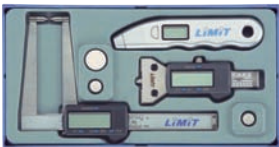


Measuring Kits

Limit. Measurement set in 3 pieces intended for car mechanics, service technicians, etc. To measure brake drums, tyre pressure and tread depth. Supplied in a plastic TC tray with removable cover. Fits in Teng Tools tool boxes and tool trolleys.

Art. no.	13956	-0106
Digital brake disc vernier calipers.....	mm	0-75
Tyre pressure gauge	kg/cm ²	7
Tread depth gauge	mm	0-25
Case size LxWxH	mm	265x142x50



No 13956

Limit. Set of 5 pieces containing: mechanical vernier calipers 150 mm 2670-0302, micrometer 0-25 mm 9538-0101, angle 150x100 mm 2533-1158, steel rule 150 mm 8427-0107, scriber 150 mm with hard metal tip 2474-0102. Supplied in a plastic TC tray with removable cover. Fits in Teng Tools tool boxes and tool trolleys.

Art. no.	12864	-0109
Case size LxWxH	mm	265x142x50



No 12864

Limit. Set of 5 pieces containing digital vernier calipers 150 mm 2928-0104, micrometer 0-25 mm 9538-0101, square 150x100 mm 2533-1158, steel rule 150 mm 8427-0107, scriber 150 mm with HM-tip 2474-0102. Supplied in a plastic TC tray with removable cover. Fits in Teng Tools tool boxes and tool trolleys.

Art. no.	11861	-0104	-0203
System of units.....		metric	Inch
Case size	mm	265x142x50	265x142x50



No 11861

Measuring Kits



No 13957

Limit. 9 pcs measuring set. For measuring, troubleshooting and control. A basic assortment for vehicle mechanical, repair, service etc. Supplied in blue plastic box.

Code no.	13957	-0105
IR Thermometer, measuring range	°C	-20 - +500
Digital caliper, measuring range	mm	0-150
Digital brake disc caliper, measuring range	mm	0-75
Tyre pressure gauge, measuring range	kg/cm ²	0-7
Tyre tread depth gauge	mm	0-25
Steel rule	mm	300
Feeler gauge, 13 blades	mm	0.05-1.00
Thread pitch gauge 60°		Metric/UNC
Multimeter:		
Voltage	DC	500 V
Voltage	AC	500 V
Current	DC	10 A
Resistance		20 Ω
Temperature	°C	-40 - +250
Continuity test		-
Diode test		-
Size of box LxWxH	mm	450x228x60



No 12863

Limit. Set of 9 pieces. Includes digital sliding caliper, micrometer, multimeter, flat square, protractor, thread gauges, feeler gauges, steel rule, scriber. Supplied in blue plastic box.

Art. no.	12863	-0100
Multimeter: direct voltage	DCV	200 mV -500 V
alternating voltage	ACV	200 V - 500 V
direct voltage	DCA	2000 μA - 10 A
resistance	Ω	200 Ω -20 MΩ
temperature	°C	-40 - +250
Digital sliding caliper	mm	150
Flat square	mm	150
Protractor	mm	80
Thread gauge M/UNC	No. of blades	55
Feeler gauges 13 blades	mm	0.05-1.0
Steel rule	mm	300
Scriber HM, length	mm	150
Case size LxWxH	mm	450x228x60

Measuring Kits

Limit. 12 pcs measuring set. For measuring, troubleshooting and control. A basic assortment for vehicle mechanical, repair and service etc.
Fit in Teng Tools tool boxes and tool trolleys.

Code no.	13958	-0104
IR Thermometer, measuring range	°C	-20 - +500
Digital caliper, measuring range	mm	0-150
Digital brake disc caliper, measuring range	mm	0-75
Tyre pressure gauge	kg/cm ²	7
Tyre tread depth gauge	mm	0-25
Micrometer	mm	0-25
Dial gauge	mm	10
Magnetic stand, max. height	mm	280
Steel rule	mm	300
Feeler gauge, 13 blades	mm	0.05-1.00
Thread pitch gauge 60°		Metris/UNC
Multimeter:		
Voltage	DC	1000 V
Voltage	AC	750 V
Current	DC	10 A
Resistance		20 Ω
Dwell		
Enging tach		-
Continuity test		-
Diode test		-
Size of box LxWxH	mm	560x265x40
Weight	kg	3.9



No 13958

Limit. Set of 14 pieces. Includes digital sliding caliper, micrometer, telescopic measurement stop (6 parts), flat square, protractor, thread gauge, feeler gauges, steel rule, scriber and compasses.
Supplied in blue plastic tray.

Art. no.	12862	-0101
Digital sliding caliper	mm	150
Micrometer	mm	0-25
Telescopic measurement set (6)	mm	8-150
Flat square	mm	150
Protractor	mm	80
Thread gauge M/UNC	No. of blades	55
Feeler gauges 13 blades	mm	0.05-1.0
Steel rule	mm	300
Scriber HM, length	mm	150
Case size LxWxH	mm	450x288x60



No 12862

Measuring Kits



No 12861

Limit. Set of 20 pieces. Includes digital sliding caliper, depth measurement stop, micrometer, telescopic measurement stop (6 parts), flat square, base square, protractor, indicator gauge, magnetic indicator stand, hole gauge (2), thread gauge, feeler gauges, steel rule, scriber and compasses. Supplied in a plastic TC tray with removable cover. Fits in Teng Tools tool boxes and tool trolleys.

Art. no.	12861	-0102
Digital sliding caliper	mm	150
Depth measurement stop, length	mm	75
Micrometer	mm	0-25
Telescopic measurement set (6)	mm	8-150
Flat square	mm	150
Protractor	mm	120
Dial indicator	mm	10/0.01
Indicator stand, max. height	mm	280
Hole size gauge	mm	0.45-1.5 1.5-3.0
Thread gauge M/UNC	No. of blades	55
Feeler gauges 13 blades	mm	0.05-1.0
Steel rule	mm	300
Scriber HM, length	mm	150
Callipers	mm	200
Case size LxWxH	mm	560x265x40
Weight	kg	5.6



No 12267

Limit. Set of 23 parts. Contains digital sliding caliper, depth measurement stop, workshop callipers, micrometer, telescopic measurement stop (6 parts), flat square, base square, protractor, indicator gauge, tilt indicator, magnetic indicator stand, hole gauge (2), thread gauge, feeler gauges, steel rule, scriber and compasses. Supplied in blue plastic box.

Art. no.	12267	-0102
Digital sliding caliper	mm	150
Depth measurement stop, length	mm	75
Workshop callipers	mm	300
Micrometer	mm	0-25
Telescopic measurement set (6)	mm	8-150
Flat square	mm	100
Base square	mm	300
Protractor	mm	120
Dial indicator	mm	10/0.01
Level type dial indicator	mm	0.8/0.01
Indicator stand, max. height	mm	280
Hole size gauge	mm	0.45-1.5 1.5-3.0
Thread gauge M/UNC	No. of blades	55
Feeler gauges 13 blades	mm	0.05-1.0
Steel rule	mm	300
Scriber HM, length	mm	150
Callipers	mm	200
Case size LxWxH	mm	550x280x60
Weight	kg	6.0

Calipers

Calipers

Limit. Miniature vernier callipers. Of brass. Graduated in mm and inches.

Art. no.	2654	-0203
Measuring length	mm 100	
Jaw length	mm 19	



No 2654

Limit. Miniature vernier callipers. Of steel. Matt chromium-plated scale. Graduated in mm, plus vernier for $\frac{1}{20}$ mm. With depth gauge and points for internal measuring. DIN 862.

Art. no.	6006	-0100
Measuring length	mm 100	
Jaw length	mm 27	



No 6006

Limit. Made of hardened tool steel. Graduated in millimetres and imperial measures. Vernier scale for $\frac{1}{128}$ " and $\frac{1}{20}$ mm. Equipped with depth gauge and needle points for inside measurements. Quick locking. DIN 862.

Art. no.	11909	-0108
Measurement length	mm 150	
Leg length	mm 40	



No 11909

Limit. 4 functions. Stainless steel. Fully hardened. Matt chromium-plated scale. Graduated in mm and inches, and with Nonie scale for $\frac{1}{128}$ " and $\frac{1}{20}$ mm of 39 mm length. Equipped with depth gauge and needle points for inside measurements. Quick locking. DIN 862. 4-function see information page 0000.

