





















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.

	Protected against solid particles $\varnothing > 1 \text{ mm}$
	Protected against solid particles $\varnothing > 1 \text{ mm}$ and drop water resistant
	Splash water resistant
	Drop water resistant
	Drop water resistant
	Dust and spray water resistant
	Dust and spray water resistant
	Dust and drop water proof
	Dust and spray water proof
	Dust and splash water proof
	Dust and jet water proof
	Water and oil tight (at times)
	Water and oil tight (permanent)
	Article is explosion proof
	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
	Stainless steel

Icons for data process

	RS232 data output by data cable
	Opto RS232 data output
	Proximity data output, inductive, contactless
	Data output by USB and data cable
	Data output by USB and Mini USB (compatible with Mitutoyo Digimatic)
	wireless communication (WiFi) possible
	Software on CD-Rom

Several Icons

	Article-Number
	Reading / Resolution
	Weight in kg
	Cross section of the article
	Max. total accuracy(\pm)
	Repeatability (\pm)
	Individual measuring range
	Article dimension
	Measuring- and weighing-unit selectable or swichtable
	Corresponding battery included
	Corresponding battery included
	Corresponding cell battery included
	Corresponding cell battery included
	Corresponding lithium battery included
	Corresponding lithium battery included
	Accu
	Power supply
	Laser protection class
	Magnet power
	Induction
	Laser wavelength
	Shock proof
	Stand out
	Reading in mm and inch
	Reading in cm and inch
	Article with ABS/INC measuring system
	Article with ABSOLUTE measuring function

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 fulfils 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)"
vd TÜV	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 (wood, plastic or aluminum)
	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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Precision Feeler Gauge Sets

Other sets are available on request!

SILVER-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



ART No	quantity of blades	mm	composition	KG	ART No CC
40 0101	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	41 94008
40 0105	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	41 94013
40 0107	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	41 94020

BLUE-LINE® Feeler Gauge Sets

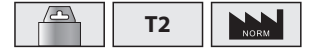
- for standard purposes, like thickness measuring between narrow slots and for automotive- and engine industry
- hardened spring steel, conical shaped blades, 100 mm length
- nickel plated case with lock nut, sizes in mm and inch on each blade
- thickness tolerance in relation to the metric sizes



ART No singly, in foil	quantity of blades	mm / inch	composition	KG	ART No CC
41 1000	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	41 94008
41 1001	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	41 94008
41 1003	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	41 94010
41 1004	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	41 94010
41 2002	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	41 94010
41 1005	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	41 94013
41 2005	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	41 94013
41 1007	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	41 94020
41 1008	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	41 94020
41 1009	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	41 94020
41 1010	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	41 94026
41 1011	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	41 94032
41 1012	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	41 94013

★★★★★ 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



ART N°	quantity of blades	mm / inch	composition	KG	ART N° CC
41 3101	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	41 94008
41 3105	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	41 94013
41 3107	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	41 94020

★★★★★ BLUE-LINE® Feeler Gauge Set, made from brass

- anti-magnetic gauge, for electrical 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 N°	quantity of blades	mm	composition	KG	ART N° CC
41 4005	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	0.065	41 94045
41 4007	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	0.095	41 94047
41 4105	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	0.065	41 94045
41 4107	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	0.095	41 94047

★★★★★ 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



ART N°	quantity of blades	mm	composition	KG
41 5010	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



ART NO singly packed	ART NO bulk packed	quantity of blades	mm / inch	composition	KG
41 5106	41 51061	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
41 5107	41 51071	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



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
43 6151	0.030	43 6155	0.080	43 6157	0.150	43 6158	0.190	150
43 6201	0.040	43 6205	0.125	43 6207	0.220	43 6208	0.250	200
43 6301	0.070	43 6305	0.150	43 6307	0.340	43 6308	0.390	300
43 6501	0.110	43 6505	0.310	43 6507	0.550	43 6508	0.610	500
43 6991	0.220	43 6995	0.650	43 6997	1.100	43 6998	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



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
43 7151	0.030	43 7155	0.080	43 7157	0.150	150
43 7201	0.040	43 7205	0.125	43 7207	0.220	200
43 7301	0.070	43 7305	0.150	43 7307	0.340	300

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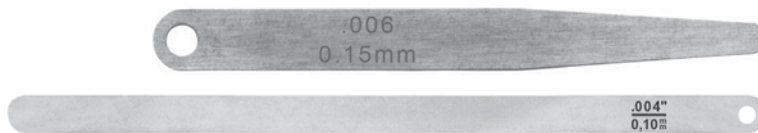
Feeler Gauge Blades and Thickness Gauge Foils

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



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
42 1110	42 3110	42 4110	2.00 / .080	✓	-	100
43 1150	43 2150	-	2.00 / .080	-	✓	150
43 1200	43 2200	-	2.00 / .080	-	✓	200
43 1300	43 2300	-	2.00 / .080	-	✓	300
43 1500	-	-	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



ART NO spring steel	ART NO stainless steel	mm / inch	KG	ART NO spring steel	ART NO stainless steel	mm / inch	KG
45 5001	45 6001	0.01 / .0004	0.035	45 5055	-	0.55 / .022	0.360
45 5002	45 6002	0.02 / .0008	0.040	45 5060	-	0.60 / .024	0.370
45 5003	45 6003	0.03 / .0012	0.045	45 5065	-	0.65 / .026	0.430
45 5004	-	0.04 / .0016	0.048	45 5070	-	0.70 / .028	0.535
45 5005	45 6005	0.05 / .002	0.050	45 5075	-	0.75 / .030	0.565
45 5006	-	0.06 / .0024	0.055	45 5080	-	0.80 / .032	0.590
45 5007	-	0.07 / .0028	0.060	45 5085	-	0.85 / .034	0.605
45 5008	-	0.08 / .003	0.065	45 5090	-	0.90 / .036	0.640
45 5009	-	0.09 / .0035	0.072	45 5095	-	0.95 / .038	0.670
45 5010	45 6010	0.10 / .004	0.075	45 5100	45 6100	1.00 / .040	0.685
45 5012	-	0.12 / .005	0.085	45 7110	-	1.10	0.105
45 5015	45 6015	0.15 / .006	0.100	45 7120	-	1.20	0.112
45 5018	-	0.18 / .007	0.112	45 7130	-	1.30	0.122
45 5020	45 6020	0.20 / .008	0.130	45 7140	-	1.40	0.131
45 5025	45 6025	0.25 / .010	0.150	45 7150	-	1.50	0.140
45 5030	45 6030	0.30 / .012	0.175	45 7160	-	1.60	0.150
45 5035	-	0.35 / .014	0.205	45 7170	-	1.70	0.159
45 5040	45 6040	0.40 / .016	0.255	45 7180	-	1.80	0.168
45 5045	-	0.45 / .018	0.280	45 7190	-	1.90	0.178
45 5050	45 6050	0.50 / .020	0.335	45 7200	-	2.00	0.187

