring jaws in disc shape
- zero setting at any position, mm/inch switchable
- On/Off buttton, with HOLD function
- with fixing screw
- incl. 2x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual







INOX · UNIT · LR44 1,5V · NORM · CE · TC · WARRANTY 2 YEARS

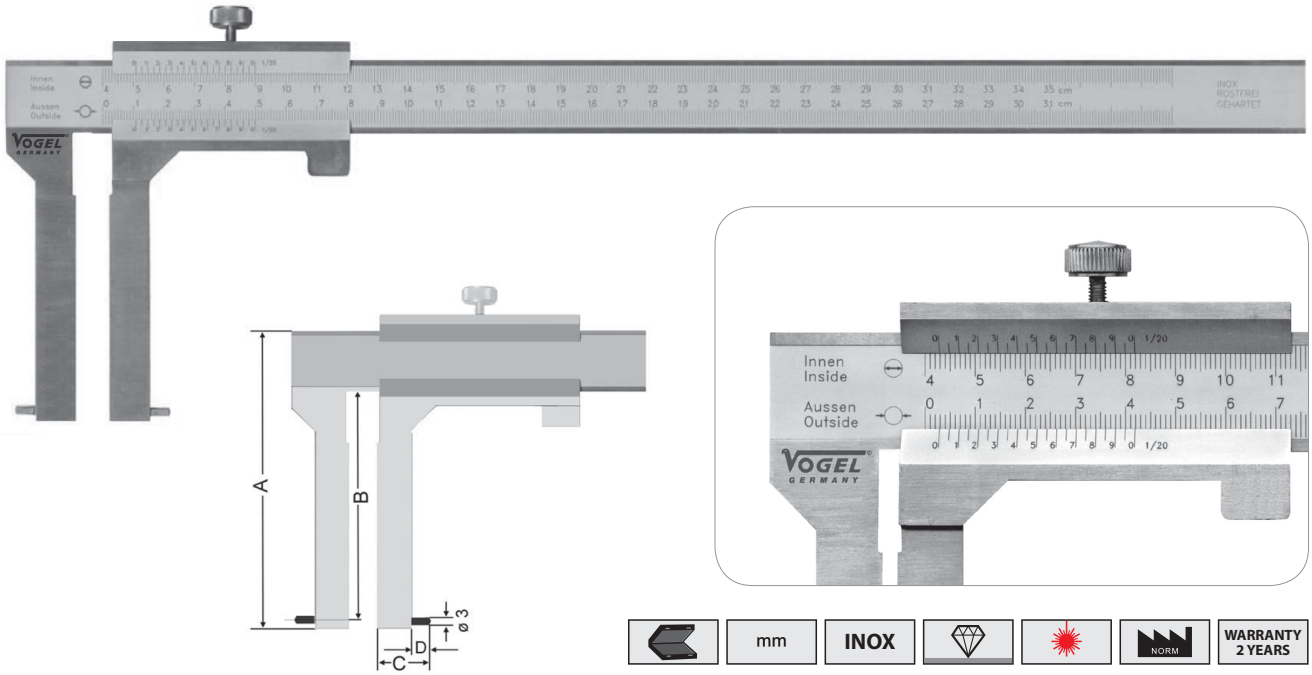
ART NO	mm / inch	mm / inch	mm	max. mm	A mm	L mm	KG	ART NO CC
206015	50 / 2	0.01 / 0.0005	0.01	0.04	50	140	0.135	2094101

VBLUE-LINE Brake Drum Caliper

workshop grade

- **for measuring internal and external diameters**

- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale
- with fixing screw



mm · INOX · NORM · WARRANTY 2 YEARS

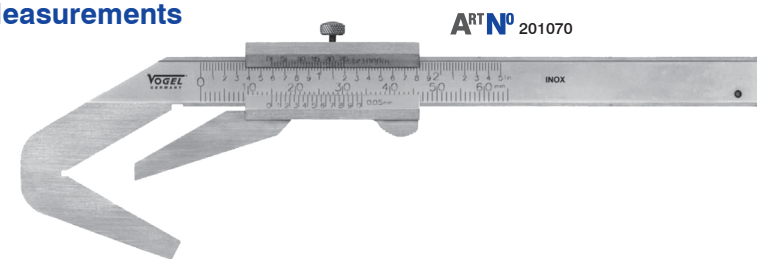
ART NO	inside mm	outside mm	mm	mm	A mm	B mm	C mm	D mm	KG	ART NO CC
205203	40 - 300	0 - 300	0.05	93	116	90	20	7	0.500	2094030
205206	50 - 500	0 - 500	0.05	153	177	150	25	9	1.200	2094050
205207	50 - 600	0 - 600	0.05	153	177	150	25	9	1.380	2094060

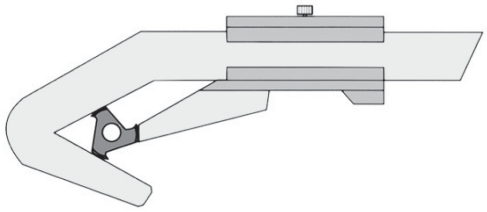
BLUE-LINE Vernier Caliper for 3/5-Point-Measurements

ART NO 201070

- **for measuring diameters of side-mills**

- stainless steel, hardened
- scale and vernier satin chrome finish, laser engraved scale
- jaws finely ground
- with fixing screw
- mono-block vernier





mm/inch | INOX | NORM | WARRANTY 2 YEARS

ART NO 3-point	ART NO 5-point	mm / inch	mm bottom	inch top	KG	ART NO CC
201070	-	4 - 40 / 0.16 - 1.60	0.05	1/128	0.180	2094070
-	**201071**	2 - 40 / 0.08 - 1.60	0.05	1/128	0.180	2094070

DIGI PLUS-LINE Electr. Digital Gear Teeth Caliper

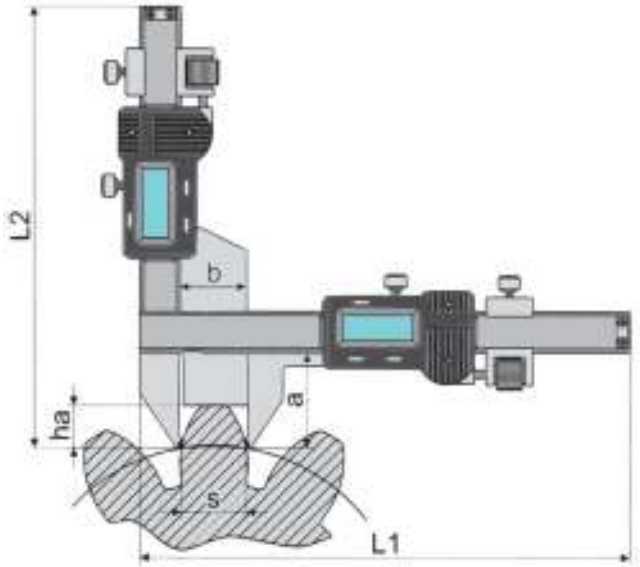
workshop grade

ART NO 202302

- **to measure the gear teeth at front-and helical gears, etc.**

- stainless steel, hardened
- LCD display with clear reading
- carbide jaws, finely ground
- with fixing screw and fine adjustment on both sides
- On/Off button, zero setting at any position
- mm/inch switchable
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual





UNIT | INOX | LR44 1,5V | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	modules	mm / inch	mm	max. mm	L1 mm	L2 mm	a mm	b mm	KG	ART NO CC
202301	m 1-25	0.01 / 0.0005	0.01	0.03	156	156	30.5	21	0.170	2094103
202302	m 5-50	0.01 / 0.0005	0.01	0.03	210	185.5	50.5	50.5	0.215	2094103

BLUE-LINE® Brass Button Gauge

- especially for advertising and promotion

- made of hard brass
- surface finely ground
- with dove-tail guiding, vernier reading
- promotional engraving possible on the front or rear





mm/inch | NORM | WARRANTY 1 YEAR

ART NO round jaws	ART NO with inside measurement	mm / inch	mm	mm		KG
214001	**214301**	80 / 3	0.10	25 *(21 4001)*	20 *(21 4301)*	0.050
214003	**214303**	100 / 4	0.10	25 *(21 4003)*	20 *(21 4303)*	0.055

BLUE-LINE® Brass Tread Depth Gauge

- especially for advertising and promotion

- surface finely ground
- with dove-tail guiding, vernier reading
- promotional engraving possible on the front or rear



NORM | WARRANTY 1 YEAR

ART NO round jaw	mm / inch	mm	mm	KG
214401	30 / -	0.10	20	0.042
214402	60 / 2.4	0.10	50	0.045

Individually laser engraved articles!

We engrave special scales, trademarks, pictures, drawings, etc. according to your specifications.

Laser marking is particularly suitable for permanent, tamperproof engravings..

Thanks to our unique flexibility we can offer to our customers favourable prices for marking single pieces as well as for mass production.



Laser engraving is possible on:

- steel, high-grade steel
- cast iron
- non-ferrous metals
- plastic
- self-adhesive foils

Any questions? We are pleased to advise!

Digital Tread Depth Gauges and Tire Pressure Gauges

VOGEL DIGI PLUS-LINE® Electr. Digital Tread Depth Gauge

- large LCD display, digit height 9.5 mm
- On/Off button, zero setting at any position
- mm/inch switchable
- with hold function (for art.-no. 214446)
- measuring tip with automatic. spring feed (for art.-no. 214446)
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

ART NO 214442



ABS plastic version



ART NO 214445

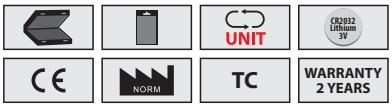


mechanical parts and pin in stainless steel

ART NO 214446



mechanical parts and pin in stainless steel



ART NO	mm / inch	mm / inch	mm	mm	KG
★★★☆☆ 214442	0 - 25 / 0 - 1	0.01 / 0.0005	0.03	60.0	0.040
★★★★☆ 214445	0 - 25 / 0 - 1	0.01 / 0.0005	0.03	45.0	0.040
★★★★☆ 214446	0 - 25 / 0 - 1	0.01 / 0.0005	0.03	53.0	0.050

★★★★☆ VOGEL DIGI PLUS-LINE® Electr. Digital Tire Pressure Gauge

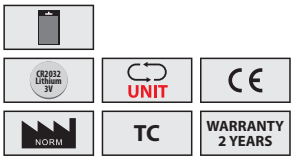
• for quick and independent measuring of the tire pressure

- sturdy ABS plastic housing
- large LCD display with clear reading, digit height 9.5 mm
- LCD display with backlight
- lighted valve tip
- On/Off button, autom. shutdown
- units in PSI, Bar, Kgf/cm², Kpa, switchable
- reading 0.1 PSI; 0.01 Bar; 0.01 Kgf/cm²; 1 Kpa
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093) with operation manual









ART NO	for cars	PSI	Bar / Kgf/cm²	Kpa	max. %	KG
214460	✓	0 - 100	0 - 7 / 0 - 7	0 - 700	1 %	0.036

"Absolute" Electr. Digital Depth Caliper • IP54

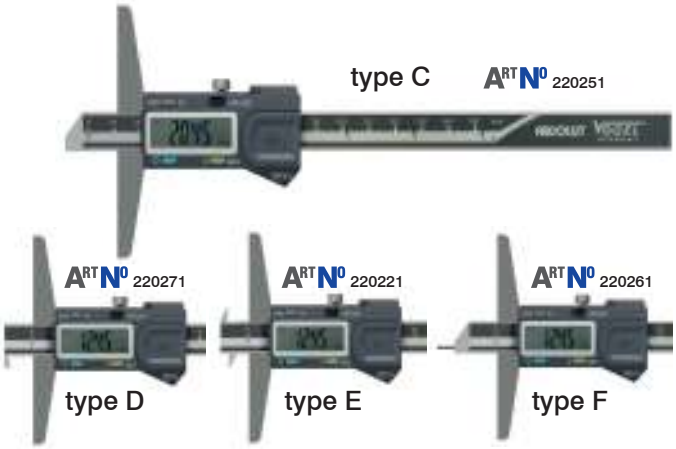
DIN 862

- top model for industry purposes
- with glass rail for more accuracy
- spray water proof acc. to DIN 40050 / IEC 60529
- with VOCOM-S duo data output (connectivity also for Digimatic measuring devices)

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 9 mm digit height
- surface finely ground and lapped, with fixing screw
- On/Off button, with „ORIGIN" system
- mm/inch switchable, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Options

- transmitter for wireless communication via WiFi, art.-no. 209006, see page 306
- receiver for wireless communication via WiFi, art.-no. 209007, see page 306
- transmitter and receiver for wireless communication as set, art.-no. 2040101, see page 306



UNIT | VOCOM-S Duo data output | INOX | CR2032 Lithium 3V | IP 54 | DIN | CE | TC | WARRANTY 3 YEARS

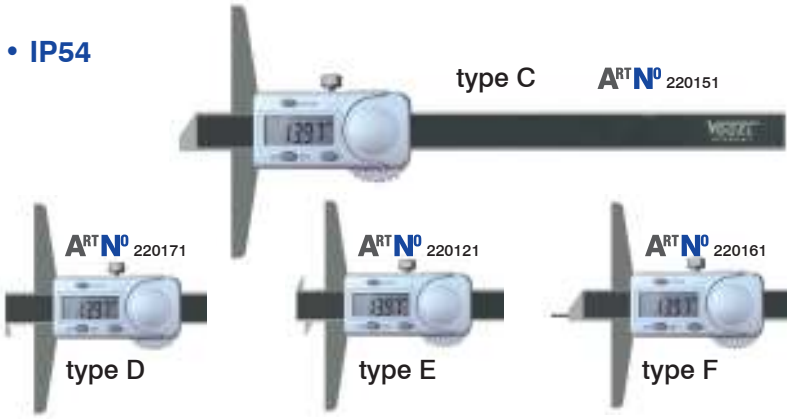
ART NO	type	mm / inch	mm / inch	max. mm	mm	type / size of measuring surface mm		KG	ART NO CC
220251	C	150 / 6	0.01 / 0.0005	0.02	100		5.5	0.175	2294101
220252		200 / 8	0.01 / 0.0005	0.03	100		5.5	0.215	2294101
220253		300 / 12	0.01 / 0.0005	0.03	150		5.5	0.280	2294101
220221	E	150 / 6	0.01 / 0.0005	0.02	100		20.5 x 6.0/3.5	0.175	2294101
220222		200 / 8	0.01 / 0.0005	0.03	100		20.5 x 6.0/3.5	0.215	2294101
220223		300 / 12	0.01 / 0.0005	0.03	150		20.5 x 6.0/3.5	0.280	2294101
220261	F	150 / 6	0.01 / 0.0005	0.02	100		Ø 1.5 / 7	0.175	2294101
220262		200 / 8	0.01 / 0.0005	0.03	100		Ø 1.5 / 7	0.215	2294101
220263		300 / 12	0.01 / 0.0005	0.03	150		Ø 1.5 / 7	0.280	2294101
220271	D	150 / 6	0.01 / 0.0005	0.02	100		6 / 3.5	0.175	2294101
220272		200 / 8	0.01 / 0.0005	0.03	100		6 / 3.5	0.215	2294101
220273		300 / 12	0.01 / 0.0005	0.03	150		7 / 3.5	0.280	2294101

Electr. Digital Depth Caliper • IP54

DIN 862

- standard model for industry and craft
- with glass rail for more accuracy
- spray water proof acc. to DIN 40050 / IEC 60529

- sturdy quality, stainless steel, hardened
- large LCD display with clear reading, 9 mm digit height
- stainless, hardened, with fixing screw
- On/Off button
- mm/inch switchable
- zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual



UNIT | INOX | CR2032 Lithium 3V | IP 54 | DIN | CE | TC | WARRANTY 3 YEARS

ART NO	type	mm / inch	mm / inch	max. mm	mm	type / size of measuring surface mm		KG	ART NO CC
220151	C	150 / 6	0.01 / 0.0005	0.02	100		5.5	0.175	2294101
220152		200 / 8	0.01 / 0.0005	0.03	100		5.5	0.215	2294101
220153		300 / 12	0.01 / 0.0005	0.03	150		5.5	0.280	2294101
220121	E	150 / 6	0.01 / 0.0005	0.02	100		20.5 x 6.0/3.5	0.175	2294101
220122		200 / 8	0.01 / 0.0005	0.03	100		20.5 x 6.0/3.5	0.215	2294101
220123		300 / 12	0.01 / 0.0005	0.03	150		20.5 x 6.0/3.5	0.280	2294101
220161	F	150 / 6	0.01 / 0.0005	0.02	100		Ø 1.5 / 7	0.175	2294101
220162		200 / 8	0.01 / 0.0005	0.03	100		Ø 1.5 / 7	0.215	2294101
220163		300 / 12	0.01 / 0.0005	0.03	150		Ø 1.5 / 7	0.280	2294101
220171	D	150 / 6	0.01 / 0.0005	0.02	100		6 / 3.5	0.175	2294101
220172		200 / 8	0.01 / 0.0005	0.03	100		6 / 3.5	0.215	2294101
220173		300 / 12	0.01 / 0.0005	0.03	150		7 / 3.5	0.280	2294101

DIGI PLUS-LINE

Electr. Digital Depth Caliper

DIN 862

- **with plastic housing cover**
- stainless steel, hardened, measuring surface finely ground
- with fixing screw
- large LCD display with clear reading, digit height 10 mm
- On/Off button, zero setting at any position
- mm / inch switchable
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual



UNIT | INOX | CR2032 Lithium 3V | CE | DIN | TC | WARRANTY 1 YEAR

ART NO	mm / inch	mm / inch	max. mm	mm	type / size of measuring surface mm		KG	ART NO CC
228251	150 / 6	0.01 / 0.0005	0.03	100		6	0.215	2294101
228252	200 / 8	0.01 / 0.0005	0.03	100		6	0.235	2294101
228253	300 / 12	0.01 / 0.0005	0.04	100		6	0.305	2294101

Special brochures for special target groups

Our new short brochures are selections of measuring tools for clear defined trade tasks like the automotive one and the metal working one, etc.



DIGI PLUS-LINE

Electr. Digital Depth Gauge

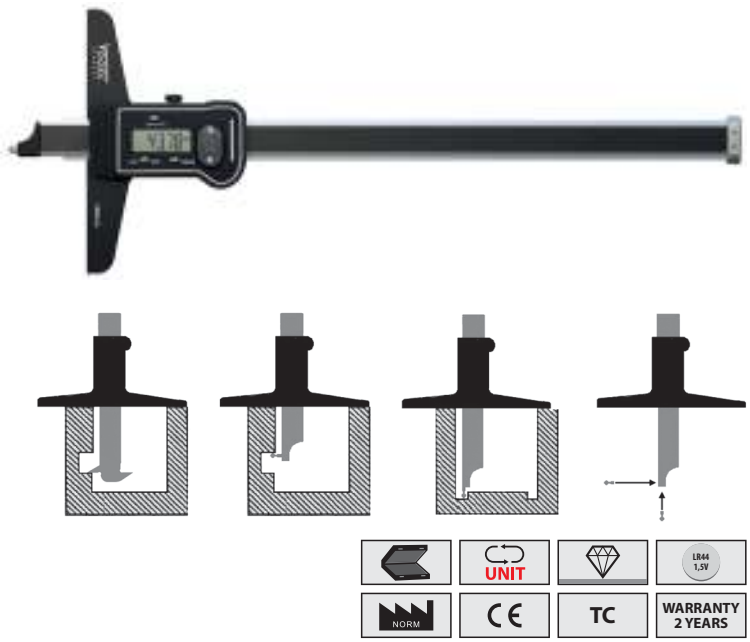
workshop grade

- **modern design, leightweight model**
- **made of anodized hard aluminium**
- **with exchangeable measuring tips (M2.5)**
- **with 3 measuring bridges with different length**

- LCD display with clear reading, digit height 10 mm
- incl. hardened measuring tips with M2.5 thread, exchangeable
- On/Off button, mm/inch switchable, zero setting at any position
- slides perfectly because of double-prismatic-lead
- rail and electronic housing made of anodized aluminium
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B) with operation manual and hexagon-key

Options

- art.-no. 220890 measuring bridge, 150 mm, anodized aluminium
- art.-no. 220891 measuring bridge, 300 mm, anodized aluminium
- art.-no. 220892 measuring bridge, 450 mm, anodized aluminium
- other measuring tips with M2.5 thread, please follow on page 141



ART NO	mm / inch	mm / inch	mm	max. mm	mm	KG	ART NO CC
220880	300 / 12	0.01 / 0.0005	0.01	0.04	150 / 300 / 450	0.410	2294870
220881	500 / 20	0.01 / 0.0005	0.01	0.05	150 / 300 / 450	0.505	2294871
220882	800 / 32	0.01 / 0.0005	0.01	0.06	150 / 300 / 450	0.820	2294872

DIGI PLUS-LINE

Electr. Digital Depth Gauge

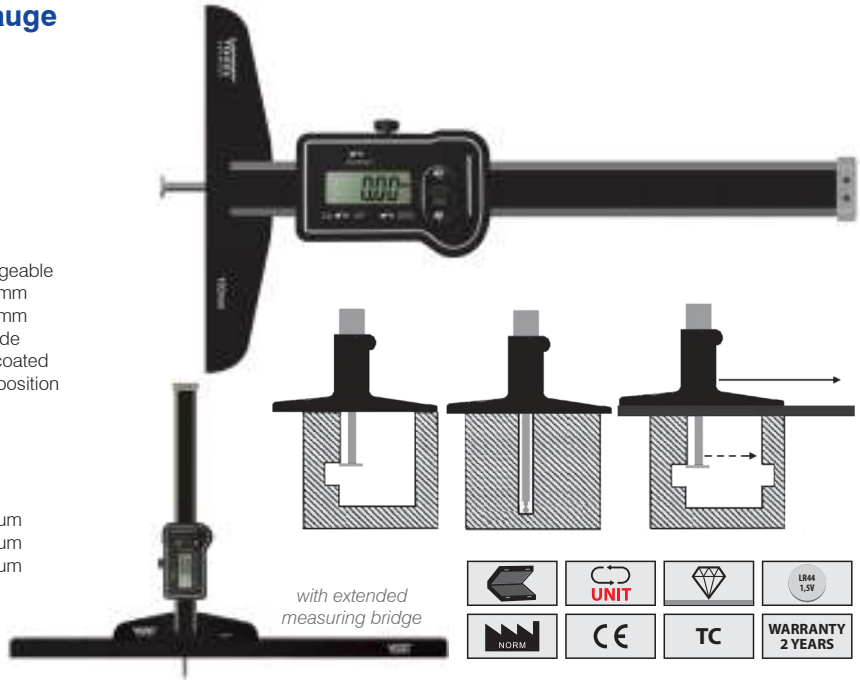
workshop grade

- **especially for narrow bore depth**
- **with round depth measuring bar**
- **modern design, leightweight model**
- **made of anodized hard aluminium**
- **with exchangeable measuring tips (M2.5)**
- **with exchangeable disc inserts**
- **incl. 2 measuring bridges with different length**

- LCD display with clear reading, digit height 10 mm
- incl. hardened measuring tips with M2.5 thread, exchangeable
- incl. plate insert with ø 10 mm with measuring rods-ø 4 mm
  incl. plate insert with ø 20 mm with measuring rods-ø 6 mm
- all sliding parts slide in plastic bearing double prism guide
- rail and electronics housing made of aluminium, oxide-coated
- On/Off button, mm/inch switchable, zero setting at any position
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B) with operation manual and hexagon-key
- further probe tips with M2.5 thread see page 141

Options

- art.-no. 220893 measuring bridge, 550 mm, duraluminium
- art.-no. 220894 measuring bridge, 750 mm, duraluminium
- art.-no. 220895 measuring bridge, 950 mm, duraluminium
- other measuring tips with M2.5 thread, please follow on page 141



with extended measuring bridge

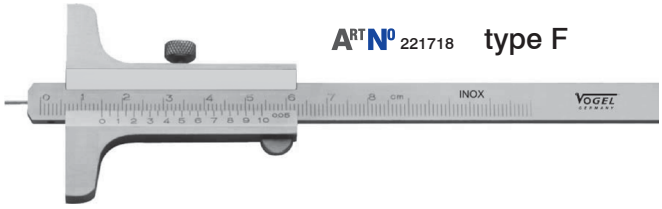
ART NO	mm / inch	mm / inch	mm	max. mm	meas.-beam-ø mm	mm	KG	ART NO CC
220840	200 / 8	0.01 / 0.0005	0.01	0.03	4	150/350	0.355	2294870
220841	300 / 12	0.01 / 0.0005	0.01	0.04	4	150/350	0.390	2294870
220842	500 / 20	0.01 / 0.0005	0.01	0.05	6	150/350	0.475	2294871
220843	800 / 32	0.01 / 0.0005	0.01	0.06	6	150/350	0.780	2294872

BLUE-LINE Depth Caliper

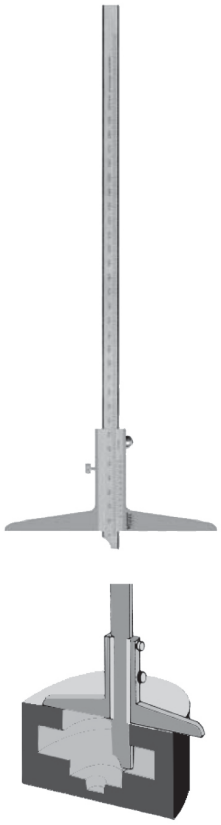
DIN 862

- stainless steel, hardened, vernier and scale matt chrome finish
- surfaces finely ground, with fixing screw
- mono block vernier, reading 0.05 mm
- straight bar, series 221530, type “C“
- straight and 90°-hook bar, reversible, series 221630, type “A“
- straight and with 2-hook bar, reversible, series 221830, type “B“
- exchangeable tip, reversible, series 221730, type “G“
- fixed tip, series 221718, type “F“

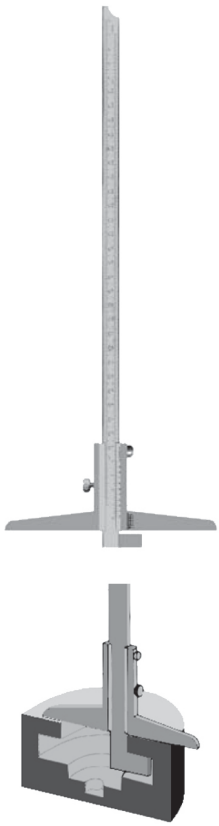
ART N° 221718 type F



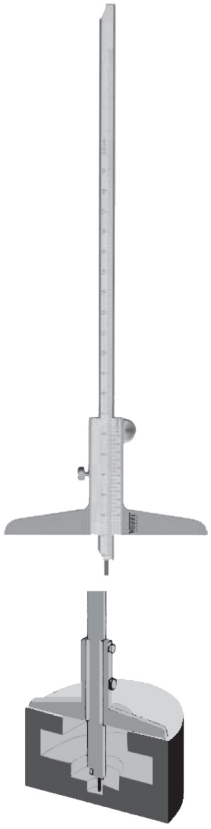
ART N° 221532 type C



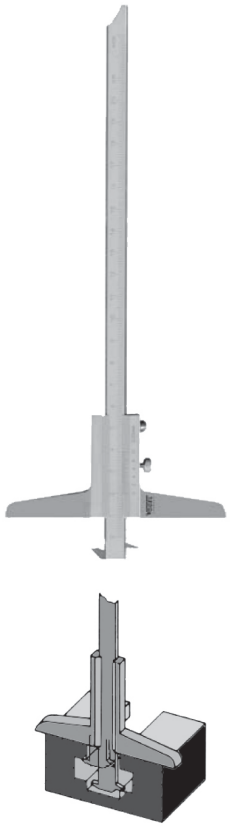
ART N° 221632 type A



ART N° 221732 type G



ART N° 221832 type B





ART N° type C	ART N° type A	ART N° type B	ART N° type G	ART N° type F	mm	mm / inch	mm	KG	ART N° CC
-	-	-	-	**221718**	80	0.05	50	0.065	2294001
221530	**221630**	**221830**	**221730**	-	150	0.05	100	0.100	2294001
221531	**221631**	**221831**	**221731**	-	200	0.05	100	0.125	2294001
221535	**221633**	-	**221733**	-	250	0.05	125	0.185	2294001
221532	**221632**	**221832**	**221732**	-	300	0.05	150	0.250	2294001
221533	**221634**	-	-	-	400	0.05	150	0.300	2294001
221534	**221635**	-	**221735**	-	500	0.05	150	0.325	2294001
221536	**221636**	-	-	-	500	0.05	250	0.550	2294001
221537	-	-	-	-	800	0.05	250	0.780	2294002
221538	-	-	-	-	1000	0.05	250	0.830	2294002

Cleaning, Repair & Calibration

Relax, we do it for you!

Sometimes it's difficult to handle and keep going measuring tools because they are extremly sensitive. Packaging and handling them right is a hard job you have to do.

A caliper has nothing to do with a standard hand tool. – Our service team is with you whatever it takes.

Our daily business: calibrations and re-calibrations.
All kind of repairing: our team is on stand-by modus for you.

Any questions?
We are pleased to advise!



Vernier Caliper Cases

- for pocket vernier caliper

ART NO vinyl leather	ART NO leather pouch	ART NO plastic box	mm
2098008	-	-	80
2098000	2098010	2097010	100
2098001	2098015	2097015	150
2098002	-	2097020	200
2098004	-	2097030	300



ART NO 2098015



ART NO 2097015



ART NO 2097020



ART NO 2099015

Wooden Boxes for Calipers

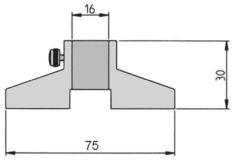
- with foam

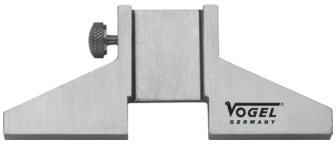
ART NO for pocket vernier caliper	ART NO for workshop caliper	mm
2099015	-	150
2099020	2099320	200
-	2099325	250
2099030	2099330	300
-	2099340	400
-	2099350	500
-	2099360	600
-	2099380	800
-	2099390	1000
-	2099392	1500
-	2099393	2000
-	2099394	2500
-	2099395	3000

VBLUE-LINE® Measuring Bridge

- for depth measuring
- for all pocket vernier caliper up to 200 mm

- stainless steel, hardened
- with fixing screw





ART NO	mm	KG
2002092	75	0.050

Spare Batteries

- for Electr. Digital Measuring Instruments

ART NO	type	voltage	KG
2002193	CR1632	3.00	0.003
2002194	CR2016	3.00	0.003
2002093	CR2032	3.00	0.003
2020192/B	LR44	1.5	0.002

VBLUE-LINE® Measuring Force Adapter

- Measuring Force Adapter for Pocket Digital Calipers
- for permanent uniform pressure in the serial testing

- 2002195 without reading scale
- 2002196 with reading scale



ART NO 2002195



ART NO 2002196



application example

ART NO	Kraft N	KG
2002195	5 - 8	0.010
2002196	± 8	0.010



ART NO 2002093



ART NO 2002194



ART NO 2002193



ART NO 2020192/B

More batteries for our instruments are available in our catalogue on page 308

Spare Part List for Electr. Digital Calipers

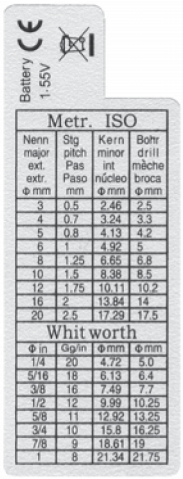
How to order spare parts:

- e.g. a fixing screw for art.-no. 202011 is needed as a spare part, then you call in your order first the art.-no. 202011 and then add #1 to the art.-no.: **202011#1**

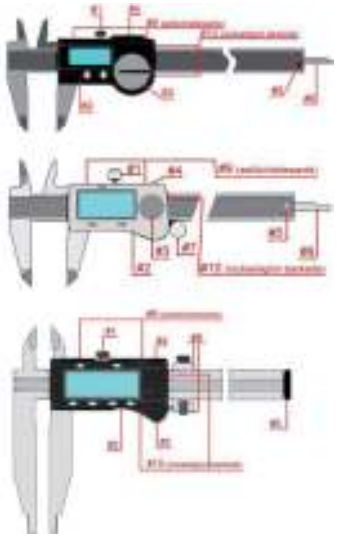
Repair Service

Our well experienced service department offers you all usual repairs of our products. Use our service for:

- repair, maintenance or replacement
- complete overhaul of Vogel Germany measuring equipment



conversion table for digital calipers





1 pair grub screws #9



1 pair screws for housing attachment (on the back) #10



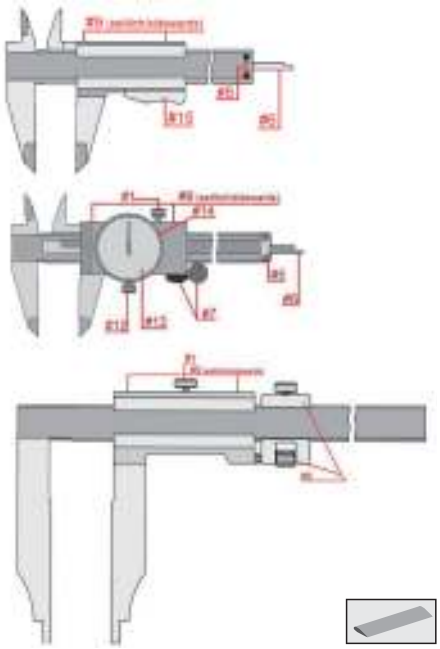
brass sliding spring #11

ART NO	description	ART NO	description	ART NO	description
xxxxxx#1	fixing screw	xxxxxx#4	cover for data output	xxxxxx#7	thumb roll with holder
xxxxxx#2	case	xxxxxx#5	set for depth gauge bracket	xxxxxx#8	set for fine adjustment
xxxxxx#3	battery cover	xxxxxx#6	depth gauge	xxxxxx#9	1 set grub screw
xxxxxx#10	1 pair of screws	xxxxxx#11	brass sliding spring	2020405	conversion table

Spare Part List for analogous Calipers

How to order spare parts:

- e.g. ein thumb lever for art.-no. 201020 is needed as a spare part, then you call in your order first the art.-no. 201020 and then add #15 to the art.-no.: **201020#15**

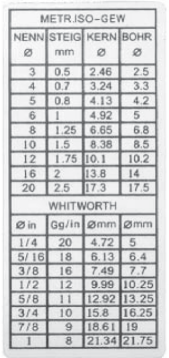




1 set grub screw #9



bronze sliding spring #11



Metr. ISO - Gew.		
Gew.-ø x Stg.	Kern- ø mm	Bohrer- ø mm
3 x 0,6	2,46	2,5
3,5x0,5	2,85	2,9
4 x 0,7	3,24	3,3
5 x 0,8	4,13	4,2
6 x 1	4,92	5,0
8 x 1,25	6,65	6,8
10 x 1,5	8,38	8,5
12x1,75	10,1	10,2
16 x 2	13,8	14,0
20 x 2,5	17,3	17,5

ART NO	description	ART NO	description	ART NO	description
xxxxxx#1	fixing screw	xxxxxx#9	1 set grub screw	xxxxxx#15	thumb lever with screw
xxxxxx#2	set for depth gauge bracket	xxxxxx#11	bronze sliding spring	2098100	conversion table
xxxxxx#3	depth gauge	xxxxxx#12	fixing screw for dial	2098102	conversion table (laser engraved)
xxxxxx#10	thumb roll with holder	xxxxxx#13	dial	-	-
xxxxxx#8	set for fine adjustment	xxxxxx#14	plastic glass	-	-

Inspection Kits

Wheelset Inspection Kit „BASIC“

consisting of:

- brake disc caliper 0-60 x 0.1 mm, jaw measuring depth 50 mm (art.-no.: 206003)
- electr. digital tire tread depth gauge 0-25 x 0.01 mm, bridge lenght 60 mm (art.-no.: 214442)
- electr. digital tire pressure meter 0-100 PSI / 0-7 bar / 0-700 Kpa (art.-no.: 214460)
- incl. batteries, operation manual, in a sturdy case

CR2032 Lithium 3V | NORM | CE | TC | WARRANTY 1 YEAR

ART NO 219900



Wheelset Inspection Kit „CLASSIC“

consisting of:

- digital brake disc caliper 0-60 x 0.01 mm, jaw measuring depth 50 mm (art.-no.: 206020)
- electr. digital tire tread depth gauge 0-25 x 0.01 mm, bridge lenght 60 mm (art.-no.: 214442)
- electr. digital tire pressure meter 0-100 PSI / 0-7 bar / 0-700 Kpa (art.-no.: 214460)
- incl. batteries, operation manual, in a sturdy case

LR44 1.5V | CR2032 Lithium 3V | NORM | CE | TC | WARRANTY 2 YEARS

ART NO 219901



Brake Disc Inspection Kit „BASIC“

consisting of:

- brake disc caliper 0-60 x 0.1 mm, jaw measuring depth 50 mm (art.-no.: 206003)
- magnetic measuring stand, chromed column, with fine adjustment, throat 140 mm, column ø 12 mm, lenght 175 mm, total height 235 mm (art.-no.: 252001)
- prec. dial indicator, 0-5 x 0.01 mm (art.-no.: 241002)
- incl. batteries, operation manual, in a sturdy case

DIN | NORM | CE | TC | WARRANTY 2 YEARS

ART NO 242503



Brake Disc Inspection Kit „CLASSIC“

consisting of:

- digital brake disc caliper 0-60 x 0.01 mm, jaw measuring depth 50 mm (art.-no.: 206020)
- magnetic measuring stand, chromed column, with fine adjustment, throat 140 mm, column ø 12 mm, lenght 175 mm, total height 235 mm (art.-no.: 252001)
- prec. dial indicator, 0-5 x 0.01 mm (art.-no.: 241002)
- incl. batteries, operation manual, in a sturdy case

LR44 1.5V | DIN | NORM | CE | TC | WARRANTY 2 YEARS

ART NO 242504



Other combinations available on request, please!

3 a
Page
78 - 83



3 b
Page
84 - 89



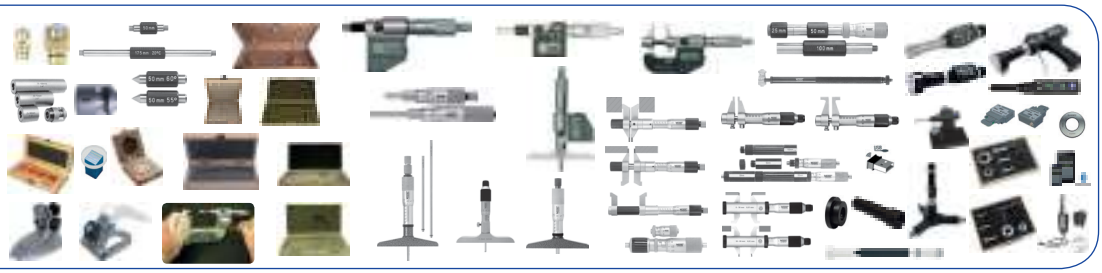
3 c
Page
90 - 95



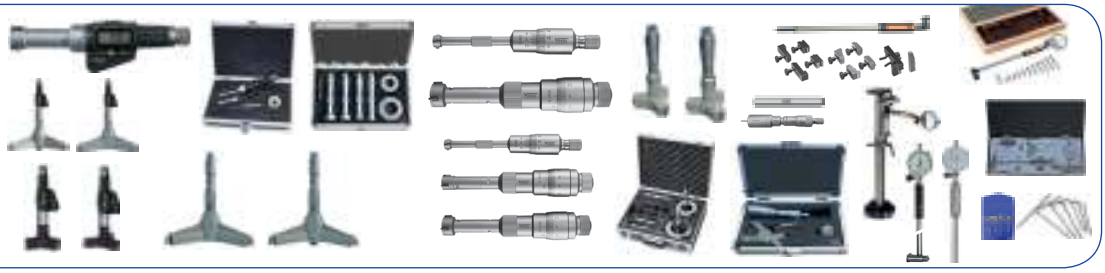
3 d
Page
96 - 100



3 e
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3 f
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DIGI PLUS-LINE Electr. Digital Micrometer VSPEED • IP67

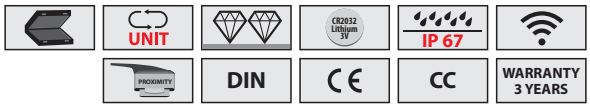
DIN 863

- **water and coolant proof acc. to DIN 40050 / IEC 60529**
- **with 2 mm spindle feed for quick measuring**
- **with Sylvac electronic • with Proximity data output**

- connection proximity USB / RS232 / digimatic (optional choice)
- large LCD display, clear reading, digit height 7 mm
- frame lacquered, with insulation plates, carbide surfaces, lapped
- automatic turn on by movement of the measuring spindle, mode / set button
- zero setting at any position, switching to sleep mode after 20 minutes
- storage of position in the sleep mode, mm/inch switchable
- non swiveling measuring spindle, measuring range 0-102 mm, means total measuring range captured with 3 micrometers
- switchable measuring force 5N/10N art.-no.: 230101, meas.-force 10 N at art.-no.: 230102 - 230103
- incl. 1x 3 V battery (type CR2032, art.-no. 2002093), with operation manual
- incl. calibration certificate







Option

- transmitter and receiver via WiFi (art.-no. 2023105 + 2023106), see page 115

ART NO	mm / inch	mm / inch	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	CC
230101	0 - 30 / 0 - 1.2	0.001 / 0.00005	28	2	8	27.5	3.5	42	0.003	0.280	inclusive
230102	30 - 66 / 1.2 - 2.6	0.001 / 0.00005	28	2	9	43	3.5	78	0.004	0.450	inclusive
230103	66 - 102 / 2.6 - 4.0	0.001 / 0.00005	28	2	10	60	3.5	114	0.005	0.580	inclusive

DIGI PLUS-LINE Electr. Digital Micrometer VSPEED

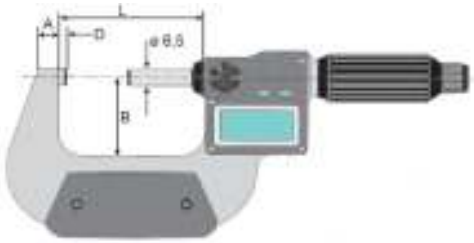
DIN 863

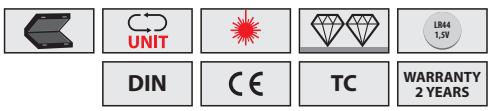
- **Absolute Measurement System (ABS-system)**
- **with 2 mm spindle feed for quick measuring**

- sturdy quality, frame lacquered, with insulation plates
- large LCD display, clear reading, digit height 7 mm
- carbide surfaces, lapped, spindle hardened and ground
- zero setting at any position, On/Off button, automatic shut down
- mm/inch switchable, ABS/INC measuring system, ORIGIN system
- locking wheel for quick and precise fixing
- with friction ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no. 2020192/B), with operation manual
- from up 25 mm with setting gauge









ART NO	mm / inch	mm / inch	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
232130	0 - 25 / 0 - 1	0.001 / 0.00005	20	2	6	25	3	35.0	0.002	0.270	2394000
232131	25 - 50 / 1 - 2	0.001 / 0.00005	20	2	8	32	3	59.5	0.002	0.325	2394001
232132	50 - 75 / 2 - 3	0.001 / 0.00005	20	2	8	44.5	3	84.5	0.003	0.460	2394001
232133	75 - 100 / 3 - 4	0.001 / 0.00005	20	2	8	57	3	109.5	0.003	0.555	2394001

DIGI PLUS-LINE „Absolute“ Electr. Digital Micrometer VSPEED • IP65

DIN 863

- water and coolant proof acc. to DIN 40050 / IEC 60529
- Absolute Measurement System (ABS-system)
- with lifting device for quick measuring processes with a constant measuring pressure
- with VOCOM-S duo data output, top model (connectivity also for Digimatic measuring devices)

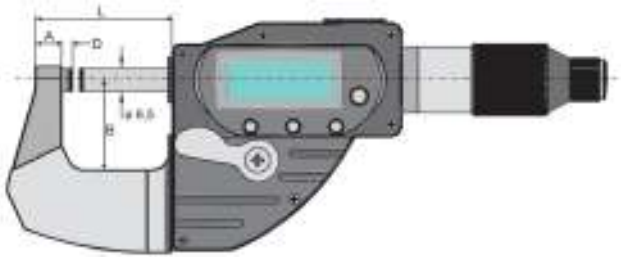


- top model in sturdy quality, frame lacquered, with insulation plates
- large LCD display, clear reading, digit height 7 mm
- carbide surfaces, lapped, non swiveling hardened measuring spindle
- On/Off button, automatic shutdown, zero setting at any position
- mm/inch switchable, ABS/INC measuring system, ORIGIN system
- constant measuring pressure through even pressure of the measuring spindle
- incl. 1x 3 V battery (type CR2032, art.-no. 2002093), with operation manual

Options

- data box with USB port, art.-no. 2420194
- foot switch for data box, art.-no. 209011
- transmitter for wireless communication via WiFi, art.-no. 209006, see page 306
- receiver for wireless communication via WiFi, art.-no. 209007, see page 306
- transmitter and receiver for wireless communication as set, art.-no. 2040101, see page 306





IP 65 | CR2032 Lithium 3V | UNIT | VOCOM-S Duo data output | DIN | CE | TC | WARRANTY 3 YEARS

ART NO	mm / inch	mm / inch	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
230580	0 - 25 / 0 - 1	0.001 / 0.00005	20	-	8	26	3.5	32	0.002	0.295	2394000
230581	25 - 50 / 1 - 2	0.001 / 0.00005	20	-	9	31	3.5	64.5	0.002	0.410	2394001
230582	50 - 75 / 2 - 3	0.001 / 0.00005	20	-	9	44	3.5	90.5	0.003	0.485	2394001
230583	75 - 100 / 3 - 4	0.001 / 0.00005	20	-	9	56	3.5	115.8	0.003	0.600	2394001

DIGI PLUS-LINE Data Transmission with Data Box

- with VOCOM-S duo data output
- connection via USB data cable also suitable for Digimatic connection
- connection socket for foot switch



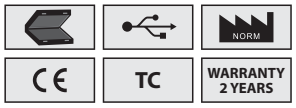
application example

ART NO 2420194



ART NO 209011





NORM | CE | TC | WARRANTY 2 YEARS

ART NO	article description	KG
2420194	data box with USB port	0.060
209011	foot switch with port	0.170

Precision Digital Micrometers

Electr. Digital Micrometer • IP65

DIN 863

- **water and coolant proof acc. to DIN 40050 / IEC 60529**
- **with USB data output**

- sturdy quality, frame lacquered, with insulation plates
- large LCD display, clear reading, digit height 7 mm
- carbide surfaces, lapped, spindle hardened and ground
- On button, automatic shutdown, zero setting at any position
- mm/inch switchable, ABS/INC measuring system
- locking lever for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 3 V battery (type CR2032, art.-no. 2002093), with operation manual
- from up 25 mm with setting gauge

Option
- data processing with data box (art.-no. 230139)



data box art.-no. 230139





ART NO	mm / inch	mm / inch	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
230130	0 - 25 / 0 - 1	0.001 / 0.00005	18	0.5	9	24	3.5	35	0.003	0.310	2394000
230131	25 - 50 / 1 - 2	0.001 / 0.00005	18	0.5	9	32	3.5	60	0.003	0.394	2394001
230132	50 - 75 / 2 - 3	0.001 / 0.00005	18	0.5	12	47	3.5	86	0.004	0.518	2394001
230133	75 - 100 / 3 - 4	0.001 / 0.00005	18	0.5	14	60	3.5	111	0.004	0.700	2394001

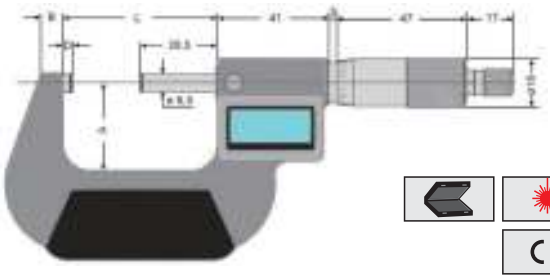
Electr. Digital Micrometer

DIN 863

- **large LCD display with clear reading, digit height 7 mm**

- frame lacquered, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- autom. shutdown, zero setting at any position
- mm/inch switchable, without data output
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual
- from up 25 mm with setting gauge







ART NO	mm / inch	mm / inch	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231088	0 - 25 / 0 - 1	0.001 / 0.00005	18	0.5	24.0	6	3.0	32.0	0.002	0.275	2394001
231089	25 - 50 / 1 - 2	0.001 / 0.00005	18	0.5	32.0	8	3.0	57.0	0.002	0.310	2394001
231090	50 - 75 / 2 - 3	0.001 / 0.00005	18	0.5	45.0	8	3.0	82.0	0.003	0.440	2394001
231091	75 - 100 / 3 - 4	0.001 / 0.00005	18	0.5	57.0	10	3.0	107.0	0.003	0.560	2394001
231092	100 - 125 / 4 - 5	0.001 / 0.00005	18	0.5	70.0	10	3.0	133.0	0.003	0.690	2394002
231093	125 - 150 / 5 - 6	0.001 / 0.00005	18	0.5	82.0	12	3.0	158.0	0.003	0.755	2394002

Electr. Digital Micrometer • IP40

DIN 863

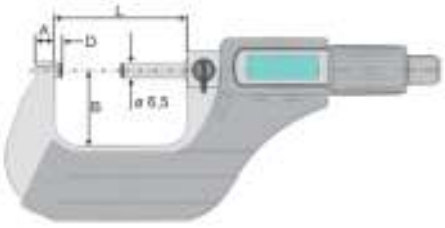
- **dust proof acc. to DIN 40050 / IEC 60529**
- **Absolute Measurement System (ABS-system)**

- frame lacquered, with insulation plates, sturdy quality
- large LCD display, clear reading, digit height 8 mm
- with carbide surfaces, lapped, spindle hardened and ground
- On/Off button, zero setting at any position
- mm/inch switchable, ABS/INC measuring system
- locking lever for quick and precise fixing
- with friction ratchet for constant measuring pressure
- friction ratchet with rubber studs for better handling
- incl. 1x 3 V battery (type CR2032, art.-no. 2002093), with operation manual
- from up 25 mm with setting gauge





ergonomically designed handle shape



ART NO	mm / inch	mm / inch	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231061	0 - 25 / 0 - 1	0.001 / 0.00005	22	0.5	6	25	3.5	32	0.003	0.200	2394000
231062	25 - 50 / 1 - 2	0.001 / 0.00005	22	0.5	6	32	3.5	57	0.003	0.330	2394001
231063	50 - 75 / 2 - 3	0.001 / 0.00005	22	0.5	7	44	3.5	82	0.004	0.460	2394001
231064	75 - 100 / 3 - 4	0.001 / 0.00005	22	0.5	8	59	3.5	108	0.005	0.555	2394001

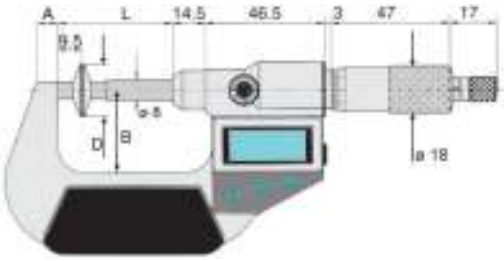
Electr. Digital Micrometer • IP40

DIN 863

- **dust proof acc. to DIN 40050 / IEC 60529**
- **for chordal measurement of gear teeth, keys, ribs, fins, etc.**
- **Absolute Measurement System (ABS-system)**
- **with data output RS232 C**

- LCD display, with clear reading, digit height 7 mm, mm/inch switchable
- frame lacquered, with insulated plates
- non-rotating spindle with disc measuring faces
- ABS/INC measurement system, zero setting at any position, On/Off button
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual
- from up 25 mm with setting gauge





ART NO	mm / inch	mm / inch	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231171	0 - 25 / 0 - 1	0.001 / 0.00005	0.7	32.0	20	43.0	0.004	0.400	2394000
231172	25 - 50 / 1 - 2	0.001 / 0.00005	0.7	44.5	20	68.0	0.004	0.535	2394001
231173	50 - 75 / 2 - 3	0.001 / 0.00005	0.7	57.0	20	93.0	0.005	0.470	2394001
231174	75 - 100 / 3 - 4	0.001 / 0.00005	0.7	70.0	20	118.5	0.005	0.565	2394001

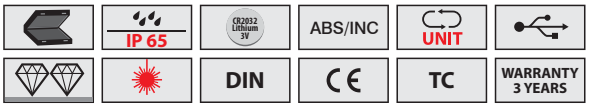
DIGI PLUS-LINE Electr. Digital Micrometer Set • IP65

DIN 863

- **water and coolant proof acc. to DIN 40050 / IEC 60529**
- **with USB data output**

- sturdy quality, frame lacquered, with insulation plates
- large LCD display, clear reading, digit height 7 mm
- carbide surfaces, lapped, spindle hardened and ground
- On button, automatic shutdown, zero setting at any position
- mm/inch switchable, ABS/INC measuring system
- locking lever for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 3 V batteries (type CR2032, art.-no. 2002093), with operation manual
- from up 25 mm with setting gauge





ART NO	mm / inch	mm / inch	set contents	ø mm	mm	max. mm	KG	ART NO CC
232170	0 - 75 / 0 - 3	0.001 / 0.00005	3	18	0.5	0.003/0.004	1.350	2394103
232171	0 - 100 / 0 - 4	0.001 / 0.00005	4	18	0.5	0.003/0.004	2.050	2394104

DIGI PLUS-LINE Electr. Digital Micrometer Set • IP40

DIN 863

- **dust proof acc. to DIN 40050 / IEC 60529**
- **Absolute Measurement System (ABS-system)**

- frame lacquered, with insulation plates, sturdy quality
- large LCD display, clear reading, digit height 8 mm
- with carbide surfaces, lapped, spindle hardened and ground
- On/Off button, zero setting at any position
- mm/inch switchable, ABS/INC measuring system
- locking lever for quick and precise fixing
- with friction ratchet for constant measuring pressure
- friction ratchet with rubber studs for better handling
- incl. 3 V batteries (type CR2032, art.-no. 2002093), with operation manual
- with setting gauges





ART NO	mm / inch	mm / inch	set content	ø mm	mm	max. mm	KG	ART NO CC
232061	0 - 100 / 0 - 4	0.001 / 0.00005	4	22	0.5	0.002 / 0.003	1.850	2394104



Calibration

is the comparison of actual measurements of a measuring instrument.
The study conducted at a measuring device calibration enables the documentation of the deviation of a measurement from standard. It will improve the measurement accuracy and the review of the technical data.

In the laboratory of the company creates Vogel Germany Calibration Certificates and test reports and provides with the re-calibration of measuring instruments as well as for the test equipment monitoring.









Why calibrate

- increase the quality level, for example in the production and in the service sector
- prevent hazards due to inaccurate readings
- guarantees traceable readings and increases safety
- ensures acceptance of test- and inspection reports

In the Service Scope of the company are included:



- cleaning and degreasing of customer‘s measurement equipment
- repair and adjustment
- calibration according to applicable standards
- creating a clear and compliant audit trails, test- and inspection reports
- attachment of calibration stickers with punctual re-calibration
- preservation of measuring equipment – also for overseas transportation
- inhouse workshop calibration
- marking of all kind of equipment by laser engraving

Precision Digital External Micrometers, Special Design

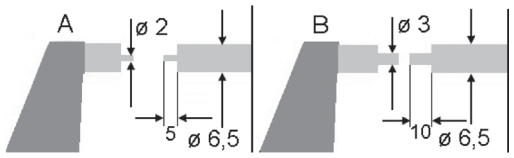
Electr. Digital Micrometer

DIN 863

- **with small anvil measuring surfaces**
- **Absolute Measurement System (ABS-system)**
- **with data output RS232 C**

- LCD display with clear reading, digit height 7 mm, mm/inch switchable
- frame lacquered, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- ABS/INC measurement system
- zero setting at any position, On/Off button
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual
- from up 25 mm with setting gauge





ABS/INC · UNIT · RS232 C · NORM · CE · TC · WARRANTY 2 YEARS

ART NO type A	ART NO type B	mm / inch	mm / inch	max. mm	ø mm	KG	ART NO CC
232871	**232861**	0 - 25 / 0 - 1	0.001 / 0.00005	0.002	18	0.275	2394000
232872	**232862**	25 - 50 / 1 - 2	0.001 / 0.00005	0.002	18	0.325	2394001

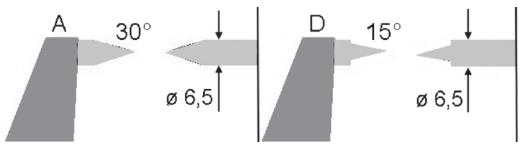
Electr. Digital Micrometer

DIN 863

- **with 30° and 15° measuring tips**
- **Absolute Measurement System (ABS-system)**
- **with data output RS232 C**

- LCD display, with clear reading, digit height 7 mm, mm/inch switchable
- frame lacquered, with insulation plates, carbide surfaces, lapped
- ABS/INC measurement system
- zero setting at any position, On/Off button
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual
- form up 25 mm setting with gauge





ABS/INC · UNIT · RS232 C · NORM · CE · TC · WARRANTY 2 YEARS

ART NO type A	ART NO type D	mm / inch	mm / inch	meas. tips knife/radius mm	max. mm	ø mm	KG	ART NO CC
232971	**232961**	0 - 25 / 0 - 1	0.001 / 0.00005	0.3	0.002	18	0.275	2394001

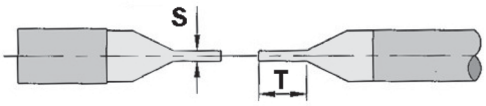
DIGI PLUS-LINE® Electr. Digital Micrometer • IP40

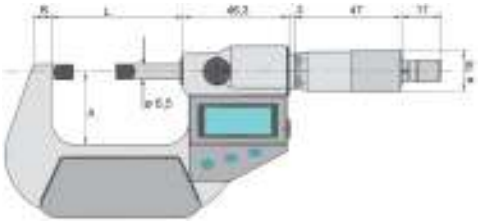
DIN 863

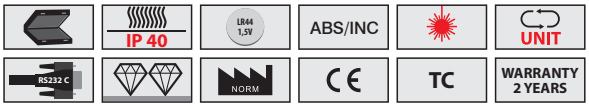
- **dust proof acc. to DIN 40050 / IEC 60529**
- **to measure small penetrations, grooves, etc.**
- **Absolute Measurement System (ABS-system)**
- **with data output RS232 C**

- LCD display, with clear reading, digit height 7 mm, mm/inch switchable
- drum with metric scale
- frame lacquered, with insulated plates
- non-rotating spindle with blade measuring faces
- ABS/INC measurement system
- zero setting at any position, On/Off button
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual
- from up 25 mm with setting gauge









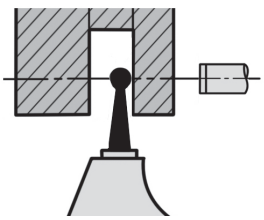
ART NO	mm / inch	mm / inch	A mm	B mm	S mm	T mm	L mm	max. mm	KG	ART NO CC
232381	0 - 25 / 0 - 1	0.001 / 0.00005	26.5	6	0.75	6.5	57.0	0.002	0.275	2394000
232382	25 - 50 / 1 - 2	0.001 / 0.00005	32.0	8	0.75	6.5	82.0	0.002	0.325	2394001
232383	50 - 75 / 2 - 3	0.001 / 0.00005	44.5	8	0.75	6.5	107.0	0.003	0.465	2394001
232384	75 - 100 / 3 - 4	0.001 / 0.00005	57.0	8	0.75	6.5	132.6	0.003	0.560	2394001

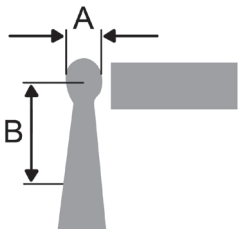
DIGI PLUS-LINE® Electr. Digital Micrometer

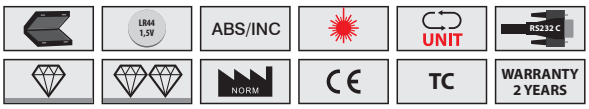
- **for measuring pipe wall thicknesses etc.**
- **Absolute Measurement System (ABS-system)**
- **with data output RS232 C**

- LCD display, with clear reading, digit height 7 mm, mm/inch switchable
- frame lacquered, with insulated plates, carbide surface, hardened anvil
- ABS/INC measurement system
- zero setting at any position, On/Off button
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual









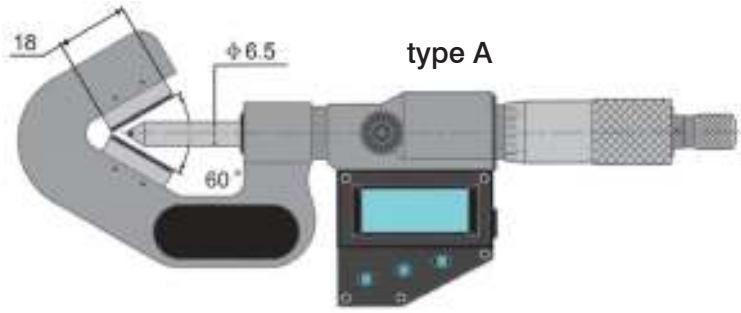
ART NO	mm / inch	mm / inch	ø mm	A ø mm	B mm	max. mm	KG	ART NO CC
232813	0 - 25 / 0 - 1	0.001 / 0.00005	18	4.7	25	0.003	0.260	2394000

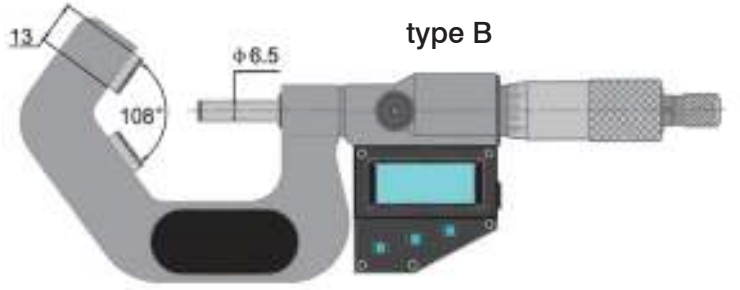
DIGI PLUS-LINE® Electr. Digital Micrometer with V-anvil

- **with data output RS232 C**
- **for measuring odd fluted taps, milling cutters, reamers, etc.**

- LCD display, clear reading, digit height 7 mm, mm/inch switchable
- frame lacquered, with insulation plates, carbide surfaces and tip, lapped
- ABS/INC measurement system
- zero setting at any position, On/Off button
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual
- with adjusting key and setting gauge

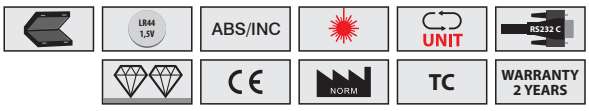








application example



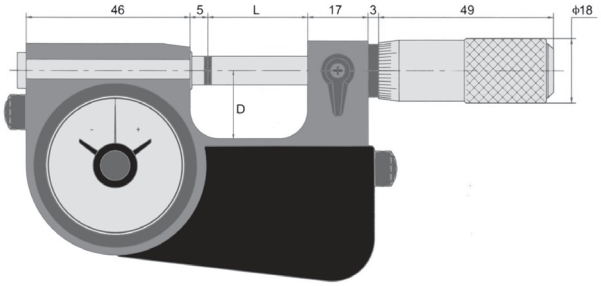
ART Nº type A 3 grooves 60°	ART Nº type B 5 grooves 108°	mm / inch	mm / inch	max. mm	KG	ART Nº CC
232180	-	1 - 15 / 0.04 - 0.6	0.001 / 0.0005	0.002	0.580	2394012
232181	-	5 - 20 / 0.2 - 0.8	0.001 / 0.0005	0.002	0.720	2394012
232182	-	20 - 35 / 0.8 - 1.4	0.001 / 0.0005	0.003	0.880	2394013
232183	-	35 - 50 / 1.4 - 2.0	0.001 / 0.0005	0.003	1.030	2394013
232184	-	50 - 65 / 2.0 - 2.6	0.001 / 0.0005	0.003	1.140	2394013
232185	-	65 - 80 / 2.6 - 3.2	0.001 / 0.0005	0.003	1.320	2394013
-	**232186**	5 - 25 / 0.2 - 1.0	0.001 / 0.0005	0.002	0.340	2394012
-	**232187**	25 - 45 / 1.0 - 1.8	0.001 / 0.0005	0.003	0.720	2394012
-	**232188**	45 - 65 / 1.8 - 2.6	0.001 / 0.0005	0.003	0.910	2394013
-	**232189**	65 - 85 / 2.6 - 3.4	0.001 / 0.0005	0.004	1.120	2394013
-	**232190**	85 - 105 / 3.4 - 4.2	0.001 / 0.0005	0.004	1.310	2394013

BLUE-LINE Indicator Snap Micrometer

- reading in µm
- for precise measurements in the series production

- drum and sleeve matt chrome
- frame hammer blow grey, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- locking lever for quick and precise fixing
- art. no. 231390 with anvil-lifting, adjustable depth stop
- accuracy micrometer ± 0.003 mm
- accuracy indicator ± 0.001 mm







WARRANTY 2 YEARS

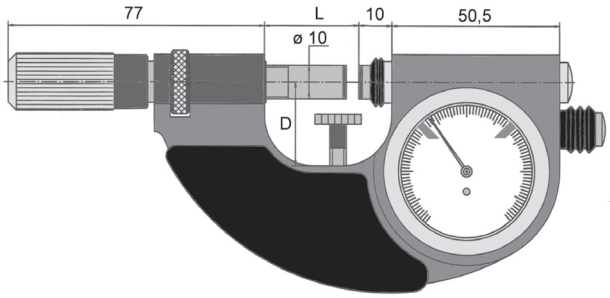
ART NO	mm	drum mm	dial mm	indicator mm	ø mm	L mm	D mm	KG	ART NO CC
231390	0 - 25	0.002	0.001	± 0.04	18	28.5	19.0	0.980	2394190
231395	0 - 25	0.002	0.001	± 0.04	18	28.5	19.0	0.980	2394190

SILVER-LINE Indicator Snap Micrometer

- reading in µm
- adjustable snap gauge for measuring shafts, axis, etc.
- replaces a large number of gauges

- with lacquered frame and insulation plates
- locking wheel for precise fixing, adjustable depth stop
- carbide surfaces, spindle hardened and ground
- large, clear round scale, adjustable tolerance marks
- free lift ~ 2.5 mm, anvil- lifting, measuring force 5-10 N





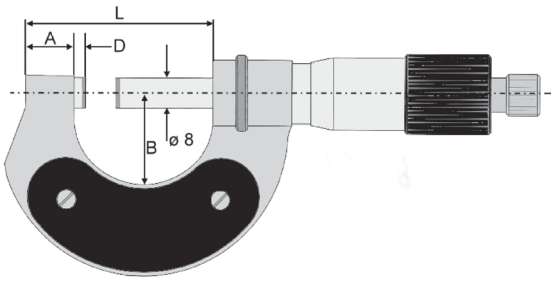
TC WARRANTY 2 YEARS

ART NO	mm	dial mm	indicator mm	max. mm	L mm	D mm	KG	ART NO CC
231410	0 - 25	0.001	± 0.04	0.001	28.5	25.0	0.800	2394410

SILVER-LINE Precision External Micrometer

- for professional industry purposes
- accuracy better than DIN 863

- sturdy quality, in high precision version
- drum and sleeve matt chrome finish
- hammer blow grey lacquered frame, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjusting key, from up 25 mm with setting gauge





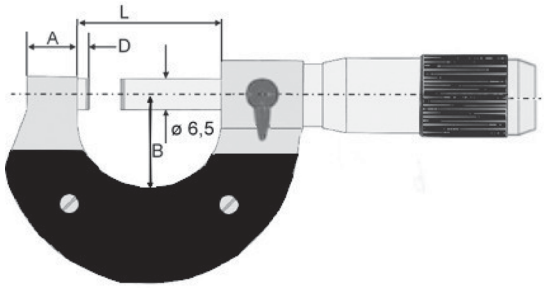
DIN | TC | WARRANTY 3 YEARS

ART NO	mm	mm	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
230586	0 - 25	0.01	21	0.5	13	24	3	37	0.002	0.300	2394000
230587	25 - 50	0.01	21	0.5	13	34	3	62	0.002	0.370	2394001
230588	50 - 75	0.01	21	0.5	15	46	3	87	0.003	0.440	2394001
230589	75 - 100	0.01	21	0.5	15	60	3	112	0.003	0.530	2394001

SILVER-LINE External Micrometer NEW

DIN 863

- sturdy quality, in top precision version
- drum and sleeve matt chromed finish
- hammer blow grey lacquered frame, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- locking lever for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjusting key, from up 25 mm with setting gauge





CC | DIN | WARRANTY 2 YEARS

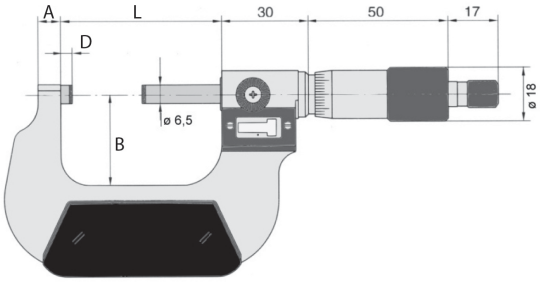
ART NO	mm	mm	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	CC
231321	0 - 25	0.01	20.5	0.5	7	26	3	32	0.004	0.205	inclusive
231322	25 - 50	0.01	20.5	0.5	8	31	3	57	0.004	0.280	inclusive
231323	50 - 75	0.01	20.5	0.5	9	45.5	3	83	0.005	0.385	inclusive
231324	75 - 100	0.01	20.5	0.5	9	56.5	3	109	0.005	0.475	inclusive

BLUE-LINE Digital Counter External Micrometer

- **easy handling and precise reading**

- mechanical digital counter, frame lacquered, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- with ratchet for constant measuring pressure
- locking wheel for quick and precise fixing
- with adjustment key, from up 25 mm with setting gauge





WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231451	0 - 25	0.01	18	6	26	3.5	32	0.004	0.370	2394000
231452	25 - 50	0.01	18	8	32	3.5	57	0.004	0.525	2394001
231453	50 - 75	0.01	18	8	44.5	3.5	82	0.005	0.685	2394001
231454	75 - 100	0.01	18	8	57	3.5	107	0.005	0.845	2394001

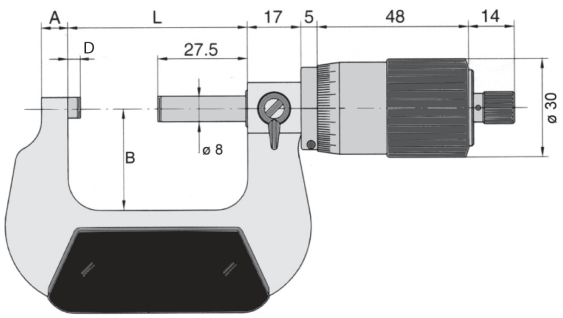
BLUE-LINE External Micrometer

DIN 863

- **with 100-step graduation**

- drum and sleeve matt chrome, frame lacquered, with insulation plates
- carbide surfaces lapped, spindle hardened and ground
- locking lever for quick and precise fixing
- with friction ratchet for constant measuring pressure
- with adjustment key, from 25 mm with setting gauge





DIN WARRANTY 2 YEARS

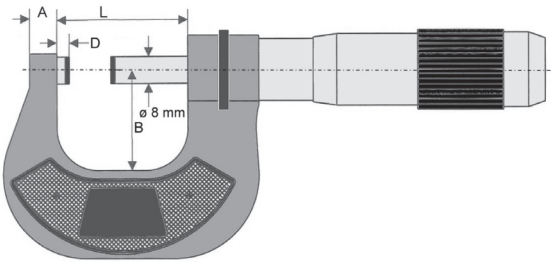
ART NO	mm	mm	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
230351	0 - 25	0.01	30	1.0	6	24	4.5	32	0.004	0.590	2394000
230352	25 - 50	0.01	30	1.0	8	32	4.5	57	0.004	0.695	2394001
230353	50 - 75	0.01	30	1.0	8	45	4.5	82	0.005	0.820	2394001
230354	75 - 100	0.01	30	1.0	8	57	4.5	107	0.005	0.910	2394001

BLUE-LINE External Micrometer

DIN 863

- sturdy quality, in precision version
- drum and sleeve matt chrome finish
- hammer blow grey lacquered frame, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjusting key, from up 25 mm with setting gauge





DIN | WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231330	0 - 25	0.01	23	0.5	9	32	3	32.5	0.004	0.250	2394000
231331	25 - 50	0.01	23	0.5	15	33	3	57.5	0.004	0.290	2394001
231332	50 - 75	0.01	23	0.5	15	40	3	82.5	0.005	0.340	2394001
231333	75 - 100	0.01	23	0.5	15	55	3	107.5	0.005	0.420	2394001
231334	100 - 125	0.01	23	0.5	32	80	32	168.5	0.006	0.950	2394002
231335	125 - 150	0.01	23	0.5	32	80	7.5	168.5	0.006	0.930	2394002

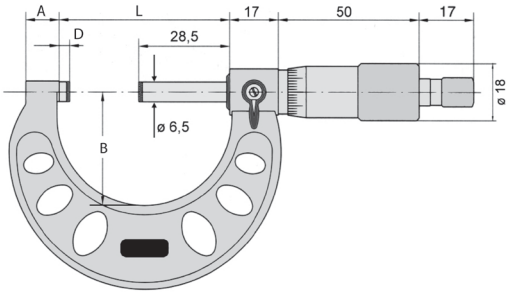
BLUE-LINE External Micrometers

DIN 863

- **lightweight design, metric graduation**
- **e.g. for use in the workshop**

- drum and sleeve matt chrome finish
- frame hammer blow blue lacquered
- carbide surfaces, lapped, spindle hardened and ground
- locking lever for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjustment key, from up 25 mm with setting gauge





DIN | WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231301	0 - 25	0.01	18	0.5	9.0	28	3.0	32	0.004	0.170	2394000
231302	25 - 50	0.01	18	0.5	14.0	38	3.0	57	0.004	0.220	2394001
231303	50 - 75	0.01	18	0.5	15.0	49	3.0	82	0.005	0.400	2394001
231304	75 - 100	0.01	18	0.5	15.0	60	3.0	107	0.005	0.580	2394001
231305	100 - 125	0.01	18	0.5	16.5	73	3.0	133	0.006	0.670	2394002
231306	125 - 150	0.01	18	0.5	16.5	85	3.0	158	0.006	0.790	2394002

BLUE-LINE External Micrometer

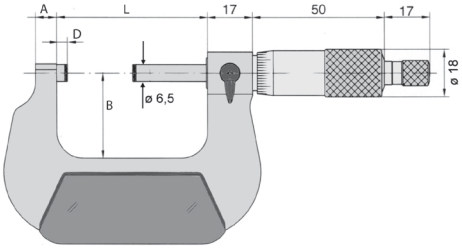
DIN 863

- **for standard expectations**

- drum and sleeve matt chrome finish
- frame hammer blow grey lacquered, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- locking lever for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjustment key, from up 25 mm with setting gauge



ART NO 231351 - 231354





ART NO 231355 - 231358

DIN | WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231351	0 - 25	0.01	18	0.5	6	24	3.0	32	0.004	0.170	2394000
231352	25 - 50	0.01	18	0.5	8	32	3.0	57	0.004	0.270	2394001
231353	50 - 75	0.01	18	0.5	8	45	3.0	82	0.005	0.340	2394001
231354	75 - 100	0.01	18	0.5	8	57	3.0	107	0.005	0.440	2394001
231355	100 - 125	0.01	18	0.5	8	70	3.0	133	0.006	0.640	2394002
231356	125 - 150	0.01	18	0.5	8	82	3.0	158	0.006	0.890	2394002
231357	150 - 175	0.01	18	0.5	8	95	5.5	183	0.007	1.100	2394002
231358	175 - 200	0.01	18	0.5	8	107	5.5	209	0.007	1.230	2394002

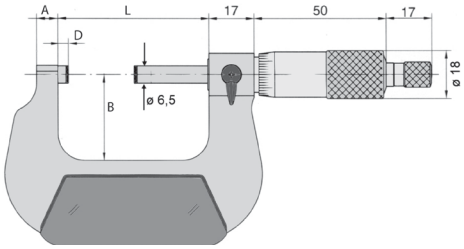
BLUE-LINE External Micrometer

DIN 863

- **with inch graduation**
- **for standard expectations**

- drum and sleeve matt chrome finish
- frame hammer blow grey lacquered, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- locking lever for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjustment key, from up 1 inch with setting gauge





DIN | WARRANTY 2 YEARS

ART NO	inch	inch	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231371	0 - 1	0.0001	18	0.5	6	24	3.0	32	0.004	0.170	2394000
231372	1 - 2	0.0001	18	0.5	8	32	3.0	57	0.004	0.270	2394001
231373	2 - 3	0.0001	18	0.5	8	25	3.0	82	0.005	0.340	2394001
231374	3 - 4	0.0001	18	0.5	8	57	3.0	107	0.005	0.440	2394001

Precision Micrometer Sets

BLUE-LINE External Micrometer Set

DIN 863

- **for standard requirements in measuring**

- drum and sleeve matt chrome finish
- frame hammer blow grey lacquered, with insulation plates
- carbide surfaces, lapped, spindle hardened and ground
- locking lever for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjustment key, from up 25 mm with setting gauge



ART NO 232006



ART NO 232003 - 232004

DIN | WARRANTY 2 YEARS

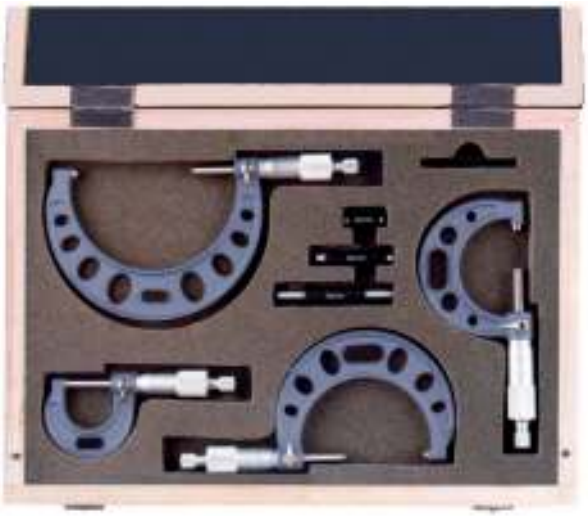
ART NO	mm	mm	set content	ø mm	mm	spindle-ø mm	KG	ART NO CC
232003	0 - 75	0.01	3	18	0.5	6.5	1.600	2394103
232004	0 - 100	0.01	4	18	0.5	6.5	1.950	2394104
232006	0 - 150	0.01	6	18	0.5	6.5	4.520	2394105
232107	150 - 300	0.01	6	18	0.5	6.5	12.125	2394105
232108	0 - 300	0.01	12	18	0.5	6.5	17.000	2394112
232109	100 - 200	0.01	4	18	0.5	6.5	5.645	2394104

BLUE-LINE External Micrometer Set

DIN 863

- **lightweight design, metric graduation**
- **for simple requirements in measuring**

- drum and sleeve matt chrome finish
- frame hammer blow blue lacquered
- carbide surfaces, lapped, spindle hardened and ground
- locking lever for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjustment key, from up 25 mm with setting gauge



DIN | WARRANTY 2 YEARS

ART NO	mm	mm	set content	ø mm	mm	spindle-ø mm	KG	ART NO CC
232001	0 - 100	0.01	4	18	0.5	6.5	1.950	2394104

Wooden cases for art.-no. 230290 - 230295
to be found on page 104

SILVER-LINE External Micrometer

DIN 863

- **with 50 mm spindle revolution**
- **100 step graduation**

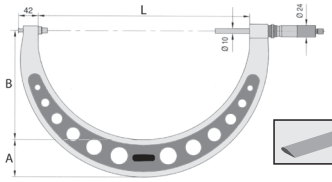
- drum and sleeve matt chrome finish
- lightweight metal frame, hammer blow grey lacquered
- carbide surfaces, lapped, spindle hardened and fine ground
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjusting key, without setting gauges, please see on page 102

Options
- insulated handle available on request
- surcharge (art.-no. 230290/1)





ART NO 230290/1



DIN | TC | WARRANTY 3 YEARS

ART NO	mm	mm	ø mm	mm	L mm	B mm	A mm	max. mm	KG	ART NO CC
230290	300 - 350	0.01	24	1.0	370	190	42	0.006	1.500	2394102
230291	350 - 400	0.01	24	1.0	430	220	42	0.006	1.800	2394102
230292	400 - 450	0.01	24	1.0	475	250	42	0.007	2.150	2394102
230293	450 - 500	0.01	24	1.0	530	273	42	0.007	2.300	2394102
230294	500 - 550	0.01	24	1.0	570	291	42	0.008	2.400	2394102
230295	550 - 600	0.01	24	1.0	630	323	42	0.008	3.000	2394102

SILVER-LINE External Micrometer

DIN 863

Wooden cases for art.-no. 230170 - 230182
to be found on page 104

- **for large measuring ranges**
- **with exchangeable extension**
- **with lightweight metal frame**

- drum and sleeve matt chrome finish, spindle revolution 50 mm
- lightweight metal frame, hammer blow grey lacquered
- carbide surfaces, lapped, spindle hardened and fine ground
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjusting key, without setting gauges, please see on page 102

Option
- insulated handle available on request
- surcharge (art.-no. 230290/1)





ART NO 230290/1



DIN | TC | WARRANTY 3 YEARS

ART NO	mm	mm	ø mm	mm	L mm	B mm	A mm	max. mm	KG	ART NO CC
230170	200 - 300	0.01	24	1.0	325	165	64	0.006	1.500	2394017
230171	300 - 400	0.01	24	1.0	430	220	74	0.007	1.900	2394017
230172	400 - 500	0.01	24	1.0	530	273	87	0.008	2.400	2394017
230173	500 - 600	0.01	24	1.0	630	323	102	0.009	3.100	2394017
230174	600 - 700	0.01	24	1.0	730	378	107	0.009	3.800	2394018
230175	700 - 800	0.01	24	1.0	830	423	113	0.009	4.200	2394018
230176	800 - 900	0.01	24	1.0	930	473	118	0.010	5.000	2394018
230177*	900 - 1000	0.01	24	1.0	1030	520	129	0.010	6.200	2394018
230178*	1000 - 1100	0.01	24	1.0	1135	585	142	0.011	7.600	2394018
230179*	1100 - 1200	0.01	24	1.0	1230	635	156	0.011	8.600	2394019
230180*	1200 - 1300	0.01	24	1.0	1335	685	168	0.012	9.700	2394019
230181*	1300 - 1400	0.01	24	1.0	1430	735	171	0.012	11.300	2394019
230182*	1400 - 1500	0.01	24	1.0	1530	780	180	0.013	12.500	2394019

SILVER-LINE External Micrometer

DIN 863

- large measuring range
- with adjustable anvil
- with lightmetal frame

- with 50 mm spindle revolution
- drum and sleeve matt chrome finish
- frame hammer blow lacquered, carbide surfaces, lapped, spindle hardened and fine ground
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjusting key, without setting gauges, please see on page 102

Options
- insulated handle available on request
- surcharge (art.-no. 230290/1)

Wooden cases for art.-no. 234205 - 234211 to be found on page 104



ART NO 230290/1



DIN | NORM | TC | WARRANTY 3 YEARS

ART NO	mm	mm	ø mm	mm	spindle-ø mm	max. mm	KG	ART NO CC
234205	0 - 300	0.1 / 0.01	24	1.0	10.0	0.006	1.900	2394018
234206	300 - 600	0.1 / 0.01	24	1.0	10.0	0.009	3.500	2394018
234207	600 - 900	0.1 / 0.01	24	1.0	10.0	0.012	5.400	2394018
234208*	900 - 1200	0.1 / 0.01	24	1.0	10.0	0.015	9.000	2394019
234209*	1200 - 1500	0.1 / 0.01	24	1.0	10.0	0.018	12.900	2394019
234210*	1500 - 1800	0.1 / 0.01	24	1.0	10.0	0.023	16.600	2394019
234211*	1700 - 2000	0.1 / 0.01	24	1.0	10.0	0.025	19.200	2394019

SILVER-LINE External Micrometer

- for measuring plates and panels
- 100 step graduation
- with deep frame

- drum and sleeve matt chrome finish
- frame hammer blow grey lacquered
- carbide surfaces, lapped, spindle hardened and fine ground
- without insulation plates
- with ratchet for constant measuring pressure



NORM | TC | WARRANTY 3 YEARS

ART NO	mm	mm	ø mm	mm	spindle-ø mm	max. mm	KG	ART NO CC
232611	0 - 25 x 50	0.01	24	1.0	6.5	0.002	0.380	2394013
232612	0 - 25 x 100	0.01	24	1.0	8.0	0.003	0.800	2394013
232613	0 - 25 x 150	0.01	24	1.0	6.5	0.005	1.300	2394013

SILVER-LINE Micrometer
DIN 863

- **with special measuring faces**

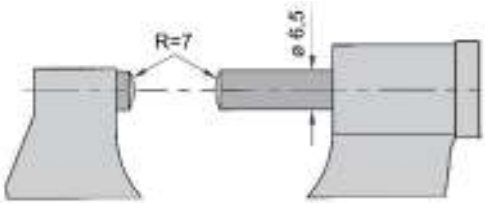
- drum and sleeve matt chrome finish
- frame hammer blow grey lacquered
- with insulation plates
- carbide surfaces, finely ground
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure



ART NO 232910



ART NO 232921



DIN | TC | WARRANTY 3 YEARS

ART NO type A 60° R = 0,4 mm	ART NO type B R = 7 mm	mm	mm	ø mm	mm	spindle-ø mm	max. mm	KG	ART NO CC
232910	**232921**	0 - 25	0.01	20	0.5	6.5	0.003	0.420	2394000
232911	**232922**	25 - 50	0.01	20	0.5	6.5	0.003	0.530	2394000

SILVER-LINE Micrometer
DIN 863

- **with 30° and 60° pointed measuring faces**

- drum and sleeve matt chrome finish
- frame hammer blow grey lacquered
- with insulation plates
- carbide surfaces, finely ground
- anvil length 15 mm
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure



DIN | TC | WARRANTY 3 YEARS

ART NO	mm	mm	ø mm	mm	measuring surfaces	spindle-ø mm	max. mm	KG	ART NO CC
230065	0 - 25	0.01	20	0.5	30° / R = 0.4	6.5	0.003	0.540	2394000
230066	25 - 50	0.01	20	0.5	30° / R = 0.4	6.5	0.003	0.660	2394000
230067	50 - 75	0.01	20	0.5	30° / R = 0.4	6.5	0.004	0.800	2394000
230068	75 - 100	0.01	20	0.5	30° / R = 0.4	6.5	0.004	0.940	2394000
230075	0 - 25	0.01	20	0.5	60° / R = 0.4	6.5	0.003	0.540	2394000
230076	25 - 50	0.01	20	0.5	60° / R = 0.4	6.5	0.003	0.660	2394000
230077	50 - 75	0.01	20	0.5	60° / R = 0.4	6.5	0.004	0.800	2394000
230078	75 - 100	0.01	20	0.5	60° / R = 0.4	6.5	0.004	0.940	2394000

Other measuring forms for art.-no. 230065 - 230068 are available on request, e.g. 15° / 20° / 45°

Suitable setting gauges are on page 102

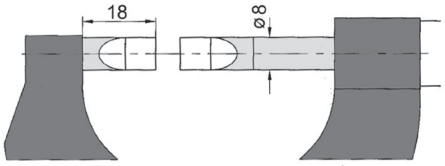
SILVER-LINE Precision Blade Micrometer

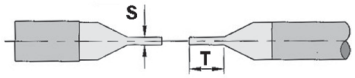
DIN 863

- **to measure small punctures, grooves, etc.**

- drum and sleeve matt chrome finish
- frame hammer blow lacquered
- with insulation plates
- flat measuring ends, flat surfaces
- anvil length 18 mm
- hardened measuring surfaces, finely ground
- non-rotating spindle
- with ratchet for constant measuring pressure







measuring surfaces

DIN | TC | WARRANTY 3 YEARS

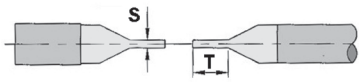
ART NO	mm	mm	ø mm	mm	measuring surfaces S x T mm	spindle-ø mm	max. mm	KG	ART NO CC
230380	0 - 25	0.01	20	0.5	0.40 x 4.0	8.0	0.003	0.560	2394000
230381	25 - 50	0.01	20	0.5	0.40 x 4.0	8.0	0.003	0.680	2394001
230382	50 - 75	0.01	20	0.5	0.75 x 7.0	8.0	0.004	0.820	2394001
230383	75 - 100	0.01	20	0.5	0.75 x 7.0	8.0	0.004	0.960	2394001
230384	100 - 125	0.01	20	0.5	0.75 x 7.0	8.0	0.005	1.080	2394002
230385	125 - 150	0.01	20	0.5	0.75 x 7.0	8.0	0.005	1.250	2394002

BLUE-LINE Blade Micrometer

- **to measure small penetrations, grooves, etc.**

- drum and sleeve matt chrome finish
- frame lacquered, with insulation plates
- flat measuring ends, flat surfaces
- hardened measuring surfaces, finely ground
- non-rotating spindle
- with ratchet for constant measuring pressure
- with adjusting key, from up 25 mm with setting gauge





measuring surfaces

NORM | WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	mm	measuring surfaces S x T mm	spindle-ø mm	max. mm	KG	ART NO CC
231380	0 - 25	0.01	20	0.5	0.75 x 6.5	6.5	0.004	0.270	2394000
231381	25 - 50	0.01	20	0.5	0.75 x 6.5	6.5	0.004	0.340	2394001
231382	50 - 75	0.01	20	0.5	0.75 x 6.5	6.5	0.005	0.435	2394001
231383	75 - 100	0.01	20	0.5	0.75 x 6.5	6.5	0.005	0.655	2394001

SILVER-LINE

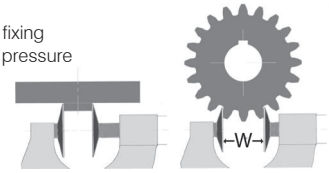
Precision Disc-Type Micrometer

DIN 863

- **for chordal measurement of gear teeth, keys, ribs, fins, etc.**

- drum and sleeve matt chrome finish
- turning spindle, module 0.8 - 6
- frame hammer blow grey lacquered
- hardened measuring plates, lapped parallel
- with insulation plates
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure





DIN | TC | WARRANTY 3 YEARS

ART NO	mm	mm	ø mm	mm	measuring disc-ø mm	spindle-ø mm	max. mm	KG	ART NO CC
230001	0 - 25	0.01	20	0.5	25	8	0.004	0.510	2394000
230002	25 - 50	0.01	20	0.5	25	8	0.004	0.650	2394001
230003	50 - 75	0.01	20	0.5	25	8	0.005	0.770	2394001
230004	75 - 100	0.01	20	0.5	25	8	0.005	0.890	2394001
230005	100 - 125	0.01	20	0.5	25	8	0.006	1.020	2394002
230006	125 - 150	0.01	20	0.5	25	8	0.006	1.130	2394002
230007	150 - 175	0.01	20	0.5	25	8	0.006	1.380	2394002
230008	175 - 200	0.01	20	0.5	25	8	0.006	1.510	2394002
230009	200 - 225	0.01	20	0.5	25	8	0.007	1.740	2394003
230010	225 - 250	0.01	20	0.5	25	8	0.007	1.880	2394003
230011	250 - 275	0.01	20	0.5	25	8	0.007	2.060	2394003
230012	275 - 300	0.01	20	0.5	25	8	0.007	2.160	2394003

BLUE-LINE

Disc-Type Micrometer

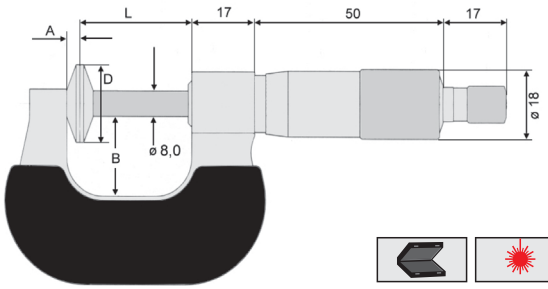
DIN 863

- **for chordal measurement of gear teeth, keys. ribs, fins, etc.**

- drum and sleeve matt chrome finish
- non-rotating spindle
- frame lacquered, with insulation plates
- carbide measuring plates, lapped parallel
- with ratchet for constant measuring pressure
- with adjusting key, from up 25 mm with setting gauge



Other measuring plate-ø available on request! Other measuring ranges from 300 - 1000 mm available on request!