Art. no.	2670	-0302	-0351
Measurement length	mm 150	200	
Leg length	mm 38	38	
Ditto calibrated	2670	-0401	-
Spare part set	2670	-2001	-2001



No 2670

Digital Calipers

Limit. 4 functions. Stainless steel. Can be switched between mm inches. With reset button. Off button.

No 2928-0146. Has absolute measuring function, and can be switched from 0-value to the absolute measurement value. DIN 862. Extra battery V13GS/V357 (SR44).

Art. no.	2928	-0104	-0146	-0161	-0203
Measurement length	mm 150	150	200	300	
Jaw length	mm 40	40	40	60	
Digit height	mm 6	6	6	6	
Resolution	mm 0.01	0.01	0.01	0.01	
Ditto calibrated	2928	-0153	-	-	-
Extra battery	2928	-1003			
Spare part set	2928	-2001			



No 2928

Limit. Digital caliper. Triple reading: metric / inch / inch fraction Made of stainless steel. Automatic switch off. Zero set in any position 4-function. DIN 863. Supplied in box.. Battery type SR44.

Art. no.	14455	-0100
Measuring length	mm 150	
Jaw length	mm 40	
Digit height	mm 11	
Resolution	mm 0.01	
Resolution	inch 0.0005	
Resolution	inch fraction 1/128	
Extra battery	2928	-1003



Nr 14455



Limit. Digital caliper with reading 0.01 mm. Made of stainless steel. Zero set in any position. Automatic switch off. Adjustable between mm and inch. 4 function. DIN 862. Battery type SR44.

Art. nr.	13233	-0101
Measuring length	mm 150	
Jaw length	mm 40	
Height of figures	mm 11	
Resolution	mm 0.01	
Spare battery	2928	-1003



No 13233

Calipers

Calipers

Waterproof digital caliper



No 12256

Limit. IP 65. Stainless steel. 4-function. Resistant to water, oil, coolant, etc. according to ISO 65. Switchable between metric and imperial measurements. Automatic shutoff. DIN 862. Extra battery SR44, art. no. 2928-1003.

Art. no.	12256	-0105
Measuring length	mm 150	mm 150
Leg length, ext.	mm 40	mm 40
Leg length, int.	mm 15	mm 15
Digit height	mm 9	mm 9
Resolution	mm 0.01	mm 0.01
Accuracy	mm 0.03	mm 0.03

With dial indicator



No 5270

Limit. 4 functions. Stainless steel. The measuring faces are precision ground and polished. Matt chromium-plated scale. Graduated in mm. DIN 862. 4 functions, see page 0000.

Art. no.	5270	-0309
Measuring length	mm 150	mm 150
Scale division on dial	mm 0.02	mm 0.02
1 turn of the pointer =	mm 2	mm 2
Jaw length	mm 40	mm 40

With scribe

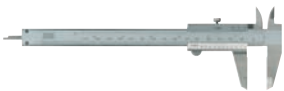


No 3513

Limit. Of stainless steel. The measuring surfaces are matt chromium-plated for non-glare reading. Graduated in mm and inches, and with vernier for $\frac{1}{128}$ " and $\frac{1}{20}$ mm of 39 mm length. Also provided with depth gauge and points for internal measuring. DIN 862. 3513-0202 has tungsten carbide tip.

Art. no.	3513	-0103	-0202
Measuring length	mm 150	mm 150	mm 150
Jaw length	mm 40	mm 40	mm 40

For left hand use



No 10236

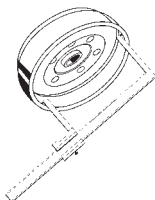
Limit. 4 functions. Stainless steel. Matt chromium-plated scale. Graduated in mm and inches. With depth gauge and points for internal measuring. DIN 862. Supplied in case. 4 functions, see page 0000.

Art. no.	10236	-0104
Measuring length	mm 150	mm 150
Leg length	mm 40	mm 40

For brake drums



No 10909



Limit. Of stainless steel. Matt chromium-plated scale and vernier. With fine adjustment. DIN 862.

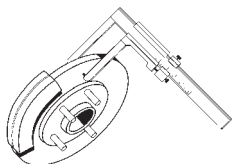
Art. no.	10909	-0050	-0100
Measurement range	mm 40-340	mm 40-340	mm 50-500
Leg length	mm 105	mm 105	mm 150

Art. no.	10909	-0209
Measurement range	mm 50-600	mm 50-600
Leg length	mm 200	mm 200

For brake discs



No 10910



Limit. Of stainless hardened steel. Matt chromium-plated scale and vernier. Measurement value can be locked when the legs are open. DIN 862.

Art. no.	10910	-0107
Measurement range	mm 0-60	mm 0-60
Leg length	mm 85	mm 85

Calipers

Calipers

For brake discs

Limit. Digital caliper for brake discs. Hardened stainless steel. Holdfunction for hold measured value when caliper remove after measuring. Zero on any position. Adjustable between mm and inch.
Extra battery type V13GSV37 8SR 44).

Art. no.	13949	-0106
Measuring range	mm 75	
Length of jaws.....	mm 92	
Digit height	mm 11	
Reading.....	mm 0.01	



No 13949

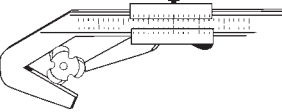
Three point vernier caliper

Limit. For measuring external diameter of 3, 6 and 12 bladed tools. Cylindrical objects can also be measured. Of stainless steel. Matt chromium-plated scale. Graduation: mm and inches.

Art. no.	2394	-0109
Measuring range diameter	mm 4-45	
Vernier	mm 0.02	



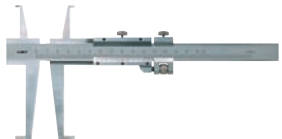
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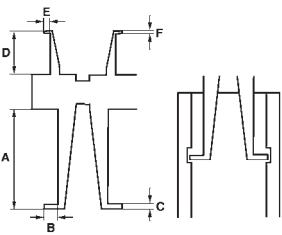
Internal vernier caliper

Limit. Made of hardened tool steel and with fine adjustment. For inside measurement of inner slot diameter.
12817-0107 has double measurement jaws.

Art. no.	12817	-0107	-0206
Measurement length	mm 9-150		30-300
A.....	mm 74		110
B.....	mm 10		10
C.....	mm 5		5
D.....	mm 35		-
E.....	mm 4		-
F.....	mm 2		-



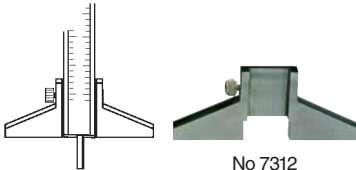
No 12187



Depth gauge stop

Limit. Suitable for most vernier callipers.

Art. no.	7312	-0107
Stock length	mm 75	
Track width	mm 4	
Track height	mm 16.5	



No 7312

Calipers

Workshop vernier calipers



No 12259

Limit. From tool steel. Hardened. Matt chromium plated scale graduated in metric and imperial measures. Vernier scale. Tips for internal measurements. DIN 862.

Art. no.	12259	-0102
Measurement length	mm	300
Jaw length	mm	60



No 15238

Limit. Of stainless steel. Hardened legs. Matt chromium-plated scale. Upper leg ground for access in grooves. Recess on lower legs for internal measurements. Tolerance according to DIN 862. Vernier scale 0.05 mm.

Art. no.	15238	-0101
Measurement length	mm	300
Lower leg length	mm	125
Upper leg length	mm	56



No 2305

Limit. Of stainless steel. Hardened. Matt chromium-plated scale. Steps on jaws for internal measuring. Tolerance according to DIN 862. Vernier scale 0.05 mm.

Art. no.	2305	-0057	-0107	-0206	-0404	-0503
Measuring length	mm	300	400	500	800	1000
Jaw length	mm	90	200	150	150	150



No 2304

Limit. Made of tool steel. Hardened. Matt chromium-plated scale. Steps on jaws for internal measuring. With fine adjustment. Tolerance according to DIN 862. Vernier scale 0.05 mm.

Art. no.	2304	-0108	-0207	-0306	-0405	-0504
Measurement length	mm	500	800	1000	1500	2000
Leg length	mm	100	125	125	150	200

Digital workshop vernier calipers

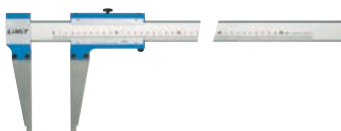


No 2289

Limit. Digital vernier callipers. Stainless steel. Max/min value function. Hold-function. Can be reset to mm or inches. Adjustable absolute value. Fine adjusting screw. DIN 862.