★★★★★ BLUE-LINE® Holder for Feeler Gauge Blades



ART NO	size	KG
45 8010	125 x 17 mm	0.120

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Precision Thickness Gauge Foils



- 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 46 2100



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
-	46 2010	46 3010	46 4010	46 5010	0.010
-	46 2020	46 3020	46 4020	46 5020	0.020
45 2025	46 2025	46 3025	46 4025	46 5025	0.025
-	46 2030	46 3030	46 4030	46 5030	0.030
-	46 2040	46 3040	46 4040	46 5040	0.040
45 2050	46 2050	46 3050	46 4050	46 5050	0.050
-	46 2060	46 3060	46 4060	46 5060	0.060
-	46 2070	46 3070	46 4070	46 5070	0.070
45 2075	46 2075	46 3075	46 4075	46 5075	0.075
-	46 2080	46 3080	46 4080	46 5080	0.080
-	46 2090	46 3090	46 4090	46 5090	0.090
45 2100	46 2100	46 3100	46 4100	46 5100	0.100
-	-	46 3120	46 4120	46 5120	0.120
45 2150	46 2150	46 3150	46 4150	46 5150	0.150
-	-	46 3180	46 4180	46 5180	0.180
45 2200	46 2200	46 3200	46 4200	46 5200	0.200
-	-	46 3220	46 4220	46 5220	0.220
45 2250	46 2250	46 3250	46 4250	46 5250	0.250
45 2300	46 2300	46 3300	46 4300	46 5300	0.300
-	-	46 3350	46 4350	46 5350	0.350
45 2400	46 2400	46 3400	46 4400	46 5400	0.400
-	-	46 3450	46 4450	46 5450	0.450
45 2500	46 2500	46 3500	46 4500	46 5500	0.500
-	-	-	-	46 5600	0.600 (rolled)
-	-	-	-	46 5700	0.700 (rolled)
-	-	-	-	46 5800	0.800 (rolled)
-	-	-	-	46 5999	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	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
46 6010	46 7010	0.010	46 6100	46 7100	0.100
46 6015	-	0.015	46 6120	46 7120	0.120
46 6020	46 7020	0.020	46 6150	46 7150	0.150
46 6025	46 7025	0.025	46 6180	46 7180	0.180
46 6030	46 7030	0.030	46 6200	46 7200	0.200
46 6040	46 7040	0.040	46 6220	46 7220	0.220
46 6050	46 7050	0.050	46 6250	46 7250	0.250
46 6060	46 7060	0.060	46 6300	46 7300	0.300
46 6070	46 7070	0.070	46 6350	46 7350	0.350
46 6075	46 7075	0.075	46 6400	46 7400	0.400
46 6080	46 7080	0.080	46 6450	46 7450	0.450
46 6090	46 7090	0.090	46 6500	46 7500	0.500

Screw Pitch Gauges and Radius Gauges

★★★★★ BLUE-LINE® Screw Pitch Gauges

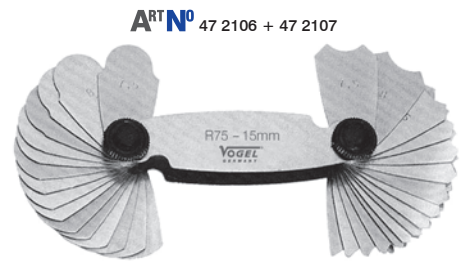
- for internal and external measurements of threads
- fine cutted threads



ART NO	quantity of blades	mm / inch	thread type	graduation	KG	
47 1009	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	1.0/0.9/0.8/0.75/0.7/0.6/0.5/0.45/0.4/0.350.3/0.25	0.040
47 1010	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
47 1011	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
47 1012	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
47 1013	48	4 - 62 / 0.40 - 7.0	whitw. / metr. SI	combined	art. no. 47 1012 + 47 1010	0.075
47 1014	52	4 - 62 / 0.25 - 6.0	whitw. / metr.	combined	art. no. 47 1012 + 47 1009	0.080
47 1015	6	8 - 28 Gang / t.p.i.	whitw. 55°	tube	8/10/11/14/19/28	0.020
47 1016	58	4-62/0.25-6.0/8-28	whitw. / metr.	combined	art. no. 47 1014 + 47 1015	0.090
47 1017	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
47 1018	30	6 - 60 Gang / t.p.i.	US 60° SAE	6/7/8/9/10/11/11.5/13/14/15/16/18/20/22/24	26/28/30/32/34/36/38/40/42/44/46/48/50/56/60	0.035
47 1019	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
47 1020	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
47 1021	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
47 1022	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

★★★★★ BLUE-LINE® Radius Gauges

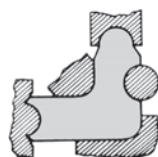
- for testing of raised and recessed curves
- concave and convex shaped blades
- fine cutted forms



ART NO carbon steel	ART NO stainless steel	quantity of blades	mm	composition mm	KG
47 2105	47 2115	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
47 2106	47 2116	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
47 2107	47 2117	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

★★★★★ BLUE-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

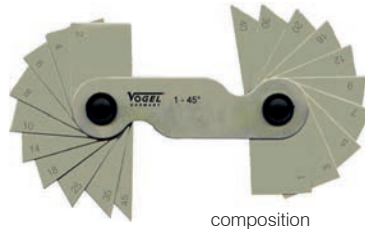


ART NO	quantity of blades	mm	composition mm	KG
47 2109	26	0.5 - 13	0.5 / 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7 / 7.5 / 8 / 8.5 / 9 / 9.5 / 10 / 10.5 / 11 / 11.5 / 12 / 12.5 / 13	0.319

Cutting Gauges

★★★★★ BLUE-LINE® Angle Gauge

- angles 1° - 45°
- fine machined edges



ART N°	quantity of blades		composition	
47 2000	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