DIN | WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	mm	A mm	B mm	D mm	L mm	max. mm	KG	ART NO CC
231121	0 - 25	0.01	18	0.5	3.3	20	20	34	0.004	0.390	2394000
231122	25 - 50	0.01	18	0.5	3.3	28	20	59	0.004	0.440	2394001
231123	50 - 75	0.01	18	0.5	3.3	41	20	85	0.005	0.590	2394001
231124	75 - 100	0.01	18	0.5	3.3	53	20	110	0.005	0.750	2394001

SILVER-LINE External Micrometer

DIN 863

- **for wire- and rolling plants**

- drum and sleeve matt chrome finish, 100 step graduation
- frame hammer blow grey lacquered
- carbide surfaces, lapped, spindle hardened and fine ground
- without insulation plates
- with ratchet for constant measuring pressure



DIN | TC | WARRANTY 3 YEARS

ART NO	mm measuring range / frame depth	mm	ø mm	mm	spindle-ø mm	max. mm	KG	ART NO CC
232510	0 - 15 x 18	0.01	20	1.0	6.5	0.002	0.320	2394000

BLUE-LINE V-Anvil Micrometer

- **for measuring odd fluted taps, milling cutters, reamers, etc.**

- drum and sleeves matt chrome finish
- non-rotating spindle
- frame lacquered, with insulation plates
- carbide measuring plate, lapped flat
- with ratchet for constant measuring pressure
- locking wheel for quick and precise fixing
- with adjusting key and setting gauge





NORM | WARRANTY 2 YEARS

ART NO 3 flutes 60°	mm	mm	ø mm	mm	max. mm	KG	ART NO CC
230080	1 - 15	0.01	18	0.5	0.004	0.500	2394012
230081	5 - 20	0.01	18	0.5	0.004	0.640	2394012
230082	20 - 35	0.01	18	0.5	0.005	0.800	2394013
230083	35 - 50	0.01	18	0.5	0.005	0.950	2394013
230084	50 - 65	0.01	18	0.5	0.006	1.060	2394013
230085	65 - 80	0.01	18	0.5	0.006	1.240	2394013

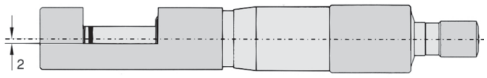
BLUE-LINE Wire Thickness Micrometer

DIN 863

- **to measure wire, rods etc.**

- drum and sleeve matt chrome finish
- carbide surfaces, finely ground
- with ratchet for constant measuring pressure





NORM | WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	mm	spindle-ø mm	max. mm	KG	ART NO CC
232902	0 - 10	0.01	19	0.5	6.5	0.004	0.250	2394001

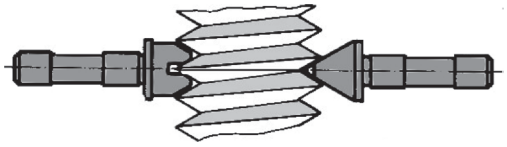
Micrometer for external threads

DIN 863

- **for external thread measurements**

- drum and sleeve matt chrome finish
- frame hammer blow grey lacquered, with insulation plates
- hardened thread flanks measuring inserts, exchangeable
- delivery without inserts and **without** setting gauges
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure





DIN | TC | WARRANTY 3 YEARS

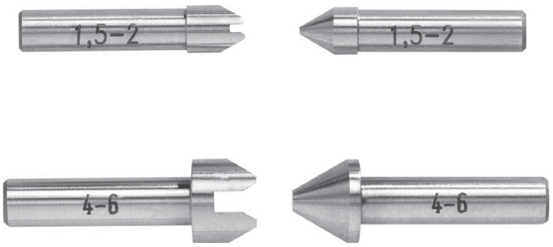
ART NO size of inserts ø 4 x 15.5 mm	ART NO size of inserts ø 3.5 x 13.5 mm	mm	mm	ø mm	mm	spindle setting mm	max. mm	KG	ART NO CC
230420	**230450**	0 - 25	0.01	20	0.5	25 mm	0.003	0.590	2394420
230421	**230451**	25 - 50	0.01	20	0.5	25 mm	0.003	0.660	2394420
230422	**230452**	50 - 75	0.01	20	0.5	25 mm	0.004	0.780	2394422
230423	**230453**	75 - 100	0.01	20	0.5	25 mm	0.004	0.920	2394422
230424	**230454**	100 - 125	0.01	20	0.5	25 mm	0.004	1.060	2394423
230425	**230455**	125 - 150	0.01	20	0.5	25 mm	0.004	1.180	2394423
230426	**230456**	150 - 200	0.01	20	0.5	50 mm	0.005	1.600	2394423
230427	**230457**	200 - 250	0.01	20	0.5	50 mm	0.005	1.940	2394423
230428	**230458**	250 - 300	0.01	20	0.5	50 mm	0.005	2.210	2394423

Thread Flanks Measuring Inserts, exchangeable

DIN 863

- **suitable for series 230420 - 230428 and 230450 - 230458**

- hardened and finely ground
- each insert marked with thread pitch
- delivery in pair (groove and cone)
- calibration certificate available on request



DIN | ISO

ART NO metr. ISO 60° ø 4 x 15.5 mm	ART NO metr. ISO 60° ø 3.5 x 13.5 mm	mm	ART NO ISO trapez 30° ø 4 x 15.5 mm	ART NO ISO trapez 30° ø 3.5 x 13.5 mm	mm	ART NO whitworth 55° ø 4 x 15.5 mm	ART NO whitworth 55° ø 3.5 x 13.5 mm	thread/inch	ART NO CC
2304206001	**2304506001**	0.35 - 0.50	**2304207001**	**2304507001**	1.5	**2304205501**	**2304505501**	60 - 48	2394042
2304206002	**2304506002**	0.60 - 0.80	**2304207002**	**2304507002**	2	**2304205502**	**2304505502**	40 - 32	2394042
2304206003	**2304506003**	0.90 - 1.25	**2304207003**	**2304507003**	3	**2304205503**	**2304505503**	28 - 22	2394042
2304206004	**2304506004**	1.50 - 2.00	**2304207004**	**2304507004**	4	**2304205504**	**2304505504**	20 - 16	2394042
2304206005	**2304506005**	2.50 - 3.50	**2304207005**	**2304507005**	5 - 6	**2304205505**	**2304505505**	14 - 11	2394042
2304206006	**2304506006**	4.00 - 6.00	**2304207006**	**2304507006**	7 - 8	**2304205506**	**2304505506**	10 - 7	2394042
-	-	-	**2304207007**	**2304507007**	9 - 10	**2304205507**	**2304505507**	6 - 4	2394042
-	-	-	**2304207008**	**2304507008**	12 - 14	-	-	-	2394042

suitbale setting gauges are on page 102

Precision Gear Tooth Outside Micrometer

DIN 863

- **to measure over-pin diameter of external gears**

- drum and sleeve matt chrome finish
- interchangeable ball anvil-spindle tips for various gear modules
- borehole for measuring ball holder-ø 3.0 mm, hardened measuring balls
- frame hammer blow grey lacquered, with insulation plates
- locking wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- delivery **without** measuring ball holder, available on page 101





DIN | TC | WARRANTY 3 YEARS

ART Nº	mm	mm	ø mm	mm	measuring end-ø ø x length mm	max. mm	KG	ART Nº CC
230901	0 - 25	0.01	20	0.5	3 x 8	0.002	0.560	2394001
230902	25 - 50	0.01	20	0.5	3 x 8	0.002	0.680	2394001
230903	50 - 75	0.01	20	0.5	3 x 8	0.003	0.820	2394001
230904	75 - 100	0.01	20	0.5	3 x 8	0.003	0.960	2394001
230905	100 - 125	0.01	20	0.5	3 x 8	0.004	1.080	2394002
230906	125 - 150	0.01	20	0.5	3 x 8	0.004	1.250	2394002
230907	150 - 175	0.01	20	0.5	3 x 8	0.004	1.430	2394002
230908	175 - 200	0.01	20	0.5	3 x 8	0.004	1.570	2394002
230909	200 - 225	0.01	20	0.5	3 x 8	0.005	1.780	2394003
230910	225 - 250	0.01	20	0.5	3 x 8	0.005	1.940	2394003

Precision Gear Tooth Inside Micrometer

DIN 863

- **to measure the pitch circle of internal gears**

- drum and sleeve matt chrome finish
- borehole for measuring ball holder-ø 3.0 mm, hardened measuring balls
- with insulation handles
- with ratchet for constant measuring pressure
- delivery **without** measuring ball holder, available on page 101



ART Nº 230921



DIN | TC | WARRANTY 3 YEARS

ART Nº	version or extensions	mm	mm	ø mm	mm	measuring end-ø ø x length mm	max. mm	KG	ART Nº CC
230919	jaws	25 - 50	0.01	21	0.5	3 x 6	0.003	0.480	2394011
230920	jaws	50 - 75	0.01	21	0.5	3 x 8	0.003	0.480	2394011
230921	measuring body, only	75 - 100	0.01	17	0.5	3 x 8	0.003	0.250	2394011
230922	25/50	75 - 175	0.01	17	0.5	3 x 8	0.006	0.340	2394011
230923	25/50/100	75 - 275	0.01	17	0.5	3 x 8	0.008	0.490	2394011
230924	25/50/100/200	75 - 475	0.01	17	0.5	3 x 8	0.010	0.790	2394011
230925	25/50/100/200/400	75 - 875	0.01	17	0.5	3 x 8	0.012	1.300	2394011
230926	25/50/100/200/400/600	75 -1475	0.01	17	0.5	3 x 8	0.015	2.030	2394011

Suitbale setting gauges are on page 101

BLUE-LINE Measuringball Holder

- for series 230901 - 230926
- for external and internal gearing

- with hardened steel balls
- carbide balls available on request, please



ART NO	ball-ø mm	module	max. mm
230928	1.5	0.9 / 1	0.001
230928/1	1.75	1.125	0.001
230929	2.0	1.25	0.001
230929/1	2.25	1.5	0.001
230930	2.5	1.75	0.001
230931	3.0	2	0.001
230932	3.5	2.25	0.001
230933	4.0	2.5 / 2.75	0.001
230934	4.5	3	0.001
230935	5.0	3.25 / 3.5	0.001
230936	5.5	3.75	0.001
230937	6.0	4	0.001

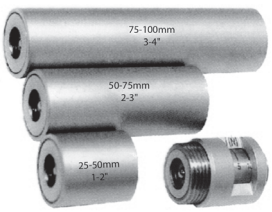
ART NO	ball-ø mm	module	max. mm
230938	6.5	4.25 / 4.5	0.001
230939	7.0	4.5	0.001
230940	7.5	5	0.001
230941	8.0	5.5	0.001
230942	9.0	6	0.001
230943	10.0	6.5	0.0015
230944	10.5	7	0.0015
230945	11.0	7.5	0.0015
230946	12.0	8	0.0015
230947	13.0	8.5 / 9	0.0015
230948	14.0	9.5	0.0015
230949	15.0	10	0.0015

BLUE-LINE Measuring Pressure Test Gauge

- for micrometers

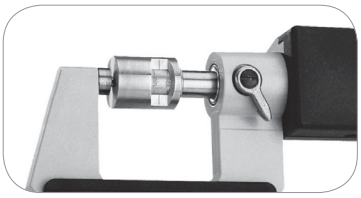
- pressure range 5-12 N
- for spindle-ø up to 8 mm

ART NO 230998



ART NO 230999





WARRANTY 2 YEARS

ART NO	mm	KG
230998	25 / 50 / 75 / 100	0.450
230999	25	0.120

SILVER-LINE Optical Parallels

- designed to inspect parallelism and flatness of measuring faces of micrometers
- each glass is marked with an identification-number (glued)

- ground and polished on both sides
- polished and faceted border



example

ART NO 350309



TC

WARRANTY 1 YEAR

ART NO	nominal size mm	glass-ø mm	accuracy of flatness µm	parallelism µm	KG
350305/1	20	60	≤ 0.10	≤ 0.20	0.145
350309	12.00 / 12.12 / 12.25 / 12.37	60	≤ 0.10	≤ 0.20	0.365
350309/1	25.00 / 25.12 / 25.25 / 25.37	60	≤ 0.10	≤ 0.40	0.500

Other sizes available on request!

BLUE-LINE® Setting Gauges for Micrometers
DIN 863

- hardened surfaces, ground and lapped
- surfaces-ø 6,5 mm, from size 300 mm with ø 10 mm
- with insulation handle





DIN

ART NO	mm	max. mm	KG	ART NO CC
2309302	25	0.00125	0.020	2394301
2309303	50	0.00125	0.025	2394301
2309304	75	0.00150	0.040	2394301
2309305	100	0.00200	0.055	2394302
2309306	125	0.00250	0.070	2394302
2309307	150	0.00250	0.080	2394302
2309308	175	0.00250	0.090	2394302
2309309	200	0.00300	0.105	2394302
2309310	225	0.00300	0.120	2394302
2309311	250	0.00300	0.130	2394302
2309312	275	0.00300	0.145	2394302
2309313	300	0.00300	0.340	2394302
2309314	325	0.00350	0.370	2394303
2309315	350	0.00350	0.390	2394303
2309316	375	0.00350	0.420	2394303
2309317	400	0.00350	0.440	2394303
2309318	425	0.00350	0.470	2394303
2309319	450	0.00350	0.490	2394303
2309320	475	0.00350	0.520	2394303
2309321	500	0.00350	0.540	2394303
2309322	525	0.00350	0.570	2394304
2309323	550	0.00350	0.600	2394304
2309324	575	0.00350	0.620	2394304
2309325	600	0.00350	0.650	2394304
2309326	625	0.00400	0.670	2394304

ART NO	mm	max. mm	KG	ART NO CC
2309327	650	0.004	0.700	2394304
2309328	675	0.004	0.730	2394304
2309329	700	0.004	0.760	2394304
2309330	725	0.004	0.790	2394304
2309331	750	0.004	0.820	2394304
2309332	775	0.004	0.850	2394304
2309333	800	0.004	0.870	2394305
2309334	825	0.004	0.900	2394305
2309335	850	0.004	0.920	2394305
2309336	875	0.004	0.940	2394305
2309337	900	0.005	0.970	2394305
2309338	925	0.005	0.990	2394305
2309339	950	0.005	1.010	2394305
2309340	975	0.005	1.040	2394305
2309341	1000	0.005	1.060	2394305
2309342	1050	0.005	1.120	2394306
2309343	1150	0.006	1.220	2394306
2309344	1250	0.007	1.330	2394306
2309345	1350	0.007	1.420	2394306
2309346	1450	0.007	1.750	2394307
2309347	1550	0.009	1.880	2394307
2309348	1650	0.010	2.000	2394307
2309349	1750	0.010	2.120	2394307
2309350	1850	0.011	2.240	2394307
2309351	1950	0.012	2.360	2394307

BLUE-LINE® Thread Setting Gauges
DIN 863

- **for external measuring**
- hardened steel surfaces
- with insulation plates



ISO DIN

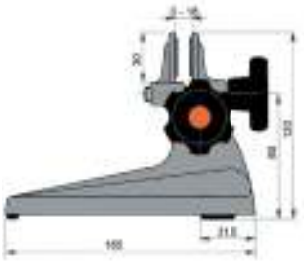
ART NO metr. ISO 60°	ART NO whitworth 55°	mm	max. mm	ART NO CC
2304216001	2304215501	25	0.003	23940421
2304216002	2304215502	50	0.003	23940421
2304216003	2304215503	75	0.003	23940421
2304216004	2304215504	100	0.004	23940421
2304216005	2304215505	125	0.004	23940421
2304216006	2304215506	175	0.004	23940421
2304216007	2304215507	225	0.004	23940421
2304216008	2304215508	275	0.004	23940421

ART NO ISO trapez (DIN 103)	available for the following thread pitches mm	max. mm	ART NO CC
2304216501	2 / 3 / 4 / 5 - 6 / 7 - 8 / 9 - 10	0.004	23940421
2304216502	2 / 3 / 4 / 5 - 6 / 7 - 8 / 9 - 10	0.004	23940421
2304216503	2 / 3 / 4 / 5 - 6 / 7 - 8 / 9 - 10	0.004	23940421
2304216504	3 / 4 / 5 - 6 / 7 - 8 / 9 - 10 / 12 - 14	0.005	23940421
2304216505	4 / 5 - 6 / 7 - 8 / 9 - 10 / 12 - 14	0.005	23940421
2304216506	4 / 5 - 6 / 7 - 8 / 9 - 10 / 12 - 14	0.005	23940421
2304216507	5 - 6 / 7 - 8 / 9 - 10 / 12 - 14	0.005	23940421
2304216508	5 - 6 / 7 - 8 / 9 - 10 / 12 - 14	0.005	23940421

BLUE-LINE Micrometer Stand

- with stable base
- made of cast iron
- hammer blow lacquered
- jaws equipped with rubber, to protect the instruments
- clamps rotate in axially position
- with fixing screw

ART NO 239004





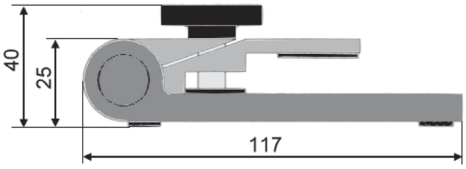


WARRANTY 2 YEARS

ART NO	for micrometer measuring range mm	mm	KG
239004	0 - 100	165 x 120 x 120	1.200

BLUE-LINE Micrometer Stand

- with stable base
- steel version
- hammer blow lacquered
- jaws equipped with rubber, to protect the instruments
- clamps rotate in axially position
- with central fixing





WARRANTY 2 YEARS

ART NO	for micrometer measuring range mm	mm	KG
239005	0 - 100	117 x 70 x 40	0.780

Repair Service

Our well experienced service department offers you all usually repair of our products. Require our service for all kind of:

- repair or replacement
- general overhaul of ***VOGEL GERMANY*** measuring tools and devices





Boxes for Micrometers

Wooden Boxes for series 230170 - 230182

ART NO	mm	KG	ART NO	mm	KG
2399244	200 - 300	2.200	2399251	900 - 1000	11.000
2399245	300 - 400	2.200	2399252	1000 - 1100	13.000
2399246	400 - 500	2.700	2399253	1100 - 1200	14.000
2399247	500 - 600	3.500	2399254	1200 - 1300	20.000
2399248	600 - 700	5.500	2399255	1300 - 1400	22.000
2399249	700 - 800	7.500	2399256	1400 - 1500	26.000
2399250	800 - 900	9.000	-	-	-



ART NO 2399245 - 2399256

Wooden Boxes for series 234205 - 234209

ART NO	mm	KG	ART NO	mm	KG
2399205	0 - 300	2.300	2399208	900 - 1200	14.500
2399206	300 - 600	5.600	2399209	1200 - 1500	26.500
2399207	600 - 900	9.430	-	-	-



ART NO 2399205 - 2399209

Wooden Boxes for series 230290 - 230295

ART NO	mm	KG	ART NO	mm	KG
2399290	300 - 350	1.900	2399293	450 - 500	2.700
2399291	350 - 400	2.200	2399294	500 - 550	3.500
2399292	400 - 450	2.700	2399295	550 - 600	3.500



ART NO 2399501 - 2399508

Wooden Boxes for series 231351 - 231358 / 231371 - 231374

ART NO	mm	KG	ART NO	mm	KG
2399501	0 - 25	0.150	2399505	100 - 125	0.350
2399502	25 - 50	0.200	2399506	125 - 150	0.400
2399503	50 - 75	0.250	2399507	150 - 175	0.450
2399504	75 - 100	0.300	2399508	175 - 200	0.500

Plastic Boxes

ART NO	mm	suitable for article-numbers	KG
2397001	0 - 25	231021 / 231041 / 231070 / 231150	0.210
2397002	25 - 50	231022 / 231042 / 231071 / 231151 / 231171 / 232381 / 232861 / 232871 / 232961 / 232971	0.225
2397003	50 - 75	231023 / 231043 / 231072 / 231152 / 231172 / 232382 / 232862 / 232872 / 232962 / 232972	0.305
2397004	75 - 100	231024 / 231044 / 231073 / 231153	0.480
2397005	100 - 125	231045 / 231074	0.490
2397006	125 - 150	231046 / 231075	0.545



ART NO 2397001 - 2397006

ART NO	mm	suitable for article-numbers	KG
2397025	0 - 25	231351 / 231371 / 231451 / 231501	0.080
2397050	25 - 50	231352 / 231372 / 231452 / 231502	0.130
2397075	50 - 75	231353 / 231373 / 231453 / 231503	0.170
2397100	75 - 100	231354 / 231374 / 231454 / 231504	0.480
2397125	100 - 125	231355 / 231505	0.490
2397150	125 - 150	231356 / 231506	0.520
2397026	0 - 25	231301 / 231310 / 231351 / 231371 / 231501	0.055
2397051	25 - 50	231302 / 231311 / 231352 / 231372 / 231502	0.080
2397076	50 - 75	231303 / 231312 / 231353 / 231373 / 231503	0.110
2397101	75 - 100	231304 / 231313 / 231354 / 231374 / 231504	0.145
2397126	100 - 125	231305 / 231314 / 231355 / 231505	0.465
2397151	125 - 150	231306 / 231315 / 231356 / 231506	0.500



ART NO 2397025 - 2397150



ART NO 2397026 - 2397151

DIGI PLUS-LINE® Electr. Digital Micrometer Head

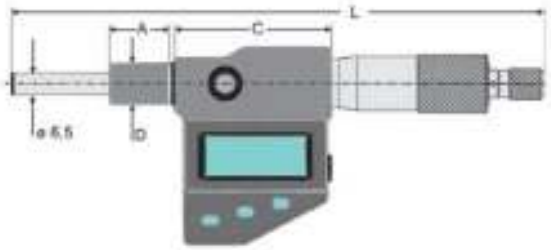
DIN 863

- **IP65: splash water proof acc. to DIN 40050 / IEC 60529 (art.-no. 231287)**

- LCD display with clear reading
- with carbide surfaces, flat, lapped, spindle hardened and ground
- mm/inch switchable, with ABS/INC measurement system, SET function
- On/Off button, zero setting at any position
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual



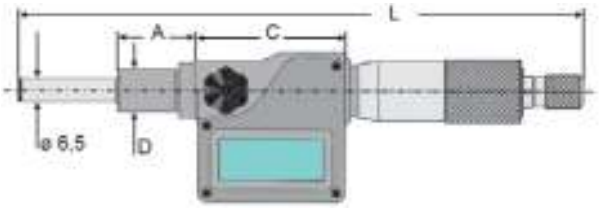
231285 ratchet





IP65

231287 ratchet



Other sizes and other shaped faces available on request!

UNIT · IP 65 · LR44 1,5V · ABS/INC · DIN · CE · TC · WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	ø mm	mm	A mm	C mm	D mm	L mm	max. mm	KG	ART NO CC
★★★★☆ 231285	0 - 25 / 0 - 1	0.001 / 0.00005	18	0.5	17.5	47.6	$12^{+0/-0.011}$	160.5	0.003	0.115	2394315
★★★★★ 231287	0 - 25 / 0 - 1	0.001 / 0.00005	18	0.5	17.5	47.6	$12^{+0/-0.011}$	165.5	0.003	0.110	2394315

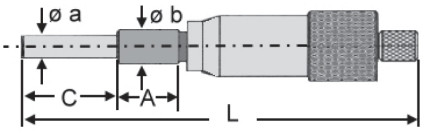
★★★★★ BLUE-LINE® Micrometer Head

DIN 863

- drum and sleeve matt chrome finish
- hardened spindle, ground thread
- measuring surface in flat version, finely ground lapped



Other sizes and other shaped faces available on request!



DIN · WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	mm	carbide yes	carbide no	A mm	C mm	L mm	ø a mm	ø b mm	max. mm	ART NO CC
231011	0 - 13	0.01	13	0.5	X	✓	9.5	17	58.5	5	$9.5^{+0/-0.009}$	0.004	2394311
231012	0 - 25	0.01	23	0.5	✓	X	17.5	28.5	113	6.5	$12^{+0/-0.011}$	0.003	2394311
231013	0 - 25	0.01	29	1.0	✓	X	17.5	28.5	115	8	$12^{+0/-0.011}$	0.004	2394311
231014	0 - 15	0.01	29	1.0	✓	X	16	18	94	8	$12^{+0/-0.011}$	0.004	2394311

BLUE-LINE Precision Depth Gauge

workshop grade

- **suitable for standard requirements**

- drum and sleeve matt chrome finish
- measuring pin and surface hardened and ground
- measuring face half round shape
- clamping screw for quick and precise fixing
- with ratchet for constant measuring pressure





WARRANTY 2 YEARS

ART NO	mm	mm	ø mm	mm	mm	measuring pin-ø mm	quantity of pins	max. mm	KG	ART NO CC
231800	0 - 25	0.01	18	0.5	63 x 18	4.5	1	0.004	0.215	2394001
231801	0 - 25	0.01	18	0.5	100 x 18	4.5	1	0.004	0.275	2394001
231802	0 - 100	0.01	18	0.5	100 x 18	4.5	4	0.005	0.310	2394003
231803	0 - 150	0.01	18	0.5	100 x 18	4.5	6	0.005	0.320	2394003

SILVER-LINE Precision Depth Gauge

DIN 863

- **high standard quality, for calibration purposes**

- drum and sleeve matt chrome finish
- measuring pin and surface hardened and fine ground
- measuring face plane ground and lapped
- clamping wheel for quick and precise fixing
- with ratchet for constant measuring pressure





DIN TC WARRANTY 3 YEARS

ART NO	mm	mm	ø mm	mm	mm	measuring pin-ø mm	quantity of pins	max. mm	KG	ART NO CC
230800	0 - 25	0.01	20	0.5	50 x 17	6.5	1	0.003	0.360	2394001
230801	0 - 25	0.01	20	0.5	100 x 17	6.5	1	0.003	0.490	2394001
with exchangeable measuring pins										
230812	0 - 75	0.01	20	0.5	50 x 17	4.0	3	0.005	0.520	2394003
230814	0 - 100	0.01	20	0.5	100 x 17	4.0	4	0.005	0.660	2394003
230815	0 - 150	0.01	20	0.5	100 x 17	4.0	6	0.006	0.760	2394005
230816	0 - 200	0.01	20	0.5	100 x 17	4.0	8	0.007	0.910	2394005
230818	0 - 300	0.01	20	0.5	100 x 17	4.0	12	0.009	1.300	2394005

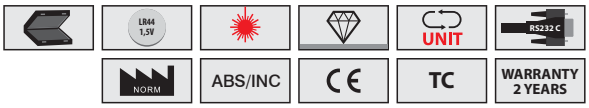
DIGI PLUS-LINE Electr. Digital Depth Micrometer

- **absolute System, high accuracy, with data output RS232**

- LCD display with clear reading, mm/inch switchable
- frame lacquered, with insulation plates
- ORIGIN button, ABS/INC measurement system
- zero setting at any position, On/Off button
- clamp wheel for quick and precise fixing
- measuring pins and surface hardened and ground
- exchangeable measuring pins, half round shape
- no need to readjust after the change of anvils
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual







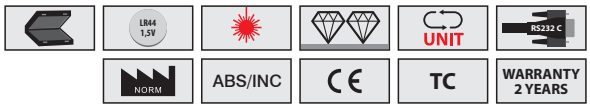
ART NO	mm / inch	mm / inch	ø mm	mm	quantity of pins	max. mm	KG	ART NO CC
231830	0 - 25 / 0 - 1	0.001 / 0.00005	18	0.5	1	0.004	0.363	2394140
231831	0 - 50 / 0 - 2	0.001 / 0.00005	18	0.5	2	0.004	0.363	2394140
231832	0 - 75 / 0 - 3	0.001 / 0.00005	18	0.5	3	0.005	0.375	2394140
231833	0 - 100 / 0 - 4	0.001 / 0.00005	18	0.5	4	0.005	0.375	2394140
231834	0 - 150 / 0 - 6	0.001 / 0.00005	18	0.5	6	0.005	0.375	2394140
231835	0 - 200 / 0 - 8	0.001 / 0.00005	18	0.5	8	0.006	0.375	2394140
231836	0 - 300 / 0 - 12	0.001 / 0.00005	18	0.5	12	0.007	0.375	2394140

DIGI PLUS-LINE Electr. Digital Internal Micrometer

- **for easy and rapid measurement of various internal intervals**
- **Absolute Measuring System, with data output RS232**

- LCD display with clear reading, mm/inch switchable
- frame lacquered, with insulation plates, rounded carbide surfaces
- ORIGIN button, ABS/INC measurement system
- zero setting at any position, On/Off switch
- clamp wheel for quick and precise fixing
- with ratchet for constant measuring pressure
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual
- art.-no. 231620 with setting ring



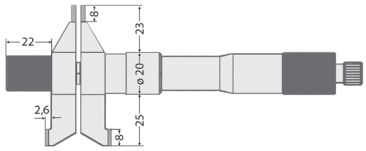


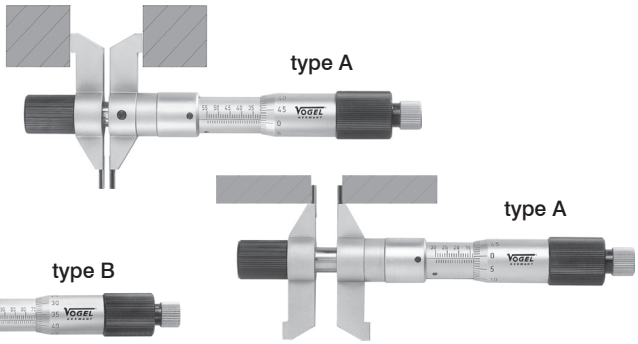
ART NO	mm / inch	mm / inch	ø mm	mm	max. mm	KG	ART NO CC
231620	5 - 30 / 0.2 - 1.2	0.001 / 0.00005	18	0.5	0.003	0.275	2394140
231621	25 - 50 / 1.0 - 2.0	0.001 / 0.00005	18	0.5	0.003	0.325	2394140
231622	50 - 75 / 2.0 - 3.0	0.001 / 0.00005	18	0.5	0.004	0.465	2394140
231623	75 - 100 / 3.0 - 4.0	0.001 / 0.00005	18	0.5	0.004	0.560	2394140
231624	100 - 125 / 4.0 - 5.0	0.001 / 0.00005	18	0.5	0.005	0.615	2394141
231625	125 - 150 / 5.0 - 6.0	0.001 / 0.00005	18	0.5	0.005	0.720	2394141
231626	150 - 175 / 6.0 - 7.0	0.001 / 0.00005	18	0.5	0.005	0.780	2394141
231627	175 - 200 / 7.0 - 8.0	0.001 / 0.00005	18	0.5	0.005	0.825	2394141

SILVER-LINE Internal Micrometer
DIN 863

- **top quality measuring instrument, for top requirements**

- drum and sleeve matt chrome finish
- carbide measuring faces in rounded shape
- two measuring jaws for two different ranges, type „A“
- same version, but with one-sided jaw, type „B“
- easy reading through scale on the front and back
- smoothly through ball bearing spindle
- with friction ratchet for constant measuring pressure
- with insulation handle





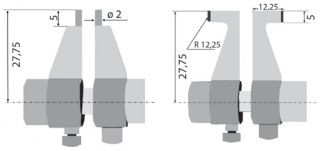
DIN | TC | WARRANTY 3 YEARS

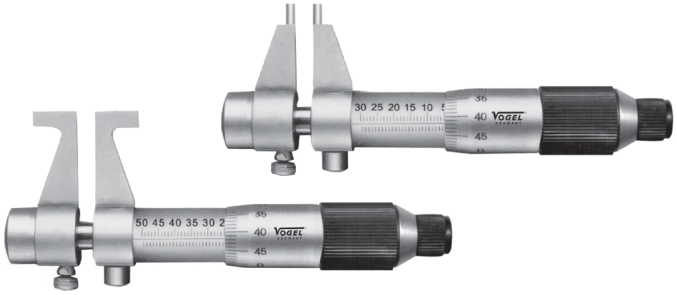
ART NO	mm	type	mm	ø mm	mm	mm	max. mm	KG	ART NO CC
230601	5 - 55	A	0.01	21	0.5	0.002	0.0025	0.480	2394102
230602	50 - 75	B	0.01	21	0.5	0.002	0.003	0.450	2394101
230603	75 - 100	B	0.01	21	0.5	0.002	0.003	0.530	2394101
230604	100 - 125	B	0.01	21	0.5	0.002	0.004	0.550	2394101
230605	125 - 150	B	0.01	21	0.5	0.002	0.004	0.640	2394101

BLUE-LINE Internal Micrometer
DIN 863

- **for standard requirements in measuring**

- drum and sleeve matt chrome finish
- carbide measuring faces in rounded shape
- clamping screw for quick and precise fixing
- with ratchet for constant measuring pressure
- with adjusting key





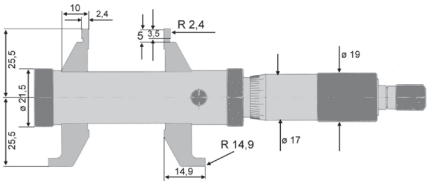
DIN | NORM | WARRANTY 2 YEARS

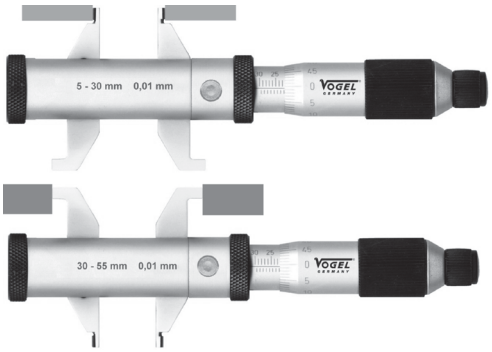
ART NO	mm	mm	ø mm	mm	mm	mm	KG	ART NO CC
231611	5 - 30	0.01	18	0.5	5	0.005	0.270	2394101
231612	25 - 50	0.01	18	0.5	25	0.006	0.360	2394101
231613	50 - 75	0.01	18	0.5	-	0.007	0.310	2394101
231614	75 - 100	0.01	18	0.5	-	0.008	0.345	2394101
231615	5 - 100 (Set)	0.01	18	0.5	5 + 25	0.005 / 0.006 / 0.007 / 0.008	1.290	2394104

BLUE-LINE Internal Micrometer
workshop grade

- **with double-measuring jaws and setting ring**
- **quality measuring equipment, for standard requirements**

- drum and sleeve matt chrome finish
- carbide measuring faces in rounded shape
- two measuring jaws for two different ranges
- easy reading through scale on the front and back
- clamping screw for quick and precise fixing
- with friction ratchet for constant measuring pressure
- with setting ring ø 30 mm
- with clamping screw for quick and precise fixing





NORM | TC | WARRANTY 2 YEARS

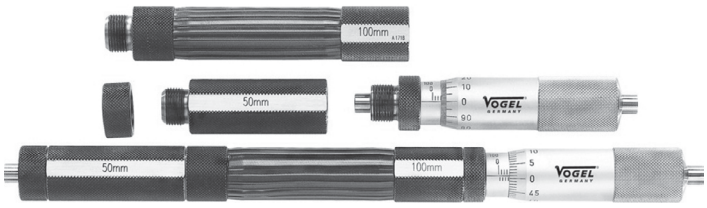
ART NO	mm	mm	mm	mm	max. mm	KG	ART NO CC
230610	5 - 55	0.01	0.5	30	0.006	0.225	2394102

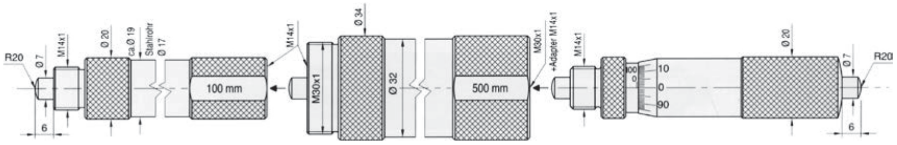
Internal Micrometer Set

DIN 863

- spring loaded end gauges
- with screw-on extensions
- up to 6000 mm measuring range available

- drum and sleeve matt chrome finish
- carbide equipped measuring heads, spherically lapped, ø 7 x 6 mm
- high accuracy because of spring loaded measuring end
- with insulation handle
- individual packed extensions are available on request





DIN | TC | WARRANTY 3 YEARS

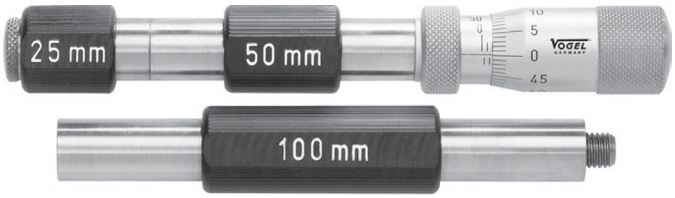
ART NO	mm	mm	mm	quantity of anvils with tube-ø 17 mm / tube-ø 32 mm	max. mm	KG	ART NO CC
230440	100 - 200	0.01	0.5	50	0.005	0.470	2394043
230441	100 - 300	0.01	0.5	50 / 100	0.007	0.690	2394044
230442	100 - 500	0.01	0.5	50 / 100 / 200	0.009	1.040	2394045
230443	100 - 900	0.01	0.5	50 / 100 / 200 / 400	0.011	1.780	2394046
230444	100 - 1300	0.01	0.5	50 / 100 / 200 / 400 / 400	0.013	2.530	2394047
230445	100 - 1700	0.01	0.5	50 / 100 / 200 / 400 / 800	0.015	3.460	2394047
230446	100 - 2100	0.01	0.5	50 / 100 / 200 / 400 / 400 / 800	0.018	4.060	2394048
230447	100 - 2500	0.01	0.5	50 / 100 / 200 / 400 / 800 / 800	0.021	4.710	2394050
230448	100 - 2000	0.01	0.5	50 / 100 / 200 / 200 / 500 / 1x1000	0.018	7.700	2394049
230449	100 - 3000	0.01	0.5	50 / 100 / 200 / 200 / 500 / 2x1000	0.030	9.800	2394050
230470	100 - 4000	0.01	0.5	50 / 100 / 200 / 200 / 500 / 3x1000	0.040	13.600	2394050
230471	100 - 5000	0.01	0.5	50 / 100 / 200 / 200 / 500 / 4x1000	0.050	17.800	2394051
230472	100 - 6000	0.01	0.5	50 / 100 / 200 / 200 / 500 / 5x1000	0.060	20.100	2394051

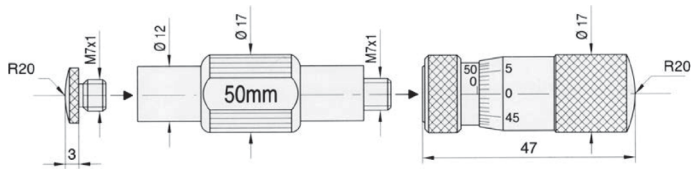
Internal Micrometer Set

DIN 863

- resiliently mounted end gauges
- with screw-on extensions
- up to 1450 mm measuring range available

- drum and sleeve matt chrome finish
- carbide equipped measuring heads, spherically lapped, R20 mm
- with insulation handle
- individual packed extensions are available on request





DIN | TC | WARRANTY 3 YEARS

ART NO	mm	mm	mm	quantity of anvils with tube-ø 17 mm	max. mm	KG	ART NO CC
230880	50 - 150	0.01	0.5	25 / 50	0.006	0.310	2394080
230881	50 - 250	0.01	0.5	25 / 50 / 100	0.008	0.460	2394081
230882	50 - 300	0.01	0.5	25 / 50 / 50 / 100	0.009	0.530	2394082
230883	50 - 450	0.01	0.5	25 / 50 / 100 / 200	0.010	0.760	2394083
230884	50 - 850	0.01	0.5	25 / 50 / 100 / 200 / 400	0.012	1.270	2394084
230885	50 - 1450	0.01	0.5	25 / 50 / 100 / 200 / 400 / 600	0.015	2.000	2394085

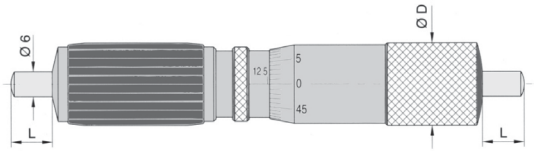
Precision Internal Micrometers

VSILVER-LINE Internal Micrometer

DIN 863

Other sizes available on request!

- drum and sleeve matt chrome finish
- carbide equipped measuring heads, spherically lapped, ø 6 mm
- from up 100 mm with clamping ring and with insulation handle
- please order the wooden box with the separate art.-no.





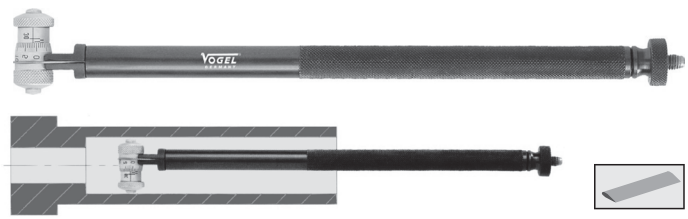


DIN | TC | WARRANTY 3 YEARS

ART NO	mm	mm	mm	ø mm	L mm	max. mm	KG	ART NO CC	ART NO wooden box	KG
230740	25 - 30	0.01	0.5	15	1.5	0.003	0.025	2394040	2399740	0.070
230741	30 - 35	0.01	0.5	15	1.5	0.003	0.030	2394040	2399741	0.070
230742	35 - 50	0.01	0.5	15	1.5	0.003	0.035	2394040	2399742	0.070
230743	50 - 75	0.01	0.5	16	1.5	0.003	0.060	2394041	2399743	0.070
230744	75 - 100	0.01	0.5	17	6	0.003	0.090	2394041	2399744	0.070
230745	100 - 125	0.01	0.5	20	6	0.003	0.160	2394041	2399745	0.100
230746	125 - 150	0.01	0.5	20	10	0.003	0.180	2394041	2399746	0.100
230747	150 - 175	0.01	0.5	20	10	0.004	0.210	2394041	2399747	0.120
230748	175 - 200	0.01	0.5	20	10	0.004	0.240	2394041	2399748	0.120
230749	200 - 225	0.01	0.5	20	10	0.004	0.260	2394041	2399749	0.160
230750	225 - 250	0.01	0.5	20	10	0.004	0.280	2394041	2399750	0.160
230751	250 - 275	0.01	0.5	20	10	0.004	0.300	2394041	2399751	0.180
230752	275 - 300	0.01	0.5	20	10	0.004	0.320	2394041	2399752	0.180
230753	300 - 325	0.01	0.5	20	10	0.004	0.340	2394041	2399753	0.220
230754	325 - 350	0.01	0.5	20	10	0.004	0.360	2394041	2399754	0.220
230755	350 - 375	0.01	0.5	20	10	0.004	0.380	2394041	2399755	0.240
230756	375 - 400	0.01	0.5	20	10	0.004	0.400	2394041	2399756	0.240
230757	400 - 425	0.01	0.5	20	10	0.004	0.420	2394042	2399757	0.300
230758	425 - 450	0.01	0.5	20	10	0.004	0.450	2394042	2399758	0.300
230759	450 - 475	0.01	0.5	20	10	0.004	0.470	2394042	2399759	0.300
230760	475 - 500	0.01	0.5	20	10	0.004	0.490	2394042	2399760	0.300
230761	500 - 525	0.01	0.5	20	10	0.005	0.520	2394042	2399761	0.340
230762	525 - 550	0.01	0.5	20	10	0.005	0.540	2394042	2399762	0.340
230763	550 - 575	0.01	0.5	20	10	0.005	0.560	2394042	2399763	0.340
230764	575 - 600	0.01	0.5	20	10	0.005	0.580	2394042	2399764	0.340
230765	600 - 625	0.01	0.5	20	10	0.005	0.600	2394043	2399765	0.380
230766	625 - 650	0.01	0.5	20	10	0.005	0.630	2394043	2399766	0.380
230767	650 - 675	0.01	0.5	20	10	0.005	0.650	2394043	2399767	0.380
230768	675 - 700	0.01	0.5	20	10	0.005	0.670	2394043	2399768	0.380
230769	700 - 725	0.01	0.5	20	10	0.005	0.690	2394043	2399769	0.420
230770	725 - 750	0.01	0.5	20	10	0.005	0.710	2394043	2399770	0.420
230771	750 - 775	0.01	0.5	20	10	0.005	0.730	2394043	2399771	0.420

VSILVER-LINE Holder for Internal Micrometers

- allows insertion in deep, narrow bores
- especially for small measuring ranges



ART NO	mm	KG
230739	220	0.105

BOWERS

Special applications...



We are also for special applications your point of contact!

Our partner BOWERS produces considerable explanation of bore gauges and inside micrometers. If your application from the standard range of equipment is not covered, contact us, we also develop probes for specific applications.

We will advise you, for free and without obligation.

Digital 2-/3-Point Bore Gauges

DIGI PLUS-LINE Electr. Digital 3-Point Bore Gauges • IP67 NEW



- **water- and coolant proof acc. to DIN 40050 / IEC 60529**
- **for through holes and from up 12.5 mm for blind holes also**

- Proximity-USB / RS232 output
- large LCD display with clear reading, digit height 9 mm
- bi-directional communication, ratchet stop, to ensure constant measuring force
- from up 12.5 mm with carbide measuring faces, „0"-setting at any position
- On-/Off-button, mm/inch switchable, data hold function
- 4 preset memories, simple 2-button operation
- incl. setting ring, UKAS certificates for instruments and setting rings
- incl. 1x 3 V battery (CR2032, Art.-No. 2002093), with operation manual

Options
- with built-in Bluetooth or WiFi, see page 115
- other measuring ranges and other measuring heads available on request! extensions find on page 120

ART NO without Bluetooth	ART NO with Bluetooth	mm / inch	mm / inch	max. mm	meas.-depth mm	ø mm	KG	CC
230631	**230631-BT**	6 - 8 / 0.25 - 0.3	0.001 / 0.00005	0.004	58	8.0	0.300	inclusive
230632	**230632-BT**	8 - 10 / 0.3 - 0.4	0.001 / 0.00005	0.004	58	8.0	0.300	inclusive
230633	**230633-BT**	10 - 12.5 / 0.4 - 0.5	0.001 / 0.00005	0.004	58	12.5	0.300	inclusive
230634	**230634-BT**	12.5 - 16 / 0.5 - 0.6	0.001 / 0.00005	0.004	62	12.5	0.300	inclusive
230635	**230635-BT**	16 - 20 / 0.6 - 0.8	0.001 / 0.00005	0.004	62	20.0	0.500	inclusive
230636	**230636-BT**	20 - 25 / 0.8 - 1	0.001 / 0.00005	0.004	66	20.0	0.500	inclusive
230637	**230637-BT**	25 - 35 / 1 - 1.37	0.001 / 0.00005	0.004	66	35.0	0.500	inclusive
230638	**230638-BT**	35 - 50 / 1.37 - 2	0.001 / 0.00005	0.004	80	35.0	1.100	inclusive
230639	**230639-BT**	50 - 65 / 2 - 2.55	0.001 / 0.00005	0.005	80	65.0	1.100	inclusive
230640	**230640-BT**	65 - 80 / 2.55 - 3.15	0.001 / 0.00005	0.005	80	65.0	1.100	inclusive
230641	**230641-BT**	80 - 100 / 3.15 - 4	0.001 / 0.00005	0.005	100	80.0	1.200	inclusive
230642	**230642-BT**	100 - 125 / 4 - 5	0.001 / 0.00005	0.006	115	125.0	2.100	inclusive
230643	**230643-BT**	125 - 150 / 5 - 6	0.001 / 0.00005	0.006	115	125.0	2.700	inclusive
230644	**230644-BT**	150 - 175 / 6 - 7	0.001 / 0.00005	0.007	115	175.0	3.500	inclusive
230645	**230645-BT**	175 - 200 / 7 - 8	0.001 / 0.00005	0.007	115	175.0	3.800	inclusive
230646	**230646-BT**	200 - 225 / 8 - 9	0.001 / 0.00005	0.008	118	225.0	3.800	inclusive
230647	**230647-BT**	225 - 250 / 9 - 10	0.001 / 0.00005	0.008	118	225.0	3.800	inclusive
230648	**230648-BT**	250 - 275 / 10 - 11	0.001 / 0.00005	0.009	118	275.0	3.800	inclusive
230649	**230649-BT**	275 - 300 / 11 - 12	0.001 / 0.00005	0.009	118	275.0	3.800	inclusive

DIGI PLUS-LINE Electr. Digital 2-/3-Point Bore Gauge Set • IP67 NEW



- **water- and coolant proof acc. to DIN 40050 / IEC 60529**
- **for through holes and from up 12.5 mm for blind holes also**

- Proximity-USB / RS232 output
- large LCD display with clear reading, digit height 9 mm
- bi-directional communication, ratchet stop, to ensure constant measuring force
- from up 12.5 mm with carbide measuring faces, „0"-setting at any position
- On-/Off-button, mm/inch switchable, data hold function
- 4 preset memories, simple 2-button operation
- incl. setting ring, UKAS certificates for instruments and setting rings
- incl. 1x 3 V battery (CR2032, art.-no. 2002093), with operation manual

Option
- with built-in Bluetooth or WiFi, see page 115

ART NO without Bluetooth	ART NO with Bluetooth	mm / inch	mm / inch	max. mm	meas.-depth mm	meas.-heads	quantity	KG	CC
2-Point Bore Gauge Set									
230611	**230611-BT**	2 - 6 / 0.08 - 0.25	0.001 / 0.00005	0.004	9 / 12 / 18	5	3	2.000	inclusive
3-Point Bore Gauge Sets									
230612	**230612-BT**	6 - 10 / 0.25 - 0.4	0.001 / 0.00005	0.004	58	2	1	2.000	inclusive
230613	**230613-BT**	10 - 20 / 0.4 - 0.8	0.001 / 0.00005	0.004	58 / 62	3	2	2.000	inclusive
230614	**230614-BT**	20 - 50 / 0.8 - 2	0.001 / 0.00005	0.004	66 / 80	3	2	3.200	inclusive
230615	**230615-BT**	50 - 100 / 2 - 4	0.001 / 0.00005	0.005	80 / 100	3	2	5.000	inclusive
230616	**230616-BT**	100 - 150 / 4 - 6	0.001 / 0.00005	0.006	115	2	1	7.000	inclusive
230617	**230617-BT**	150 - 200 / 6 - 8	0.001 / 0.00005	0.007	115	2	1	12.000	inclusive
230618	**260618-BT**	100 - 200 / 4 - 8	0.001 / 0.00005	0.006 / 0.007	115	4	2	16.000	inclusive

VOGEL DIGI PLUS-LINE Electr. Digital 3-Point Pistol Grip Bore Gauge • IP67 NEW



- **water- and coolant proof acc. to DIN 40050 / IEC 60529**
- **XT3 „Holematic“, with Sylvac-Electronic**
- **for through holes and from up 12.5 mm for blind holes also**

- Proximity-USB / RS232 data output
- large LCD display with clear reading, digit height 9 mm
- bi-directional communication, easy handling, with rugged grip
- from up 12.5 mm with carbide measuring faces, „0“-setting at any position
- On-/Off-button, mm/inch switchable, data hold function
- 4 preset memories, simple 2-button operation
- incl. setting ring, UKAS certificates for instruments and setting rings
- incl. 1x 3 V battery (CR2032, art.-no. 2002093), with operation manual

Options
- with built-in Bluetooth or WiFi, see page 115
- other measuring ranges and other measuring heads available on request! extensions find on page 120

ART NO without Bluetooth	ART NO with Bluetooth	mm / inch	mm / inch	max. mm	meas.-depth mm	ø mm	KG	CC
230976	**230976-BT**	6 - 8 / 0.25 - 0.3	0.001 / 0.00005	0.004	58	8.0	0.300	inclusive
230977	**230977-BT**	8 - 10 / 0.3 - 0.4	0.001 / 0.00005	0.004	58	8.0	0.300	inclusive
230978	**230978-BT**	10 - 12.5 / 0.4 - 0.5	0.001 / 0.00005	0.004	58	12.5	0.300	inclusive
230979	**230979-BT**	12.5 - 16 / 0.5 - 0.6	0.001 / 0.00005	0.004	62	12.5	0.300	inclusive
230980	**230980-BT**	16 - 20 / 0.6 - 0.8	0.001 / 0.00005	0.004	62	20.0	0.500	inclusive
230981	**230981-BT**	20 - 25 / 0.8 - 1	0.001 / 0.00005	0.004	66	20.0	0.500	inclusive
230982	**230982-BT**	25 - 35 / 1 - 1.37	0.001 / 0.00005	0.004	66	35.0	0.500	inclusive
230983	**230983-BT**	35 - 50 / 1.37 - 2	0.001 / 0.00005	0.004	80	35.0	1.100	inclusive
230984	**230984-BT**	50 - 65 / 2 - 2.55	0.001 / 0.00005	0.005	80	65.0	1.100	inclusive
230985	**230985-BT**	65 - 80 / 2.55 - 3.15	0.001 / 0.00005	0.005	80	65.0	1.100	inclusive
230986	**230986-BT**	80 - 100 / 3.15 - 4	0.001 / 0.00005	0.005	100	80.0	1.200	inclusive
230987	**230987-BT**	100 - 125 / 4 - 5	0.001 / 0.00005	0.006	115	125.0	2.100	inclusive
230988	**230988-BT**	125 - 150 / 5 - 6	0.001 / 0.00005	0.006	115	125.0	2.700	inclusive
230989	**230989-BT**	150 - 175 / 6 - 7	0.001 / 0.00005	0.007	115	175.0	3.500	inclusive
230990	**230990-BT**	175 - 200 / 7 - 8	0.001 / 0.00005	0.007	115	175.0	3.800	inclusive
230991	**230991-BT**	200 - 225 / 8 - 9	0.001 / 0.00005	0.008	118	225.0	3.800	inclusive
230992	**230992-BT**	225 - 250 / 9 - 10	0.001 / 0.00005	0.008	118	225.0	3.800	inclusive
230993	**230993-BT**	250 - 275 / 10 - 11	0.001 / 0.00005	0.009	118	275.0	3.800	inclusive
230994	**230994-BT**	275 - 300 / 11 - 12	0.001 / 0.00005	0.009	118	275.0	3.800	inclusive

VOGEL DIGI PLUS-LINE Electr. Digital 2-/3-Point Pistol Grip Bore Gauge Sets • IP67 NEW



- **water- and coolant proof acc. to DIN 40050 / IEC 60529**
- **XT3 „Holematic“, with Sylvac-Electronic**
- **for through holes and from up 12.5 mm for blind holes also**

- Proximity-USB / RS232 data output
- large LCD display with clear reading, digit height 9 mm
- bi-directional communication, easy handling, with rugged grip
- from up 12.5 mm with carbide measuring faces, „0“-setting at any position
- On-/Off-button, mm/inch switchable, data hold function
- 4 preset memories, simple 2-button operation
- incl. setting ring, UKAS certificates for instruments and setting rings
- incl. 1x 3 V battery (CR2032, art.-no. 2002093), with operation manual

Option
- with built-in Bluetooth or WiFi, see page 115

ART NO without Bluetooth	ART NO with Bluetooth	mm / inch	mm / inch	max. mm	meas.-depth mm	meas.-heads	quantity	KG	CC
2-Point Bore Gauge Set									
230840	**230840-BT**	2 - 6 / 0.08 - 0.25	0.001 / 0.00005	0.004	9 / 12 / 18	5	3	2.000	inclusive
3-Point Bore Gauge Sets									
230841	**230841-BT**	6 - 10 / 0.25 - 0.4	0.001 / 0.00005	0.004	58	2	1	2.000	inclusive
230842	**230842-BT**	10 - 20 / 0.4 - 0.8	0.001 / 0.00005	0.004	58 / 62	3	2	2.000	inclusive
230843	**230843-BT**	20 - 50 / 0.8 - 2	0.001 / 0.00005	0.004	66 / 80	3	2	3.200	inclusive
230844	**230844-BT**	50 - 100 / 2 - 4	0.001 / 0.00005	0.005	80 / 100	3	2	5.000	inclusive
230845	**230845-BT**	100 - 150 / 4 - 6	0.001 / 0.00005	0.006	115	2	1	7.000	inclusive
230846	**230846-BT**	150 - 200 / 6 - 8	0.001 / 0.00005	0.007	115	2	1	12.000	inclusive
230847	**260847-BT**	100 - 200 / 4 - 8	0.001 / 0.00005	0.006 / 0.007	115	4	2	17.000	inclusive

Special Digital 2-/3-Point Bore Gauges

DIGI PLUS-LINE Electr. Digital 3-Point Bore Gauge Sets • IP67 NEW

- **water- and coolant proof acc. to DIN 40050 / IEC 60529**
- **Bowers Model „XT500“, with Sylvac-Electronic**
- **designed specifically for the measurement of internal diameters between 300-500 mm**
- **measuring head with exchangeable anvils**

- Proximity-USB / RS232 data output
- large LCD display with clear reading, digit height 9 mm
- hardened, radiussed measuring anvils provide optimum centralisation in the part
- anvil sets are supplied in 25 mm steps, each set has been manufactured to exact tolerance size
- the 300-325 mm anvils are the master reference set and are used for setting gauge in the setting ring
- only one 300 mm setting ring is required to set the gauge for all diameters in the full 300-500 mm range of the instrument
- bi-directional communication, ratchet stop, to ensure constant measuring force
- On-/Off-button, mm/inch switchable, data hold function, simple 2-button operation
- 4 preset memories, simple 2-button operation
- incl. setting ring with UKAS certificate for setting ring
- incl. 1x 3 V battery (CR2032, art.-no. 2002093), with operation manual

Options
- with built-in Bluetooth or WiFi, see page 115
- extensions for deeper bores 150 / 500 / 1000 mm available on request



application example

UNIT · CR2032 Lithium 3V · IP 67 · Bluetooth · PROXIMITY · NORM · CE · CC · WARRANTY 3 YEARS

ART NO without Bluetooth	ART NO with Bluetooth	mm / inch	mm	max. mm	mm	meas.-depth mm	ø mm	KG	CC
230437	**230437-BT**	300 - 400 / 12 - 16	0.01 / 0.0001 0.0005 / 0.00005	0.015	0.003	120	300	10.000	inclusive
230438	**230438-BT**	300 - 325 / 400 - 500 12 - 12.8 / 16 - 20	0.01 / 0.0001 0.0005 / 0.00005	0.015	0.003	120	300	13.000	inclusive
230439	**230439-BT**	300 - 500 / 12 - 20	0.01 / 0.0001 0.0005 / 0.00005	0.015	0.003	120	300	15.000	inclusive

DIGI PLUS-LINE Electr. Digital 2-Point Bore Gauge Sets • IP65 NEW

- **water- and coolant proof acc. to DIN 40050 / IEC 60529**
- **Micro Gauge, with Sylvac-Electronic**
- **designed specifically for the measurement of small bores between 1.0-10.0 mm**



- Proximity-USB / RS232 data output
- slimline LCD display with clear reading, digit height 7 mm
- switchable resolution 0.01 / 0.001 / 0.0005 mm
- hard-chromed ball-contacts
- On-/Off-button, mm/inch switchable, data hold function, simple 2-button operation
- Linearity: ø 1.0-1.5 max. 2% of measuring travel, min. 0.001 mm, ø 1.5-10 mm max. 1% of measuring travel, min. 0.001 mm
- incl. setting ring with UKAS certificate for setting ring
- incl. 2x 1.5 V battery (LR44, art.-no. 2020192/B), with operation manual

Options
- also available as single devices with various measuring ranges on request
- Proximity data transmission (WiFi) find on page 115





UNIT · LR44 1,5V · IP 65 · PROXIMITY · NORM · CE · CC · WARRANTY 3 YEARS

ART NO	mm / inch	mm	max. mm	meas.-depth mm	quantity	KG	CC
230190	0.95 - 1.55 / 0.037 - 0.045	0.01 / 0.001 / 0.0005	0.001	0.6 - 11	5	2.100	inclusive
230191	1.50 - 2.45 / 0.059 - 0.096	0.01 / 0.001 / 0.0005	0.001	0.9 - 17	4	2.000	inclusive
230192	2.25 - 4.25 / 0.089 - 0.167	0.01 / 0.001 / 0.0005	0.001	1.2 - 22	7	3.800	inclusive
230193	3.65 - 6.35 / 0.144 - 0.250	0.01 / 0.001 / 0.0005	0.001	2.0 - 40	5	4.300	inclusive
230194	6.15 - 8.35 / 0.242 - 0.329 8.15 - 10.35 / 0.321 - 0.408	0.01 / 0.001 / 0.0005	0.001	2.0 - 40 2.0 - 50	8	5.500	inclusive

Accessories for Analogue- and Electr. Digital 3-Point Bore Gauges

- extensions in different length
- depth stop for measuring range 2-6 mm

WARRANTY 1 YEAR

Extensions	ART NO	mm	for measuring heads
	230651	63	6 - 10
	230652	76	10 - 12.5
	230653	100	12.5 - 20
	230654	150	20 - 50
	230655	150	50 - 300

Depth Stop for Electr. Digital 3-Point Bore Gauges	ART NO	mm
	230656	2 - 6

Accessories for Electr. Digital 2-Point Bore Gauge (MicroGauge)

- extensions in different length
- stand for MicroGauge

WARRANTY 1 YEAR

Depth Stop for MicroGauge	ART NO	mm
	230475	0.95 - 1.55
	230476	1.50 - 2.45
	230477	2.25 - 4.25
	230478	3.65 - 6.35
	230479	6.15 - 10.35

Stand for MicroGauge	ART NO
	230658

Accessories setting ring for XT500 Electr. Digital 3-Point Bore Gauge

- setting ring, hardened and lapped, incl. UKAS-calibration certificate

ART NO	ø mm	CC
2307703000	300	inclusive



WARRANTY 1 YEAR

Accessories Data Transfer via WiFi and Bluetooth

Bluetooth

ART NO	wireless data transmission Transmitter module for measuring instruments with proximity interface
2023105	

ART NO	wireless data transmission USB receiver (up to 15 m distance)	
2023104		

ART NO	wireless data transmission USB transmitter Bluetooth
2023106	

SylvacBT Smart App

- **allows communication with our Bluetooth Electr. Digital 2/3-Point Bore Gauges**
- for Smart Phone and Tablet
- download free of charge (available on our website)

SylvacBT Smart App download for free:

www.vogel-germany.de





Any questions?
We are pleased to advise!