Extra battery V13GS/V357 (SR44) art.no. 2928-1003.

Art. no.	2289	-0107	-0156	-0172	-0206
Measuring length	mm	500	600	800	1000
Jaw length	mm	100	300	200	150
Digit height	mm	8	8	8	8
Resolution	mm	0.01	0.01	0.01	0.01



No 0575

Aluminium calipers

Limit. Of structural aluminium. The jaws are made of hardened stainless steel. Easy to use because of their low weight. Non-glare scale. Graduated in mm. Vernier for 1/20 mm. Tolerance according to DIN 862.

Art. no.	0575	-0104	-0203	-0302	-0401	-0500	-0559	-0609	(-0708)	(-0807)
Measurement length	mm	500	800	800	1000	1000	1500	1500	2000	3000
Jaw length	mm	150	250	150	400	150	500	150	150	150
Weight	kg	1.1	1.1	1.5	1.6	1.8	1.9	2.1	2.6	3.4

Calipers

Depth gauges

Limit. Of stainless steel. Matt chromium-plated scale. The ends of the rod and base are hardened. The scale is graduated in mm and has 1/20 mm vernier. Lockable. Tolerance according to DIN 862.

Art. no.	2643	-0108	-0207	-0405	-0504
Measuring depth	mm	150	200	300	500
Base length	mm	100	100	100	150



No 2643

Limit. Of stainless steel. Matt chromium-plated scale. Reversible scale for measuring with hook or tip. Graduated in mm. Vernier scale 0.05 mm. Tolerance according to DIN 862.

Art. no.	2255	-0107
Measuring depth	mm	300
Base length	mm	150
Hook dim.	mm	16x10



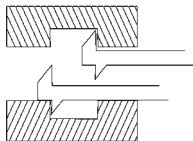
No 2255

Limit. Of stainless steel. Matt chromium-plated scale. Reversible scale for measuring with hook or point. Graduated in mm. Vernier scale 0.05 mm. Tolerance according to DIN 862.

Art. no.	12257	-0104
Measuring depth	mm	200
Stock length	mm	100
Hook length	mm	6



No 12257



Limit. Of stainless steel. Matt chromium-plated scale. With replaceable, hardened steel pin. The scale is graduated in mm and has 1/20 mm vernier. Lockable. Tolerance according to DIN 862.

Art. no.	2645	-0106	-0205
Measuring depth	mm	80	200
Base length	mm	50	100



No 2645

Calipers

Depth gauges

Digital depth gauges

Limit. Adjustable absolute value. Can be switched from mm to inches. With reset and off button. Fine adjusting screw. DIN 862.
Extra batteries V 13 GS/V 357 (SR44), art.no. 2928-1003.



No 2146

Art. no.	2146	-0605
Measuring depth	mm	200
Resolution	mm	0.01
Precision	± mm	0.03
Base length	mm	100
Indicator rod dim.	mm	14,5 x 4



No 13236

Limit. Digital depth gauge for measuring tread depth of tires and suchlike.
Extra battery V13GS/V357 (SR44).

Art. no.	13236	-0108
Tread depth	mm	0-25
Measuring tip dimension	mm	5 x 4
Stop dimension	mm	55 x 6
Extra battery	2928	-1003

Height gauges



No 2249

Limit. Precision design. Matt chromium-plated scale. Graduated in mm. With fine-adjusting screw and vernier reading 0.05 mm. DIN 862.

Art. no.	2249	-0056	-0106	-0205
Scribing height	mm	300	500	1000
Base plate dim.	mm	110x60	150x90	220x150
Weight	kg	2.6	4.7	10
Extra scriber point	2249	-0304	-0403	-0403



No 10235

Limit. The measurement value is read-off in whole mm on the counter and in 0.01 mm on the dial indicator. 1 pointer turn = 1 mm. Dual counter, one adding and one subtracting, that can be reset individually in optional position. Flexible height setting with knob on the back. Measuring tip of hard metal. DIN 862.

Art. no.	10235	-0105
Scribing height	mm	500
Base dim.	mm	150x100
Extra scriber	10235	-0204



No 2146

Digital height gauge

Limit. Of stainless steel. High contrast LCD display. Adjustable measuring alignment from mm to inches. Reset button. Hold function. DIN 862. Connection to PC. Suitable PC cable, see 7311-0108 and 7311-0207.
Extra battery 3 V CR 2032, art. no. 10960-0304.

Height marking gauges	2146	-1108	-1306
Scribing height	mm	300	500
Resolution	mm	0.01	0.01
Precision	±mm	0.03	0.03
Horizontal range of measuring tip, max	mm	110	145
Base dim.	mm	110x65	120x170
Overall height	mm	455	640
Extra scriber point	2146	-1207	-1405

Micrometers

Micrometers

Limit. Forged frame and matt chromium-plated scale. Hardened 6.5 mm with fine-polished measuring faces of hard metal. Friction sleeve and lock nut. DIN 863.

Art. no.	9538	-0101	-0200	-0309	-0408
Measuring range	mm	0-25	25-50	50-75	75-100
Reading	mm	0.01	0.01	0.01	0.01
Precision	±mm	0.004	0.004	0.005	0.005
Ditto calibrated	9538	-0150	-	-	-



No 9538

Art. no.	9538	-1000	-1109	-1208	-1307	-1406
Measurement range	inch	0-1	1-2	2-3	3-4	4-5
Reading	inch	0.0001	0.0001	0.0001	0.0001	0.0001
Precision	±mm	0.004	0.004	0.005	0.005	0.006

Limit. Splashproof - IP54. Forged frame. Hardened spindle 6.5 mm with fine-polished measuring faces of hard metal. Off button. Friction sleeve and lock nut. DIN 863. Battery type SR 44, art.no. 2928-1003.

Art. no.	9664	-0107	-0206	-0305	-0404
Measuring range	mm	0-25	25-50	50-75	75-100
Resolution	mm	0.001	0.001	0.001	0.001
Precision	±mm	0.004	0.004	0.005	0.005



No 9664

Limit. For left and right-handed use with displays on both sides. Fine-polished measuring faces of hard metal. Hardened spindle 6.5 mm. The micrometers can also be read upside down. DIN 863. 3V battery CR2032, art. no. 10960-0304.

Art. no.	12060	-0101
Measurement range	mm	0-30
Precision	±mm	0.004



No 12060

Limit. Enamelled steel frame and matt chromium-plate scale. Hardened spindle 6.5 mm with fine-polished measuring faces of hard metal. Friction screw and lock nut. DIN 863.

Art. no.	9542	-0105	-0204	-0303	-0402
Measuring range	mm	100-125	125-150	150-175	175-200
Reading	mm	0.01	0.01	0.01	0.01
Precision	±mm	0.006	0.006	0.007	0.007



No 9542

Limit. Large measuring drum with 100 division lines. 1 turn = 1 mm. Matt chromium-plated scale. Fine-polished measuring faces of hard metal. Friction drum and lock nut. DIN 863.

Art. no.	10237	-0103
Measuring range	mm	0-25
Reading	mm	0.01
Precision	±mm	0.04



No 10237

Limit. Measurement value is shown on the counter. Fine-polished measuring faces of hard metal. Friction drum and lock nut. DIN 863.

Art. no.	11910	-0105	-0204
Measurement range	mm	0-25	25-50
Reading	mm	0.01	0.01
Precision	±mm	0.004	0.004



No 11910

Limit. Enamelled steel frame and matt chromium-plated scale. With interchangeable insert rods. Hardened spindle and insert rods 8.0 mm with fine-polished measuring faces of hard metal. DIN 863.

Art. no.	9544	-0103	-0202
Measuring range	mm	0-150	150-300
Reading	mm	0.01	0.01
Precision	±mm	0.006	0.009



No 9544

Limit

Micrometers

Micrometers



No 9676

Limit. Forged frame. Hardened spindle and interchangeable insert rods 8 mm with fine-polished measuring faces of hard metal. Absolute/incremental measuring. Adjustable absolute value. Friction sleeve and lock nut. DIN 863. Battery type SR 44, art.no. 2928-1003.