ART N°	quantity of blades		composition	
47 2020	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

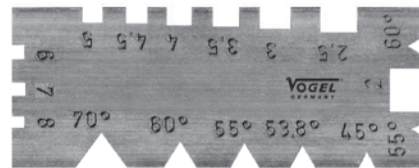
- angles 55° whitworth or 60° metric



ART N°		inch	ART N°		mm	
47 2001		55°	47 2002		60°	0.013

★★★★★ BLUE-LINE® Combined Angle Thread Cutting Gauge

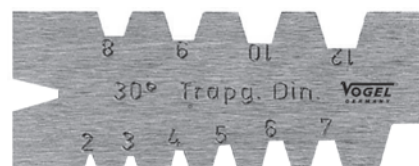
- fine machined edges



ART N°	angles threads	flat threads threads/inch (t.p.i.)	
47 2003	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



ART N°	trapez thread	trapez pitch mm	
47 2004	30°	2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 12	0.018

7b

11

★★★★★ BLUE-LINE® Combined Turning and Thread Cutting Gauge

- with trapez- and flat threads



ART NO	trapez threads mm	flat threads threads/inch (t.p.i.)	angles	KG
47 2005	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

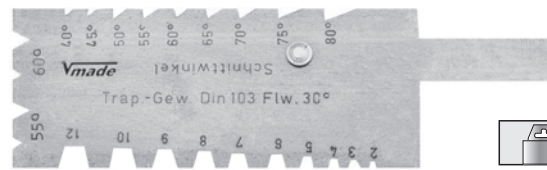
- with trapez- and saw cutting angles



ART NO	trapez threads mm	saw cutting angles	angles	KG
47 2006	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



ART NO	trapez threads mm	saw cutting angles	adjusting angle	angles	KG
47 2007	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

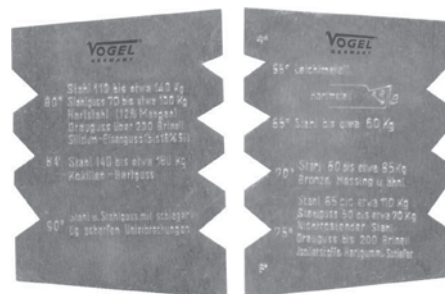
- SAE 60° / Ww-BSF 55° / 14.5° ACME / 47.5° BA



ART NO	SAE	Whitworth BSF	ACME	B.A.	KG
47 2008	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



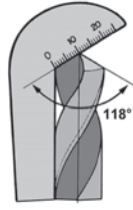
ART NO	for carbide turning tools	ART NO	for high speed turning tools	KG
47 2009	✓	47 2010	✓	0.050

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Cutting Gauges and Twist Drill Gauges

★★★★★ BLUE-LINE® Twist Drill Grinding Gauge

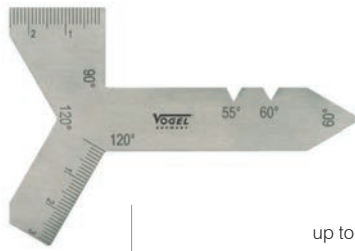
- with 118° angle



ART NO	angle cut	up to drill-ø mm	KG
47 2011	118°	50	0.025

★★★★★ BLUE-LINE® Universal Twist Drill Grinding Gauge

- with several angle cuts



ART NO	angle cut	up to drill-ø mm	KG
47 2012	55° / 60° / 90° / 120°	60	0.030

★★★★★ BLUE-LINE® Universal Twist Drill Grinding Gauge

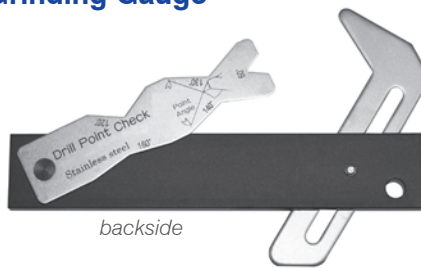
- with adjustable angle pointer



ART NO	angle cut	up to drill-ø mm	KG
47 2013	30° - 160°	60	0.065

★★★★★ BLUE-LINE® Universal Twist Drill Grinding Gauge

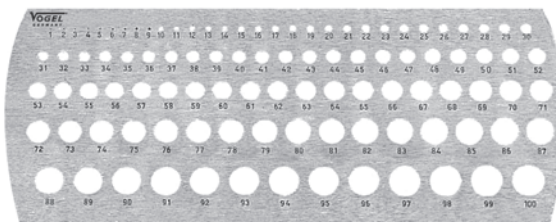
- special steel, hardened, ground and burnished
- with angle finder at the rear side



ART NO	mm	angle settings	up to drill-ø mm	KG
47 2018	0 - 70	60° / 118° / 120° / 130° / 140° / 160°	100	0.185

★★★★★ BLUE-LINE® Twist Drill Gauge

- special steel, hardened and ground

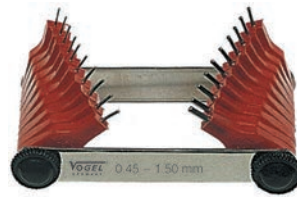


ART NO	ø mm	steps ø mm	quantity of holes	KG
47 2301	0.10 - 10.0	0.1	100	0.185

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★★★★★ BLUE-LINE® Jet Gauge

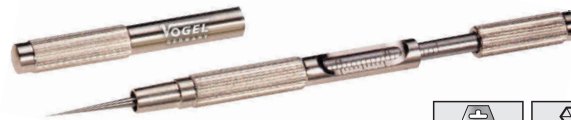
- with hardened steel pins, in plastic holders mounted



ART NO	quantity of pins	mm	composition mm	KG
47 2201	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
47 2202	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



ART NO	mm	mm	taper mm	mm	KG
47 2219	0 - 3	0.1	1 : 10	Ø 6.5 x 118	0.025
47 2220	0 - 5	0.1	1 : 10	Ø 9.0 x 176	0.065

★★★★★ BLUE-LINE® Taper Gauge

- flat version
- art. no. 47 2370 - 47 2372 made of special steel, hardened
- art. no. 47 2373 - 47 2375 made of technical ABS plastic
- art. no. 47 2375 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.