DIGI PLUS-LINE Electr. 3-Point Digital Bore Micrometer • IP54

- spray water proof acc. to DIN 40050 / IEC 60529
- for bore holes and blind holes
- with Vocom-s duo data output, top model
  (connectivity also for Digimatic measuring devices, Mitutoyo compatible)



- LCD unit with clear reading, digit height 8 mm
- chromed finish, self-centering and self-aligning
- with friction ratchet for constant measuring pressure
- 6 - 12 mm with hardened measuring faces, from up 12 mm with tungsten carbide measuring faces
- zero setting at any position, On-/Off-button
- measuring unit switchable mm/inch, with ABS/INC-system
- data hold function, ± preset function
- incl. setting ring and with extension rod
- incl. 1x 3 V battery (type CR2032, art. no.: 2002093), with operation manual

UNIT | Vocom-s Duo data output | IP 54 | CR2032 Lithium 3V | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	max. mm	L1 mm	B mm	C mm	extension rod mm	ø mm	KG	ART NO CC
236431	6 - 8 / 0.24 - 0.32	0.001 / 0.00005	0.004	30	2.5	1.0	50	8	0.185	2394020
236432	8 - 10 / 0.32 - 0.40	0.001 / 0.00005	0.004	30	2.5	1.0	50	8	0.190	2394020
236433	10 - 12 / 0.40 - 0.50	0.001 / 0.00005	0.004	30	2.5	1.0	50	10	0.210	2394020
236434	12 - 16 / 0.50 - 0.63	0.001 / 0.00005	0.004	48	6.3	0.4	100	16	0.225	2394020
236435	16 - 20 / 0.63 - 0.80	0.001 / 0.00005	0.004	48	6.3	0.4	100	16	0.260	2394020
236436	20 - 25 / 0.80 - 1.00	0.001 / 0.00005	0.004	50	9.2	0.4	150	25	0.305	2394020
236437	25 - 30 / 1.00 - 1.20	0.001 / 0.00005	0.004	50	9.2	0.4	150	25	0.345	2394020
236438	30 - 40 / 1.20 - 1.60	0.001 / 0.00005	0.004	50	9.2	0.4	150	30	0.440	2394020
236439	40 - 50 / 1.60 - 2.00	0.001 / 0.00005	0.005	55	16.5	0.5	150	40	0.520	2394020
236440	50 - 63 / 2.00 - 2.50	0.001 / 0.00005	0.005	55	16.5	0.5	150	50	0.725	2394022
236441	62 - 75 / 2.45 - 3.00	0.001 / 0.00005	0.005	55	16.5	0.5	150	62	0.740	2394022
236442	75 - 88 / 3.00 - 3.46	0.001 / 0.00005	0.005	55	16.5	0.5	150	87	1.010	2394022
236443	87 - 100 / 3.43 - 4.00	0.001 / 0.00005	0.005	55	16.5	0.5	150	87	1.070	2394022

DIGI PLUS-LINE Electr. 3-Point Digital Bore Micrometer Set • IP54

- spray water proof acc. to DIN 40050 / IEC 60529
- for bore holes and blind holes
- with Vocom-s duo data output, top model
  (connectivity also for Digimatic measuring devices, Mitutoyo compatible)



- LCD unit with clear reading, digit height 8 mm
- as set with 1 digital unit and with 2 interchangeable measuring heads
- chromed finish, self-centering and self-aligning
- with friction ratchet for constant measuring pressure
- 6 - 12 mm with hardened measuring faces, from up 12 mm with tungsten carbide measuring faces
- zero setting at any position, On-/Off-button
- measuring unit switchable mm/inch, with ABS/INC-system
- data hold function, ± preset function
- incl. setting ring and with extension rod
- incl. 1x 3 V battery (type CR2032, art. no.: 2002093), with operation manual

UNIT | Vocom-s Duo data output | IP 54 | CR2032 Lithium 3V | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm / inch	max. mm	L1 mm	B mm	C mm	extension rod mm	ø mm	ART NO CC
236451	6 - 10	6 - 8 / 0.24 - 0.32 8 - 10 / 0.32 - 0.40	0.001 / 0.00005	0.004 0.004	30	2.5	1.0	50	8	2394028
236452	8 - 12	8 - 10 / 0.32 - 0.40 10 - 12 / 0.40 - 0.50	0.001 / 0.00005	0.004 0.004	30	2.5	1.0	50	10	2394028
236453	12 - 20	12 - 16 / 0.50 - 0.63 16 - 20 / 0.63 - 0.80	0.001 / 0.00005	0.004 0.004	48	6.3	0.4	100	16	2394028
236454	20 - 30	20 - 25 / 0.80 - 1.00 25 - 30 / 1.00 - 1.20	0.001 / 0.00005	0.004 0.004	50	9.2	0.4	150	25	2394028
236455	30 - 50	30 - 40 / 1.20 - 1.60 40 - 50 / 1.60 - 2.00	0.001 / 0.00005	0.004 0.004	50	9.2	0.4	150	40	2394028
236456	50 - 75	50 - 63 / 2.00 - 2.50 62 - 75 / 2.45 - 3.00	0.001 / 0.00005	0.005 0.005	55	16.5	0.5	150	62	2394028
236457	75 - 100	75 - 88 / 2.45 - 3.46 87 - 100 / 3.43 - 4.00	0.001 / 0.00005	0.005 0.005	55	16.5	0.5	150	87	2394028

VDIGI PLUS-LINE® Electr. 3-Point Digital Bore Micrometer • IP54

- spray water proof acc. to DIN 40050 / IEC 60529
- for bore holes and blind holes
- for large measuring range
- with VOCOM-S duo data output, top model
  (connectivity also for Digimatic measuring devices, Mitutoyo compatible)

- LCD unit with clear reading, digit height 8 mm
- chromed finish, self-centering and self-aligning
- with tungsten carbide measuring faces
- with friction ratchet for constant measuring pressure
- zero setting at any position, On-/Off-button
- measuring unit switchable mm/inch, with ABS/INC-system
- data hold function, ± preset function
- incl. 1x 3 V battery (type CR2032, art. no.: 2002093), with operation manual





Option
- extension rods and setting rings on page 120 + 232

UNIT | VOCOM-S Duo data output | IP 54 | CR2032 Lithium 3V | NORM | CE | TC | WARRANTY 2 YEARS

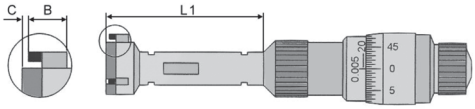
ART NO	mm	mm	max. mm	L1 mm	B mm	C mm	KG	ART NO CC
236471	100 - 125	0.001	0.008	135	23	1	0.950	2394038
236472	125 - 150	0.001	0.008	135	23	1	0.980	2394038
236473	150 - 175	0.001	0.008	135	23	1	1.230	2394038
236474	175 - 200	0.001	0.008	135	23	1	1.350	2394038
236475	200 - 225	0.001	0.008	135	23	1	1.755	2394038
236476	225 - 250	0.001	0.008	135	23	1	1.800	2394038
236477	250 - 275	0.001	0.008	135	23	1	1.850	2394038
236478	275 - 300	0.001	0.008	135	23	1	1.890	2394038
236479	300 - 325	0.001	0.010	135	23	1	1.945	2394038
236480	325 - 350	0.001	0.010	135	23	1	1.965	2394038

VSILVER-LINE® 3-Point Bore Micrometer

- for bore holes and blind holes
- for large measuring range

- chromed finish, self-centering and self-aligning
- with ratchet for constant measuring pressure
- with tungsten carbide measuring faces
- incl. operation manual

Option
- extension rods and setting rings on page 120 + 232





DIN | CE | TC | WARRANTY 2 YEARS

ART NO	mm	mm	max. mm	L1 mm	B mm	C mm	KG	ART NO CC
236571	100 - 125	0.005	0.008	135	23	1	0.920	2394038
236572	125 - 150	0.005	0.008	135	23	1	0.950	2394038
236573	150 - 175	0.005	0.008	135	23	1	1.200	2394038
236574	175 - 200	0.005	0.008	135	23	1	1.320	2394038
236575	200 - 225	0.005	0.008	135	23	1	1.725	2394038
236576	225 - 250	0.005	0.008	135	23	1	1.770	2394038
236577	250 - 275	0.005	0.008	135	23	1	1.820	2394038
236578	275 - 300	0.005	0.008	135	23	1	1.860	2394038
236579	300 - 325	0.005	0.010	135	23	1	1.915	2394038
236580	325 - 350	0.005	0.010	135	23	1	1.935	2394038

3-Point Bore Gauges

SILVER-LINE 3-Point Bore Gauge

- **for through holes and from up 12.5 mm for blind holes also**

- vernier scale 6 - 20 mm with 0.002 mm
- chromed finish with clear reading, ergonomically designed
- ratchet stop to ensure constant measuring force
- from up 12.5 mm with carbide measuring faces
- incl. setting ring, UKAS certificates for instruments and setting rings with operation manual

Option
- extensions find on page 120



DIN | CC | WARRANTY 3 YEARS

ART NO	mm	mm	max. mm	meas.-depth mm	ø mm	KG	CC
230500	6 - 8	0.002	0.004	58	8.0	0.300	inclusive
230501	8 - 10	0.002	0.004	58	8.0	0.300	inclusive
230502	10 - 12.5	0.002	0.004	58	12.5	0.300	inclusive
230503	12.5 - 16	0.002	0.004	62	12.5	0.300	inclusive
230504	16 - 20	0.002	0.004	62	20.0	0.500	inclusive
230505	20 - 25	0.005	0.004	66	20.0	0.500	inclusive
230506	25 - 35	0.005	0.004	66	35.0	0.500	inclusive
230507	35 - 50	0.005	0.004	80	35.0	1.100	inclusive
230508	50 - 65	0.005	0.005	80	65.0	1.100	inclusive
230509	65 - 80	0.005	0.005	80	65.0	1.100	inclusive
230510	80 - 100	0.005	0.005	100	80.0	1.200	inclusive
230511	100 - 125	0.005	0.006	115	125.0	2.100	inclusive
230512	125 - 150	0.005	0.006	115	125.0	2.700	inclusive
230513	150 - 175	0.005	0.007	115	175.0	3.500	inclusive
230514	175 - 200	0.005	0.007	115	175.0	3.800	inclusive
230515	200 - 225	0.005	0.008	118	225.0	3.800	inclusive
230516	225 - 250	0.005	0.008	118	225.0	3.800	inclusive
230517	250 - 275	0.005	0.009	118	275.0	3.800	inclusive
230518	275 - 300	0.005	0.009	118	275.0	3.800	inclusive

SILVER-LINE 2-/3-Point Bore Gauge Sets

- **for through holes and from up 12.5 mm for blind holes also**

- vernier scale 2 - 6 mm with improved resolution in 0.001 mm (micro version)
- vernier scale 6 - 20 mm with improved resolution in 0.002 mm (micro version)
- chromed finish with clear reading, ergonomically designed
- ratchet stop to ensure constant measuring force
- from up 12.5 mm with carbide measuring faces
- incl. setting ring, UKAS certificates for instruments and setting rings with operation manual

Option
- extensions find on page 120



DIN | CC | WARRANTY 3 YEARS

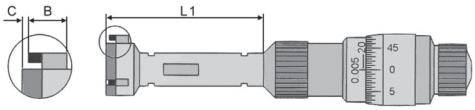
ART NO	mm	mm	max. mm	meas.-depth mm	meas.-heads	quantity	KG	CC
2-Point Bore Gauge Sets								
230520	2 - 3	0.001	0.004	9	2	1	2.000	inclusive
230521	3 - 6	0.001	0.004	12 / 18	3	2	2.000	inclusive
3-Point Bore Gauge Sets								
230522	6 - 10	0.002	0.004	58	2	1	2.000	inclusive
230523	10 - 20	0.002	0.004	58 / 62	3	2	2.000	inclusive
230524	20 - 50	0.005	0.004	66 / 80	3	2	3.200	inclusive
230525	50 - 150	0.005	0.005	80 / 100	3	2	5.000	inclusive
230526	100 - 150	0.005	0.006	115	2	1	7.000	inclusive
230527	150 - 200	0.005	0.007	115	2	1	12.000	inclusive

SILVER-LINE 3-Point Bore Micrometer

- **for bore holes and blind holes**

- chromed finish, self-centering and self-aligning
- with ratchet for constant measuring pressure
- 6 - 12 mm with hardened measuring faces, from up 12 mm with tungsten carbide measuring faces
- incl. setting ring and extension rod
- with operation manual

Option
- extension rods and setting rings on page 120 + 232





DIN | TC | WARRANTY 2 YEARS

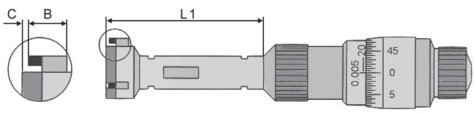
ART NO	mm	mm	mm (max.)	L1 mm	B mm	C mm	extension rod mm	ø mm	KG	ART NO CC
236531	6 - 8	0.001	0.004	30	2.5	1.0	50	8	0.155	2394020
236532	8 - 10	0.001	0.004	30	2.5	1.0	50	8	0.160	2394020
236533	10 - 12	0.001	0.004	30	2.5	1.0	50	10	0.180	2394020
236534	12 - 16	0.005	0.004	48	6.3	0.4	100	16	0.195	2394020
236535	16 - 20	0.005	0.004	48	6.3	0.4	100	16	0.230	2394020
236536	20 - 25	0.005	0.004	50	9.2	0.4	150	25	0.275	2394020
236537	25 - 30	0.005	0.004	50	9.2	0.4	150	25	0.315	2394020
236538	30 - 40	0.005	0.004	50	9.2	0.4	150	30	0.410	2394020
236539	40 - 50	0.005	0.005	55	16.5	0.5	150	40	0.490	2394020
236540	50 - 63	0.005	0.005	55	16.5	0.5	150	50	0.695	2394022
236541	62 - 75	0.005	0.005	55	16.5	0.5	150	62	0.710	2394022
236542	75 - 88	0.005	0.005	55	16.5	0.5	150	87	0.780	2394022
236543	87 - 100	0.005	0.005	55	16.5	0.5	150	87	0.870	2394022

SILVER-LINE 3-Point Bore Micrometer Set

- **for bore holes and blind holes**

- as set composition, with setting ring and extension rod
- chromed finish, self-centering and self-aligning
- with ratchet for constant measuring pressure
- 6 - 12 mm with hardened measuring faces, from up 12 mm with tungsten carbide measuring faces
- with operation manual

Option
- extension rods and setting rings on page 120 + 232





DIN | TC | WARRANTY 2 YEARS

ART NO	mm	mm	mm	mm (max.)	L1 mm	B mm	C mm	extension rod mm	ø mm	ART NO CC
236581	6 - 12	6 - 8 8 - 10 10 - 12	0.001	0.004 0.004 0.004	30	2.5	1.0	50	8 10	2394027
236582	12 - 20	12 - 16 16 - 20	0.005	0.004 0.004	48	6.3	0.4	100	16	2394028
236583	20 - 50	20 - 25 25 - 30 30 - 40 40 - 50	0.005	0.004 0.004 0.004 0.004	50	9.2	0.4	150	25 40	2394030
236584	50 - 100	50 - 63 62 - 75 75 - 88 87 - 100	0.005	0.005 0.005 0.005 0.005	55	16.5	0.5	150	62 87	2394030

Extension rods for 3-Point Bore Micrometers

- extension for to reach deep measuring points in tubes



ART NO	L x ø mm	suitable for series
236400	150 x 29	236471-236480 / 236571-236580
236401	300 x 29	236461-236480 / 236561-236580
236402	50 x 5.7	236431-236433 / 236531-236533
236403	100 x 11.7	236434-236435 / 236534-236535
236404	150 x 16.7	236436-236437 / 236536-236537
236405	100 x 21.8	236438-236443 / 236538-236543

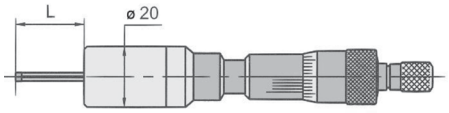
SILVER-LINE Internal Micrometer

- suitable for measuring in blind holes

- chromed finish
- tungsten carbide faces
- constant measuring pressure, with ratchet
- with setting ring
- incl. operation manual







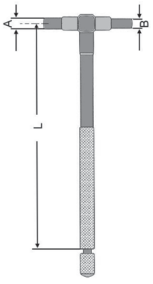
DIN | TC | WARRANTY 2 YEARS

ART NO	mm	mm	mm	L mm	ø mm	KG	ART NO CC
236826	2.0 - 2.5	0.001	0.004	12.5	2.5	0.130	2394027
236827	2.5 - 3.0	0.001	0.004	12.5	2.5	0.133	2394027
236828	3.0 - 4.0	0.001	0.004	22.5	4.0	0.140	2394027
236829	4.0 - 5.0	0.001	0.004	22.5	5.0	0.140	2394027
236830	5.0 - 6.0	0.001	0.004	22.5	6.0	0.145	2394027

BLUE-LINE Telescopic Gauges, 6-pcs.

- in places that are hard to reach with standard measuring instruments

- steel made, satin chromed
- self-centering, spherical measuring faces, hardened
- constant spring pressure on the measuring faces
- with fixing device







NORM | WARRANTY 2 YEARS

ART NO	set / mm	mm	measuring depth (L) mm	A mm	B mm	KG
472030	8 - 150	8 - 12.7 12.7 - 19 19 - 32 32 - 54 54 - 90 90 - 150	102 102 102 127 127 127	4 5 5 7.5 7.5 7.5	3 4 4 6 6 6	0.290

BLUE-LINE Bore Gauge Set with Dial Indicator

- for quick and easy measuring of bores
- standard precision, especially for workshop use

- matt chrome finish pipe, with insulation handle
- hardened contact ponits
- with operation manual



ART NO 237011 - 237012



ART NO 237013



ART NO 237014 - 237017



WARRANTY 2 YEARS

ART NO	mm	mm	quantity of contact points	quantity	L mm	KG	ART NO CC
237011	10 - 18	0.01	9	1	50	0.450	2394701
237012	18 - 35	0.01	7	2	142	0.700	2394701
237013	35 - 50	0.01	5	2	155	0.800	2394701
237014	50 - 100	0.01	7	2	200	2.950	2394703
237015	50 - 160	0.01	8	2	200	3.500	2394703
237016	100 - 160	0.01	8	2	205	3.100	2394703
237017	160 - 250	0.01	8	2	205	3.545	2394703

BLUE-LINE Bore Gauge Set with Dial Indicator

- for quick and easy measuring of bores
- standard precision, for workshop use

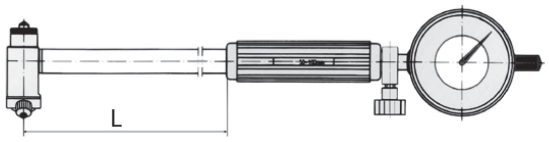
- matt chrome finish pipe, with insulated plates
- carbid-tipped contact points for durability
- with operation manual



Option
- rugged cover ø 40 mm: art.-no. 237098
- rugged cover ø 60 mm: art.-no. 237099



ART NO 237098
237099



ART NO 237005





ART NO 237000



ART NO 237001



ART NO 237002



ART NO 237003



ART NO 237004 - 237007

WARRANTY 2 YEARS

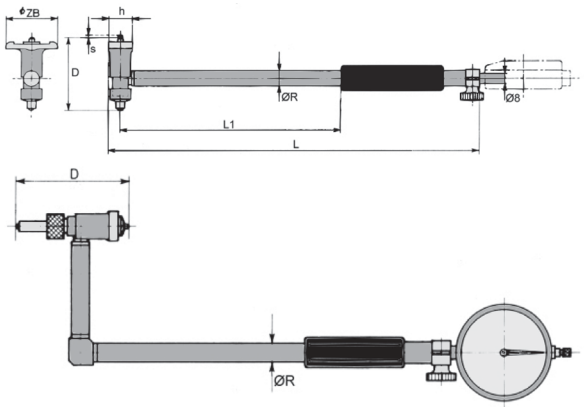
ART NO	mm	mm	quantity of contact points	quantity	L mm	KG	ART NO CC
237000	4 - 6	0.01	4	-	35	0.175	2394701
237001	6 - 10	0.01	9	1	45	0.450	2394701
237002	10 - 18	0.01	9	1	95	0.450	2394701
237003	18 - 35	0.01	7	-	130	0.700	2394701
237004	35 - 50	0.01	3	-	150	0.800	2394701
237005	50 - 160	0.01	5	1	150	3.500	2394703
237006	160 - 250	0.01	5	1	410	3.240	2394703
237007	250 - 450	0.01	5	1	410	3.545	2394703

SILVER-LINE Bore Gauge Set without Dial Indicator

- **for quick and easy measuring of bores**
- **high precision quality, especially for workshop use**

- steel tube, stainless, with insulation plate
- measuring bolts hardened or made of carbide available
- repeatability at sizes:
  4.5 – 290 mm = fw <0.5 µm, 280 – 800 mm = fw <1.5 µm
- deviation range at sizes:
  4.5 – 290 mm = fe <2.0 µm, 280 – 800 mm = fe <3.0 µm
- with calibration certificate
- with operation manual





TC | NORM | WARRANTY 3 YEARS

ART NO steel contact points	ART NO carbide contact points	D mm	quantity of contact points	L1 mm	L mm	R ø mm	s mm	h mm	ZB ø mm	KG
-	**230720**	4.5 - 6	9	80	147	4	0.35	2.00	4.0	0.450
-	**230721**	6 - 8	7	100	165	5	0.50	2.60	5.2	0.450
-	**230722**	8 - 12	9	100	165	5	0.70	3.25	6.5	0.450
-	**230723**	12 - 20	9	110	204	8	0.90	4.50	9.0	1.000
230700	**230724**	18 - 35	9	110	206	8	1.30	5.40	14.8	0.900
230701	**230725**	35 - 60	6	138	243	10	1.30	7.00	28.0	0.900
230702	**230726**	50 - 100	11	177	295	12	1.40	8.50	45.0	1.200
230703	**230727**	50 - 150	11	177	295	12	1.40	8.50	45.0	1.250
230704	**230728**	100 - 160	7	234	365	18	1.60	11.50	75.0	2.300
230705	**230729**	100 - 230	7	234	365	18	1.60	11.50	75.0	2.300
230706	**230730**	160 - 290	7	234	365	18	1.60	11.50	120.0	3.800
230707	**230731**	160 - 360	7	234	365	18	1.60	11.50	120.0	3.800
230708	**230732**	280 - 410	7	400	550	24	2.60	16.00	165.0	6.000
230709	**230733**	280 - 510	7	400	550	24	2.60	16.00	165.0	6.000
230710	**230734**	400 - 800	11	700	855	24	2.60	17.50	300.0	10.500

SILVER-LINE Extension for Bore Gauges

- **for internal micrometer series 230701 - 230734**
- **suitable from up bore-ø 35 mm**

- plug-in connection
- dial indicator shaft-ø 8 mm

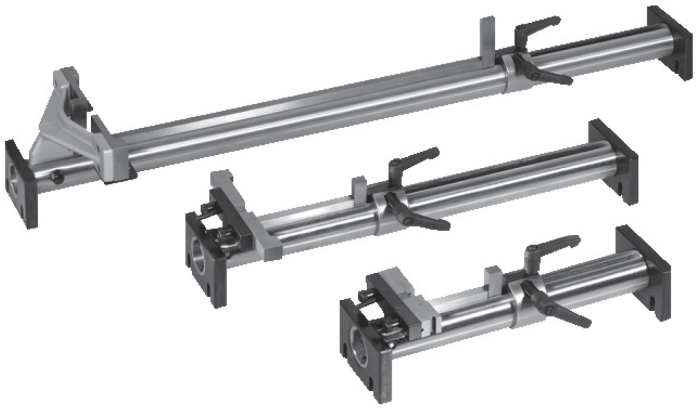


ART NO	mm	pipe-ø mm	ART NO	mm	pipe-ø mm
230790	250	12	**230794**	1000	18
230791	500	12	**230795**	1500	18
230792	750	12	**230796**	2000	18
230793	1000	12	-	-	-

SILVER-LINE Bore Gauge Zero-Setter, without Dial Indicator

- **for easy zero adjustment of 2-point dial bore gauges by using blocks for series 230700 - 230734**

- frame with gauge block holder
- pair of setting jaws, base and spanner
- carbide measuring jaws
- delivery **without** gauge blocks, **without** dial indicator
- with operation manual





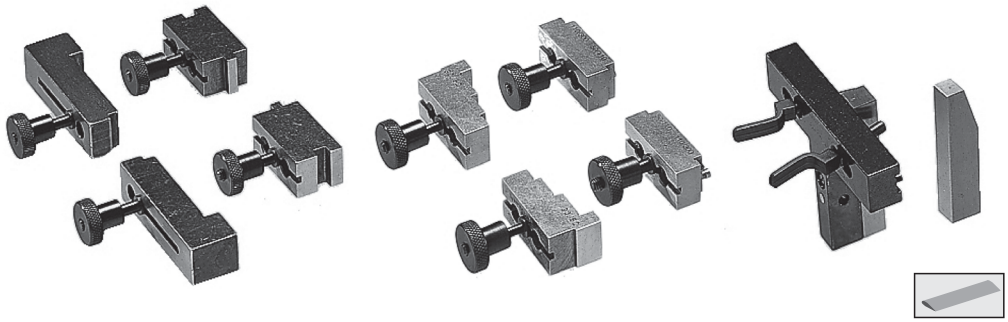
horizontal and vertical applications

WARRANTY 3 YEARS

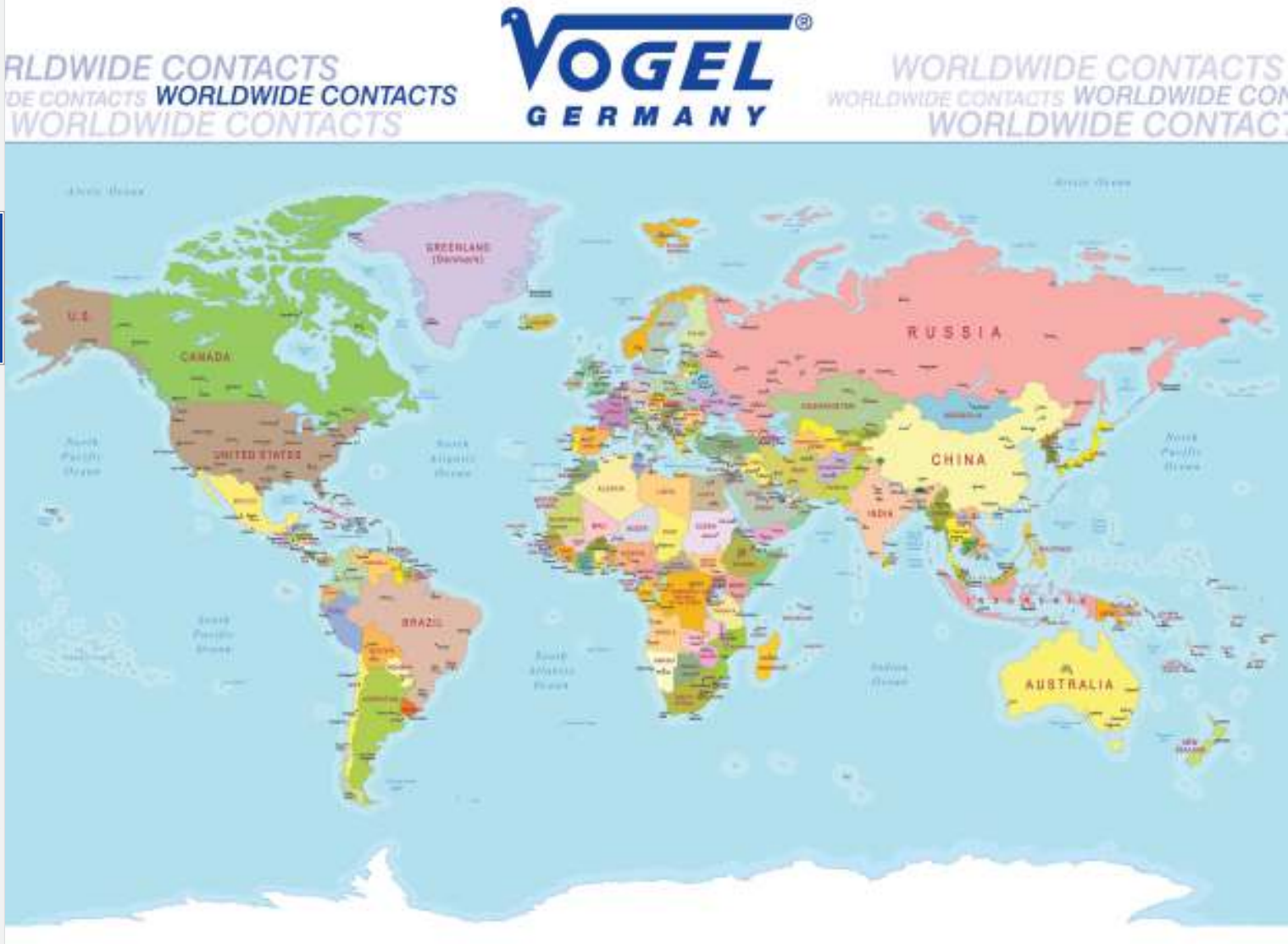
ART NO	setting range mm
230950	4.5 - 35
230951	4.5 - 160
230952	4.5 - 290
230953	35 - 160
230954	35 - 290
230955	160 - 510
230956	160 - 800

SILVER-LINE Spare parts for Bore Gauge Zero-Setter

suitable for series 230950 - 230956



ART NO setting jaw holder	ART NO pair of setting jaws	ART NO pair of measuring jaws	ART NO frame with spanner	ART NO base for setting up to 300 mm
230957	230958 4.5 - 35 mm	230960 4.5 - 300 mm	230962 bis 160 mm	230965
-	230959 18 - 290 mm	230961 160 - 800 mm	230963 bis 300 mm	-
-	-	-	230964 bis 600 mm	-



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Actually you can find us in more than 75 countries via sales agents, distributors, dealers, sales representatives, trade representatives, etc.

Any questions?
We are pleased to advise!

4 a

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4 d

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DIGI PLUS-LINE® Electr. Digital Dial Indicator

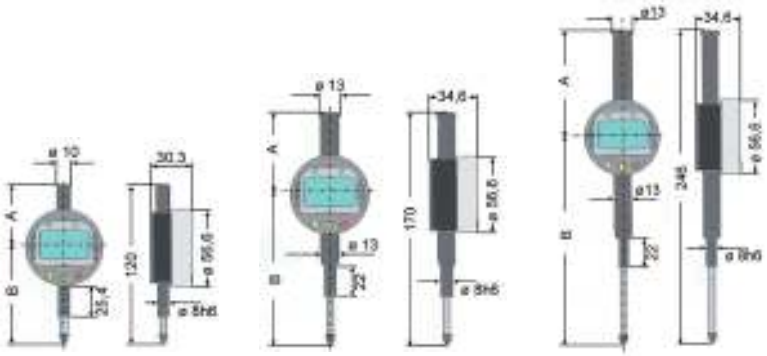
- **standard model for industry and craft**
- **with USB data output**

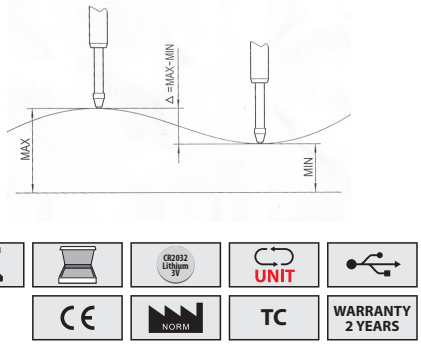
- aluminium housing with sturdy plastic cover
- large LCD display with clear reading, digit height 10 mm
- stem and spindle stainless, hardened and lapped
- exchangeable probe tips, M 2.5
- On/Off button, ABS and Preset function
- zero setting at any position, mm/inch switchable
- min./max., tol. and set function (selection and indication of tolerance limits)
- with a flat cover and cover with lug
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Option
- data transmission USB / Mini-USB (art.-no. 2420192), see page 304+306



ART N° 242060 | ART N° 242063 | ART N° 242160 | ART N° 242055 | ART N° 242161 | ART N° 242056 | ART N° 242057







ART N°	mm / inch	mm / inch	mm	max. ¹) mm	measu-ring force N	min/ max tol/set	A mm	B mm	KG	ART N° CC
242060	0 - 12.7 / 0 - 0.5	0.01 / 0.0005	0.010	0.010 ¹)	< 1.50	✓	75	50	0.100	2494200
242055	0 - 12.7 / 0 - 0.5	0.001 / 0.00005	0.003	0.05	< 1.50	✓	75	50	0.100	2494200
242160	0 - 12.7 / 0 - 0.5	0.001 / 0.00005	0.003	0.05	< 1.50	✓	75	50	0.100	2494200
242163	0 - 25.4 / 0 - 1.0	0.01 / 0.0005	0.010	0.015 ¹)	< 1.50	✓	120	60	0.100	2494201
242056	0 - 25.4 / 0 - 1.0	0.001 / 0.00005	0.003	0.05	< 1.50	✓	110	60	0.115	2494201
242161	0 - 25.4 / 0 - 1.0	0.001 / 0.00005	0.003	0.06	< 1.50	✓	110	60	0.100	2494201
242057	0 - 50.8 / 0 - 2.0	0.001 / 0.00005	0.003	0.05	< 1.50	✓	160	90	0.125	2494202
242164	0 - 50.8 / 0 - 2.0	0.01 / 0.0005	0.010	0.030 ¹)	< 1.50	✓	155	85	0.100	2494202
242162	0 - 50.8 / 0 - 2.0	0.001 / 0.00005	0.03	0.08	< 1.50	✓	155	85	0.100	2494202
242063	0 - 12.7 / 0 - 0.5	0.01 / 0.0005	0.010	0.020 ¹)	< 1.50	X	75	45	0.115	2494200
242061	0 - 25.4 / 0 - 1.0	0.01 / 0.0005	0.010	0.020 ¹)	< 1.50	X	110	60	0.115	2494201
242062	0 - 50.8 / 0 - 2.0	0.01 / 0.0005	0.010	0.020 ¹)	< 1.50	X	160	90	0.125	2494202

Data cable for digital measuring instruments see page 304

DIGI PLUS-LINE® Electr. Digital Indicator • IP51

- **the measurement will not influenced by the liquids on the scale or on measuring sensor**
- **with Sylvac electronic**
- **with proximity data output**

- connection proximity & power USB / RS232 / wireless (optional choice)
- external power supply combined with data output „Power“
- mechanic in stainless steel, hardened
- housing made of aluminium, front plate made of plastic, 270° swiveling
- LCD display with clear reading, integrated tolerance illuminating diode
- Smart Inductive Sensor (S.I.S.):
  - autom. On/Off, autom. sleep mode
  - storage of the original value, ABSOLUT system
- zero setting at any position, SET button, MODE button
- customizable button for a wide selection of function (min/max, DELTA, TOL, conversion factor), ± pre-select value, PRESET, automatic power off
- mm/inch switchable
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual







Option: Lifting device

Option
- integrated extraction device for 12.5 mm, (art.-no.: 2409205)
- integrated extraction device for 25.0 mm, (art.-no.: 2409206)
- with integrated Bluetooth or WiFi, see page 115

UNIT · IP 51 · ABSOLUTE · NORM · CE · TC · WARRANTY 3 YEARS

ART NO without Bluetooth	ART NO with Bluetooth	mm / inch	mm / inch	mm	max. mm 1) 1 Digit	A mm	B mm	C mm	D mm	L mm	KG	ART NO CC
240215	-	12.5 / 0.5	0.01 / 0.0005	0.002	1) 0.010	36.6	50.5	25.4	59.5	122.7	0.117	2494200
240205	**240205-BT**	12.5 / 0.5	0.001 / 0.00005	0.002	0.003	36.6	50.5	25.4	59.5	122.7	0.117	2494200
240216	-	25.0 / 1.0	0.01 / 0.0005	0.002	1) 0.010	49.4	50.5	25.4	59.5	148.3	0.120	2494201
240206	**240206-BT**	25.0 / 1.0	0.001 / 0.00005	0.002	0.004	49.4	50.5	25.4	59.5	148.3	0.120	2494201
240217	-	50.0 / 2.0	0.01 / 0.0005	0.002	1) 0.020	102.0	88.0	25.4	59.5	263.0	0.161	2494202
240207	**240207-BT**	50.0 / 2.0	0.001 / 0.00005	0.002	0.005	102.0	88.0	25.4	59.5	263.0	0.161	2494202
240218	-	100.0 / 4.0	0.01 / 0.0005	0.002	1) 0.020	153.0	139	25.4	59.5	416.0	0.208	2494203
240208	**240208-BT**	100.0 / 4.0	0.001 / 0.00005	0.002	0.006	153.0	139	25.4	59.5	416.0	0.208	2494203
240219	-	150.0 / 6.0	0.01 / 0.0005	0.002	1) 0.020	205.0	193	25.4	59.5	573.0	0.265	2494204
240209	-	150.0 / 6.0	0.001 / 0.00005	0.002	0.010	205.0	193	25.4	59.5	573.0	0.265	2494204

DIGI PLUS-LINE® Electr. Digital Indicator • IP51

- **the measurement is not affected by liquids on the scale or on the probe**
- **with Sylvac electronic**
- **with proximity data output**
- **with analog display (up to 0.2 µm) and configuration of the tolerance limits**

- connection proximity & power USB / RS232 / wireless (optional choice)
- external power supply combined with data output „Power“
- mechanic in stainless steel, hardened
- housing made of aluminium, front plate made of plastic, 270° swiveling
- LCD display with clear reading, integrated tolerance illuminating diode
- Smart Inductive Sensor (S.I.S.):
  - autom. On/Off, autom. sleep mode
  - storage of the original value, ABSOLUT system
- zero setting at any position, SET button, MODE button
- customizable button for a wide selection of function (min/max, DELTA, TOL, conversion factor), ± pre-select value, PRESET, automatic power off
- mm/inch switchable
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

ART NO 240260 ART NO 240261





Option
- integrated extraction device for 12.5 mm, (art.-no.: 2409205)
- integrated extraction device for 25.0 mm, (art.-no.: 2409206)
- with integrated Bluetooth or WiFi, see page 115

UNIT · IP 51 · ABSOLUTE · NORM · CE · TC · WARRANTY 3 YEARS

ART NO without Bluetooth	ART NO with Bluetooth	mm/inch	mm/inch	mm	max. 1) ± 1 Digit	L mm	A mm	B mm	C mm	D mm	KG	ART NO CC
240260	**240260-BT**	12.5 / 0.5	0.001 / 0.00005	0.002	0.003	122.7	36.6	50.5	25.4	59.5	0.117	2494200
240261	**240261-BT**	25.0 / 1.0	0.001 / 0.00005	0.002	0.004	148.3	49.4	50.5	25.4	59.5	0.120	2494200

Precision Digital Indicators and Data Transmission with Data Box

DIGI PLUS-LINE „Absolute“ Electr. Digital Dial Indicator • IP65

- **water and coolant acc. to DIN 40050 / IEC 60529**
- **with Vocom-s duo data output, top model (connectivity also for Digimatic measuring devices)**

- mechanical parts in stainless steel, hardened
- housing IP65 protected, front plate made of plastic, 330° swiveling
- large LCD display with clear reading, digit height 10 mm
- On/Off button, ABS/INC measuring system, with ORIGIN system
- min/max, tolerance, ± pre-select value, PRESET, zero setting at any position
- mm/inch switchable
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Options
- data box with USB port (art.-no.: 2420194)
- foot switch for data box (art.-no.: 209011)
- lifting device as spare part (art.-no.: 249994)
- Transmitter for wireless communication via WiFi, art.-no. 209006, see page 306
- receiver for wireless communication via WiFi, art.-no. 209007, see page 306
- transmitter and receiver for wireless communication as set, art.-no. 2040101, see page 306

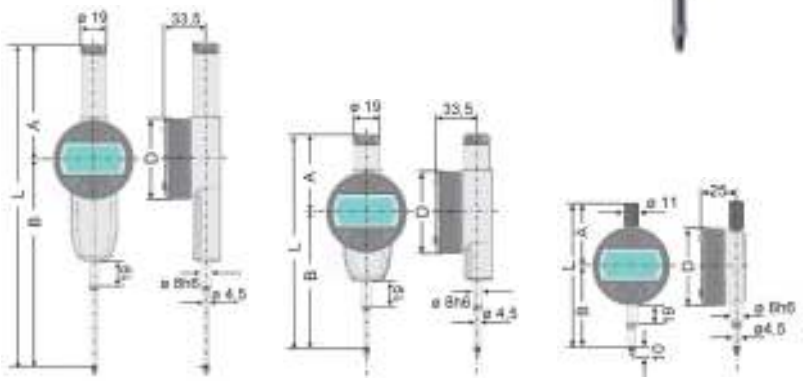
ART NO 240257

ART NO 240256

ART NO 240255



incl. lifting device





ART NO	mm / inch	mm / inch	mm	max. mm	A mm	B mm	D mm	L mm	KG	ART NO CC
240250	12.7 / 0.5	0.01 / 0.0005	0.002	0.02	55	61	60	116	0.196	2494200
240255	12.7 / 0.5	0.001 / 0.00005	0.002	0.003	55	61	60	116	0.196	2494200
240251	25.4 / 1.0	0.01 / 0.0005	0.002	0.02	57	101	60	158	0.307	2494201
240256	25.4 / 1.0	0.001 / 0.00005	0.002	0.003	57	101	60	158	0.307	2494201
240252	50.8 / 2.0	0.01 / 0.0005	0.002	0.04	85	150	60	235	0.382	2494202
240257	50.8 / 2.0	0.001 / 0.00005	0.002	0.005	85	150	60	235	0.382	2494202

DIGI PLUS-LINE Data Transmission with Data Box

- **with Vocom-s duo data output**
- **connection via USB data cable also suitable for Digimatic connection**
- **connection socket for foot switch**

ART NO 2420194

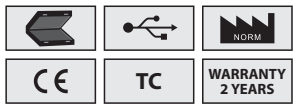


ART NO 209011





application example



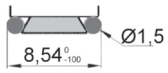
ART NO	article description	KG
2420194	data box with USB port	0.060
209011	foot switch with port	0.170

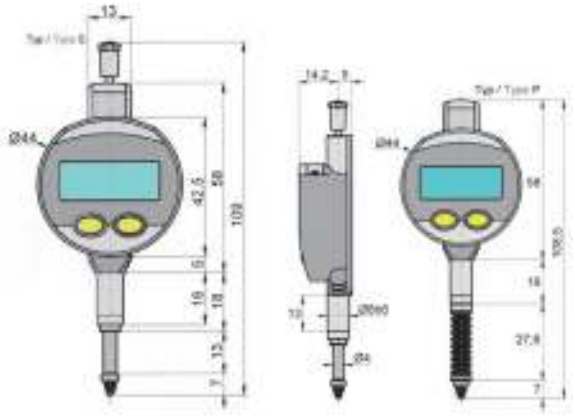
VOGEL DIGI PLUS-LINE Elektr. Digital-Kleinmessuhr • IP65

- **dial indicators „type P“ water and coolant proof acc. to DIN 40050 / IEC 60529 (IP65)**
- **with Sylvac electronic**
- **with data output RS232 „Power“**

- data output RS232 combined with external power supply
- data output S_Connect power USB / RS232 / wireless (optional choice)
- mechanical parts in stainless steel, hardened
- housing and front plate made of polyamide
- LCD display with clear reading, digit height 6 mm
- autom. On/Off switching, zero setting at any position
- hold function, absolute and relative mode, pre-select value
- mm/inch switchable, reversal of the measuring device
- with dovetail guide at the back
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Options
- spare rubber sleeve (art.-no.: 249916)
- measurement data transfer (art.-no.: 2424100) see page 304+306







type S — *IP51*

type P — *IP65*

UNIT · RS232 C · IP 51 · IP 65 · CR2032 Lithium 3V · NORM · CE · TC · WARRANTY 3 YEARS

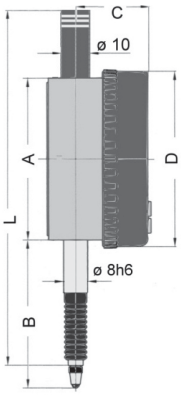
ART NO	mm / inch	mm / inch	mm	max. mm [1] 1 Digit	type P protected	type S standard	measuring force N	KG	ART NO CC
240230	0-12.7 / 0-0.5	0.01 / 0.0005	0.002	[1] 0.010	✓	-	0.60 - 1.30	0.070	2494230
240231	0-12.7 / 0-0.5	0.01 / 0.0005	0.002	[1] 0.010	-	✓	0.50 - 0.90	0.070	2494230
240232	0-12.7 / 0-0.5	0.001 / 0.00005	0.002	0.005	✓	-	0.60 - 1.30	0.070	2494230
240233	0-12.7 / 0-0.5	0.001 / 0.00005	0.002	0.005	-	✓	0.50 - 0.90	0.070	2494230

VOGEL DIGI PLUS-LINE Electr. Digital Dial Indicator • IP65

- **water and coolant proof acc. to DIN 40050 / IEC 60529**
- **with mini USB data output**

- mechanical parts in stainless steel, hardened
- housing made of aluminium, front plate made of plastic
- LCD display with clear reading, digit height 11mm
- On/Off button, ABS/INC measurement system
- zero setting at any position, ± pre-select value, PRESET
- mm/inch switchable
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

Options
- spare rubber sleeve (art.-no.: 249915)
- measurement data transfer USB / Mini-USB (art.-no.: 2420192), see page 304





UNIT · USB · IP 65 · CR2032 Lithium 3V · NORM · CE · TC · WARRANTY 2 YEARS

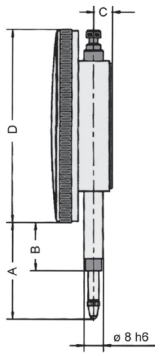
ART NO	mm / inch	mm / inch	mm	max. mm [1] 1 Digit	A mm	B mm	C mm	D mm	L mm	KG	ART NO CC
242140	12.5 / 0.5	0.01 / 0.0005	0.02	[1] 0.010	59	65	30	59.5	145	0.095	2494200
242150	12.5 / 0.5	0.001 / 0.00005	0.004	0.003	59	65	30	59.5	145	0.095	2494200

BLUE-LINE Small Dial Indicator

workshop grade

- **standard quality**
- **e.g. for workshop use**

- metal housing, matt chrome finish
- spindle and stem stainless and hardened
- with turnable scale by outer ring, for easy zero setting





WARRANTY 2 YEARS

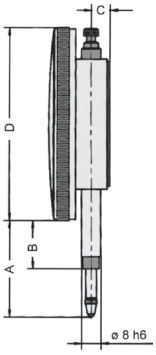
ART Nº	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART Nº CC
241001	0 - 3	0.01	-	X	0.5	28	14	8.2	45	0.095	2494000
241002	0 - 5	0.01	-	X	0.5	28	14	8.2	45	0.095	2494000

SILVER-LINE Small Dial Indicator

DIN 878

- **top quality, for the workshop and inspection room**

- metal housing, matt chrome finish
- spindle and stem stainless and hardened
- adjustable tolerance fingers
- with a flat cover and cover with lug
- with turnable scale by outer ring, for easy zero setting
- incl. calibration certificate





DIN | CC | WARRANTY 2 YEARS

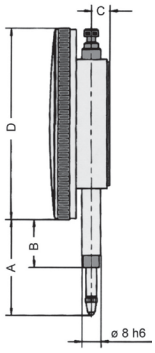
ART Nº	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	CC
241114	0 - 3	0.01	-	X	1	28.5	14	7.3	40	0.085	inclusive
241116	0 - 5	0.01	-	X	1	28.5	14	7.3	40	0.085	inclusive

SILVER-LINE Small Dial Indicator

DIN 878 / workshop grade

- **sturdy design, for workshop use and calibration purposes**

- solid brass housing, matt chrome finish
- spindle and stem stainless, hardened and lapped
- adjustable tolerance fingers
- from up 0.001 mm reading in workshop grade
- with turnable scale by outer ring, for easy zero setting





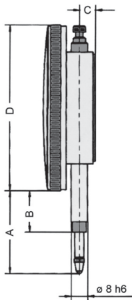
DIN | TC | WARRANTY 3 YEARS

ART Nº	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART Nº CC
240001	0 - 3	0.01	-	X	0.5	28.5	14	7.3	40	0.110	2494000
240002	0 - 5	0.01	-	X	0.5	28.5	14	7.3	40	0.110	2494000
240003	0 - 1	0.001	-	X	0.2	28.5	14	7.3	40	0.110	2494003
240121	0 - 3	0.01	✓	-	0.5	28.5	14	7.3	40	0.115	2494000
240122	0 - 5	0.01	✓	-	0.5	28.5	14	7.3	40	0.115	2494000
240123	0 - 1	0.001	✓	-	0.2	28.5	14	7.3	40	0.115	2494003

BLUE-LINE Dial Indicator
workshop grade

- **standard quality**
- **e.g. for workshop use**

- solid brass housing, matt chrome finish, adjustable tolerance fingers
- spindle and stem stainless and hardened
- with turnable scale by outer ring, for easy zero setting




ART NO 241131


ART NO 241101

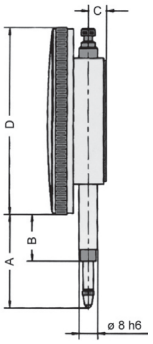
NORM | WARRANTY 2 YEARS

ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
241101	0 - 10	0.01	-	X	1	43.0	22.0	8.2	57	0.190	2494000
241103	0 - 1	0.001	-	X	0.2	33.5	22.0	8.0	57	0.190	2494003
241131	0 - 10	0.01	✓	-	1	43.0	22.0	8.2	57	0.200	2494000

SILVER-LINE Dial Indicator
DIN 878

- **top quality, for the workshop and inspection room**

- metal housing, matt chrome finish
- spindle and stem stainless and hardened
- adjustable tolerance fingers
- with a flat cover and cover with lug
- with turnable scale by outer ring, for easy zero setting
- incl. calibration certificate




ART NO 241118


ART NO 241119

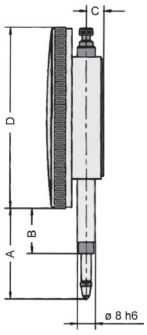
DIN | CC | WARRANTY 2 YEARS

ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	CC
241118	0 - 10	0.01	-	X	1	40	19.5	8	60	0.190	inclusive
241119	0 - 10	0.01	✓	-	1	40	19.5	8	60	0.190	inclusive

SILVER-LINE Dial Indicator
DIN 878 / workshop grade

- **sturdy design, for workshop use and calibration purposes**

- solid brass housing, matt chrome finish
- spindle and stem stainless, hardened and lapped
- adjustable tolerance fingers
- from up 0.001 mm reading in workshop grade
- with turnable scale by outer ring, for easy zero setting





DIN | NORM | TC | WARRANTY 3 YEARS

ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
240101	0 - 10	0.01	-	X	1	40	18.5	7.5	58	0.190	2494000
240103	0 - 1	0.001	-	X	0.2	40	18.5	7.5	58	0.190	2494003
240106	0 - 5	0.001	-	X	0.2	40	18.5	7.5	58	0.190	2494003
240131	0 - 10	0.01	✓	-	1	40	18.5	7.5	58	0.200	2494000
240133	0 - 1	0.001	✓	-	0.2	40	18.5	7.5	58	0.200	2494003

Precision Dial Indicators

Accessories for Dial Indicators can be found on page 138-141

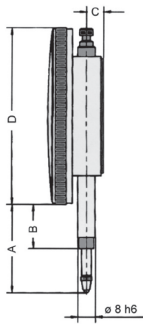
SILVER-LINE Dial Indicator

DIN 878

- with comparator measuring
- for very accurate comparative mesurements
- contrary to tooth wheel system, the spindle travel is expanded by a lever, due to the lever transmission the hysteresis can kept very small

- solid brass housing, matt chrome finish
- stem and spindle stainless, hardened and lapped
- adjustable tolerance fingers
- with turnable scale by outer ring, for easy zero setting

ART NO 240004 ART NO 240005





DIN | NORM | TC | WARRANTY 3 YEARS

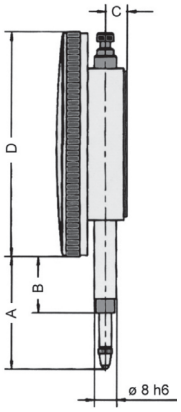
ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
240004	0 - 1.0	0.001	✓	-	0.1	28	14	7.5	40	0.190	2494003
240005	0 - 1.0	0.001	✓	-	0.1	40	18.5	8.5	58	0.300	2494003
240006	0 - 0.08	0.001	✓	-	-	28	14	7.5	40	0.190	2494003
240007	0 - 0.08	0.001	✓	-	-	40	18.5	8.5	58	0.300	2494003
240008	0 - 1.0	0.002	✓	-	0.1	28	14	7.5	40	0.190	2494003
240009	0 - 1.0	0.002	✓	-	0.1	40	18.5	8.5	58	0.300	2494003

SILVER-LINE Dial Indicator

high workshop grade

- for large measuring ranges
- concentric millimeter scale

- metal housing, matt chrome finish, adjustable tolerance fingers
- stem and spindle stainless and hardened
- with turnable scale by outer ring, for easy zero setting
- with a flat cover and cover with lug
- incl. calibration certificate





NORM | CC | WARRANTY 3 YEARS

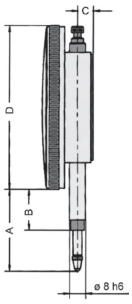
ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	CC
241121	0 - 30	0.01	-	X	1	60	22.5	8	60	0.240	inclusive

SILVER-LINE Dial Indicator

DIN 878 / workshop grade

- with left turning pointer, for depth measurement with measuring bridge

- solid brass housing, matt chrome finish
- stem and spindle stainless, hardened and lapped
- adjustable tolerance fingers
- from up size 0-30 mm in workshop grade only
- with turnable scale by outer ring, for easy zero setting





example



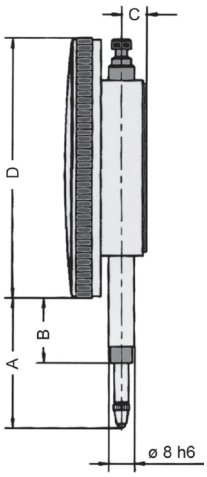
DIN | NORM | TC | WARRANTY 3 YEARS

ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
240107	0 - 10	0.01	-	X	1	40	18.5	7.5	58	0.320	2494001
240108	0 - 30	0.01	-	X	1	60	18.5	7.5	58	0.320	2494001

SILVER-LINE Dial Indicator

- **instead of a revolution counter, this dial indicator has a linear scale**
- **the stem is fitted 3.5 mm out of the middle**

- solid brass housing, matt chrome finish
- stem and spindle stainless, hardened and lapped
- adjustable tolerance fingers
- with turnable scale by outer ring, for easy zero setting





NORM | TC | WARRANTY 3 YEARS

ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
240030	0 - 30	0.1	-	X	10	60	18.5	7.5	58	0.320	2494001
240031	0 - 50	0.1	-	X	10	60	18.5	7.5	58	0.320	2494001

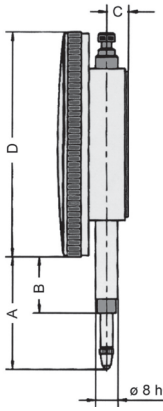
SILVER-LINE Dial Indicator

- **with concentric millimeter scale**

- solid brass housing, matt chrome finish
- stem and spindle stainless, hardened and lapped
- adjustable tolerance fingers
- with turnable scale by outer ring, for easy zero setting

ART NO 240102





ART NO 240134



NORM | TC | WARRANTY 3 YEARS

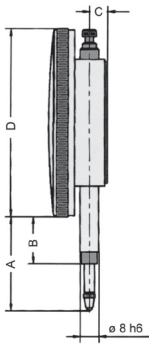
ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
240102	0 - 30	0.01	-	X	1	60	18.5	7.5	58	0.230	2494001
240104	0 - 50	0.01	-	X	1	97.5	36.5	7.5	58	0.350	2494001
240105	0 - 100	0.01	-	X	1	178	65.5	8.5	80	0.405	2494002
240110	0 - 100	0.01	-	X	1	147.5	56.5	7.5	58	0.380	2494002
240111	0 - 10	0.01	-	X	1	40	18.5	7.5	58	0.190	2494000
240132	0 - 30	0.01	✓	-	1	60	18.5	7.5	58	0.235	2494001
240134	0 - 50	0.01	✓	-	1	97.5	36.5	7.5	58	0.355	2494001
240135	0 - 80	0.01	✓	-	1	147.5	56.5	7.5	58	0.380	2494002

BLUE-LINE Dial Indicator • IP54

DIN 878

- **splash water resistant acc. to DIN 40050 / IEC 60529**

- metal housing, matt chrome finish
- stem and spindle stainless and hardened, with rubber sleeve
- with turnable scale by outer ring, for easy zero setting







IP 54 | DIN | WARRANTY 2 YEARS

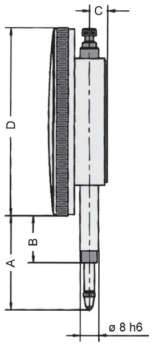
ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
★★★☆☆ 241142	0 - 10	0.01	-	X	1	46	20	8	55.5	0.170	2494011
★★★★★ 241143	0 - 10	0.01	-	X	1	46	19	8	61	0.210	2494011

★★★★★ SILVER-LINE Dial Indicator • IP53

DIN 878

- **drip water proof acc. to DIN 40050 / IEC 60529**

- solid brass housing, matt chrome finish, stem with rubber sleeve
- stem and spindle stainless, hardened and lapped
- adjustable tolerance fingers, shadowfree flat glass, perfect sealed by O-rings
- with turnable scale by outer ring, for easy zero setting
- version 0.001 mm reading is acc. to workshop grade





IP 53 | DIN | NORM | TC | WARRANTY 3 YEARS

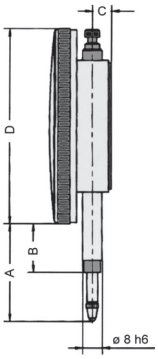
ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
240141	0 - 10	0.01	✓	-	1	47	18.5	8	58	0.220	2494011
240142	0 - 3	0.01	✓	-	0.5	33	11.6	8	41	0.120	2494011
240143	0 - 1	0.001	✓	-	0.2	47	18.5	8	58	0.220	2494011
240144	0 - 1	0.001	✓	-	0.2	33	11.6	8	41	0.120	2494011

★★★★★ SILVER-LINE Dial Indicator • IP67

DIN 878

- **water-, coolant and oil tight acc. to DIN 40050 / IEC 60529**

- solid brass housing, matt chrome finish, stem with rubber sleeve
- stem and spindle stainless, hardened and lapped
- adjustable tolerance fingers, shadowfree flat glass, perfect sealed by O-rings
- with turnable scale by outer ring, for easy zero setting
- version with 0.001/0.002 mm reading is acc. to workshop grade





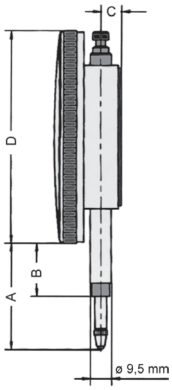
IP 67 | DIN | NORM | TC | WARRANTY 3 YEARS

ART NO	mm	mm	yes	no	mm	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
240151	0 - 10	0.01	✓	-	1	45.5	16.7	9.3	61.5	0.240	2494000
240152	0 - 3	0.01	✓	-	0.5	33	11.6	9.3	44.5	0.140	2494000
240153	0 - 1	0.001	✓	-	0.2	45.5	16.7	9.3	61.5	0.240	2494003
240154	0 - 1	0.002	✓	-	0.2	33	11.6	9.3	44.5	0.140	2494003

SILVER-LINE Small Dial Indicator

- **with inch reading**
- **top quality, for workshop and inspection laboratory**

- aluminium housing, matt chrome finish
- stem and spindle stainless and hardened
- adjustable tolerance fingers
- with a flat cover and cover with lug
- with turnable scale by outer ring, for easy zero setting
- incl. calibration certificate





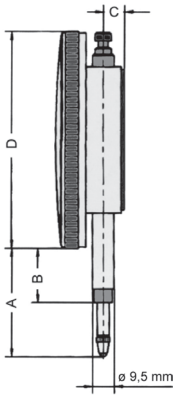
CC | NORM | WARRANTY 2 YEARS

ART NO	inch	inch	yes	no	inch	A mm	B mm	C mm	D-ø mm	KG	CC
241115	0 - 0.25	0.001	-	X	0.025	34	15	8.5	40	0.085	inclusive

SILVER-LINE Dial Indicator

- **with inch reading**
- **shockproof version with 6 jewels**
- **top quality, for workshop and inspection laboratory**

- aluminium housing, matt chrome finish
- stem and spindle stainless and hardened
- adjustable tolerance fingers
- with a flat cover and cover with lug
- with turnable scale by outer ring, for easy zero setting
- incl. calibration certificate



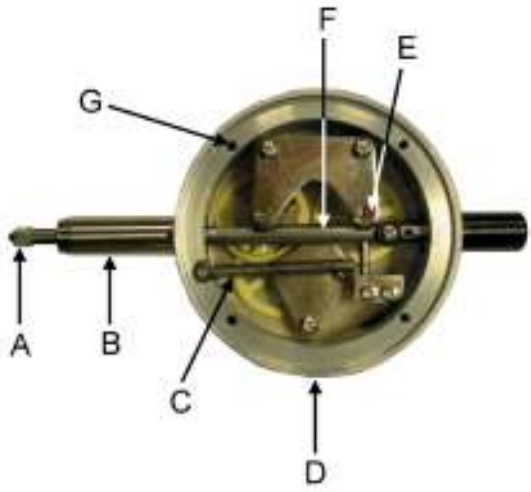


CC | NORM | WARRANTY 2 YEARS

ART NO	inch	inch	yes	no	inch	A mm	B mm	C mm	D-ø mm	KG	CC
241136	0 - 1.0	0.001	-	X	0.1	54	19	8.5	60	0.135	inclusive
241137	0 - 1.0	0.001	✓	-	0.1	54	19	8.5	60	0.135	inclusive

Dial Indicator Design Features

- **A** exchangeable contact point
- **B** hardened, stainless steel stem
- **C** tension spring, connected with the spindle
- **D** sturdy, matt chrome finish housing
- **E** bridge for rigid jewels bearing support (with shockproof only)
- **F** hardened and ground spindle
- **G** screw holes for fixing the back cover



Accessories for our dial indicators can be found on page 138-141

SILVER-LINE Dial Indicator

DIN 878

- **with magnetic backside**

- solid brass housing, matt chrome finish
- stem and spindle stainless, hardened and lapped
- adjustable tolerance fingers
- with turnable scale by outer ring, for easy zero setting



DIN | TC | WARRANTY 3 YEARS

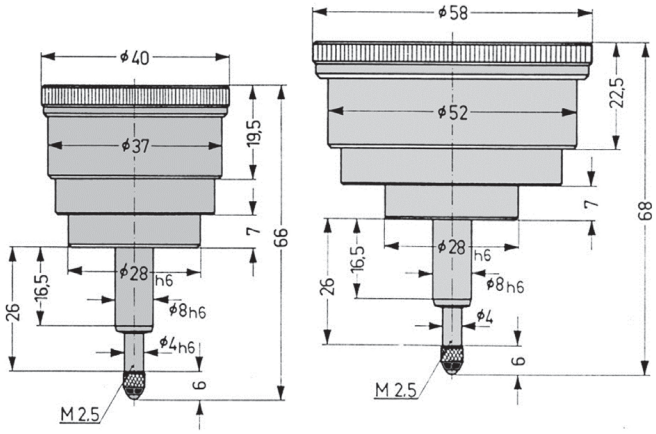
ART NO	mm	mm	yes	no	A mm	B mm	C mm	D-ø mm	KG	ART NO CC
240001/1	0 - 3	0.01	-	X	28	14	25	40	0.280	2494000
240101/1	0 - 10	0.01	-	X	40	18.5	25	58	0.380	2494000
240121/1	0 - 3	0.01	✓	-	28	14	25	40	0.280	2494000
240131/1	0 - 10	0.01	✓	-	40	18.5	25	58	0.380	2494000

SILVER-LINE Dial Indicator

- **with probe in the center of the back plate**
- **especially for measuring in appliances and tool engineering**

- solid brass housing, matt chrome finish
- stem and spindle stainless, hardened and lapped
- adjustable tolerance fingers
- with turnable scale by outer ring, for easy zero setting





TC | WARRANTY 3 YEARS

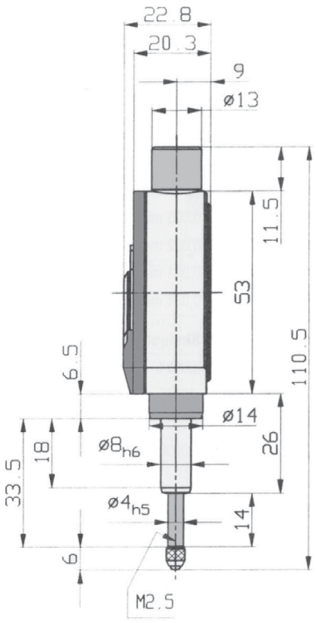
ART NO	mm	mm	mm	number of pointers	housing-ø	KG	ART NO CC
240020	0 - 3	0.01	1.0	2	58	0.330	2494000
240021	0 - 5	0.01	1.0	2	58	0.330	2494001
240023	0 - 3	0.01	0.5	2	40	0.210	2494001
240024	0 - 5	0.01	0.5	2	40	0.210	2494002

SILVER-LINE Comparator Gauge
DIN 879

- **designed to check parallelism, smoothness and through running**

- sturdy housing with stable plastic cover
- stem and spindle stainless, hardened and finely lapped
- shockproof version, stem-ø 8 h6
- adjustable tolerance fingers
- exchangeable contact points, M 2.5

Option
- spindle lifting cable (art.-no.: 249996)





DIN | TC | WARRANTY 2 YEARS

ART NO	mm		range mm	free lift mm	housing-ø mm	KG	ART NO CC
240800	± 0.25	0.01	0.5	2.5	62	0.300	2494800
240803	± 0.05	0.001	0.1	3.0	62	0.300	2494800

BLUE-LINE Comperator Gauge • IP53

- **to check parallelism, smoothness and through running**

- sturdy metal housing with sturdy plastic cover
- stem and spindle stainless, hardened and finely lapped
- shockproof version, stem-ø 8 h6
- adjustable tolerance fingers
- incl. spindle lifting cable
- exchangeable contact points, M 2.5







IP 53 | NORM | WARRANTY 2 YEARS

ART NO	mm	mm	range mm	free lift mm	max. mm	KG	ART NO CC
241804	± 0.05	0.001	0.5	2.5	0.002	0.090	2494800

Accessories for Dial Indicators

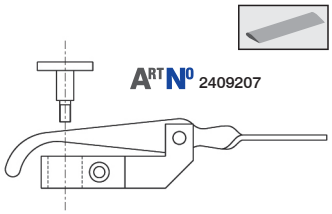
VBLUE-LINE® Spindle Lifting Lever

- for our analogous and digital dial indicator
- please choose the suitable lever control according to the art.-no. of our dial indicators

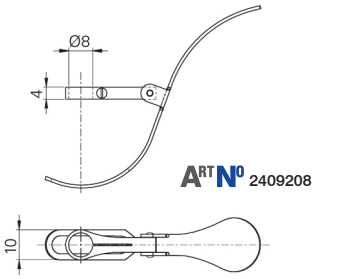




ART NO 2409207	ART NO 249997	ART NO 249998	ART NO 240998
Dial Indicator	Dial Indicator	Dial Indicator	Dial Indicator
240205 + 240215	240250 + 240255	241001 + 241002	240001 - 240003
-	-	241114 - 241116	240121 - 240123
-	-	-	240001/1 + 240121/1



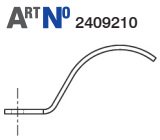
ART NO 249992	ART NO 2409208	ART NO 2409209	ART NO 240992
Dial Indicator	Dial Indicator	Dial Indicator	Dial Indicator
241101 - 241103	240230 + 240232	240231 + 240233	240101 - 240103
241118 + 241119	-	-	240106 - 240108
241121 + 241131	-	-	240111 + 240131/1
241136 + 241137	-	-	-

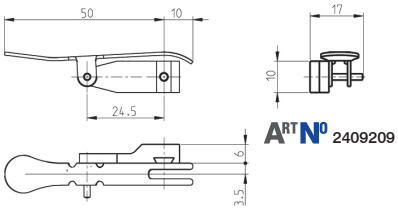


VBLUE-LINE® Lifting Device

- for our analogous and digital dial indicators
- choose according to our dial indicator art. no. the right lifting device











ART NO 2409205	ART NO 2409206	ART NO 2409210	ART NO 249994	ART NO 249996
Dial Indicator	Dial Indicator	Dial Indicator	Dial Indicator	Dial Indicator
240205 + 240215	240206 + 240216	240230 + 240233	240251 + 240252	240800 + 240803
240260	240261	-	240256 + 240257	241804

VBLUE-LINE® Backside Cover

- flat or with lug
- for our analogous and digital dial indicator
- please choose the suitable backside cover according to the art.-no. of our dial indicator

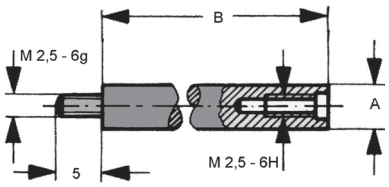


ART NO with lug	ART NO flat	suitable for dial indicator
240980	**240981**	240005 • 240007 • 240009 • 240030 • 240031 240101 • 240102 • 240103 • 240104 • 240106 240107 • 240111 • 240131 • 240132 • 240133 240134 • 240135 • 240141 • 240143 • 240151 240153 • 240800 • 240803 • 240810 • 240813
240982	**240983**	240001 • 240002 • 240003 • 240004 • 240006 240008 • 240121 • 240122 • 240123 • 240142 240144 • 240152 • 240154
240984	**240989**	241118 • 241119 • 241121 • 241134 241136 • 241137 • 241142
240987	**240988**	240230 • 240231 • 240232 • 240233
240990	**240991**	240260 • 240261 • 240205 - 240219

ART NO with lug	ART NO flat	suitable for dial indicator
249900	**249901**	241101 241102 241103 241131
249902	**249903**	241001 241002
249908	**249909**	241143
249990	**249991**	241114 • 241115 • 241116
249910	**249911**	242055 • 242056 • 242057 • 242060 242061 • 242062 • 242063 • 242160 242162 • 242163 • 242164 242140 • 242150 • 240250 • 240255

VBLUE-LINE® Extensions

- for analogous and electr. digital dial indicators



ART NO	length B mm	ø A mm	ART NO	length B mm	ø A mm
24095010	10	4	24095110	10	5
24095020	20	4	24095120	20	5
24095030	30	4	24095130	30	5
24095040	40	4	24095140	40	5
24095050	50	4	24095150	50	5
24095060	60	4	24095160	60	5
24095070	70	4	24095170	70	5
24095080	80	4	24095180	80	5
24095090	90	4	24095190	90	5
240950100	100	4	240951100	100	5

VBLUE-LINE® Measuring Bridge for Depth Measurements

- with extensions rods, as set
- suitable for all analogous or digital dial indicators

- measuring bridge made of steel, hardened, chromed
- stainless steel extensions, with M2.5 inside/outside thread

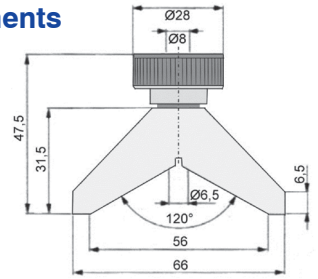


ART NO	size of measuring bridge mm	sizes of extension rods mm	KG
240525	80 (art.-no. 240511)	10 / 20 / 30 / 40 / 50 / 60 / 70 / 80 / 90	0.415

VBLUE-LINE® Measuring Bridge for Depth Measurements

- with prismatic base
- suitable for all analogous or digital dial indicators
- for measuring the depth of keyways in cylindrical shafts, etc.

- made of steel, hardened, matt chrome finish
- measuring surface lapped
- bore-ø 8 H7





ART NO	length of bridge mm	for shafts-ø mm	width mm	KG
240520	66 x 16	10 - 100	16	0.240

VBLUE-LINE® Measuring Bridge for Depth Measurements

- suitable for all analogous or electr. digital dial indicators

- made of steel, hardened, matt chrome finish or black burnished
- measuring surface lapped, bore-ø 8 H7







ART NO burnished	ART NO chromed	length of bridge mm	width mm	KG
240500	240510	50	16	0.180
240501	240511	80	16	0.200
240504	240514	100	16	0.230
240502	240512	120	20	0.250
240503	240513	150	20	0.280

Accessories for Dial Indicators

VBLUE-LINE® Inside Test Indicator

- **without dial indicator**
- **designed to check small bore holes**

- sturdy version, hammer blow lacqered
- suitable for all analogous and digital dial indicators
- bore-ø 8 H7, shaft-ø 8 h6



VBLUE-LINE® Angle Test Indicator

- **without dial indicator**
- **to controll small bores on lathes and various tool machines**

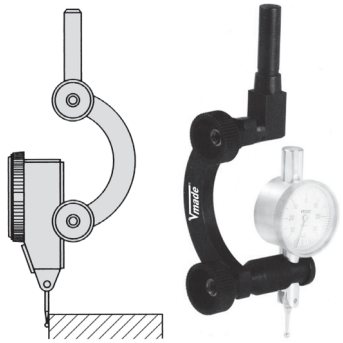
- sturdy version, hammer blow laquered
- suitable for all analogous and digital dial indicators
- bore-ø 8 H7, shaft-ø 8 h6

ART NO	measuring depth mm	smallest bore to be measured ø mm	KG
240646	60	6	0.210
240647	30	6	0.200

VBLUE-LINE® Centering Holder

- **allows large cylinder diameters or holes to be centered**
- **suitable for all dial indicators and for dovetail guide**

- made of steel, black burnished

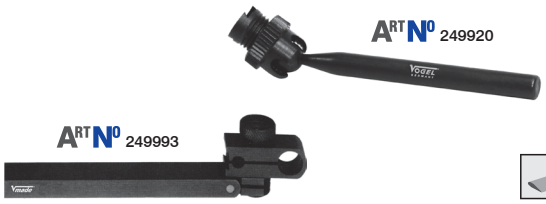


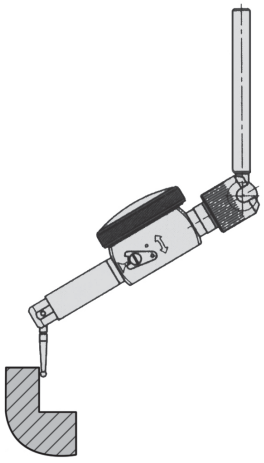
ART NO	for bore-ø mm	shaft-ø mm	for dove tail guide	KG
240997	4 + 8	8	✓	0.070

VBLUE-LINE® Clamp Holder

- **suitable for all dial indicators and for dovetail guide**

- made of steel, black burnished

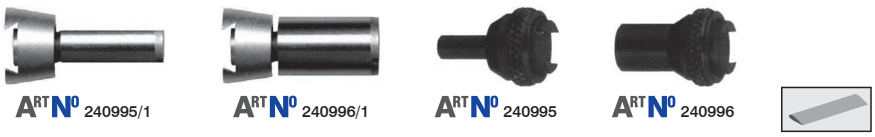




ART NO	mm	for bore-ø mm	for dovetail guide	KG
249993	72 x 12 x 6	4 + 8	✓	0.070
249924	72 x 12 x 6	6 + 8	✓	0.070
249920	ø 6 x 70	-	✓	0.060
249921	ø 8 x 70	-	✓	0.060
249922	76 x 9 x 9	6 + 8	✓	0.070
249923	76 x 9 x 9	4 + 8	✓	0.070

VBLUE-LINE® Clamping Shaft

- made of steel, black burnished or stainless steel, polished

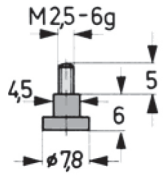
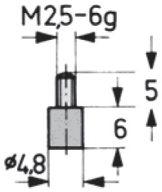
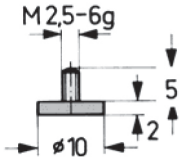
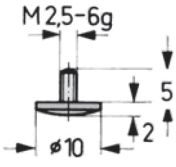
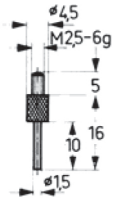
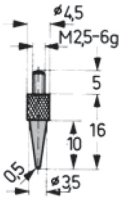
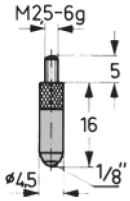


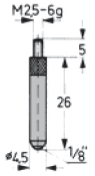
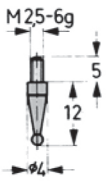
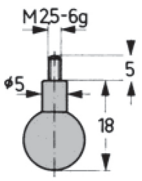
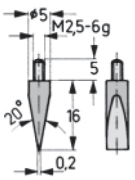
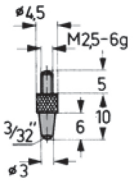
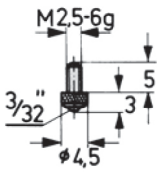
ART NO	shaft-ø mm	KG
240995	4 h6	0.015
240995/1	6 h6	0.015
240995/2	4 h6	0.015

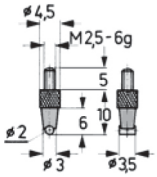
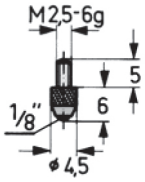
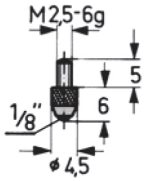
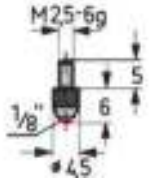
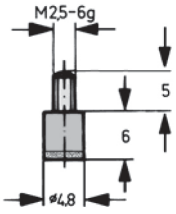
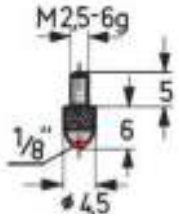
ART NO	shaft-ø mm	KG
240996	8 h6	0.015
240996/1	8 h6	0.015
-	-	-

BLUE-LINE® SILVER-LINE® DIGI PLUS-LINE® Contact Points

- for analogous and electr. digital dial indicators

ART N° steel	ART N° steel	ART N° steel	ART N° steel	ART N° steel	ART N° steel	ART N° steel
240952	240953	240954	240955	240956	240957	240958
	ART N° carbide	ART N° carbide	ART N° carbide	ART N° carbide		ART N° carbide
	2409531	2409541	2409551	2409561		2409581
						ART N° ruby
						2409582
						

ART N° steel	ART N° steel	ART N° steel	ART N° steel	ART N° steel	ART N° steel	ART N° steel
240959	240960	240961	240962	240963	240964	240965
ART N° carbide			ART N° carbide	ART N° carbide	ART N° carbide	
2409591			2409621	2409631	2409641	
ART N° ruby						
2409592						
						

ART N° steel	ART N° steel	ART N° carbide	ART N° ruby	carbide	ruby
240966	240967	2409671	2409672		
					

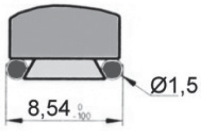
DIGI PLUS-LINE® Electr. Digital Test Indicator • IP65

- **water- a. coolant proof acc. to DIN 40050 / IEC 60529 (IP65)**
- **with Sylvac electonic**
- **with data output RS232 „Power“**

- data output RS232 combined with external power supply
- connection S_Connect Power USB / RS232 / (optional choice)
- mechanical parts in stainless, hardened, matt chrome finish
- housing and front panel made of polyamide
- LCD display with clear reading, digit height 6 mm, over 360° revolving
- autom. power off, zero setting at any position
- hold function, absolute and relative mode, input of preset value
- mm/inch switchable, selection of measuring direction
- housing with 3 dovetail guides
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual

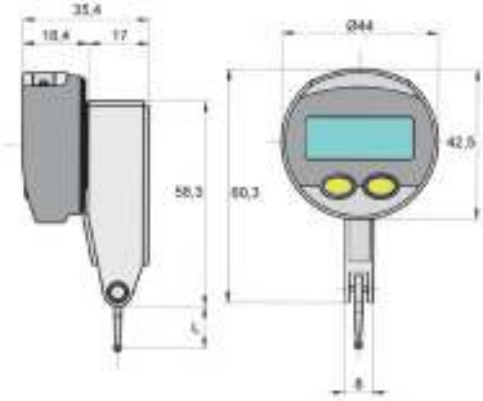


Option
- measurement data transfer (art.-no.: 2424100), see page 304+306





with digital and graph bar





Accessories for our test indicators can be found on page 144



IP 65 | UNIT | RS232 C | CE | NORM | TC | WARRANTY 3 YEARS

ART NO	mm	mm / inch	measuring range mm / inch	mm	max. mm	measuring force N	L mm	KG	ART NO CC
240680	0 - 1.6	0.001 / 0.0001	±0.8 / ±0.03	0.001	0.01	0.13 ±15%	12.5	0.073	2494200
240681	0 - 1	0.001 / 0.0001	±0.5 / ±0.02	0.001	0.01	0.07 ±15%	36.5	0.075	2494200

Explore our website!



Any questions?
We are pleased to advise!

SILVER-LINE Dial Test Indicator

DIN 2270

- **for toolmakers, for checking of difference measurement**
- **to check the parallelism, smoothness and trough running**

- solid brass housing, matt chrome finish
- with friction clutch, means shock proof
- housing with dovetail guide
- important bearings machined in ceramic stones
- carbide measuring ball-ø 2 mm, exchangeable
- contact points reverses, always maintaining clockwise
- scale mounted in turnable knurled grip ring

ART NO 240600



form A

ART NO 240601



form B

ART NO 240602



form C

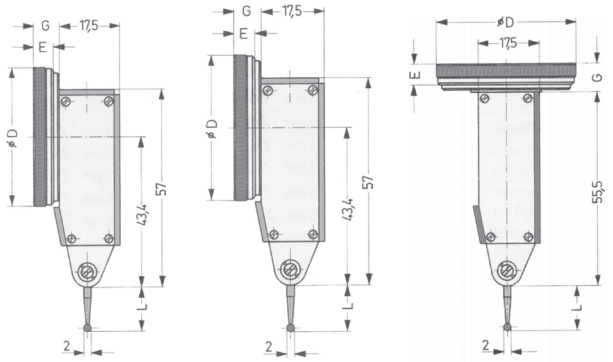
DIN | TC | WARRANTY 2 YEARS

ART NO form A	ART NO form B	ART NO form C	mm	measuring range mm	mm	L mm	ø D mm	quantity of dovetail guides form A+B	quantity of dovetail guides form C	KG	ART NO CC
240600	**240601**	**240602**	0 - 40 - 0	0.8	0.01	12	32	3	2	0.070	2494600
240610	**240611**	**240612**	0 - 100 - 0	0.2	0.002	12	32	3	2	0.070	2494610
240630	**240631**	**240632**	0 - 25 - 0	0.5	0.01	35	32	3	2	0.070	2494630
240640	**240641**	**240642**	0 - 40 - 0	0.8	0.01	12	40	3	2	0.080	2494640
240650	**240651**	**240652**	0 - 25 - 0	0.5	0.01	35	40	3	2	0.080	2494650
240660	**240661**	**240662**	0 - 100 - 0	0.2	0.002	12	40	3	2	0.080	2494660

Dimensions of Dial Test Indicators

DIN 2270

article-type	D mm	E mm	G mm	H mm
240600+240610	32	5.6	7.1	-
240601+240611	32	5.6	7.7	69.5
240602+240612	32	5.6	7.5	-
240630	32	5.6	7.1	-
240631	32	5.6	7.7	69.5
240632	32	5.6	7.5	-
240640+240660	40	6.0	7.5	-
240641+240661	40	6.0	8.1	73.5
240642+240662	40	6.0	7.9	-
240650	40	6.0	7.5	-
240651	40	6.0	8.1	73.5
240652	40	6.0	7.9	-



BLUE-LINE Dial Test Indicator

- **standard quality**

- solid brass housing, matt chrome finish
- carbide measuring ball ø 2,5 mm, exchangeable
- contact points reverses, always maintaining clockwise
- scale mounted in turnable knurled grip ring
- incl. clamp holder ø 6 mm + ø 8 mm at art.-no. 246600 until 246660

Accessories for test indicators can be found on page 144

ART NO 246641



form A

ART NO 246600



form A

ART NO 246693



form C

ART NO 246690



form D

NORM | WARRANTY 2 YEARS

ART NO	form	mm	measuring range mm	mm	L mm	ø D mm	quantity of dovetail guides	KG	ART NO CC
246600	A	0 - 40 - 0	0.8	0.01	13.5	30.0	3	0.065	2494600
246610	A	0 - 100 - 0	0.2	0.002	13.5	30.0	3	0.065	2494610
246640	A	0 - 40 - 0	0.8	0.01	16.5	37.5	3	0.075	2494640
246641	A	0 - 40 - 0	0.8	0.01	43.4	30.0	3	0.090	2494640
246660	A	0 - 100 - 0	0.2	0.002	13.5	37.5	3	0.076	2494660
246661	A	0 - 40 - 0	0.8	0.01	43.4	37.5	3	0.090	2494660
246690	D	0 - 40 - 0	0.8	0.01	13.5	37.5	3	0.095	2494640
246691	D	0 - 40 - 0	0.8	0.01	13.5	30.0	3	0.085	2494640
246692	C	0 - 40 - 0	0.8	0.01	13.5	37.5	3	0.095	2494640
246693	C	0 - 40 - 0	0.8	0.01	13.5	30.0	3	0.085	2494640

Accessories for Precision Dial Test Indicators

VDIGI PLUS-LINE® Probes for Dial Test Indicators

- **suitable for electr. digital dial test indicators art.-no. 240680 + 240681**
- with carbide ball, length 12.5 + 36.5 mm



2409681
ø 1 x 12.5 mm



2409682
ø 2 x 12.5 mm

2409683
ø 3 x 12.5 mm

2409684
ø 1 x 36.5 mm

2409685
ø 2 x 36.5 mm

2409686
ø 3 x 36.5 mm

VSILVER-LINE® Probes for Dial Test Indicators

- **suitable for dial test indicators art.-no. 240600 - 240662**
- with carbide or ruby ball, length 12 + 35 mm



2409690
ø 0.4 x 12 mm



2409691
ø 1 x 12 mm

2409692
ø 2 x 12 mm

2409693
ø 3 x 12 mm

2409694 / Ruby
ø 2 x 12 mm



2409695
ø 1 x 35 mm

2409696
ø 2 x 35 mm

2409697
ø 3 x 35 mm

2409698 / Ruby
ø 2 x 35 mm

VBLUE-LINE® Probes for Dial Test Indicators

- **suitable for dial test indicators art.-no. 246600 - 246690**
- with carbide ball, length 13.5 mm + 16.5 mm



2409699
ø 2 x 13.5 mm

2409687
ø 2,5 x 16.5 mm

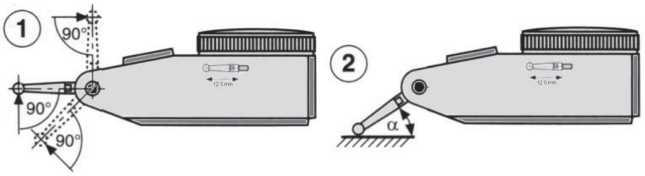
VBLUE-LINE® Spanner for Probes

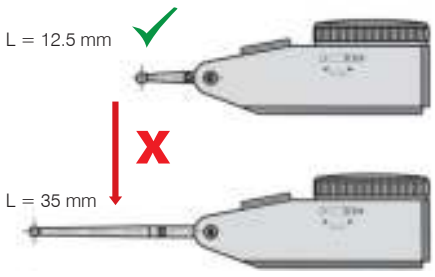


ART NO	KG
240999	0.010

Reference to application of dial test indicators

For accurate measurements the axis of the contact point must be perpendicular to the measuring direction (fig.1). If this is not possible, it is necessary to multiply the reading on the dial with a correction factor, which depends on an angle α (fig. 2). The correction factor is negligible for angles below 15°.