Art. no.	9676	-0103
Measuring range	mm	0-150
Resolution	mm	0.001
Precision	±mm	0.006



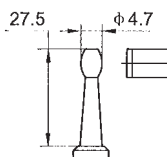
No 9545

Limit. Enamelled low weight frame of steel. Matt chromium-plated scale. Adjustable measuring rod with fixed spacing sleeves. Hardened spindle 8.0 mm with fine-polished measuring faces of hard metal. DIN 863.

Art. no.	9545	-0102	-0201	-0300	-0409
Measuring range	mm	300-400	400-500	500-600	600-700
Reading	mm	0.01	0.01	0.01	0.01
Precision	±mm	0.011	0.013	0.015	0.016



No 9548



Tube micrometer

Limit. Forged frame and matt chromium-plated scale. Hardened spindle 6.5 mm with fine-polished measuring face of hard metal. Anvil 4.8 mm. Friction sleeve and lock screw. DIN 863.

Art. no.	9548	-0109
Measuring range	mm	0-25
Reading	mm	0.01
Precision	±mm	0.006



No 13268

Digital tube micrometer

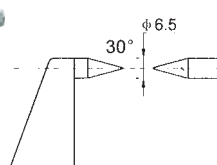
Limit. Digital tube micrometer. Waterproof IP 54. Forged frame with matt chromium-plated scale. Hardened spindle with twin spherical measuring faces. Friction sleeve and lock nut. Can be switched between mm and English inches. Automatic switching off. DIN 863.

Supplied in case. Battery type SR44, art. no. 2928-1003.

Art. no.	13268	-0109
Measurement range	mm	0-25
Resolution	mm	0.001
Precision	mm	±0.004



No 9564



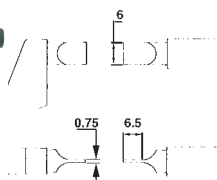
With conical measuring tips

Limit. Forged frame with matt scale. Hardened spindle 6.5 mm with hardened measuring tips of hard metal. Friction screw and lock nut. DIN 863.

Art. no.	9564	-0108
Measuring range	mm	0-25
Reading	mm	0.01
Precision	±mm	0.004



No 9609



With blade measuring tips

Limit. Forged frame with matt chromium-plated scale. Hardened spindle 8 mm with hardened measuring tips. Friction sleeve and lock nut. DIN 863.

Art. no.	9609	-0105
Measuring range	mm	0-25
Reading	mm	0.01
Precision	±mm	0.004
Blade thickness	mm	0.75
Blade length x width	mm	6.5x6

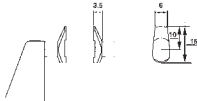
Micrometers

Micrometers

Tooth micrometer

Limit. Forged frame and matt chromium-plated scale. Hardened spindle 7.5 mm. Friction sleeve and lock nut. DIN 863.

Art. no.	9613	-0109
Measuring range	mm	0-25
Reading	mm	0.01
Precision	±mm	0.004
Face height	mm	6
Face width	mm	6
Face thickness	mm	3.5



No 9613

Wire micrometer

Limit. Matt chromium-plated scale. Hardened spindle 6.5 mm with fine-polished measuring faces of hard metal. Friction sleeve and lock nut. DIN 863.

Art. no.	9614	-0108
Measuring range	mm	0-13
Reading	mm	0.002
Precision	±mm	0.004
Measuring height	mm	5



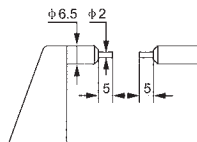
No 9614



For precision work

Limit. Reading 0.01 mm. For measuring small components and inserts etc. Thimble diameter 17 mm. Measuring faces of steel. With friction and locking device. Insulation plates to counteract heat from hand. Matt chromium-plated micrometer head. DIN 863.

Art. no.	7322	-0105
Measurement range	mm	0-16.5
Measuring pin, length x diam.	mm	5x2



No 7322

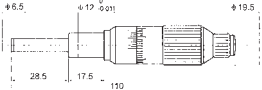
Micrometer head

Limit. Vernier for reading 0.01 mm. Measuring face of hard metal. With friction thimble. DIN 863.

Art. no.	7324	-0103
Measuring range	mm	0-25
Fitting diam.xlength	mm	12x17



No 7324



Thread micrometers

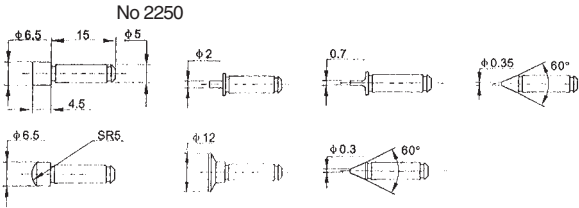
Limit. Forged frame with matt chromium-plated scale. Reading 0.01 mm. For outside measuring of thread diameter. Interchangeable V-shaped and cone-shaped anvils (Not included). Friction thimble and locking device. Tolerance according to DIN 863.

Art. no.	13272	-0103	-0400	-0509	-0608
Measuring range	mm	0-25	25-50	50-75	75-100
Accuracy	mm	0.01	0.01	0.01	0.01
Precision	mm	±0.004	±0.004	±0.004	±0.005
Set with 6 pairs of V-shaped and cone-shaped anvils 60°	13272	-0202			
Pitch	mm	0.4-0.5	0.6-0.9	1-1.75	2-3 3.5-5 5.5-7
Threads per inch		64-48	44-28	24-14	13-9 8-5 4.5-3-5
Set with 10 pairs of V-shaped and cone-shaped anvils 55°	13272	-0301			
Threads per inch		60-48	48-40	40-32	32-24 24-18
		18-14	14-10	10-7	7-4.5 4.5-3.5



No 13272

Micrometers



Micrometers

With exchangeable tips

Limit. Universal micrometer with 7 pairs of interchangeable measuring tips. The measuring tips are easy to replace. The anvil is adjustable. Measuring tips: smooth Ø 6.5 mm, smooth Ø 12 mm, smooth Ø 2x4 mm, spherical Ø 6.5 mm, tapered 60°, pointed 60°, knife-edged 6.5x0.8x3.5 mm. Forged frame, matt chromium-plated sleeve. Friction sleeve.

Art. no.	2250	-0102
Measuring range	mm	0-25
Reading	mm	0.01
Precision	±mm	0.004



No 6007

Micrometer holders

Limit. Rotating holder. Black finish.

Art. no.	6007	-0208
Clamping range	mm	0-14
Height	mm	100
Diameter	mm	105
Weight	kg	1.7



No 10238

Limit. Rotating holder.

Art. no.	10238	-0102
Clamping range	mm	7-16
Base (length x width)	mm	120x80

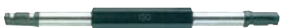


No 13272

Thread micrometers

Limit. Forged frame with matt chromium-plated scale. Reading 0.01 mm. For outside measuring of thread diameter. Interchangeable V-shaped and cone-shaped anvils (Not included). Friction thimble and locking device. Tolerance according to DIN 863.

Art. no.	13272	-0103	-0400	-0509	-0608
Measuring range	mm	0-25	25-50	50-75	75-100
Accuracy	mm	0.01	0.01	0.01	0.01
Precision	mm	±0.004	±0.004	±0.004	±0.005
Set with 6 pairs of V-shaped and cone-shaped anvils 60°	13272	-0202			
Pitch	mm	0.4-0.5	0.6-0.9	1-1.75	2-3
Threads per inch		3.5-5	5.5-7	64-48	44-28
Set with 10 pairs of V-shaped and cone-shaped anvils 55°	13272	-0301			
Threads per inch		60-48	48-40	40-32	32-24
		18-14	14-10	10-7	7-4.5



No 2624

Control gauges

Limit. Intended for controlling external micrometers. The measuring values correspond to the lower and upper limit for respective measuring range. Size 50 mm and larger are provided with insulation to counteract heat from hand.

Art. no.	2624	-3006	-3105	-3204	-3303
Length	mm	25	50	75	100
Precision	± µm	0.5	1.0	1.0	1.5
Art. no.	2624	-3402	-3501	-3600	-3709
Length	mm	125	150	175	200
Precision	± µm	1.5	2.0	2.0	2.5

Micrometers

Depth micrometer

Limit. Reading 0.01 mm, with interchangeable insert rods in steps of 25 mm. Matt chromium-plated micrometer head. DIN 863.