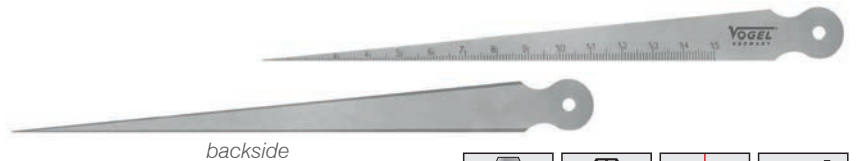
- laser engraved graduation
- with knurled handle



ART NO	mm	mm	mm	version	KG
47 2370	0.5 - 7.0 mm	0.1	124 x 8 x 8	steel	0.060
47 2371	2.0 - 7.0 mm	0.1	109 x 8 x 8	steel	0.060
47 2372	0.5 - 11.0 mm	0.1	153 x 8 x 12	steel	0.080
47 2373	0.5 - 11.0 mm	0.1	155 x 8 x 12	ABS plastic	0.020
47 2375	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



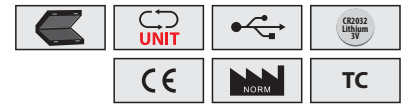
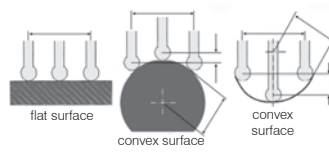
ART NO	mm	mm	mm	KG
47 2320	1.0 - 15.0	0.1	178 x 12 x 2	0.020
47 2321	15.0 - 30.0	0.1	217 x 31 x 2	0.060

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Taper Gauges, Keyways Caliper and Spring Gauges

DIGI PLUS-LINE® Electr. Digital Arc Test Set

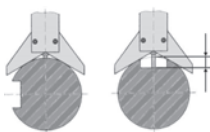
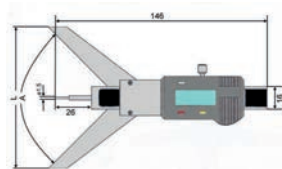
- ideal device for tooling
- USB data output
- aluminium housing with sturdy plastic cover
- large LCD display with clear reading, digit height 10 mm
- stem and spindle stainless, hardened and lapped
- exchangeable probe tips, M 2.5
- different sized probes for arc measurements
- measured value display 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.: 20 02093), with operation manual



ART N°	linearly mm / inch	radius mm	mm / inch	mm	max. linearly mm	max. radius mm	KG
47 2120	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 **NEW**

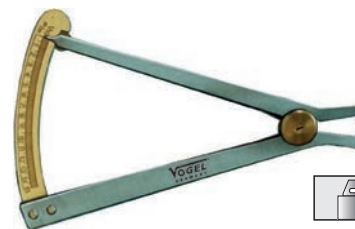
- for measurements of groove depth, etc.
- mechanical parts in stainless steel, hardened
- LCD display with clear reading, digit height 8 mm
- zero setting at any position
- reading switchable in mm/inch
- incl. 1x 1.5 V battery (type LR44, art. no.: 20 20192/B), with operation manual



ART N°	mm / inch	mm / inch	mm	A °	L mm	for shaft-ø mm	KG
47 3315	50 / 2	0.01 / 0.0005	0.03	90	100	5 - 140	0.190
47 3316	50 / 2	0.01 / 0.0005	0.03	120	100	5 - 200	0.190

BLUE-LINE® Spring Gauge

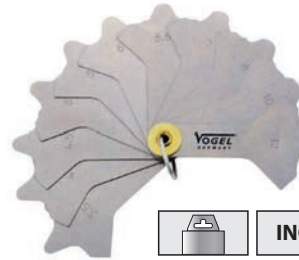
- scale made of brass
- for thickness measurements of sheet-metal etc.
- special steel, burnished



ART N°	mm	mm	total length mm	KG
47 4801	0 - 10	0.1	80	0.040
47 4802	0 - 15	0.1	125	0.075
47 4803	0 - 20	0.1	150	0.110

★★★★★ BLUE-LINE® Welding Gauge

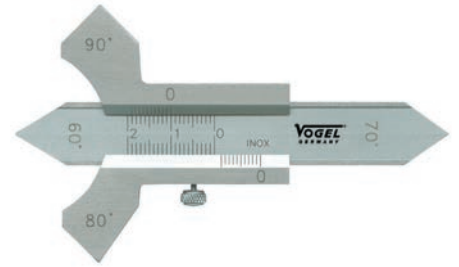
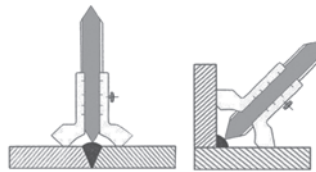
- fan shape
- for measuring right angled welds
- stainless steel



ART N°	quantity of blades	mm	composition mm	KG
47 4401	12	3 - 12	3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7 / 8 / 10 / 12	0.073

★★★★★ BLUE-LINE® Precision Welding Gauge

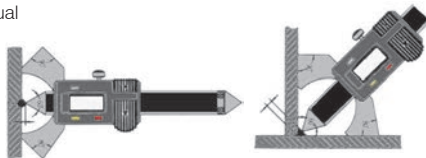
- with vernier reading
- for measurements of flat welding seams and in corners etc.
- stainless steel hardened and fine ground
- scale matt chromed
- with fixing screw



ART N°	mm	mm	angle	mm	KG	ART N° CC
47 4403	0 - 20	0.1	60 / 70 / 80 / 90	98 x 59 x 5.2	0.070	47 94443

★★★★★ DIGI PLUS-LINE® Electr. Digital Welding Gauge

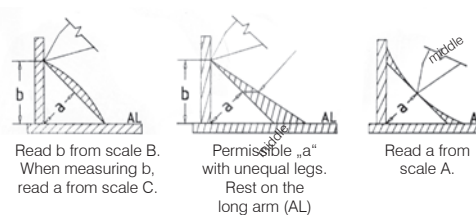
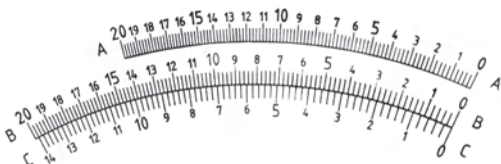
- with data output RS 232 C
- stainless steel, hardened and ground
- LCD display with clear reading, zero-setting at any position
- On/Off button, reading switchable mm/inch
- incl. 1x 1.5 V battery (type LR44, art.-no.: 20 20192/B), with operation manual