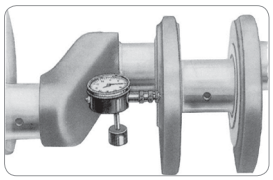


Use only the probe whose length is engraved on the housing, please!

angle α	15°	30°	45°	60°
corr.-faktor	0.96	0.87	0.70	0.50
example:				
angle α:			30° (estimated)	
reading on dial:			0.38 mm	
measuring result:			0.38 x 0.87 = 0.33 mm	

SILVER-LINE Crankshaft Testing Instruments

- for testing crankshaft deflections and for the alignment of crankshaft bearings during engine assembly
- used in ship engines, car engines, compressors, etc.



example of application



WARRANTY 2 YEARS

ART NO	mm	mm	housing-ø of dial indicator mm	KG	ART NO CC
240162	60 - 500	0.01	40	1.200	2494000

BLUE-LINE Saw Teeth Setting Dial Indicator

- designed to check the right setting of the saw teeth

- sturdy housing made of light metal, hammer blow lacquered
- dial on both sides, for right and left hand use
- with tolerance fingers and rotatable scale
- 4 bearing points for exact measurements
- spring loaded measuring plate, measuring plate-ø 10 mm



example of application



front



back

WARRANTY 2 YEARS

ART NO	mm	mm	graduation mm	mm	outer ring-ø mm	KG	ART NO CC
240370	0 - 2	0.1	0.05	1	40	0.170	2494370

SILVER-LINE Thickness Gauge

- with adjustable scale

- measuring surfaces hardend, ground and lapped
- spindle and probe made of stainless steel, measuring pressure approx. 1 N
- zero setting of the display by rotating the knurled outer ring
- different **but not** exchangeable probes are available

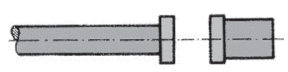
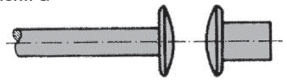
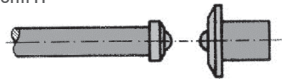
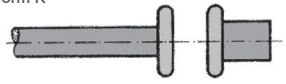
The probe type "F" is delivered as standard!
In case of order indicate the probe type, please!



TC

WARRANTY 2 YEARS

ART NO	mm	mm	throad depth mm	mm	available probes	KG
240401	0 - 10	0.1	15	10	F G H K	0.070
240402	0 - 20	0.1	15	10	F G H K	0.070

standard version 6.35 mm ø, flat	arched	ball shaped	10 mm ø, flat
form F	form G	form H	form K
			

SILVER-LINE Prec. Thickness Gauge, with ceramic measuring surface

- **very helpful for measurements on hot materials or electronic parts because of ceramic measuring surfaces etc.**

- sturdy light metal frame, lacquered, with spindle lifting lever
- ceramic measuring surfces, non conducting
- stainless spindle, hardened and fine ground
- zero setting by rotating the knurled outer ring
- incl. calibration certificate





CC | NORM | WARRANTY 2 YEARS

ART NO	mm	mm	thread depth mm	probe-ø mm	mm	KG	CC
240480	0 - 10	0.01	30	9	1	0.160	inclusive

DIGI PLUS-LINE Electr. Digital Thickness Gauge

- **pocket size, with spindle lifting knob**

- stainless, hardened measuring surfaces, rugged plastic cover
- large LCD display with clear reading, digit height 10 mm
- On/Off button, mm/inch switchable
- zero setting at any position
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual





UNIT | LR44 1.5V | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm	thread depth mm	KG
240408	0 - 10 / 0 - 0.4	0.01 / 0.0005	0.01	0.02	11	0.065

SILVER-LINE Thickness Gauge

DIN 878

- **pocket size, with spindle lifting wheel**

- measuring surfaces hardened, ground and lapped
- spindle and probe made of stainless steel, measuring pressure approx. 1 N
- reading by concentrically mm pointer
- zero setting by rotating the knurled outer ring
- different **but not** exchangeable probes are available

The probe type "F" is delivered as standard!
In case of order indicate the probe type, please!

ART NO 240404

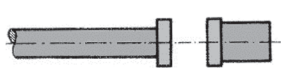
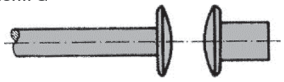
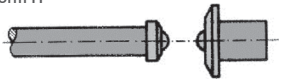
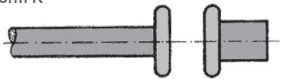


ART NO 240403



NORM | TC | WARRANTY 2 YEARS

ART NO	mm	mm	thread depth mm	available probes	mm	KG
240403	0 - 8	0.01	12	F H	1	0.070
240404	0 - 10	0.01	18	F G H K	1	0.130

standard version 6.35 mm ø, flat	arched	ball shaped	10 mm ø, flat
form F	form G	form H	form K
			

Thickness Gauge

DIN 878

- **for measuring the thickness of leather, paper, felt, rubber etc.**

- frame made of light metal, hammer blow lacquered
- measuring faces hardened, ground and lapped
- spindle and probe made of stainless steel
- zero-setting of the display by rotating the knurled outer ring
- different **but not** exchangeable probes are available

The probe type "C" is delivered as standard!
In case of order indicate the probe type, please!



type P



type L



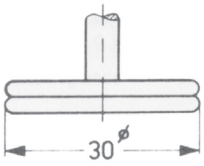
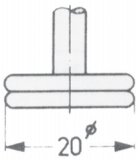
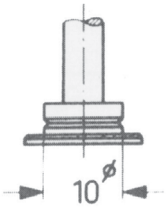
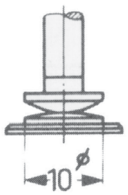
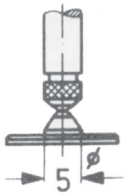
type M



type N

TC

WARRANTY 2 YEARS

rubber, felt, soft materials	rubber, felt, soft materials	soft leather, cardboard, paper, foils	hard leather, plywood etc.	sheet metals, etc.
form A	form B	form C (standard)	form D	form E
				

ART NO	mm	mm	type	throat depth mm	available probes	mm	KG	ART NO CC
240410	0 - 10	0.01	P	50	A B C D E	1	0.250	2494410
240411	0 - 10	0.01	L	50	A B C D E	1	0.250	2494410
240412	0 - 10	0.01	L	100	A B C D E	1	0.400	2494410
240413	0 - 10	0.01	M	200	A B C D E	1	0.900	2494410
240414	0 - 10	0.1	P	50	A B C D E	10	0.200	2494410
240415	0 - 10	0.1	L	50	A B C D E	10	0.200	2494410
240416	0 - 20	0.1	P	50	A B C D E	10	0.250	2494411
240417	0 - 30	0.1	N	50	A B C D E	10	0.300	2494411
240420	0 - 30	0.1	M	200	A B C D E	10	0.600	2494411
240421	0 - 30	0.1	M	300	A B C D E	10	0.900	2494411
240422	0 - 30	0.1	M	400	A B C D E	10	1.200	2494411
240423	0 - 30	0.01	M	200	A B C D E	1	0.900	2494411

SILVER-LINE Foil Thickness Gauge

- **exclusively to use to measure the thickness of thin foils**

- frame made of solid cast iron, hammer blow lacquered
- with isolation handle
- measuring surfaces hardened, ground and lapped, probe-ø 6.35 mm
- dial indicator in a dustproof housing, housing-ø 58 mm
- measuring pressure approx. 2 N, shockproof version





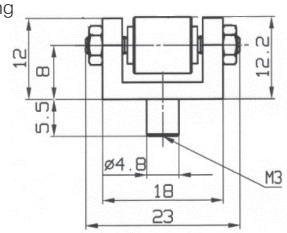
NORM TC WARRANTY 2 YEARS

ART NO	mm	mm	graduation mm	throat depth mm	mm	KG
240400	0 - 1	0.001	0 - 100	30	0.1	0.400

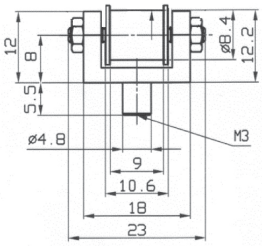
SILVER-LINE Thickness Gauge with wheels

- **designed for the measuring of threads, wires, strings, foils, etc.**
- **as special version with side discs on the lower wheel available**

- frame made of solid cast iron. hammer blow lacquered
- measuring wheels hardened and ground
- scale rotateable by a knurled outer ring
- dial indicator with spindle lifting lever
- measuring pressure approx. 1.2 N



240425 without discs



240426 with side discs



NORM TC WARRANTY 2 YEARS

ART NO	mm	mm	size of wheels length x ø mm	throat depth mm	side discs yes	side discs no	mm	KG
240425	0 - 5	0.01	8.7 x 8.4	50	-	X	1	0.400
240426	0 - 5	0.01	8.7 x 8.4	50	✓	-	1	0.400

Explore our website!



Any questions?
We are pleased to advise!

VBLUE-LINE® Quicktest “Pocotest“

- **universal and handy pocket measuring instrument**

- tungsten carbide measuring contact points
- with moveable contact arm
- incl. operation manual





TC | WARRANTY 2 YEARS

ART NO	mm	mm	L mm	Hb mm	Hf mm	F min. N	F max. N	max. mm	KG	ART NO CC
241420	0 - 10	0.1	36	5	5	0.3	1.3	0.1	0.290	2494430

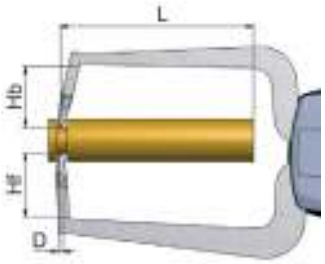
VSILVER-LINE® Quicktest Gauge “Oditest“ • IP65

- **for measuring of external grooves, bars and flats etc.**

- water proof
- tungsten carbide measuring contact points
- with moveable arm, with tolerance fingers
- zero setting by rotating the knurled outer ring
- incl. operation manual

ART NO 240437





measuring contact points can be changed against additional charge

D = form of measuring contact points

form 6 disc ø 6/10 mm	**form 7** S R 0.4 mm	**form 8** carbide ball ø 1.5 mm	**form 14** carbide ball ø 2.0 mm	**form 18** carbide ball ø 1.5 mm
				

IP 65 | NORM | CC | WARRANTY 3 YEARS

ART NO	mm	mm	form D	L mm	Hb mm	Hf mm	F min. N	F max. N	max. mm	KG	CC
[1] **240435**	0 - 10	0.005	6 / ø6	35	21.7	14.8	0.8	1.2	0.02	0.320	inclusive
[1] **240435/1**	0 - 20	0.01	6 / ø10	85	28.2	20.7	1.1	1.6	0.04	0.340	inclusive
[1] **240436**	0 - 20	0.01	7	85	24.6	24.6	1.1	1.6	0.03	0.370	inclusive
[1] **240437**	0 - 20	0.01	8	85	24.6	24.6	1.1	1.6	0.03	0.400	inclusive
[2] **240438**	0 - 50	0.05	14	170	32	32	1.2	1.8	0.05	0.430	inclusive
[2] **240439**	0 - 50	0.05	18	170	32	1	1.2	1.8	0.05	0.430	inclusive
[2] **240440**	50 - 100	0.05	14	170	32	32	1.2	1.8	0.075	0.450	inclusive
[2] **240441**	100 - 150	0.05	14	170	32	32	1.2	1.8	0.075	0.480	inclusive

SILVER-LINE Quicktest Gauge “Intertest“ • IP65

- **for measuring of internal grooves, bore etc.**

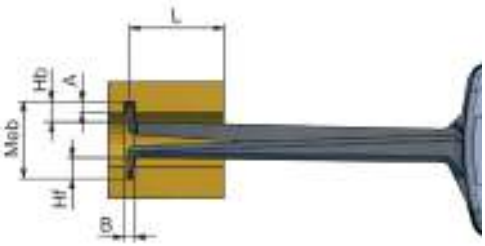
- water and colant proof acc. to DIN 40050 / IEC 60529
- tungsten carbide measuring contact points
- with rack gear
- with moveable contact arm
- with tolerance fingers
- incl. operation manual



IP 65 | NORM | CC | WARRANTY 3 YEARS

D = form of measuring contact points

form 1 S R 0.1 mm	form 2 carbide ball ø 1.0 mm	form 3 carbide ball ø 1.0 mm	form 4 carbide ball ø 0.6 mm	form 5 carbide ball ø 1.0 mm
				



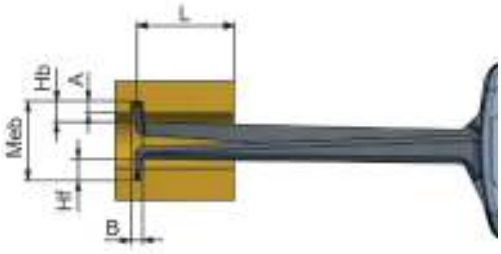
ART NO	mm	mm	form	L mm	A mm	B mm	Hb mm	Hf mm	F min. N	F max. N	max. mm	KG	CC
240530	2.5 - 12.5	0.005	1	35	0.7	0.4	0.9	0.9	0.8	1.2	0.015	0.320	inclusive
240532	5.0 - 15.0	0.005	4	35	2.3	0.8	2.5	2.5	0.8	1.2	0.015	0.320	inclusive

SILVER-LINE Quicktest Gauge “Intertest“ • IP65

- **for measuring of internal grooves, bore etc.**

- water and colant proof acc. to DIN 40050 / IEC 60529
- tungsten carbide measuring contact points
- with steel filament drive
- with moveable contact arm
- with tolerance fingers
- incl. operation manual





IP 65 | NORM | CC | WARRANTY 3 YEARS

ART NO	mm	mm	form	L mm	A mm	B mm	Hb mm	Hf mm	F min. N	F max. N	max. mm	KG	CC
240539	10 - 30	0.01	2	85	5.2	1.2	5.4	5.4	1.1	1.6	0.03	0.450	inclusive
240540	20 - 40	0.01	3	85	7.0	1.2	7.3	7.3	1.1	1.6	0.03	0.460	inclusive
240541	30 - 50	0.01	3	85	7.0	1.2	7.3	7.3	1.1	1.6	0.03	0.460	inclusive
240542	40 - 60	0.01	5	85	8.3	1.2	12.2	12.2	1.1	1.6	0.03	0.470	inclusive
240543	50 - 70	0.01	5	85	8.3	1.2	12.2	12.2	1.1	1.6	0.03	0.480	inclusive
240544	60 - 80	0.01	5	85	8.3	1.2	12.2	12.2	1.1	1.6	0.03	0.490	inclusive
240545	70. - 90	0.01	5	85	8.3	1.2	12.2	12.2	1.1	1.6	0.03	0.500	inclusive
240546	80 - 100	0.01	5	85	8.3	1.2	12.2	12.2	1.1	1.6	0.03	0.510	inclusive

DIGI PLUS-LINE

Electr. Digital External Quicktest Gauge • IP67
Electr. Digital Internal Quicktest Gauge • IP67

- **with analogous and digital display**
- **with USB interface and with Mitutoyo interface** (as accessories available)

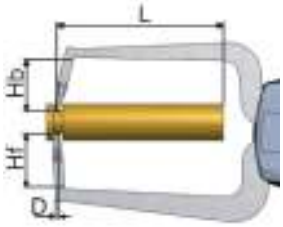
- robust, rugged plastic housing, LCD-Display with clear digits
- housing [1] oiltight, [2] water proof
- ABS and REL measuring system, red/green display for tolerance measurement
- with tungsten carbide measuring contact points, one movable contact arm
- reading in mm/inch, numeric interval switch
- incl. 1x 1.5 V Battery (type AA, art.-no.: 609282), and operation manual





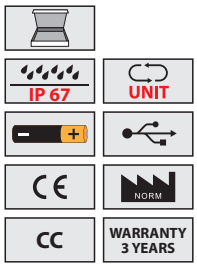
D = form of measuring contact points **external**

form A carbide ball ø 1.5 mm / ø 3.0 mm	**form B** S / R 0,4 mm	**form C** disc ø 6 / 10 mm	**form D** disc ø 50 mm	**form E** carbide ball ø 1.5 mm / ø 3.0 mm
				



D = form of measuring contact points **inside**

form F S / R 0.4 mm	**form G** S / R 0.1 mm	**form H** carbide ball ø 0.6 mm	**form K** carbide ball ø 1.0 mm	**form L** carbide ball ø 1.0 mm
				



ART NO	mm	mm	form D	L mm	Hb mm	Hf mm	F min. N	F max. N	max. mm	KG	CC
external quicktest gauge											
[1] **240300**	0 - 10	0.005	E / ø 1.5	35	19.1	18.6	0.8	1.2	0.005	0.270	inclusive
[1] **240301**	0 - 10	0.005	C / ø 6.0	35	21.7	14.8	0.8	1.2	0.005	0.270	inclusive
[1] **240302**	0 - 20	0.01	E / ø 1.5	85	24.6	24.6	1.1	1.6	0.01	0.290	inclusive
[1] **240303**	0 - 20	0.01	F	85	24.6	2.5	1.1	1.6	0.01	0.290	inclusive
[1] **240307**	0 - 20	0.01	D	85	28.2	20.7	1.1	1.6	0.01	0.300	inclusive
[2] **240304**	0 - 30	0.02	E / ø 3.0	115	22	22	1.0	1.5	0.02	0.380	inclusive
[2] **240305**	0 - 30	0.02	A / ø 3.0	115	22	1	1.0	1.5	0.02	0.380	inclusive
[2] **240306**	0 - 30	0.02	D	115	22	18	1.0	1.5	0.02	0.380	inclusive
internal quicktest gauge											
[1] **240310**	2.5 - 12.5	0.005	G	35	0.9	0.9	0.8	1.2	0.005	0.270	inclusive
[1] **240311**	5 - 15	0.005	H	35	2.5	2.5	0.8	1.2	0.005	0.290	inclusive
[1] **240312**	10 - 30	0.01	K	85	5.4	5.4	1.1	1.6	0.01	0.290	inclusive
[1] **240313**	20 - 40	0.01	K	85	7.3	7.3	1.1	1.6	0.01	0.290	inclusive
[1] **240314**	30 - 50	0.01	K	85	7.3	7.3	1.1	1.6	0.01	0.290	inclusive
[1] **240315**	40 - 60	0.01	L	85	12.2	12.2	1.1	1.6	0.01	0.290	inclusive
[1] **240316**	50 - 70	0.01	L	85	12.2	12.2	1.1	1.6	0.01	0.290	inclusive
[1] **240317**	60 - 80	0.01	L	85	12.2	12.2	1.1	1.6	0.01	0.290	inclusive
[1] **240318**	70 - 90	0.01	L	85	12.2	12.2	1.1	1.6	0.01	0.290	inclusive
[1] **240324**	80 - 100	0.01	L	85	12.2	12.2	1.1	1.6	0.01	0.330	inclusive
[2] **240319**	13 - 43	0.02	L / ø 1.5	114	4.5	2.5	1.2	1.7	0.02	0.360	inclusive
[2] **240320**	30 - 60	0.02	L / ø 2.0	114	8.0	4.0	1.3	1.87	0.02	0.380	inclusive
[2] **240321**	50 - 80	0.02	L / ø 2.0	114	8.0	4.0	1.3	1.87	0.02	0.380	inclusive
[2] **240322**	70 - 100	0.02	L / ø 2.0	114	8.0	4.0	1.3	1.87	0.02	0.380	inclusive
[2] **240323**	90 - 120	0.02	L / ø 2.0	114	8.0	4.0	1.3	1.87	0.02	0.380	inclusive

DIGI PLUS-LINE® Electr. Digital External Quicktest Gauge • IP67
Electr. Digital Internal Quicktest Gauge • IP67

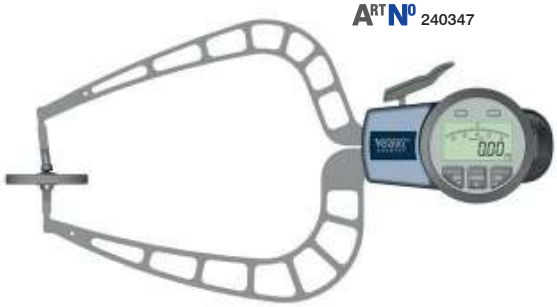
- **with extra long contact arms**
- **with analogous and digital display**
- **with USB interface and with Mitutoyo interface** (as accessories available)

- robust, rugged plastic housing
- LCD-Display with clear digits
- ABS and REL measuring system
- red/green display for tolerance measurement
- with tungsten carbide measuring contact points
- one movable contact arm
- reading in mm/inch
- numeric interval switch, repatability ± 0.04 mm
- incl. 1x 1.5 V Battery (type AA, art.-no.: 609282), and operation manual

ART NO 240345



ART NO 240347



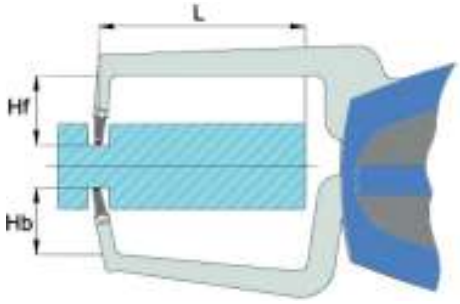
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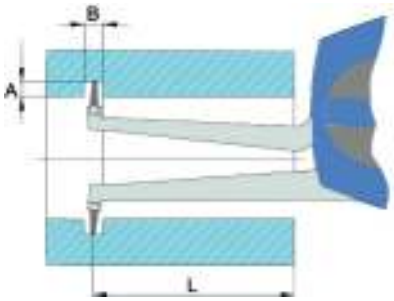


IP 67 | UNIT | NORM | CC | WARRANTY 3 YEARS

form of measuring contact points **internal** / **external**

form K carbide ball ø 1.5 mm	**form L** carbide ball ø 2.0 mm	**form E** carbide ø 5 mm	**form M** carbide ball ø 5 mm	**form D** disc ø 50 mm
				





ART NO	mm	mm	form	L mm	Hb mm	Hf mm	F min. N	F max. N	max. mm	KG	CC
external quicktest gauge											
240345	0 - 50	0.02	E	180	25.3	25.3	0.9	1.2	0.06	0.470	inclusive
240347	0 - 50	0.02	D	180	27.2	19.5	0.6	1.0	0.08	0.470	inclusive
internal quicktest gauge											
240336	15 - 65	0.02	K	175	4.5	2.5	1.0	1.2	0.06	0.440	inclusive
240337	40 - 90	0.02	L	195	8.0	4.0	1.0	1.2	0.06	0.440	inclusive

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5 g
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SILVER-LINE Universal Magnetic Measuring Stand

- **for all kind of measurements in various position**
- **for the professional use**

- chromed stem, with fine adjustment
- clamping connection by cross head at art.-no. 250201 + 250203
- with clamping connection by grip clamp at art.-no. 250204
- sturdy magnetic block, On/Off-rotary switch from aluminium, prismatic base and with a flat ground face backwards
- hammer blow blue lacquered magnetic block
- dial indicator shank ø 8 mm, ø 10 mm and dovetail





clamping head at art.-no. 250204







Option 2599201

TC | WARRANTY 3 YEARS

ART NO	total height mm	column ø x lenght mm	throat mm	thread mm	magnetic block mm	magnetic power ~ N	KG
250201	295	16 x 230	250	M 10	70 x 45 x 65	650	2.300
250203	500	20 x 420	250	M 12	75 x 60 x 80	800	5.000
250204	295	16 x 230	250	M 10	70 x 45 x 65	650	2.300
wooden box with foam insert							
2599201	for art.-no. 250201 + 250204				mm 345 x 146 x 77		0.800
2599203	for art.-no. 250203				mm 573 x 146 x 77		1.145

BLUE-LINE Universal Magnetic Measuring Stand

- **for all kind of measurements in various position**
- **economy model, for simple demands**

- chromed stem, with fine adjustment, lacquered magnetic block
- clamping connection by cross head
- sturdy magnetic block, On/Off-switch made of rugged plastic, prismatic base and with a flat ground face backwards
- dial indicator shank ø 4 mm and ø 8 mm





WARRANTY 2 YEARS

ART NO	total height mm	column ø x L mm	throat mm	thread mm	magnetic block mm	magnetic power ~ N	KG
252001	235	12 x 175	140	M 8	65 x 50 x 55	600	1.410
252002	280	16 x 220	200	M 10	65 x 50 x 55	600	1.880

SILVER-LINE Magnetic Measuring Stand

- **triple-jointed arm with central mechanical clamping**
- **particularly for use in hard to reach places**
- **high-end product with unrestricted mobility**

- elocated aluminium column, corrosion-resistant, universal rotating
- with fine adjustment by knurled screw
- sturdy magnetic block
- art.-no. 250301 with On/Off-rotary switch made of aluminium
- art.-no. 250302 with On/Off-rotary switch made of plastic
- hammer blow lacquered magnetic block
- magnetic block with prismatic base and with a flat ground face backwards
- dial indicator shank ø 8 mm and with dovetail for dial test indicators



Option 2599301

ART NO 250302



ART NO 250301



TC | WARRANTY 3 YEARS

ART NO	total height mm	column ø x lenght mm	throat mm	thread mm	magnetic block mm	magnetic power ~ N	KG
250301	430	18 x 370	320	M 10	70 x 45 x 65	650	2.000
250302	870	18 x 800	725	M 10	120 x 50 x 55	1600	3.520
wooden box with foam insert							
2599301	for art.-no. 250301			mm	307 x 170 x 70		0.780

SILVER-LINE Measuring Stand, with Vacuum-Base

- **triple-jointed arm with central mechanical clamping**
- **particularly for use in hard to reach places**
- **high-end product with unrestricted mobility**

- elocated aluminium column, corrosion-resistant, universal rotating
- with fine adjustment by knurled screw
- vacuum-base with extrem and permanent vacuum force and with locking lever
- dial indicator shank ø 8 mm and with dovetail for dial test indicators



TC | WARRANTY 3 YEARS

ART NO	total height mm	column ø x lenght mm	throat mm	thread mm	vacuum-base mm	KG
250305	395	18 x 370	320	M 8 + M 10	Ø 110	1.270

BLUE-LINE Magnetic Measuring Stand

- **with central mechanical clamping**
- **particularly for use in hard to reach places**
- **standard model with unrestricted mobility**

- chromed column, corrosion-resistant, universal turnable
- art.-no. 250401, 255001, 250319 and 250320 with sturdy magnetic block, On/Off-switch with prismatic base and with a flat ground face backwards, art.-no. 250300 and 250304 with permanent magnetic base
- with lacquered magnetic block
- dial indicator shank ø 8 mm and dovetail for dial test indicators, with fine adjustment
- art.-no. 250300 and 250320 with shank ø 6 mm and dovetail



ART NO 255001



ART NO 250401



ART NO 250320



ART NO 250319



ART NO 250304



ART NO 250300

WARRANTY 2 YEARS

ART NO	total height mm	column ø x length mm	throat mm	thread mm	magnetic block mm	magnetic power ~ N	KG
250401	360	10/14 x 270	250	M 8	65 x 50 x 55	600	1.365
255001	400	10/12 x 345	330	M 8	65 x 50 x 55	600	1.515
250300	105	10/17 x 65	45	M 5	Ø 25 x 25	120	0.195
250304	205	8/20 x 175	100	M 5	Ø 35 x 30	120	0.545
250319	210	8/20 x 175	100	M 5	36 x 30 x 35	300	0.400
250320	108	10/17 x 65	45	M 5	36 x 30 x 35	300	0.260

BLUE-LINE Universal Measuring Stand

- **with flexible articulated arm**
- **particularly for use in hard to reach places**
- **with unrestricted mobility**

- flexible stem with locking lever, adjustable to any position
- sturdy magnetic block, On/Off-switch with prismatic base and with a flat and fine ground face backwards
- with lacquered magnetic block
- dial indicator shank for ø 10 mm and ø 8 mm adjustable



WARRANTY 2 YEARS

ART NO	total height mm	column ø x length mm	throat mm	thread mm	magnetic block mm	magnetic power ~ N	KG
251501	395	16 x 340	240	M 8	65 x 50 x 55	600	1.320

VBLUE-LINE® Universal Measuring Stand

- **for measuring the parallelism of guideways and for testing the centric running on machine tools**

- chromed column, corrosion-resistant, with heavy cast iron base
- dial indicator shank ø 8 mm and dovetail for dial test indicators, with fine adjustment
- hammer blow lacquered base, all sides with fine ground faces
- clamping connection by grip clamp at art.-no. 251020
- clamping connection by cross head at art.-no. 251040
- cast iron base with prismatic base and with T-slot



WARRANTY 2 YEARS

ART NO	total height mm	column ø x length mm	throat mm	thread mm	A	B	C	D	cast iron base L x B x H mm	KG
					mm					
251020	665	16 x 230	300	M 8	10	16.2	5	6.5	260 x 62 x 52	5.970

VBLUE-LINE® Cast Iron Base

- **heavy version**
- **cast iron base with prismatic base and with T-slot**
- **hammer blow lacquered base, all sides with fine ground faces**



WARRANTY 2 YEARS

ART NO	suitable for art.-no.	A	B	C	D	cast iron base L x B x H mm	KG
		mm					
251021	251020	10	16.2	5	6.5	260 x 62 x 52	4.700

VBLUE-LINE® Magnetic Holder

- **with flat base**
- **small and compact instrument suitable for all dial indicator types**

- with sturdy, round permanent magnet
- dial indicator shank ø 8 mm



application example



WARRANTY 2 YEARS

ART NO	total height mm	column-ø mm	throat mm	magnetic base mm	KG
250504	60	16	44	ø 46 x 14	0.215

SILVER-LINE® Magnetic Base

- **the thread is eccentrically placed on the surface, so that the magnetic core is protected from smut**
- sturdy magnetic block, On/Off-rotary switch from aluminium
- hammer blow blue lacquered
- magnetic block with prismatic base and with a flat ground face backwards



WARRANTY 3 YEARS

ART NO	thread mm	suitable for art.-no.	mm	magnetic power ~ N	KG
250210	M 10	250201 / 250204 / 250301	70 x 45 x 65	650	1.230
250212	M 12	250203	75 x 60 x 80	800	2.700

BLUE-LINE® Magnetic Base

- sturdy magnetic block, On/Off-switch
- magnetic block with prismatic base and with a flat ground face backwards
- hammer blow lacquered

ART NO 252014



ART NO 252015



ART NO 250310



ART NO 252010



WARRANTY 2 YEARS

ART NO	thread mm	suitable for art.-no.	mm	magnetic power ~ N	KG
252010	M 8	252001 / 250401 / 251501 / 255001	58 x 50 x 55	600	0.950
252011	M 10	252002	60 x 50 x 55	800	1.050
252012	M 8	252001 / 250401 / 251501 / 255001	74 x 50 x 55	1000	1.200
252014	M 5	250319 / 250320	36 x 30 x 35	300	0.210
252015	M 8	252001 / 250401 / 251501 / 255001	75 x 46 x 54	600	0.600
250310	M 10	250302	118 x 50 x 55	1200	2.000

BLUE-LINE® Permanent Magnetic Base

- solid magnetic base, with permanent magnetic power
- flat base
- hammer blow lacquered



ART NO 250318



ART NO 250315

WARRANTY 2 YEARS

ART NO	thread mm	suitable for art.-no.	mm	magnetic power ~ N	KG
250315	M 5	250304	Ø 35 x 30	120	0.150
250317	M 5	250300	Ø 25 x 25	120	0.130
250318	M 8	252001 / 250401	Ø 35 x 40	120	0.150

SILVER-LINE® Vacuum Base

- **with powerful suction power**
- with locking lever
- solid aluminium dye-cast housing
- with M10 and M8 threads



WARRANTY 3 YEARS

ART NO	thread mm	suitable for art.-no.	mm	KG
250312	M8 and M10	250305	Ø 90 x 20	0.340

Measuring Stand Column

- with mechanical clamping
- with fine adjustment


ART NO 250309


ART NO 250308


ART NO 250408


ART NO 255008


ART NO 250316


ART NO 250314


ART NO 259925

WARRANTY 2 YEARS

ART NO	column ø x length mm	thread mm	suitable for art.-no.	throat	shank-ø mm	quality	KG
250308	18 x 370	M 10	250301 + 250305	aluminium	8 + dovetail	SILVER-LINE	0.780
250309	18 x 800	M 10	250302	aluminium	8 + dovetail	SILVER-LINE	1.150
250314	8/16 x 175	M 5	250304 + 250319	steel, chromed	8 + 6	BLUE-LINE	0.250
250316	10/17 x 75	M 5	250300 + 250320	steel, burnished	6	BLUE-LINE	0.050
250408	10/14 x 270	M 8	250401	steel, chromed	8 + dovetail	BLUE-LINE	0.390
255008	10/12 x 345	M 8	255001	steel, chromed	8 + dovetail	BLUE-LINE	1.230
259925	9/19 x 150/190	ø 8 x 40	shank-ø 8 mm	steel, chromed	8 + dovetail	BLUE-LINE	0.070

Measuring Stand Column

- rigid column
- with fine adjustment


ART NO 250209


ART NO 250205


ART NO 252008


ART NO 251022

WARRANTY 2 YEARS

ART NO	column ø x length mm	thread mm	suitable for art.-no.	throat	shank-ø mm	quality	KG
250205	16 x 230	M 10	250204	steel, chromed	8	SILVER-LINE	0.980
250208	20 x 425	M 12	250203	steel, chromed	8	SILVER-LINE	2.300
250209	16 x 230	M 10	250201	steel, chromed	8	SILVER-LINE	0.980
252008	16 x 220	M 10	252002	steel, chromed	8	BLUE-LINE	0.680
252009	12 x 175	M 8	252001	steel, chromed	8	BLUE-LINE	0.380
251022	16 x 290	M 14 / M8	251020	steel, chromed	8	BLUE-LINE	1.270

Measuring Stand Column

- flexible tubular steel sections
- with wire-rope tension



WARRANTY 2 YEARS

ART NO	column ø x length mm	thread mm	suitable for art.-no.	throat	shank-ø mm	quality	KG
250508	16 x 340	M 8	251501	steel, burnished	6 + 8	BLUE-LINE	0.350

Accessories and Wooden Boxes for Measuring Stands

Accessories for Measuring Stand Columns

ART Nº	article description
259902	cross joint for 250201
259903	cross joint for 250203
259909	cross joint for 252001
259910	cross joint for 252002
259906	grip clamp for 250204 + 251020
259901	dial indicator shank for 250201 / 250203 + 250204
259911	dial indicator shank for 250301 / 250302 + 250305 ø 8+dovetail
259912	dial indicator shank for 250401 + 255001 ø 8+dovetail
259904	spanner M6 for 252001 + 252002
259905	spanner M8 for 250201 / 250203 + 250204
259908	spanner M6 for 250304 + 250319



ART Nº 259902



ART Nº 259906



ART Nº 259901



ART Nº 259911



ART Nº 259912



ART Nº 259905



ART Nº 259908



ART Nº 259904

Wooden Boxes for Measuring Stands

ART Nº 2599201



ART Nº 2599301



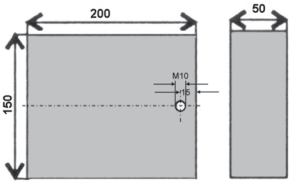
ART Nº	mm	suitable for art.-no. mm	KG
2599201	345 x 146 x 77	art.-no. 250201 + 250204	0.800
2599203	573 x 146 x 77	art.-no. 250203	1.145
2599301	307 x 170 x 70	art.-no. 250301	0.780

VSILVER-LINE® Precision Measuring Table

DIN 876/00

- made of black granite
- triple-jointed arm with central mechanical clamping
- for the measuring room and calibration laboratory

- base surface finely diamond lapped, with M 10 thread hole
- aluminium column, anodized, universal rotating
- with fine adjustment
- dial indicator shank ø 8 mm and dovetail for dial test indicators





DIN | TC | WARRANTY 3 YEARS

ART NO	mm	total height mm	throat mm	column-ø mm	eveness mm	KG
250603	200 x 150 x 50	420	320	18	0.002	5.270

VBLUE-LINE® Measuring Table

- without dial indicator

- flat measuring table, steel, hardened and ground surface
- chromed column, rigid measuring arm, with fine adjustment
- dial indicator shank ø 8 mm





NORM | WARRANTY 1 YEAR

ART NO	mm	total height mm	description of measuring table		throat mm	column-ø mm	column-ø mm	KG
			flat	serrated				
258011	ø 60	125	✓	-	75	25	0.008	3.850
258013	60 x 60	125	✓	-	75	25	0.008	3.850

VBLUE-LINE® Precision Measuring Table

- without dial indicator

- measuring table, steel, hardened and ground surface
- table with dust grooves, dial indicator shank ø 8 mm
- stainless steel column, fine ground
- with adjustable arm





NORM | WARRANTY 2 YEARS

ART NO	mm	total height mm	throat mm	angle accuracy column/table	column-ø mm	eveness mm	KG
258022	60 x 68	100	75	< 0.05 °	22	0.002	3.500
258030	98 x 115	150	120	< 0.05 °	28	0.004	8.000

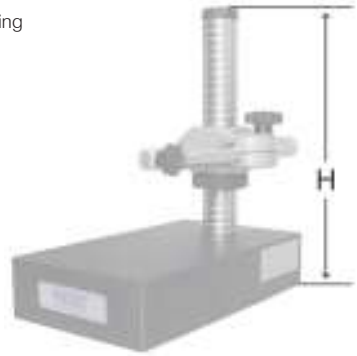
SILVER-LINE Precision Measuring Table

DIN 876/00

- **made of black granite**
- **for the measuring room and calibration laboratory**

- measuring surface fine ground and diamond lapped
- hardened column with height adjustment and setting ring
- with adjustable cross arm
- dial indicator shank ø 8 mm







DIN | TC | WARRANTY 3 YEARS

ART NO	mm table	meas.- height mm	throat mm	total height (H) mm	column-ø mm	cross arm-ø mm	KG
250815	240 x 140 x 50	165	180	270	35	22	8.900
250816*	300 x 210 x 60	235	225	360	35	22	25.500
250817*	400 x 300 x 70	300	270	450	35	22	46.000

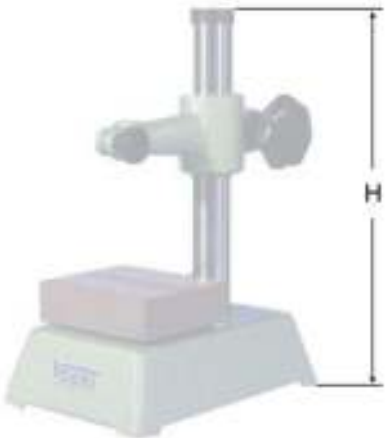
BLUE-LINE Precision Measuring Table

DIN 876/0

- **made of black granite**
- **for the measuring room and calibration laboratory**

- measuring surface finely lapped
- hardened column with height adjustment and setting ring
- with adjustable cross arm
- dial indicator shank ø 8 mm







DIN | WARRANTY 3 YEARS

ART NO	mm table	measuring height mm	throat mm	total height (H) mm	column-ø mm	KG
258050	70 x 60 x 20	100	49	195	22	2.930

SILVER-LINE Granite Measuring and Control Plate

DIN 876

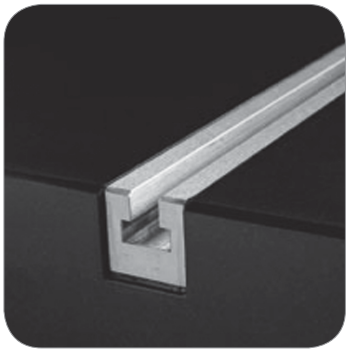
Other sizes or special designed plates are available on request!

- **particularly well selected material of highest quality, entirely faultless**
- **diamond lapped measuring surfaces, acc. to DIN 876**

- extreme hard and wear resistant and acid resistant
- T-Slots acc. to DIN 650, made of steel, **against extra charge**
- incl. workshop test certificate

Option:
- DAkkS calibration certificate on request





Option: T-slot, with extra charge

ATTENTION
We charge transport and packing costs for articles marked with *!

grade of accuracy:
should be selected according to the intended purpose

grade 00	extra fine diamond lapped for the inspection room
grade 0	fine diamond lapped for control purposes
grade I	diamond lapped for workshop use

DIN | TC | WARRANTY 3 YEARS

ART NO grade 00	accuracy ± µm	ART NO grade 0	accuracy ± µm	ART NO grade 1	accuracy ± µm	mm	KG	CC	ART NO T-slot 14 H7
260199	2.0	**260229**	4.0	**260259**	12.0	250 x 250 x 50	9.000	inclusive	2609102
260200	3.0	**260230**	6.0	**260260**	13.0	300 x 300 x 50	13.000	inclusive	2609103
260201	3.0	**260231**	6.0	**260261**	14.0	400 x 250 x 60	18.000	inclusive	2609104
260202*	3.0	**260232***	6.0	**260262***	14.0	400 x 400 x 60	32.000	inclusive	2609104
260203*	3.0	**260233***	6.0	**260263***	15.0	500 x 500 x 80	60.000	inclusive	2609105
260204*	3.0	**260234***	7.0	**260264***	16.0	630 x 400 x 80	60.000	inclusive	2609106
260205*	3.0	**260235***	7.0	**260265***	16.0	630 x 630 x 80	95.000	inclusive	2609106
260206*	4.0	**260236***	7.0	**260266***	18.0	800 x 500 x 100	120.000	inclusive	2609108
260207*	4.0	**260237***	8.0	**260267***	20.0	1000 x 630 x 100	190.000	inclusive	2609110
260208*	4.0	**260238***	8.0	**260268***	20.0	1000 x 630 x 150	285.000	inclusive	2609110
260209*	4.0	**260239***	8.0	**260269***	20.0	1000 x 1000 x 100	300.000	inclusive	2609110
260210*	4.0	**260240***	8.0	**260270***	20.0	1000 x 1000 x 150	450.000	inclusive	2609110
260211*	4.4	**260241***	8.8	**260271***	22.0	1200 x 800 x 150	432.000	inclusive	2609112
260212*	4.4	**260242***	8.8	**260272***	22.0	1200 x 800 x 200	576.000	inclusive	2609112
260213*	5.0	**260243***	10.0	**260273***	25.0	1500 x 1000 x 150	675.000	inclusive	2609115
260214*	5.0	**260244***	10.0	**260274***	25.0	1500 x 1000 x 200	900.000	inclusive	2609115
260215*	6.0	**260245***	12.0	**260275***	30.0	2000 x 1000 x 200	1200.000	inclusive	2609120
260216*	6.0	**260246***	12.0	**260276***	30.0	2000 x 1000 x 250	1500.000	inclusive	2609120

Stands for Granite and Ceramic Plates

BLUE-LINE® Safety-Stand
SUVA-design

- **type „Profi“**

- solid angular steel construction, powder coated, grey (RAL 7001)
- for a working height of approx. 900-1000 mm adjustable
- with protective device against misalign
- 3-point support M 24 x 80 mm
- 2 extra support for tipping protection, with adjusting screws
- single packed on an Euro-pallet

ATTENTION
We charge transport and packing costs for articles marked with *!

type „Profi“



BLUE-LINE® Tool Cabinet
SUVA-design

- **type „Super“**

- solid sheet-steel construction, powder coated, grey (RAL 7001)
- for a working height of approx. 900 - 1000 mm adjustable
- drawers are with ball bearing application
- 3-point support M 24 x 80 mm
- 2 extra support for tipping protection, with adjusting screws
- single packed on an Euro-pallet

type „Super“





WARRANTY 2 YEARS

ART NO „Profi“	ART NO „Super“	suitable for plate size mm	KG „Profi“	cabinet mm	doors	KG „Super“
260901*	-	630 x 400	16.000	-	-	-
260902*	-	630 x 630	27.000	-	-	-
260903*	**260950***	800 x 500	29.000	800 x 500	1	54.000
260904*	**260951***	1000 x 630	42.000	1000 x 630	1	60.000
260905*	**260952***	1000 x 1000	46.000	1000 x 1000	2	85.000
260906*	**260953***	1200 x 800	50.000	1200 x 800	2	85.000
260907*	**260954***	1500 x 1000	54.000	1500 x 1000	2	103.000
260908*	**260955***	2000 x 1000	60.000	2000 x 1000	2	120.000

VBLUE-LINE® Levelling Jacks

- **for granite plates up to 1000 x 630 mm**

- large adjusting range
- support in the ball joint



WARRANTY 2 YEARS

ART NO	quantity / singly	description	mm	KG
269074	1	table adjustment	60 - 130 mm	0.260

VBLUE-LINE® Tailstock Pair

- **made of dense, aged and stress relieved special cast iron with high wear resistance**
- **one tailstock with stationary and one with axially adjustable tail spindle**
- **spindles and dead centres are hardened and precision ground**
- **sliding blocks with a nominal size of 14 mm**
- **tailstocks can be fixed to the T-slot with the help of an excentric adjusting device**

- hand wheel, adjustable by means of an adjustable tail pressure
- tail stocks can be delivered with or without hardened and precision ground 90° prisms (as option, with extra charge!)
- the prisms are needed for excentrically shanks or for measuring of extra large shanks, which exceed over the length of the tail stock pair
- **in case of order, please mention the needed grade**



Option (special construction)
tailstocks with hand wheel, adjustment suitable for heavy work pieces. Height adjustment possible through ground screw-thread with hand wheel (fine adjustment).

WARRANTY 2 YEARS

ART NO	center height mm	inside tape MK	total length mm	grade/00	grade/0	grade/1	KG pair
269060	100	2	290	± 0.004 mm	± 0.008 mm	± 0.015 mm	10.00
269061	150	2	360	± 0.004 mm	± 0.008 mm	± 0.015 mm	25.00
269062	200	2	390	± 0.004 mm	± 0.008 mm	± 0.015 mm	30.00
269063*	250	3	490	± 0.004 mm	± 0.008 mm	± 0.015 mm	55.00
269064*	300	3	570	± 0.004 mm	± 0.008 mm	± 0.015 mm	80.00

VSILVER-LINE® Granite Master Square 90°

- **particularly well selected material of highest quality, entirely faultless**
- **2 diamond lapped measuring surfaces acc. to grade 00**

- 90° angle machined
- extreme hard and wear-resistant, acid-resistant
- calibration certificate available on request



NORM TC WARRANTY 2 YEARS

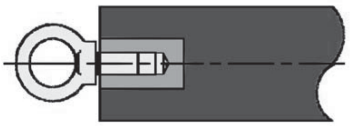
ART NO	max. ± µm		angle length mm	width mm	KG
grade 00					
260500	2.0	2.0	200 x 150	50	2.500
260501	2.5	2.5	300 x 200	50	5.000
260502	2.5 / 3.0	3.0	400 x 250	60	10.000
260503*	2.5 / 3.0	3.5	500 x 300	80	20.000
260504*	3.0	4.0	630 x 400	80	35.000
260505*	4.0/ 3.0	5.0	800 x 500	100	95.000
260506*	4.0 / 3.0	6.0	1000 x 600	100	105.000

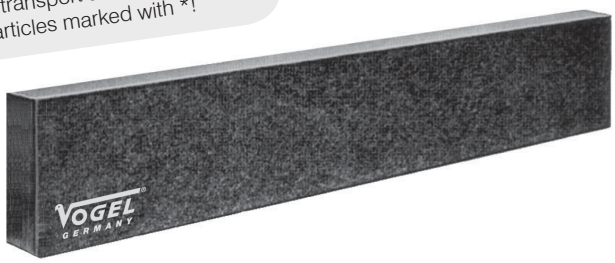
SILVER-LINE® Precision Gauge Block

- **particularly well selected material of highest quality**
- **2 diamond lapped measuring surfaces acc. to grade 00**

- entirely faultless, from up 800 mm length with transport lugs
- calibration certificate available on request

ATTENTION
We charge transport and packing costs for articles marked with *!





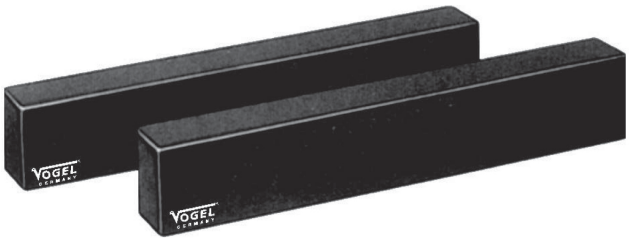
NORM | TC | WARRANTY 2 YEARS

ART NO grade 00	max. ± µm	mm	KG
260530	3.0	630 x 50 x 100	10.000
260531	4.0	800 x 50 x 120	15.000
260532*	4.0	1000 x 60 x 150	27.000
260533*	5.0	1200 x 60 x 180	39.000
260534*	6.0	1500 x 70 x 200	63.000
260535*	6.0	2000 x 80 x 250	120.000

SILVER-LINE® Precision Pair of Parallels

- **particularly well selected material of highest quality**
- **2 measuring surfaces parallel machined as a pair acc. to grade 00**

- entirely faultless
- calibration certificate available on request



NORM | TC | WARRANTY 2 YEARS

ART NO grade 00	max. ± µm	mm	KG
260550	2.0	100 x 15 x 25	0.200
260551	2.0	150 x 20 x 30	0.500
260552	2.0	200 x 25 x 40	1.200
260553	2.0	250 x 30 x 50	2.200
260554	3.0	300 x 40 x 70	5.000
260555	3.0	400 x 50 x 100	12.000

BLUE-LINE® Maintenance Set for Granite Plates

- **consisting of cleaner and care oil**

- environmentally friendly
- cleaner protects, maintains and extends the life of granite surfaces
- care oil ensures easy sliding of workpieces and works for wear reducing

Other volumes are available, on request!

ART NO 260299



ART NO 260299/2



ART NO	cleaner content ltr.	care oil content ltr.	cleaner concentrate content ltr.	KG
260299	0.5	0.5	-	1.076
260299/2	-	-	5.0	5.100

SILVER-LINE Granite Master Squares 90°

- **particularly well selected material of highest quality acc. to grade 00**

- entirely faultless, extreme hard and wear-resistant, acid-resistant
- base and 2 small measuring surfaces
- calibration certificate available on request



ATTENTION
We charge transport and packing costs for articles marked with *!

TC | WARRANTY 2 YEARS

ART NO grade 00	max. ± µm		mm	KG
260520	2.5	2.5	300 x 100 x 80	6.000
260521	3.0	3.5	500 x 150 x 120	23.000
260522*	4.0	5.0	800 x 220 x 150	70.000
260523*	4.0	6.0	1000 x 250 x 200	125.000

SILVER-LINE Granite Master Squares 90°

- **particularly well selected material of highest quality**
- **measuring surfaces acc. to grade 00**

- entirely faultless, extreme hard and wear-resistant, acid-resistant
- measuring surfaces absolut plane and rectangular finely ground quality
- calibration certificate available on request



ATTENTION
We charge transport and packing costs for articles marked with *!

TC | WARRANTY 2 YEARS

ART NO grade 00	max. ± µm squareness	straightness	parallelism	mm	KG
260580	2.0	0.9	2	200 x 200 x 25	2.600
260582	2.6	1.1	2.6	300 x 300 x 30	7.100
260584*	3.5	1.5	3.5	500 x 500 x 50	38.000

Other sizes are available on request!

Straightening Plates

ATTENTION
We charge transport and packing costs for articles marked with *!

BLUE-LINE® Straightening Plates

- **solid or ribbed construction**
- **special wear resistant steel casting**

- surfaces and four sides fine planed
- against extra charge the plates can be supplied also with bores, holes or T-slots



WARRANTY 1 YEAR

ART NO solid	mm	KG
261400	200 x 200 x 40	12.000
261401*	300 x 300 x 50	34.000
261402*	400 x 400 x 50	60.000
261403*	500 x 500 x 60	112.000
261404*	600 x 600 x 70	189.000
261405*	700 x 700 x 80	294.000
261406*	800 x 800 x 100	480.000
261407*	1000 x 800 x 100	600.000
261408*	1000 x 1000 x 110	730.000
261409*	1200 x 800 x 80	560.000
261410*	1200 x 1000 x 110	990.000
261411*	1500 x 1000 x 120	1.350.000
261412*	2000 x 1000 x 120	1.800.000

ART NO ribbed	mm	rib height mm	KG
261500	200 x 200 x 20	40	9.000
261501	300 x 300 x 20	40	16.000
261502*	400 x 400 x 30	50	42.000
261503*	500 x 500 x 40	40	84.000
261504*	600 x 600 x 40	40	120.000
261505*	700 x 700 x 40	40	165.000
261506*	800 x 800 x 40	40	216.000
261507*	1000 x 800 x 40	60	270.000
261508*	1000 x 1000 x 40	60	340.000
261509*	1200 x 800 x 60	60	470.000
261510*	1200 x 1000 x 60	60	590.000
261511*	1500 x 1000 x 60	60	735.000
261512*	2000 x 1000 x 60	60	980.000

BLUE-LINE® Stands

- **suitable for straightening plates**

- solid steel construction
- for a working height of approx. 800 mm



WARRANTY 1 YEAR

ART NO	for straightening plate size mm	quantity of legs	KG
269102*	400 x 400	4	16.000
269103*	500 x 500	4	27.000
269104*	600 x 600	4	29.000
269105*	700 x 700	4	42.000
269106*	800 x 800	4	46.000
269107*	1000 x 800	4	50.000
269108*	1000 x 1000	4	54.000
269109*	1200 x 800	4	54.000
269110*	1200 x 1000	4	65.000
269111*	1500 x 1000	4	72.000
269112*	2000 x 1000	4	86.000

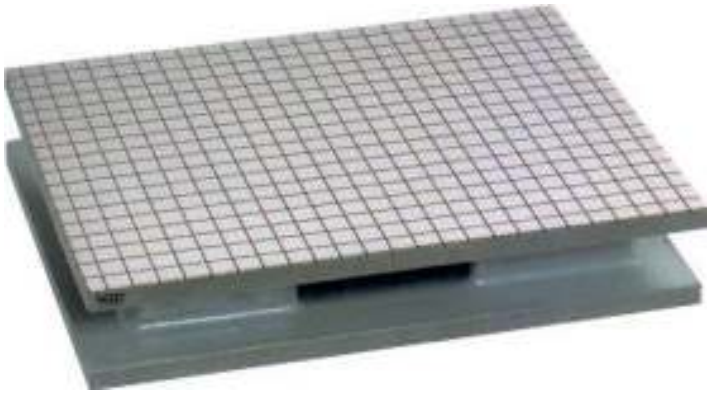
BLUE-LINE Lapping and Control Plate

DIN 876/1

- **for lapping, flatness measuring and as base line**

- special high-density cast iron
- top and bottom surfaces finest ground
- upper surface is additionally squared, with dust grooves

ATTENTION
We charge transport and packing costs for articles marked with *!



DIN | WARRANTY 2 YEARS

ART NO	mm	eveness mm	KG	ART NO wooden box
262101	360 x 260 x 65	0.0014	22.000	2699036

BLUE-LINE Control-, Surface- and Testing Plate

DIN 876

- **special wear-resistant casting with additionally steel**

- strong ribbed construction, side surfaces reinforced
- measuring surface according to DIN 876
- side surfaces carefully planed or milled
- with supporting points, corresponding to the size of plate
- against extra charge we supply the plates with handle and with protective wooden cover

grade 0 = fine scraped and finished
grade 1 = fine finished
grade 3 = fine planed



DIN | WARRANTY 2 YEARS

ART NO grade 0	ART NO grade 1	ART NO grade 3	ART NO pair of handle	ART NO wooden cover	mm	KG
261002	261102	261302	269070	2699020	200 x 200	7.000
261005	261105	261305	269070	2699030	300 x 300	19.000
261007*	261107*	261307*	269070	2699040	400 x 400	27.000
261008*	261108*	261308*	269071	2699054	500 x 400	37.000
261009*	261109*	261309*	269071	2699050	500 x 500	50.000
261011*	261111*	261311*	269071	2699065*	600 x 500	59.000
261014*	261114*	261314*	-	2699085*	800 x 500	100.000
261018*	261118*	261318*	-	2699160*	1000 x 600	164.000
261020*	261120*	261320*	-	2699180*	1000 x 800	236.000
261021*	261121*	261321*	-	2699100*	1000 x 1000	290.000
261022*	261122*	261322*	-	2699128*	1200 x 800	287.000
261024*	261124*	261324*	-	2699157*	1500 x 1000	465.000
261026*	261126*	261326*	-	2699210*	2000 x 1000	890.000

Other sizes are available on request!

BLUE-LINE® Stands

- **suitable for Control- and Testing Plates**
- **from about 1200x800 mm size we recommend single supporting feets**

- solid steel construction
- for a working height of approx. 800 mm

Option
- adjusting screw art.-no. 209096 (singly), to make it possible to adjust exactly in the horizontal level

ATTENTION
We charge transport and packing costs for articles marked with *!



WARRANTY 2 YEARS

ART NO	mm	KG
269018*	400 x 400	23.000
269019*	500 x 400	24.000
269020*	500 x 500	25.000
269021*	600 x 500	26.000
269026*	800 x 500	30.000
269029*	1000 x 600	35.000
269031*	1000 x 800	40.000
269032*	1000 x 1000	45.000
269033*	1200 x 800	45.000
269036*	1500 x 1000	50.000
269038*	2000 x 1000	82.000

BLUE-LINE® Levelling Jack

- **suitable for Control- and Testing Plates up to 1000 x 630 mm**

- large adjusting range
- support in the ball joint



WARRANTY 2 YEARS

ART NO	quantity	product description	max. mm	KG
269074	1	levelling jack	60 - 130 mm	0.260

BLUE-LINE® Supporting Feet

- **especially for straightening plates**

- made of special casting
- with adjusting screw



WARRANTY 2 YEARS

ART NO	stand height mm	adjusting height mm	KG
269076*	250 - 300	50	21.000
269077*	350 - 400	50	27.000
269078*	450 - 500	50	32.000
269079*	550 - 600	50	38.000
269081*	650 - 700	50	43.000

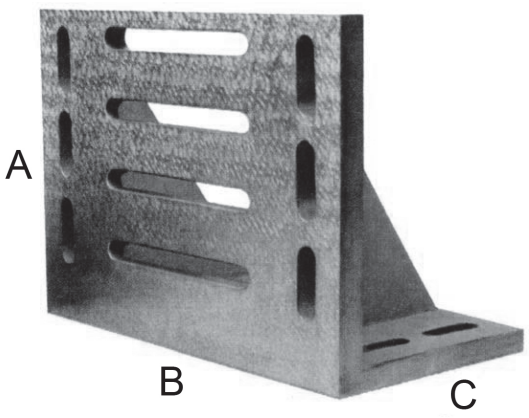
BLUE-LINE Angle Plates

DIN 875 and DIN 876

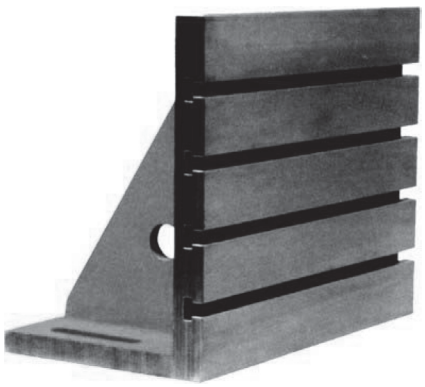
- **construction with clamping slots or with clamping T-slots**

- made of special cast iron with high resistance to wear
- accuracy of measuring surfaces according to DIN 876
- accuracy of angle according to DIN 875
- side areas carefully milled
- T - Slots acc. to DIN 650 machined in H12

ART NO 261604



ART NO 261704



DIN | NORM | WARRANTY 2 YEARS

ART NO slots grade 1	ART NO slots grade 3	mm B x A x C	slot width mm	KG
261600	**261640**	150 x 100 x 75	14	3.000
261601	**261641**	200 x 150 x 100	15	6.000
261602	**261642**	275 x 200 x 150	17	12.000
261603	**261643**	300 x 250 x 150	17	16.000
261604*	**261644***	400 x 300 x 225	20	38.000
261605*	**261645***	500 x 400 x 300	26	75.000
261606*	**261646***	600 x 500 x 350	24	146.000
261607*	**261647***	700 x 520 x 390	24	156.000
261608*	**261648***	800 x 600 x 450	24	220.000
261609*	**261649***	1000 x 800 x 600	30	431.000
261610*	**261650***	1200 x 1000 x 700	30	850.000
261611*	**261651***	1500 x 1250 x 900	30	1370.000

ART NO T-slots grade 1	ART NO T-slots grade 3	mm B x A x C	T-slot width mm	KG
261700	**261740**	150 x 100 x 75	10	5.000
261701	**261741**	200 x 150 x 100	12	12.000
261702*	**261742***	300 x 250 x 150	12	32.000
261703*	**261743***	400 x 300 x 225	18	58.000
261704*	**261744***	500 x 400 x 300	18	115.000
261705*	**261745***	600 x 500 x 350	18	180.000
261706*	**261746***	700 x 520 x 390	22	160.000
261707*	**261747***	800 x 600 x 450	22	350.000
261708*	**261748***	1000 x 800 x 600	22	605.000
261709*	**261749***	1200 x 1000 x 700	22	1250.000
261710*	**261750***	1500 x 1250 x 900	22	2200.000

Other sizes are available on request!





Your advertisement...

creative and specific!

Our marketing team supports your efforts in promoting our products and services to your customers.

We are pleased to advise!





BLUE-LINE® Marking Ink

- **for the marking of machining points on metal surfaces**

- drys within seconds
- non-reflective fluid
- good adhesions and can be removed easily
- 2 different colours available
- delivery in a spray can (FCKW-free) or in a canister



ART NO	colour	contents ml	spray can	canister	KG
262602	blue	300	✓	-	0.308
262603	blue	500	-	✓	0.444
262604	blue	1000	-	✓	0.922
262612	red	300	✓	-	0.308
262613	red	500	-	✓	0.444
262614	red	1000	-	✓	0.922

BLUE-LINE® Dressing Paste

- **the test pieces are covered with the dressing paste, then moved one after the other or on a dressing plate: by this the paste forms a colour coat, showing the eveness**

- easy to remove
- 2 different colours available
- delivery in a tube or in a plastic box



ART NO	colour	contents ml	tube	box	KG
262631	blue	80	✓	-	0.086
262632	blue	250	-	✓	0.313
262641	red	80	✓	-	0.086
262642	red	250	-	✓	0.313

BLUE-LINE® Special Cleaner

- **this cleaner dissolves dressing paste, marking ink etc.**

- skin friendly
- delivery in a spray can or canister



ART NO	contents ml	spray can	canister	KG
262643	300	✓	-	0.300
262644	1.000	-	✓	0.920

SILVER-LINE Precision Parallel Support Set

- **14 pairs of parallels**

- special steel, carefully hardened and strain-removed, HRC 58-60
- longitudinal surfaces are plane parallel machined and extra fine adjusted in pairs
- flat positioned in a wooden box



TC | NORM | WARRANTY 2 YEARS

ART NO	thickness mm	mm	accuracy for height ± mm	KG
260600	14 / 16 / 18 / 20 / 22 / 24 / 26 / 28 / 30 / 32 / 35 / 40 / 45 / 50	150 x 10 ±0.05	0.01	12.000

SILVER-LINE Precision Parallel Support Set

- special steel, carefully hardened and strain-removed, HRC 58-60
- longitudinal surfaces are plane parallel machined and extra fine adjusted in pairs



TC | NORM | WARRANTY 2 YEARS

ART NO	mm		set contents pair	range mm	max. mm	KG
260601	2x5 / 3x6 / 4x7 / 5x8 / 6x9 / 2x10 / 3x11 / 4x12 / 5x13 / 6x14 / 2x15 / 3x16 / 4x17 / 5x18 / 6x19 / 2x20 / 3x21 / 4x22 / 5x23 / 6x24	100	20	2 - 24	0.01	2.200
260602	8x11 / 10x13 / 12x15 / 14x17 / 8x16 / 10x18 / 12x20 / 14x22 / 8x21 / 10x23 / 12x25 / 14x27 / 8x26 / 10x28 / 12x30 / 14x32 / 8x31 / 10x38 / 12x40 / 14x42	125	24	8 - 42	0.01	14.000
260603	8x11 / 10x13 / 12x15 / 14x17 / 8x16 / 10x18 / 12x20 / 14x22 / 8x21 / 10x23 / 12x25 / 14x27 / 8x26 / 10x28 / 12x30 / 14x32 / 8x31 / 10x38 / 12x40 / 14x42	150	24	8 - 42	0.01	17.000

SILVER-LINE Precision Parallel Support Set

DIN 6346 P

- special steel, carefully hardened and strain-removed, HRC 58-60
- longitudinal surfaces are plane parallel machined and extra fine adjusted in pairs



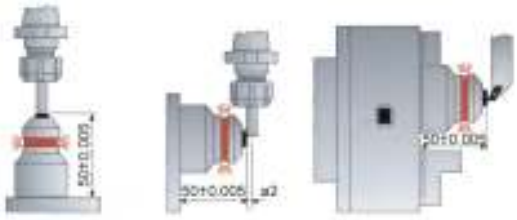
TC | DIN | WARRANTY 2 YEARS

ART NO	mm accuracy for height and width acc. to DIN 2768 IT5		set contents pair	range mm	KG
260610	8 x 2.5 / 10 x 3.2 / 12 x 4 / 16 x 5 / 20 x 6.3	63	9	2.5 - 25	1.300
	12 x 4 / 16 x 5 / 20 x 6.3 / 25 x 8	100			
260611	12 x 4 / 16 x 5 / 20 x 6.3 / 25 x 8	100	7	4 - 40	3.800
	25 x 8 / 32 x 10 / 40 x 12	160			
260612	25 x 8 / 32 x 10 / 40 x 12	100	5	8 - 63	7.400
	50 x 16 / 63 x 20	160			
260613	63 x 20 / 80 x 25 / 100 x 32	250	3	20 - 100	27.100
260614	12 x 4 / 16 x 5 / 20 x 6.3 / 25 x 8 / 32 x 10	100	5	4 - 32	1.500
260615	25 x 8 / 32 x 10 / 40 x 12 / 50 x 16	160	4	8 - 50	5.000

BLUE-LINE Electr. Zero Setting Device

- **with LED signal light**

- with magnetic inserts in the bottom
- red LED lights, when contact is given
- incl. 2 batteries 1.5 V (type LR44, art.-no.: 2020192/B)







ART NO	base-ø mm	contact plate-ø mm	total height mm	KG
271065	56	13.5	50	0.500

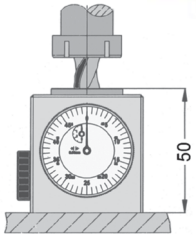
BLUE-LINE Zero Setter
with or without permanent magnetic base

- **to adjust the tools, for example milling tools, to the „0"-position and for to determine the reference point of the machine spindle**
- **no feeler gauge or starting contact is needed**
- **no damages at the measuring element and at the work piece**

Operational instruction:
- calibrate the zero setter by putting a parallel on the setter and press it against on the spring loaded surface and set the dial gauge at „0"
- put the setter on machine table or workpiece reference surface. Move spindle to bring cutting tool to touch measuring surface and read
- the dial gauge carefully. When the dial points are at „0", the distance between tool end and machine table is 50 mm (± 0.01 mm)
- art.-no. 271051 without magnet
- art.-no. 271052 with magnet







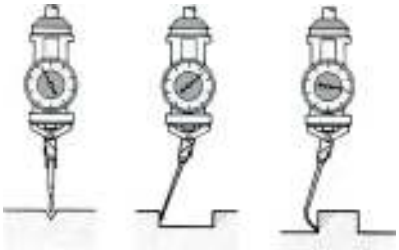


ART NO	mm		spring range of contact plate mm	contact plate-ø mm	total height mm	mm	max. ± mm	KG
271051	0.01	X	0 - 2	32	50	50 x 50 x 50	0.01	0.970
271052	0.01	✓	0 - 2	32	50	50 x 50 x 50	0.01	0.970

BLUE-LINE Centering Indicator

- **for the centrical alignment of bores and spindles on tool machines**

- with bended and straight probes in different length
- clamping shaft ø 10 mm
- reading 0.01 mm
- accuracy of centering 0.02 mm



ART NO 272011



ART NO 272001



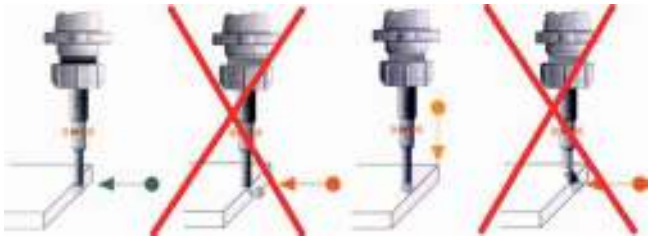
ART NO	mm	mm	Length of straight sensors mm	Length of bended sensors mm	Length of center sensor mm	KG
272001	0.01	0 - 3	45, 100, 154	46, 100, 154	52.5	0.280
272011	probes set	-	45, 100, 154	46, 100, 154	52.5	0.200

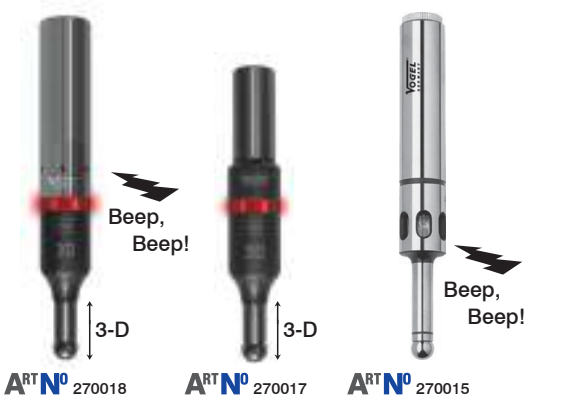
Edge Finders

BLUE-LINE® Edge Finders

- with LED signal light
- art.-no. 270015 + 270018 with acoustic signal and signal light
- for adjusting basic surfaces or edges

- stainless. hardened, fine ground
- with hardened contact ball





WARRANTY 2 YEARS

ART NO	type	acoustic signal	contact ball-ø mm	clamping shaft-ø mm	mm	KG	ART NO battery	battery type
★★★★★ 270013	2-D	-	10	20	158	0.172	272013	R 1 N / 1.5 V
★★★★★ 270015	2-D	✓	10	20	158	0.220	272015	23 A / 12 V
★★★★★ 270017	3-D	-	10	16	111	0.102	272015	23 A / 12 V
★★★★★ 270018	3-D	✓	10	20	131	0.110	272015	23 A / 12 V

★★★★★ SILVER-LINE® 3-D Probe, with Dial Indicator

- extremely slim and rugged housing
- allows quick and easy determination of workpiece zero points and length

- contact point with predetermined breaking point
- large travel paths, limited by mechanical stops
- solid carbide ball, with standard probe, size ø 3 x 27 mm (art.-no. 279911)



probe

270210


measurement scale

270215


measurement scale



TC WARRANTY 3 YEARS

ART NO	type	mm	contact ball-ø mm	clamping shaft-ø mm	mm	KG
270210	3-D	-1.5 / 0 / 2	3	12	124	0.325
270215	3-D	-1.5 / 0 / 2	3	12	134	0.340

SILVER-LINE® Probes, as Spare Part

- solid carbide ball


ART NO 279911


ART NO 279912

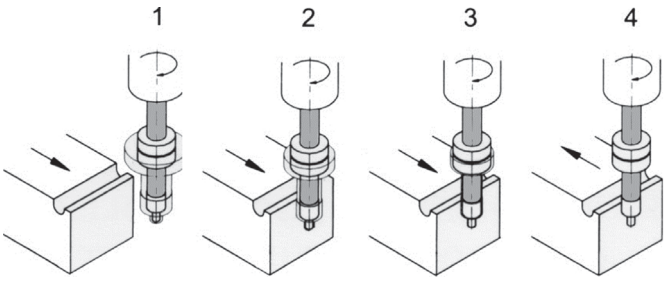
ART NO	description	ball-ø mm	mm	KG
279911	probe „Standard“	3	27	0.005
279912	probe „Extra“	6	62	0.015

BLUE-LINE Edge Finder

- with ceramic contact tip (anti-magnetic)
- mechanical version
- for adjusting basic surfaces or edges

- rotational speed of spindle approx 400 - 600 r.p.m.
- contact tip in ceramic, hardness HV 1350

Option
Spare Part Spring art.-no. 270090 for 270002 / 270003
Spare Part Spring art.-no. 270091 for 270001




ART NO 270003


ART NO 270002


ART NO 270001

WARRANTY 2 YEARS

ART NO	contact tip-ø mm	clamping shaft-ø mm	mm	KG
270001	10	10	85	0.030
270002	10	10	83	0.058
270003	4/10	10	90	0.060

BLUE-LINE Edge Finder

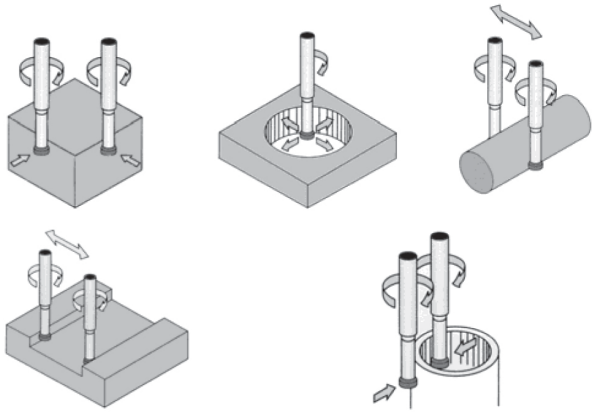
- hardened or titanium coated (anti-magnetic)
- mechanical version
- for adjusting basic surfaces or edges

- rotational speed of spindle approx 400 - 600 r.p.m.
- steel hardened, HRC 58 / titanium coated, HV 2500

Options
Spare Part Spring art.-no. 270090 for 270010 / 270011 / 270030 / 270031
Spare Part Spring art.-no. 270091 for 270009


ART NO 270030


ART NO 270031




ART NO 270011


ART NO 270010


ART NO 270009

WARRANTY 2 YEARS

ART NO steel, hardened	ART NO titanium coated (anti-magnetic)	contact tip-ø mm	clamping shaft-ø mm	mm	KG
270009	-	6 / 10	10	64	0.028
270010	270030	10	10	84	0.060
270011	270031	4 / 10	10	88	0.060

DIGI PLUS-LINE® Electr. Digital Hand Tachometer

- **with LCD display for optical or mechanical speed detection**

- measurement accuracy is ± 0.02 % from the end value ± 1 digit
- 5 digit LCD display, sturdy ABS plastic housing
- direct and non-contact recording of rotation
- automatic Off-function, after 30 sec.
- automatic Min/Max/Average memory-function, recall by memory button
- mode function for different measurement units
- extensive accessories is included: Hand Tachometer, 10 reflective tags, adaptor for direct measuring 1:1, rubber tip, track wheel 0.1 m and 6"
- incl. 2x 1.5 V battery (type AA, art.-no. 609282) operation manual and test certificate, in sturdy carrying case

Option
- art.-no. 270160/8 set of reflective tags (10 pcs.)

ART NO 270160







UNIT · TC · WARRANTY 3 YEARS

ART NO	1 / min.	measuring distance max. mm	storage temperature ° C	operation temperature ° C	KG	ART NO CC
270160	1 - 99999	600 (optically)	-20° ~ +70 °	0° ~ +50 °	0.250	2794110

DIGI PLUS-LINE® Electr. Digital Hand Tachometer

- **especially for maintenance and service tasks for lifts**
- **special set for lift and wire/cable measurement**
- **with LCD display for optical or mechanical speed detection**

- measurement accuracy is ± 0.02 % from the end value ± 1 digit
- 5 digit LCD display, sturdy ABS plastic housing
- direct and non-contact recording of rotation
- automatic Off-function, after 30 sec.
- automatic Min/Max/Average memory-function, recall by memory button
- mode function for different measurement units
- extensive accessories is included: Hand Tachometer, 10 reflective tags, adaptor for direct measuring 1:1, rubber tip, track wheel 0.1 m and 6", adapter for lift-, textile yarn- and wire measuring
- incl. 2x 1.5 V battery (type AA, art.-no. 609282) operation manual and sturdy carrying case

Option
- art.-no. 270160/8 set of reflective tags (10 pcs.)

ART NO 270161









UNIT · TC · WARRANTY 3 YEARS

ART NO	1 / min.	measuring distance max. mm	storage temperature ° C	operation temperature ° C	KG	ART NO CC
270161	1 - 99999	600 (optically)	-20° ~ +70 °	0° ~ +50 °	0.250	2794110

Accessories for Electr. Digital Handtachometers



ART NO 270160/1



ART NO 270160/2



ART NO 270160/3



ART NO 270160/4



ART NO 270160/5



ART NO 270160/6



ART NO 270160/7



ART NO 270160/8



ART NO 609282

In each set contain:

set content	 270160/1	 270160/2	 270160/3	 270160/5 270160/4	 0.1 m 270160/6	 6“ 270160/7	 270160/8	 609282	
270160	-	✓	✓	✓	✓	✓	✓	✓	✓
270161	✓	✓	✓	✓	✓	✓	✓	✓	✓

ART NO	product description
270160/1	adapter
270160/2	extension shaft
270160/3	change attachment
270160/4	drive cone

ART NO	product description
270160/5	drive tip
270160/6	measuring wheel 0.1 m
270160/7	measuring wheel 6“
270160/8	set of reflective tags, 10 pcs.