Art. no.	7325	-0102
Measuring depth	mm	0-100
Base length	mm	63
Number of insert rods	unit	4
Insert rod diameter	mm	4.5

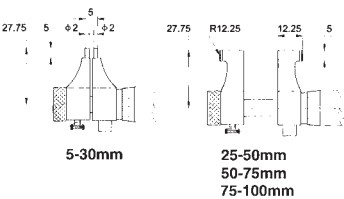


No 7325

Internal micrometers



No 9615



Limit. Matt chromium-plated scale. Hardened and fine-polished measuring faces. Friction screw and lock screw. DIN 863. Supplied with adjusting ring.

Art. no.	9615	-0107	-0206	-0305	-0404
Measuring range	mm	5-30	25-50	50-75	75-100
Reading	mm	0.01	0.01	0.01	0.01
Precision	±mm	0.007	0.007	0.008	0.008

Limit. Matt chromium-plated scale. Consist of measuring head and requisite extension sleeves. Supplied with adjusting frame. DIN 863.

Art. no.	9623	-0107	-0206	-0305
Measuring range	mm	50-200	50-600	150-1400
Reading	mm	0.01	0.01	0.01
Number of parts	unit	5	7	9



No 9623

Three-point internal micrometers

Limit. Three-point micrometers for measuring holes. With one-hand pistol grip and replaceable measurement head. Measuring faces of hard metal. Friction sleeve and locking catch. Extension bar for larger measurement depths as well as setting rings are included. Supplied in case. Indicator dial not included. Digital gauge art. no. 15130-0308 recommended.

Art. no.	12061	-0100	-0209	-0308	-0407
Measurement range	mm	6-12	12-20	20-50	50-100
Precision	±mm	0.004	0.004	0.005	0.005
No. of measurement heads	ea.	3	2	4	4
Extension bar	mm	100	150	150	150



No 12061 with gauge

Limit. For measuring holes. With friction device that gives a constant measurement force and self-centering measurement device. Measuring faces of hard metal. Measurement tips reach to 0.5 mm from the bottom of a blind hole. Setting ring included.

Art. no.	12781	-0109	-0208	-0307	-0406	-0505	-0604	-0703	-0802	-0901	-1008
Measurement range	mm	12-16	16-20	20-25	25-30	30-40	40-50	50-63	62-75	75-88	87-100
Reading	mm	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Precision	mm	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005
Measuring depth	mm	80	80	90	90	97	97	114	114	114	114



No 12781

Micrometers



No 12782

Three-point internal micrometers

Limit. Set of several micrometers incl. setting rings and extension bar. The micrometers have measuring faces of hard metal. Measurement tips reach to 0.5 mm from the bottom of a blind hole.

Art. no.	12782	-0108	-0207
Measurement range	mm	20-50	50-100
Extension bar	mm	150	150
Number of micrometers	ea.	4	4
No. of setting rings	ea.	2	2



No 12783

Setting rings

Limit. Intended for inspection and setting internal micrometers and hole indicators.

Art. no.	12783	-0107	-0206	-0305	-0404	-0503	-0602	-0701
Diameter	mm	10	16	25	30	40	62	87
Tolerance	µm	±1.5	±1.5	±1.5	±1.5	±1.5	±1.5	±1.5
Cylindricity ...	µm	1.0	1.0	1.0	1.0	1.0	1.0	1.0



No 5291

Telescopic gauges

Limit. Adjustable gauge. Set of 6. Consists of two spring-loaded measuring cylinders. Of hardened steel. Locking with screw in top part of the handle. Can be read with a micrometer.

Art. no.	5291	-0106
Measuring range	mm	8-150

No 5291
Spare gauges

Limit. Spare gauges of set 5291.

Art. no.	5291	-0205	-0304	-0403
Measuring range	mm	8-12.7	12.7-19	19-32
Art. no.	5291	-0502	-0601	-0700
Measuring range	mm	32-54	54-90	90-150



No 6193

Cylinder gauges

Limit. For precision measuring in holes and grooves. Provided with interchangeable measuring tips and spacers for different dimensions. The gauge is centered automatically with a spring-loaded support and has a hard metal coated measuring tip. Complete with dial indicator. Accuracy is $\pm 15 \mu\text{m}$ plus the gauge's accuracy, which is accordance with DIN 878.

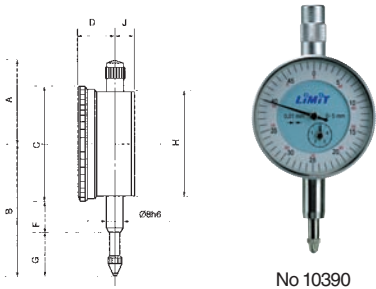
Art. no.	6193	-1002	-1101	-1200	-1309	-1408
Type	D	E	F	H	J	
Measurement range	mm	10-18	18-35	35-50	50-160	160-250
Precision	mm	0.01	0.01	0.01	0.01	0.01
Measuring depth	mm	100	125	150	150	400
Bottom holes can be measured from the bottom	mm	7	7	7.5	10	15
Number of measuring tips		9	9	4	12	12
Extra measurement tips - set	6193	-2000	-2109	-2208	-2307	-2406

Dial gauges

Dial gauges

Limit. Mini dial gauge. With turnable scale. Extra pointer that shows whole mm. Replaceable measuring tip. Without mounting lug. Tolerance according to DIN 878.

Art. no.	10390	-0106
Measurement range	mm	5
Scale division	mm	0.01
Scale graduation		0-50, 50-0
One pointer turn =	mm	0.5
Dial diameter	mm	40
Fixing pin diameter	mm	8
Dimension A	mm	38
Dimension B	mm	48
Dimension C	mm	42
Dimension D	mm	14
Dimension F	mm	14
Dimensions G	mm	13
Dimension H	mm	40
Dimension J	mm	7



No 10390

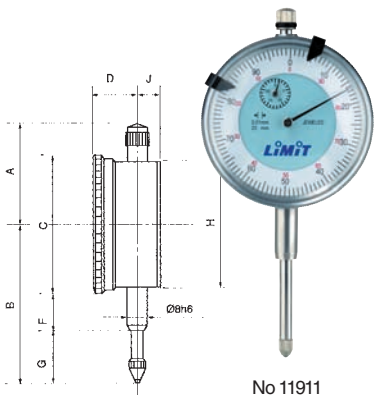
Limit. With turnable scale and two adjustable tolerance indexes. Extra pointer that indicates whole millimetres. Body made of aluminium. Replaceable measuring tip. Without mounting lug. Tolerance according to DIN 878.

11911-0153 Rear with securing lug, hole 6.5 mm.

Accessories, see 5318 page 0000.

Art. no.	11911	-0104	-0153	-0203
Measurement range	mm	10	10 with securing lug	25
Scale division	mm	0.01	0.01	0.01
Scale graduation		0-100, 100-0	0-100, 100-0	0-100, 100-0
One pointer turn =	mm	1	1	1
Dial diameter	mm	58	58	58
Fixing pin diameter	mm	8	8	8
Dimension A	mm	44	44	38
Dimension B	mm	69	69	81
Dimension C	mm	58	58	58
Dimension D	mm	17	17	17
Dimension F	mm	18	18	18
Dimensions G	mm	21	21	34
Dimension H	mm	54	54	54
Dimension J	mm	8.5	8.5	8.5

Art. no.	11911	-1003
Measurement range	inch	0.5
Scale division	inch	0.0005
Scale graduation	inch	0-50, 50-0
One pointer turn =	inch	0.05
Dial diameter	mm	58
Fixing pin diameter	mm	8
Dimension A	inch	1.48
Dimension B	inch	2.74
Dimension C	inch	2.28
Dimension D	inch	0.64
Dimension F	inch	0.69
Dimensions G	inch	0.91
Dimension H	inch	2.11
Dimension J	inch	0.32



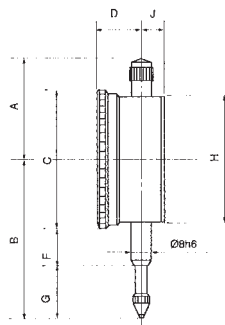
No 11911

Limit

Dial gauges



No 11912



Dial gauges

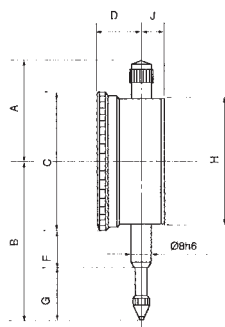
Limit. With turnable scale and two adjustable tolerance indexes. Extra pointer, graduated in 0.2 mm up to whole mm. Body made of aluminium. Replaceable measuring tip. Without mounting lug. Tolerance according to DIN 878.