ART N°	mm / inch	mm / inch	max. mm	angle °	mm	KG	ART N° CC
47 4410	0 - 20 / 0 - 0.8	0.01 / 0.0005	0.03	60 / 70 / 80 / 90	100 x 62 x 14	0.070	47 94449

★★★★★ BLUE-LINE® Precision Welding Gauge

- with reading window
- stainless steel, hardened and fine ground
- reading through a window by a reference line



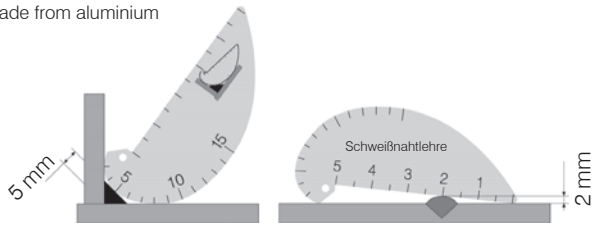
ART N°	mm	mm	KG	ART N° CC
47 4404	0.1	108 x 81.5 x 3.2	0.110	47 94444

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Welding Gauges and Thread Rules

★★★★★ BLUE-LINE® Welding Gauge "S"

- made from aluminium



ART^{NO}

47 4405



62.70 x 29.80 x 1.00



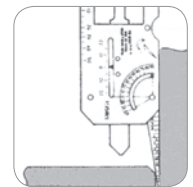
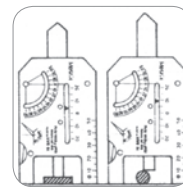
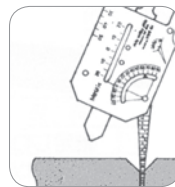
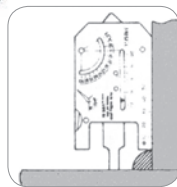
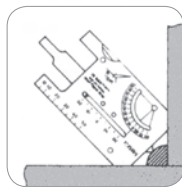
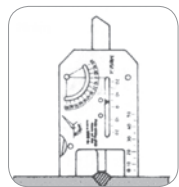
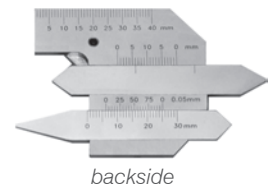
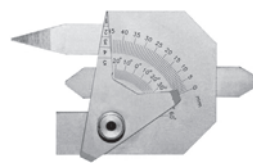
0.003

★★★★★ BLUE-LINE® Welding Gauge

- with adjustable angle
- with various setting facilities
- stainless steel, hardened and fine ground

ART^{NO} 47 4407

ART^{NO} 47 4408

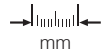


INOX



ART^{NO}

47 4407



20 - 0 - 20

angle graduation

50° - 0 - 90°



110 x 60 x 6.0



0.090

47 4408

0 - 45

20° - 0 - 60°

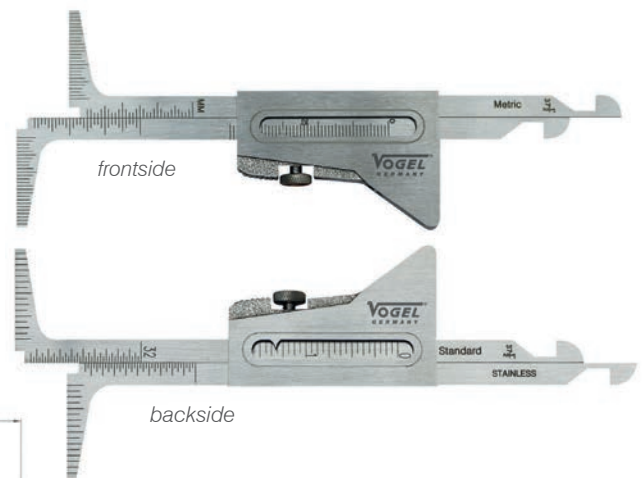
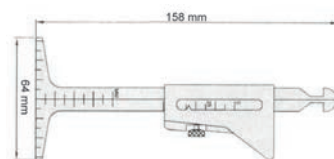
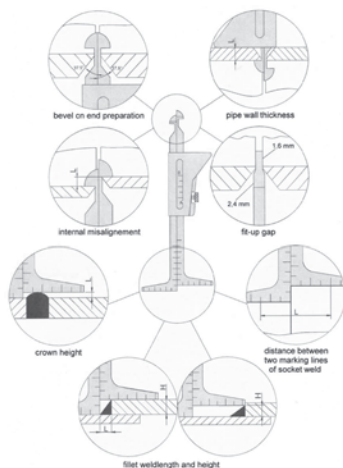
60 x 52 x 3.0

0.090

★★★★★ BLUE-LINE® Pipe Welding Gauge / Edge Offset Gauge

NEW

- 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



INOX



ART^{NO}

47 4409



35



mm

1.0



158 x 64 x 7



0.100

Thread Indicators and Profile Gauges

★★★★★ BLUE-LINE® Thread Indicator

- for the direct reading of all details necessary for the determination of threads and core-ø
- dustproof plastic housing



ART N°		KG
47 4121	30 x 60 x 110	0.100

★★★★★ BLUE-LINE® ISO Tolerance Indicator

- for the direct reading of all tolerance values according to ISO, including complete board of all ISO-tolerances up to 500 mm
- dustproof plastic housing



ART N°		KG
47 4122	30 x 60 x 110	0.100

★★★★★ BLUE-LINE® Converter

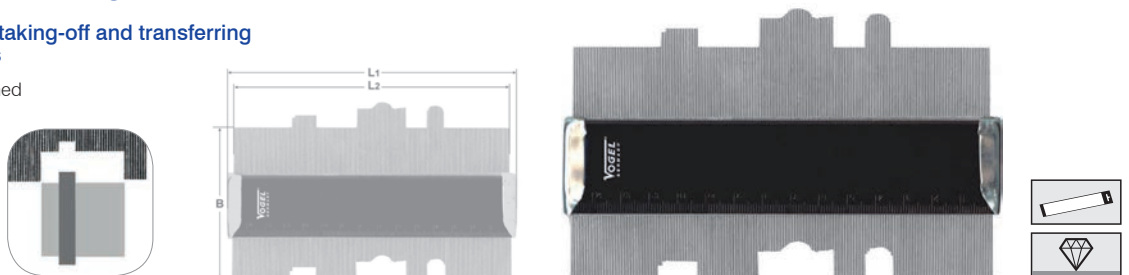
- for reading millimetre to inch and visa versa
- dustproof plastic housing