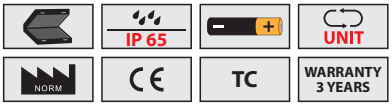
DIGI PLUS-LINE® Electr. Digital Stroboscope • IP65

- water-, coolant proof and shock resistant hand-held device
- e.g. for use in the automotive industry and mechanical engineering
- for measuring the speed of high-speed turns
- in a rugged aluminium- / ABS plastic-housing
- with modern LED technology, precise working electronic
- for non-contact measurements

- large LCD display, multiple lines
- with adjustable flash duration, light emission 1500 lux @ 6000 FPM / 20 cm
- no waste of flash tubes
- resolution ± 0.1 (30 ~ 999 FPM) / ±1 (1000~300000 FPM); FPM=flashes/min.
- operation temperature 0° C ~ +45° C
- incl. 3x 1.5 V battery (type AA, art.-no.: 609282), operation time max. 10 hrs.
- in sturdy carrying case, with operation manual







ART NO	FPM	max.	flash colour	mm	KG
610101	30 ~ 300000	0.02% (±1 Digit)	white 6500 K	195 x 95 x 50	0.400

DIGI PLUS-LINE® Electr. Digital Force Gauge

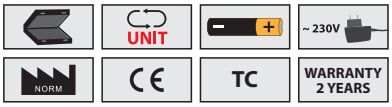
- **robust push/pull force gauge, for simple measurements**

- measurement accuracy is 0.5 % from max. of capacity
- data sampling rate 1000 Hz, large LCD display with backlight
- overload protection 2% of full scale
- reversible display with automatic direction detection
- with peak hold function, real time or peak hold mode to observe
- automatic power-Off
- incl. standard attachments and extension rod 90 mm long
- incl. 1x 1.5 V battery (type AAA, art.-no.: 609283), charger and operation manual





standard attachments and extension rod 90 mm



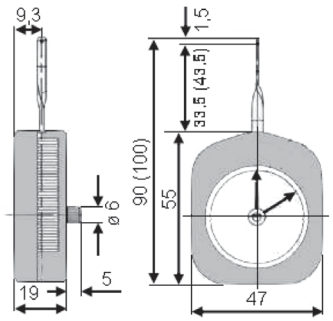
ART NO	N max.	N	measuring units	mm	KG	ART NO CC
270353	100	0.050	N / kgf / lbf / oz	195 x 84 x 35	0.600	2794350
270354	250	0.100	N / kgf / lbf / oz	195 x 84 x 35	0.600	2794350
270355	500	0.200	N / kgf / lbf / oz	195 x 84 x 35	0.600	2794350
270356	1000	0.500	N / kgf / lbf / oz	195 x 84 x 35	0.600	2794351

BLUE-LINE® Dial Tension Gauge

- **for mechanics and electronics**
- **for adjustment of e.g. relays, valves etc.**

- sturdy ABS plastic housing
- clear reading figures with double scale for measurements in both directions
- from up art.-no. 271101 with peak pointer, contact point-ø approx. 1 mm
- re-setting by hand
- max. deviation of read out 0.5%
- incl. operation manual







ART NO	g	g	dial indicator g	with peak pointer	max. %	KG
271100	0.6 - 5	0.2	0.6 - 5 - 0.6	-	0.5	0.054
271101	1 - 10	0.5	1 - 10 - 1	✓	0.5	0.056
271110	10 -100	5	10 - 100 - 10	✓	0.5	0.056
271115	15 -150	5	15 -150 - 15	✓	0.5	0.056

Electr. Digital Compact Scale

- **entry-level model in the low cost range, with weigh-in function**

- rugged plastic housing, with large LCD unit, digit height 15 mm
- easy operation by two buttons
- connector for charger
- weigh-in function, by pressing the TARE-button switches over to “0”, simplifies mixing
- automatic auto-off after 3 min. without change of load to preserve the battery
- incl. 2x 1.5 V battery (type AA, art.-no. 609282), incl. operation manual

Option
- charger 230 V/AC (art.-no. 273998)



ART NO	max. kg	g	weighing plate-ø mm	mm	KG
273003	0.5	0.1	150	170 x 240 x 39	0.600
273004	0.2	0.01	105	170 x 240 x 39	0.600
273006	2.2	1	150	170 x 240 x 39	0.600
273008	6	0.1	150	170 x 240 x 39	0.600

Electr. Digital Precision Scale • IP65 / IP67

- **IP65: Dust and jet water proof acc. to DIN 40050 / IEC 60529**
- **IP67: Water and oil tight (at times) acc. to DIN 40050 / IEC 60529**

- rugged metal housing, weighing plate made from stainless steel
- large LCD display, digit height 20 mm
- easy 3-/4-button operation, self-explaining
- operation by battery or main supply, switchable
- automatic power-Off after 3 min. without change of load to preserve the battery
- freely programmable weighing units
- adjusting program (CAL)
- incl. charger 230 V/AC and dust cover incl. operation manual

ART NO 273320 + 273321



IP65

ART NO 273322 - 273324



IP67

ART NO	max. kg	g	reproducibility g	linearity ± g	weighing plate mm	mm	KG	ART NO CC DAkkS
273320	0.5	0.1	0.1	0.2	120 x 150	170 x 150 x 40	0.650	2794310
273321	5	1	1	2	120 x 150	170 x 150 x 40	0.650	2794310
273322	5 | 7.5	0.5 | 1	0.5 | 1	1.5 | 3	252 x 200	285 x 255 x 90	3.610	2794310
273323	8 | 15	1 | 2	1 | 2	3 | 6	252 x 200	285 x 255 x 90	3.610	2794310
273324	16 | 30	2 | 5	2 | 5	6 | 15	252 x 200	285 x 255 x 90	3.610	2794310

DIGI PLUS-LINE Electr. Digital Precision Scale

- **reliability thanks to automatic internal adjustment and EC type approval**
- **industry scale with stainless steel weighing plate**
- **with USB interface and RS232**



art. no. 273310 - 273312
- with large LCD display, with backlight, digit height 17 mm
- weighing principle: Force compensation
- Alibi memory: Paperless form of the archive of weighing results
- internal memory for up to 999 weighing results, 1000 items, 100 container weights, 100 users
- USB interface for transferring weighing data to the PC, printer, USB sticks etc.
- adjusting programme (CAL)
- incl. windshield

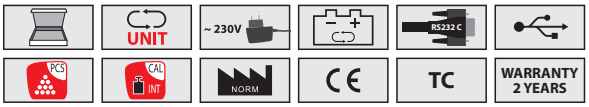
art. no. 273313
- with large LCD display, with backlight, digit height 19 mm
- weighing principle: Strain gauge
- rechargeable battery pack internal, standard, operating time up to 35 h, charging time approx. 12 h
- adjusting programme (CAL)

Options
- suitable printer, please find on page 186

windshield



Accessories for Electr. Digital Scales can be found on page 186



ART NO	max. kg	g	reproducibility g	linearity ± g	weighing plate mm	mm	KG	ART NO CC verification	ART NO CC DAkkS
273310	0.36	0.001	0.001	0.004	128 x 128	206 x 335 x 85	3.600	-	2794360
273311	0.60	0.001	0.002	0.004	128 x 128	206 x 335 x 85	3.600	2794310	2794360
273312	3.50	0.01	0.01	0.04	195 x 195	206 x 335 x 85	3.600	-	2794360
273313	6.00	0.1	0.2	0.2	195 x 195	206 x 335 x 85	3.600	2794311	2794361

DIGI PLUS-LINE Electr. Digital Compact Scale

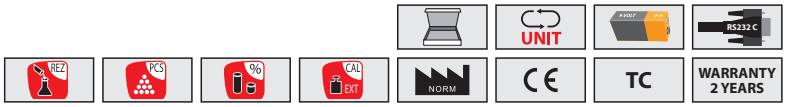
- **industry quality design, with two LCD-displays**
- **with data output RS 232 C**

- industry scale with rugged metal housing, stainless steel weighing plate
- with large LCD display, with backlight, digit height 25 mm
- automatic power-Off after 3 min., without change of load to preserve the battery
- PRE-TARE button for manual subtraction of a known container weight
- power supply with 9 V block battery (not included)
- with animal weighing program, strong vibrations are filtered out
- incl. dust cover and operation manual

Options
- printer and interface cable please find on page 186
- DAkkS calibration certificate



rear side



ART NO	max. kg	g	reproducibility g	linearity ± g	weighing plate mm	mm	KG	ART NO CC DAkkS
273076	12	1	1	3	252 x 228	270 x 345 x 106	3.000	2794361
273078	24	2	2	6	252 x 228	270 x 345 x 106	3.000	2794361

Electr. Digital Parcel Platform Scale

DIGI PLUS-LINE

- **favourably industrial Scale, for despatch weighing**



- rugged metal housing, weighing plate made from stainless steel
- with wall mounting for electr. unit
- large LCD display, digit height 25 mm
- weighing units in kg or lb
- display unit placed anywhere by flexible spiral cable (approx. 1.8 m)
- easy 4-button operation, self-explaining
- automatic power-Off after 3 min., without change of load to preserve the battery, permissible temperature +10°C ~ +35°C
- with animal weighing program
- weigh-in function, by pressing TARE-button switches over to "0"
- adjusting programme (CAL) means for adjusting the precision test weights, (is not included)
- mains or battery operation possible (6x 1.5 V battery, type AA, art.-no. 609282, batteries are not included)
- incl. charger 230 V/AC, with operation manual

Options
- stand, art.-no. 273558 (except unit and scale)
- DAkkS calibration certificate



art.-no. 273558, stand, except unit and scale

UNIT · ~ 230V · TAR · CAL EXT · NORM · CE · TC · WARRANTY 2 YEARS

ART NO	max. kg	g	reproducibility g	linearity ± g	weighing plate mm	LCD unit mm	KG	ART NO CC DAkkS
273302	35	10	10	20	310 x 305 x 65	210 x 110 x 45	4.000	2794361
273303	60	20	20	40	310 x 305 x 65	210 x 110 x 45	4.000	2794362
273305	150	50	50	100	310 x 305 x 65	210 x 110 x 45	4.000	2794362
273308	300	100	100	200	310 x 305 x 65	210 x 110 x 45	4.000	2794362

Electr. Digital Parcel Platform Scale • IP65

DIGI PLUS-LINE

- **multimodel platform scale • with data output RS 232 C**
- **for industrial purpose, with piece-counting, reference quantities selectable**
- **dual range scale, automatically switches to the next higher weighing range**
- **dust- and splash water proof acc. to DIN 40050 / IEC 60529**



- industry scale with rugged metal housing, stainless steel weighing plate
- with large LCD display, with backlight, digit height 25 mm
- freely programmable weighing units, e.g. in yarn length g/m, in paper weight g/m², etc.
- display unit (IP 65) placed anywhere by flexible spiral cable (approx. 1.4 m)
- easy 5-button operation, self-explaining, with animal weighing program
- with data output RS 232, for data-printer or computer connection
- mains or battery operation possible (1x 9 V battery, type 6LR61, art.-no. 609281, batteries are not included)
- adjusting program (CAL), piece-counting (PCS), net-total weighing (REZ)
- automatic power-Off after 3 min., permissible temperature +5°C ~ +35°C
- incl. charger 230 V/AC, dust cover, with operation manual

Options
- stand, art.-no. 273550 (except unit and scale)
- statistics printer, art.-no. 273098
- interface cable, art.-no. 279998
- DAkkS calibration certificate



art.-no. 273550, stand, except unit and scale

UNIT · IP 65 · RS232 C · ~ 230V · PCS · % · REZ · CAL EXT · NORM · CE · TC · WARRANTY 2 YEARS

ART NO	max. kg	g	reproducibility g	linearity ± g	weighing plate mm	LCD unit mm	KG	ART NO CC DAkkS
273054	15 / 35	5 / 10	5 / 10	15 / 30	318 x 308 x 75	225 x 110 x 45	4.000	2794361
273057	30 / 60	10 / 20	10 / 20	30 / 60	318 x 308 x 75	225 x 110 x 45	4.000	2794362
273059	60 / 150	20 / 50	20 / 50	60 / 150	318 x 308 x 75	225 x 110 x 45	4.000	2794362
273061	150 / 300	50 / 100	50 / 100	150 / 300	522 x 403 x 90	225 x 110 x 45	16.000	2794362

★★★★★ DIGI PLUS-LINE® Electr. Digital Industrial Counting Scale

- **verifiable**
- **entry level model into the professional-counting**

- industry scale with rugged metal housing, stainless steel weighing plate
- with 3 large LCD displays, with backlight, , digit height 18 mm
- verifiable weight display, reference weight, total number of pieces
- programmable via keypad: known reference weight / reference quantity
- accurate counting: the autom. reference optimization gradually improves the average value of the piece weighing
- cumulative counter memory: summing up of the same counting parts and total pieces and total weight, counting resolution: 30000 points
- accoustic beep „Fill-to-target“: target quantity and target weight programmable
- weigh-in function, by pressing the TARE-button switches over to “0”, simplifies mixing
- permissible temperature -10°C ~ +40°C
- standard with charger, internal (please mention the country location of use) and operation manual



Option
- **verification** or DAkkS calibration certificate by extra charge (with **verification**: location of use with post code required - subsequently not possible)



high mobility, thanks to battery operation



~ 230V | PCS | CAL EXT | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	max. kg	g	verification value [e] g	minimum weight [min] g	minimum weight g/pc.	weighing plate mm	mm	KG	ART NO CC verification	ART NO CC DAkkS
273022	3	1	1	20	0.1	300 x 225	300 x 330 x 110	4.000	2794310	2794360
273024	15	5	5	100	0.5	300 x 225	300 x 330 x 110	4.000	2794311	2794361
273025	30	10	10	200	1	300 x 225	300 x 330 x 110	4.000	2794311	2794361

DIGI PLUS-LINE® Electr. Digital Hanging Scale

- **for mobile use**
- **for weighing by hand or for hanging up on an angle bracket**

- sturdy ABS-plastic housing with a stainless steel hook
- large LCD display with digit height: art.-no. 273087 about 13 mm / art.-no. 273080 - 273082 about 11 mm
- with data hold button, display can be ”frozen” for approx. 5 sec.
- On/Off-button, TARE-button: attach an empty vessel/container and place the display to zero
- weight can be displayed in kg and lb, selectable
- automatic power-Off
- permissible temperature +5 °C ~ +35 °C
- art.-no. 273080 - 273082 with built-in measuring tape (100 cm)
- art.-no. 273087 incl. 2x 1.5 V battery (type AAA, art.-no.: 609283) art.-no. 273080 - 273082 incl. 1x 9 V battery (type 6LR61, art.-no.: 609281), incl. operation manual



ART NO 273080 - 273082



ART NO 273087

Option
- DAkkS calibration certificate for art.-no. 273080 - 273082 by extra charge (afterwards not possible)



CAL EXT | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	max. kg	g	mm	KG	ART NO CC DAkkS
★★★★☆ **273080**	15	20	90 x 30 x 175	0.250	2794361
★★★★☆ **273081**	50	50	90 x 30 x 175	0.250	2794361
★★★★☆ **273082**	50	100	90 x 30 x 175	0.250	2794361
★★★☆☆ **273087**	30	10	95 x 23 x 195	0.175	-

Electr. Digital Crane Scale

- **TÜV approved crane scales acc. to the standards of EN 13155 (loose load receptor) and EN 61010-1 (electr. safety)**

- art.-no. 273100* - 273103* prof. device for rough application (industry quality)
  art.-no. 273110* - 273111* compact crane scale (for standard purpose)
- art.-no. 273100* - 273103* self-luminous LED display, digit height 30 mm
  art.-no. 273110* - 273111* LCD display with backlight, digit height 23 mm
- art.-no. 273100* - 273103* incl. remote control, up to 20 m working range
  art.-no. 273110* - 273111* incl. infrared-remote control, up to 2.5 m working range
- with data-hold button, to hold the display value
- art.-no. 273100* - 273103* with adaption to unstable conditions
- hook with saftey lock, made from forged steel, chromed, turnable
- standard with internal battery, incl. charge 230 V/AC
- remote control incl. 2x 1.5 V battery (type AAA, art.-no.: 609283)
- adjusting programme (CAL), weigh-in function, by pressing TARE-button switches over to "0"
- accuracy 0.2% from [max], permissible temperature 0°C ~ +40°C
- incl. operation manual

Option
- DAkkS calibration certificate by extra charge (afterwards not possible)

ART NO 273110* - 273111*



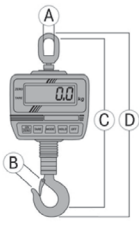
ART NO 273100* - 273103*

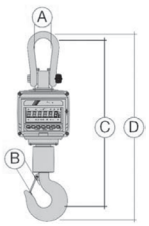


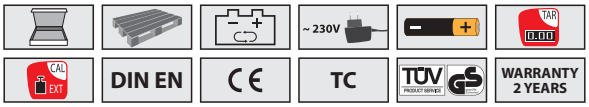
ATTENTION
We charge transport and packing costs for articles marked with *!











ART NO	max. kg	g	A	B	C	D	mm	KG	ART NO CC DAkkS
273100*	1000	100	80	40	540	610	270 x 175 x 200	15.000	2794365
273101*	3000	500	75	50	540	610	270 x 175 x 200	16.500	2794366
273102*	5000	500	75	50	650	730	300 x 190 x 230	25.000	2794366
273103*	10000	1.000	100	60	750	840	300 x 190 x 230	37.000	2794367
273110*	300	100	24	14	330	380	163 x 120 x 159	4.000	2794362
273111*	600	200	24	14	350	400	163 x 120 x 159	4.000	2794365

Electr. Digital Hanging Scale • also with IP65

- **with stainless steel snap link and S-hook made from stainless steel**

- art.-no. 273083 - 273086 with sturdy ABS plastic housing
  art.-no. 273094 - 273097 with sturdy stainless steel housing, in IP65 design
- art.-no. 273083 - 273086 large LCD display, digit height 12 mm
  Art.-Nr. 273094 - 273097 large LCD display, at front and rear side, digit height 12 mm
- with data hold button, display can be "frozen" for some seconds, adjusting programme (CAL)
- TARE-button: attach an empty vessel/container and place the display to zero
- automatic power-Off after 3 min., without change of load to preserve the battery
- art.-no. 273083 - 273086 incl. 3x 1.5 V battery (type AA, art.-no.: 609282)
  art.-no. 273094 - 273097 incl. 2x 1.5 V battery (type AA, art.-no.: 609282),
  incl. operation manual

ART NO 273094 - 273097



ART NO 273083 - 273086







ART NO	IP65 water- and coolant proof	max. kg	g	mm	total height incl. hooks mm	KG	ART NO CC DAkkS
273083	X	20	10	80 x 45 x 150	290	0.400	2794361
273084	X	50	100	80 x 45 x 150	290	0.400	2794361
273085	X	100	200	80 x 45 x 150	290	0.400	2794362
273086	X	200	500	80 x 45 x 150	290	0.400	2794362
273094	✓	20	50	95 x 55 x 175	315	0.800	2794361
273095	✓	50	100	95 x 55 x 175	315	0.800	2794361
273096	✓	100	200	95 x 55 x 175	315	0.800	2794362
273097	✓	200	500	95 x 55 x 175	315	0.800	2794362

Accessories for Electr. Digital Scales

please state your balance model when ordering, so that the printer can be preconfigured in the factory to suit your balance (* = Good Laboratory Practice)

ART NO	product description	mm
273098	**Thermal Printer with data interface** RS232, for printing weighing values, recipes, quantities, etc., GLP* record keeping of balance adjustment with date and time print; numerator printout with date and time, languages in D, GB, F, PL • charger 230V/AC / 50Hz • speed 0.75 lines/sec. • max. 40 characters/line • paper strip: width 112 mm	165 x 140 x 50
273099	**Statistics Thermal Printer with data interface** RS232, for printing weighing values, recipes, quantities, etc., with GLP* record keeping of balance adjustment with date and time print; numerator; with statistical functions such as count and total of all measurements, minimum and maximum values of the main unit, range (Max-Min). Average value, standard deviation, available units: mg, g, kg, pcs. Language versions: D, GB, F, PL • charger 230V/AC / 50Hz • speed 0.75 lines/sec. • max. 40 characters/line • paper strip: width 112 mm	165 x 140 x 50
273099/1	**Matrix Needle Printer** with data interface RS232, to print the weights on normal paper, which is ideal for long-term archiving • charger 230V/AC / 50Hz • speed 1 lines/sec. • max. 16 characters/line • paper strip: width 44 mm	158 x 106 x 40
279998	**Interface cable**, for printer series art.-no. 273098 and art.-no. 273099	cable length approx. 1500
279998/1	**Interface cable**, for printer series art.-no. 273099/1	cable length approx. 1500
273551	**paperroll** (10 pcs.), for printer series art.-nr. 273098	width 112
273552	**Paperroll** (10 pcs.), for printer series art.-no. 273099	width 112
273553	**Paperroll** (5 pcs.), for printer series art.-no. 273099/1	width 44
273550	**Stand**, for printer series art.-no. 273054 / 273057 / 273059 / 273061	height 450
273558	**Stand**, for printer series art.-no. 273302 / 273303 / 273305 / 273308	height 950

ART NO 273098



ART NO 273099



ART NO 273099/1





ART NO 273550



ART NO 273558

SILVER-LINE Test Weights

- **for checking of measurements and scales**
- **available as single weights or in sets**

- M1-Quality Class, brass made, finely turned
- DAkkS calibration certificate (with extra charge)
- in a plastic case with soft insert





Other weights or set-components are available on request!

ART NO	kg	max. ± mg	ART NO CC DAkkS
Quality Class M1			
273266	0.100	5	2794410
273268	0.500	25	2794410
273269	1.000	50	2794410
273270	2.000	100	2794411
273271	5.000	230	2794411

ART NO	kg	ART NO CC DAkkS
Set-Components Quality Class M1		
273282	0.001 - 0.500	2794464
273283	0.001 - 1.000	2794465
273285	0.001 - 5.000	2794467
-	-	-
-	-	-

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Dividers, Internal and External Spring Joint Compasses

BLUE-LINE Spring Divider
DIN 6486

- steel, polished
- square legs, with hardened tips
- with quick nut for quick positive adjustment


ART NO 302422


ART NO 302682

ART NO 3026899
pair of spare needles



NORM DIN WARRANTY 1 YEAR

ART NO Divider		KG	ART NO Divider with exchangeable points		KG
302420	100	0.090	**302680**	100	0.090
302421	125	0.100	**302681**	125	0.100
302422	150	0.135	**302682**	150	0.135
302423	175	0.165	**302683**	175	0.165
302424	200	0.170	**302684**	200	0.170
302425	250	0.270	**302685**	250	0.270
302426	300	0.325	**302686**	300	0.325
302427	400	0.340	**302687**	400	0.340
302428	500	0.460	**302688**	500	0.460

BLUE-LINE Internal and External Spring Joint Compass
DIN 6482/6484

- steel, polished
- square legs, with hardened tips
- with quick nut for quick positive adjustment


ART NO 302442


ART NO 302462

NORM DIN WARRANTY 1 YEAR

ART NO Spring Inside Compass		KG	ART NO Spring Outside Compass		KG
302440	100	0.090	**302460**	100	0.100
302441	125	0.115	**302461**	125	0.130
302442	150	0.125	**302462**	150	0.145
302443	175	0.150	**302463**	175	0.180
302444	200	0.180	**302464**	200	0.190
302445	250	0.220	**302465**	250	0.230
302446	300	0.255	**302466**	300	0.265
302447	400	0.335	**302467**	400	0.350
302448	500	0.415	**302468**	500	0.445

BLUE-LINE Divider and Divider with Setting Wing

DIN 6486

- steel, polished
- square legs, with hardened tips
- with rivet

ART NO 302402



ART NO 302412



ART NO 302472



DIN | NORM | WARRANTY 1 YEAR

ART NO Divider		KG	ART NO with setting wing		KG	ART NO with holder		KG
302402	150	0.125	**302412**	150	0.100	**302472**	150	0.135
302403	175	0.170	**302413**	175	0.160	**302473**	175	0.145
302404	200	0.180	**302414**	200	0.190	**302474**	200	0.180
302405	250	0.245	**302415**	250	0.275	**302475**	250	0.280
302406	300	0.295	**302416**	300	0.320	**302476**	300	0.335
302407	400	0.435	**302417**	400	0.525	**302477**	400	0.405
302408	500	0.500	**302418**	500	0.580	**302478**	500	0.590

BLUE-LINE Internal and External Joint Compass

DIN 6482 / 6484

- steel, polished
- with flat legs
- with rivet

ART NO 302432



ART NO 302452



DIN | NORM | WARRANTY 1 YEAR

ART NO Inside Compass		KG	ART NO Outside Compass		KG
302432	150	0.065	**302452**	150	0.085
302433	175	0.070	**302453**	175	0.095
302434	200	0.080	**302454**	200	0.105
302435	250	0.110	**302455**	250	0.150
302436	300	0.190	**302456**	300	0.240
302437	400	0.210	**302457**	400	0.290
302438	500	0.370	**302458**	500	0.380

Precision Trammels

ATTENTION
We charge transport and packing costs for articles marked with *!

BLUE-LINE Trammel

- steel, with hardened, exchangeable points
- flat beam, with fine adjustment
- with fixing screws

ART NO 302986 ART NO 302996





NORM WARRANTY 2 YEARS

ART NO	mm	mm	KG	ART NO spare points, in pair, hardened	ART NO spare points, in pair, carbide
302911	500	0.1	1.180	302986	302996
302912	1000	0.1	2.240	302986	302996
302913	1500	0.1	2.940	302986	302996
302914*	2000	0.1	3.800	302986	302996
302915*	3000	0.1	4.750	302986	302996

BLUE-LINE Precision In- and Outside Caliper

- special steel, chromed
- reading scale in matt chrome finish
- with adjusting screw



NORM WARRANTY 3 YEARS

ART NO	mm	mm	total length mm	KG
303301	120	0.1	190	0.200
303302	160	0.1	250	0.300
303303	200	0.1	310	0.500
303304	250	0.1	380	0.700
303305	300	0.1	460	0.900

BLUE-LINE Compass Vernier Caliper

- **for accurate marking owing to parallel position of the scriber jaws**
- special steel, reading scale in matt chrome finish
- with fixing screw
- with carbide tips or hardened tips at your choice



NORM WARRANTY 2 YEARS

ART NO hardened tips	ART NO carbide tips	mm	for ø mm	mm	KG
303002	**303102**	150	300	0.1	0.150
303003	**303103**	200	400	0.1	0.180
303004	**303104**	250	500	0.1	0.210
303005	**303105**	300	600	0.1	0.250

Precision Inspection Square
DIN 875/0

- **for inspection rooms and test laboratories**

- stainless, hardened steel or made from special hardened steel
- extra fine ground
- flat or with back

Precision Inspection Square
DIN 875/1

- **for precision machinery**

- stainless, steel or made from special steel
- fine ground
- flat or with back

Option
- wooden box



DIN

TC

WARRANTY 2 YEARS

ART NO flat	mm	KG	ART NO with back	mm	KG	ART NO CC	ART NO wooden box	
DIN 875/0 stainless steel							flat	with back
310000	50 x 40	0.065	**310100**	50 x 40	0.085	3194050	3199050	3199051
310001	75 x 50	0.080	**310101**	75 x 50	0.100	3194075	3199075	3199076
310002	100 x 70	0.100	**310102**	100 x 70	0.150	3194100	3199100	3199101
310003	150 x 100	0.250	**310103**	150 x 100	0.400	3194150	3199150	3199151
310004	200 x 130	0.500	**310104**	200 x 130	0.700	3194200	3199200	3199201
310005	250 x 165	0.700	**310105**	250 x 165	1.100	3194250	3199250	3199251
310006	300 x 200	1.150	**310106**	300 x 200	1.600	3194300	3199300	3199301
DIN 875/0 carbon steel							flat	with back
310011	75 x 50	0.080	**310111**	75 x 50	0.100	3194075	3199075	3199076
310012	100 x 70	0.100	**310112**	100 x 70	0.150	3194100	3199100	3199101
310013	150 x 100	0.250	**310113**	150 x 100	0.400	3194150	3199150	3199151
310014	200 x 130	0.500	**310114**	200 x 130	0.700	3194200	3199200	3199201
310015	250 x 165	0.700	**310115**	250 x 165	1.100	3194250	3199250	3199251
310016	300 x 200	1.150	**310116**	300 x 200	1.600	3194300	3199300	3199301
DIN 875/1 stainless steel							flat	with back
310021	75 x 50	0.080	**310121**	75 x 50	0.100	3194075	3199075	3199076
310022	100 x 70	0.100	**310122**	100 x 70	0.150	3194100	3199100	3199101
310023	150 x 100	0.250	**310123**	150 x 100	0.400	3194150	3199150	3199151
310024	200 x 130	0.500	**310124**	200 x 130	0.700	3194200	3199200	3199201
310025	250 x 165	0.700	**310125**	250 x 165	1.100	3194250	3199250	3199251
310026	300 x 200	1.150	**310126**	300 x 200	1.600	3194300	3199300	3199301
310026/1	400 x 265	1.180	**310126/1**	400 x 265	2.700	3194400	3199400	3199401
310027	500 x 330	2.800	**310127**	500 x 330	4.360	3194500	3199500	3199501
310027/1	600 x 400	3.300	**310127/1**	600 x 400	4.900	3194600	3199600	3199761
310028	750 x 500	6.400	**310128**	750 x 500	8.900	3194750	3199750	3199751
310029*	1000 x 660	13.000	**310129***	1000 x 660	15.800	3194990	3199990	3199991
DIN 875/1 carbon steel							flat	with back
310041	75 x 50	0.080	**310141**	75 x 50	0.100	3194075	3199075	3199076
310042	100 x 70	0.100	**310142**	100 x 70	0.150	3194100	3199100	3199101
310043	150 x 100	0.250	**310143**	150 x 100	0.400	3194150	3199150	3199151
310044	200 x 130	0.500	**310144**	200 x 130	0.700	3194200	3199200	3199201
310045	250 x 165	0.700	**310145**	250 x 165	1.100	3194250	3199250	3199251
310046	300 x 200	1.150	**310146**	300 x 200	1.600	3194300	3199300	3199301
310046/1	400 x 265	1.180	**310146/1**	400 x 265	2.700	3194400	3199400	3199401
310047	500 x 330	2.800	**310147**	500 x 330	4.360	3194500	3199500	3199501
310047/1	600 x 400	3.300	**310147/1**	600 x 400	4.900	3194600	3199600	3199761
310048	750 x 500	6.400	**310148**	750 x 500	8.900	3194750	3199750	3199751
310049*	1000 x 660	13.000	**310149***	1000 x 660	14.800	3194990	3199990	3199991
310049/1*	1500 x 1000	15.000	**310149/1***	1500 x 1000	33.000	3194991	3199992	3199993

BLUE-LINE® Precision Workshop Squares

DIN 875/2

- **for standard machinery**

- stainless or carbon steel, at your choice
- fine ground
- flat or with back

Option
- wooden box





DIN

WARRANTY 2 YEARS

ART NO flat	mm	KG	ART NO with back	mm	KG	ART NO CC	ART NO wooden box	
DIN 875/2 stainless steel							flat	with back
310071	75 x 50	0.080	**310171**	75 x 50	0.100	3194075	3199075	3199076
310072	100 x 70	0.100	**310172**	100 x 70	0.150	3194100	3199100	3199101
310073	150 x 100	0.250	**310173**	150 x 100	0.400	3194150	3199150	3199151
310074	200 x 130	0.500	**310174**	200 x 130	0.700	3194200	3199200	3199201
310075	250 x 165	0.700	**310175**	250 x 165	1.100	3194250	3199250	3199251
310076	300 x 175	0.800	**310176**	300 x 175	1.180	3194300	3199300	3199301
310076/1	400 x 200	1.100	**310176/1**	400 x 200	1.480	3194400	3199400	3199401
310077	500 x 250	1.600	**310177**	500 x 250	2.300	3194500	3199500	3199501
310077/1	600 x 300	2.000	**310177/1**	600 x 300	2.700	3194600	3199600	3199761
310078	750 x 375	3.500	**310178**	750 x 375	5.000	3194750	3199750	3199751
310079*	1000 x 500	6.000	**310179***	1000 x 500	7.500	3194990	3199990	3199991
310079/1*	1500 x 750	14.500	**310179/1***	1500 x 750	16.000	3194991	3199992	3199993
310079/2*	2000 x 1000	23.500	**310179/2***	2000 x1000	26.000	3194992	3199994	3199995
DIN 875/2 carbon steel							flat	with back
310061	75 x 50	0.080	**310161**	75 x 50	0.100	3194075	3199075	3199076
310062	100 x 70	0.100	**310162**	100 x 70	0.150	3194100	3199100	3199101
310063	150 x 100	0.250	**310163**	150 x 100	0.400	3194150	3199150	3199151
310064	200 x 130	0.500	**310164**	200 x 130	0.700	3194200	3199200	3199201
310065	250 x 165	0.700	**310165**	250 x 165	1.100	3194250	3199250	3199251
310066	300 x 175	0.800	**310166**	300 x 175	1.180	3194300	3199300	3199301
310066/1	400 x 200	1.100	**310166/1**	400 x 200	1.480	3194400	3199400	3199401
310067	500 x 250	1.600	**310167**	500 x 250	2.300	3194500	3199500	3199501
310067/1	600 x 300	2.000	**310167/1**	600 x 300	2.700	3194600	3199600	3199761
310068	750 x 375	3.500	**310168**	750 x 375	5.000	3194750	3199750	3199751
310069*	1000 x 500	6.000	**310169***	1000 x 500	7.500	3194990	3199990	3199991
310069/1*	1500 x 750	14.500	**310169/1***	1500 x 750	16.000	3194991	3199992	3199993
310069/2*	2000 x 1000	23.500	**310169/2***	2000 x 1000	26.000	3194992	3199994	3199995

Wooden Boxes for Prec. Squares

- **for a secure storage of the squares**

- with foam insert
- fine and smooth design
- for flat squares or with back



Precision Bevel Edge Square

DIN 875/00

- **for the tests of the light-gap method**

- stainless steel or carbon steel, at your choice
- hardened and fine ground
- with two bevelled edges, finely ground and lapped
- flat or with back

Option
- wooden box

ART NO 310221 - 310225



ART NO 310201



DIN | TC | WARRANTY 2 YEARS

ART NO flat	mm	KG	ART NO with back	mm	KG	ART NO CC	ART NO wooden box	
stainless steel							flat	with back
310201	50 x 40	0.030	**310221**	50 x 40	0.050	3194021	3199050	3199051
310202	75 x 50	0.050	**310222**	75 x 50	0.060	3194021	3199075	3199076
310203	100 x 70	0.100	**310223**	100 x 70	0.130	3194022	3199100	3199101
310204	150 x 100	0.260	**310224**	150 x 100	0.320	3194023	3199150	3199151
310205	200 x 130	0.430	**310225**	200 x 130	0.650	3194024	3199200	3199201
carbon steel							flat	with back
310211	50 x 40	0.030	-	-	-	3194021	3199050	-
310212	75 x 50	0.050	-	-	-	3194021	3199075	-
310213	100 x 70	0.100	-	-	-	3194022	3199100	-
310214	150 x 100	0.260	-	-	-	3194023	3199150	-
310215	200 x 130	0.430	-	-	-	3194024	3199200	-

Precision Knife Straight Edge

DIN 874/2 page 2

- **for the tests of the light-gap method**

- stainless steel, anti-glare matt chromed, hardened and fine ground
- carbon steel, with burnished edges, hardened and fine ground
- bevelled edges finely ground and lapped
- with insulation handle

Option
- in wooden box

ART NO 310323



ART NO 310303



DIN | TC | WARRANTY 2 YEARS

ART NO stainless	mm	KG	ART NO carbon steel	mm	KG	ART NO CC	ART NO wooden box
310302	75	0.050	**310322**	75	0.050	3194302	3199302
310303	100	0.070	**310323**	100	0.070	3194303	3199303
310304	125	0.090	**310324**	125	0.090	3194304	3199304
310305	150	0.110	**310325**	150	0.110	3194305	3199305
310306	200	0.150	**310326**	200	0.150	3194306	3199306
310307	250	0.200	**310327**	250	0.200	3194307	3199307
310308	300	0.250	**310328**	300	0.250	3194308	3199308
310310	400	0.750	**310329**	400	0.750	3194310	3199310
310311	500	0.910	**310330**	500	0.910	3194311	3199311
310312	600	1.650	**310331**	600	1.650	3194312	3199312
310313	750	2.800	**310332**	750	2.800	3194313	3199313
310314	1000	4.000	**310333**	1000	4.000	3194314	3199314
310315	1250	4.250	**310334**	1250	4.250	3194315	3199315
310316	1500	5.600	**310335**	1500	5.600	3194316	3199316

SILVER-LINE Square with Inside Bevelled Edge

DIN 875/00

- **with a bevelled edge at the inside**

- stainless steel
- hardened and fine ground
- bevelled edge finely ground and lapped



INOX | DIN | TC | WARRANTY 2 YEARS

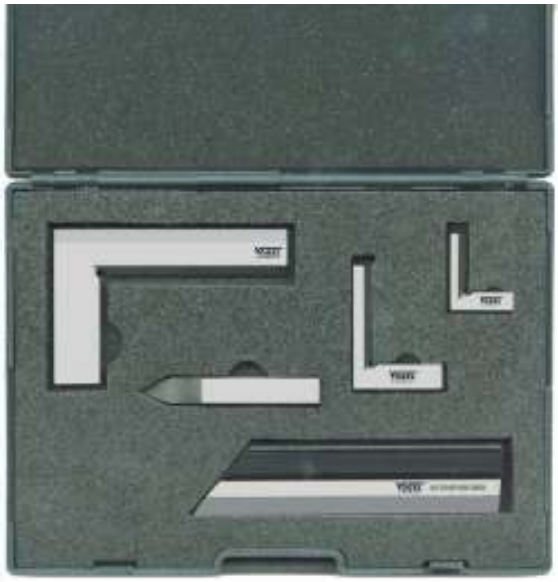
ART NO	mm square	mm long blade	mm short blade	KG	ART NO CC	ART NO wooden box
310231	25 x 20	6.0 x 3.5	5.0 x 3.5	0.004	3194302	3199050
310232	40 x 28	8.0 x 3.5	5.0 x 3.5	0.008	3194302	3199050

SILVER-LINE Toolmaker Square Set

DIN 875/00

contents:

- knife straight edge, stainless steel, hardened, DIN 874/00, length 100 mm
- square with inside bevelled edge, stainless, hardened, DIN 875/00, size 25x20 mm
- square with inside bevelled edge, stainless, hardened, DIN 875/00, size 40x28 mm
- square with bevelled edges, stainless, hardened, DIN 875/00, size 75x50 mm
- steel scriber point, size 60x9x9 mm



INOX | DIN | TC | WARRANTY 2 YEARS

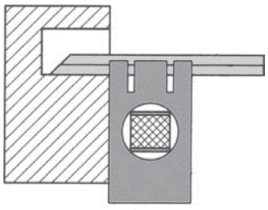
ART NO	KG	ART NO CC
310229	0.300	3194229

SILVER-LINE Adjustable Bevelled Edge Square

DIN 875 GG 00

- **precision pattern for toolmakers etc.**

- stainless steel, hardened and fine ground
- bevelled edge finely ground and lapped
- incl. workshop test cetificate





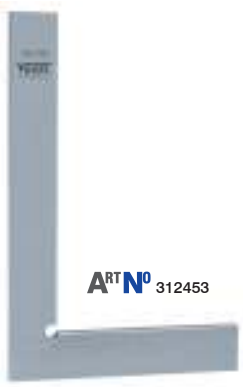
INOX | DIN | TC | WARRANTY 2 YEARS

ART NO	size of handle mm	mm	KG	ART NO CC
310235	40 x 23 x 10	60 x 4 x 4	0.067	3194235

BLUE-LINE® Workshop Square

- **for locksmith, workshop use, mechanics, training, etc.**

- special steel, galvanized finish
- flat or with back, at your choice





NORM WARRANTY 1 YEAR

ART NO flat	mm		KG
312453	100 x 70	19 x 5	0.070
312454	150 x 100	20 x 5	0.145
312455	200 x 130	25 x 5	0.250
312456	250 x 160	25 x 5	0.350
312457	300 x 180	25 x 5	0.400
312458	400 x 230	30 x 6	0.575
312459	500 x 280	30 x 6	0.770
312460	600 x 330	30 x 6	1.000
312461	750 x 375	30 x 6	1.200
312462	1000 x 500	30 x 6	1.850
312464*	1500 x 750	30 x 6	2.700
312465*	2000 x 1000	30 x 6	3.400

ART NO with back	mm		KG
312473	100 x 70	19 x 5	0.105
312474	150 x 100	20 x 5	0.235
312475	200 x 130	25 x 5	0.350
312476	250 x 160	25 x 5	0.475
312477	300 x 180	25 x 5	0.550
312478	400 x 230	30 x 6	0.800
312479	500 x 280	30 x 6	1.100
312480	600 x 330	30 x 6	1.400
312481	750 x 375	30 x 6	1.850
312482	1000 x 500	30 x 6	2.950
312484*	1500 x 750	30 x 6	4.400
312485*	2000 x 1000	30 x 6	5.800

BLUE-LINE® Mechanic Square

- **with heavy base and thin blade**

- special carbon steel, fine ground
- workshop grade with chromed base, fine ground blade
- DIN quality with fine polished surfaces







DIN NORM WARRANTY 1 YEAR

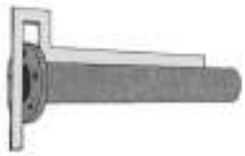
ART NO workshop grade	mm	KG
☆☆☆☆☆ **312370**	67 x 58	0.120
☆☆☆☆☆ **312373**	118 x 73	0.165
☆☆☆☆☆ **312374**	170 x 100	0.245
☆☆☆☆☆ **312375**	220 x 115	0.290
☆☆☆☆☆ **312376**	270 x 135	0.550
☆☆☆☆☆ **312377**	320 x 150	0.630

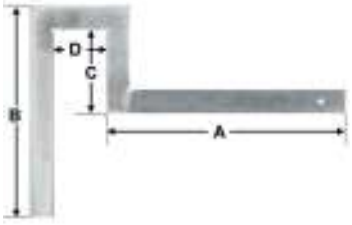
ART NO DIN 875/1	mm	KG
☆☆☆☆☆ **312310**	75 x 50	0.120
☆☆☆☆☆ **312313**	100 x 70	0.190
☆☆☆☆☆ **312314**	150 x 100	0.340
☆☆☆☆☆ **312315**	200 x 130	0.495
☆☆☆☆☆ **312316**	250 x 160	0.670
☆☆☆☆☆ **312317**	300 x 175	0.770

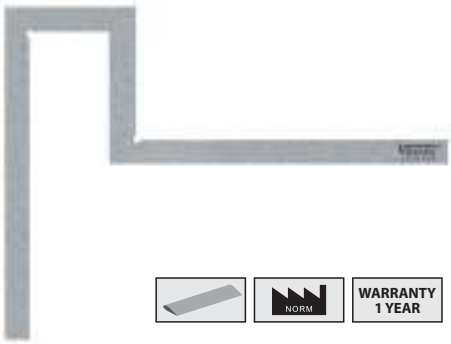
ART NO DIN 875/2	mm	KG
☆☆☆☆☆ **312350**	75 x 50	0.120
☆☆☆☆☆ **312353**	100 x 70	0.190
☆☆☆☆☆ **312354**	150 x 100	0.325
☆☆☆☆☆ **312355**	200 x 130	0.545
☆☆☆☆☆ **312356**	250 x 160	0.730
☆☆☆☆☆ **312357**	300 x 175	1.025
☆☆☆☆☆ **312358**	400 x 250	1.585
☆☆☆☆☆ **312359**	500 x 250	2.680

BLUE-LINE Flange Square

- for fitters and pipeline constructions
- to adjust the flange
- steel, galvanized finish







WARRANTY 1 YEAR

ART NO	mm A x B x C x D	steel blade mm	KG
312511	300 x 300 x 105 x 65	30 x 6	1.070
312512	400 x 400 x 115 x 65	30 x 6	1.370
312513	500 x 500 x 125 x 70	30 x 6	1.660
312514	600 x 500 x 125 x 70	30 x 6	1.800
312515	800 x 500 x 125 x 95	30 x 6	2.070
312516	1000 x 500 x 125 x 95	30 x 6	2.380

BLUE-LINE Carpenter's Square

- stainless, spring steel
- with or without marking holes, at your choice
- art.-no. 521123 - 521126 yellow, powder coated surface, with cm-graduation and marking holes

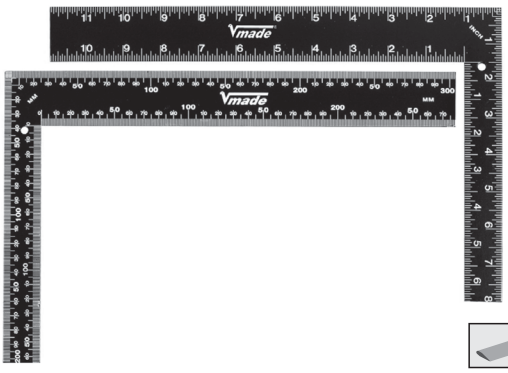


WARRANTY 1 YEAR

ART NO without marking holes	ART NO with marking holes	ART NO yellow, with marking holes	mm	steel blade mm	KG
521101	521111	-	500 x 260	35 x 1.5	0.400
521102	521112	-	600 x 280	35 x 1.5	0.450
521103	521113	521123	700 x 300	35 x 1.5	0.500
521104	521114	521124	800 x 320	35 x 1.5	0.550
521106	521116	521126	1000 x 380	35 x 1.5	0.650

BLUE-LINE Carpenter's Square

- steel, black coated surface
- with printed graduation on front- and rear side



WARRANTY 1 YEAR

ART NO type A	mm type A	ART NO type B	mm / inch type B	mm	steel blade mm	KG
521201	mm - mm / mm - mm	521211	mm - mm / inch - inch	300 x 200	38 / 26 x 2	0.245

BLUE-LINE Carpenter‘s Try Square NEW

- **with hardened aluminium blade (HRB 70) and elocated aluminium handle**
- **for general carpentry and metal work, etc.**

- with black anodized aluminium blade, non glare reading
- elocated aluminium handle with profile grooves
- with 45° mitre
- graduation on front- and rear side
- laser engraved scale for clear reading



graduation at type B = mm - mm / mm - mm

graduation at type C = mm - mm / inch - inch

WARRANTY 2 YEARS

ART NO type B	mm	ART NO type C	mm / inch	length of handle mm	aluminium handle	aluminium blade	KG
504031.2	150	**504051.2**	150 / 6	130	40 x 12	40 x 2.0	0.185
504032.2	200	**504052.2**	200 / 8	130	40 x 12	40 x 2.0	0.195
504033.2	250	**504053.2**	250 / 10	145	40 x 12	40 x 2.0	0.205
504034.2	300	**504054.2**	300 / 12	145	40 x 12	40 x 2.0	0.215
504036.2	400	**504056.2**	400 / 16	170	40 x 12	40 x 2.0	0.235
504037.2	500	**504057.2**	500 / 20	170	40 x 12	40 x 2.0	0.255

BLUE-LINE Measuring Tool Set

- **selection of need-based compilation**



ART NO SET	pieces	consisting of	article	box type
509901.2	**5**	**Carpenter´s Try Square** with black anodized aluminum blade, non glare reading and elocated aluminium handle, 300 mm	504034.2	WARRANTY 2 YEARS
		Bevel Square carbon steel blade, with angle graduation on the handle, 250 mm	504853	
		Digital Angle Measurer Spirit Level sturdy, anodized aluminum housing with adjustable spirit level, 0° - 360°, 305 x 52 x 23 mm	711025	
		Carpenter‘s Pencil 175 mm, red, unsharpened	509910	
		Wood Folding Rule with double mm graduation on front and back, with 10 links, 2000 mm	1312010200	

BLUE-LINE® Combination Square-Set

- **with protractor and center head**
- **for carpenters, wood workers and mechanics, etc.**

- stainless steel blade, etched graduation in mm/inch, double-sided
- square head, protractor and center head made from alloy casting, powder coated
- smoothly processed surfaces
- with steel scriber and vial





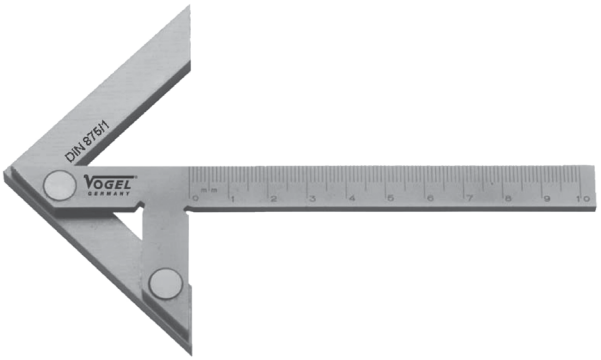
INOX | NORM | WARRANTY 2 YEARS

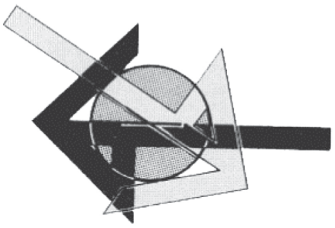
ART NO	mm / inch	garduation	mm square	blade	KG
508090	300 / 12	mm-mm / 8th + 16th	110 x 90 x 17.5	25.4 x 1.8	0.545

BLUE-LINE® Center Square

- **for marking centers on round discs and shafts**

- special steel, chromed finish
- scale in matt chrom finish, with mm graduation





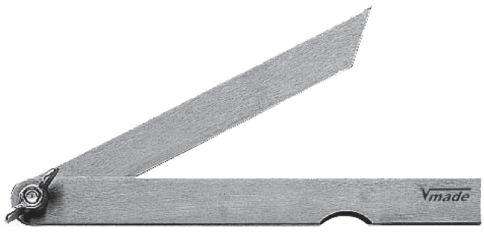
NORM | WARRANTY 2 YEARS

ART NO	mm	for shaft-ø mm	KG
312531	100 x 70	90	0.150
312532	150 x 130	190	0.450
312533	200 x 150	220	0.580
312534	250 x 160	230	0.650
312535	300 x 180	280	0.730
312536	400 x 250	380	2.400
312537	500 x 330	530	3.500

BLUE-LINE® Bevel Square

- **rugged construction**
- **for metalworker, fitters, locksmith, etc.**

- special steel, galvanized finish
- with galvanized fixing screw for locking the steel blade



WARRANTY 1 YEAR

ART NO	mm	blade	handle	KG
312571	100	20 x 2.5	20 x 8.0	0.180
312572	150	20 x 2.5	20 x 8.0	0.220
312573	200	20 x 2.5	20 x 8.0	0.270
312574	250	20 x 2.0	20 x 8.0	0.410
312575	300	20 x 2.0	20 x 8.0	0.500
312576	400	20 x 2.0	20 x 8.0	0.670
312577	500	20 x 2.0	20 x 8.0	0.800

BLUE-LINE® Bevel Square

- **for general carpentry and metal work, etc.**

- steel blade ind carbon or stainless steel, cross section 29 x 1.6 mm
- elocated aluminium handle with profile grooves, cross section 30 x 11.5 mm
- with or without angle graduation on the handle, at your choice
- with galvanized fixing screw for locking the steel blade



WARRANTY 2 YEARS

ART NO w/o angle graduation, carbon steel blade	ART NO with angle graduation, carbon steel blade	ART NO w/o angle graduation, stainless steel blade	ART NO with angle graduation, stainless steel blade	mm	KG
504802	504852	504812	504862	200	0.220
504803	504853	504813	504863	250	0.250
504804	504854	504814	504864	300	0.280

BLUE-LINE® Mitre Square NEW

- **with hardened aluminium blade (HRB 70)**
- **for standard joiners' and carpenters' purpose**

- blade made of black anodized aluminium
- elocated aluminium handle with profile grooves
- with 45° and 135° angular



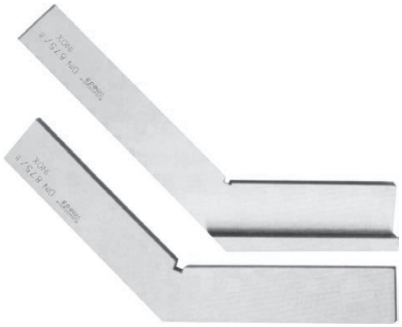
WARRANTY 2 YEARS

ART NO	mm	aluminium handle	aluminium blade	KG
504903.2	250	40 x 12	40 x 2	0.220
504904.2	300	40 x 12	40 x 2	0.240

BLUE-LINE Acute Angle Square 120° and 135°

DIN 875/2

- stainless steel, flat or with back
- for standard machinery purpose
- edges and sides fine ground



INOX | DIN | WARRANTY 2 YEARS

ART NO flat 120°	mm	KG	ART NO CC
314050	50 x 50	0.050	3194801
314051	75 x 75	0.075	3194801
314052	100 x 100	0.140	3194801
314053	125 x 125	0.170	3194801

ART NO with back 135°	mm	KG	ART NO CC
314080	100 x 70	0.150	3194801
314081	120 x 80	0.200	3194801
314082	150 x 100	0.250	3194801
314083	200 x 130	0.390	3194802

BLUE-LINE Acute Angle Square 120° and 135°

DIN 875/2

- carbon steel, flat or with back
- for standard machinery purpose
- edges and sides fine ground



DIN | WARRANTY 2 YEARS

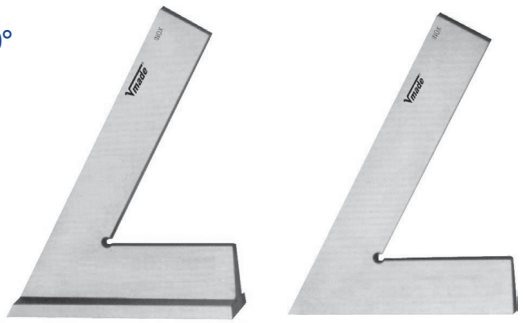
ART NO flat 120°	ART NO flat 135°	mm	KG	ART NO CC
313050	**313060**	50 x 50	0.050	3194801
313051	**313061**	75 x 75	0.075	3194801
313052	**313062**	100 x 100	0.140	3194801
313053	**313063**	125 x 125	0.170	3194801
313054	**313064**	150 x 150	0.260	3194801
313055	**313065**	200 x 200	0.500	3194802

ART NO with back 135°	mm	KG	ART NO CC
313080	100 x 70	0.150	3194801
313081	120 x 80	0.200	3194801
313082	150 x 100	0.250	3194801
313083	200 x 130	0.390	3194802
-	-	-	-
-	-	-	-

BLUE-LINE Acute Angle Square 45° and 60°

DIN 875/2

- stainless steel, flat or with back
- for standard machinery purpose
- edges and sides fine ground



INOX | DIN | WARRANTY 2 YEARS

ART NO flat 45°	ART NO with back 45°	ART NO flat 60°	ART NO with back 60°	mm	KG	ART NO CC
314001	**314021**	**314011**	**314031**	100 x 70	0.120	3194801
314002	**314022**	**314012**	**314032**	120 x 80	0.160	3194801
314003	**314023**	**314013**	**314033**	150 x 100	0.200	3194801
314004	**314024**	**314014**	**314034**	200 x 130	0.325	3194802

BLUE-LINE Acute Angle Square 45° and 60°

DIN 875/2

- carbon steel, flat or with back
- for standard machinery purpose
- edges and sides fine ground





DIN | WARRANTY 2 YEARS

ART NO flat 45°	ART NO with back 45°	ART NO flat 60°	ART NO with back 60°	mm	KG	ART NO CC
313001	313021	313011	313031	100 x 70	0.120	3194801
313002	313022	313012	313032	120 x 80	0.160	3194801
313003	313023	313013	313033	150 x 100	0.200	3194801
313004	313024	313014	313034	200 x 130	0.325	3194802

Special brochures for special target groups

Our new short brochures are selections of measuring tools for clear defined trade tasks like the automotive one and the metal working one, etc.



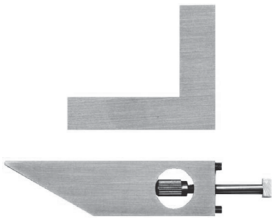
DIGI PLUS-LINE® Electr. Digital Universal Bevel Protractor Set

- **with USB data output**
- **with 3 blades (150 / 200 / 300 mm), 90° square and angle stop**

- stainless steel, hardened and fine ground
- rugged ABS-plastic housing, multifunctional display
- with fine adjustment for easy adjustment and fixing device for the blade
- large LCD display with clear reading
- two display lines, resolution in 1. line with 0.005° and in 2. line with min. 10“
- preset to 360° / 180° / 90°, two measuring directions selectable
- On/Off button, mode-button, set-button, zero setting at any position
- operation temperature 0°C ~ +40°C, storage temperature -10°C ~ +60°C
- incl. 1x 3 V battery (type CR2032, art. no.: 2002093), with operation manual

Option
- data transmission USB - Mini-USB (art.-no. 2420192), see page 304







UNIT · INOX · CR2032 Lithium 3V · NORM · CE · TC · WARRANTY 2 YEARS

ART NO	length of blade mm			max.	KG	ART NO CC
320100	150 / 200 / 300	360° / 2x 180° / 4x 90°	0.005° / 10’’	5’	0.350	3294022

DIGI PLUS-LINE® Electr. Digital Univ. Bevel Protractor • IP51

- **with data output Opto RS232**
- **spraywater resistant acc. to DIN 40050 / IEC 60529**

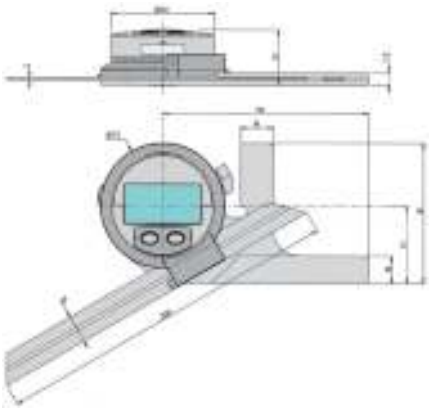
- base plate and rulers stainless, hardened
- robust ABS plastic housing, multi-functional display
- with fine adjustment for easy adjustment and quick clamping of the measuring rail
- large LCD display with clear reading
- eesolution 1 arc minute or decimal 0.01 degree angle
- preset values in 360 ° / 180 ° / 90 °, two selectable measuring directions
- On/Off button, Mode button, Set button, zero setting at any position
- operating temperature 0°C ~ +40°C, storage temperature -10°C ~ +60°C
- incl. 1x 3 V battery (type CR2032, art. no.: 2002093), with operation manual

Option
- data transmission Opto RS232 data cable duplex (art.-no. 2002090), see page 205





Option: Opto RS232 data cable duplex



Accessories can be found on page 205

UNIT · IP 51 · INOX · CR2032 Lithium 3V · OPTO RS232 C · NORM · CE · TC · WARRANTY 3 YEARS

ART NO	length of blades mm			max.	KG	ART NO CC
320150	150	360° / 2 x 180° / 4 x 90°	0.01° / 1’	2’	0.370	3294020
320151	200	360° / 2 x 180° / 4 x 90°	0.01° / 1’	2’	0.375	3294020
320152	300	360° / 2 x 180° / 4 x 90°	0.01° / 1’	2’	0.380	3294020

Electr. Digital Angle-Sensor „Bevel-Box“ and „Level-Box“ • IP54

- **dust- and splash water proof acc. to DIN 40050 / IEC 60529**
- **ideal device for angle adjustment, can be used for many purposes**

- rugged metal housing
- large LCD display with clear reading, digit height 10 mm
- with 3 magnetic discs in the bottom of the housing
- with On/Off-, zero- and ABS button, data hold function
- art.-no. 32 0011 added with a vial on top of the housing
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), and operation manual



ART NO 320010 ART NO 320011



magnetic discs

IP 54 · UNIT · WARRANTY 2 YEARS · NORM · CE · TC

ART NO			max.	mm	KG
320010	± 180°	0.1°	± 0.1°	50 x 50 x 32	0.160
320011	± 180°	0.1°	± 0.1°	50 x 63 x 32	0.180

Electr. Digital Angle-Sensor with 90° swiveling LCD display • IP54

- **dust- and splash water proof acc. to DIN 40050 / IEC 60529**
- **ideal device for angle adjustment, can be used for many purposes**

- large LCD display, with clear reading, digit height 8 mm
- LCD display swivelling up to 90°, with direction indicating vial in the display
- with magnetic V-base
- On/Off button and data hold function
- incl. 2x 1.5 V batteries (type AAA, art.-no.: 609283), operation manual





magnetic V-base



swivelling display



IP 54 · UNIT · WARRANTY 2 YEARS · NORM · CE · TC

ART NO			max.	mm	KG
320015	± 180°	0.1°	± 0.1°	55 x 57 x 32	0.130

Electr. Digital Protractor • IP65

- **water- and coolant proof acc. to DIN 40050 / IEC 60529**
- **ideal device for precise leveling and measuring of flatness and squareness, can be used for many purposes**

- sturdy housing with aluminium V-prism at top and bottom side
- art.-no. 320016 additionally with magnetic discs in the V-bottom
- large LCD display, with clear reading, digit height 9 mm
- with acoustic signal and backlight
- autom. 180° rotating display, by turning up-side down
- with data hold function, ABS system, with easy to handle self calibration
- On/Off- and zero button, zero setting at any position
- incl. 2x 1.5 V battery (type AAA, art.-no.: 609283), with operation manual



ART NO 320016



magnetic base

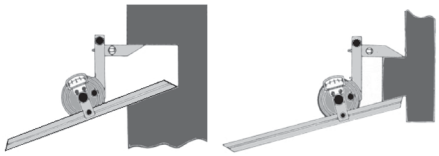
IP 65 · UNIT · WARRANTY 2 YEARS · NORM · CE · TC

ART NO			max.	mm		KG
320013	4 x 90° (0-360°)	0.05°	± 0.15°	150 x 35 x 54	✗	0.280
320016	4 x 90° (0-360°)	0.05°	± 0.15°	150 x 35 x 54	✓	0.295

SILVER-LINE Universal Bevel Protractor

- **top quality, for calibration purpose**

- stainless, hardened and fine ground
- scales matt chrome finish
- parallaxfree reading by vernier, with large magnifying lens
- with fine adjustment





INOX | TC | WARRANTY 3 YEARS

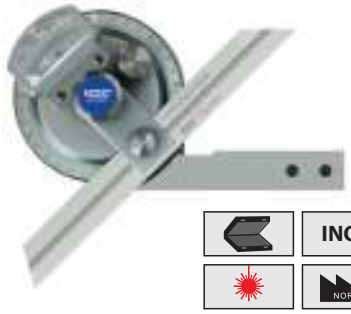
ART NO	length of blades mm		angle graduation	KG	ART NO CC
320121	150	4 x 90°	1/12° = 5'	0.710	3294021
320122	200	4 x 90°	1/12° = 5'	0.725	3294021
320123	300	4 x 90°	1/12° = 5'	0.755	3294021
320124	500	4 x 90°	1/12° = 5'	0.790	3294021

BLUE-LINE Universal Bevel Protractor Set

- **set with 3 blades in different length**

- stainless, hardened and fine ground
- scales matt chrome finish
- parallaxfree reading by vernier, with large magnifying lens
- with fine adjustment





INOX | WARRANTY 2 YEARS

ART NO	length of blades mm		angle graduation	packing	KG	ART NO CC
321220	150 / 200 / 300 mm	4 x 90°	1/12° = 5'	wooden box	0.765	3294023
321220/K	150 / 200 / 300 mm	4 x 90°	1/12° = 5'	plastic box	0.420	3294023

DIGI PLUS-LINE Electr. Digital Protractor

- **for checking and transferring angles**

- large LCD display with clear reading, digit height 10 mm
- blades in anodized aluminium with profile grooves, and embedded magnet strips
- On/Off button and data hold function, with fixing screw
- 180° rotating display, by pressing function button
- zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), operation manual





CR2032 Lithium 3V | WARRANTY 2 YEARS

ART NO	°	°	max. °	length of blades mm	mm	KG	ART NO CC
320021	0 - 360	0.05	0.2	200 x 200	205 x 45 x 30	0.290	3294020
320022	0 - 360	0.05	0.2	300 x 300	305 x 45 x 30	0.415	3294020

BLUE-LINE Protractor

- **with fixing screw**
- **with half round plate**

- special steel, chromed
- scale matt chrome finish
- double graduation from 0-180° in opposite direction



WARRANTY 2 YEARS

ART NO	length of blades mm	arc-ø mm	°	KG	ART NO CC
322541	150	80	0 - 180	0.075	3294511

Spare Parts for Electr. Digital Universal Protractors

art.-no. 320150 - 320152

ART NO	spare blade	ART NO	spare blade
321250	150	321252	300
321251	200	321254	500

ART NO		mm
321265	angle stop	75/60 x 11 x 6.2

ART NO		mm
321266	stand with prismatic base	92 x 24.6 x 24.5

ART NO		
2002090	data cable Opto RS232 duplex	~ 2,000

ART NO		mm
2002093	battery 3 V CR 2032	Ø 20 x 3





ART NO 321265



ART NO 321266



ART NO 2002090



ART NO 2002093

Spare Parts for Electr. Digital Universal Protractors

art.-no. 320100

ART NO	spare blade
320101	150
320102	200
320103	300

ART NO		mm	KG
321275	90° angled adjustment	60 x 50 / 15 x 4	0.040

ART NO		mm	KG
321276	angle stop	70/40 x 18 x 4	0.030

ART NO		mm
2002093	battery 3 V CR 2032	Ø 20 x 3

ART NO	
2420192	USB - Mini-USB (with data key)

ART NO 320101
ART NO 320102
ART NO 320103





ART NO 2002093



ART NO 321275



ART NO 321276



ART NO 2420192



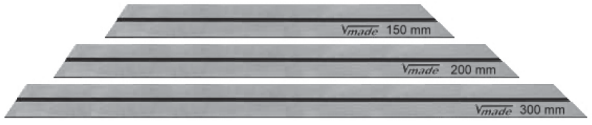
Spare Parts for Universal Protractors

art.-no. 320121 - 320124 and art.-no. 321220

ART NO	spare blade	KG
321225	150	0.030
321226	200	0.045
321227	300	0.070
321229	500	0.140

ART NO		mm	KG
321228	magnifying glass, w/o screws	37 x 22	0.015

ART NO		mm	KG
321230	angle stop	68 x 38 / 18 x 4	0.030





ART NO 321228



ART NO 321230

BLUE-LINE Protractor NEW

- with fixing screw
- for standard mechanical engineering

- made of Dur-Aluminium, hardened with HRC63
- scratch-resistant, black anodized surface
- laser engraved, clear reading scale



ART NO	length of blades mm	arc-ø mm	°	KG	ART NO CC
322511.2	120	80	0 - 180	0.045	3294511
322512.2	150	120	0 - 180	0.065	3294512
322513.2	200	150	0 - 180	0.100	3294513
322514.2	300	200	0 - 180	0.180	3294514
322515.2	500	300	0 - 180	0.410	3294515

DIGI PLUS-LINE Electr. Digital Bevel Protractor

- for high precision accuracy and safety reading

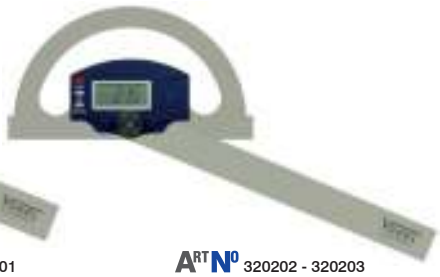
- LCD display with clear reading, digit height 10 mm
- stainless, hardened and fine ground
- On/Off button, with fixing screw
- zero setting at any position, with data hold function
- reading of values in display by 180° switchable
- incl. 1x 3 V battery (type CR2032, art. no.: 2002093), with operation manual







ART NO 320201



ART NO 320202 - 320203

ART NO	length of blades mm	arc-ø mm	°	°	max. °	KG	CC
320201	150	120	0 - 180	0.05	0.3	0.260	inclusive
320202	200	150	0 - 180	0.05	0.3	0.310	inclusive
320203	300	200	0 - 180	0.05	0.3	0.450	inclusive

BLUE-LINE Protractor (Skew Measure)

- for standard mechanical engineering

- special steel, in chromed finish
- scale in matt chrom finish
- with adjustable blade, with fixing screw

Accessories can be found on page 205

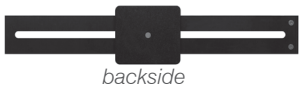


ART NO	length of blades mm	arc-ø mm	angle graduation	KG	ART NO CC
320571	150	100	10 - 170°	0.065	3294511
320572	300	150	10 - 170°	0.125	3294512
320573	400	200	10 - 170°	0.180	3294513
320574	500	250	10 - 170°	0.350	3294514
320575	600	300	10 - 170°	0.550	3294515

VBLUE-LINE Marking Gauge

- **with flat sliding ruler and marking block**
- **with fixing screw**

- made of Dur-Aluminium, hardened with HRC63
- scratch-resistant, black anodized surface
- with hardened marking block
- laser engraved, clear reading scale
- vernier reading 0.05 mm









ART NO	mm	mm	mm	KG
336230	200	0.05	298 x 60 x 16	0.195
336231	250	0.05	348 x 60 x 16	0.210
336233	300	0.05	400 x 60 x 16	0.225

VBLUE-LINE Marking Gauge and Protractor NEW

- **with flat sliding ruler and marking block**
- **with angle degree plate**

- made of Dur-Aluminium, hardened with HRC63
- sratch-resistant, black anodized surface
- with hardened marking block
- laser engraved, clear reading scale
- vernier reading 0.10 mm and degree 4 x 90°









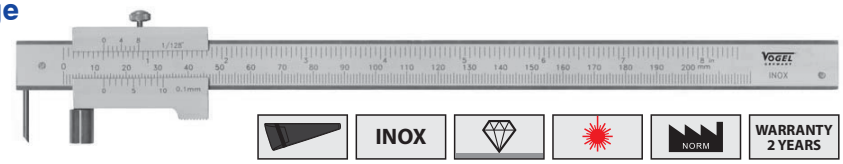


ART NO	mm	vernier in mm	angle degree in °	mm	KG
336250	200	0.1	4 x 90	300 x 82 x 23	0.275
336251	250	0.1	4 x 90	350 x 82 x 23	0.285
336252	300	0.1	4 x 90	400 x 82 x 23	0.295

VBLUE-LINE Universal Marking Gauge

- **with contact-roll**
- **carbide scriber, exchangeable**

- stainles steel, hardened
- laser engraved scale, reading parts in matt chrome finish
- incl. a second carbide scriber, as spare part



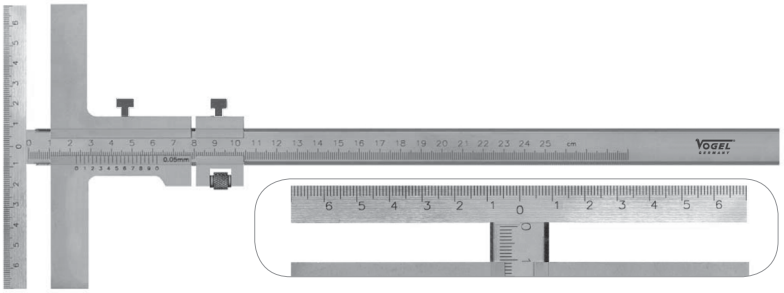
ART NO	mm	mm	KG	ART NO carbide scriber (spare part)
335070	200	0.1	0.175	335072
335071	400	0.1	0.320	335072

VBLUE-LINE T-Marking Vernier Caliper

- **with mm-graduation at the edge of the T-bar**

- special steel, hardened, with or without fine adjustment
- laser engraved scale, reading parts in matt chrome finish







ART NO	mm	mm	length of T-bar mm	KG
337301	160	0.05	100	0.280
337302	250	0.05	140	0.350
337303	300	0.05	160	0.480
337305	500	0.05	160	0.670

Etching Pen and Steel Scribers

BLUE-LINE® Metal Etching Pen

- **for markings on metal and aluminium**
- **with exchangeable ink tank**

- chemical and thermical resistant
- package contents 1 pen holder and 2 cartridges



ink tank (spare part)

WARRANTY 1 YEAR

ART NO for metal (green liquid)	ART NO for aluminium (light blue liquid)	ART NO for tool steel (blue liquid)	KG
334501	334502	334503	0.10

ART NO spare part ink tank for metal (green liquid)	ART NO spare part ink tank for aluminium (light blue liquid)	ART NO spare part ink tank for tool steel (blue liquid)
334591	334592	334593

BLUE-LINE® Steel Scriber

- **with hardened tips**
- made form special steel



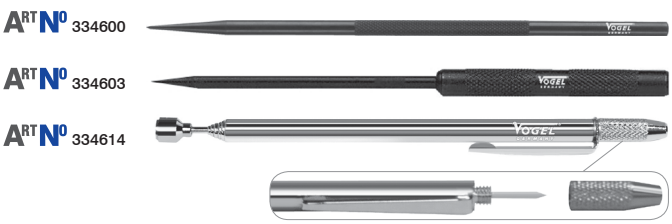
ART NO 334604

ART NO 334602

ART NO 334600

ART NO 334603

ART NO 334614



WARRANTY 1 YEAR

ART NO	mm	scriber-ø mm	version	packing version		KG
★★★★★ 334600	180	5	straight bar, knurled handle	✓	-	0.030
★★★★★ 334602	230	4	straight and cranked bar, with plastic handle	✓	-	0.048
★★★★★ 334603	175	4	straight bar, exchangable tip, knurled handle	✓	-	0.030
★★★★★ 334604	250	4	straight and cranked bar, exchangeable tips, knurled handle	✓	-	0.060
★★★★★ 334614	143	7	telescopic rod, with marking tip and magnetic lifter	-	✓	0.025
334691	90	4	spare tip, straight (for art.-no. 334604)	✓	-	0.010
334692	100	4	spare tip, cranked (for art.-no. 334604)	✓	-	0.012

BLUE-LINE® Steel Scriber

- **with tungsten carbide tips**



ART NO 334606

ART NO 334612

ART NO 334608

ART NO 334610

ART NO 334611

ART NO 334615



WARRANTY 1 YEAR

ART NO	mm	shaft-ø mm	version	packing version		KG
★★★★★ 334606	175	14	straight bar, with red plastic handle	-	✓	0.022
★★★★★ 334608	150	6	hexagonal bar, galvanized, with clip	-	✓	0.040
★★★★★ 334609	180	8	hexagonal bar, galvanized, without clip	✓	-	0.050
★★★★★ 334610	150	8	hexagonal, aluminium shaft, lacquered, with drop mechanic	-	✓	0.030
334695	35	-	spare tip, carbide, for 334610	✓	-	0.006
★★★★★ 334611	150	10	„RICO"-Marker, aluminium shaft, knurled handle, pen type	-	✓	0.030
334694	70	-	spare tip, carbide, for 334611	-	✓	0.010
★★★★★ 334612	230	4	straight and cranked bar, exchangeable tips, knurled handle	✓	-	0.060
★★★★★ 334615	150	9	carbide marker, push technic, with clip	-	✓	0.015
334690	30	-	spare tip, carbide, straight version, for 334615	✓	-	0.003
334696	90	-	spare tip, carbide, straight version, for 334612	✓	-	0.010
334697	100	-	spare tip, carbide, cranked version, for 334612	✓	-	0.012

VBLUE-LINE® Steel Scriber NEW

- **with tungsten carbide needle**
- **with clip and magnet**

- made of steel, black burnished
- with exchangeable needle
- with anti-slip knurled handle





with magnet

WARRANTY 1 YEAR

ART NO	mm	shaft-ø mm	version	KG
334620	155	7.5	with tungsten carbide tip, anti-slip knurled handle	0.040
334629	-	3	spare part, tungsten carbide needle	0.007

VBLUE-LINE® Marking Gauge

- **with round bar**

- chromed bar and scale, with 0.1 mm vernier reading
- with round contact plate, with fixing screw
- with or without fine adjustment, at your choice
- with exchangeable, hardened marking needle



WARRANTY 2 YEARS

ART NO	ART NO	mm		KG	ART NO spare needle
335030	335031	300	0.1	0.500	335066
-	335051	500	0.1	0.700	335066

VBLUE-LINE® Parallel V-Block Pairs

- made of dense special cast iron with high resistance to wear
- supplied in matched pair
- 4 different large grooves, 90°
- available in milled or ground version

grade 0 = ground parallelism tolerance = ± 0.008 mm
grade 1 = ground parallelism tolerance = ± 0.016 mm
grade 3 = milled parallelism tolerance = ± 0.064 mm



WARRANTY 2 YEARS

ART NO grade 0	ART NO grade 1	ART NO grade 3	mm	for shaft-ø mm	KG
333511	333501	333531	60 x 120 x 100	8 - 90	6.000
333512	333502	333532	75 x 150 x 130	10 - 120	12.000
333513	333503	333533	90 x 200 x 170	12 - 180	25.000

VBLUE-LINE® Prism Pair

- made of dense special cast iron with high resistance to wear
- supplied in matched pair
- with 1 large cut, 90°
- available in milled or ground version

grade 0 = ground parallelism tolerance = ± 0.008 mm
grade 1 = ground parallelism tolerance = ± 0.016 mm
grade 3 = milled parallelism tolerance = ± 0.064 mm



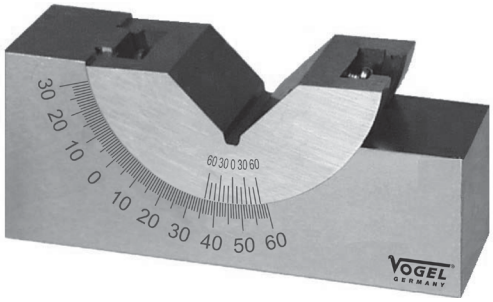
WARRANTY 2 YEARS

ART NO grade 0	ART NO grade 1	ART NO grade 3	mm	for shaft-ø mm	KG
333101	333201	333301	100 x 40 x 30	6 - 40	2.000
333102	333202	333302	150 x 50 x 40	8 - 50	4.000
333103	333203	333303	200 x 70 x 50	8 - 70	8.000
333104	333204	333304	250 x 85 x 60	12 - 85	13.000
333105	333205	333305	300 x 100 x 70	12 - 100	18.000

BLUE-LINE Adjustable Angle Prism

- **adjustable**

- special steel, hardened, fine ground
- prism cut 90°, angle scaling 0-60°



NORM | WARRANTY 2 YEARS

ART NO	mm	parallelism tolerance ±mm	for shaft-ø mm	KG
334001	75 x 25 x 32/23	0.05	28	0.500
334002	102 x 30 x 48/29	0.05	40	1.000
334003	102 x 46 x 48/29	0.05	40	1.400

BLUE-LINE Magnetic Square and V-Block

- **with 2x 90° V-cut**
- **3 magnetic surfaces, powerful and switchable**

- special steel, hardened, fine ground
- with On/Off-switch from metal



NORM | WARRANTY 2 YEARS

ART NO	mm	for shaft-ø mm	parallelism tolerance ± mm / 100 mm	rectangularity ± mm / 100 mm	prism N	surface N	KG
331020	100 x 100 x 100	ø 6 - 16	0.015	0.025	250	390	7.500

BLUE-LINE Magnetic Joint Prism

- **with 2 magnetic blocks**
- **each block with 1x 90° V-cut and with flat clamping surface**

- special steel, hardened, prism and clamping surface fine ground
- with On/Off-switch
- joint with locking screw can be clamped in any position







NORM | WARRANTY 2 YEARS

ART NO	mm	for each prism N	KG
332020	58 x 50 x 55	600	2.300

SILVER-LINE Magnetic Measuring and Clamping V-Block

- especially engineered for toolmakers etc.