Accessories, see 5318 page 0000.

Art. no.	11912	-0103
Measurement range	mm	1
Scale division	mm	0.001
Scale graduation		0-100, 100-0
One pointer turn =	mm	0.2
Dial diameter	mm	58
Fixing pin diameter	mm	8
Dimension A	mm	45
Dimension B	mm	69
Dimension C	mm	58
Dimension D	mm	17
Dimension F	mm	18
Dimensions G	mm	34
Dimension H	mm	54
Dimension J	mm	8.5



No 4397



Shock proof

Limit. With turnable scale and two adjustable tolerance indexes. Extra pointer that shows full mm. Body of strong plastic. Replaceable measuring tip. Without mounting lug (cannot be fitted with mounting lug). Tolerance according to DIN 878.

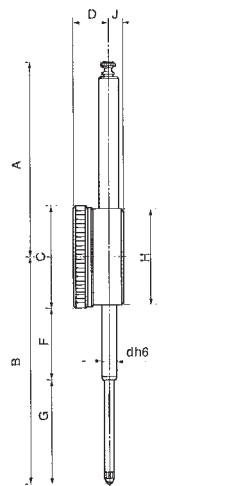
4397-0250 Rear with securing lug, hole 6.5 mm.

Accessories, see 5318 page 0000.

Art. no.	4397	-0201	-0250
Measurement range	mm	10	10 with securing lug
Scale division	mm	0.01	0.01
Scale graduation		0-100, 100-0	0-100, 100-0
One pointer turn =	mm	1	1
Dial diameter	mm	58	58
Fixing pin diameter	mm	8	8
Dimension A	mm	44	44
Dimension B	mm	69	69
Dimension C	mm	58	58
Dimension D	mm	17	17
Dimension F	mm	18	18
Dimensions G	mm	21	21
Dimension H	mm	54	54
Dimension J	mm	8.5	8.5
Ditto calibrated.	4397	-0300	-



No 11913



Limit. With revolving scale and two adjustable tolerance markers. Extra pointer that indicates whole millimetres. Body made of aluminium. Replaceable measuring tip. Without mounting lug. Tolerance according to DIN 878.

Accessories, see 5318 page 0000.

Art. no.	11913	-0102	-0201
Measurement range	mm	50	80
Scale division	mm	0.01	80
Scale graduation		0-100	0-100
One pointer turn =	mm	1	1
Dial diameter	mm	58	58
Fixing pin diameter	mm	8	8
Dimension A	mm	108	139
Dimension B	mm	127	169
Dimension C	mm	58	58
Dimension D	mm	20	20
Dimension D	mm	8	8
Dimension F	mm	40	52
Dimensions G	mm	58	88
Dimension H	mm	54	54
Dimension J	mm	8	8

Dial gauges

Dial gauges

Electronic dial gauge

Limit. Digital gauge. tolerance function. Adjustable between absolute and incremental measurement values. Resetting. Adjustable between metric and imperial. Automatic switching off. DIN 878.
Extra battery 3 V type CR 3032.

Art. no.	15130	-0100	-0209	-0308
Measurement range.	mm	12.5	25	12.5
Reading.	mm	0.01	0.01	0.001
Precision.	mm	0.02	0.02	0.013
Digit height.	mm	12	12	12
Dial diameter.	mm	57	57	57
Gauge thickness.	mm	26	26	26
Fixing pin diameter.	mm	8	8	8



No 15130-0100

Accessories

Back with lug. Only for Käfer dial indicators with diameters 58 and 61 mm.

Lift arm for dial indicators.

Magnetic attachment. Magnetic back and ball-joint. For dial indicators and lever type indicators. Mounting hole 8 mm.



Back

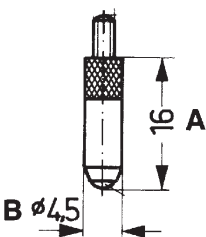


Lifting arm

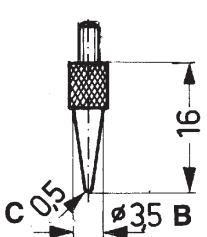


Magnetic attachment

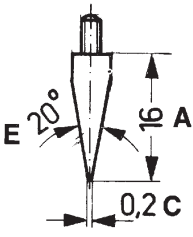
Art. no.	5318	-0105	-0204	-0303
Designation.		Back	Lifting arm	Magnetic attachment



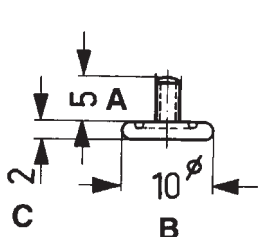
No 573/16



No 573/15



No 573/20



No 573/11

Spare measuring tips for dial indicators.

Art. no.	5318	-1004	-1103	-1202	-1301
Orig. no.		573/16	573/15	573/20	573/11
Tip.		Half round	Tapered	Flat	Flat
Dimension A.	mm	16	16	16	5
Dimension B $\varnothing$	mm	4.5	3.5	-	10
Dimension C.	mm	-	0.5	0.2	2
Dimension D.	mm	-	-	5	-
Dimension E.		-	-	20°	-

Extension bars mm	Art. no. 2651
Length 10 mm	-0131
Length 20 mm	-0164
Length 30 mm	-0206
Length 60 mm	-0305
Length 90 mm	-0404

Limit. 15129-0103. Holder for indicator dial. With 8 and 6 mm holes and dovetail slot for level type dial indicator.

15129-0202. Holder with ball joint for level type dial indicator. Dovetail slot.

Art. no.	15129	-0103	-0202
Hole diameter for indicator dial/level type dial indicator.	mm	8 and 6	8
Holder arm dim.	mm	6x12	$\varnothing$ 8
Length.	mm	100	65



No 15129-0103

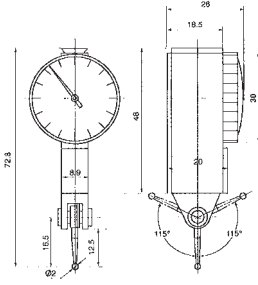


No 15129-0202

Dial gauges



No 2259



Flip flop indicators

Limit. The movement of the pointer is reversible. Turnable scale for zeroing. Supplied with two fixing pins, diameter 8 mm and 6 mm.

Art. no.	2259	-0103
Measuring range	mm	0.8
Scale division	mm	0.01
Scale graduation		0-40-0
Dial diam.	mm	30
Tip length	mm	15
Lever movement		vertical

Extra measurement tips. **2259** **-0202**

Extra fixed pin 8 mm. **2259** **-0301**

Magnetic stand with dial indicator



No 11908-1008

Limit. Magnetic stand 11908-0208 with indicator dial 11911-0104.

Art. no.	11908	-1008
Indicator stand:		
Max height adjustment	mm	330
Base dim.	mm	50x55x58
Securing hole diam.	mm	8
Magnetic force	kg	80
Weight	kg	1.9
Indicator dial:		
Measurement range	mm	10
Scale division	mm	0.01
Scale graduation		0-100, 100-0
One pointer turn =	mm	1
Dial diameter	mm	58

Magnetic stands



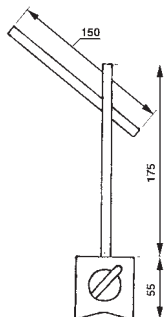
No 15128

Limit. Mini stand with magnetic base. V-slot in magnetic base's bottom. Magnetism switched on and off with a lever.

Art. no.	15128	-0104
Max height adjustment	mm	230
Dimension of magnetic foot	mm	30x35x36
Mounting hole diameter	mm	8 and 6
Magnetic fastening force	kg	40
Net weight	kg	8 and 6



No 6019



Limit. With fine adjustment. With magnetic base. The bottom and back are magnetic. The magnetism is switched on and off with the button. Vertically and horizontally adjustable. Supplied with top and bottom holder, but without dial indicator.

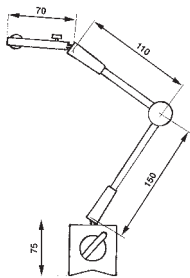
Art. no.	6019	-1004
Max height adjustment	mm	250
Base dimensions	mm	50x55x58
Mounting hole diameter	mm	8
Magnetic force	kg	75
Net weight	kg	1.5
Top and bottom holder.	6019	-0402
Separate magnetic base. Threaded hole M8.	6019	-0600

Dial gauges

Magnetic stands

Limit. With fine adjustment in the top holder. Holder with holes for indicator dial and dovetail slot for rocker indicator. Central locking with one knob for the bottom, middle and top joints. Magnetic base with V-slot in the bottom. Supplied without indicator dial.