ART N°		KG
47 4123	30 x 60 x 110	0.100

★★★★★ BLUE-LINE® Profile Gauge

- especially use for taking-off and transferring all existing shapes
- with steel pins, hardened



ART N°		B mm	L2 mm	L1 mm	thickness mm	KG
47 4501	150 x 40	80	148	154	20	0.236
47 4502	300 x 75	150	293	305	33	0.982

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Stroke Counters, Revolution Counters

★★★★★ 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 N° 47 7003



ART N° 47 7001



driving shaft at right side



ART N°	ART N°	revolution max. 1/min.	quantity of digits	digit height mm	driving shaft-ø mm	base plate mm	height mm	KG
47 7001	47 7002	500	5	4.5	4.0	40 x 46	27.5	0.090
47 7003	47 7004	500	5	4.5	4.0	60 x 29	27.5	0.090

driving shaft at left side



ART N°	ART N°	revolution max. 1/min.	quantity of digits	digit height mm	driving shaft-ø mm	base plate mm	height mm	KG
47 7005	47 7006	500	5	4.5	4.0	40 x 46	27.5	0.090
47 7007	47 7008	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 N° 47 7010



ART N° 47 7012



driving shaft at right and left side



ART N°	ART N°	revolution max. 1/min.	quantity of digits	digit height mm	driving shaft-ø mm	base plate mm	height mm	KG
47 7010	47 7011	500	6	4.5	4.0	60 x 70	28.0	0.130
47 7012	47 7013	500	7	7.0	7.0	120 x 64	45.0	0.380

Manual Piece Counters and Length Counters

★★★★★ BLUE-LINE® Mechanical Manual Piece Counter

- for counting the number of people in cinemas, at sporting events, at ski lifts, etc.
- also for counting piece parts when taking inventory, during production or when counting traffic
- sturdy metal housing
- available with retaining ring, table mounting or wall mounting

ART N° 47 7101



ART N° 47 7102



ART N° 47 7103



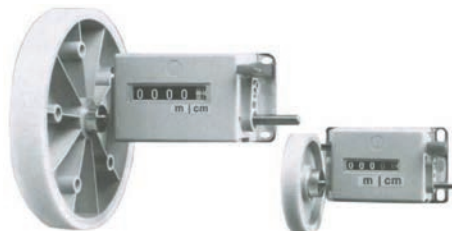
ART N° with retaining ring	ART N° with table mounting	ART N° with wall mounting	quantity of digits	digit height mm	housing-ø mm	base plate-ø mm	KG
47 7101	47 7102	47 7103	4	4,5	47	65	0.170

★★★★★ 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



ART N°	revolution max. 1/min.	quantity of digits	digit height mm	driving shaft-ø mm	base plate mm	height mm	KG
47 7130	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!



ART N°	measuring wheel-ø cm	bore hole-ø mm	plastic / hytel ribbed	aluminium / rubber nap version	aluminium / knurled
47 7140	20	4.0	✓	-	-
47 7141	20	4.0	-	✓	-
47 7142	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.: 20 20192/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.: 20 20192/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



Price / Performance:
good - excellent

ART N° 47 4470



ART N° 47 4471



ART N°	set	telescope bar	LED	mirror ø 50 mm	mirror 60 x 40 mm	magnet	claw pick-up	magnetic tray	KG
47 4470	5-pcs.	✓	✓	✓	✓	✓	✗	✗	0.340
47 4471	7-pcs.	✓	✓	✓	✓	✓	✓	✓	0.815

★★★★★ BLUE-LINE® Magnetic Tray

- stainless steel, polished
- with powerful permanent magnet bottom
- available in round and rectangular design

ART N° 47 4475



ART N° 47 4476



ART N°	Gauss	mm	KG
47 4475	1000 - 1200	ø 150	0.387
47 4476	1000 - 1200	240 x 140	0.812

★★★★★ BLUE-LINE® Magnet Lifter

- with quick release
- with telescope bar
- socket with magnet
- telescope bar, stainless steel
- 360° rotatable and swivel joint
- insulated handle, with clip



ART No	mm	kg	KG
47 4441	~ 650	8	0.096

BLUE-LINE® Magnet Lifter

- with telescope bar
- telescope bar, stainless steel, with clip
- art.-no. 33 4614 additionally with scriber



ART No	mm	kg	KG
★★★★★ 47 4442	~ 530	3.5	0.030
★★★★★ 33 4614	~ 650	1.0	0.025

Explore our website!



Any questions?
We are pleased to advise!

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Professional Inspection Mirrors

★★★★★ BLUE-LINE® Professional Inspection Mirror

- with telescope bar
- stainless steel telescope bar
- 360° rotatable and swivel joint
- insulated handle



ART No	mm	mm	KG
47 4452	~ 610	ø 40	0.087
47 4453	~ 620	ø 50	0.094
47 4454	~ 620	43 x 65	0.098

★★★★★ BLUE-LINE® Professional Inspection Mirror

- with telescope arm and LED light
- stainless steel telescope bar
- 360° rotatable and swivel joint
- with clip
- detachable LED light, switchable
- incl. 3x 1.5 V battery (type LR41, art.-no.: 20 20192/A)



bright LED light, detachable



ART No	mm	mm	KG
47 4465	~ 610	ø 26	0.057

★★★★★ BLUE-LINE® Professional Inspection Mirror

- with 5x magnification and telescope bar
- stainless steel telescope bar
- 360° rotatable and swivel joint
- insulated handle



Mirror image with 5x magnification



ART No	mm	mm	KG
47 4460	~ 610	ø 24	0.065
47 4461	~ 510	ø 55	0.097

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7d



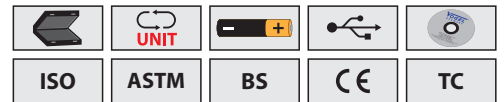
Universal Coating Thickness Gauge

- with memory and multifunction display, combined system for ferrous (Fe) and non-ferrous metal (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.
- 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 $\pm 2.5 \mu\text{m}$, 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 $\pm 1 \mu\text{m}$
- 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.: 60 9282)
- incl. operation manual, screw driver, wrist strap, in a rugged plastic carrying case