- made of special steel or hardened steel
- with V-cut 90°, finely ground
- strong magnetic block
- with On/Off-rotary switch from aluminium
- magnetic base with finely ground prism
- plane, parallel and squared machined

Option
- wooden boxes available, by extra charge, see page 213





TC | NORM | WARRANTY 3 YEARS

ART NO steel	ART NO hardened	mm	for shaft-ø mm	parallelism tolerance ± mm	prism N	surface N	KG	ART NO CC
330100	**330102**	80 x 67 x 96	ø 6 - 66	0.004	400	900	2.900	3394100
330101	**330103**	100 x 70 x 96	ø 6 - 72	0.004	650	1800	4.000	3394101
in pair, adjusted and marked								
330110	**330112**	80 x 67 x 96	ø 6 - 66	0.004	400	900	5.800	3394110
330111	**330113**	100 x 70 x 96	ø 6 - 72	0.004	650	1800	8.000	3394111

BLUE-LINE Magnetic Measuring and Clamping V-Block

- special steel made
- with On/Off switch
- art.-no. 331000 - 331002 with flat magnetic base
- art.-no. 331010 - 331012 with magnetic prism base
- with V-cut 90°, fine ground
- plane, parallel and squared machined



ART NO 331010 + 331011



ART NO 331002



ART NO 331012



NORM | WARRANTY 2 YEARS

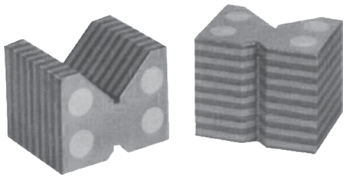
ART NO steel	mm	for shaft-ø mm	parallelism tolerance ± mm	N	flat base	prism base	KG
331000	101 x 76 x 78	ø 6 - 40	0.05	700	✓	-	3.100
331001	127 x 60 x 73	ø 6 - 35	0.05	600	✓	-	3.000
331002	70 x 60 x 73	ø 6 - 30	0.05	700	✓	-	1.400
331010	80 x 70 x 95	ø 6 - 30	0.05	800	-	✓	3.200
331011	101 x 67 x 95	ø 6 - 70	0.05	1000	-	✓	3.800
331012	115 x 75 x 100	ø 6 - 70	0.05	800	-	✓	5.500

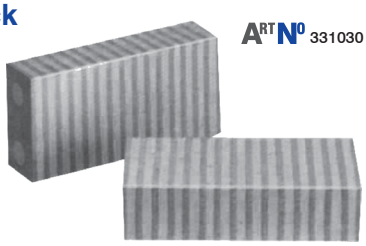
BLUE-LINE Lamellar Block / Prism Lamellar Block

- for setting on magnetic holding plates

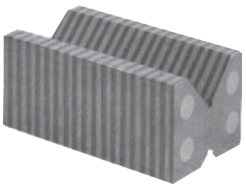
- special steel, fine ground
- with 90° cut or in flat version
- with pole distance 4 mm

ART NO 331040





ART NO 331030



ART NO 331041

NORM | WARRANTY 2 YEARS

ART NO flat	mm	KG
331030	100 x 50 x 25	1.230
-	-	-

ART NO with V-cut	mm	KG
331040	50 x 60 x 48	1.225
331041	100 x 60 x 48	1.320

BLUE-LINE V-Block with Clamp

- **for clamping cylindrical pieces**

- special steel, hardened, fine ground
- 2 different deep 90° V-cuts
- 2 supporting surfaces
- singly and in pair adjusted available



ART NO singly	ART NO pair	mm	clamping range for ø mm	max. ± mm / 100 mm	KG singly	KG pair
333001	**333011**	45 x 40 x 35	5 - 20	0.01	0.385	0.670
333002	**333012**	70 x 45 x 40	5 - 25	0.01	0.720	1.440

BLUE-LINE V-Block Pair with Clamps

- **for clamping cylindrical pieces and marking purposes, etc.**

- special steel, hardened or stainless steel hardened
- 2 different deep 90° V-cuts, surfaces finely ground
- front faces angular ground in regard to base area, adjusted in pairs

Option
- wooden boxes available, by extra charge, see page 215

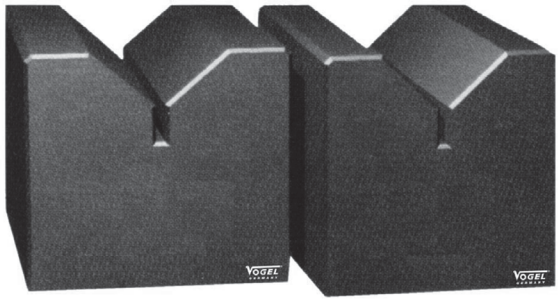


ART NO special steel pair	ART NO stainless steel pair	mm	clamping range for ø mm	max. ± mm / 100 mm	KG pair
333041	-	50 x 40 x 50	5 - 30	0.01	1.200
333042	-	75 x 55 x 55	5 - 50	0.01	2.800
333043	-	100 x 75 x 75	7 - 70	0.01	8.000
333051	**333056**	50 x 40 x 40	5 - 30	0.004	1.200
333052	**333057**	75 x 55 x 55	5 - 50	0.004	2.800
333053	**333058**	100 x 75 x 75	7 - 70	0.004	8.000

SILVER-LINE Vee Block Pair

- **made of granite**
- **for storing cylindrical pieces for marking etc.**
- **adjusted in pairs**

- particularly well selected material of highest quality
- with V-cut 90°, finely ground
- side- and front-faces angular ground in regard to base area
- incl. calibration certificate



ART NO pair	mm	supporting range for ø mm	max. ± mm / 100 mm	KG pair	CC
330510	63 x 63 x 63	ø 5 - 30	0.0015	1.490	inclusive
330511	100 x 100 x 100	ø 5 - 50	0.0020	5.870	inclusive
330512	160 x 160 x 160	ø 5 - 70	0.0025	23.800	inclusive

Replacement Clamp for Prisms

- singly packed

ART NO	suitable for	KG
3330901	333001+333011	0.073
3330902	333002+333012	0.127
3330941	333041+333051	0.115
3330942	333042+333052	0.222
3330943	333043+333053	0.364

ART NO 3330941



ART NO 3330901



Wooden Boxes for Prisms

- singly packed

ART NO	suitable for	KG
3399051	333051	0.290
3399052	333052	0.340
3399053	333053	0.420
3399041	333041	0.290
3399042	333042	0.340
3399043	333043	0.420
3399100	330102+330112	0.520
3399101	330103+330113	0.520



SILVER-LINE Granite Square Block

- accuracy grade 00
- with V-cut 90° (without measuring stand, without dial indicator)
- to use as measuring table for measurements and marking purposes

- particularly well selected material of highest quality
- with V-cut 90°, finely ground
- side- and front faces angular ground in regard to base area
- with thread insert M10
- incl. calibration certificate



measuring stands see pages 159-160
dial indicators see on pages 126-137



example

ART NO	mm	rectangularity ± mm	eveness ± mm	parallelism ± mm	KG	CC
330611*	150 x 150 x 150	0.004	0.0017	0.004	33.000	inclusive

Electr. Digital Height and Marking Gauge

- **with „ABSOLUT“ system**
- **with USB data output, top model (connectivity also for Digimatic measuring devices)**

- stainless steel guideway, with fine adjustment
- LCD with clear figures
- On/Off switch, zero-setting at any position
- reading switchable mm / inch
- data-hold, Preset function ±
- max. slidingspeed 1.5 m/sec.
- carbide tipped drawing point, interchangeable
- at „0“-position the drawing point coincides exactly with the base
- base made of stable cast iron, grey lacquered
- with battery 3 V (type CR 2032, art.-no.: 2002093), with operation manual

Options
- Mini-USB/USB data cable (art.-no. 3420192)
- Data transmission with data box (art.-no. 230139/1)







data box art.-no. 230139/1

Accessories can be found on page 217

ABSOLUTE | NORM | CE | TC | UNIT | CR2032 Lithium 3V | WARRANTY 3 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm	guide bar	size of base	KG	ART NO CC
340403	300 / 12	0.01 / 0.0005“	0.02	0.03	20 x 6	140 x 90 x 45	2.750	3494010

Electr. Digital Height and Marking Gauge

- **with data output RS232 C**

- stainless steel guideway, with fine adjustment
- LCD display with clear reading
- On/Off switch, zero-setting at any position
- reading switchable mm/inch
- Data-Hold, Preset function
- max. slidingspeed 1.5 m/sec.
- carbide tipped steel scriber, exchangeable
- at zero-position the scriber coincides exactly with the base
- sturdy base, cast iron made, lacquered
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual





Accessories can be found on page 217

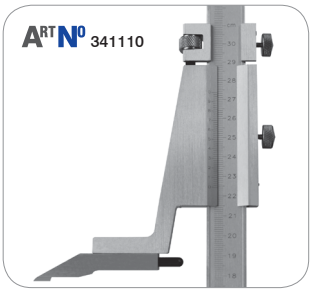
INOX | RS232 C | CE | NORM | TC | UNIT | LR44 1,5V | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	max. mm	guide bar	size of base	KG	ART NO CC
341103	300 / 12	0.01 / 0.0005	0.04	23 x 6	137 x 88 x 44	1.970	3494010
341105	500 / 20	0.01 / 0.0005	0.05	31 x 10	178 x 117 x 53	3.665	3494011
341109	1000 / 40	0.01 / 0.0005	0.07	50 x 17	250 x 150 x 73	12.330	3494012

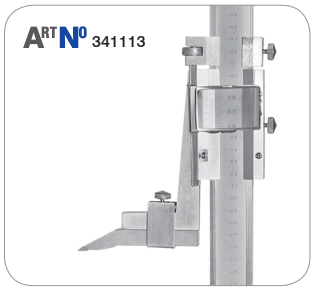
BLUE-LINE Universal Height and Marking Gauge

- **for standard workshop purposes**

- guide bar made of special steel
- reading parts matt chrome finish, with fine adjustement
- at zero-position the scriber coincides exactly with the base
- carbide tipped steel scriber, exchangeable
- sturdy base, cast iron made, lacquered
- art.-no. 341113 - 341119 with magnifying glass



without magnifying glass



with magnifying glass



Accessories can be found on page 217

ART NO	mm	mm	max. mm		mm guide bar	mm size of base	KG	ART NO CC
341110	300	0.02	0.04	✗	20 x 6	110 x 65 x 32	2.210	3494110
341111	500	0.02	0.05	✗	28 x 8	150 x 110 x 50	5.030	3494111
341113	300	0.02	0.04	✓	20 x 6	110 x 65 x 32	2.150	3494110
341116	500	0.02	0.05	✓	35 x 12	170 x 110 x 50	5.070	3494111
341119	1000	0.02	0.07	✓	35 x 12	220 x 150 x 55	10.490	3494112

DIGI PLUS-LINE „Absolute“ Electr. Digital Height and Marking Gauge NEW

- **for standard workshop purposes**
- **with Vocom-s duo data output, Mini-USB (connectivity also for Digimatic measuring devices)**

- guide bar made of stainless steel
- with handwheel for quick adjustment and fine adjustment
- LCD display with clear reading, digit height 14 mm
- reading mm/inch, switchable, zero-setting at any position
- On/Off switch, hold function, with „ORIGIN“ system
- carbide tipped steel scriber, exchangeable, with racks feed
- at zero-position the drawing point coincides exactly with the base
- with built-in connector for external power supply
- with holder for clamping a dial gauge, massive Special cast iron base, lacquered
- with external digital input function for example digital gauges art. series 240250 - 240257
- incl. 1 x 3 V battery (type CR2032, art.-no. 2002093), with operation manual

Connections:
Vocom-s
Mini-USB
Power Supply


application example

Options
- transmitter for wireless communication via WiFi, art.-no. 209006, see page 306
- receiver for wireless communication via WiFi, art.-no. 209007, see page 306
- transmitter and receiver for wireless communication as set, art.-no. 2040101, see page 306

Accessories can be found on page 217

ART NO	mm / inch	mm / inch	max. mm	mm	mm guide bar	mm size of base	KG	ART NO CC
341210	300 / 12	0.01 / 0.0005	0.03	0.02	35 x 15	150 x 100 x 50	5.070	3494110
341211	500 / 20	0.01 / 0.0005	0.05	0.02	35 x 15	150 x 100 x 50	8.100	3494111

DIGI PLUS-LINE Electr. Digital Height and Marking Gauge

- stainless steel guideway
- with handwheel for quick adjustment and fine adjustment
- LCD display with clear reading, reading mm / inch switchable
- On/Off switch, zero-setting at any position
- Preset-function, max. sliding speed 1.5 m/sec.
- carbide tipped steel scriber, exchangeable
- at zero-position the drawing point coincides exactly with the base
- sturdy base, cast iron made, lacquered
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual

Accessories can be found on page 217







INOX | UNIT | CE | NORM | TC | WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	max. mm	guide bar mm	size of base mm	KG	ART NO CC
341203	300 / 12	0.01 / 0.0005"	0.02	0.05	35 x 15	185 x 120 x 55	5.630	3494010
341206	600 / 24	0.01 / 0.0005"	0.02	0.06	35 x 15	185 x 145 x 55	8.250	3494011

BLUE-LINE Parallel Surface Gauge

- **for simple workshop purposes**
- round, chromed column, without graduation
- hardened steel scriber, straight and cranked bar
- scriber is rotatable and turnable
- round and lacquered iron base

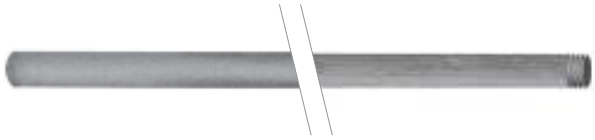


WARRANTY 1 YEAR

ART NO	mm	KG
342102	300	0.650
342104	500	2.400

Spare parts

- base / column / marking-needle with clamping
- for parallel marking gauges series 342102 - 342106

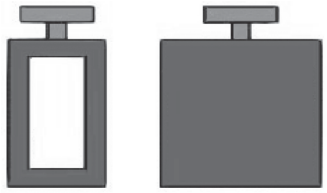






suitable for ART NO	ART NO base	base ø mm	ART NO column	column ø x L mm	ART NO marking-needle with clamping	marking-needle with clamping ø x L mm
342102	**3421021**	80	**3421022**	10 x 300	**3421023**	5 x 150
342104	**3421041**	80	**3421042**	10 x 500	**3421043**	5 x 150

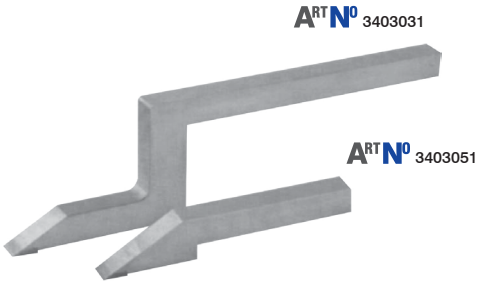
Spare drawing points for Height and Marking Gauges



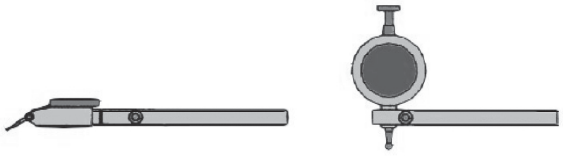
clamp holder



magnifying glass incl. frame



drawing points



holder for dial indicator

suitable for ART NO	ART NO carbide steel scriber	mm	ART NO clamp holder + srew	mm internal size	ART NO holder f. dial ind.	mm
341103	**3411031**	75 x 8 x 6	**3411032**	18.2 x 6.1	**3411033**	75 x 8 x 6
341105	**3411051**	100 x 12 x 10	**3411052**	24.2 x 10.1	**3411053**	95 x 12 x 10
341109	**3411091**	110 x 15 x 10	**3411092**	30.2 x 10.2	**3411093**	95 x 15 x 10
341110 / 341111	**3411101**	60 x 10 x 9	-	-	-	-
341116 / 341119	**3411111**	100 x 14 x 11	**3411112**	29.1 x 11.4	-	-
341113	**3411131**	80 x 11 x 9	**3411132**	22.5 x 9.3	-	-
341113	-	160 x 11 x 9	**341113/2**	22.5 x 9.3	-	-
341203	**3412031**	80 x 10 x 12	**3412032**	34.5 x 10.2	**3412033**	95 x 12 x 10
340305 / 340309	**3403031**	80 x 9 x 9	**3403032**	18.6 x 9.1	-	-
340303	**3403051**	77 x 9 x 9	**3403052**	21.1 x 9.1	-	-
341210 / 341211	**3403031**	80 x 9 x 9	**3403053**	20.5 x 9.1	**3412034**	87 x 8 x 8

suitable for ART NO	ART NO magnifying glass	mm magnifying glass	suitable for ART NO	ART NO magnifying glass	mm magnifying glass
341113	**341181**	43 x 31 x 8	341116 / 341119	**341182**	51.5 x 35 x 7.2

SILVER-LINE Parallel Gauge Blocks, individual

DIN EN ISO 3650

- from specially alloyed, particularly cured and relaxed special steel or of zirconia ceramic (best ceramic grade)
- ceramic gauge blocks are particularly suitable for the measurement chamber and test room
- each gauge block is marked with an identification number



DIN EN ISO | TC | WARRANTY 1 YEAR

Options

- **art.-no. 3594001** calibration certificate, traceable to national standards
- gauge blocks made of tungsten carbide available on request

size = nominal size mm	ART NO steel tolerance class 0	ART NO ceramic tolerance class 0	ART NO steel tolerance class 1	ART NO ceramic tolerance class 1	size = nominal size mm	ART NO steel tolerance class 0	ART NO ceramic tolerance class 0	ART NO steel tolerance class 1	ART NO ceramic tolerance class 1
0.50	350200 0.50	350201 0.50	350210 0.50	350211 0.50	1.48	350200 1.48	350201 1.48	350210 1.48	350211 1.48
1.000	350200 1.000	350201 1.000	350210 1.000	350211 1.000	1.49	350200 1.49	350201 1.49	350210 1.49	350211 1.49
1.0005	350200 1.0005	350201 1.0005	350210 1.0005	350211 1.0005	1.50	350200 1.50	350201 1.50	350210 1.50	350211 1.50
1.001	350200 1.001	350201 1.001	350210 1.001	350211 1.001	1.60	350200 1.60	350201 1.60	350210 1.60	350211 1.60
1.002	350200 1.002	350201 1.002	350210 1.002	350211 1.002	1.70	350200 1.70	350201 1.70	350210 1.70	350211 1.70
1.003	350200 1.003	350201 1.003	350210 1.003	350211 1.003	1.80	350200 1.80	350201 1.80	350210 1.80	350211 1.80
1.004	350200 1.004	350201 1.004	350210 1.004	350211 1.004	1.90	350200 1.90	350201 1.90	350210 1.90	350211 1.90
1.005	350200 1.005	350201 1.005	350210 1.005	350211 1.005	2.00	350200 2.00	350201 2.00	350210 2.00	350211 2.00
1.006	350200 1.006	350201 1.006	350210 1.006	350211 1.006	2.50	350200 2.50	350201 2.50	350210 2.50	350211 2.50
1.007	350200 1.007	350201 1.007	350210 1.007	350211 1.007	3.00	350200 3.00	350201 3.00	350210 3.00	350211 3.00
1.008	350200 1.008	350201 1.008	350210 1.008	350211 1.008	3.50	350200 3.50	350201 3.50	350210 3.50	350211 3.50
1.009	350200 1.009	350201 1.009	350210 1.009	350211 1.009	4.00	350200 4.00	350201 4.00	350210 4.00	350211 4.00
1.01	350200 1.01	350201 1.01	350210 1.01	350211 1.01	4.50	350200 4.50	350201 4.50	350210 4.50	350211 4.50
1.02	350200 1.02	350201 1.02	350210 1.02	350211 1.02	5.00	350200 5.00	350201 5.00	350210 5.00	350211 5.00
1.03	350200 1.03	350201 1.03	350210 1.03	350211 1.03	5.50	350200 5.50	350201 5.50	350210 5.50	350211 5.50
1.04	350200 1.04	350201 1.04	350210 1.04	350211 1.04	6.00	350200 6.00	350201 6.00	350210 6.00	350211 6.00
1.05	350200 1.05	350201 1.05	350210 1.05	350211 1.05	6.50	350200 6.50	350201 6.50	350210 6.50	350211 6.50
1.06	350200 1.06	350201 1.06	350210 1.06	350211 1.06	7.00	350200 7.00	350201 7.00	350210 7.00	350211 7.00
1.07	350200 1.07	350201 1.07	350210 1.07	350211 1.07	7.50	350200 7.50	350201 7.50	350210 7.50	350211 7.50
1.08	350200 1.08	350201 1.08	350210 1.08	350211 1.08	8.00	350200 8.00	350201 8.00	350210 8.00	350211 8.00
1.09	350200 1.09	350201 1.09	350210 1.09	350211 1.09	8.50	350200 8.50	350201 8.50	350210 8.50	350211 8.50
1.10	350200 1.10	350201 1.10	350210 1.10	350211 1.10	9.00	350200 9.00	350201 9.00	350210 9.00	350211 9.00
1.11	350200 1.11	350201 1.11	350210 1.11	350211 1.11	9.50	350200 9.50	350201 9.50	350210 9.50	350211 9.50
1.12	350200 1.12	350201 1.12	350210 1.12	350211 1.12	10.00	350200 10.00	350201 10.00	350210 10.00	350211 10.00
1.13	350200 1.13	350201 1.13	350210 1.13	350211 1.13	10.50	350200 10.50	350201 10.50	350210 10.50	350211 10.50
1.14	350200 1.14	350201 1.14	350210 1.14	350211 1.14	11.00	350200 11.00	350201 11.00	350210 11.00	350211 11.00
1.15	350200 1.15	350201 1.15	350210 1.15	350211 1.15	11.50	350200 11.50	350201 11.50	350210 11.50	350211 11.50
1.16	350200 1.16	350201 1.16	350210 1.16	350211 1.16	12.00	350200 12.00	350201 12.00	350210 12.00	350211 12.00
1.17	350200 1.17	350201 1.17	350210 1.17	350211 1.17	12.50	350200 12.50	350201 12.50	350210 12.50	350211 12.50
1.18	350200 1.18	350201 1.18	350210 1.18	350211 1.18	13.00	350200 13.00	350201 13.00	350210 13.00	350211 13.00
1.19	350200 1.19	350201 1.19	350210 1.19	350211 1.19	13.50	350200 13.50	350201 13.50	350210 13.50	350211 13.50
1.20	350200 1.20	350201 1.20	350210 1.20	350211 1.20	14.00	350200 14.00	350201 14.00	350210 14.00	350211 14.00
1.21	350200 1.21	350201 1.21	350210 1.21	350211 1.21	14.50	350200 14.50	350201 14.50	350210 14.50	350211 14.50
1.22	350200 1.22	350201 1.22	350210 1.22	350211 1.22	15.00	350200 15.00	350201 15.00	350210 15.00	350211 15.00
1.23	350200 1.23	350201 1.23	350210 1.23	350211 1.23	15.50	350200 15.50	350201 15.50	350210 15.50	350211 15.50
1.24	350200 1.24	350201 1.24	350210 1.24	350211 1.24	16.00	350200 16.00	350201 16.00	350210 16.00	350211 16.00
1.25	350200 1.25	350201 1.25	350210 1.25	350211 1.25	16.50	350200 16.50	350201 16.50	350210 16.50	350211 16.50
1.26	350200 1.26	350201 1.26	350210 1.26	350211 1.26	17.00	350200 17.00	350201 17.00	350210 17.00	350211 17.00
1.27	350200 1.27	350201 1.27	350210 1.27	350211 1.27	17.50	350200 17.50	350201 17.50	350210 17.50	350211 17.50
1.28	350200 1.28	350201 1.28	350210 1.28	350211 1.28	18.00	350200 18.00	350201 18.00	350210 18.00	350211 18.00
1.29	350200 1.29	350201 1.29	350210 1.29	350211 1.29	18.50	350200 18.50	350201 18.50	350210 18.50	350211 18.50
1.30	350200 1.30	350201 1.3	350210 1.30	350211 1.30	19.00	350200 19.00	350201 19.00	350210 19.00	350211 19.00
1.31	350200 1.31	350201 1.31	350210 1.31	350211 1.31	19.50	350200 19.50	350201 19.50	350210 19.50	350211 19.50
1.32	350200 1.32	350201 1.32	350210 1.32	350211 1.32	20.00	350200 20.00	350201 20.00	350210 20.00	350211 20.00
1.33	350200 1.33	350201 1.33	350210 1.33	350211 1.33	21.00	350200 21.00	350201 21.00	350210 21.00	350211 21.00
1.34	350200 1.34	350201 1.34	350210 1.34	350211 1.34	22.00	350200 22.00	350201 22.00	350210 22.00	350211 22.00
1.35	350200 1.35	350201 1.35	350210 1.35	350211 1.35	23.00	350200 23.00	350201 23.00	350210 23.00	350211 23.00
1.36	350200 1.36	350201 1.36	350210 1.36	350211 1.36	24.00	350200 24.00	350201 24.00	350210 24.00	350211 24.00
1.37	350200 1.37	350201 1.37	350210 1.37	350211 1.37	25.00	350200 25.00	350201 25.00	350210 25.00	350211 25.00
1.38	350200 1.38	350201 1.38	350210 1.38	350211 1.38	30.00	350200 30.00	350201 30.00	350210 30.00	350211 30.00
1.39	350200 1.39	350201 1.39	350210 1.39	350211 1.39	40.00	350200 40.00	350201 40.00	350210 40.00	350211 40.00
1.40	350200 1.40	350201 1.40	350210 1.40	350211 1.40	41.30	350200 50.00	350201 50.00	350210 50.00	350211 50.00
1.41	350200 1.41	350201 1.41	350210 1.41	350211 1.41	50.00	350200 50.00	350201 50.00	350210 50.00	350211 50.00
1.42	350200 1.42	350201 1.42	350210 1.42	350211 1.42	60.00	350200 60.00	350201 60.00	350210 60.00	350211 60.00
1.43	350200 1.43	350201 1.43	350210 1.43	350211 1.43	70.00	350200 70.00	350201 70.00	350210 70.00	350211 70.00
1.44	350200 1.44	350201 1.44	350210 1.44	350211 1.44	80.00	350200 80.00	350201 80.00	350210 80.00	350211 80.00
1.45	350200 1.45	350201 1.45	350210 1.45	350211 1.45	90.00	350200 90.00	350201 90.00	350210 90.00	350211 90.00
1.46	350200 1.46	350201 1.46	350210 1.46	350211 1.46	100.00	350200 100.00	350201 100.00	350210 100.00	350211 100.00
1.47	350200 1.47	350201 1.47	350210 1.47	350211 1.47	131.40	350200 131.40	350201 131.40	350210 131.40	350211 131.40

BLUE-LINE Parallel Gauge Block Set

DIN EN ISO 3650

- **for standard use in workshop area and at the machine**

- made of specially alloyed, particularly cured and relaxed special steel
- each gauge block is marked with an identification number
- calibration certificate available by extra charge



DIN EN ISO | TC | WARRANTY 1 YEAR

ART NO	tolerance class	quantity per set	pcs.	nominal size mm	steps mm	KG	ART NO CC
351001	0	32	1 9 9 9 4	1.005 1.01 - 1.09 1.1 - 1.9 1.0 - 9.0 10 / 20 / 30 / 50	- 0.01 0.1 1.0 -	1.500	3594032
351011	1						3594032
351021	2						3594032
351002	0	47	1 19 8 9 10	1.005 1.01 - 1.19 1.2 - 1.9 1.0 - 9.0 10 - 100	- 0.01 0.1 1.0 10.0	3.300	3594047
351012	1						3594047
351022	2						3594047
351003	0	87	9 49 19 10	1.001 - 1.009 1.01 - 1.49 0.5 - 9.5 10 - 100	0.001 0.01 0.5 10.0	3.800	3594087
351013	1						3594087
351023	2						3594087
351004	0	103	1 49 49 4	1.005 1.01 - 1.49 0.5 - 24.5 25 - 100	- 0.01 0.5 25.0	4.600	3594103
351014	1						3594103
351024	2						3594103

BLUE-LINE Rectangular Gauge Block Set

DIN EN ISO 3650

- **suitable for use in measurement and test room**

- made of specially alloyed, particularly cured and relaxed special steel
- each gauge block is marked with an identification number
- calibration certificate available by extra charge



DIN EN ISO | WARRANTY 1 YEAR

ART NO	tolerance class	quantity per set	nominal size mm	KG	ART NO CC
350180	0	8	125 / 150 / 175 / 200 / 250 / 300 / 400 / 500	7.000	3594080
350181	1	8	125 / 150 / 175 / 200 / 250 / 300 / 400 / 500	7.000	3594080
350183	0	5	600 / 700 / 800 / 900 / 1000	18.000	3594081
350184	1	5	600 / 700 / 800 / 900 / 1000	18.000	3594081

Steel Parallel Gauge Block Sets

Parallel Gauge Block Set

SILVER-LINE

DIN EN ISO 3650

- **suitable for use in measurement and test room**

- made of specially alloyed, particularly cured and relaxed special steel
- each gauge block is marked with an identification number
- calibration certificate available by extra charge

Tungsten carbide sets available on request!



DIN EN ISO | TC | WARRANTY 2 YEARS

ART NO	tolerance class	quantity per set	pcs.	nominal size mm	steps mm	KG	ART NO CC
350001	0	32	1 9 9 9 4	1.005 1.01 - 1.09 1.1 - 1.9 1.0 - 9.0 10 / 20 / 30 / 50	- 0.01 0.1 1.0 -	1.500	3594032
350011	1						3594032
350021	2						3594032
350002	0	47	1 19 8 9 10	1.005 1.01 - 1.19 1.2 - 1.9 1.0 - 9.0 10 - 100	- 0.01 0.1 1.0 10.0	3.300	3594047
350012	1						3594047
350022	2						3594047
350003	0	87	9 49 19 10	1.001 - 1.009 1.01 - 1.49 0.5 - 9.5 10 - 100	0.001 0.01 0.5 10.0	3.800	3594087
350013	1						3594087
350023	2						3594087
350004	0	103	1 49 49 4	1.005 1.01 - 1.49 0.5 - 24.5 25 - 100	- 0.01 0.5 25.0	4.600	3594103
350014	1						3594103
350024	2						3594103
350005	0	112	1 9 49 49 4	1.0005 1.001 - 1.009 1.01 - 1.49 0.5 - 24.5 10 - 100	- 0.001 0.01 0.5 25.0	4.680	3594112
350015	1						3594112
350025	2						3594112

Rectangular Gauge Block Set

SILVER-LINE

DIN EN ISO 3650

- **suitable for use in measurement and test room**

- made of specially alloyed, particularly cured and relaxed special steel
- each gauge block is marked with an identification number
- calibration certificate available by extra charge



DIN EN ISO | TC | WARRANTY 2 YEARS

ART NO	tolerance class	quantity per set	nominal size mm	KG	ART NO CC
350185	0	8	125 / 150 / 175 / 200 / 250 / 300 / 400 / 500	7.000	3594080
350186	1	8	125 / 150 / 175 / 200 / 250 / 300 / 400 / 500	7.000	3594080
350187	0	5	600 / 700 / 800 / 900 / 1000	18.000	3594081
350188	1	5	600 / 700 / 800 / 900 / 1000	18.000	3594081

Ceramic Parallel Gauge Block Set

DIN EN ISO 3650

- **suitable for use in measurement and test room**

- made of zirconia ceramic, best ceramic quality
- up to 50-fold higher wear resistance than steel
- high thermal stability
- high resistance to knocks and drops
- does not burr easily and high corrosion resistant
- each gauge block is marked with an identification number
- calibration certificate available by extra charge

Other set combinations available on request!



DIN EN ISO | TC | WARRANTY 2 YEARS

ART NO	tolerance class	quantity per set	pcs.	nominal size mm	steps mm	KG	ART NO CC
350031	0	32	1 9 9 9 4	1.005 1.01 - 1.09 1.1 - 1.9 1.0 - 9.0 10 / 20 / 30 / 50	- 0.01 0.1 1.0 -	1.200	3594032
350041	1						3594032
350032	0	47	1 19 8 9 10	1.005 1.01 - 1.19 1.2 - 1.9 1.0 - 9.0 10 - 100	- 0.01 0.1 1.0 10.0	2.600	3594047
350042	1						3594047
350033	0	87	9 49 19 10	1.001 - 1.009 1.01 - 1.49 0.5 - 9.5 10 - 100	0.001 0.01 0.5 10.0	3.000	3594087
350043	1						3594087

Optical Parallels

- **designed to inspect parallelism and flatness of measuring faces of micrometers**
- **each glass is marked with an identification-number (glued)**

- ground and polished on both sides
- polished and faceted border



example

ART NO 350309



TC | WARRANTY 1 YEAR

ART NO	nominal size mm	glass-ø mm	accuracy of flatness µm	parallelism µm	KG
350305/1	20	60	≤ 0.10	≤ 0.20	0.145
350309	12.00 / 12.12 / 12.25 / 12.37	60	≤ 0.10	≤ 0.20	0.365
350309/1	25.00 / 25.12 / 25.25 / 25.37	60	≤ 0.10	≤ 0.40	0.500

Inspection Gauge Block Sets

Inspection Gauge Block Set, for Micrometers

DIN EN ISO 3650

- **for review and adjustment of micrometer acc. to VDI/VDE/DGQ 2618, page 5**

- with optical plane face glass and gloves
- each gauge block is marked with an identification number
- calibration certificate **without** optical plane glass calibration by extra charge



DIN EN ISO | TC | WARRANTY 1 YEAR

ART NO ceramic	ART NO steel	ART NO carbide	tolerance class	quantity per set	nominal size mm	KG	ART NO CC
350110	**350130**	**350119**	1	10	2.50 / 5.10 / 7.70 / 10.30 / 12.90 / 15.00 / 17.60 / 20.20 / 22.80 / 25.00	1.000	3594010

Inspection Gauge Block Set, for Micrometers

DIN EN ISO 3650

- **for review and adjustment of micrometer acc. to VDI/VDE/DGQ 2618, page 5 / 10.1**

- each gauge block is marked with an identification number
- calibration certificate by extra charge



DIN EN ISO | TC | WARRANTY 1 YEAR

ART NO steel	for micrometer sizes	tolerance class	quantity per set	nominal size mm	KG	ART NO CC
350176	0 - 25	1	5	5.10 / 10.30 / 15.00 /20.20 / 25	0.850	3594186
350177	0 - 100	1	8	5.10 / 10.30 / 15.00 / 20.20 / 25 / 50 / 75 / 100	0.980	3594187

Inspection Gauge Block Set, for Calipers

DIN EN ISO 3650

- **for review and adjustment of calipers acc. to VDI/VDE/DGQ 2618, page 8 / 9.1**

- incl. steel setting ring, hardened and incl. gloves
- each gauge block is marked with an identification number
- calibration certificate by extra charge



DIN EN ISO | TC | WARRANTY 1 YEAR

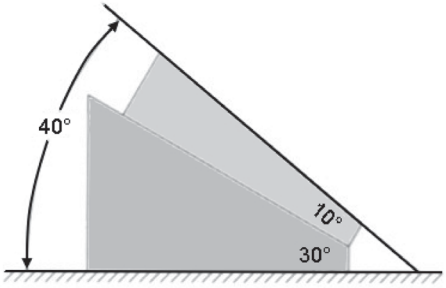
ART NO ceramic	ART NO steel	tolerance class	ø mm	nominal size mm	KG	ART NO CC
350111	**350139**	1	20	30 / 41.3 / 131.4	1.000	3594007
350118	**350148**	1	4 and 25	30 / 41.3 / 131.4	1.100	3594008

BLUE-LINE Angle Gauge Block Set

- **workshop quality, for standard purposes**
- **for fast, easy and accurate determination of angular dimensions**

- hardened and relieved special steel, high grade of abrasion resistance
- measuring faces fine ground
- angle accuracy of measuring faces +/- 60”





WARRANTY 1 YEAR

ART NO	tolerance class	quantity per set	angle sizes in °	L x H	KG	ART NO CC
352012	1	12	0.25 / 0.5 / 1 / 2 / 3 / 4 / 5 / 10 / 15 / 20 / 25 / 30°	75 x 6.5	0.930	3594212

Explore our website!

On our website you will find many features and informations, which make cooperation with us very well. For more dealer information, ask for your personal access code to our login area!

Our Vmade -team is happy to help.



Any questions?
We are pleased to advise!

Accessories for Parallel Gauge Blocks

BLUE-LINE Accessory Set for Gauge Blocks

- **8-piece set, contents:**
- 1 pair of 2 mm half round jaws
- 1 pair of 5 mm half round jaws
- 1 scriber point, 1 centering tip
- 1 holder 0 - 50 / 0 - 100 / 100 - 200 mm
- 1 base for holder



ART NO	content / pieces	KG
353000	8	3.000

BLUE-LINE Gauge Block Holder

- **for clamping individual gauge blocks**
- special steel made

ART NO 350313 - 350317



ART NO 350310 - 350312



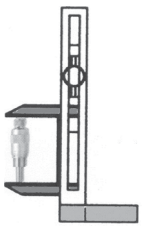
ART NO	clamping range mm	suitable base		KG
350310	0 - 50	353020	-	0.230
350311	0 - 100	353020	-	0.250
350312	100 - 200	353020	-	0.300
350313	0 - 300	-	353021	0.500
350314	100 - 300	-	353021	0.500
350315	200 - 400	-	353021	0.600
350316	300 - 500	-	353021	0.700
350317	400 - 600	-	353021	0.800

BLUE-LINE Holder Base

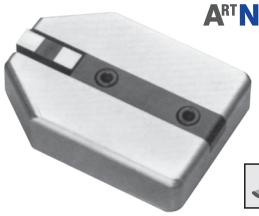
- made of cast steel
- **art.-no. 353020** special steel, chromed
- **art.-no. 353021** cast iron, lacquered

ART NO 353021





ART NO 353020



ART NO	ART NO	KG
353020	-	0.140
-	**353021**	0.920

BLUE-LINE Gauge Connector

- **art.-no. 350360** for coupling gauge blocks > 100 mm
- **art.-no. 350361** for coupling gauge blocks > 100 mm with gauges < 100 mm

Other sizes available on request!

ART NO 350361

ART NO 350360



ART NO	for sizes mm	KG
350360	> 100 + > 100	0.210
350361	0 - 180	0.200

VOGEL GERMANY products are on top of the charts!

Vogel Germany always convinced with innovation and quality,
for example with the products:

Inspection Tool Kits

Got an award by German magazine “Heimwerker Praxis”.



Price / Performance: goog - excellent

Pocket Measuring Tapes

Got an award by German magazine “DIY selbermachen”.



For more information and options
please have a look at our website.

Accessories for Parallel Gauge Blocks

VBLUE-LINE® Half rounded Measuring Jaws, in pair

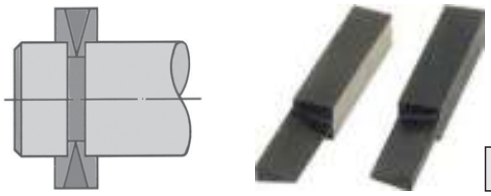
- half round jaws for internal and external measurements
- hardened and relieved steel



ART NO	nominal size ø mm	max. measuring depth mm	total length mm	KG
350327	2	10	40	0.022
350328	5	15	45	0.030
350329	10	40	70	0.055

VBLUE-LINE® Knife Edge Jaws, in pair

- hardened and relieved steel



ART NO	nominal size ø mm	total length mm	KG
353026	60	65	0.080

VBLUE-LINE® Steel Scriber Point

- hardened and relieved steel



ART NO	KG
350350	0.055

VBLUE-LINE® Centering Point

- hardened and relieved steel



ART NO	KG
350351	0.055

VBLUE-LINE® Measuring Jaws, in Pair

- hardened and relieved steel



ART NO	total length mm	KG
353025	100	0.140

BLUE-LINE Maintenance Kit for Gauge Block

contents:

linen cloth, chamois leather, anti corrosion oil, deburring stone, soft brush, grease brush, operation manual

ART NO 350301



BLUE-LINE Anti Corrosion Oil

- **for maintenance and cleaning of gauge blocks and other gauges, brings a protective film on the surface**

ART NO 350306



ART NO	KG
350301	0.690

ART NO	contents ml	KG
350306	50	0.060

BLUE-LINE Maintenance Spray

- **cleans, maintains and lubricates measuring tools, loosens caked-on section and conserves degreased mechanical connections**
- acid and resin-free, compatible to environment, FCKW-free
- displaces humidity in electrical and electronical areas





ART NO	contents ml	mm	KG
350320	500	260 x ø 64	0.480

BLUE-LINE Metal Maintenance Tissue

- **cleans and maintains all kind of metal, thoroughly and streak-free**
- **makes a protective film on the metal parts**
- **tissues in a dispenser box**
- acid- and resin-free, steak-free and odorless, compatible to environment
- for indoor- and outdoor use





ART NO	contents tissues pcs.	mm	KG
350321	80	190 x ø 90	0.205

Precision Inspection Spirit Levels

DIN 877

- **for accurate levelling and adjusting of surfaces and cylinders**

- housing made of special cast iron
- with prism and flat surface, finely ground
- adjustable main vial and one cross vial
- with insulation handles



ART NO 360281



ART NO 360202

DIN | TC | WARRANTY 2 YEARS

ART NO sensitivity 0.01 mm/m	ART NO sensitivity 0.02 mm/m	ART NO sensitivity 0.05 mm/m	length mm	KG	ART NO CC
-	**360281**	**360282**	150	1.100	3694150
360202	**360283**	**360284**	200	1.400	3694200
360203	**360285**	-	250	1.830	3694250
360204	**360287**	**360288**	300	2.180	3694300

ART NO sensitivity 0.1 mm/m	ART NO sensitivity 0.3 mm/m	ART NO sensitivity 0.5 mm/m	length mm	KG	ART NO CC
-	-	**360261**	150	1.100	3694150
360251	**360231**	-	160	1.100	3694160
360252	**360232**	**360262**	200	1.400	3694200
360253	**360233**	-	250	1.830	3694250
360254	**360234**	**360264**	300	2.180	3694300

Precision Inspection Frame Spirit Levels

DIN 877

- **for levelling and adjusting of horizontal and vertical surfaces and cylinders**

- housing made of special cast iron
- with prism and flat surface, fine ground
- adjustable main vial and one cross vial
- with insulation handles



DIN | TC | WARRANTY 2 YEARS

ART NO sensitivity 0.02 mm/m	ART NO sensitivity 0.05 mm/m	ART NO sensitivity 0.1 mm/m	mm	KG	ART NO CC
360311	**360312**	**360351**	150 x 150 x 40	2.200	3694151
360313	**360314**	**360352**	200 x 200 x 40	3.300	3694201
360315	**360316**	-	250 x 250 x 40	4.400	3694251
360317	-	**360353**	300 x 300 x 40	5.000	3694301

SILVER-LINE Precision Crank Pin Levels

DIN 877

- **to adjust crankshafts and crank pins of motors and machines**

- with vertical and horizontal prism, fine ground
- with main vial and cross vial
- width 40 mm

Option
- with magnets in the prism bottom on request, please



DIN | TC | WARRANTY 2 YEARS

ART NO sensitivity 0.04 mm/m	ART NO sensitivity 0.1 mm/m	ART NO sensitivity 0.2 mm/m	length mm	KG	ART NO CC
-	-	**360295**	60	0.510	3694062
360296	-	-	90	0.740	3694121
360297	-	-	120	1.010	3694121
-	**360293**	-	90	0.740	3694091
-	**360294**	-	120	1.010	3694091

SILVER-LINE Precision Alloy Spirit Level

- **for simple levelling and adjusting of surfaces and cylinders**

- housing made of alloy cast
- with ground prism base
- with ground and graduated main vial



NORM | TC | WARRANTY 2 YEARS

ART NO sensitivity 0.6 mm/m	length mm	width mm	KG
360410	100	22	0.080
360415	150	22	0.120

ART NO sensitivity 0.6 mm/m	length mm	width mm	KG	ART NO CC
360420	200	22	0.160	3694400
360430	300	22	0.240	3694400

DIGI PLUS-LINE Electr. Digital Light Alloy Spirit Level

- **with cross laser, angle degree indicator and percent deviation**

- rugged, rectangular profile, made of light alloy, with ribbed surface
- large LCD display, digit height 10 mm, reading from all directions possible
- switchable display in angle-, percentage measuring- and tangent-mode
- On/Off button, data hold function and memory function
- magnetic inserts in the bottom and M6 thread for tripod attachment
- with each 1x horizontal and 1x vertical vial
- with self-calibration and switchable cross laser
- incl. 1x 9 V battery (type 6LR61, art.-no.: 609281), with operation manual





with magnet inserts and M6 thread for tripod attachment





with cross laser

UNIT | NORM | TC | WARRANTY 2 YEARS

ART NO	± °	mm	KG
712010	4 x 90°	0.05°	0.1	225 x 57 x 25	0.278



We seek the dialogue where you are at home...

Trade fairs, customer- and in-house exhibitions!

Hereby we see an opportunity to support your company in the implementation of your customers and in-house shows, so that you can achieve your customers need precisely.

We offer a lot of service and support to you.

Contact us, we are happy to help!

Limit Plug Gauge

tolerance and dimensions acc. to DIN 7150-2 and DIN 7164

- **designed acc. to DIN 2245 / 2246 / 2247**
- special steel, finely ground and lapped
- with „Go“ and „No-Go“ surface end



DIN | TC | WARRANTY 2 YEARS

ART NO tolerance H7	ART NO other tolerances	size-ø mm	ART NO CC
370800010	370900010	1.0	3794001
370800012	370900012	1.2	3794001
370800015	370900015	1.5	3794001
370800018	370900018	1.8	3794001
370800020	370900020	2.0	3794001
370800022	370900022	2.2	3794001
370800025	370900025	2.5	3794001
370800028	370900028	2.8	3794001
370800030	370900030	3.0	3794001
370800035	370900035	3.5	3794002
370800040	370900040	4.0	3794002
370800045	370900045	4.5	3794002
370800050	370900050	5.0	3794002
370800060	370900060	6.0	3794002
370800070	370900070	7.0	3794002
370800080	370900080	8.0	3794002
370800090	370900090	9.0	3794002
370800100	370900100	10	3794002
370800110	370900110	11	3794002
370800120	370900120	12	3794002
370800130	370900130	13	3794002
370800140	370900140	14	3794002
370800150	370900150	15	3794002
370800160	370900160	16	3794002
370800170	370900170	17	3794002
370800180	370900180	18	3794002
370800190	370900190	19	3794002
370800200	370900200	20	3794002
370800210	370900210	21	3794003
370800220	370900220	22	3794003
370800230	370900230	23	3794003
370800240	370900240	24	3794003
370800250	370900250	25	3794003
370800260	370900260	26	3794003
370800270	370900270	27	3794003
370800280	370900280	28	3794003

ART NO tolerance H7	ART NO other tolerances	size-ø mm	ART NO CC
370800300	370900300	30	3794003
370800320	370900320	32	3794003
370800330	370900330	33	3794003
370800340	370900340	34	3794003
370800350	370900350	35	3794003
370800360	370900360	36	3794003
370800370	370900370	37	3794003
370800380	370900380	38	3794003
370800400	370900400	40	3794003
370800420	370900420	42	3794003
370800440	370900440	44	3794003
370800450	370900450	45	3794003
370800460	370900460	46	3794003
370800470	370900470	47	3794003
370800480	370900480	48	3794003
370800500	370900500	50	3794003
370800520	370900520	52	3794003
370800550	370900550	55	3794003
370800580	370900580	58	3794003
370800600	370900600	60	3794003
370800620	370900620	62	3794004
370800650	370900650	65	3794004
370800680	370900680	68	3794004
370800700	370900700	70	3794004
370800720	370900720	72	3794004
370800750	370900750	75	3794004
370800780	370900780	78	3794004
370800800	370900800	80	3794004
370800820	370900820	82	3794004
370800850	370900850	85	3794004
370800880	370900880	88	3794004
370800900	370900900	90	3794004
370800920	370900920	92	3794004
370800950	370900950	95	3794004
370800980	370900980	98	3794004
370801000	370901000	100	3794004

Limit Plug Gauge

tolerance and dimensions acc. to DIN 7150-2 and DIN 7164

- **hard chromed plated**
- with hard chromed “Go” surface end and “No-Go” surface end in special steel, hardened



DIN | TC | WARRANTY 2 YEARS

ART NO tolerance H7	size-ø mm	ART NO tolerance H7	size-ø mm
370820010	1.0	370820025	2.5
370820012	1.2	370820028	2.8
370820015	1.5	370820030	3.0
370820018	1.8	370820035	3.5
370820020	2.0	370820040	4.0
370820022	2.2	370820045	4.5

ART NO tolerance H7	size-ø mm	ART NO tolerance H7	size-ø mm
370820050	5.0	370820120	12
370820060	6.0	370820150	15
370820070	7.0	370820200	20
370820080	8.0	370820220	22
370820090	9.0	370820250	25
370820100	10.0	370820300	30

Other sizes available on request!

Precision Ring Gauges

SILVER-LINE

Setting Ring Gauges, acc. to DIN 2250 C, DIN ISO 286/1
„Go“ Ring Gauges, indicate the requested tolerance, please
„No-Go“ Ring Gauges, indicate the requested tolerance, please

- special steel, hardened, finely ground and lapped



DIN ISO | DIN | TC | WARRANTY 2 YEARS

ART NO setting ring	ART NO „Go“ ring	ART NO „No-Go“ ring	size- ø mm	ART NO CC
3707700010	3707720010	3707730010	1.0	3794011
3707700012	3707720012	3707730012	1.2	3794011
3707700015	3707720015	3707730015	1.5	3794011
3707700018	3707720018	3707730018	1.8	3794011
3707700020	3707720020	3707730020	2.0	3794011
3707700022	3707720022	3707730022	2.2	3794011
3707700025	3707720025	3707730025	2.5	3794011
3707700028	3707720028	3707730028	2.8	3794011
3707700030	3707720030	3707730030	3.0	3794011
3707700035	3707720035	3707730035	3.5	3794011
3707700040	3707720040	3707730040	4.0	3794011
3707700045	3707720045	3707730045	4.5	3794011
3707700050	3707720050	3707730050	5.0	3794011
3707700060	3707720060	3707730060	6.0	3794012
3707700070	3707720070	3707730070	7.0	3794012
3707700080	3707720080	3707730080	8.0	3794012
3707700090	3707720090	3707730090	9.0	3794012
3707700100	3707720100	3707730100	10.0	3794012
3707700110	3707720110	3707730110	11.0	3794012
3707700120	3707720120	3707730120	12.0	3794012
3707700130	3707720130	3707730130	13.0	3794012
3707700140	3707720140	3707730140	14.0	3794012
3707700150	3707720150	3707730150	15.0	3794012
3707700160	3707720160	3707730160	16.0	3794012
3707700170	3707720170	3707730170	17.0	3794012
3707700180	3707720180	3707730180	18.0	3794012
3707700190	3707720190	3707730190	19.0	3794012
3707700200	3707720200	3707730200	20.0	3794012
3707700210	3707720210	3707730210	21.0	3794012
3707700220	3707720220	3707730220	22.0	3794012
3707700230	3707720230	3707730230	23.0	3794012
3707700240	3707720240	3707730240	24.0	3794012
3707700250	3707720250	3707730250	25.0	3794012
3707700260	3707720260	3707730260	26.0	3794012
3707700270	3707720270	3707730270	27.0	3794012
3707700280	3707720280	3707730280	28.0	3794012
3707700300	3707720300	3707730300	30.0	3794012
3707700320	3707720320	3707730320	32.0	3794012
3707700330	3707720330	3707730330	33.0	3794012
3707700340	3707720340	3707730340	34.0	3794012
3707700350	3707720350	3707730350	35.0	3794012
3707700360	3707720360	3707730360	36.0	3794012
3707700370	3707720370	3707730370	37.0	3794012
3707700380	3707720380	3707730380	38.0	3794012
3707700400	3707720400	3707730400	40.0	3794012
3707700420	3707720420	3707730420	42.0	3794012
3707700440	3707720440	3707730440	44.0	3794012
3707700450	3707720450	3707730450	45.0	3794012
3707700460	3707720460	3707730460	46.0	3794012
3707700470	3707720470	3707730470	47.0	3794012
3707700480	3707720480	3707730480	48.0	3794012
3707700500	3707720500	3707730500	50.0	3794012

ART NO setting ring	ART NO „Go“ ring	ART NO „No-Go“ ring	size- ø mm	ART NO CC
3707700520	3707720520	3707730520	52.0	3794013
3707700550	3707720550	3707730550	55.0	3794013
3707700580	3707720580	3707730580	58.0	3794013
3707700600	3707720600	3707730600	60.0	3794013
3707700620	3707720620	3707730620	62.0	3794013
3707700650	3707720650	3707730650	65.0	3794013
3707700680	3707720680	3707730680	68.0	3794013
3707700700	3707720700	3707730700	70.0	3794013
3707700720	3707720720	3707730720	72.0	3794013
3707700750	3707720750	3707730750	75.0	3794013
3707700780	3707720780	3707730780	78.0	3794013
3707700800	3707720800	3707730800	80.0	3794013
3707700820	3707720820	3707730820	82.0	3794013
3707700850	3707720850	3707730850	85.0	3794013
3707700880	3707720880	3707730880	88.0	3794013
3707700900	3707720900	3707730900	90.0	3794013
3707700920	3707720920	3707730920	92.0	3794013
3707700950	3707720950	3707730950	95.0	3794013
3707700980	3707720980	3707730980	98.0	3794013
3707701000	3707721000	3707731000	100.0	3794013
3707701050	3707721050	3707731050	105.0	3794013
3707701100	3707721100	3707731100	110.0	3794013
3707701150	3707721150	3707731150	115.0	3794013
3707701200	3707721200	3707731200	120.0	3794013
3707701250	3707721250	3707731250	125.0	3794013
3707701300	3707721300	3707731300	130.0	3794013
3707701350	3707721350	3707731350	135.0	3794013
3707701400	3707721400	3707731400	140.0	3794013
3707701450	3707721450	3707731450	145.0	3794013
3707701500	3707721500	3707731500	150.0	3794013
3707701550	3707721550	3707731550	155.0	3794013
3707701600	3707721600	3707731600	160.0	3794013
3707701650	3707721650	3707731650	165.0	3794013
3707701700	3707721700	3707731700	170.0	3794013
3707701750	3707721750	3707731750	175.0	3794013
3707701800	3707721800	3707731800	180.0	3794013
3707701850	3707721850	3707731850	185.0	3794013
3707701900	3707721900	3707731900	190.0	3794013
3707701950	3707721950	3707731950	195.0	3794013
3707702000	3707722000	3707732000	200.0	3794014
3707702100	3707722100	3707732100	210.0	3794014
3707702200	3707722200	3707732200	220.0	3794014
3707702400	3707722400	3707732400	240.0	3794014
3707702500	3707722500	3707732500	250.0	3794014
3707702600	3707722600	3707732600	260.0	3794014
3707702800	3707722800	3707732800	280.0	3794014
3707703000	3707723000	3707733000	300.0	3794014
3707703200	3707723200	3707733200	320.0	3794014
3707703400	3707723400	3707733400	340.0	3794014
3707703600	3707723600	3707733600	360.0	3794014
3707703800	3707723800	3707733800	380.0	3794014
3707704000	3707724000	3707734000	400.0	3794014

SILVER-LINE

Limit Thread Plug Gauge

DIN 13

- **metric ISO-threads**

- special steel, hardened and finely ground
- „type A“ „Go“ and „No-Go“ thread plug gauge



DIN ISO | DIN | TC | WARRANTY 2 YEARS

ART NO type A	tolerance class	thread-ø mm	ART NO CC
390101	5H	1.0 x 0.25	3994020
390102	5H	1.1 x 0.25	3994020
390103	5H	1.2 x 0.25	3994020
390104	5H	1.4 x 0.3	3994020
390105	6H	1.6 x 0.35	3994020
390106	6H	1.8 x 0.35	3994020
390107	6H	2.0 x 0.4	3994020
390108	6H	2.2 x 0.45	3994020
390109	6H	2.5 x 0.45	3994020
390110	6H	3.0 x 0.5	3994020
390111	6H	3.5 x 0.6	3994021
390112	6H	4.0 x 0.7	3994021
390113	6H	4.5 x 0.75	3994021
390114	6H	5.0 x 0.8	3994021
390115	6H	6.0 x 1.0	3994021
390116	6H	7.0 x 1.0	3994021
390117	6H	8.0 x 1.25	3994021
390118	6H	9.0 x 1.25	3994021
390119	6H	10 x 1.5	3994021
390120	6H	12 x 1.75	3994021
390121	6H	14 x 2.0	3994021
390122	6H	16 x 2.0	3994021
390123	6H	18 x 2.5	3994021
390124	6H	20 x 2.5	3994021
390125	6H	22 x 2.5	3994022
390126	6H	24 x 3.0	3994022
390127	6H	27 x 3.0	3994022
390128	6H	30 x 3.5	3994022
390129	6H	33 x 3.5	3994022
390130	6H	36 x 4.0	3994022
390131	6H	39 x 4.0	3994022

Other sizes or types are available on request!

Limit Thread Ring Gauges and Sets

SILVER-LINE Limit Thread Ring Gauge

DIN 13

- **metric ISO-threads**
- special steel, hardened and finely ground



type B type C

type B „Go“ thread ring gauge
type C „No-Go“ thread ring gauge

DIN | TC | WARRANTY 2 YEARS

ART NO type B	ART NO type C	tolerance class	thread-ø mm	ART NO CC
390201	390301	6h	1.0 x 0.25	3994020
390202	390302	6h	1.1 x 0.25	3994020
390203	390303	6h	1.2 x 0.25	3994020
390204	390304	6h	1.4 x 0.3	3994020
390205	390305	6g	1.6 x 0.35	3994020
390206	390306	6g	1.8 x 0.35	3994020
390207	390307	6g	2.0 x 0.4	3994020
390208	390308	6g	2.2 x 0.45	3994020
390209	390309	6g	2.5 x 0.45	3994020
390210	390310	6g	3.0 x 0.5	3994020
390211	390311	6g	3.5 x 0.6	3994021
390212	390312	6g	4.0 x 0.7	3994021
390213	390313	6g	4.5 x 0.75	3994021
390214	390314	6g	5.0 x 0.8	3994021
390215	390315	6g	6.0 x 1.0	3994021
390216	390316	6g	7.0 x 1.0	3994021
390217	390317	6g	8.0 x 1.25	3994021
390218	390318	6g	9.0 x 1.25	3994021
390219	390319	6g	10 x 1.5	3994021
390220	390320	6g	12 x 1.75	3994021
390221	390321	6g	14 x 2.0	3994021
390222	390322	6g	16 x 2.0	3994021
390223	390323	6g	18 x 2.5	3994021
390224	390324	6g	20 x 2.5	3994021
390225	390325	6g	22 x 2.5	3994022

ART NO type B	ART NO type C	tolerance class	thread-ø mm	ART NO CC
390226	390326	6g	24 x 3.0	3994022
390227	390327	6g	27 x 3.0	3994022
390228	390328	6g	30 x 3.5	3994022
390229	390329	6g	33 x 3.5	3994022
390230	390330	6g	36 x 4.0	3994022
390231	390331	6g	39 x 4.0	3994022
390232	390332	6g	42 x 4.5	3994022
390233	390333	6g	45 x 4.5	3994022
390234	390334	6g	48 x 5.0	3994022
390235	390335	6g	52 x 5.0	3994022
390236	390336	6g	56 x 5.5	3994022
390237	390337	6g	60 x 5.5	3994023
390238	390338	6g	64 x 6.0	3994023
390239	390339	6g	68 x 6.0	3994023
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

SILVER-LINE Limit Thread Plug Gauge Set
Limit Thread Ring Gauge Set
Limit Plug Gauge Set

- **acc. to DIN tolerances**
- special steel, hardened, fine ground

Option
- with wooden case, available on request



DIN | TC | WARRANTY 2 YEARS

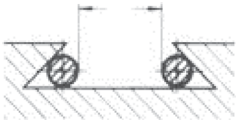
ART NO	plug gauge set	ring gauge set	„Go“	„No-Go“	contents mm	ART NO CC
390801	✓	-	✓	✓	M 3 / M 4 / M 5 / M 6 / M 8 / M 10 / M 12	3994801
390805	-	✓	✓	-	M 3 / M 4 / M 5 / M 6 / M 8 / M 10 / M 12	3994805
390806	-	✓	-	✓	M 3 / M 4 / M 5 / M 6 / M 8 / M 10 / M 12	3994806
370801	✓	-	✓	✓	3H7 / 4H7 / 5H7 / 6H7 / 8H7 / 10H7 / 12H7	3794801

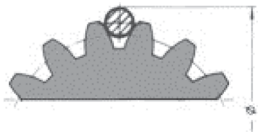
SILVER-LINE

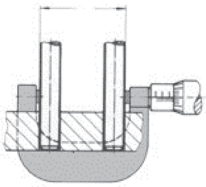
Cylindrical Measuring Pins in a Set

DIN 2269

- special chrome-steel with high wearing quality and enough resistance to corrosion
- hardened, finely ground and **lapped**
- from up 3.0 mm marked with the size on the top surface









DIN | TC | WARRANTY 2 YEARS

ART NO	contents pcs.	size-ø mm	steps mm	max. ± mm	length mm	ART NO CC
380210	21	0.10 - 0.30	0.01	0.0005	30	3894021
380211	21	0.30 - 0.50	0.01	0.0005	30	3894021
380212	51	0.50 - 1.00	0.01	0.0005	30	3894051
380213	19	0.10 - 1.00	0.05	0.0005	30	3894019
380301	21	0.10 - 0.30	0.01	0.0010	40	3894021
380302	21	0.30 - 0.50	0.01	0.0010	40	3894021
380303	51	0.50 - 1.00	0.01	0.0010	40	3894051
380304	19	0.10 - 1.00	0.05	0.0010	40	3894019
380307	21	1.00 - 2.00	0.05	0.0010	70	3894021
380308	21	2.00 - 3.00	0.05	0.0010	70	3894021
380309	21	3.00 - 4.00	0.05	0.0010	70	3894021
380310	21	4.00 - 5.00	0.05	0.0010	70	3894021
380311	21	5.00 - 6.00	0.05	0.0010	70	3894021
380312	21	6.00 - 7.00	0.05	0.0010	70	3894021
380313	21	7.00 - 8.00	0.05	0.0010	70	3894021
380314	21	8.00 - 9.00	0.05	0.0010	70	3894021
380315	21	9.00 - 10.00	0.05	0.0010	70	3894021
380316	100	10.01 - 11.00	0.01	0.0020	50	3894100
380317	100	11.01 - 12.00	0.01	0.0020	50	3894100
380318	100	12.01 - 13.00	0.01	0.0020	50	3894100
380319	100	13.01 - 14.00	0.01	0.0020	50	3894100
380320	100	14.01 - 15.00	0.01	0.0020	50	3894100
380321	100	15.01 - 16.00	0.01	0.0020	50	3894100
380323	100	16.01 - 17.00	0.01	0.0020	50	3894100
380324	100	17.01 - 18.00	0.01	0.0020	50	3894100
380325	100	18.01 - 19.00	0.01	0.0020	50	3894100
380326	100	19.01 - 20.00	0.01	0.0020	50	3894100
380350	101	1.00 - 2.00	0.01	0.0010	70	3894101
380351	101	2.00 - 3.00	0.01	0.0010	70	3894101
380352	101	3.00 - 4.00	0.01	0.0010	70	3894101
380353	101	4.00 - 5.00	0.01	0.0010	70	3894101
380354	101	5.00 - 6.00	0.01	0.0010	70	3894101
380355	101	6.00 - 7.00	0.01	0.0010	70	3894101
380356	101	7.00 - 8.00	0.01	0.0010	70	3894101
380357	101	8.00 - 9.00	0.01	0.0010	70	3894101
380358	101	9.00 - 10.00	0.01	0.0010	70	3894101
380341	41	1.00 - 5.00	0.10	0.0010	70	3894041
380342	91	1.00 - 10.00	0.10	0.0010	70	3894091
380343	91	0.50 - 5.00	0.05	0.0010	40/70	3894091
380344	100	5.05 - 10.00	0.05	0.0010	70	3894100
380345	100	10.05 - 15.00	0.05	0.0020	50	3894100
380346	100	15.05 - 20.00	0.05	0.0020	50	3894100

Other sizes available on request!

Pin holder find on page 236

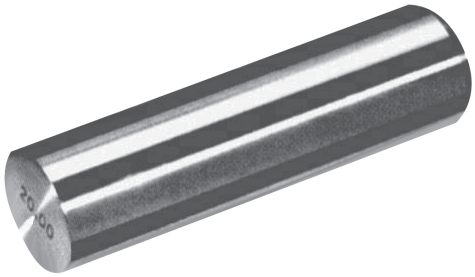
Precision Measuring Steel Pins

Other sizes available on request!

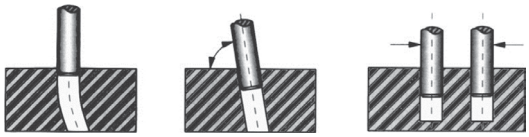
VSILVER-LINE® Singly Cylindrical Measuring Pins

DIN 2269

- **for inspection and measuring of bores, bore distances, or as setting-gauge for measuring instruments**
- **for inspection of internal- and external-tooth system and many other application**
- special chrome steel with high wearing quality and enough resistance to corrosion, hardened, finely ground and lapped



Option
- alloy steel handle, available at extra charge
  (when order the handle, specify the diameter also, please!)



DIN | TC | WARRANTY 2 YEARS

ART NO	size-ø mm	max. ± mm	length mm	ART NO CC
3805010...	0.10 - 1.00	0.0005	30	3894501
3805011...	0.10 - 0.99	0.0010	40	3894501
3805012...	1.00 - 3.00	0.0010	40	3894501
3805013...	1.00 - 3.00	0.0010	70	3894501
3805014...	3.01 - 6.00	0.0010	70	3894501
3805015...	6.01 - 10.20	0.0010	70	3894501

ART NO	size-ø mm	max. ± mm	length mm	ART NO CC
3805030...	10.00 - 12.00	0.0020	50	3894501
3805031...	12.01 - 14.00	0.0020	50	3894501
3805032...	14.01 - 16.00	0.0020	50	3894501
3805033...	16.01 - 18.00	0.0020	50	3894501
3805034...	18.01 - 20.05	0.0020	50	3894501
-	-	-	-	-

VBLUE-LINE® Pin Holder

- **with marking “G” (Go) + “A” (No-Go)**



WARRANTY 2 YEARS

ART NO	for pin-ø mm
381001	1 - 2
381002	2 - 4

ART NO	for pin-ø mm
381003	4 - 6
381004	6 - 8

ART NO	for pin-ø mm
381005	8 - 10
-	-

VSILVER-LINE® Precision Measuring Pins in a Set

- **75-pieces**
- special chrome steel with high wearing quality and enough resistance to corrosion, hardened, finely ground and lapped
- nominal-size-ø 5 mm
- steps in ø m, tolerance ø 0.2 µm
- with plastic-handles



NORM | TC | WARRANTY 2 YEARS

ART NO	tolerance gradations µm	KG	ART NO CC
380201	± 0 + 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16 / 18 / 20 / 22 / 24 / 26 28 / 30 / 35 / 40 / 45 / 50 / 55 / 60 / 65 / 70 / 75 / 80 / 85 / 90 / 95 / 100 – 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16 / 18 / 20 / 22 / 24 / 26 28 / 30 / 35 / 40 / 45 / 50 / 55 / 60 / 65 / 70 / 75 / 80 / 85 / 90 / 95 / 100	4.000	3894201

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Precision Feeler Gauge Sets

Other sets are available on request!

VSILVER-LINE® Precision Feeler Gauge Sets

DIN 2275

- **high tolerance accuracy for precise measurements**

- hardened spring steel, conical shaped blades, 100 mm length
- nickel plated case with lock nut
- sizes in mm on each blade
- thickness tolerance in relation to the metric sizes



T3 | DIN | TC | WARRANTY 1 YEAR

ART NO	quantity of blades	mm	composition	KG	ART NO CC
400101	8	0.05 - 0.50	0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50 mm .002-.004-.006-.008-.010-.012-.016-.020 inch	0.035	4194008
400105	13	0.05 - 1.00	0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50-0.60-0.70-0.80-0.90-1.00 mm .002-.004-.006-.008-.010-.012-.016-.020-.024-.028-.032-.036-.040 inch	0.065	4194013
400107	20	0.05 - 1.00	0.05-0.10-0.15-0.20-0.25-0.30-0.35-0.40-0.45-0.50-0.55-0.60-0.65-0.70 0.75-0.80-0.85-0.90-0.95-1.00 mm .002-.004-.006-.008-.010-.012-.014-.016-.018-.020-.022-.024-.026-.028 .030-.032-.034-.036-.038-.040 inch	0.095	4194020

VBLUE-LINE® Feeler Gauge Sets

- **for standard purposes, like thickness measuring between narrow slots and for automotive- and engine industry**

- hardened spring steel, conical shaped blades, 100 mm length
- nickel plated case with lock nut, sizes in mm and inch on each blade
- thickness tolerance in relation to the metric sizes





T2 | NORM | WARRANTY 1 YEAR

ART NO singly, in foil	quantity of blades	mm / inch	composition	KG	ART NO CC
411000	8	0.03 - 0.10 .0012 - .004	0.03-0.04-0.05-0.06-0.07-0.08-0.09-0.10 mm .0012-.0016-.002-.0024-.0028-.003-.0035-.004 inch	0.030	4194008
411001	8	0.05 - 0.50 .002 - .020	0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50 mm .002-.004-.006-.008-.010-.012-.016-.020 inch	0.035	4194008
411003	10	0.05 - 0.80 .002 - .032	0.05-0.10-0.15-0.20-0.30-0.40-0.50-0.60-0.70-0.80 mm .002-.004-.006-.008-.012-.016-.020-.024-.028-.032 inch	0.045	4194010
411004	10	0.03 - 0.50 .0012 - .020	0.03-0.04-0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50 mm .0012-.0016-.002-.004-.006-.008-.010-.012-.016-.020 inch	0.035	4194010
412002	10	0.038 - 0.63 .0015 - .025	0.038-0.05-0.08-0.10-0.15-0.20-0.25-0.30-0.38-0.63 mm .0015-.002-.003-.004-.006-.008-.010-.012-.015-.025 inch	0.035	4194010
411005	13	0.05 - 1.00 .002 - .040	0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50-0.60-0.70-0.80-0.90-1.00 mm .002-.004-.006-.008-.010-.012-.016-.020-.024-.028-.032-.036-.040 inch	0.065	4194013
412005	13	0.05 - 0.88 .002 - .035	0.05-0.08-0.10-0.12-0.15-0.20-0.25-0.30-0.38-0.50-0.63-0.75-0.88 mm .002-.003-.004-.005-.006-.008-.010-.012-.015-.020-.025-.030-.035 inch	0.055	4194013
411007	20	0.05 - 1.00 .002 - .040	0.05-0.10-0.15-0.20-0.25-0.30-0.35-0.40-0.45-0.50-0.55-0.60-0.65-0.70- 0.75-0.80-0.85-0.90-0.95-1.00 mm .002-.004-.006-.008-.010-.012-.014-.016- .018-.020-.022-.024-.026-.028-.030-.032-.034-.036-.038-.040 inch	0.095	4194020
411008	21	0.10 - 0.50	0.10-0.12-0.14-0.16-0.18-0.20-0.22-0.24-0.26-0.28-0.30-0.32-0.34-0.36- 0.38-0.40-0.42-0.44-0.46-0.48-0.50 mm	0.070	4194020
411009	21	0.05 - 2.00	0.05-0.10-0.20-0.30-0.40-0.50-0.60-0.70-0.80-0.90-1.00-1.10-1.20-1.30- 1.40-1.50-1.60-1.70-1.80-1.90-2.00 mm	0.190	4194020
411010	26	0.03 - 1.00	0.03-0.04-0.05-0.06-0.07-0.08-0.09-0.10-0.15-0.20-0.25-0.30-0.35-0.40- 0.45-0.50-0.55-0.60-0.65-0.70-0.75-0.80-0.85-0.90-0.95-1.00 mm	0.110	4194026
411011	32	0.03 - 1.00 .0012 - .040	0.03-0.04-0.05-0.06-0.07-0.075-0.08-0.09-0.10-0.12-0.15-0.18-0.20-0.22- 0.25-0.28-0.30-0.32-0.35-0.40-0.45-0.50-0.55-0.60-0.65-0.70- 0.75-0.80-0.85-0.90-0.95-1.00 mm	0.220	4194032
411012	14	0.03 - 1.00	0.03-0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50-0.60-0.70-0.80-0.90-1.00 mm	0.065	4194013

BLUE-LINE Feeler Gauge Set, stainless steel

- **stainless steel made**

- blades made from stainless steel, hard rolled out
- conical shaped blades, 100 mm length
- nickel plated case with lock nut
- sizes in mm and inch on each blade



INOX | T2 | NORM | WARRANTY 1 YEAR

ART NO	quantity of blades	mm / inch	composition	KG	ART NO CC
413101	8	0.05 - 0.50 .002 - .020	0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50 mm .002-.004-.006-.008-.010-.012-.016-.020 inch	0.035	4194008
413105	13	0.05 - 1.00 .002 - .040	0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50-0.60-0.70-0.80-0.90-1.00 mm .002-.004-.006-.008-.010-.012-.016-.020-.024-.028-.032-.036-.040 inch	0.065	4194013
413107	20	0.05 - 1.00 .002 - .040	0.05-0.10-0.15-0.20-0.25-0.30-0.35-0.40-0.45-0.50-0.55-0.60-0.65-0.70 0.75-0.80-0.85-0.90-0.95-1.00 mm .002-.004-.006-.008-.010-.012-.014-.016-.018-.020-.022-.024-.026-.028 .030-.032-.034-.036-.038-.040 inch	0.095	4194020

BLUE-LINE Feeler Gauge Set, made from brass

- **anti-magnetic gauge, for electronical services**

- blades made from brass
- conical shaped blades, 100 mm length
- nickel plated or brass case with lock nut
- sizes in mm on each blade

ART NO 414005



ART NO 414105



NORM | WARRANTY 1 YEAR

ART NO	quantity of blades	cover blade	mm	composition	KG	ART NO CC
414005	13	nickel	0.05 - 1.00	0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50-0.60-0.70-0.80-0.90-1.00 mm	0.065	4194045
414007	20	nickel	0.05 - 1.00	0.05-0.10-0.15-0.20-0.25-0.30-0.35-0.40-0.45-0.50-0.55-0.60-0.65-0.70 0.75-0.80-0.85-0.90-0.95-1.00 mm	0.095	4194047
414105	13	brass	0.05 - 1.00	0.05-0.10-0.15-0.20-0.25-0.30-0.40-0.50-0.60-0.70-0.80-0.90-1.00 mm	0.065	4194045
414107	20	brass	0.05 - 1.00	0.05-0.10-0.15-0.20-0.25-0.30-0.35-0.40-0.45-0.50-0.55-0.60-0.65-0.70 0.75-0.80-0.85-0.90-0.95-1.00 mm	0.095	4194047

BLUE-LINE DIY Feeler Gauge Set

- **simple gauge, especially for tool sets, etc.**

- blade length 75 mm, cylindrical shaped blade form
- hardened spring steel, sizes in metric and inch on each blade
- fixing screw with metal thread, blue plastic case
- bulk packed



T2 | NORM | WARRANTY 1 YEAR

ART NO	quantity of blades	mm	composition	KG
415010	10	0.10 - 1.00	0.10-0.20-0.30-0.40-0.50-0.60-0.70-0.80-0.90-1.00 mm .004-.008-.012-.016-.020-.024-.028-.032-.036-.040 inch	0.030

Feeler Gauge Sets and Piston Gauge Sets

BLUE-LINE Valve Regulation Gauge Set

- **for adjusting the valves**

- blades made from hardened spring steel
- cylindrical shaped blades, 75 mm length, 10 mm width
- fixed by a brass rivet
- sizes in mm and inch on each blade
- delivery bulk packed or in foil



T2 | NORM | WARRANTY 1 YEAR

ART NO singly packed	ART NO bulk packed	quantity of blades	mm / inch	composition	KG
415106	**4151061**	6	0.10 - 0.40 .004 - .016	0.10-0.15-0.20-0.25-0.30-0.40 mm .004-.006-.008-.010-.012-.016 inch	0.008
415107	**4151071**	7	0.10 - 0.50 .004 - .020	0.10-0.15-0.20-0.25-0.30-0.40-0.50 mm .004-.006-.008-.010-.012-.016-.020 inch	0.010

BLUE-LINE Piston Feeler Gauge Set

- **on a metal ring**
- **for adjusting the valves at narrow spaces and difficult to reach positions, etc.**

- blades made from hardened spring steel
- cylindrical shaped blades, 13 mm width



T2 | NORM | WARRANTY 1 YEAR

ART NO 8 blades 0.05 - 0.50 mm .002 - .020 inch	KG	ART NO 13 blades 0.05 - 1.00 mm .002 - .040 inch	KG	ART NO 20 blades 0.05 - 1.00 mm .002 - .040 inch	KG	ART NO 20 blades 0.10 - 2.00 mm .004 - .080 inch	KG	length of blades mm
436151	0.030	**436155**	0.080	**436157**	0.150	**436158**	0.190	150
436201	0.040	**436205**	0.125	**436207**	0.220	**436208**	0.250	200
436301	0.070	**436305**	0.150	**436307**	0.340	**436308**	0.390	300
436501	0.110	**436505**	0.310	**436507**	0.550	**436508**	0.610	500
436991	0.220	**436995**	0.650	**436997**	1.100	**436998**	1.200	1000

BLUE-LINE Piston Feeler Gauge Set, stainless steel

- **on a metal ring**
- **for adjusting the valves at narrow spaces and to reach difficult positions, etc.**

- blades made from stainless steel, hard rolled out
- cylindrical shaped blades, 13 mm width



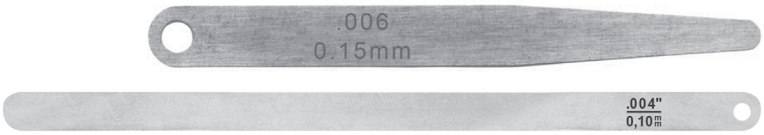
INOX | T2 | NORM | WARRANTY 1 YEAR

ART NO 8 blades 0.05 - 0.50 mm .002 - .020 inch	KG	ART NO 13 blades 0.05 - 1.00 mm .002 - .040 inch	KG	ART NO 20 blades 0.05 - 1.00 mm .002 - .040 inch	KG	length of blades mm
437151	0.030	**437155**	0.080	**437157**	0.150	150
437201	0.040	**437205**	0.125	**437207**	0.220	200
437301	0.070	**437305**	0.150	**437307**	0.340	300

BLUE-LINE® Feeler Gauge Spare Blades

when ordering, please specify blade thickness!