Art. no.	11908	-0208
Max height adjustment	mm	330
Base dim.	mm	50x55x58
Mounting hole diameter	mm	8
Magnetic force	kg	80
Net weight	kg	8



No 11908

Flexible arm - lockable with lever in every required position. Magnetic base - on the V-shaped bottom and one side. The magnetism is switched on and off with a knob. Supplied without dial indicator.

Art. no.	6020	-0201
Arm length	mm	330
Base dimensions	mm	50x55x58
Mounting hole diameters	mm	6 & 8
Magnetic force	kg	80
Net weight	kg	1.6



No 6020

Inställningskub

Limit. Preset gauge for set-up tools in Milling machines etc. Digital gauge shows movement of top surface. By "0" is distance 50 mm. Magnet base makes it easy to put in vertical or horizontal position. The gauge has a calibration mechanism.

Art. no.	15320	-0100
Height	mm	50.00
Digital gauge range	mm	3
Dial gauge reading	mm	0.01
Width x Length	mm	50 x 50



No 15320

Dial gauge stand

Limit. Measuring table with precision ground surface. 3mm fine tuning.

Art. no.	5322	-0208
Table area	mm	60x60
Max height table/measuring tip	mm	145
Horizontal range, measuring tip/pillar	mm	75
Mounting hole diameter	mm	8
Weight	kg	3.5



No 5322

Thicknes gauges

Limit. Suitable for both soft and hard materials.

Art. no.	11915	-0100
Measurement range	mm	10
Reading	mm	0.01
Measuring surface diameter	mm	8
Yoke depth	mm	12



No 11915

Dial gauges



No 11916

Thicknes gauges

Limit. Suitable for both soft and hard materials.

Art. no.	11916	-0109
Measurement range	mm	10
Reading	mm	0.01
Measuring surface diameter	mm	10
Yoke depth	mm	30



No 11917

Limit. Suitable for both soft and hard materials.

Art. no.	11917	-0108
Measurement range	mm	10
Reading	mm	0.01
Measuring surface diameter	mm	10
Yoke depth	mm	120



No 2294

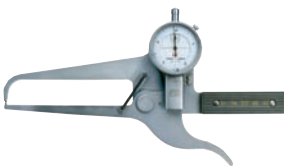
Electronic

Limit. Digital display. Can be switched between mm or inches. Automatic switching off. Reset button.

Extra battery V13GS/V 357 (SR44), art.no. 2928-1003.

Art. no.	2294	-0100
Measuring range	mm	0-15
Resolution	mm	0.01
Tolerance	mm	±0.02
Measuring surface diameter	mm	8.9
Yoke depth	mm	13

Snap gauges



No 2268

Limit. For external measuring. Hardened, round measuring tips. Turnable scale.

Art. no.	2268	-0102
Measuring range	mm	0-50
Scale division	mm	0.05
One pointer turn =	mm	5
Measuring depth, length	mm	125
Measuring tip dim.	mm	Ø 2.6x1.5



No 2272

Limit. For internal measuring. Hardened, round measuring tips. Turnable scale.

Art. no.	2272	-0106	-0205
Measuring range	mm	10-30	30-50
Scale division	mm	0.01	0.01
One pointer turn =	mm	2	2
Measuring depth	mm	100	150
Measuring tip dim.	mm	Ø 2.6x1.5	Ø 2.6x1.5

Rules and angles

Steel rules

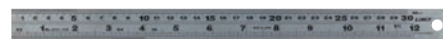
Limit. Of matt chromium-plated, stainless steel. **Extra thin** and bendable. Graduated in mm/mm on top and bottom edge.



No 2702

Art. no.....	2702	-0106	-0205	-0304	-0403	-0502	-0601
Length.....	mm	100	150	200	300	500	1000
Width×thickness.....	mm	13x0.5	13x0.5	13x0.5	13x0.5	18x0.5	18x0.5

Limit. Hardened **stainless** steel. Matt chromium-plated, non-glare scale. Graduated on one side - top in mm/mm, bottom in inches.



No 2703

Art. no.....	2703	-0055	-0105	-0204	-0303
Length.....	mm	150	300	500	1000
Width×thickness.....	mm	15x0.5	25x1.0	30x1.2	35x1.5

Limit. Hardened **stainless** steel. With matt, chromium-plated surface for non-glare reading. Graduated in mm on top edge and half mm on bottom edge. Blank back.



No 8427

Art. no.....	8427	-0107	-0206	-0305	-0404	-0503	-0602
Length.....	mm	150	300	600	1000	2000	3000
Width×thickness.....	mm	15x0.5	25x1	30x1.2	35x1.5	40x2	40x3
Precision.....	mm	±0.12	±0.13	±0.16	±0.20	±0.30	±0.40

Engineers rules

Limit. Of steel. With bevelled edge. Ground, Graduated in mm.

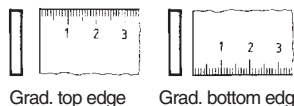


No 2705

Art. no.....	2705	-0202	-0509	-0608	-0707
Length.....	mm	500	1000	1500	2000
Width×thickness.....	mm	40x5	40x5	40x5	40x5
Pack.....	qty	5	1	1	1



No 2706



Limit. Of steel. Ground faces. Tolerance according to DIN 866/ II. Graduated in mm.

Graduated top edge

Art. no.....	2706	-0102	-0201	-0300	-0409	-0508
Length.....	mm	500	1000	1500	2000	3000
Width×thickness.....	mm	25x5	30x6	30x6	40x8	40x8
Pack.....	qty	5	1	1	1	1
Dito calibrated.....	2706	-	-0250	-	-0458	-

Graduated bottom edge

Art. no.....	2706	-1001	-1100	-1209	-1308
Length.....	mm	500	1000	1500	2000
Width×thickness.....	mm	25x5	30x6	30x6	40x8

Rules and angles

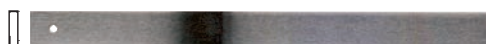


No 2505

Steel rules

Limit. With one bevelled edge. Ground.

Art. no.	2505	-0204	-0501	-0600	-0709
Length	mm	500	1000	1500	2000
Widthxthick.	mm	40x5	40x5	40x5	40x5
Pack	qty	5	1	1	1



No 2506

Limit. All faces bright. Flat faces ground - edges precision gauged. Rectangular section.

Art. no.	2506	-0104	-0302	-0500	-0609	(-0807)
Length	mm	500	1000	1500	2000	3000
Widthxthickness	mm	40x5	40x5	40x5	40x5	50x8
Weight	kg	0.7	1.4	3.8	8.0	12.0



No 2507

Limit. All faces bright. Flat faces ground - edges precision gauged. Tolerance according to DIN 874.

DIN 874/2. Rectangular section.

DIN 874/1. 500-2000 mm with rectangular section. 2500-4000 mm with I-section and hand grips.

Calibration certificate included.

Art. no. DIN 874/2	2507	-0103	-0202	-0301	-0400	(-0509)	(-0608)	(-0707)
Length	mm	500	1000	1500	2000	2500*	3000*	4000*
Widthxthickness	mm	30x6	40x8	50x10	60x12	70x15	80x15	100x16
Weight	kg	1.3	2.5	5.8	11.4	14.3	17.1	22.8
Ditto DIN 874/1	2507	-1507	-1606	-1705	-1804	(-1903)	(-2000)	(-2109)
Widthxthickness	mm	40x8	50x10	60x12	70x15	80x15	100x16	120x20
Weight	kg	1.3	4.0	8.4	12.0	17.0	28.0	35.0

*Length 2500-4000 according to DIN 874/1 has I-section.

Sharp edge rules



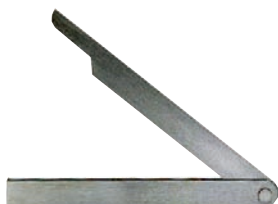
No 5209

Limit. Suitable for checking flatness. Tempered special steel. Smooth ground faces and polished edge. Insulation to counteract heat from hand. The measurement edge has a 30° angle and is black for better contrast. Tolerance according to DIN 874/00. Supplied in a wooden box.