Accessories on page 265



ART N° 48 0226



Option

- art.-no. 48 0317 Probe F10 (Fe), for measuring range 0 - 10000 μm , low range resolution 10 mm

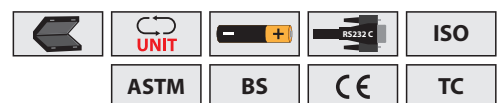
ART N°	μm / probe F1 + N1	μm / probe F1 + N1		
48 0226	0.1	0 - 1250	125 x 68 x 33	0.400



Universal Coating Thickness Gauge with integrated probe

- especially for automobile industry and garages, combined system for ferrous (Fe) and non-ferrous metal (Ne), with RS232 data output
- compact handheld device quick and flexible coating thickness measurements with one-key operation.
- 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.
- 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 $\pm 2.5 \mu\text{m}$, 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 $\pm 1 \mu\text{m}$
- 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.: 60 9283), with low battery indicator
- with operation manual, wrist strap, in a rugged plastic carrying case

Accessories on page 265



Options

- art.-no. 48 9880 RS232C data cable with software
- art.-no. 48 9881 USB adapter

ART N°	μm / probe F1 + N1	μm / probe F1 + N1		
48 0235	0.1	0 - 1250	125 x 65 x 28	0.081

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Coating Thickness Gauges and Ultrasonic Thickness Gauges

DIGI PLUS-LINE® Universal Coating Thickness Gauge

- with memory and multifunction display, combined system for ferrous (Fe) and non-ferrous metal (Ne), with RS232 data output, with external or integrated probe available
- 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 $\pm 2.5 \mu\text{m}$, 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 $\pm 1 \mu\text{m}$
- 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.: 60 9283), with low battery indicator
- incl. operation manual, wrist strap, in a rugged plastic carrying case

Options

- art.-no. 48 9880 RS232 C data cable with software
- art.-no. 48 9881 USB adapter

ART NO	μm / probe F1	μm / probe F1	μm / probe N1	μm / probe N1	mm	KG
48 0233	0.1	0 - 1250	0.1	0 - 1250	125 x 65 x 28	0.081
48 0243	0.1	0 - 1250	0.1	0 - 1250	125 x 65 x 28	0.081

Accessories on page 265



DIGI PLUS-LINE® Ultrasonic Thickness Gauge

- 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

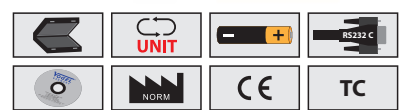
- rugged extruded aluminium case, with soft keypad
- multi-function display with clear reading, coupling status indicator, backlight
- integrated steel testplate for fast calibration, with single point working mode and scan mode, alarm function shiftable
- measurement in metric/inch switchable, measuring range for steel pipes: Min. $\phi 15 \times 2.0 \text{ mm}$ and max. $\phi 20 \times 3.0 \text{ mm}$
- 2 external transducers, 1m length, N05 for standard purpose ($\phi 10 \text{ mm}$ / 5 MHz) and N07 for thin walled pipes or small radii ($\phi 6 \text{ mm}$ / 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 $\pm 0.5\%$ thickness $+0.04 \text{ mm}$, 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.: 60 90282), 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.: 48 0389 thermal printer
- art.-no.: 48 0284 printer cabel
- art.-no.: 48 0285 interface cable RS232

Accessories on page 265

ART NO	mm	mm N05	mm N07	sound velocity m/s	max. mm	mm	KG
48 0405	0.1 / 0.01	1.2 - 230	0.75 - 80	1000 - 9999	$\pm 0.5\%n + 0.04 \text{ mm}$	132 x 76 x 30	0.345



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Ultrasonic Thickness Gauge

- 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 $\pm 0.5\%$ thickness + 0.04 mm, readings in 0.1/0.01 mm
- selectable sound velocity 500 - 9000 m/s
- operation temperature $0^\circ \sim +50^\circ\text{C}$, humidity 20% - 80% RH
- incl. 4x battery 1.5 V (type AAA, art.-no.: 60 9283), with low battery indicator
- incl. operation manual, wrist strap, in a rugged plastic carrying case

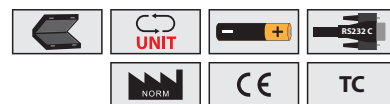
ART N° 48 0260



ART N° 48 0280








Accessories on page 265



Option

- art.-no. 48 0280 couplant (60 ml)

ART N°	 mm	 mm N05	sound velocity m/s	 max.	 mm	 KG
48 0260	0.1	1.0 - 230	500 - 9000	$\pm 0.5\%n + 0.1 \text{ mm}$	135 x 65 x 30	0.115

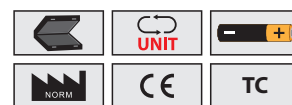
Ultrasonic Thickness Gauge






- 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, $\varnothing 10 \text{ mm}$, for standard purposes
- operation temperature $0^\circ\text{C} \sim +40^\circ\text{C}$, humidity 20% - 90% RH
- incl. 2x battery 1.5 V (type AA, art.-no.: 60 9282), with operation manual, wrist strap and couplant



More probes available on request

Accessories on page 265



ART N°	 mm	 mm / inch	 max.	 mm	 KG
48 0120	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

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Ultrasonic Thickness Gauges

DIGI PLUS-LINE® Ultrasonic Thickness Gauge

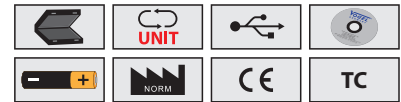
- top class device, with USB data output, with A-Scan mode
- rugged handheld, for quick and flexible wall thickness measurements
- for wall thickness checking of pressure tanks, vessels, oil tanks, chemical instruments and many others
- dedicated for many materials, such as steel, cast iron, grey cast 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.: 60 9282), couplant, data view software, data cable and operation manual

More probes available on request



Accessories on page 265



ART N°	mm	mm / inch	max.	mm	KG
48 0246	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

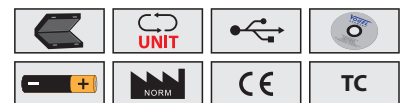
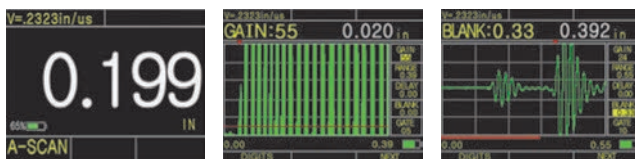
- top class device, with USB data output, with A-scan and B-scan mode
- rugged handheld, for quick and flexible wall thickness measurements, even through coatings
- for wall thickness checking of pressure tanks, vessels, oil tanks, chemical instruments and many others
- dedicated for many materials, 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.: 60 9282), couplant, data view software, data cable and operation manual