NOTE
- stainless steel blades and brass blades are available up to 1.00 mm only



NORM

ART NO spring steel	ART NO stainless steel	ART NO brass	thickness up to max. mm / inch	conical shape	cylindrical shape	length of blade mm
421110	**423110**	**424110**	2.00 / .080	✓	-	100
431150	**432150**	**-**	2.00 / .080	-	✓	150
431200	**432200**	**-**	2.00 / .080	-	✓	200
431300	**432300**	**-**	2.00 / .080	-	✓	300
431500	**-**	**-**	2.00 / .080	-	✓	500

BLUE-LINE® Thickness Gauge Foil

- **5 meter, rolled**
- **for automotive and engine industry and as levelling foil**

- hardened spring steel or stainless steel, hard rolled out
- sizes in mm and inch on each blade
- rolled in a rugged plastic box
- from up 0.65 mm bulk rolled, or in tin box with extra charge
- sizes from up 1.10 mm in stripes à 1 meter long







Tin box with extra charge, available from up 0.65 mm - 1.00 mm, only
Sizes 1.10 mm up to 2.00 mm are in stripes with 1 m length available, only

T2 | NORM | WARRANTY 1 YEAR

ART NO spring steel	ART NO stainless steel	mm / inch	KG	ART NO spring steel	ART NO stainless steel	mm / inch	KG
455001	**456001**	0.01 / .0004	0.035	**455055**	-	0.55 / .022	0.360
455002	**456002**	0.02 / .0008	0.040	**455060**	-	0.60 / .024	0.370
455003	**456003**	0.03 / .0012	0.045	**455065**	-	0.65 / .026	0.430
455004	-	0.04 / .0016	0.048	**455070**	-	0.70 / .028	0.535
455005	**456005**	0.05 / .002	0.050	**455075**	-	0.75 / .030	0.565
455006	-	0.06 / .0024	0.055	**455080**	-	0.80 / .032	0.590
455007	-	0.07 / .0028	0.060	**455085**	-	0.85 / .034	0.605
455008	-	0.08 / .003	0.065	**455090**	-	0.90 / .036	0.640
455009	-	0.09 / .0035	0.072	**455095**	-	0.95 / .038	0.670
455010	**456010**	0.10 / .004	0.075	**455100**	**456100**	1.00 / .040	0.685
455012	-	0.12 / .005	0.085	**457110**	-	1.10	0.105
455015	**456015**	0.15 / .006	0.100	**457120**	-	1.20	0.112
455018	-	0.18 / .007	0.112	**457130**	-	1.30	0.122
455020	**456020**	0.20 / .008	0.130	**457140**	-	1.40	0.131
455025	**456025**	0.25 / .010	0.150	**457150**	-	1.50	0.140
455030	**456030**	0.30 / .012	0.175	**457160**	-	1.60	0.150
455035	-	0.35 / .014	0.205	**457170**	-	1.70	0.159
455040	**456040**	0.40 / .016	0.255	**457180**	-	1.80	0.168
455045	-	0.45 / .018	0.280	**457190**	-	1.90	0.178
455050	**456050**	0.50 / .020	0.335	**457200**	-	2.00	0.187

BLUE-LINE® Holder for Feeler Gauge Blades





WARRANTY 1 YEAR

ART NO	size	KG
458010	125 x 17 mm	0.120

Precision Thickness Gauge Foils

BLUE-LINE® Thickness Gauge Foil

DIN 1544

- **for adjusting, levelling etc.**

- rolled in a rugged plastic box or as stripes in a case with 10 or 5 blades
- different material in different width and different length available

brass: CuZn37 (MS63)
stainless steel: 1.4301
strength: 1300-1500 N/mm²



ART NO 467030



ART NO 462100

DIN | WARRANTY 1 YEAR

ART NO steel length x width 2500 x 150 mm	ART NO brass length x width 2500 x 150 mm	ART NO stainless steel length x width 2500 x 25 mm	ART NO stainless steel length x width 2500 x 50 mm	ART NO stainless steel length x width 2500 x 150 mm	mm
-	462010	463010	464010	465010	0.010
-	462020	463020	464020	465020	0.020
452025	462025	463025	464025	465025	0.025
-	462030	463030	464030	465030	0.030
-	462040	463040	464040	465040	0.040
452050	462050	463050	464050	465050	0.050
-	462060	463060	464060	465060	0.060
-	462070	463070	464070	465070	0.070
452075	462075	463075	464075	465075	0.075
-	462080	463080	464080	465080	0.080
-	462090	463090	464090	465090	0.090
452100	462100	463100	464100	465100	0.100
-	-	463120	464120	465120	0.120
452150	462150	463150	464150	465150	0.150
-	-	463180	464180	465180	0.180
452200	462200	463200	464200	465200	0.200
-	-	463220	464220	465220	0.220
452250	462250	463250	464250	465250	0.250
452300	462300	463300	464300	465300	0.300
-	-	463350	464350	465350	0.350
452400	462400	463400	464400	465400	0.400
-	-	463450	464450	465450	0.450
452500	462500	463500	464500	465500	0.500
-	-	-	-	465600	0.600 (rolled)
-	-	-	-	465700	0.700 (rolled)
-	-	-	-	465800	0.800 (rolled)
-	-	-	-	465999	1.000 (rolled)

ART NO stainless steel length x width 300 x 50 mm/10 blades	ART NO stainless steel length x width 500 x 150 mm/5 blades	mm
466010	467010	0.010
466015	-	0.015
466020	467020	0.020
466025	467025	0.025
466030	467030	0.030
466040	467040	0.040
466050	467050	0.050
466060	467060	0.060
466070	467070	0.070
466075	467075	0.075
466080	467080	0.080
466090	467090	0.090

ART NO stainless steel length x width 300 x 50 mm/10 blades	ART NO stainless steel length x width 500 x 150 mm/5 blades	mm
466100	467100	0.100
466120	467120	0.120
466150	467150	0.150
466180	467180	0.180
466200	467200	0.200
466220	467220	0.220
466250	467250	0.250
466300	467300	0.300
466350	467350	0.350
466400	467400	0.400
466450	467450	0.450
466500	467500	0.500

VBLUE-LINE® Screw Pitch Gauges

- **for internal and external measurements of threads**
- fine cutted threads



WARRANTY 1 YEAR

ART NO	quantity of blades	mm / inch	thread type	graduation		KG
471009	24	0.25 - 6.00 mm	metr. 60°	6.0/5.5/5.0/4.5/4.0/3.5/3.0/ 2.5/2.0/1.75/1.5/1.25	1.0/0.9/0.8/0.75/0.7/0.6/0.5/ 0.45/0.4/0.35/0.3/0.25	0.040
471010	20	0.40 - 7.00 mm	metr. 60° SI	7.0/6.5/6.0/5.5/5.0/4.5/4.0/3.5/3.0/2.5	2.0/1.75/1.5/1.25/1.0/0.8/ 0.75/0.7/0.5/0.4	0.035
471011	20	4 - 30 Gang / t.p.i.	whitw. 55°	4.0/4.5/5.0/6.0/7.0/8.0/ 9.0/10.0/11.0/12	13/14/16/18/19/22/24/26/28/30	0.030
471012	28	4 - 62 Gang /t.p.i.	whitw. 55°	4.0/4.5/5.0/6.0/7.0/8.0/9.0/10.0 11.0/12/13/14/16/18	19/20/22/24/25/26/28/30/ 32/36/40/48/60/62	0.045
471013	48	4 - 62 / 0.40 - 7.0	whitw. / metr. SI	combined	art. no. 47 1012 + 47 1010	0.075
471014	52	4 - 62 / 0.25 - 6.0	whitw. / metr.	combined	art. no. 47 1012 + 47 1009	0.080
471015	6	8 - 28 Gang / t.p.i.	whitw. 55°	tube	8/10/11/14/19/28	0.020
471016	58	4-62/0.25-6.0/8-28	whitw. / metr.	combined	art. no. 47 1014 + 47 1015	0.090
471017	14	10 - 40 Gang / t.p.i.	US 60° SAE	10/11/12/13/14/16/18	20/24/27/28/32/36/40	0.020
471018	30	6 - 60 Gang / t.p.i.	US 60° SAE	6/7/8/9/10/11/11.5/13/14/ 15/16/1820/22/24	26/28/30/32/34/36/38/40/ 42/44/46/48/50 56/60	0.035
471019	30	4 - 42 Gang / t.p.i.	US 60° SAE	4.0/4.5/5.0/5.5/6.0/7.0/8.0/9.0/ 10/11/11.5/12/13/14/15	16/18/20/22/24/26/27/28/30 32/34/36/38/40/42	0.034
471020	52	4 - 84 Gang / t.p.i.	US 60° SAE	4/4.5/5.0/5.5/6.0/7.0/8.0/9.0/ 10/11/11.5/12/13/14/15/16/ 18/20/22/24/25/26/27/28/30/32	34/36/38/40/42/44/46/48/50/52 54/56/58/60/62/64/66/68/70/72 74/76/78/80/82/84	0.055
471021	22	4 - 64 Gang / t.p.i.	US 60° UNC	4/4.5/5/6/7/8/9/10/11/12/13	14/16/18/20/22/24/32/40/48/56/64	0.026
471022	16	12 - 80 Gang / t.p.i.	US 60° UNF	12/14/16/18/20/24/28/32	36/40/44/48/56/64/72/80	0.021

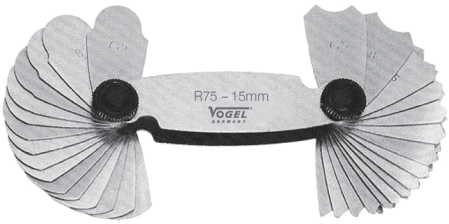
VBLUE-LINE® Radius Gauges

- **for testing of raised and recessed curves**
- concave and convex shaped blades
- fine cutted forms

ART NO 472105



ART NO 472106 + 472107

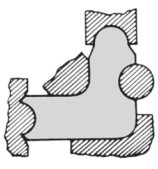


WARRANTY 1 YEAR

ART NO carbon steel	ART NO stainless steel	quantity of blades	mm	composition mm	KG
472105	**472115**	17	1.0 - 7.0	1 / 1.25 / 1.5 / 1.75 /2 / 2.25 / 2.5 / 2.75 / 3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7	0.085
472106	**472116**	16	7.5 - 15.0	7.5 / 8 / 8.5 / 9 / 9.5 / 10 / 10.5 / 11 / 11.5 / 12 / 12.5 / 13 / 13.5 / 14 / 14.5 / 15	0.120
472107	**472117**	15	15.5 - 25.0	15.5 / 16 / 16.5 / 17 / 17.5 / 18 / 18.5 / 19 / 19.5 / 20 / 21 / 22 / 23 / 24 / 25	0.115

VBLUE-LINE® Radius Gauge Set

- **matt chrome finish**
- **for testing of raised and recessed curves**
- concave and convex shaped blades
- each blade with 5 measuring points





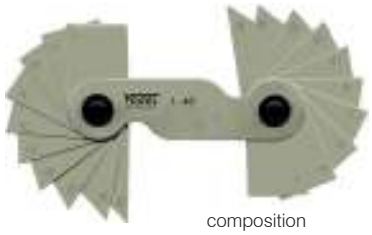


WARRANTY 1 YEAR

ART NO	quantity of blades	mm	composition mm	KG
472109	26	0.5 - 13	0.5 / 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7 / 7.5 / 8 / 8.5 / 9 / 9.5 / 10 / 10.5 11 /11.5 / 12 / 12.5 / 13	0.319

BLUE-LINE Angle Gauge

- angles 1° - 45°
- fine machined edges



NORM WARRANTY 1 YEAR

ART NO	quantity of blades		composition °	KG
472000	20	1° - 45°	1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 12 / 14 / 16 / 18 / 20 / 25 / 30 / 35 / 40 / 45°	0.095

BLUE-LINE Angle Gauge Set

- **stainless steel**
- angles 5° - 90 °
- each blade with several angles



NORM WARRANTY 1 YEAR

ART NO	quantity of blades		composition °	KG
472020	18	5° - 90°	5 / 10 / 15 / 20 / 25 / 30 / 35 / 40 / 45 / 50 / 55 / 60 / 65 / 70 / 75 / 80 / 85 / 90°	0.128

BLUE-LINE Angle Thread Cutting Gauge

- angles 55° whitworth or 60° metric

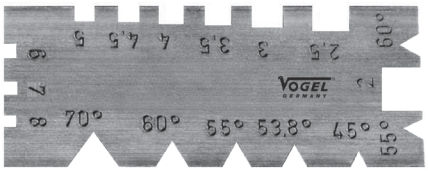


NORM WARRANTY 1 YEAR

ART NO	inch	ART NO	mm	KG
472001	55°	472002	60°	0.013

BLUE-LINE Combined Angle Thread Cutting Gauge

- fine machined edges



NORM WARRANTY 1 YEAR

ART NO	angles threads °	flat threads threads/inch (t.p.i.)	KG
472003	45 - 53.8 - 55 - 60 - 70°	2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 6 / 7 / 8	0.020

BLUE-LINE Trapez Thread Cutting Gauge

- fine machined edges

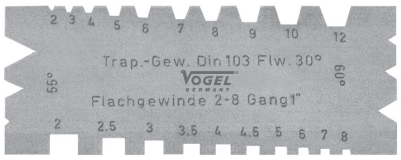


NORM WARRANTY 1 YEAR

ART NO	trapez thread °	trapez pitch mm	KG
472004	30°	2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 12	0.018

BLUE-LINE Combined Turning and Thread Cutting Gauge

- with trapez- and flat threads



NORM WARRANTY 1 YEAR

ART NO	trapez threads mm	flat threads threads/inch (t.p.i.)	angles °	KG
472005	2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 12	2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 6 / 7 / 8	55° + 60°	0.050

BLUE-LINE Combined Turning and Thread Cutting Gauge

- with trapez- and saw cutting angles

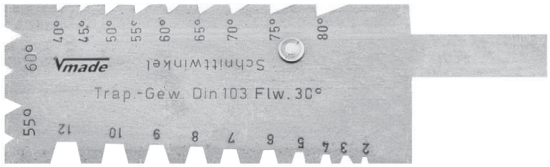


NORM WARRANTY 1 YEAR

ART NO	trapez threads mm	saw cutting angles °	angles °	KG
472006	2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 12	40 / 45 / 50 / 55 / 60 / 65 / 70 / 75 / 80°	55° + 60°	0.050

BLUE-LINE Combined Turning and Thread Cutting Gauge

- with trapez- and saw cutting angles, with adjusting angle pointer



NORM WARRANTY 1 YEAR

ART NO	trapez threads mm	saw cutting angles °	adjusting angle °	angles °	KG
472007	2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 12	40 / 45 / 50 / 55 / 60 / 65 / 70 / 75 / 80°	0° - 30°	55° + 60°	0.065

BLUE-LINE ACME Thread Cutting Gauge

- SAE 60° / Ww-BSF 55° / 14.5° ACME / 47.5° BA

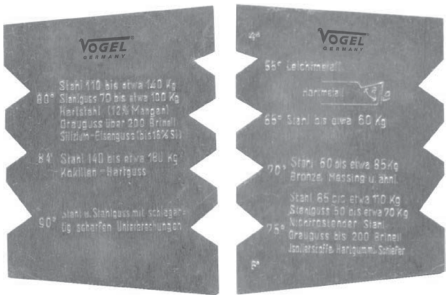


NORM WARRANTY 1 YEAR

ART NO	SAE °	Whitworth BSF °	ACME °	B.A. °	KG
472008	60°	55°	14.5°	47.5°	0.018

BLUE-LINE Lathe Tool Gauge

- **for carbide turning tool and high speed turning tools**
- fine machined edges

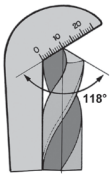


NORM WARRANTY 1 YEAR

ART NO	for carbide turning tools	ART NO	for high speed turning tools	KG
472009	✓	472010	✓	0.050

BLUE-LINE Twist Drill Grinding Gauge

- with 118° angle





NORM WARRANTY 1 YEAR

ART NO	angle cut °	up to drill-ø mm	KG
472011	118°	50	0.025

BLUE-LINE Universal Twist Drill Grinding Gauge

- with several angle cuts



NORM WARRANTY 1 YEAR

ART NO	angle cut °	up to drill-ø mm	KG
472012	55° / 60° / 90° / 120°	60	0.030

BLUE-LINE Universal Twist Drill Grinding Gauge

- with adjustable angle pointer

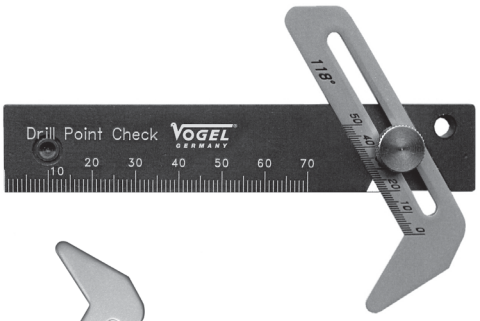


NORM WARRANTY 1 YEAR

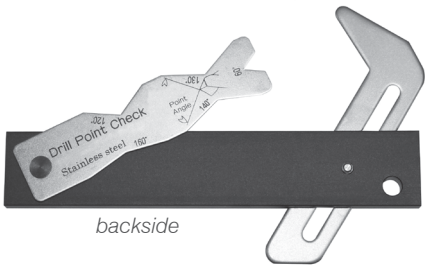
ART NO	angle cut °	up to drill-ø mm	KG
472013	30° - 160°	60	0.065

BLUE-LINE Universal Twist Drill Grinding Gauge

- special steel, hardened, ground and burnished
- with angle finder at the rear side







backside

NORM WARRANTY 1 YEAR

ART NO	mm	angle settings °	up to drill-ø mm	KG
472018	0 - 70	60° / 118° / 120° / 130° / 140° / 160°	100	0.185

BLUE-LINE Jet Gauge

- with hardened steel pins, in plastic holders mounted



WARRANTY 1 YEAR

ART NO	quantity of pins	mm	composition mm	KG
472201	20	0.45 - 1.50	0.45 / 0.50 / 0.55 / 0.60 / 0.65 / 0.70 / 0.75 / 0.80 / 0.85 / 0.90 / 0.95 / 1.00 1.05 / 1.10 / 1.15 / 1.20 / 1.25 / 1.30 / 1.40 / 1.50	0.019
472202	16	1.50 - 3.00	1.50 / 1.60 / 1.70 / 1.80 / 1.90 / 2.00 / 2.10 / 2.20 / 2.30 / 2.40 / 2.50 / 2.60 2.70 / 2.80 / 2.90 / 3.00	0.022

BLUE-LINE Precision Jet Gauge

- measuring pin hardened, fine ground
- nickel plated housing



WARRANTY 2 YEARS

ART NO	mm	mm	taper mm	mm	KG
472219	0 - 3	0.1	1 : 10	Ø 6.5 x 118	0.025
472220	0 - 5	0.1	1 : 10	Ø 9.0 x 176	0.065

BLUE-LINE Taper Gauge

- flat version
- art. no. 472370 - 472372 made of special steel, hardened
- art. no. 472373 - 472375 made of technical ABS plastic
- art. no. 472375 with slider made of aluminium, especially useful to measure hard to reach places, because the slider holds the position of measurement
- useful gauge, especially for the inspection of gap size, generators, motors, turbines, engines, etc.

- laser engraved graduation
- with knurled handle



ART NO 472372



ART NO 472373



ART NO 472375







WARRANTY 2 YEARS

ART NO	mm	mm	mm	version	KG
472370	0.5 - 7.0 mm	0.1	124 x 8 x 8	steel	0.060
472371	2.0 - 7.0 mm	0.1	109 x 8 x 8	steel	0.060
472372	0.5 - 11.0 mm	0.1	153 x 8 x 12	steel	0.080
472373	0.5 - 11.0 mm	0.1	155 x 8 x 12	ABS plastic	0.020
472375	0.5 - 11.0 mm	0.1	124 x 8 x 8	Taper Gauge with slider (Taper Gauge is made of ABS plastic, slider is made of aluminium)	0.060

BLUE-LINE Taper Gauge

- flat version
- rear side with rounded edges

- special steel, hardened and fine ground
- laser engraved graduation



backside

WARRANTY 2 YEARS

ART NO	mm	mm	mm	KG
472320	1.0 - 15.0	0.1	178 x 12 x 2	0.020
472321	15.0 - 30.0	0.1	217 x 31 x 2	0.060

DIGI PLUS-LINE Electr. Digital Arc Test Set

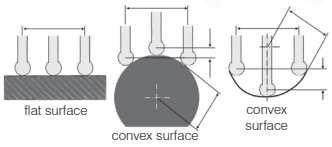
- **ideal device for tooling**

- USB data output
- aluminium housing with sturdy plastic cover
- large LCD display with clear reading, digit height 10 mm
- stem and spindle stainless, hardened and lapped
- exchangeable probe tips, M 2.5
- different sized probes for arc measurements
- measured value display in percent and radius display
- autom. power off, zero setting at any position
- Hold function, reading mm/inch, switchable
- incl. 1x 3 V battery (type CR2032, art.-no.: 2002093), with operation manual









UNIT · CE · NORM · TC · WARRANTY 2 YEARS

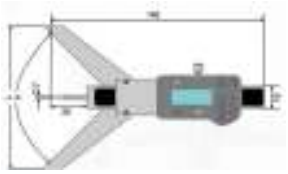
ART NO	linearly mm / inch	radius mm	mm / inch	mm	max. linearly mm	max. radius mm	KG
472120	12.7 / 0.5	5 - 700	0.01 / 0.0005	0.01	<0.02	<0.02	0.140

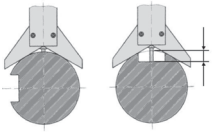
DIGI PLUS-LINE Electr. Digital Keyways Caliper

- **for measurements of groove depth, etc.**

- mechanical parts in stainless steel, hardened
- LCD display with clear reading, digit height 8 mm
- zero setting at any position
- reading switchable in mm/inch
- incl. 1x 1.5 V battery (type LR44, art. no.: 2020192/B), with operation manual







UNIT · INOX · LR44 1.5V · NORM · CE · TC · WARRANTY 2 YEARS

ART NO	mm / inch	mm / inch	mm	A °	L mm	for shaft-ø mm	KG
473315	50 / 2	0.01 / 0.0005	0.03	90	100	5 - 140	0.190
473316	50 / 2	0.01 / 0.0005	0.03	120	100	5 - 200	0.190

BLUE-LINE Spring Gauge

- **scale made of brass**
- **for thickness measurements of sheet-metal etc.**

- special steel, burnished



NORM · WARRANTY 2 YEARS

ART NO	mm	mm	total length mm	KG
474801	0 - 10	0.1	80	0.040
474802	0 - 15	0.1	125	0.075
474803	0 - 20	0.1	150	0.110

VBLUE-LINE® Welding Gauge

- fan shape
- for measuring right angled welds
- stainless steel





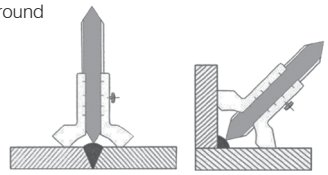
INOX | NORM | WARRANTY 1 YEAR

ART NO	quantity of blades	mm	composition mm	KG
474401	12	3 - 12	3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7 / 8 / 10 / 12	0.073

VBLUE-LINE® Precision Welding Gauge

- with vernier reading
- for measurements of flat welding seams and in corners etc.
- stainless steel hardened and fine ground
- scale matt chromed
- with fixing screw





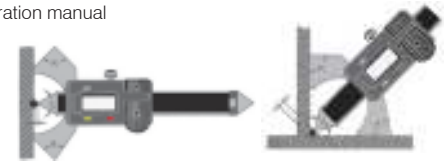
INOX | NORM | WARRANTY 1 YEAR

ART NO	mm	mm	angle °	mm	KG	ART NO CC
474403	0 - 20	0.1	60 / 70 / 80 / 90	98 x 59 x 5.2	0.070	4794443

VDIGI PLUS-LINE® Electr. Digital Welding Gauge

- with data output RS 232 C
- stainless steel, hardened and ground
- LCD display with clear reading, zero-setting at any position
- On/Off button, reading switchable mm/inch
- incl. 1x 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual



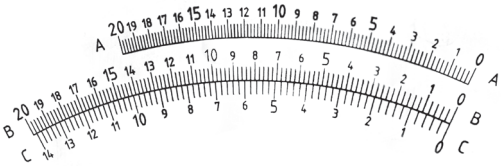


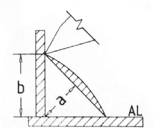
INOX | LR44 1,5V | RS232 C | NORM | TC | WARRANTY 1 YEAR

ART NO	mm / inch	mm / inch	max.	angle °	mm	KG	ART NO CC
474410	0 - 20 / 0 - 0.8	0.01 / 0.0005	0.03	60 / 70 / 80 / 90	100 x 62 x 14	0.070	4794449

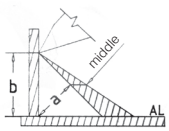
VBLUE-LINE® Precision Welding Gauge

- with reading window
- stainless steel, hardened and fine ground
- reading through a window by a reference line

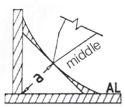




Read b from scale B. When measuring b, read a from scale C.



Permissible „a“ with unequal legs. Rest on the long arm (AL)



Read a from scale A.



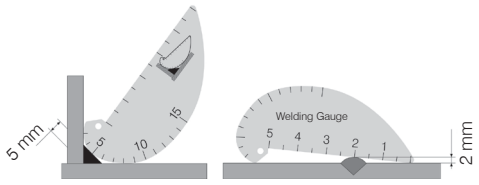
INOX | NORM | WARRANTY 2 YEARS

ART NO	mm	mm	KG	ART NO CC
474404	0.1	108 x 81.5 x 3.2	0.110	4794444

Welding Gauges and Thread Rules

BLUE-LINE Welding Gauge “S“

- made from aluminium





WARRANTY 1 YEAR

ART NO	mm	KG
474405	62.70 x 29.80 x 1.00	0.003

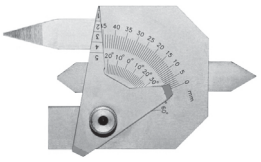
BLUE-LINE Welding Gauge

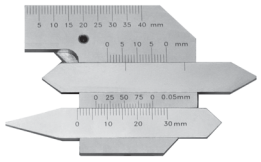
- with adjustable angle
- with various setting facilities
- stainless steel, hardened and fine ground

ART NO 474407

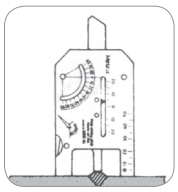


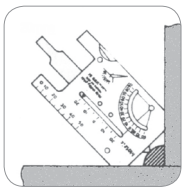
ART NO 474408

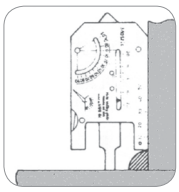


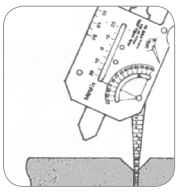


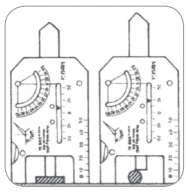
backside

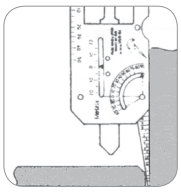












INOX

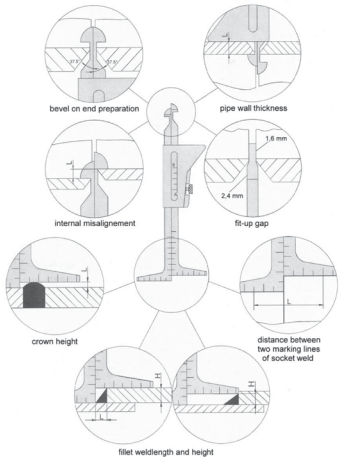
WARRANTY 1 YEAR

ART NO	mm	angle graduation °	mm	KG
474407	20 - 0 - 20	50° - 0 - 90°	110 x 60 x 6.0	0.090
474408	0 - 45	20° - 0 - 60°	60 x 52 x 3.0	0.090

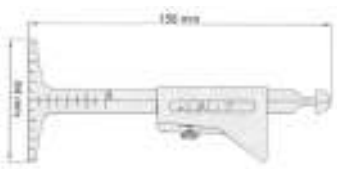
BLUE-LINE Pipe Welding Gauge / Edge Offset Gauge

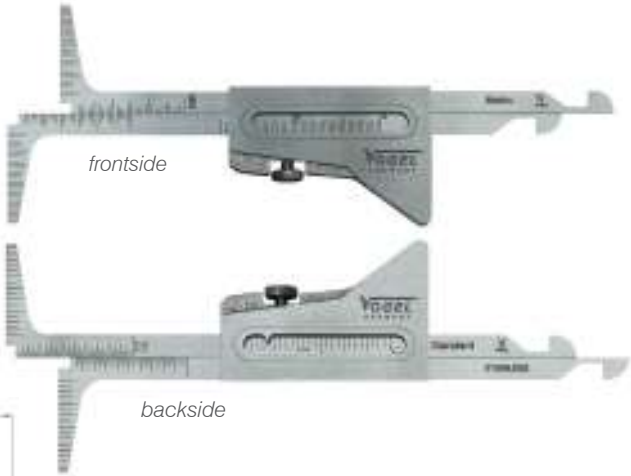
- with opposite movable measuring jaws
- for pipe welds up to 35 mm wall thickness

- stainless steel, hardened, polished surfaces
- reading scale in mm and inch, laser engraved graduation
- with reading window, with fixing screw









frontside

backside

INOX

WARRANTY 1 YEAR

ART NO	mm	mm	mm	KG
474409	35	1.0	158 x 64 x 7	0.100

Measuring Tool Set

- selection of need-based compilations

ART NO SET	pieces	consisting of	article	box type
479901 BLUE-LINE	4	**Welding Gauge** stainless steel, fan shape, quantity of blades 12, 3-12 mm	474401	WARRANTY 1 YEAR
		Precision Welding Gauge stainless steel, hardened and fine ground, with vernier reading, scale matt chromed, with fixing screw	474403	
		Precision Welding Gauge stainless steel, hardened and fine ground, reading through a window by a reference line	474404	
		Pipe Welding Gauge / Edge Offset Gauge with opposite movable measuring jaws, for pipe welds up to 35 mm wall thickness, stainless, hardened, reading 1.0 mm	474409	
479904 BLUE-LINE	4	**Magnet Lifter** top model for technical purposes, with quick release, with telescope bar, ~650 mm	474441	WARRANTY 1 YEAR
		Professional Inspection Mirror stainless steel telescope bar, with 360° rotateable and swivel joint, with insulated handle	474454	
		LED Handheld Magnifier aplanatic lense, scratch-resistant and solvent-resistant, size of lense ø 30 mm, magnification 10x	600166	
		LED Flashlight professional, splash-proof light, sturdy, acid-proof aluminium housing, 3 Watt, 120 Lumen, beam range 120 m	601805	
479905 BLUE-LINE	5	**Magnifier with LED Lamp** in pocket size, with 3 magnifying lenses, 3x / 5x / 7x, with one extra bright LED lamp, in a rugged ABS-plastic housing	601230	WARRANTY 1 YEAR
		Magnetic Lifter with Marking Tip with telescopic rod, 143 mm	334614	
		Jet Gauge, 0.45 - 1.50 mm with hardened steel pins, in plastic holders mounted	472201	
		Feeler Gauge Set, 13 blades blades made of hardened spring steel, conical shaped blades, length 100 mm, nickel plated case, with lock nut, sizes in mm and inch on each blade, 0.05 - 1.00 mm	411005	
		LED Flashlight professional, water resistant torch, sturdy, acid- and oil-resistant aluminium housing, 3 Watt, 120 luminous flux, lighting range 120 m	601805	

ART NO 479901



ART NO 479904



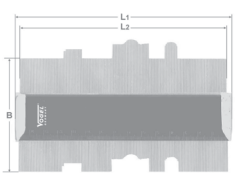
ART NO 479905



BLUE-LINE Profile Gauge

- especially use for taking-off and transferring all existing shapes
- with steel pins, hardened







WARRANTY 2 YEARS

ART NO	mm	B mm	L2 mm	L1 mm	thickness mm	KG
474501	150 x 40	80	148	154	20	0.236
474502	300 x 75	150	293	305	33	0.982

BLUE-LINE Stroke Counter

- zero reset by means of turning knob
- adding in one stroke direction
- the lever can be relocated at any position of the driving shaft and returns automatically to the basic position

- movement of stroke min. 38°, max. 60°
- driving shaft righthand side or lefthand side available

ART NO 477003

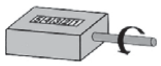


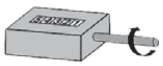
ART NO 477001



WARRANTY 2 YEARS

driving shaft at right side





ART NO	ART NO	revolution max. 1/min.	quantity of digits	digit height mm	driving shaft-ø mm	base plate mm	height mm	KG
477001	477002	500	5	4.5	4.0	40 x 46	27.5	0.090
477003	477004	500	5	4.5	4.0	60 x 29	27.5	0.090

driving shaft at left side





ART NO	ART NO	revolution max. 1/min.	quantity of digits	digit height mm	driving shaft-ø mm	base plate mm	height mm	KG
477005	477006	500	5	4.5	4.0	40 x 46	27.5	0.090
477007	477008	500	5	4.5	4.0	60 x 29	27.5	0.090

BLUE-LINE Stroke Counter

- zero reset by means of detachable key
- adding in one stroke direction
- the lever can be relocated at any position of the driving shaft and returns automatically to the basic position

- movement of stroke min. 38°, max. 60°
- driving shaft righthand side and lefthand side

ART NO 477010

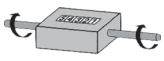


ART NO 477012



WARRANTY 2 YEARS

driving shaft at right and left side





ART NO	ART NO	revolution max. 1/min.	quantity of digits	digit height mm	driving shaft-ø mm	base plate mm	height mm	KG
477010	477011	500	6	4.5	4.0	60 x 70	28.0	0.130
477012	477013	500	7	7.0	7.0	120 x 64	45.0	0.380

BLUE-LINE® Mechanical Manual Piece Counter

- for counting the number of people in cinemas, at sporting events, at ski lifts, etc.
- aso for counting piece parts when taking inventory, during production or when counting traffic

ART NO 477103



- sturdy metal housing
- available with retaining ring, table mounting or wall mounting



ART NO 477101



ART NO 477102

WARRANTY 2 YEARS

ART NO with retaining ring	ART NO with table mounting	ART NO with wall mounting	quantity of digits	digit height mm	housing-ø mm	base plate-ø mm	KG
477101	477102	477103	4	4.5	47	65	0.170

BLUE-LINE® Length Counter (Meter Counter)

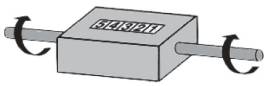
- zero reset by means of detachable key
- adding in one turning direction and in backwards turning minus
- standard: 5 rev. = 10 figures = 1.0 m by 20 cm measuring wheel circumference
- measuring range: 99.999,9 m (red decimal display)

- revolution max. 100 m/min. with measuring wheel
- revolution max. 300 m/min. without measuring wheel
- driving shaft righthand side and lefthand side





driving shaft at right and left side



WARRANTY 2 YEARS

ART NO	revolution max. 1/min.	quantity of digits	digit height mm	driving shaft-ø mm	base plate mm	height mm	KG
477130	100 / 300	6	4.5	4.0	60 x 70	28.0	0.130

BLUE-LINE® Measuring Wheel

- made from various material and with several surfaces

Other bore hole- and wheel-diameters on request!



WARRANTY 2 YEARS

ART NO	measuring wheel-ø cm	bore hole-ø mm	plastic / hytrel ribbed	aluminium / rubber nap version	aluminium / knurled
477140	20	4.0	✓	-	-
477141	20	4.0	-	✓	-
477142	20	4.0	-	-	✓

Inspection Tool Kits

BLUE-LINE Inspection Tool Kit

- **multipart set, especially for garages, mechanics, plumbers, etc.**
- **well assembled kit for the professional**

5-piece set, contents:

- stainless steel telescope bar with quick release, non-slip grip, 530 mm working length
- socket with ultra bright NICHIA LED-Licht, incl. 3x 1.5 V battery (type LR44, art.-no.: 2020192/B)
- socket with powerful magnet, 8lb, for to pick up and hold metal objects in hard to reach places
- inspection mirrors, with perfect reflection, no deterioration in the mirror mounted in a stainless steel frame, 360° rotatable, one mirror in ø 50 mm and one mirror rectangular 60 x 40 mm
- in a strong case with zip

7-piece set, contents:

- quality claw pick-up device, semi-rigid hose, 400 mm length
- stainless steel telescope bar with quick release, non-slip grip, 530 mm working length
- socket with ultra bright NICHIA LED light, incl. 3x 1.5 V battery (type LR44, art.-no.: 2020192/B)
- socket with powerful magnet, 8lb, for to pick up and hold metal objects in hard to reach places
- inspection mirrors, with perfect reflection, no deterioration in the mirror mounted in a stainless steel frame, 360° rotatable, one mirror in ø 50 mm and one mirror rectangular 60 x 40 mm
- stainless steel tray, ø 110 mm, with powerful permanent magnetic bottom for small parts
- in a strong case with zip

ART NO 474470



ART NO 474471





OBERKLASSE Heimwerker Praxis 1,2

Price / Performance: good - excellent

INOX | LR44 1,5V | CE | WARRANTY 2 YEARS

ART NO	set	telescope bar	LED	mirror ø 50 mm	mirror 60 x 40 mm	magnet	claw pick-up	magnetic tray	KG
474470	5-pcs.	✓	✓	✓	✓	✓	X	X	0.340
474471	7-pcs.	✓	✓	✓	✓	✓	✓	✓	0.815

BLUE-LINE Magnetic Tray

- **stainless steel, polished**

- with powerful permanent magnet bottom
- available in round and rectangular design

ART NO 474475



ART NO 474476



INOX | WARRANTY 2 YEARS

ART NO	Gauss	mm	KG
474475	1000 - 1200	ø 150	0.387
474476	1000 - 1200	240 x 140	0.812

BLUE-LINE® Magnet Lifter

- professional model for the technician
- with quick release
- with telescope bar

- socket with magnet
- telescope bar, stainless steel
- 360° rotatatable and swivel joint
- insulated handle, with clip





INOX | WARRANTY 3 YEARS

ART NO	mm	kg	KG
474441	~650	8	0.096

BLUE-LINE® Magnet Lifter

- with telescope bar

- telescope bar, stainless steel, with clip
- art.-no. 334614 additionally with scriber

ART NO 474442



ART NO 334614



INOX | WARRANTY 2 YEARS

ART NO	mm	kg	KG
★★★★☆ 474442	~ 530	3.5	0.030
★★★☆☆ 334614	~ 650	1.0	0.025

Explore our website!



Any questions? We are pleased to advise!

BLUE-LINE Professional Inspection Mirror

- **with telescope bar**

- stainles steel telescope bar
- 360° rotatatable and swivel joint
- insulated handle



ART NO	mm	mm	KG
474452	~ 610	ø 40	0.087
474453	~ 620	ø 50	0.094
474454	~ 620	43 x 65	0.098

BLUE-LINE Professional Inspection Mirror

- **with telescope arm and LED light**

- stainless steel telescope bar
- 360° rotatatable and swivel joint
- with clip
- detachable LED light, switchable
- incl. 3x 1.5 V battery (type LR41, art.-no.: 2020192/A)



bright LED light, detachable

ART NO	mm	mm	KG
474465	~ 610	ø 26	0.057

BLUE-LINE Professional Inspection Mirror

- **with 5x magnification and telescope bar**

- stainless steel telescope bar
- 360° rotatatable and swivel joint
- insulated handle



ART NO	mm	mm	KG
474460	~ 610	ø 24	0.065
474461	~ 510	ø 55	0.097

DIGI PLUS-LINE Universal Coating Thickness Gauge

- **with memory and multifunction display, combined system for ferrous (Fe) and non-ferrous metall (Ne), with mini USB data output and with software for statistics**
- **professional, handheld device for quick and flexible coating thickness measurements**
- **housing in a rugged aluminium frame, with large LCD display for clear reading**
- **operates in any position: horizontal, vertical or upside down**
- **for measurements of non-magnetic layers on metal surfaces (Fe) and for measurements of insulating layers on non-ferrous metals (Ne)**
- **application fields include surface engineering, automotive industry, electroplating, pipeline construction, aluminium industry, spray coating, plastic coating, mechanical engineering, etc.**

Accessories on page 261



- rugged extruded aluminium case, with soft keypad, with low battery indicator
- multi-function LCD display with clear reading, backlight (dimmer)
- autom. recognition of probe, indication of all needed informations, data storage of 495 measurements
- units in µm or mil, automatic substrate recognition, magnetic induction (Fe) and eddy current measuring principle (Ne)
- calibration foil-set (5 pcs.), one aluminium substrate block and one iron substrate block
- 5 statistical ways: mean values; max. values; min. values; testing numbers; standard deviations
- 5 statistical values: mean value; max. value; min. value; numbers of measuring; standard deviation
- tolerance: in standard mode 3% of the value or ± 2.5 µm, or by two point calibration method with zero-plate and distance foil, hereby the device can be setted precisely to the actual measuring range, by this method you can achieve lowest tolerance of about 1% of value or ± 1 µm
- min. radius workpiece for Fe-probe: convex 1.5 mm/concave 25 mm, min. thickness of substrate 0.5 mm
- min. radius workpiece for Ne-probe: convex 3.0 mm/concave 50 mm, min. thickness of substrate 0.3 mm
- direct testing mode and block statistics mode, direct printing out of statistical values via data cable
- min. measuring area 6 mm², autom. and manual power off
- operation temperature 0°C ~ +40°C, humidity 20% - 90% RH
- incl. dataview-software, mini-USB data cable, 2x 1.5 V battery (type AA, art.-no.: 609282)
- incl. operation manual, screw driver, wrist strap, in a rugged plastic carrying case

UNIT | ISO | ASTM | BS | CE | TC | WARRANTY 2 YEARS

Option

- **art.-no. 480317** Probe F10 (Fe), for measuring range 0 - 10000 µm, low range resolution 10 mm

ART NO	µm / probe F1 + N1	µm / probe F1 + N1	mm	KG
480226	0.1	0 - 1250	125 x 68 x 33	0.400

DIGI PLUS-LINE Universal Coating Thickness Gauge with integrated probe

- **especially for automobile industry and garages, combined system for ferrous (Fe) and non-ferrous metall (Ne), with RS232 data output**
- **compact handheld device quick and flexible coating thickness measurements with one-key orperation.**
- **operates in any position: horizontal, vertical or upside down**
- **for measurements of non-magnetic layers on metal surfaces (Fe) and for measurements of insulating layers on non-ferrous metals (Ne)**
- **application fields include surface engineering, automotive industry, electroplating, pipeline construction, aluminium industry, spray coating, plastic coating, mechanical engineering, etc.**

Accessories on page 261





- rugged plastic housing, with soft keypad, LCD Display with clear reading
- measuring in µm or mil, switchable, operating principle magnetic induction (Fe) and eddy current (Ne) switchable and automatic substrate recognition
- 4 standard calibration foils, one aluminium substrate block and one iron substrate block
- tolerance: in standard mode 3% of the value or ± 2.5 µm, or by two point calibration method with zero-plate and distance foil, hereby the device can be setted precisely to the actual measuring range, by this method you can achieve lowest tolerance of about 1% of value or ± 1 µm
- min. radius workpiece for Fe-probe: convex 1.5 mm/concave 25 mm, min. thickness of substrate 0.5 mm
- min. radius workpiece for Ne-probe: convex 3.0 mm/concave 50 mm, min. thickness of substrate 0.3 mm
- min. measuring area 6 mm², autom. and manual power off
- operation temperature 0°C ~ +50°C, humidity 20% - 90% RH
- incl. 4x 1.5 V battery (type AAA, art.-no.: 609283), with low battery indicator
- with operation manual, wrist strap, in a rugged plastic carrying case

Options

- **art.-no. 489880** RS232C data cable with software
- **art.-no. 489881** USB adapter

UNIT | RS232 C | ISO | ASTM | BS | CE | TC | WARRANTY 1 YEAR

ART NO	µm / probe F1 + N1	µm / probe F1 + N1	mm	KG
480235	0.1	0 - 1250	125 x 65 x 28	0.081

DIGI PLUS-LINE Universal Coating Thickness Gauge

ART NO 480233



ART NO 480243



- **with memory and multifunction display, combined system for ferrous (Fe) and non-ferrous metall (Ne), with RS232 data output, with external or integrated probe availabe**
- **professional, handheld device for quick and flexible coating thickness measurements**
- **operates in any position: horizontal, vertical or upside down**
- **for measurements of non-magnetic layers on metal surfaces (Fe) and for measurements of insulating layers on non-ferrous metals (Ne)**
- **application fields include surface engineering, automotive industry, electroplating, pipeline construction, aluminium industry, spray coating, plastic coating, mechanical engineering, etc.**

- robust housing made of polyamide, with soft keypad and multi function display
- large LCD display with clear reading, backlight, with graphical indicating of all needed informations
- units in µm or mil, functions for Fe and Ne switchable and automatic substrate recognition
- magnetic induction (Fe) and eddy current measuring principle (Ne), can store 99 groups of measurements
- mini-statistic function with indication of values, average value, min. u. max. value and number of values
- calibration foil-set (4 pcs.), one aluminium substrate block and one iron substrate block
- tolerance: In standard mode 3% of the value or ± 2.5 µm, or by two point calibration method with zero-plate and distance foil, hereby the device can be setted precisely to the concrete measuring range, by this method you can achieve lowest tolerance of about 1% of value or ± 1 µm
- min. radius workpiece for Fe-probe: convex 1.5 mm/concave 25 mm, min. thickness of substrate 0.5 mm
- min. radius workpiece for Ne-probe: convex 3.0 mm/concave 50 mm, min. thickness of substrate 0.3 mm
- min. measuring area 6 mm², autom. and manual power off
- operation temperature 0°C ~ +50°C, humidity 20% - 80% RH
- incl. 2x battery 1.5 V (type AAA, art.-no.: 609283), with low battery indicator
- incl. operation manual, wrist strap, in a rugged plastic carrying case

Accessories on page 261

ISO · ASTM · BS · CE · TC · WARRANTY 1 YEAR

Options
- **art.-no. 489880** RS232 C data cable with software
- **art.-no. 489881** USB adapter

ART NO	µm / probe F1	µm / probe F1	µm / probe N1	µm / probe N1	mm	KG
480233	0.1	0 - 1250	0.1	0 - 1250	125 x 65 x 28	0.081
480243	0.1	0 - 1250	0.1	0 - 1250	125 x 65 x 28	0.081

DIGI PLUS-LINE Ultrasonic Thickness Gauge

ART NO 480405



- **with external probe and data output RS232**
- **dedicated for many materials, such as steel, cast iron, grey cast iron, nodular cast iron, aluminium, copper, bronze, zinc, glass (quarz), ceramics, composites, epoxies, homogenously plastics and other ultrasonic wave well conductive materials**
- **professional, handheld measurement device for quick and flexible wall thickness measuring**
- **suitable for most metallic and non-metallic ultrasonic wave can go through, application areas are e.g. surface technology, automotive industry, storage tank, pressure boiler, shipbuilding, chemical- and petrol plants, power stations, aluminium industry, machine engineering, bridge construction, etc.**
- **for wall thickness checking of pressure tanks, vessels, oil tanks, chemical instruments, and others**
- **operates in any position: horizontal, vertical or upside down**

- rugged extruded aluminium case, with soft keypad
- multi-function display with clear reading, coupling status indicator, backlight
- integrated steel testplate for fast calibration, with single point working mode and scan mode, alarm function shiftable
- measurement in metric/inch switchable, measuring range for steel pipes: Min. ø 15 x 2.0 mm and max. ø 20 x 3.0 mm
- 2 external transducers, 1m length, N05 for standard purpose (ø 10 mm / 5 MHz) and N07 for thin walled pipes or small radii (ø 6 mm / 7 MHz), other transducers for different applications are available
- internal data memory for 20 files with up to 99 values for each file
- four measurement readings per second for single point measurement and ten per second for scan mode
- measuring range in steel: 0.75-300 mm (with different transducers), selectable sound velocity 1000-9999 m/s
- Pre-Set for upper and lower limit, it will alarm automatically by exceeding the limits
- tolerance ±0,5% thickness +0.04 mm, readings in 0.1/0.01 mm, auto calibration of zero point, correction of system error
- On/Off key and autom. power off function, operation temperature -20°C ~ +60°C, humidity 20% - 90% RH
- incl. 2x battery 1.5 V (type AA, art.-no.: 6090282), with low battery indicator
- incl. data cable RS232C and software for data process
- incl. operation manual, wrist strap, couplant, screw driver, in a rugged plastic carrying case

Options
- **art.-no.: 480389** thermal printer
- **art.-no.: 480284** printer cabel
- **art.-no.: 480285** interface cable RS232

Accessories on page 261

NORM · CE · TC · WARRANTY 2 YEARS

ART NO	mm	mm N05	mm N07	sound velocity m/s	max.	mm	KG
480405	0.1 / 0.01	1.2 - 230	0.75 - 80	1000 - 9999	±0.5%n + 0.04 mm	125 x 68 x 33	0.345

DIGI PLUS-LINE Ultrasonic Thickness Gauge

ART NO 480260



- with integrated probe, with data output RS232
- dedicated for many materials, such as steel, cast iron, grey cast iron, nodular cast iron, aluminium, copper, bronze, zinc, glass (quarz), ceramics, composites, epoxies, homogenously plastics and other ultrasonic wave well conductive materials
- compact handheld measuring device for quick and flexible wall thickness measurement
- operates in any position horizontal, vertical and upside down
- easy to operate device
- application areas are e.g. surface technology, automotive industry, storage tank, pressure boiler, shipbuilding, chemical- and petrol plants, power stations, aluminium industry, machine engineering, bridge construction, etc.
- for wall thickness checking of pressure tanks, vessels, oil tanks, chemical instruments and many others

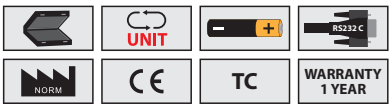
- robust housing made of polyamide, with soft keypad
- external steel test plate for fast and easy calibration
- LCD display with clear reading, units in mm/inch switchable
- tolerance ±0.5% thickness+0.04 mm, readings in 0.1/0.01 mm
- selectable sound velocity 500 - 9000 m/s
- operation temperature 0° ~ +50°C, humidity 20% - 80% RH
- incl. 4x battery 1.5 V (type AAA, art.-no.: 609283), with low battery indicator
- incl. operation manual, wrist strap, in a rugged plastic carrying case

Option
- **art.-no. 480280** couplant (60 ml)

ART NO 480280



Accessories on page 261



ART NO	mm	mm N05	sound velocity m/s	max.	mm	KG
480260	0.1	1.0 - 230	1000 - 9000	±0.5%n + 0.1 mm	135 x 65 x 30	0.115

DIGI PLUS-LINE Ultrasonic Thickness Gauge

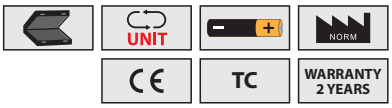


- designed to measure the thickness of ferrous (Fe) or non-ferrous materials (NFe)
- dedicated for many materials, such as steel, cast iron, grey cast iron, nodular cast iron, aluminium, copper, bronze, zinc, glass (quarz), ceramics, composites, epoxies, homogenously plastics and other ultrasonic wave well conductive materials
- rugged handheld measurement device, for quick and flexible wall thickness measurements
- suitable for most metallic and non-metallic ultrasonic wave can go through, application areas are e.g. surface technology, automotive industry, storage tank, pressure boiler, shipbuilding, chemical- and petrol plants, power stations, aluminium industry, machine engineering, bridge construction, etc.
- for wall thickness checking of pressure tanks, vessels, oil tanks, chemical instruments and many others
- operates in any position: horizontal, vertical or upside down

- robust housing made of polyamide, with soft keypad
- 4-digit LCD display, with backlight, digit height 9 mm
- with integrated test block for fast calibration
- autom. calibration function, reading in mm/inch
- On/Off key and autom. power off function, with „low-battery“ indicator
- selectable sound velocity 1000-9999 m/s
- internal data memory for 40 measurements
- incl. exchangeable 5 MHz transducer, ø 10 mm, for standard purposes
- operation temperature 0°C ~ +40°C, humidity 20% - 90% RH
- incl. 2x battery 1.5 V (type AA, art.-no.: 609282), with operation manual, wrist strap and couplant

More probes available on request

Accessories on page 261



ART NO	mm	mm / inch	max.	mm	KG
480120	0.01 0.1	1.0 - 99.99 / 0.39 - 3.94 100.0 - 250.0 / 3.93 - 9.83	0.5 %n + 0.1	124 x 67 x 30	0.240

DIGI PLUS-LINE® Ultrasonic Thickness Gauge

More probes available on request



- top class device, with USB data output, with A-Scan mode
- rugged handheld, for quick and flexible wall thickness measurements
- for wall thickness checking of pressure tanks, vessels, oil tanks, chemical instruments and many others
- dedicated for many materials, such as steel, cast iron, grey cast iron, nodular cast iron, aluminium, copper, bronze, zinc, glass (quarz), ceramics, composites, epoxies, homogenously plastics and other ultrasonic wave well conductive materials
- operates in any position: horizontal, vertical or upside down
- suitable for most metallic and non-metallic ultrasonic wave can go through, application areas are e.g. surface technology, automotive industry, storage tank, pressure boiler, shipbuilding, chemical- and petrol plants, power stations, aluminium industry, machine engineering, bridge construction, etc.

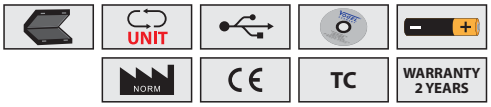
- robust housing made of polyamide, with keypad, On/Off button, autom. power off
- 4-digit OLED colour display, with backlight, digit height 14 mm
- autom. colour representation of values if it is above or below the measurement limits
- with integrated test block for fast calibration, Pre-Set of min./max. value, alarm setting
- autom. calibration function, readings in mm/inch, with „low-battery"-indicator
- selectable sound velocity 500 m/s - 9999 m/s
- internal data memory for 100000 measurements, 400 data storage
- menu in german, english, chinese
- incl. exchangeable 5 MHz transducer, for standard purposes
- operation temperature -10°C ~ +50°C, humidity 20 - 90%RH
- incl. 2x 1.5 V battery (type AA, art.-no.: 609282), couplant, data view software, data cable and operation manual

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ART NO	mm	mm / inch	max.	mm	KG
480246	0.01 0.1	0.6 - 508 / 0.024 - 20.0 100.0 - 250.0 / 3.93 - 9.83	0.5 %n + 0.1	153 x 76 x 37	0.280

DIGI PLUS-LINE® Ultrasonic Echo-Echo Thickness Gauge

More probes available on request

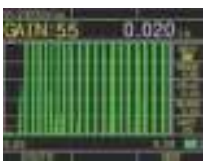


- top class device, with USB data output, with A-scan and B-scan mode
- rugged handheld, for quick and flexible wall thickness measurements, even through coatings
- for wall thickness checking of pressure tanks, vessels, oil tanks, chemical instruments and many others
- dedicated for many materials, such as steel, cast iron, grey cast iron, nodular cast iron, aluminium, copper, bronze, zinc, glass (quarz), ceramics, composites, epoxies, homogenously plastics and other ultrasonic wave well conductive materials
- operates in any position: horizontal, vertical or upside down
- suitable for most metallic and non-metallic ultrasonic wave can go through, application areas are e.g. surface technology, automotive industry, storage tank, pressure boiler, shipbuilding, chemical- and petrol plants, power stations, aluminium industry, machine engineering, bridge construction, etc.

- robust housing made of polyamide, with keypad, On/Off button, autom. power off
- 4-digit OLED colour display, with backlight, digit height 14 mm
- autom. colour representation of values if it is above or below the measurement limits
- with integrated test block for fast calibration, Pre-Set of min./max. value, alarm setting
- autom. calibration function, readings in mm/inch, with „low-battery"-indicator
- selectable sound velocity 500 m/s - 9999 m/s
- internal data memory for 100000 measurements, 400 data storage
- menu in german, english, chinese
- incl. exchangeable 5 MHz transducer, for special purposes
- operation temperature -10°C ~ +50°C, humidity 20 - 90%RH
- incl. 2x 1.5 V battery (type AA, art.-no.: 609282), couplant, data view software, data cable and operation manual

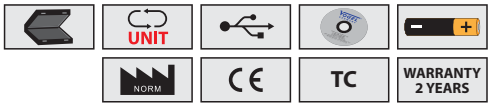
Accessories on page 261











ART NO	mm	mm / inch	max.	mm	KG
480252	0.01 0.1	0.5 - 508 / 0.020 - 20.0 100.0 - 250.0 / 3.93 - 9.83	0.5 %n + 0.1	153 x 76 x 37	0.280

Accessories for Universal Coating Thickness Gauges

ART NO	suitable for model	application	article description	µm
480310	all models	for calibration purpose	calibration foil set Fe + Ne	-
480315	480226	magnetic induction	probe F1 (Fe)	0 - 1250
480315-90°		magnetic induction	probe F1 (Fe)	0 - 1250
480316		eddy current method	probe N1 (Ne)	0 - 1250
480316-90°		eddy current method	probe N1 (Ne)	0 - 1250
480317		magnetic induction	probe F10 (Fe)	0 - 10000
480318		magnetic induction	probe F400 (Fe)	0 - 400
489880	480233 480243 480235	-	data cable RS232 C with data view software	-
489881		-	USB adapter cable	-





Accessories for Ultrasonic Thickness Gauges

ART NO	suitable for model	application	article description	mm
480280	all models	for coupling	couplant, 60 ml	-
480288			couplant, 100 ml	-
480287	480405	-	mini thermal printer	-
480284		-	printer cable	-
480285		-	data cable RS232 C	-
480286		-	data-pro software for data transmission	-
480275	480120	for standard and Echo-Echo purposes	probe, ø10 mm 5 MHz	1.0 - 250
480274		for thin material, pipes, etc..	probe, ø7 mm 5 MHz	0.8 - 30
480277		for extrem high temperatures	probe, ø12 mm 5 MHz, bis 400°C	3.0 - 100
480278		for cast iron	probe, ø12 mm 2.5 MHz	3.0 - 250
489890	480405	for standard purposes	probe, ø10 mm 5 MHz	1.0 - 250
489893		for standard purposes	probe, ø10 mm 5 MHz, 90°	1.0 - 250
489891		for thin material, pipes, etc.	probe, ø6 mm 7 MHz	0.75 - 80
489892		for cast iron	probe, ø14 mm 2 MHz	3.0 - 300
489894		for extrem high temperatures	probe, ø14 mm 5 MHz, bis 300°C	3.0 - 250
480980	480246 480252	for standard purposes	probe, ø11 mm 5 MHz	1.0 - 100
480981	480252	for standard and Echo-Echo purpose	probe, ø10 mm 5 MHz	0.8 - 275
480982	480246 480252	for thin pipes, etc.	probe, ø6 mm 7.5 MHz	0.8 - 30
480983		for cast iron	probe, ø12 mm 2 MHz	4.0 - 300
480984		for extrem high temperatures	probe, ø10 mm 5 MHz, bis 380°C	4.0 - 80
480985		for thin material, pipes, etc.	probe, ø4 mm 10 MHz	0.7 - 12
489870	all models	4-step testblock 2.54/5.08/10.16/15.24/20.32 mm		2.54 - 20.32
489871	all models	6-step testblock 1/3/5/10/15/20 mm		1 - 20









DIGI PLUS-LINE® Electr. Digital Vibration Meter

- **with integrated or with external probe, incl. workshop test certificate**
- **compact analyser for predective maintenance of production machinery and for a quick checking of unbalance, misalignment, bearings and gears etc.**

- rugged, polyamid plastic housing, with keypad
- large LCD display with clear reading, with backlight
- On-switch, automatic power-Off after approx. 1 min., with battery indicator
- low frequency mode “Lo-RMS” to test low vibrations
- high frequency mode “Hi-AVE” to test avarage acceleration
- displacement peak to peak mode “Hi-Peak”
- large frequency range: 10 Hz up to 1 kHz (Lo), 1 kHz up to 15 kHz (Hi)
- incl. 2 exchangeable probe tips, for different measuring functions:
  - short probe tip for standard vibration measurements
  - long, small probe tip for vibration measurements on small or narrow objects, etc.
  - without probe tip for vibration measurements on smooth object surfaces, etc.
- operation temperature 0°C ~ +40°C, humidity 30 - 90%RH
- incl. 1x 9 V battery (type 6LR61, art.-no.: 609281), with operation manual



art.-no. 480600
- LCD display with digit height 18 mm
- accuracy ± 5% of display value (± 2 digits)
- with integrated accelerometer and with hand strap

art.-no. 480605
- two-row LCD display, for velocity and temperature, digit height 15 mm/10 mm
- accuracy ± 5% of display value (± 2 digits)
- with external accelerometer and adapter cable
- HOLD function for holding the determined measured value
- with magnet
- with temperature measurement (C°/F°) within range -10°C ~ +80°C, accuracy ± 2°C

ART NO 480600



ART NO 480605



NORM CE TC WARRANTY 2 YEARS

ART NO	velocity Lo-RMS	velocity Hi-AVE	displacement, peak to peak Hi-PEAK	mm	KG
480600	0.1 - 199.9 mm/s	0.1 - 199.9 m/s²	0.001 - 1999 mm	185 x 68 x 30	0.147
480605	0.1 - 199.9 mm/s	0.1 - 199.9 m/s²	0.001 - 1999 mm	135 x 75 x 38	0.290

DIGI PLUS-LINE® Electr. Digital Vibration Meter

- **with integrated probe**
- **compact analyser for predective maintenance of production machinery and for a quick checking of unbalance, misalignment, bearings and gears etc.**

- rugged, chromed metal housing, with keypad
- large LCD display, digit height 6 mm
- On/Off key, automatic power-Off after approx. 1 min.
- with HOLD function for holding the determined measured value
- low frequency mode “Lo-RMS” to test low vibrations
- high frequency mode “Hi-AVE” to test average acceleration
- displacement peak to peak mode “Hi-Peak”
- frequency range: 10 Hz up to 1 kHz
- operation temperature 0°C ~ +40°C, humidity 30 - 85%RH
- incl. 2x 1.5 V battery (type LR44, art.-no. 2020192/B), hand strap, screw driver, pouch and operation manual





LR44 1.5V NORM CE TC WARRANTY 2 YEARS

ART NO	velocity Lo-RMS	velocity Hi-AVE	displacement, peak to peak Hi-PEAK	mm	KG
480607	0.1 - 199.9 mm/s	0.1 - 199.9 m/s²	0.001 - 1999 mm	150 x 22 x 18	0.080

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VOGEL DIGI PLUS-LINE® Electr. Digital Stopwatch • IP54

- **with basic functions**
- **with 2-button-operation**

- sturdy ABS-plastic housing
- splash water proof acc. to DIN 40050 / IEC 60529
- LCD display with clear reading
- Start / Stop / Reset - Addition / Split / Dual measuring
- incl. 1x 1.5 V battery (type AA, art.-no.: 609282), with lanyard, protection pouch and operation manual

additional functions for art.-no. 580195
- 5 memory function for 25 split- and 25 lap-times
- Start / Stop / Reset-Addition / Split / Lap / Daytime

ART NO 580191



ART NO 580195



IP 54 | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	sec.	indicating range hrs. / min. / sec.	LCD digits	digit height mm	operation button	mm	KG	ART NO CC
580191	1/100	9 / 59 / 59.99	7	8	2	82 x 61 x 28	0.090	5894001
580195	1/100	9 / 59 / 59.99	7	8	2 / 2	82 x 61 x 28	0.090	5894001

VOGEL DIGI PLUS-LINE® Electr. Digital Stopwatch • IP54

- **with basic functions**
- **with 1-button-operation**

- sturdy ABS-plastic housing
- splash water proof acc. to DIN 40050 / IEC 60529
- LCD display with clear reading
- Start / Stop / Reset - Split / Lap / Addition
- all three times can be switched-over at any time
- count-down with repeat
- separate system- and memory-reset, daytime, date
- 60 data memory per type of time
- Split time can be pre-set from clock time
- incl. 1x 1.5 V battery (type AA, art.-no.: 609282) with lanyard, protection pouch and operation manual
- with interface for printer



IP 54 | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	sec.	indicating range hrs. / min. / sec.	LCD digits	digit height mm	operation button	mm	KG	ART NO CC
580202	1/100	9 / 59 / 59.99	7	6	1 / 3	82 x 61 x 28	0.090	5894001

VOGEL DIGI PLUS-LINE® Electr. Digital Stopwatch

- **for industrial time recording**

- sturdy ABS-plastic housing
- LCD display with clear reading
- Start / Stop / Reset - Split / Lap
- both times can be switched-over at any time
- separate system- and memory-reset, daytime, date
- 60 data memory for Split and Lap
- incl. 1x 1.5 V battery (type AA, art.-no.: 609282), with lanyard, protection pouch and operation manual



NORM | CE | TC | WARRANTY 2 YEARS

ART NO	min.	indicating range min.	LCD digits	digit height mm	operation button	mm	KG	ART NO CC
580200	1/100	99999.99	7 / 2	6	1 / 3	82 x 61 x 28	0.090	5894001

DIGI PLUS-LINE Electr. Digital Stopwatch

- **for standard requirements**
- **with 2-button-operation**

- sturdy ABS-plastic housing
- LCD display with clear reading
- start / stop / reset-addition / split / dual measuring
- incl. 1x 1.5 V battery (type SR54, art.-no.: 2020199), with lanyard and operation manual



ART NO	sec.	indicating range hrs. / min. / sec.	LCD digits	digit height mm	operation button	mm	KG
580210	1/100	9 / 59 / 59.99	7	6.5	2	66 x 70 x 21	0.062

DIGI PLUS-LINE Electr. Digital Stopwatch • IP54

- **for standard requirements**
- **with 3-button-operation**

- sturdy ABS-plastic housing
- splash water proof acc. to DIN 40050 / IEC 60529
- LCD display with clear reading
- start / stop / reset-lap / split / daytime / date / alarm with snooze
- art.-no. 580505 with 1.5 V battery (type LR44, art.-no. 2020192/B), art.-no. 580506 with 3 V battery (type CR2032, art.-no. 2002093)
- with lanyard, protection pouch and operation manual

additional functions for art.-no. 580506

- memory for 10 laps
- recall of lap and split times

ART NO 580505



ART NO 580506



ART NO	sec.	indicating range hrs. / min. / sec.	LCD digits	digit height mm	operation button	mm	KG
580505	1/100	9 / 59 / 59	6	11	3	85.5 x 64 x 22	0.076
580506	1/100	9 / 59 / 59.99	7	5 / 4	3	85.5 x 64 x 22	0.078

DIGI PLUS-LINE Electr. Digital Table Timer

- **with adjustable alarm signal**
- **for industry, schools, laboratories, sporting events, etc.**

- sturdy ABS-plastic housing
- LCD display with clear reading, digit height 22 + 8 mm
- start / stop / reset-addition - Flyback - Count-Down
- 4 timer fully programmable, Start / Stop operation, either separate or together
- repeat, manually or automatically
- with daytime
- operation temperature –10° ~ +55° C
- incl. 1x 1.5 V battery (type AA, art.-no.: 609282), and operation manual



ART NO	min. / sec.	indicating range hrs. / min. / sec.	LCD digits	mm	KG	ART NO CC
580104	1/100 min. 1/10 sec.	999 min. / 99/100 min. 9 hrs. / 59 min. / 59 sec. / 1/10 sec.	3 5	175 x 130 x 40/95	0.390	5894104

BLUE-LINE Mechanical Precision Addition Stopper

- **low cost, precise stopwatch in plastic housing**

- sturdy ABS-plastic housing
- with lanyard
- shock-protected pinlever



WARRANTY 2 YEARS

ART NO	min. / sec.	indicating range min.	operation button	mm Ø mm	KG
580152	1/5 sec.	30	3	55	0.085

BLUE-LINE Mechanical Precision Stopwatch • IP54

- **highly precise mechanical stopwatch for industry and sport**

- diamond polished metal housing, with pinlever
- shock-, dust- and splash water proof acc. to DIN 40050 / IEC 60529

additional functions for art.-no. 580141
doublehand timer, with trail finger for the recording of any number of intermediate times

additional functions for art.-no. 580173
Crown timer, the most commonly used system for all simple time measurements without interruption of the measuring process. The most selling models.

additional functions for art.-no. 580182
addition timer, for stopping of single times



ART NO 580141



ART NO 580173



ART NO 580182

More stopwatches are available on request!

WARRANTY 2 YEARS | IP 54

ART NO	min. / sec.	indicating range min.	jewels	operation button	mm Ø mm	KG	ART NO CC
580141	1 / 10	15	7	3	55	0.120	5894141
580173	1 / 5	30	7	1	55	0.120	5894173
580182	1 / 100 min.	30	7	2	55	0.120	5894182

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Precision Reading Glasses and Magnifiers

BLUE-LINE Technical Reading Glass

- aplanatic lens with silicate glass optic, scratch-resistant and solvent-resistant
- highly polished metal-frame
- art. no. 600121 and 600122 handle made of black plastic, fine-grained
- art. no. 600132 metal frame and handle, highly polished finish and chromed


ART NO 600121


ART NO 600122


ART NO 600132

WARRANTY 2 YEARS

ART NO	size of lens ø mm	magnification	mm	KG	ART NO suitable soft case
600121	65	4 x	245 x 114 x 23	0.146	6009921
600122	90	2.5 x	245 x 114 x 23	0.252	6009922
600132	45	3 x	139 x 16 x 12	0.060	-

BLUE-LINE Watchmaker's Magnifier and Stone Magnifier

- biconvex silicate lens
- flame resistant plastic housing, with air hole to cope up with steaming



WARRANTY 2 YEARS

ART NO	size of lense ø mm	magnification	type of lense	KG
600194	25	7 x	biconvex	0.008
600195	25	10 x	biconvex	0.010

BLUE-LINE Precision Technical Magnifier

- **with LED-Light and exchangeable scales**

- tempered glass-lenses, housing made of aluminium / ABS / PE
- delivery with crosshair at:
  art.-no. 601126 = 10 - 0 - 10 mm scale, graduation 0.1 mm, scale-ø 26 mm
  art.-no. 601135 = 12 - 0 - 12 mm scale, graduation 0.1 mm, scale-ø 35 mm
- adjusting by focus-ring, exchangeable measuring scales
- attachable LED unit, bright, white LED light, incl. 3x 1.5 V battery (type LR41, art.-no.: 609279)


ART NO 601126

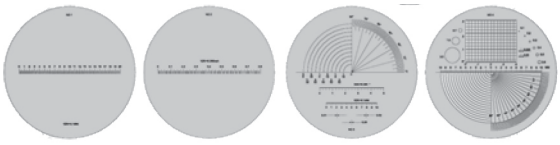

ART NO 601135

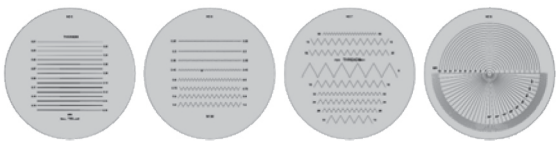


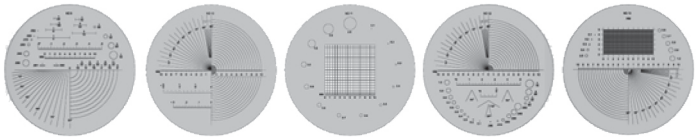


Exchangeable Scales

- tempered glass lenses, please mention type code and outside diameter!


type 1 type 2 type 3 type 4


type 5 type 6 type 7 type 8


type 9 type 10 type 11 type 12 type 13

WARRANTY 2 YEARS

ART NO	size of lens ø mm	magnification	mm	KG
601126	18.5	10 x	95 x 70 x 65	0.044
601135	21.0	10 x	95 x 70 x 65	0.074

SILVER-LINE LED Handheld Magnifier

- **with different lenses versions**

- silicate glass optic, scratch-resistant and solvent-resistant
- with high power LED
- rugged ABS-plastic housing
- incl. 1x 1.5 V battery (type AAA, art.-no.: 609283)



ART NO 600165



ART NO 600160

TC | WARRANTY 3 YEARS

ART NO	size of lense ø mm	magnification	type of lense	mm	KG
600160	55	4 x	aspheric	165 x 80 x 30	0.100
600161	30	8 x	aplantic	165 x 80 x 30	0.135
600165	16.3	15 x	biconvex	165 x 80 x 30	0.139

SILVER-LINE Precision Technical Magnifier

- **with exchangeable scales**

- aplanatic glass lens, tempered, housing made of polyamide
- incl. measuring scale 20 mm with 0.1 mm graduation
- adjusting by focus-ring, exchangeable measuring scales



ART NO 600169
(without measuring magnifier)

ART NO 600197

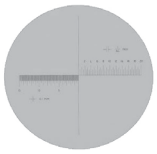


Handle with LED Lighting Unit

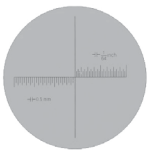
- incl. 3x 1.5 V battery (type AAA, art.-no.: 609283)

Exchangeable Scales

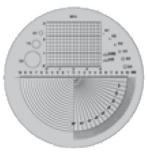
- aplanatic glass lenses, tempered, with different scale applications



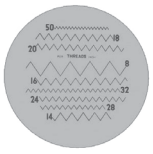
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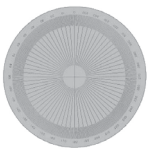
ART NO 600197/2



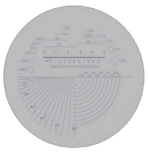
ART NO 600197/3



ART NO 600197/4



ART NO 600197/5



ART NO 600197/6

TC | WARRANTY 3 YEARS

ART NO	size of lens ø mm	magnification	mm	KG
600197	22.8	7 x	85 x 50 x 47	0.097

ART NO LED lighting unit	mm	KG
600169	165 x 80 x 30	0.166

BLUE-LINE LED Handheld Magnifier

- **very popular model**

- ailicate glass optic, scratch-resistant and solvent-resistant
- with high power LED, rugged ABS-plastic housing
- incl. 3x battery 1,5 V (type AAA, art.-no.: 609283) and with soft case



WARRANTY 2 YEARS

ART NO	size of lense ø mm	magnification	type of lense	mm	KG
600166	30	10 x	aplantic	38 x 105 x 25	0.070
600167	21	15 x	aplantic	38 x 105 x 25	0.070

BLUE-LINE LED Handheld Magnifier

- **with additional LED light in the handle**

- aspheric high tech lens made of PMMA, scratch-resistant and solvent-resistant
- rugged ABS-plastic housing
- incl. 1x 1.5 V battery (type AAA, art.-no.: 609283), with soft case and hand strap





WARRANTY 2 YEARS

ART NO	size of lense ø mm	magnification	type of lense	mm	KG
600170	42	5 x	aspheric	60 x 132 x 25	0.075

BLUE-LINE Tube Microscope

- **designed for quality control applications for instant surface examinations during the production process**
- **fine adjustable focus, high brilliance**

- precision achromatic lens with silicate glass optic
- sturdy metal housing, with or without measuring scale available
- lighting unit (art.-no. 60 0712) must be ordered separate, please
- art.-no. 600712 incl. 3x 1.5 V battery (type AAA, art.-no.: 609283)
- incl. soft case

ART NO 600710



ART NO 600712



WARRANTY 2 YEARS

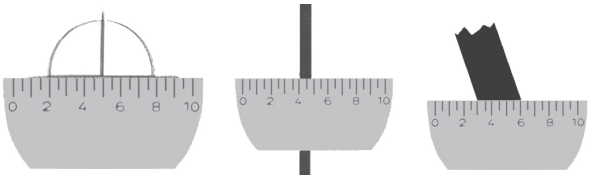
ART NO	measuring scale mm	magnification	type of lense	mm	KG
600710	-	40 x / 50 x / 60 x	achromatic	160 x 35 x 25	0.094
600711	0.02 / 1	40 x / 50 x / 60 x	achromatic	160 x 35 x 25	0.086
600712	-	-	-	45 x 152 x 32	0.112

SILVER-LINE Technical Stand Magnifier

- **with measuring scale**
- **for precise measurements between scale lines, spaces, etc.**

- adjustable aplanatic lens
- black chromed metal housing
- stainless steel scale, with clear graduation

More scales as spare part are available on request!





TC

WARRANTY 3 YEARS

ART NO	size of lense ø mm	magnification	length of scale mm	mm	possibility of reading mm	KG	ART NO CC
600178	20	10 x	10	0.10	0.025	0.038	609470
600180	20	8 x	10	0.10	0.025	0.038	609470
600179	20	6 x	20	0.10	0.025	0.038	609470

BLUE-LINE Precision Folding Magnifier

- **popular technical folding magnifier**

- compound triple lens, aplanatic lens precision glass optic
- polished chrome plated metal housing, with loop
- metal lens frame, wrapped with black rubber
- incl. leather case





TC | WARRANTY 2 YEARS

ART NO	size of lense ø mm	magnification	type of lense	mm	KG
600150	18	10 x	aplanatic	35 x 23 x 18	0.036

SILVER-LINE Precision Folding Magnifier

- **proven technical folding magnifier**

- precision glass optics
- satin chrome plated brass housing, with loop
- black lacquered metal lens frame

ART NO 600159



ART NO 600153



TC | WARRANTY 2 YEARS

ART NO	size of lense ø mm	magnification	type of lense		mm	KG
			aplanatic	biconvex		
600153	20.3	10 x	✓	-	39 x 39 x 34	0.031
600159	30	4 x + 6 x = 10 x	-	✓	42 x 27 x 56	0.056

BLUE-LINE Linen Tester

- biconvex lens, optically ground silicate glass
- precision brass body, satin chromed



WARRANTY 2 YEARS

ART NO	size of lense ø mm	magnification	height mm	cut-out mm	KG
600200	12.5	12 x	23	10 x 10	0.013
600201	14.5	10 x	27	15 x 15	0.020
600202	17.5	8 x	33	20 x 20	0.037
600204	31.5	5 x	53	30 x 30	0.122

BLUE-LINE Magnifier with LED Lamp

- **in pocket size**
- **with 3 magnifying lenses**

- 3x, 5x and 7x magnification
- with one extra bright LED lamp
- in a rugged ABS-plastic housing
- incl. 2x 3 V battery (type CR2032, art.-no.: 2002093)
- with a storage case





WARRANTY 1 YEAR

ART NO	magnification	field of view mm	mm	KG
601230	3 x / 5 x / 7 x	50 x 50 / 25 x 20 / 25 x 20	117 x 61 x 9	0.038

BLUE-LINE® Headband Magnifier with LED Lamp

- **total new model with powerful LED light**
- **patented design**
- **ideal for technical repair, camera, watch & clock repair, electronic repair, artworkers, dentist, etc.**

- made of ABS-plastic with sticky buckle tape for adjustment
- with 4 different lenses with special surface treatmentent
- light can be adjusted by up-down 45° or left-right 25°, removeable unit
- adjustable special function buckle band
- incl. 3x 1.5 V battery (type AAA, art.-no.: 609283)







WARRANTY 2 YEARS

ART NO	magnification	field of view mm	working distance mm	KG
600220	1 x / 1.5 x / 2 x / 2.5 x	100 x 50	100 - 650	0.120

BLUE-LINE® Professional LED Illuminated Magnifier

- **with articulated arm**
- **adjustable at any position, with 360° rotation**

- metal body, powder coated, insulation lamp housing made of rugged plastic
- with extra large and precision glass lens, 3 dpt., with built-in trafo
- with table clamp, cable inside of the arm, overload category CAT I
- with extra bright LED's, mounted around the lens

ART NO 600350



ART NO 600354



~ 230V

WARRANTY 2 YEARS

ART NO	voltage	magnification	field of view mm	total throat mm	KG
600350	230	1.75 x	ø 127	900	2.200
600354	230	1.75 x	190 x 160	900	3.800

Accessories for Illuminated Magnifiers



ART NO	article description	suitable for art.-no.
600337	table clamp	600350 + 600354



Calibration

is the comparison of actual measurements of a measuring instrument.
The study conducted at a measuring device calibration enables the documentation of the deviation of a measurement from standard. It will improve the measurement accuracy and the review of the technical data.

In the laboratory of the company creates Vogel Germany Calibration Certificates and test reports and provides with the re-calibration of measuring instruments as well as for the test equipment monitoring.









Why calibrate

- increase the quality level, for example in the production and in the service sector
- prevent hazards due to inaccurate readings
- guarantees traceable readings and increases safety
- ensures acceptance of test- and inspection reports

In the Service Scope of the company are included:



- cleaning and degreasing of customer‘s measurement equipment
- repair and adjustment
- calibration according to applicable standards
- creating a clear and compliant audit trails, test- and inspection reports
- attachment of calibration stickers with punctual re-calibration
- preservation of measuring equipment – also for overseas transportation
- inhouse workshop calibration
- marking of all kind of equipment by laser engraving

BLUE-LINE Accu Work Lamp, with LED • IP54

- **splash water resistant lamp, acc. to DIN 40050 / IEC 60529**
- **modern work lamp, designed for universal working places**
- **rechargeable**

- sturdy, acid- and oil-resistant housing, 360° revolving hook
- with rubber covered handle, On/Off pressure switch
- with built-in magnet
- 27 bright white LED's and 1 red control LED
- incl. 230 V DC charger and 12 V car adapter







IP 54 · ~ 230V · CE · TÜV GS · WARRANTY 2 YEARS

ART NO	quantity of LED's	LED light colour	mm	KG
600020	27 + 1	white	170 x 29 x 29	0.640

BLUE-LINE LED Work Lamp

- **modern work lamp**
- **designed for universal working places**

- sturdy housing
- with rubber covered handle
- with hand strap, ON/OFF pressure switch
- 52 bright white LED´s at the side and one LED at the top
- incl. 3x 1.5 V battery (type AA, art.-no.: 609282)

Option
- **art. no. 600025SET**
  contents 12 pcs. of LED working lamps



ART NO 600025SET

ART NO 600025







magnetic bottom

WARRANTY 1 YEAR

ART NO	quantity of working lamps	quantity of LED's	LED light colour	mm	KG
600025	1 pcs.	52 + 1	white	280 x 42 x 42	0.225
600025SET	12 pcs.	52 + 1	white	280 x 42 x 42	2.700

BLUE-LINE LED Head Lamp • IP54

- **splash water resistant lamp, acc. to DIN 40050 / IEC 60529**
- **professional head lamp**
- **with extra bright LED light**
- **with optimized collimator for a deeper, brighter beam, even in outdoor area**
- **this model will convince every technician as well as rescue service, in maintenance, hobby, etc.**

- durable, shock- and splash water resistant housing
- with rubber-covered lenshead
- lens head adjustable, swivel in a wide range
- flexible, tough and adjustable head belt, all-weather resistant
- On/Off pressure switch, extremly bright and white light colour
- incl. 3x 1.5 V battery (type AAA, art.-no.: 609283)





IP 54 · CE · WARRANTY 1 YEAR

ART NO	watt	colour of housing	LED colour light	mm	KG
600821	3	black	white	70 x 75 x 50	0.155

BLUE-LINE LED Head Lamp • IP67

- **watertight and explosion-proof head lamp**
- **acc. to all international standards, ATEX / UL / IECEx**
- **intrinsically safe head lamp for use in hazardous locations**

- durable, impact-resistant construction, watertight up to 1 m
- explosion-proof for gas/dust, acc. to ATEX-1354X
- with rotatable head, angle adjustable by max. 90°
- with clear and bright CREE XP-G2 LED
- flexible, tough and adjustable head belt, all-weather resistant
- with locking mechanism on battery compartment, On/Off-switch
- with focus and flood reflector, built-in gas release vent
- light output 75 m/150 m, low/high light mode, adjustable
- incl. 3x 1.5 V battery (type AAA, art.-no.: 609283) with operation manual





IP 67 | WARRANTY 2 YEARS

ART NO	luminous flux low / high lm	watt	beam distance max. m	quantity LED	colour of housing	LED light colour	mm	KG
601521	75 / 150	3	150	1	yellow	white	85 x 60 x 45	0.160

BLUE-LINE LED Flashlight • IP67

- **watertight and explosion-proof head lamp**
- **acc. to all international standards, ATEX / UL / IECEx**
- **intrinsically safe head lamp for use in hazardous locations**

- durable, impact-resistant construction, watertight up to 1 m
- explosion-proof for gas/dust, acc. to ATEX-1354X
- rubber covered lens head, with clear and bright CREE XP-E LED
- with device for helmet attachment or belt clip (art.-no. 601595 / 601596 / 601599)
- with lockable On/Off-switch, extreme bright, white light-colour
- light output 47 m/114 m, low/high light mode, adjustable
- valve design helps to hydrogen gas released
- incl. 4x 1.5 V battery (type AA, art. no.: 609282) with operation manual





IP 67 | WARRANTY 2 YEARS

ART NO	luminous flux low / high lm	watt	beam distance max. m	quantity LED	colour of housing	LED light colour	mm	KG
601505	47 / 114	3	114	1	yellow	white	175 x 47 x 47	0.200

BLUE-LINE rechargeable LED Flashlight • IP64

- **water resistant, rechargeable Flashlight**
- **with charging station by USB cable**
- **wide and professional scope, for industry, off-shore, marine, construction, road construction etc.**

- durable, impact-resistant construction, water resistant up to 1 m
- rubber covered lens head, with clear and bright CREE XP-E LED
- with device for helmet attachment or belt clip (art.-no. 601595 / 601596 / 601599)
- with lockable On/Off-switch, extreme bright, white light-colour
- light output up to 156 m, 1 red LED when charging, 1 blue ring light at charging station
- power supply by charger or at PC/Laptop with USB adapter
- with charging station, USB adapter cable, charger 110-240 V, 50/60 Hz, AC/DC
- incl. 2x lithium battery (type 14500LI) with operation manual





IP 64 | ~230V | WARRANTY 2 YEARS

ART NO	luminous flux low / high lm	watt	beam distance max. m	quantity LED	colour of housing	LED light colour	mm	KG
601508	156	3	129	1	yellow	white	172 x 47 x 47	0.165

Flashlights, Accessories for LED Flashlights

BLUE-LINE LED Flashlight • IP54

- **splash water resistant torch, acc. to DIN 40050 / IEC 60529**
- **thanks to the LED technology almost no replacement of the lamp needed**
- **LED's with approx. 100000 hrs. durability**

- sturdy, acid-and oil-resistant aluminium housing
- On/Off pressure switch
- extremly bright and white LED colour light
- with knurled grip for safe and nonslip handling, incl. 3x 1.5 V battery (type AAA, art.-no.: 609283)
- delivery with hand strap and pouch with belt-holder



IP 54 | WARRANTY 1 YEAR

ART NO	watt	luminous flux	colour of housing	LED light colour	lighting range m	mm length x ø mm	KG
601805	3	120	black	white	120	120 x 28	0.140

BLUE-LINE rechargeable LED Flashlight

- **handy, rechargeable flashlight**
- **accu power bank, with USB and micro USB data port**
- **application range at industry, crafts, etc.**

- sturdy, acid and oil resistant aluminium housing
- lockable On/Off button
- extreme bright and white LED light
- can also be used as a charger for smart phone
- charging by PC/Laptop or in car/truck by USB adapter
- incl. micro USB charging cable and storage bag
- incl. built-in lithium battery





backside



Smart-Phone charging

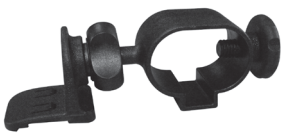
CE | WARRANTY 1 YEAR

ART NO	watt	luminous flux	colour of housing	LED light colour	lighting range m	mm	KG
601806	3	40 - 50	black	white	100	113 x 22 x 22	0.095

Accessories for LED Flashlights

- **helmet attachment or belt clip suitable for art. no. 601505 + 601508**

- art. no. 601595: helmet attachment with clip
- art. no. 601596: helmet attachment with fixing screw
- art. no. 601599: belt clip with powerful fixing



ART NO 601595



ART NO 601596









ART NO 601599



ART NO	mm	KG	ART NO	mm	KG	ART NO	mm	KG
601595	115 x 26 x 36	0.030	**601596**	115 x 26 x 36	0.040	**601599**	90 x 23 x 21	0.015

Have a look into our facilities

Since 1949 Vogel Germany operates as a provider and as well as a manufacturer of precision measuring tools and test instruments. Please have a look into our facilities. Take some spots with you!

Please let us know your requests!



DIGI PLUS-LINE

Image/Video Borescope with 3.5“ TFT colour monitor • IP65/IP57



- for quick, visual inspection and documentation, useful in hard to reach places
- IP57 protected housing, interchangeable water- and cooling waterproof hoses acc. to IP65, available in different diameters and length
- with 4 high bright white LEDs, USB data port, 2 GB memory card, with multifunctional keyboard

- rugged plastic housing, industry quality, scratch resistant display
- backside with 2 heavy duty magnet stripes and with M8 thread for tripod installation
- camera (CMOS) with resolution 640x480 pixel, high bright LEDs, with dimmer, USB-port
- digital zoom, still image storage format (JPG), video recording (MPG-4) AV-out (PAL + NTSC)
- Time/Date, On/Off button, 20 languages selectable (with device-type VGA only!)
- incl. power supply, charger, 3.7 V lithium-polymer battery, AV cable, USB cable, cleaning set
- with operation manual and rugged carrying case

More devices and hose lengths are available on request!