More probes available on request



Accessories on page 265




ART N°	mm	mm / inch	max.	mm	KG
48 0252	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

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Accessories for Coating Gauges and Thickness Gauges

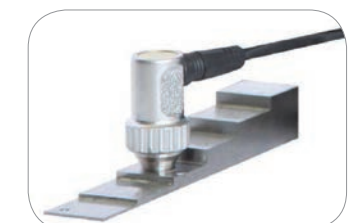
Accessories for Universal Coating Thickness Gauges

ART N°	suitable for model	application	article description	 μm
48 0310	all models	for calibration purpose	calibration foil set Fe + Ne	-
48 0315	48 0226	magnetic induction	probe F1 (Fe)	0 - 1250
48 0315-90°		magnetic induction	probe F1 (Fe)	0 - 1250
48 0316		eddy current method	probe N1 (Ne)	0 - 1250
48 0316-90°		eddy current method	probe N1 (Ne)	0 - 1250
48 0317		magnetic induction	probe F10 (Fe)	0 - 10000
48 0318		magnetic induction	probe F400 (Fe)	0 - 400
48 9880	48 0233 48 0243	-	data cable RS232 C with data view software	-
48 9881	48 0235	-	USB adapter cable	-



Accessories for Ultrasonic Thickness Gauges

ART N°	suitable for model	application	article description	 mm	
48 0280	all models	for coupling	couplant, 60 ml	-	
48 0288			couplant, 100 ml	-	
48 0287	48 0405	-	mini thermal printer	-	
48 0284		-	printer cable	-	
48 0285		-	data cable RS232 C	-	
48 0286		-	data-pro software for data transmission	-	
48 0275		48 0120	for standard and Echo-Echo purposes	probe, ø10 mm 5 MHz	1.0 - 250
48 0274			for thin material, pipes, etc..	probe, ø7 mm 5 MHz	0.8 - 30
48 0277	for extrem high temperatures		probe, ø12 mm 5 MHz, bis 400°C	3.0 - 100	
48 0278	for cast iron		probe, ø12 mm 2.5 MHz	3.0 - 250	
48 9890	48 0405	for standard purposes	probe, ø10 mm 5 MHz	1.0 - 250	
48 9893		for standard purposes	probe, ø10 mm 5 MHz	1.0 - 250	
48 9891		for thin material, pipes, etc.	probe, ø6 mm 7 MHz	0.75 - 80	
48 9892		for cast iron	probe, ø14 mm 2 MHz	3.0 - 300	
48 9894		for extrem high temperatures	probe, ø14 mm 5 MHz, bis 300°C	3.0 - 250	
48 0980		48 0246 48 0252	for standard purposes	probe, ø11 mm 5 MHz	1.0 - 100
48 0981	48 0252	for standard and Echo-Echo purpose	probe, ø10 mm 5 MHz	0.8 - 275	
48 0982	48 0246 48 0252	for thin pipes, etc.	probe, ø6 mm 7.5 MHz	0.8 - 30	
48 0983		for cast iron	probe, ø12 mm 2 MHz	4.0 - 300	
48 0984		for extrem high temperatures	probe, ø10 mm 5 MHz, bis 380°C	4.0 - 80	
48 0985		for thin material, pipes, etc.	probe, ø4 mm 10 MHz	0.7 - 12	
48 9870	all models	4-step testblock 2.54/5.08/10.16/15.24/20.32 mm		2.54 - 20.32	
48 9871	all models	6-step testblock 1/3/5/10/15/20 mm		1 - 20	



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Electr. Digital Vibration Meter

DIGI PLUS-LINE® Electr. Digital Vibration Meter

- with integrated or with external probe, incl. workshop test certificate
- compact analyser for predictive 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 average 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.: 60 9281), with operation manual

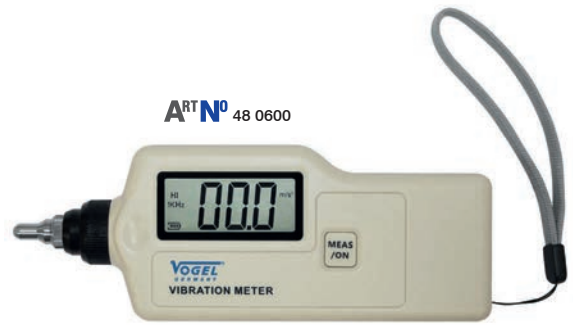
art.-no. 48 0600

- LCD display with digit height 18 mm
- accuracy ± 5% of display value (± 2 digits)
- with integrated accelerometer and with hand strap



art.-no. 48 0605

- 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

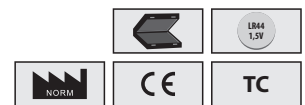
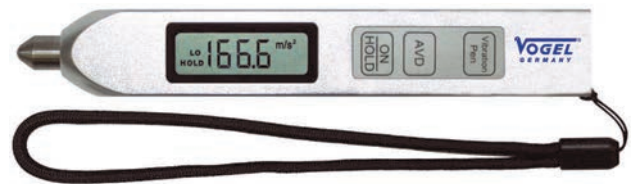


ART N°	velocity Lo-RMS	velocity Hi-AVE	displacement, peak to peak Hi-PEAK	mm	KG
48 0600	0.1 - 199.9 mm/s	0.1 - 199.9 m/s ²	0.001 - 1999 mm	185 x 68 x 30	0.147
48 0605	0.1 - 199.9 mm/s	0.1 - 199.9 m/s ²	0.001 - 1999 mm	135 x 75 x 38	0.290

DIGI PLUS-LINE® Electr. Digital Vibration Meter

- with integrated probe
- compact analyser for predictive 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. 20 20192/B), hand strap, screw driver, pouch and operation manual



ART N°	velocity Lo-RMS	velocity Hi-AVE	displacement, peak to peak Hi-PEAK	mm	KG
48 0607	0.1 - 199.9 mm/s	0.1 - 199.9 m/s ²	0.001 - 1999 mm	150 x 22 x 18	0.080

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