ART NO 620120







ART NO	hose mm	hose ø mm	hose type: flexible	hose type: semi rigid	hose type: VGA	field of view °	depth of field mm	mm	magnet	KG
620076	1000	4.0	✓	X	✓	67°	15 - 100 mm	220 x 120 x 35	X	0.390
620176	1000	4.25	X	✓	✓	67°	15 - 100 mm	220 x 120 x 35	X	0.390
620120	1000	5.5	✓	X	✓	67°	15 - 100 mm	220 x 120 x 35	✓	0.410
620121	1000	5.8	X	✓	✓	67°	15 - 100 mm	220 x 120 x 35	✓	0.410
620220	2000	5.5	✓	X	✓	67°	15 - 100 mm	220 x 120 x 35	✓	0.500
620221	2000	5.8	X	✓	✓	67°	15 - 100 mm	220 x 120 x 35	✓	0.500
620320	3000	5.5	✓	X	✓	67°	15 - 100 mm	220 x 120 x 35	✓	0.580
620321	3000	5.8	X	✓	✓	67°	15 - 100 mm	220 x 120 x 35	✓	0.580

Accessories and Spare Parts

- device, 2 way-adapter, cabel, mirrors, pick-up magnets
- mirrors and magnets can be screwed on to lens head
- more hose types up to 30 meter available on request

More hose types and hose lengths are available up to 30 meter, on request



with 2 tubes

9



device

4



controller
2-way-adapter

5

side view direction (90°)



90°
hose

6

front view direction (0°)



0°
hose

7

front- and side view,
combined (0° and 90°)



0° and 90°
hose

8



mirror

1



pick-up
magnet

2

ART NO	type	view direction °	hose mm	hose-ø mm	hose type: flexible	hose type: semi rigid	hose type: VGA	2-way system	mirror °	KG
620002	4	X	X	X	X	X	✓	X	X	0.450
6299001	5	0	1000	5.5	✓	X	X	✓	X	0.540
6299002	5	0	2000	5.5	✓	X	X	✓	X	0.590
6299012	6	90	1000	5.5	✓	X	✓	X	X	0.095
6299013	7	0	1000	5.5	✓	X	✓	X	X	0.095
6299014	7	0	1000	5.8	X	✓	✓	X	X	0.095
6299015	8	0 and 90	1000	5.8	✓	X	✓	X	X	0.095
6299022	7	0	2000	5.5	✓	X	✓	X	X	0.175
6299023	7	0	2000	5.8	X	✓	✓	X	X	0.175
6299032	7	0	3000	5.5	✓	X	✓	X	X	0.225
6299033	7	0	3000	5.8	X	✓	✓	X	X	0.225
6299056	7	0	5000	5.5	✓	X	✓	X	X	0.360
6299057	7	0	5000	5.8	X	✓	✓	X	X	0.360
6299063	7	0	1000	4.0	✓	X	✓	X	X	0.065
6299067	7	0	1000	4.25	X	✓	✓	X	X	0.095
6299330	2	X	X	4.0 / 4.25	X	X	X	X	X	0.018
6299333	1	70 / 90 / 110	X	4.0 / 4.25	X	X	X	X	35 / 45 / 55	0.066
6299530	2	X	X	5.5 / 5.8	X	X	X	X	X	0.018
6299533	1	70 / 90 / 110	X	5.5 / 5.8	X	X	X	X	35 / 45 / 55	0.066
629903	9	0 and 90	300	4 = 0° 5 = 90°	X	X	✓	X	45	0.220
629905	9	0 and 90	300	6 = 0° 7 = 90°	X	X	✓	X	45	0.235

BLUE-LINE® Voltage Detector • IP44

- **non-contact type, rapid detection of live conductors to e.g. cable connections, cable reels, sockets, electrical outlets, switches, etc.**
- **particulary well-suited for professional use and as well for hobby**

- sturdy ABS-plastic housing, with clip, dustproof and spray water resistant
- contactless and safe testing, works at a distance of 4 mm
- protected against voltage loads up to 1000 V AC
- overload category CAT III 1000 V
- capacitive process
- incl. 2x 1.5 V battery (type AAA, art.-no.: 609283), with operation manual

art.-no. 640357
- with acoustical signal and built-in LED lamp on top, measuring range 12 V - 1000 V







ART NO	V AC	display	mm L x ø	KG
640350	110 - 1000	optical	142 x 25	0.022
640357	12 - 1000	optical and acoustical	160 x 25	0.045

DIGI PLUS-LINE® Electr. Digital Miniature Current Clamp • IP44

- **the manual/automatic test range selector enables versatile and reliable testing**
- **use in the service sector, in industry or in the installation**
- **whether you want to measure a direct current as shown in the picture to check that a battery's load current will be sufficient, or the load is pulling too much and causing leakage**
- **the included readiness-bag keeps the device and its attachments safe, even in harsh areas or on the road**

- protected housing made of sturdy ABS-plastic, dustproof and spray water resistant
- LCD display with clear reading
- voltage up to 600 V, current AC/DC up to 600 A
- overload category CAT III 600 V, conductivity with acoustical signal, resistance 0-60Ω
- with diode test, with 1x testing lead set
- incl. 3x 1.5 V battery (type AAA, art.-no.: 609283)
- incl. readyness bag, with operation manual







ART NO			mm	KG
640364	- 600 V AC/DC	- 600 A AC/DC	208 x 75 x 35	0.340

SILVER-LINE Two Pole Voltage Tester • IP65, with LED's

DIGI PLUS-LINE Two Pole Voltage Tester • IP65, with LCD display

ART NO 640332 ART NO 640333



- **the professional appearance is underlined by the mix of materials used in the plastic housing and the rubber handle**
- **display window made of break proof plastic, scratch resistant**

- sturdy ABS-plastic housing, water- and coolant proof acc. to DIN 40050 / IEC 60529
- single pole phase testing, two pole phase sequence testing, autom. load for FI/RCD test
- autom. measurement range, autom. resistance: Is ~ 30mA ED(DT) = 30 sec.
- incl. 2x 1.5 V battery (type AAA, art.-no.: 609283), with operation manual

art.-no. 640332
- operation panel: finger tip contact, continuity test 0-500 kOhm, with acoustical signal

art.-no. 640333
- resistance test 0-2000 Ω, continuity test 0-150 Ω, with acoustical alarm
  operation panel: On/Off button, data hold button, finger tip contact
  display: LCD 3½ digit, LCD for phase/rotary field





IP 65 | IEC / EN | CE | TC | TÜV GS | WARRANTY 2 YEARS

ART NO	V AC / DC	phase indicating	overload category	mm	KG
640332	6 - 1000 AC / DC	> 100 V AC	CAT IV 1000 V	238 x 70 x 30	0.200
640333	6 - 1000 AC / DC	> 100 V AC	CAT IV 1000 V	238 x 70 x 30	0.200

BLUE-LINE Two Pole Voltage Tester • IP44

- **with 8 LED's, user-friendly design**
- **for measuring AC / DC, two practical functions in a single device**
- **the instrument has met with the approval for many customers working in the electrical- and tools branch**

- sturdy ABS-plastic housing with rubber handle, dustproof and spray water resistant
- protected against voltage loads from 6 up to 400 V AC / DC
- DC and AC voltage tests with polarity indication can be performed safely
- power supply by test object
- overload category CAT III 1000 V
- with operation manual



IP 44 | IEC / EN | CE | TÜV GS | WARRANTY 2 YEARS

ART NO	V AC / DC	display	mm	KG
640356	6 - 400	8 LED's	120 x 60 x 30	0.100

DIGI PLUS-LINE Electr. Digital Multimeter • IP44

- **with LED lamp and with non-contact voltage tester**
- **very useful instrument, especially in the field of electrical engineering**

- housing is made of tough, demage-resistant ABS-plastic, dustproof and spray water resistant
- large LCD display for clear reading
- current DC and AC up to 4 A
- diode test, transistor test function, conductivity test, with acoustical signal
- incl. 1x measuring lines and with readiness bag
- incl. 2x 1.5 V battery (typ AAA, art.-no.: 609283), with operation manual







IP 44 | IEC / EN | CE | TÜV GS | TC | WARRANTY 2 YEARS

ART NO	AC/DC	overload protection	resistance	mm	KG
640382	0 - 400 V	CAT III / 300 V	2 MΩ	140 x 70 x 35	0.220

DIGI PLUS-LINE Electr. Digital Multimeter • IP44

- **with solar charger on top of instrument**
- **very useful instrument, especially in the field of electrical engineering**

- housing is made of tough, demage-resistant ABS-plastic, dustproof and spray water resistant
- large LCD display clear reading, digit height 19 mm
- current DC and AC up to 20 A
- incl. thermo probe for temperature measurements
- diode test, transistor test function, conductivity test, with acoustical signal
- with battery test function
- with frequency function
- with decimal digits change
- incl. 2x measuring lines and readiness bag
- incl. rechargeable accu and charger cable, with operation manual





solar charger



with stand



alligator clips



power plug



USB cable for charging



measurement probes



temperature probe

IP 44 | IEC / EN | CE | TC | WARRANTY 2 YEARS

ART NO	AC	DC	overload category	resistance	mm	KG
640384	0 - 750 V	0 - 1000 V	CAT III / 600 V CAT IV / 1000 V	60 MΩ	167 x 90 x 50	0.320

IP-Protection types overview acc. to EN 60529 (IP • International Protection)

1. Index

Degree of protection against foreign objects/particles and dust

IP **4..** Protection against penetration of solid foreign objects von ≥ 1 mm.

IP **5..** Protection against harmful dust deposits (dust protected).

IP **6..** Protection against penetration of dust (dust-proof).

2. Index

Degree of protection against water

IP **..0** no protection
IP **..2** Protection against dripping water up to 15° tilt housing.
IP **..4** Protection against water spray from any direction.
IP **..5** Protection against water jets from any direction.
IP **..6** Protection against powerful water jets from any direction.
IP **..7** Protection against temporary immersion in water.
IP **..8** Protected from ingress of water during immersion for indefinite period.

Tolerance limits acc. to EC-Measuring Directive 2004/22

Pocket Tapes / Steel Rules

Length	m	1	2	3	4	5	8	10
Tolerance EC I	mm	± 0.3	± 0.4	± 0.5	± 0.6	± 0.7	± 1.0	± 1.2
Tolerance EG II	mm	± 0.7	± 0.9	± 1.1	± 1.3	± 1.5	± 2.1	± 2.5

Folding Rules

Length	m	1	2	3
Tolerance EC II	mm	± 1.0	± 1.2	± 1.4
Tolerance EG III	mm	± 1.8	± 2.2	± 2.6

Thickness tolerances for feeler gauges and feeler gauge rolls

nominal thickness mm	0.000 – 0.024	0.025 – 0.039	0.040 – 0.062	0.063 – 0.124	0.125 – 0.159	0.160 – 0.199	0.200 – 0.249	0.250 – 0.314	0.315 – 0.389	0.400 – 0.499	0.500 – 0.629	0.630 – 0.799	0.800 – 0.999	1.000 – 1.249
Tolerance T2 µm	± 2	± 3	± 4	± 5	± 6	± 7	± 8	± 9	± 11	± 12	± 14	± 17	± 19	± 24
Tolerance T3 µm	± 1.5	± 2	± 3	± 4	± 5	± 5	± 6	± 7	± 8	± 9	± 10	± 12	± 13	± 17

Measuring categories CAT I up to CAT IV

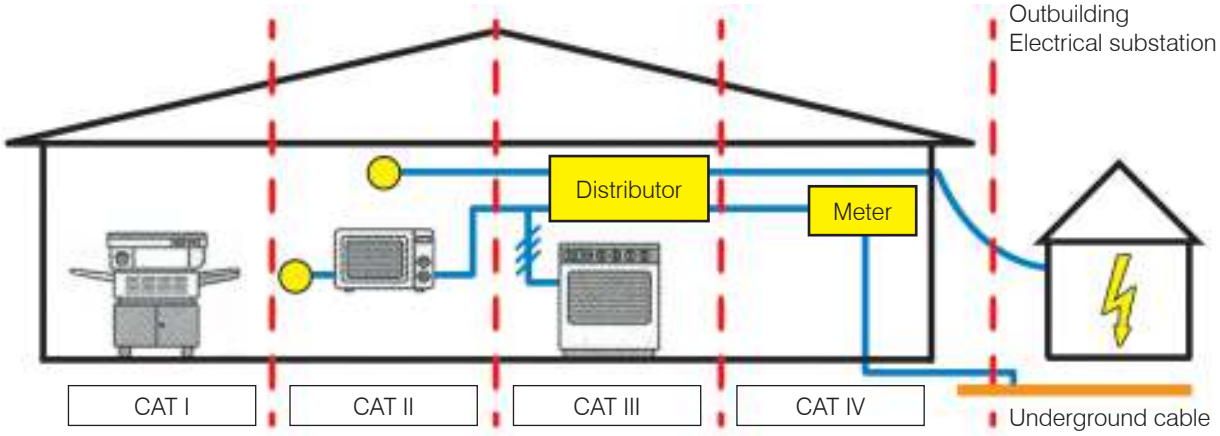
CAT I: approved for measurements on circuits that are not directly connected to the power grid. (e.g. specially protected devices)

CAT II: approved for measurements on circuits which are electrically connected directly to the low voltage grid. (e.g. household appliances)

CAT III: approved for measurements in building installation (e.g. as distribution, wiring, sockets, switches)

CAT IV: approved for measurements at the source of low-voltage installations (e.g. as meters, mains terminals, primary overcurrent protection devices)

Any questions?
We are pleased to advise!



BLUE-LINE Magnet Field Detector, non contact



- with LED lamp, non contact
- easy and quick contact-free detection of magnetic-fields
- all permanent and synthetic magnetic fields are indicated by the tip lighting up
- the built-in magnet-field sensor allows a reliable check proper function of hydraulic and pneumatic valves, relays and contactors

- rugged ABS-plastic housing, with clip
- safe and contactless testing, works at a distance of 4 mm
- optical red LED display, with built-in permanent magnet for a quick self test
- incl. 2x 1.5 V battery (type AAA, art.-no.: 609283), with operation manual



IEC / EN | CE | WARRANTY 2 YEARS

ART NO		mm length x ø	KG
640376	all magnetic fields	160 x 25	0.045

BLUE-LINE Brake Fluid Tester, DOT 3, DOT 4, DOT 5.1 · IP44

- fast and accurate check on the water content in the brake fluid
- thanks to various measuring ranges, user-friendly operation and compact design, the device is ideal for use in garages and motorcycle workshops

- check brake fluids DOT 3, DOT 4, DOT 5.1
- acid- and laugenfestes Gehäuse, mit Clip
- visual indicating via 3 LED's
- measuring point illumination
- incl. 2x 1.5 V battery (type AAA, art.-no. 609283) with operation manual







IP 44 | IEC / EN | CE | WARRANTY 2 YEARS

ART NO		mm length x ø	KG
640372	DOT 3 / DOT 4 / DOT 5.1	152 x 23.5	0.040

SILVER-LINE Car Tester, Voltage Tester for 3-48 V • IP40

- with integrated piercing probe
- perfect instrument for fault diagnostics in cars, trucks, etc.

- rugged ABS plastic housing, dust proof
- LED's with indicating 12 V / 24 V / 48 V
- power supply via test object
- protection class III, IEC/EN 61010-1
- with operation manual







IP 40 | IEC / EN | CE | TC | TÜV GS | WARRANTY 2 YEARS

ART NO	DC	mm	KG
640366	3 - 48 V	145 x 25 x 16	0.250

Electr. Digital Thermometer

- **for quick and exact measurement of temperatures**
- **with external temperature probe, type K (art. no. 649303)**

- rugged, ABS-plastic housing, with insulating peel
- large LCD display, 3 ½ -digit, with clear reading, with battery indicator
- On/Off button, data hold button, measuring in °C and °F, max. display 1999
- 2 inputs for temperature probes type K, for temperature and relative measurements
- max. voltage input DC 60V AC 24V, response time approx. 2.5 s
- storage temperature 0°C ~ +50°C, rel. humidity <80% RH
- incl. 1 x 9 V battery (type 6LR61, art.-no. 609281) with operation manual

Option
- spare part temperature probe (art. no. 649303)





with stand



probe



bumper case

UNIT | NORM | CE | TC | WARRANTY 2 YEARS

ART NO	capacity of device °C	°C at -50° ~ 200°C	max. -50°~ 200°/200 ~ 1000°/1000° ~ 1300°C	mm	KG	ART NO CC
640302	-50 ~ +1300	0.1	± 0.1%+1°C / ± 0.3%+2°C / ± 0.5%+2°C	147 x 71 x 34	0.200	649402

Temperature Probe, Type K



ART NO 649300

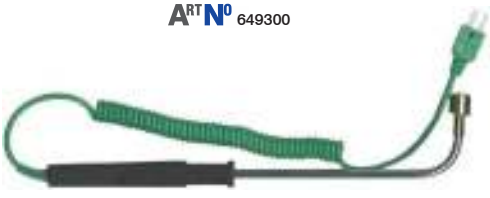


ART NO 649301

immersion probe



ART NO 649303



ART NO 649302

surface probe



ART NO 649304



ART NO 649305



ART NO 649306

ART NO		L mm	ø mm	KG
649300	~ +700 °C	~ 84	3	0.027
649302	~ +400 °C	~ 150	15	0.095

ART NO		L mm	ø mm	KG
649301	~ +700 °C	~ 150	4	0.090
649303	~ +400 °C	~ 950	2	0.006
649304	~ +400 °C	~ 15	14.92	0.270
649305	~ +600 °C	~ 150	3.5	0.270
649306	~ +800 °C	~ 170	5	0.270

Infrared Laser Thermometers

DIGI PLUS-LINE® Infrared Laser Thermometer

- **suitable for use in industrial companies, car garages, heating, refrigeration and air-conditioning systems or the electric trade**
- **pistol-sized, with shiftable laser pointer**
- **for contactless and quick measuring of temperatures**
- **the devices fulfill the strict requirements of the european and national guidelines**

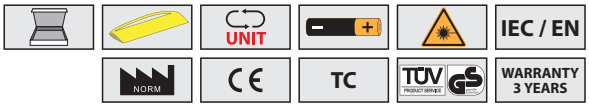
- rugged ABS-plastic housing, resistant to breaking by impact
- large LCD display with clear reading, with backlighting
- temperature in °C / °F, Auto power-off, Data Hold function
- laser protection class II, operation temperature 0°C ~ 50°C
- humidity 10 - 80 % RH, detector: Thermopile,
- with 2 x 1.5 V battery (type AAA, art.-no. 609283)
- incl. readiness bag, operation manual
- **art.-no. 640313** incl. K-type temperature sensor, connection for K-type sensor
  adjustable emission value, averaging, Min-/Max value memory, alarm function,
  meas.-accuracy infrared: Object 15-35°C, ambient 25°C: ±1,0°C / Object -33-15°C and 35-500°C, ambient 23°C ±3°C: ±2°C or ±2%, the greater value applies, response time 0.5 s
  meas.-accuracy K-type sensor: ambient 23°C ±6°C: ±1°C or ±1%, the greater value applies
- **art.-no. 640315** emissivity 0,95 (fixed), Min-/Max value indication
  Meas.-accuracy ±2,0°C, response time 1 s

ART NO 640313



ART NO 640315 NEW





ART NO	°C	°C	max. °C	°C	measuring optics	mm	KG	ART NO CC
640313	-60 ~ +500 Infrared -64 ~ +1400 with K-type-sensor	0,1	± 2,0	± 2,0	12:1	146 x 133 x 49	0.222	649401
640315	-50 ~ +550	0,1	± 2,0	± 2,0	12:1	152 x 94 x 38	0.127	649401

DIGI PLUS-LINE® Infrared Laser Thermometer

- **pistol-sized, with K-type temperature probe and shiftable laser pointer**
- **for quick measuring of temperatures, by temperature probe or contactless**
- **the devices fulfill the strict requirements of the european national guidelines**

- rugged ABS plastic housing
- large LCD display with clear reading, with backlight
- temperature reading in °C / °F, with shiftable laser pointer
- autom. power off after ~ 20 sec., response time < 0.5 sec., laser protection class II
- data hold function for short memory time of the measuring value, Min/Max-function
- average value selectable, with battery indicator
- storage temperature -10° ~ +60°C, operation temperature 0° ~ +50°C
- relative humidity 10 - 90% RH, emissivity 0.95 (fixed)
- incl. 1x 9 V battery (type 6LR61, art.-no.: 609281)
- with readiness bag and operation manual

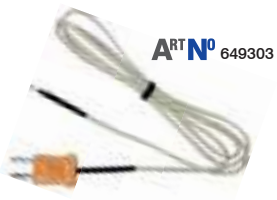
ART NO 640317

ART NO 640314





ART NO 649303





ART NO	°C	°C	max. °C	°C	measuring optics	mm	KG	ART NO spare probe	KG
★★★☆☆ 640314	-30 ~ +550	0.1	±4.0 / ±4%	± 1.0	12:1	170 x 135 x 50	0.120	649303	0.030
★★★★☆ 640317	-50 ~ +720	0.1	±2.0 / ±2%	± 1.0	16:1	170 x 135 x 50	0.195	-	-

Electr. Digital Moisture Meter

- **for measurements of wood moisture, paper, building materials, etc.**
- **with 4 contact pins**

- rugged, polyamide housing material
- large LCD display with clear reading
- On/Off button, data hold button
- autom. power off, battery indicator
- setting the upper limit of the moisture ratio
- storage temperature -10°C ~ +60°C, operation temperature 0°C ~ +40°C, rel. humidity <70% RH
- incl. 1x 9 V battery (type 6LR61, art.-no. 609281) with operation manual





ART NO	wood		max.	mm	KG
641006	5% - 40%	1.0 %	± 1.0% Rh+0.5	129 x 63 x 32	0.115

Electr. Digital Moisture Meter

- **for measurements of wood moisture, paper, concrete, building materials, etc.**
- **measurement via back-installed sensor plate**
- **with selection of 10 different wood densities**

- rugged, polyamide housing material
- large LCD display with clear reading
- On/Off button, mode button for settings, button for wood density selection
- autom. temperature compensation, with self-calibration function
- autom. power off, battery indicator
- setting the upper limit of the moisture ratio
- storage temperature -10°C ~ +60°C, operation temperature 0°C ~ +40°C, rel. humidity <70% RH
- incl. 3x 1.5 V battery (type AAA, art.-no. 609283) with operation manual





sensor (backside)



ART NO	wood		max.	mm	KG
641007	4% - 80%	0.5 %	± 1.0% Rh+0.5	132 x 67 x 25	0.125

Electr. Digital Moisture Meter

- **for measurements of wood moisture, paper, carton, building material, grain, etc.**
- **with insulating peel**
- **measurement via 2 external contact pins**

- rugged, polyamide housing material
- large LCD display with clear reading
- On/Off button, data hold button, button for wood density selection
- button for selection of moisture measurement /temperature measurement in °C or °F
- battery indicator, with backlight
- setting the upper limit of moisture ratio, rel. humidity <70% RH
- storage temperature -10°C ~ +60°C, operation temperature -10°C ~ +40°C
- incl. 4x 1.5 V battery (type AA, art.-no. 609282) with operation manual





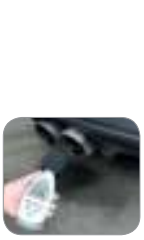


ART NO	wood		max.	temperature	temperature	max.	mm housing	KG
641008	2% - 70%	0.5%	± 1.0% Rh+0.5	-10°C - 60°C	1°C / 2°F	± 2°C / ± 4°F	174 x 38 x 73	0.406

DIGI PLUS-LINE Electr. Digital Sound Level Meter

- **for sound and noise measurements acc. to the international directives whether in industry, craft, or housekeeping**
- **useful device for air-conditioning, aviation industry, environmental technology**
- **with self-calibration**

- rugged, polyamide housing material
- On/Off button, data memory for 4700 measurements, slow-/fast-button, clock- and calendar indicator
- with tripod mounting screw on the rear side, autom. power off
- large LCD display, 4-digit, with clear reading, battery indicator
- frequency range 31.5 Hz ~ 8.5 KHz, A/C frequency weighting select switch, AC/DC out put
- bar graph indicator with 50 dB scale, 1 dB step, with pre-select of min/max.-value
- microphone ½ inch, electret condenser-microphone, with detachable foam ball for outside measuring
- storage temperature -20°C ~ +70°C, operation temperature 0°C ~ +45°C, DC 6 V input port, AC analog output port
- incl. 4x 1.5 V battery (type AA, art.-no. 609282), USB data cable, software, with operation manual





Option
- charging by power supply possible, only when using rechargeable batteries!

IEC / EN · ANSI · CE · CC · WARRANTY 2 YEARS

ART NO	level range dBA / dBC	dB	max. dB	linearity range dB	mm	KG	CC
641106	40-80 / 50-100 / 60-110 / 80-130	0.1	± 1.5	50	220 x 80 x 35	0.148	inclusive

DIGI PLUS-LINE Electr. Digital Luxmeter

- **utilising a silicon photo diode with filter behind a large diffusor that is connected to the device by cable ensures that the light intensity can be read in all positions without restrictions**

- rugged, polyamide housing material
- large LCD display, 3 ½ digit, with clear reading
- On/Off switch, data hold switch, 3 step measurement setting function
- max. reading value 1999, test rate 0.5 s, temperature characteristic ±0,1%/°C
- storage temperature -20°C ~ +70°C, operation temperature 0°C ~ +45°C
- incl. 1x 9 V battery (type 6LR61, art.-no. 609281), carrying bag, with operation manual



DIN VDE · CE · TC · WARRANTY 2 YEARS

ART NO	LUX	LUX	max. <10000 LUX	max. >10000 LUX		mm	KG	ART NO CC
640342	1 - 100000	1	± 4%	± 5% ± 10 Digits	± 2%	130 x 72 x 35	0.135	6494340

DIGI PLUS-LINE Electr. Digital Anemometer

- **for many outdoor applications and for several industry purposes**
- **for to measure the wind speed in different units**
- **ideal device for heating- and ventilation technician, shipping industry, etc.**
- **with Beaufortscale display**

- rugged, polyamide housing material
- with tripod mounting screw on the rear side
- large LCD display with clear reading and backlight
- wind speed unit selection: m/s; Ft/min; Knots; Km/h; Mph
- with max.-value and data hold button, average and current speed measuring, temperature reading in °C and °F, switchable
- storage temperature -20°C ~ +70°C, operation temperature -10°C ~ +45°C
- incl. 1x 9 V battery (type 6LR61, art.-no. 609281), with operation manual





Art. No. 641205 without data output
Art. No. 641203 with USB data output, with external impeller, recording- and reset function, data cable and software
Art. No. 641204 without data output, with external impeller

UNIT · NORM · CE · TC · WARRANTY 2 YEARS

ART NO	wind speed m/s	wing volume m³/min.	speed m/s	temperature °C	max. wing speed	max. temperature °C	mm	KG
641203	0.3 ~ 45	0 ~ 999900	0.1	0.2°	± 0.1 Digit	± 2°	160 x 62 x 35	0.265
641204	0.3 ~ 45	-	0.1	0.2°	± 0.1 Digit	± 2°	160 x 62 x 35	0.265
641205	0.3 ~ 30	-	0.1	0.2°	± 0.1 Digit	± 2°	165 x 85 x 38	0.200

DIGI PLUS-LINE Electr. Digital Surface Roughness Tester

- **portable roughness tester for measurements of Rz, Ra, Rq, Rt,**

- rugged housing in an aluminium frame, Ra, Rz, Rq, Rt roughness parameter in one device
- large OLED display, with backlight shiftable, with “low-battery” indicator
- On/Off push button, autom. power off after 3 min., with acoustical signal (start-test-ready)
- measuring range selectable in µm / µinch, parameter Ra (ISO and Rz DIN)
- min. tracer tip arc radius 10 µm±1 µm, angle 90°+5°/-10°
- variation of indication <12%, error indication ±15%
- touch needle statistic force measurement: 0,016 N, force measurement rate: 800 N/m
- operation temperature -20°C ~ +40°C, rel. humidity < 90%
- tracing length 6 mm, tracing speed 1.0 mm/sec., sensor guide head pressure 0.5 N
- integrated stylus protection sleeve for detector, with easy to use calibration function
- incl. roughness calibration test plate Ra, accuracy acc. ISO class 3
- with 3.7 V Li-Ion rechargeable battery, incl. charger 9 V AC
- incl. sturdy carrying case and operation manual





UNIT | ~ 230V | ISO | TC | WARRANTY 2 YEARS

ART NO	µm / inch	Ra µm	Rz µm	tracing length mm	mm	KG
657111	0.01 / 1	0.05 - 10	0.1 - 50	6	350 x 200 x 75	0.200

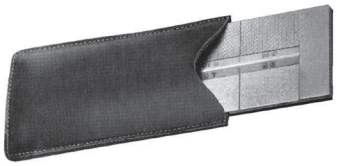
BLUE-LINE Surface Finish Specimen „RUGOTEST“

- **acc. to the norms NF E 05-501, ISO/R 468 and ISO 2632**
- **for testing surface roughness by sight and touch method (with finger-tip)**
- **available for all standard machining methods**

- wear-resistant and made of stainless steel
- delivery in a handy pouch, with description

ART NO 651001





ART NO 651101 - 651107



ISO | WARRANTY 1 YEAR

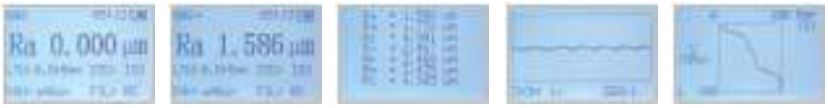
ART NO	machining method	quantity of plates	comparaison range Ra µm	ISO class	mm	KG
651001	general (standard)	27	0.05 - 12.5	N2 - N10	120 x 90	0.150
651002	sand	6	0.8 - 25.0	N6 - N11	120 x 90	0.125
651003	shot / grit (coarse + fine)	18	0.0125 - 25.0	N0 - N11	120 x 90	0.125
651101	planing	6	0.8 - 25.0	N6 - N11	110 x 50	0.125
651102	turning	6	0.4 - 12.5	N5 - N10	110 x 50	0.100
651103	face milling	6	0.4 - 12.5	N5 - N10	110 x 50	0.120
651104	suface grinding	8	0.025 - 3.2	N1 - N8	130 x 50	0.125
651105	cylindrical grinding	8	0.025 - 3.2	N1 - N8	130 x 50	0.110
651107	spark erosion	6	0.4 - 12.5	N5 - N10	110 x 50	0.105

DIGI PLUS-LINE® Electr. Digital Surface Roughness Tester

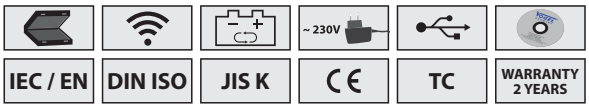
- **high performance device, for professional demand**
- **for measurement of roughness parameters Rz, Ra, Rq, Ry, Rt, Rv, R3z, R3y, RzJIS, Rsk, Rku, Rsm, Rmr**
- **with USB 2.0 data output**

- rugged ABS plastic housing, in ergonomic design
- large LCD display with clear reading and with backlight
- comprehensive information and graphic representations
- diamond tracer tip, 90°, radius 5 µm, contact power 4mN (0.4gf)
- standards acc. to ISO, DIN, ANSI, JIS
- digital filter RC, PCRC, Gauss, D-T13565, data memory 2 MB + 2 GB
- with built-in and rechargeable Li-Ion battery, charger 100-240 V / 50/60 Hz
- up to 10 hrs. permanent use, with calendar and RTC
- On/Off button, autom. power off, battery indicator
- selectable languages: english, german, chinese
- reliable software for the electrical motor drive
- connection to PC or printer, incl. interface cable
- incl. software, ground plate, calibration test block, standard tracer (art.-no. 657210) and operation manual, with carrying case





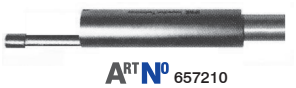
extensive information and graphic representations



ART NO		Ra / Rq µm	Rq/Rt/Rp/Rv/R3z/R3y/ RzJIS/Rsk/Rku/Rsm/Rmr µm	max. %	%	cut-off length mm	mm	KG
657112	LCD	Ra 0.005-16 / 0.02 - 160	± 0.6 %	< ±10	< 6	0.25 / 0.8 / 2.5	140 x 55 x 47	0.400
657113	OLED	Ra 0.005-16 / 0.02 - 160	± 0.6 %	< ±10	< 6	0.25 / 0.8 / 2.5	140 x 55 x 47	0.400

Accessories for Art. No. 657112 + 657113

- **Art. No. 657210** tracer, straight (standard)
- **Art. No. 657211** tracer, angled
- **Art. No. 657212** tracer, for ø 3 mm bore depth
- **Art. No. 657213** tracer, for ø 10 mm bore depth
- **Art. No. 657214** Ra test block
- **Art. No. 657218** stand
- **Art. No. 657219** PC software for wireless data transfer
- **Art. No. 657220** bluetooth printer



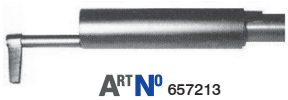
ART NO 657210



ART NO 657211



ART NO 657212



ART NO 657213



Example for a wireless transmission



ART NO 657220



ART NO 657218

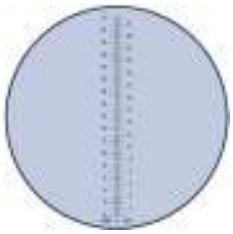
BLUE-LINE Hand-Held Refractometer

- **refractometers are optical precision instruments for measuring the optimal concentration of liquids**
- rugged stainless stell housing with rubber handle
- with adjusting screw, folding cover, okular with rubber eye cup, quality optic
- delivery in a case, with accessories, operation manual

ART NO 653200



scale reading



ART NO 653200



ART NO 653210



ART NO 653211

Further instruments available on request

WARRANTY 2 YEARS

ART NO	application range		max.	mm	KG
653200	lubricants, coolant liquids, fruit, juices, wines, etc.	0 - 32% Brix	± 0.20%	170 x ø-29	0.240
653210	automotive industry (standrad)	E: -40°C – 0°C P: -50°C – 0°C B: 1.10 – 1.40 SG	± 5°C ± 5°C ± 0.01 SG	153 x ø-29	0.230
653211	automotive industry (universal with Adblue) Adblue concentration, coolant liquids, antifreeze, detergents and battery acidity	Adblue: 30 - 35% E: -60°C - 0°C P: -50°C - 0°C B: 1.10 - 1.40 SG	5°C 5°C 0.01 SG	170 x ø 29	0.260

Explore our website!

On our website you will find many features and informations, which make cooperation with us very well. For more dealer information, ask for your personal access code to our login area!

Our Vmade -team is happy to help.



Any questions? We are pleased to advise!

SILVER-LINE Webster Hardness Tester

- **3 pliers for different application ranges are available**
- **a round test anvil allows tests of different specimen forms**

- portable instrument, one-hand-use, provides testing at any angle
- testable material thicknesses of specimen between 0.6 mm and 8 mm
- adequate Rockwell values can be determine on provided diagram
- values can be switched into other hardness data by conversion table
- incl. standard test block, spare indentor, screwdriver, calibration wrench, diagram
- with operation manual, in carrying case



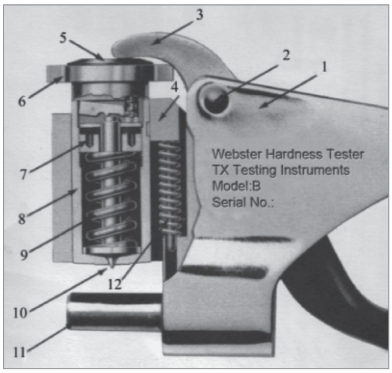
application range at type B, art.-no. 654274
- aluminium, aluminium alloy and other materials in the range of Rockwell 25~110 HRE

application range at type B 75, art.-no. 654276
- brass, hard aluminium alloy and other steel qualities in the range of Rockwell 63~105 HRF

application range at type BB 75, art.-no. 654278
- copper alloy and annealed brass in the range of Rockwell 18~100 HRE

Spare parts
- indentor (art.-no.: 659270)
- standard test block (art.-no.: 659275)

Construction of a Webster Hardness Tester



1. frame
2. rotary screw
3. handle
4. reset button
5. adjustment
6. probe
7. adjusting
8. penetration cylinder
9. load spring
10. penetration tip
11. anvil
12. return spring



standard test plate



DIN EN | ASTM | TC | WARRANTY 2 YEARS

ART NO	max.	hardness range		workpiece thickness mm	mm case	KG
		type	hardness range			
654274	± 0.5 HW	B	25-110 HRE / 58-131 HV	0.8 - 6.0	330 x 255 x 150	0.500
654276	± 0.5 HW	B75	63-105 HRF	0.8 - 6.0	330 x 255 x 150	0.500
654278	± 0.5 HW	BB75	18-100 HRE	0.8 - 6.0	330 x 255 x 150	0.500

DIGI PLUS-LINE Universal Digital Rebound Hardness Tester

- **with integrated impact device type „D“, portable device without cable connection**
- **measurement is based on the principle of Leeb**

- hand-held device, rugged, polyamide housing material, with self-calibration function
- LCD display with clear reading and backlight, digit height 9 mm
- autom. power off, memory with 99 data
- suitable for testing hardness of almost all Ferrous (Fe) and Non-Ferrous (NFe) materials
- direct display of hardness scales: HL, HRC, HRB, HB, HV and HS
- statistics function: average / min. / max. / value
- provides testing at any angle, even upside down
- min. workpiece weight 2~5 kg on a solid ground, at 0.05~2 kg with couplant paste
- for indentation depth see techn. data of the impact devices on page 309
- min. radius workpiece (concave/convex) Rmin. = 50 mm, with support ring Rmin. = 10 mm
- min. surface roughness of workpiece 1.6 µm (Ra)
- storage temperature -20°C ~ 70°C, operation temperature -10°C ~ 45°C
- incl. cleaning brush, test block with HLD value and with calibration certificate
- incl. 1x 9 V battery (type 6LR61, art.-no.: 609281), carrying case and operation manual





UNIT | DIN EN | ASTM | CE | CC | WARRANTY 2 YEARS

ART NO		max. (HL=800 / ± 0.2 HRC)	mm	KG	CC
651609	200-960 HL / 19-68 HRC 13-101.7 HRB / 20-655 HB 80-940 HV / 32-99.5 HS	± 0.6 %	100 x 60 x 33	0.150	inclusive

DIGI PLUS-LINE Universal Digital Rebound Hardness Tester

- **with external impact device type „D“ (standard), with RS232/USB**
- **portable device for quick and location-independent hardness tests based on the principle of Leeb, in sturdy housing**
- **large LCD display with clear reading**

- rugged, anodized aluminium frame (art.-no. 651606), multifunction display, with dimmable backlight
- display functions: hardness scales, hardness value, date, testing time, battery indication, impact direction, average value, type of impact device, memory, with keypad
- incl. testblock type „D“ and impact device type „D“, more impact devices as accessory available
- suitable for most metallic materials, in any position: horizontal, vertical and overhead
- autom. and manual power off, memory capacity for 600 groups
- adjusting limit function, autom. alarm function when exceeding the limit value
- min. workpiece weight 2~5 kg on solid support or 0.05~2 kg with couplant, surface roughness of specimen Ra 10
- min. thickness of workpiece 3 mm with couplant paste, (with impact device G = 10 mm)
- direct display of hardness scale HL, with autom. conversion in HRB, HRC, HV, HB, HS and tensile strength
- min. radius workpiece (concave/convex) Rmin=30 mm (<30 mm with support ring)
- operation temperature -10° ~ +40°C, humidity 20% ~ 90% RH
- incl. 2x 1.5 V battery (type AA, art.-no.: 609282), cleaning brush, screw driver, calibration certificate for the test block, small support ring
- incl. software and data cable RS232 / USB, hand strap, sturdy carrying case, operation manual



art.-no. 651608 additional functions:

- with large OLED display for clear reading
- with integrated thermal printer, for direct printing of all values and histogram
- internal memory for 500 groups, rugged polyamide housing material, anti-slip rubber covered
- incl. software, data cable USB/Mini-USB, 3.7 V Li-ion rechargeable accu and charger 100 V ~ 240 V / AC

NEW



ART NO 651606 | UNIT | DIN ISO | ASTM | BS | CE | TC | WARRANTY 2 YEARS

ART NO 651608 | UNIT | ~ 230V | DIN ISO | ASTM | BS | CE | TC | WARRANTY 2 YEARS

ART NO	max. (HLD = 800)	max. hardness of workpiece HLD	workpiece radius (concave/convex) mm	mm	KG
651606	± 1.0%	960	Rmin. = 30/with support ring Rmin. = 10	123 x 67 x 30	0.350
651608	± 0.5%	960	Rmin. = 30/with support ring Rmin. = 10	210 x 80 x 35	0.465

Further information please find on our website. Explore more!



Any questions? We are pleased to advise!

Electr. Digital Hardness Tester „Durometer“ NEW

- **with data output Mini-USB**
- **portable device with LCD reading, for to measure the penetration hardness**
- **Shore „A“: rubber, elastomer, neoprene rubber, silicon, vinyl, thermo-plastic, leather, felt and similar materials**
- **Shore „D“: plastic, formica, plexiglass, epoxies and similar materials**

- rugged ABS-plastic housing
- for one-hand-use or can be mounted onto a stand
- LCD display with clear reading, digit height 13 mm
- On/Off button, with HOLD function
- measurement deviation <1% of max. value, resolution 0.1
- possible characteristic value displays: shore grade, average, max. value
- operation temperature 0°C ~ +40°C, humidity 20% ~ 80% RH
- incl. 1x 3 V byttery (type CR2032, art.-no.: 2002093), with operation manual

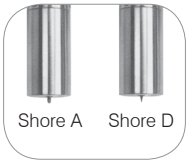
ART N° 650250



ART N° 650251



Option
- **art.-no. 659210** stand for „Durometer“



DIN ISO | UNIT | CR2032 Lithium 3V | USB | ASTM | JIS K | CE | TC | WARRANTY 2 YEARS

ART N°	shore type		max. spring force N		indentor type	mm	KG	ART N° CC
650250	A	0 - 100 HA	8.065	0.1	blunt taper, 35°	110 x 56 x 26	0.220	6594200
650251	D	0 - 100 HD	44.50	0.1	sharp point, 30°	110 x 56 x 26	0.220	6594200

Electr. Digital Hardness Tester „DIGITAL-DUROMETER“

- **portable device for to measure the hardness of elastomers and plastics, leather, glass, etc.**

- portable device, rugged metal housing, front plate made of rugged polyamide material
- large LCD display, with clear reading, digit height 10 mm
- On/Off button, for one-hand-use, with data hold function
- Shore „A“ and Shore „D“ for curing valuations of rubber, thermoplastics, resins, glass, fibers, printing and printed circuit boards, etc.
- Shore „C“ for hardness valuations of foams, sponges, shoes with composite material, etc.
- incl. 1.5 V battery (type LR44, art.-no.: 2020192/B), with operation manual





DIN ISO | LR44 1,5V | ASTM | TC | WARRANTY 2 YEARS

ART N°	shore type			needle version ° / mm	indentor type	mm	KG	ART N° CC
650220	A	0 - 100 HA	0.5	35° / ø 0.79	blunt taper	85 x 57 x 27	0.250	6594200
650221	D	0 - 100 HD	0.5	30° / R 0.1	sharp point	85 x 57 x 27	0.250	6594200
650222	C	0 - 100 HC	0.5	SR 2.5	ball head	85 x 57 x 27	0.250	6594200

SILVER-LINE Shore Hardness Tester „Durometer“ • analog model

- **portable device for measuring the hardness for elastomers and plastics**
- **Shore „A“: rubber, elastomers, neoprene rubber, silicon, vinyl, soft plastics, leather, felt and similar materials**
- **Shore „D“: plastic, formica, plexiglass, epoxies and similar materials**

- rugged metal housing, compact design
- with drag pointer, with needle protection
- 2 different models, for Shore „A“ and Shore „D“ measurements
- measuring needle made of special steel, needle guidance is linear mounted
- incl. test block, with operation manual



Shore A *Shore D*



with needle protection

ART NO 650720



DIN | ASTM | TC | WARRANTY 2 YEARS

ART NO	shore type	max. spring load N	mm		needle ° / mm	meas.-face mm	indentor type	mm	KG
650720	A	8.064	0 - 100 HA	1.0	35° / ø 0.9	ø 18	blunt taper	100 x 64 x 35	0.180
650721	D	44.54	0 - 100 HD	1.0	30° / R 0.1	ø 18	sharp point	100 x 64 x 35	0.180

Test Stand for Shore Hardness Testers

Suitable for series art. no. 650720 - 650721 and 650220 - 650222

- rugged construction
- chromed and polished column
- with hand lever
- incl. additional weight (1 kg)



example with hardness tester



ART NO	ground plate mm	column mm	working height mm	KG additional weight	KG stand
659210	180 x 180 x 15	ø 25 x 285	100	1.000	0.323

Test Blocks for Shore Hardness Testers



ART NO	article	shore type	shore value	mm	KG
650919	set of test blocks, 3-pcs.	A + D	50 / 80 / 40	-	0.150
650920	test block	A	50	80 x 40 x 12	0.050
650921	test block	A	80	80 x 40 x 12	0.050
650922	test block	D	40	80 x 70 x 7	0.050

Impact Devices for Special Applications

- suitable for our hardness testers





ART NO 659899



ART NO 651680



ART NO 651688



ART NO 651690



ART NO 651698/1

ART NO 651699

reference
impact body „G“ suitable for impact device „G“
impact body „D“ for all other impact devices



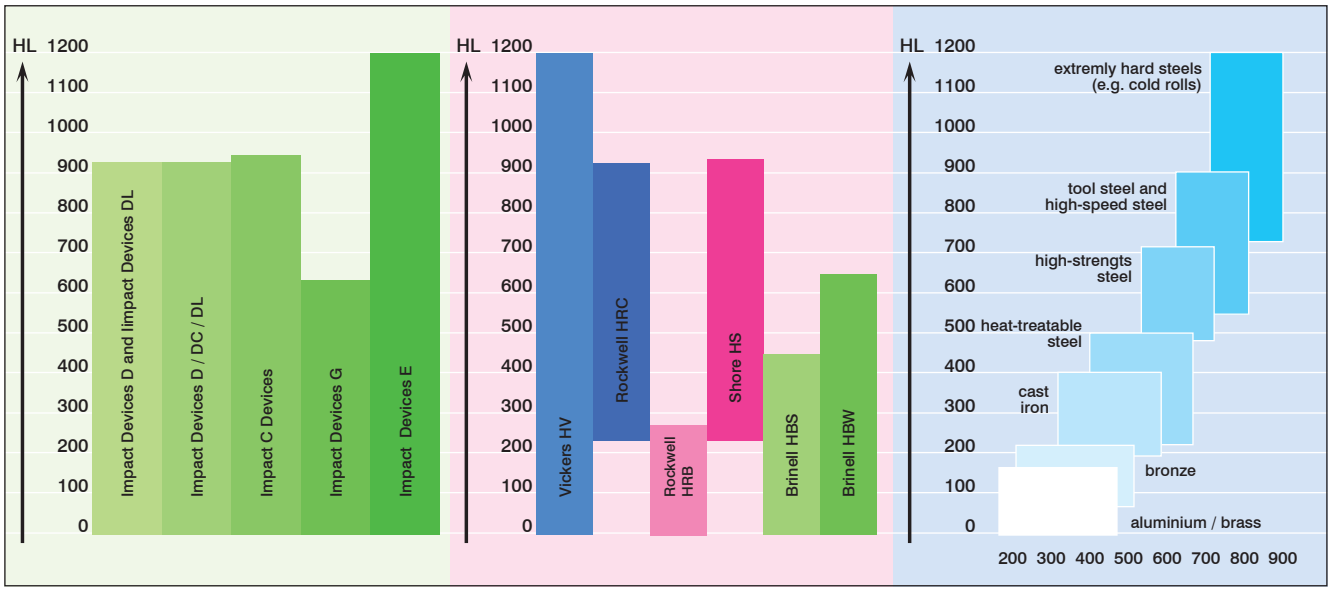
ART NO	suitable for version	article description	application
659892	type “D”	impact device “D”	standard impact device. for the majority of hardness testing assignments
659893	type “C”	impact device “C”	device with reduced energy (~¼ of that for type D), thin walled or impact sensitive components
659894	type “DC”	impact device “DC”	extremly short impact device
659895	type “D+15”	impact device “D+15”	impact device with particularly slim front section and with measuring coil moved back
659896	type “DL”	impact device “DL”	tube front section diameter ø 4.2 mm, length 50 mm
659897	type “G”	impact device “G”	enlarged test tip, increased impact energy (~9 x that of type D), with only minor damage to the surface
659890	type “D”	impact body “D”	for measurements in the extremly high hardness range up to 500 HRC/650 HV. Tool steel with high carbide content inclusions for measurements up to 1200 HV
659891	type “G”	impact body “G”	for measurements in the extremly high hardness range up to 500 HRC/650 HV. Tool steel with high carbide content inclusions for measurements up to 1200 HV
659893/2	type “C”	impact body “D”	for surface hardened elements, coatings, thinly coated or impact sensitive parts
659894/2	type “DC”	impact body “D”	for standard measurements in holes, cylinders, inside measurements, etc.
659895/2	type “D+15”	impact body “D”	for general measurements in narrow grooves and on narrow surfaces (e.g. gears)
659896/2	type “DL”	impact body “D”	for measurements in inaccessible places and recesses
651680	all models	couplant paste, 60 ml	for better contacting, especially with thin materials
651688	all models	couplant paste, 100 ml	
651690	all models	support rings with holder, set of 11-pcs.	on curved surfaces with a radius under 30 mm, effective positioning, rings can be screwed on front of the impact device
651698/1	65 1606	mini-thermal printer, 230 V power supply and printer cable	-
651698/2	65 1698/1	printer cable	-
651698/3	65 1606	data cable USB to PC and RS232 C	-
651692/1	all models with data output	software for data process	data view/statistics
651699	all models	cable with Lemo connetctor	replacement cable for impact device
659899	all “D” versions	test block “D”, with application of HLD value	for perfomance tests of hardness testers
659899/1	all “G” versions	test block “G”, with application of HLG value	for perfomance tests of hardness testers
659913	651607 + 651608	paper roll	-
659914	651607 + 651608	printer ribbon, black	-

Impact Devices for Special Applications • Technical Data

Hardness Parameters and Materials versus range for impact devices type „D“ (HLD 200~900)

Material	HLD	HRB	HRA	HRC	HB	HV	HS
steel cast steel	300 - 900	39 - 100	59 - 86	20 - 68	81 - 654	81 - 955	32 - 100
cold work tool steel	300 - 840	-	-	20 - 67	-	80 - 898	-
stainless steel	300 - 800	46 - 101	-	20 - 62	85 - 655	85 - 802	-
grey cast iron	360 - 650	-	-	-	93 - 334	-	-
nodular cast iron	400 - 660	-	-	-	131 - 387	-	-
aluminium alloys	200 - 570	24 - 34	-	-	27 - 164	-	-
brass	200 - 550	13 - 95	-	-	40 - 173	-	-
bronze	300 - 700	-	-	-	60 - 290	-	-
copper	200 - 690	-	-	-	45 - 315	-	-
the ranges are stipulated by the application limits of the relevant static procedure							

type of impact device	D / DC / DL	D+15	C	G
impact energy: weight:	11 Nmm 5.5 g / DL = 7.3 g	11 Nmm 7.8 g	3 Nmm 3.0 g	90 Nmm 20 g
test tip hardness: diameter: material:	 1600 HV 3 mm	 1600 HV 3 mm	 1600 HV 3 mm Hartmetall	 1600 HV 5 mm
impact body diameter: length: weight:	 20 mm 147 / 86 mm 75 / 50 g	 20 mm 162 mm 80 g	 20 mm 141 mm 75 g	 30 mm 254 mm 250 g
max. hardness of sample:	940 HV	940 HV	1000 HV	650 HV
preparation of surface roughness class ISO: max. roughness Rt: average roughness Ra	 N7 10 µm 2 µm	 N7 10 µm 2 µm	 N5 2.5 µm 0.4 µm	 N9 30 µm 7 µm
min. weight of sample solid and compact shape: on solid support/ground: with couplant paste:	 5.0 kg 2.0 kg 0.1 kg	 5.0 kg 2.0 kg 0.1 kg	 1.5 kg 0.5 kg 0.02 kg	 15 kg 5 kg 0.5 kg
min. thickness of sample coupled with copulant paste: min. thickness of hardened layers:	 3.0 mm 0.8 mm	 3.0 mm 0.8 mm	 1.0 mm 0.2 mm	 10.0 mm
indentation of test tip				
at 300 HV diameter: depth:	 0.54 mm 24 µm	 0.54 mm 24 µm	 0.38 mm 12 µm	 1.03 mm 53 µm
at 600 HV diameter: depth:	 0.45 mm 17 µm	 0.45 mm 17 µm	 0.32 mm 8 µm	 0.90 mm 41 µm
at 800 HV diameter: depth:	 0.35 mm 10 µm	 0.35 mm 10 µm	 0.30 mm 7 µm	 - -



SILVER-LINE Rockwell Hardness Testers NEW

- **for example for Rockwell hardness testing of metals and plastics, steel, alloy steel, cast iron, nonferrous metals, techn. plastics, etc.**
- **equipped with many features, quality, accurate readings and a wide measuring range with 15 Rockwell scales**
- **with motorized testing procedure**

- rugged construction, for use in the laboratory or workshop area
- large workspace and stable spindle for heavy parts, with spindle protection
- Preload 98.1 N (10 kgf), load time 2 s ~ 50 s, adjustable
- adjustable feet, selectable function control via keypad
- with automatic memory function for max. 500 test results
- upper and lower limit adjustable, with alarm, resolution 0.1 HR
- incl. 1 hardness test block for the various standards „A“ / „B“ / „C“
- incl. 120° conical cut diamond indenter and indenter in ball shape ø 1/16“
- incl. flat testing tabel and prismatic testing table
- incl. dust cover and various accessories for installation
- USB interface for external PC connection / printer connection for art.-no. 650140 RS232 connection to micro-printer is available as option
- with connection cable for power supply, AC, 220 V/110V, 50~60 Hz, 4A
- the test values can be transferred as HB / HV / HLD / HK and O'b
- accuracy in accordance with international standards: ISO 6508-2, ASTM E18, EN ISO 6508-2, GB/T230.2



ART NO 650140*



ART NO 650141*



ART NO 650144*

additional equipment at art.-no. 650141
- with integrated printer and data interface

additional equipment at art.-no. 650144
- model with horizontal preceding indenter, making it suitable for indoor and outdoor test

optional accessory
- art.-no. 659800 testing table ø 150 mm
- art.-no. 659801 testing table ø 225 mm
- art.-no. 659802 short diamond indenter
- art.-no. 659803 sharp-edged indenter (Chisel)
- art.-no. 659804 indenter in narrow design
- art.-no. 659805 indenter in spherical shape-ø 1/8“
- art.-no. 659806 indenter in spherical shape-ø 1/4“
- art.-no. 659807 indenter in spherical shape-ø 1/2“
- art.-no. 659808 data printer for art.-no. 650140

~ 230V | DIN EN ISO | ASTM | CE | TC | WARRANTY 2 YEARS

ART NO	Rockwell	total load N	max. space sizes in mm vertically / horizontally	mm	KG
650140*	HRA / HRB / HRC / HRD / HRE / HRF / HRG / HRH / HRK / HRL / HRM / HRP / HRR / HRS / HRV	1471	200 / 165	550 x 200 x 720	100
650141*	HRA / HRB / HRC / HRD / HRE / HRF / HRG / HRH / HRK / HRL / HRM / HRP / HRR / HRS / HRV	1471	200 / 165	550 x 200 x 720	100
650144*	HRA / HRB / HRC / HRD / HRE / HRF / HRG / HRH / HRK / HRL / HRM / HRP / HRR / HRS / HRV	1471	260 / 150	710 x 210 x 830	90

SILVER-LINE Hardness Reference Blocks for all Testing Scales

- **with DAkkS calibration certificate (MPA Hannover)**

- manufactured acc. to the patented HIP-procedure (hot isostatic pressing)
- polished surface, means even for micro testing method



Options
- more blocks for other testing methods available, all blocks in other dimensions available
- wooden boxes available by extra charge, on request

DIN EN ISO | ASTM | CC

ART NO	testing method	range of hardness	useable test field mm²	mm	KG	CC
650950	HRA	40 - 83.4 HRA	3600	60 x 60 x 16	0.240	inclusive
650951	HRB	60 - 100 HRB	3600	60 x 60 x 16	0.240	inclusive
650952	HRC	20 - 65 HRC	3600	60 x 60 x 16	0.240	inclusive
650953	HV 0.01 - HV 30	140 - 840 HV	3600	60 x 60 x 16	0.240	inclusive

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Electr. Digital Angle Measurer Spirit Level

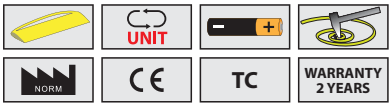
- **automatic calculation of single and double mitre angles without any other tools**

- sturdy aluminium housing, with adjustable bevel blade
- large LCD display, digit height 12 mm, reading from all directions possible, with shiftable backlight
- rapid calculation and transfer of angles by means of memory function for frequently used angle dimensions
- power On/Off button, data hold function, shock resistant up to 1 m falling down
- precise mitre- and self-calibration function
- with 1x horizontal vial and 1x vertical vial
- with fixing screw for fixing the angle setting
- incl. 2x battery 1.5 V (type AAA, art.-no.: 609283)
- with carrying bag and operation manual









ART NO			max. ± °	max. vial	mm	KG
711020	0 - 225°	0.05°	0.1°	1 mm/m = ±0.057°	440 x 60 x 25	0.900

Electr. Digital Angle Measurer Spirit Level

- **for quick and accurate measuring of angular degrees, can also be used as a spirit level**
- **with 1x horizontal vial and 1x vertical vial**

- sturdy aluminium housing, with adjustable bevel blade
- large LCD display with clear reading, digit height 12 mm
- On/Off and zero button, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art. no. 2002093), with operation manual





ART NO			max.	max. vial	mm	KG
711025	0° - 228°	0.1°	0.2°	1 mm/m = ±0.057°	305 x 52 x 23	0.275

Electr. Digital Light Alloy Spirit Level

- rugged, rectangular profile, made of light alloy
- large LCD display with clear reading, digit height 12 mm, with shiftable back light
- display always appears in the reading direction no matter which direction the device is rotated
- conversion between ABS- and INC-measurement
- calculation of ascend/descend, angle and deviation
- with self-calibration function
- power On/Off button, data hold function
- with 1 x horizontal vial and 1 x vertical vial
- incl. 2x battery 1.5 V (type AAA, art.-no.: 609283)
- with operation manual





UNIT · NORM · CE · TC · WARRANTY 2 YEARS

ART NO			max. ± °	mm	KG
712020	4 x 90°	0.1°	0.2°	416 x 50 x 21	0.308

Electr. Digital Light Alloy Spirit Level

- **with laser pointer and electronical inclination measurement**
- **conventional vials are still best means of making horizontal and vertical measurements, an electronic system is the superior method for measurement of all inclinations, this model includes both in one**
- **with overhead measurement, display always appears in the reading direction no matter which direction the device is rotated**



- rugged, rectangular profile, made of light alloy, with ribbed surface
- with milled measuring surfaces, rugged electronic housing
- large LCD display, digit height 10 mm, reading from all directions possible
- switchable display in angle-, percentage measuring- and tangent-mode
- On/Off button, data hold function and memory function
- range of laserbeam at day-light ~50 m / in darkness ~100 m
- incl. 1x 9 V battery (type 6LR61, art.-no.: 609281), with acoustic signal
- delivery with carrying bag, with operation manual





UNIT · NORM · CE · TC · WARRANTY 2 YEARS

Option
- art.-no. 712991 attachable beam-prism

ART NO		mm	error limit at 0° and 90°	max. in normal position	KG
712001	0.1°	600 x 25 x 60	± 0.1°	0.5 mm/m = ±0.029°	0.790

Electr. Digital Light Alloy Spirit Level

- **with cross laser, angle degree indicator and percent deviation**



- rugged, rectangular profile, made of light alloy, with ribbed surface
- large LCD display, digit height 10 mm, reading from all directions possible
- switchable display in angle-, percentage measuring- and tangent-mode
- On/Off button, data hold function and memory function
- magnetic inserts in the bottom and M6 thread for tripod attachment
- with each 1x horizontal and 1x vertical vial
- with self-calibration and switchable cross laser
- incl. 1x 9 V battery (type 6LR61, art.-no.: 609281), with operation manual



with magnet inserts and M6 thread for tripod attachment





with cross laser

UNIT · NORM · CE · TC · WARRANTY 2 YEARS

ART NO			max. ± °	mm	KG
712010	4 x 90°	0.05°	0.1	225 x 57 x 25	0.278

BLUE-LINE Spirit Levels „NIVEAU NORM“

- **top quality spirit levels with plane surfaces**

- rugged light alloy rectangular profile, from up 1500 mm length with extrem solid wallthickness
- with 1x horizontal vial and 1x vertical vial
- barrel-shaped vials with patented SOLID built-in system, permanent fixed and constantly aligned with the profile
- surfaces in stratosilver elocated
- measuring accuracy adjusted by electronical adjustment and at final inspection
- measuring accuracy in normal position 0.5 mm/m = 0.029°, with reversal measurement minimum 0.75 mm/m = 0.043°

art-no. 714100 - 714110
- with strong adhesive magnet in the measurement base



ART NO 714100 - 714110



with strong adhesive magnet in the measurement base



plane, rectangular aluminium profile, extruded and warm cured

ART NO 714000 - 714010 — NORM — WARRANTY 3 YEARS

ART NO 714100 - 714110 — NORM — WARRANTY 3 YEARS

ART NO	mm			max. vial	KG
714000	200	50 x 22	X	0.5 mm/m = ±0.029°	0.142
714001	300	50 x 22	X	0.5 mm/m = ±0.029°	0.194
714002	400	50 x 22	X	0.5 mm/m = ±0.029°	0.250
714003	500	50 x 22	X	0.5 mm/m = ±0.029°	0.299
714004	600	50 x 22	X	0.5 mm/m = ±0.029°	0.358
714005	800	50 x 22	X	0.5 mm/m = ±0.029°	0.422
714006	1000	50 x 22	X	0.5 mm/m = ±0.029°	0.565
714007	1200	50 x 22	X	0.5 mm/m = ±0.029°	0.682
714008	1500	50 x 22	X	0.5 mm/m = ±0.029°	1.105
714009	1800	50 x 22	X	0.5 mm/m = ±0.029°	1.226
714010	2000	50 x 22	X	0.5 mm/m = ±0.029°	1.366
714100	200	50 x 22	✓	0.5 mm/m = ±0.029°	0.210
714101	300	50 x 22	✓	0.5 mm/m = ±0.029°	0.266
714102	400	50 x 22	✓	0.5 mm/m = ±0.029°	0.383
714103	500	50 x 22	✓	0.5 mm/m = ±0.029°	0.482
714104	600	50 x 22	✓	0.5 mm/m = ±0.029°	0.509
714105	800	50 x 22	✓	0.5 mm/m = ±0.029°	0.614
714106	1000	50 x 22	✓	0.5 mm/m = ±0.029°	0.698
714107	1200	50 x 22	✓	0.5 mm/m = ±0.029°	0.809
714108	1500	50 x 22	✓	0.5 mm/m = ±0.029°	1.308
714109	1800	50 x 22	✓	0.5 mm/m = ±0.029°	1.554
714110	2000	50 x 22	✓	0.5 mm/m = ±0.029°	1.664

11 a
Page
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Data Cables and Accessories for Electr. Digital Devices

	ART NO	article description	200250 - 200253 / 230101 - 230103 240205 - 240209 / 240215 - 240219 230631 - 230649 / 230611 - 230618 230976 - 230994 / 230840 - 230847 230437 - 230439 / 230190 - 230194	240230 - 240233 / 240680 - 240681	231070 - 231081 / 232070 - 232072 232871 - 232876 / 232971 - 232972 232381 - 232387 / 232381/1- 232384/1 231171 - 231174 / 232180 - 232185 232186 - 232190 / 232191 - 232194 232813 / 231031 - 231032 / 231285 231830 - 231836 / 231620 - 231627 232061 / 236611 - 236668 236620 - 236621 236631 - 236643 / 236644 - 236650	242140 - 242150 / 242055 - 242164 472120 / 320100	202150 - 202152 / 230580 - 230583 240250 - 240257	202040.3 - 202043.3 202110 - 202112 / 202020.3 202025 / 202026 / 202027 341103 - 341109 / 207021	202040.3 - 202043.3 / 202110 - 202112 202020.3 / 202025 / 202026 - 202027
2002102 software	**2023100**	PROXIMITY - RS232 software	●						
	2020188	USB - RS232, adapter (optional suitable for 2023100)	●						
2002103 software	**2023101**	PROXIMITY - USB software	●						
2002101 software	**2424100**	POWER - RS232, external power software		●					
	2020188	USB - RS232, adapter (optional suitable for 2424100)		●					
2002105 software	**2424101**	POWER - USB, external power software		●					
2320195 software	**2323100**	RS232 - cinch plug 90° (3-wire) software			●				
	2020188	USB - RS232, adapter (optional suitable for 2323100)			●				
compatible with	**2420192**	USB - Mini-USB (with data key) optional, additional available: foot switch (art. no. 209011)				●			
compatible with	**2420194**	USB-PC - VOCOM-s Duo-Data output interface box with data key and with foot switch port (connectivity also for Mitutoyo Digimatic measuring devices) optional, additional available: foot switch (art. no. 209011)					●		
compatible with	**209001**	Interface USB - Mini-USB, 0.01 mm / 0.001 mm, with data key optional, additional available: foot switch (art. no. 209010)						●	
209004 209003 software	**2040100**	wireless data transfer (209003), interface withdata key and receiver (209004) software							●
	209010 or 209011	foot switch made of metal, with cinch plug	Art. No. 209010 for connection to Art. No. 209001 Art. No. 209011 for connection to Art. No. 2420192 + 2420194						

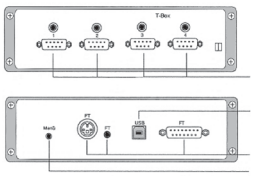
VOCOM-S T-BOX, Interface box

- **data transfer device through keyboard codes, that means the T-Box, can be used with any software by manual input, e.g. MS-Excel®**

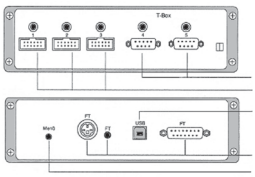
- USB keyboard interface with different inputs
- power supply via USB interface
- no special software for the USB interface is needed
- the USB interface is seen as a key board
- other settings such as language, separators, measuring devices and timer
- foot switch port, data key at measuring device/cable for data transfer or via timer
- RS232C interface* for over 60 measuring devices
- incl. USB cable and operation manual

* plug assingment like at a PC interface (COM). For various OptoRS232 and RS232 measuring devices. Original data cables can be used.





ART NO 2002095



ART NO 2002097

WARRANTY 2 YEARS

ART NO	data ports	mm	KG
2002095	4x Opto RS232C, 9-pin	168 x 122 x 52	0.630
2002097	3x Mitutoyo Digimatic; 2x Opto RS232C, 9-pin	168 x 122 x 52	0.630

VOCOM-S Keyboard Interface

- **with measuring equipment cable and data key in one device**
- **USB keyboard interface with various ports (optional)**

- power supply via USB interface
- no special software for the USB interface is needed
- the USB interface is seen as a key board
- other settings such as language, separators, measuring devices and timer
- data key at measuring device/cable for data transfer or via timer
- with operation manual



WARRANTY 2 YEARS

ART NO	data ports	KG
2002610	Opto RS232 C	0.060
2002611	Proximity	0.060

VOCOM-S Electr. Digital LCD Display

- **better reading over long distances, for quality control**
- **display with red, green or yellow digits available**

- operation with data cable or wireless
- data ports for Opto RS232C, RS232C or (Mitutoyo Digimatic on request!)
- digit height 25 mm, 7-digits or digit height 57 mm, 6-digits (incl. pre-signs)
- two tolerance limits -OT / UT- for good- / bad evaluation
- display with 3 LED's in red / green and yellow
- housing form is designed as stand alone or for wall mounting
- incl. power supply 220 V and operation manual



~ 230V

WARRANTY 2 YEARS

ART NO OPTO RS232C without LED's	ART NO OPTO RS232C with LED's	ART NO RS232C with LED's	ART NO Opto RS 232 + RS 232 without LED's	mm	KG
with cable connection			wireless operation		
2002220	2002221	2002222	2002230	254 x 56 x 91.5	1.210

VOCOM-S Measurement Data Transmission System WiFi

- **wireless transmission of measurement data for max. up to 8 measurement instruments from measurement instrument to PC via WiFi adapter for systems with VOCOM-S duo data output**

- transmitter (art.-no. 209006)
- receiver (art.-no. 209007)
- transmitter and receiver as set (art.-no. 2040101)

example
ART NO 230580



example
ART NO 240256



example
ART NO 202150



example
ART NO 220221





ART NO 209006

as SET
ART NO 2040101

transmitter

ART NO 209007



receiver

example wireless data transmission
via WiFi



VOCOM-S Measurement Data Transmission System „W-DAS“

- **wireless data transmission from measurement instrument to PC via „W-STAT 1.0“ software**

- transmitter (art.-no. 209003)
- receiver (art.-no. 209004)
- transmitter and receiver as set (art.-no. 2040100)

individual components
can be found on page 304

as SET
ART NO 2040100

ART NO 209004

ART NO 209003



transmitter *receiver*

example wireless data transmission
via „W-STAT 1.0“ software



example
ART NO 202040.3



VOCOM-S Measurement Data Transmission System „I-DAS“

- **Measurement data transfer via USB interface to PC**
  Data management via standard software, for example MS Excel®

- cable and interface selection can be found on page 304-305
- software can be found on page 308

example measurement data transmission
via USB interface

ART NO 2420192



individual components
can be found on page 304



VDIGI PLUS-LINE® Measurement Data Transmission with Data Box

- **with VOCOM-S duo data output**
- **Connection via USB data cable,**
  also suitable for Digimatic connection (Mitutoyo compatible)

- Data box with USB cable connection (art.-no. 2420194)
- Footswitch with cable connection (art.-no. 209011)

example measurement data transmission via duo data output
(via USB interface or for Mitutoyo Digimatic)

ART NO 2420194



ART NO 209011

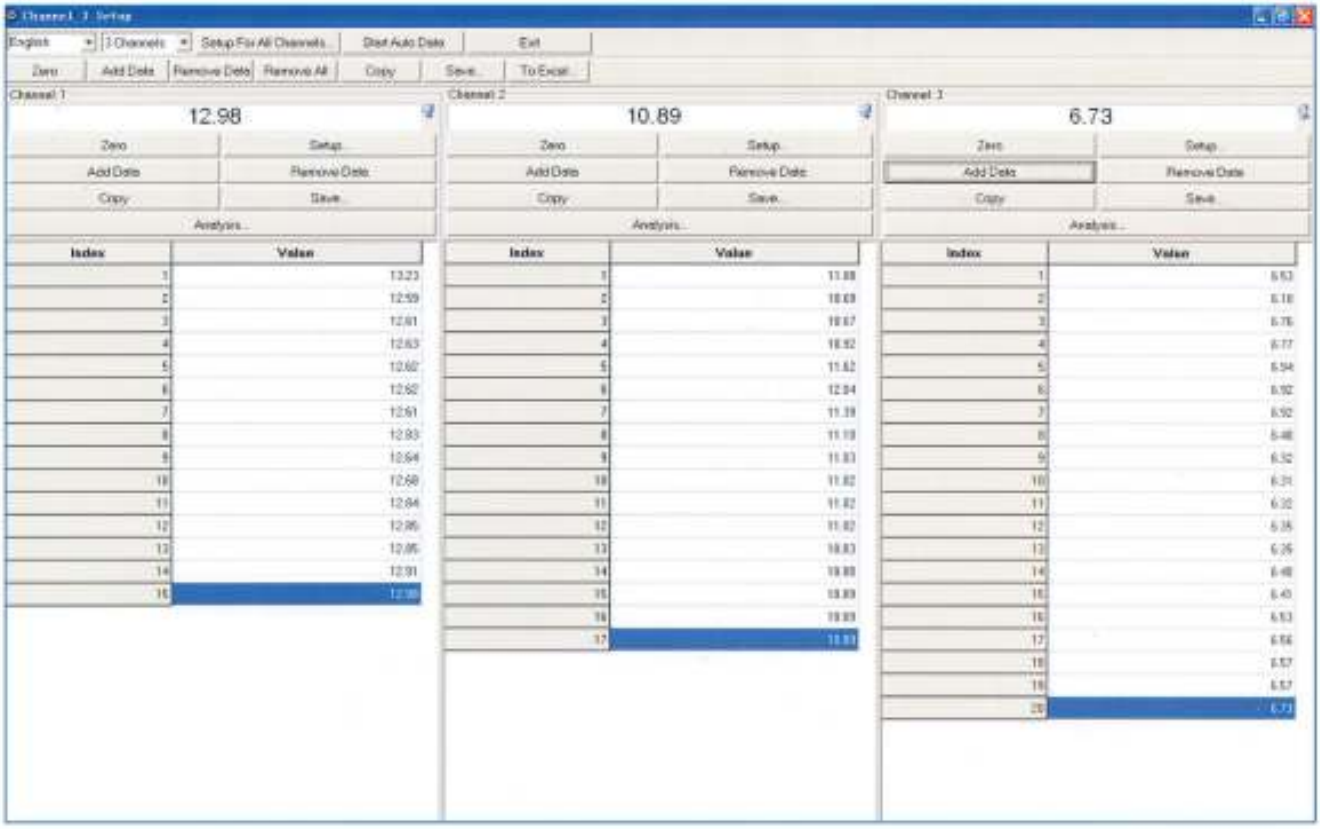


individual components
can be found on page 304



VOCOM-S Software „W-STAT 1.0“

- wireless data processing („W-DAS“) from measuring instrument to PC
- used for data acquisition with our system of article-series 209003/209004
- data fields can be controlled by the user
- software for data collection and for statistical analysis
- only in english language available



TC

ART NO	language version	KG
2002995	english	0.018

Batteries

ART NO	battery type	voltage	KG
609281	6LR61 (Alkaline)	9.0	0.019
609282	AA (Alkaline)	1.5	0.025
609283	AAA (Alkaline)	1.5	0.010
609291	AAA (rechargeable)	1.5	0.011
609278	AAAA (Alkaline), LR61	1.5	0.005
2020192/B	LR44	1.5	0.002
2002193	CR1632	3.00	0.003
2002194	CR2016	3.00	0.003
2002093	CR2032	3.0	0.003
272015	MN21 23 (Alkaline)	12	0.008
609285	LR14 (C-Cell)	1.5	0.015



VOGEL GERMANY

Precision for highest demands!



We are very pleased that the ByKOLLES racing team also in this year trusts in the Precision Measuring Tools and Test Instruments of Vogel Germany to develop the new LMP1 race car.

We wish a successful international WEC season 2016.

For more information, see **www.bykolles.com**



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General Terms and Conditions of Sale, Delivery and Payment

Date: 25th February 2016

1. **Acceptance of Terms of Sale, Delivery and Payment**
   Our sales are based on the following terms and conditions. Any variations to these must be accepted and confirmed by us in writing. The placing of order/contract with us implies acceptance of these conditions by the buyer unless expressly agreed otherwise and confirmed by us in writing. Any terms and conditions the buyer might have imposed on his order/contract contradicting our terms are not accepted, also if not objected by us.
   With placing the order the buyer acknowledges exclusively our terms.
   Valid is german right, the UN-rights of sales are not valid.

2. **Quotations**
   Our offers are without engagement. The catalogue or CD-Rom forms part of our offers. The specifications and drawings as shown in our catalogues, prospects, CD or internet are subject to change without notice unless contracted otherwise by us and confirmed in writing.
   Prices are in EURO (€) and means ex works.

3. **Special Manufacture**
   We reserve the right to modify the quantities ordered for special production by plus or minus 10%, also normal production items which are marked or finished to buyer's special requirements. Such orders cannot be cancelled once accepted by us. We are unable to accept the return of such items for credit or allowance.

4. **Prices**
   Prices quoted by us are not binding until confirmed by us in writing and must be regarded as works prices not including value tax or similar charges. We reserve the right to correct prices in case there should be a change in our production costs such as raw material, alloying-costs, power, wages etc. up the date of delivery. For orders coming from Germany with an order value less € 100 we will invoice a handling charge of € 10.
   For orders coming from Europe with an order value less € 150 we will invoice a handling charge of € 18.
   For orders coming from other countries with an order value less € 150 we will invoice a handling charge of € 18.

5. **Terms of payment**
   Our invoices are payable for
   German market: within 10 days after date of invoice less 2% discount
   or 30 days after date of invoice net. without deduction.
   Export market: according to the special arrangements which are stated in our offers, order confirmation and / or invoices.
   Drafts will be accepted only after prior arrangements and all charges are to buyer's account.

6. **Despatch and Delivery**
   If not otherwise stated and confirmed by us in writing we deliver ex works, excl. transport-packing and excl. customs clearance.

7. **Title of the Goods**
   Goods delivered remain our property until payment is received in full. It is expressly reserved that any law contradicting this clause shall not injure our rights concerning our goods. Distraints and/or any other limitations which might be imposed on our property despite the reservations outlined in the preceding sentence must be reported immediately. The buyer may dispose of the goods in the usual business-like manner provided he is not insolvent or in default. Should the customer sell goods which are still our property, respective credit is due to our account automatically without express confirmation. Until paid for in full, we reserve the right to enter buyer's premises and re-take possessions of the goods Should the goods be processed or mixed with other goods by the buyer and/or a contractor to the buyer, ownership of the processed or mixed goods is automatically passed to us until payment for the goods has been received in full. Notwithstanding the conditions outlined above, goods are at the entire risk of the buyer's from the date of delivery.

8. **Software-Use**
   If there is any software incl. with our instruments, the user has a non exclusive right of using the software or documentary. The right of use is for the incl. instrument only. No further use for other instruments is allowed.

9. **Time of Delivery - Delivery Possibilities**
   All information given in respect of delivery period is approximate and without obligation. Liability in case of delay in delivery, interest for delay and/or damages cannot be accepted. The time of delivery begins only after clarification of all clerical and technical details.

10. **Force Majeure**
    Force majeure, such as strike and lock-out, catastrophes of any kind, breakdown in supply of any kind, as well as delivery of faulty material and the like shall release us from our liabilities.

11. **Claims**
    Claims must be made immediately, latest after 8 days on receipt of the goods otherwise such claims will not be accepted by us. Claims above the nominal value of the goods involved will not be entertained.
    Amendments to our deductions from invoices will not be accepted in respect of claims. Adjustments must be made only through documents issued by us.

12. **Warrantee**
    For the purchase of goods applies between the customer and us a period of a product-related limitation for the legal objective defect liability claim of 12-36 month on new parts and 6 month on used parts. The objective defect liability claim has priority to a claim for performance is limited.
    No warrantee will be taken over especially in the following cases:
    Not qualified or faulty use, incorrect installation respectively commissioning by the purchaser or a third party, wear and tear, incorrect or careless treatment, maintenance not according to the rules.
    If the purchaser or a third party repairs inappropriate assumes no liability for the supplier for any resulting consequences. Claimed parts have to be returned free delivered by the purchaser in addition of the invoice with the according purchase date. An entitled replacement will be returned by us as well free delivered.

13. **Repair fee**
    Unless otherwise agreed, a repair cost share is considered to be accepted for repair fee of € 25.- with delivery of a device for repair.
    We reserve the right to grant, at its discretion in favor of the customer a discount for this repair if the repair seems relatively simple.
    With an estimated expenses for the repair of more than € 50.- the customer receives a written estimate for approval.

14. **Electrical and Electronic Equipment (the „ElectroG")**
    The buyer assumes the obligation to dispose of him delivered and used in professional measuring tools and test equipment of brand „Vogel Germany" after termination of use at its own expense in accordance with the guidelines of the „ElectroG" properly. Thus Vogel Germany is exempted from the obligations according to § 10 paragraph 2 „ElectroG", and thus the consolidation of related claims of third parties.
    Any failure of the customer, third parties to whom he passes our measuring tools and test equipment, contractually obligated to assume the duty of disposal and for further obligation, the buyer is obliged to take back the goods delivered after termination of use at its own expense and in accordance with the legal regulations to discard.
    The claim of the Vogel Germany on acquisition of the lawful disposal of professionally used measurement tools / test equipment of brand „Vogel Germany" by the customer, not time-barred before the expiration of two years after the final termination of the use of the products supplied to him. The two-year period, the flow begins at the earliest with receipt of written notice to the customer of the termination of use.

15. **Settling Place and Place of Competency**
    Kevelaer is the settling place for delivery and payment.
    The place for competency of justice in case of dispute is the place of the sellers court.

16. **Scope of our terms and conditions, General**
    In case of a dispute only the German version of our applicable current general terms and conditions are prevail.

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VBLUE-LINE®

VBLACK-LINE®

VSILVER-LINE®

VDIGI PLUS-LINE®

VGOLD-LINE®

VRED-LINE®

VSTANDARD-LINE®

VMASTER-LINE®

VSUPER-LINE

VONLINE®

VOCOM-S®

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