Art. no.	5209	-0107	-0206	-0305	-0404
Length	mm	75	100	200	300
Width x thickness	mm	22x6	22x6	22x6	30x7
Weight	g	40	60	120	750

Workshop squares

Sliding bevels



No 2544

Limit. Of steel. Ground and polished. The blade folds into the leg. With wing nut.

Art. no.	2544	-1007	-1106	-1205	-1304
Leg length	mm	200	300	400	500
Leg cross-section	mm	25x5	25x5	30x5	30x5

Rules and angles

Workshop squares

Flat squares

Limit. Of steel. With equally thick legs. All faces machined. For workshops and forge shops, etc.

Long leg mm	Short leg mm	Width X thickness mm	Art. no.
			2538
800	375	30x5	-0957
1000	500	30x5	-1005
1500	750	30x5	-1104
2000	1000	30x5	-1203



No 2538

Limit. Zinc plated steel With uniformly thick legs. All faces machined. 3rd quality.

Long leg mm	Short leg mm	Width X thickness mm	Right- angled ±µm	Art. no.	Pack.
				12047	qty
150	100	25x5	55	-0109	20
200	130	25x5	60	-0208	12
300	175	25x5	70	-0307	12
400	230	25x5	80	-0406	8
500	250	25x5	90	-0505	1
600	300	25x5	100	-0604	1



No 12047

Limit. With equally thick legs. Of steel. All faces ground and polished.

Long leg. mm	Short leg. mm	Widthx thickness mm	DIN 875/2 Art. no. 2533
75	50	15x4	-1505
100	70	20x5	-1604
150	100	25x6	-1703
200	130	30x7	-1802
300	200	40x8	-1901
400	265	45x10	-2008



No 2533

Base squares

Limit. Zinc plated steel Legs with a uniform thickness and horizontal underside. All faces machined. 3-quality.

Long leg mm	Short leg mm	Width X thickness mm	Base width mm	Right- angled ±µm	Art. no.	Pack.
					12048	qty
150	100	25x5	22	55	-0108	10
200	130	25x5	22	60	-0207	6
300	175	25x5	22	70	-0306	6
400	230	25x5	22	80	-0405	4
500	250	25x5	22	90	-0504	1
600	300	25x5	22	100	-0603	1



No 12048

Limit. Of steel. Precision design. All faces ground. Manufactured according to tolerance DIN 875/2.

Long leg. mm	Short leg. mm	Widthx thickness mm	Base width mm	DIN 875/2 Art. no. 2534	Calibrated Art. no. 2534
100	70	20x5	20	-2007	-
200	130	30x7	30	-2106	-1553
300	200	40x8	40	-2205	-1652
400	265	40x10	45	-2304	-

No 2534



Limit

Rules and angles

Workshop squares

Engineers squares

Limit. Of steel. Precision design. With stock. All faces precision machined.



No 2530

Long leg mm	Long leg dim. mm	Short leg mm	Short leg dim. mm	DIN 875/1 Art. no.	Calibrated Art. no.
75	14x3	50	14x10	-1003	-
100	16x3	70	16x10	-1102	-0252
150	22x3	100	20x12	-1201	-0351
200	24x3	130	24x14	-1300	-
250	28x3	165	28x16	-1508	-
300	30x3	200	30x18	-1607	-
400	34x3	265	34x20	-1706	-



No 5217

Sharp edge squares

Limit. Of hardened steel. Smooth ground faces and polished edge. Equally thick legs. Tolerance according to DIN 875/00.

Long leg mm	Short leg mm	Widthx thickness mm	DIN 875/00 Art. no.
50	40	13.5x4	5217
75	50	15x4	-1006
100	70	20x5	-1105
			-1204
150	100	25x6	-1303
200	130	30x7	-1402



No 15125

Adjustble squares

Limit. Adjustable stop along a graduated steel rule Tolerance according to DIN 875/2.

Art. no.	15125	-0107	-0206
Steel rule, length	mm	100	150
Adjustable stop, length	mm	70	100



No 2542

Centre square

Limit. Of steel. Intended for round workpieces, but can also be used as stock or T-squares.

Art. no.	2542	-0209
Blade length	mm	200
Stock length	mm	150

Rules and angles

Protractors

Limit. Of sheet metal. The disc is graduated from 0-180° in both directions. Supplied with circular or rectangular disc. With locking nut.

Art. no.	2549	-0103	
Disc shape.....	mm	Circular	
Disc diameter.....	mm	85	
Leg length.....	mm	150	



No 2549 Circular

Limit. Of steel. Disc graduated from 0-180°. Matt chromium-plated. With locking screw.

Art. no.	2548	-0104	-0203	-0302	-0401
Disc diameter.....	mm	80	120	150	200
Leg length.....	mm	120	150	200	300



No 2548

Limit. Precision design. Of steel. Graduated from 10-170°. The leg slides and can be locked in the required position along the full blade.

Art. no.	2550	-0109	-0208	-0406
Disc diameter.....	mm	150	200	300
Leg length.....	mm	300	400	600



No 2550



No 7377

Limit. Of steel. Matt chromium-plated for non-glare reading. Can be used for measuring of both internal and external angles. With locking nut. In case.

Art. no.	7377	-0109
Disc diam.....	mm	90
Leg length.....	mm	80

Universal protractors

Limit. Of stainless steel. Protractor has the entire circumference graduated 0-90° in both directions and can be set at the required angle against the stop. Provided with magnifying glass for simple reading. With vernier for reading 1/12° = 5 minutes. The sliding blades can be locked with locking nuts. Supplied with two replaceable blades.

Art. no.	12258	-0103
Blade length.....	mm	150 and 300



No 12258

Limit. Precision design. Dial with a rotating scale for approximate readings and a pointer for accurate readings gives simple and reliable results. Sliding rule and angle stop included. Can be used through 360 degrees.

Art. no.	11919	-0106
Rotating scale.....	degrees	10-20-30-40-50 etc.
One pointer turn =	degrees	10
Pitch.....	min	5
Rule length.....	mm	300
Angle stop.....	mm	65



No 11919

Rules and angles



No 1623

Universal protractors

Limit. Precision design. Of stainless steel. Very easy to read graduation. Whole degrees can read on the disc with magnifier in 0°-90° and 90°-0°. Parts of whole degrees can be read with the **micrometer screw**. Readings in 1/60° = 1 minute. The red digits on the disc are combined with the red digits on the micrometer screw, and ditto with the black digits. Simple, quick adjustment and replacement of rule.

Supplied with two rules, 150 and 300 mm long, plus square 60×90 mm.

Art. no.	1623	-0104
Length of rules	mm	150 & 300



No 15127

Limit. Digital angle gauge. Manufactured of stainless steel. Reading alternatives 0-360°, 0-180° or 0-90°. Can be reset in all positions. Freezing of the measurement value. 2 rulers 150 and 300 mm. Setting angle 90°.

Art. no.	15127	-0105
Reading		0-360°, 0-180° or 0-90°
Resolution		0,1°
Precision		±0,2°
Length of rules	mm	150 and 300



No 11918

Combined squares

Limit. With protractor, angle stop and centre head. All parts slide on the graduated rule. Vial on the protractor and angle stop. The rule is graduated in millimetre and imperial measures.

Art. no.	11918	-0107
Protractor	degrees	0-180
Rule Length	mm	300
Angle stop length	mm	110
Centre head length	mm	63
Extra rule 600 mm	11918	-0206
Spare part set (screw/spring/nut)	11918	-0305



No 15126

Limit. Combination square with all faces machined. Manufactured of stainless steel. Protractor with vernier scale and magnifying glass for clear reading. Angle head with 90°, 45° and centre angle. The ruler is graduated in metric and imperial on both sides.

Art. no.	15126	-0106
Protractor		360°
Steel rule, length	mm	300
90° angle, length	mm	100
Protractor, length	mm	180

V blocks



No 2502

Limit. Of stress-free cast iron. Precision machined in pairs. Parallelism of base and V-groove, max 0.03 mm. V-groove angle 90°.

Art. no.	2502	-0108	-0207	-0405	-0603
Width	mm	75	100	150	205
Height	mm	60	65	90	140
Thickness	mm	32	41	63	100
V-groove width	mm	44	50	82	100
V-groove depth	mm	23	28	39	56



No 5252

Limit. Precision design. For clamping when drilling, milling, grinding or measuring. Manufactured in pairs of hardened and smooth ground steel. Supplied in sets, with 2 blocks and 2 clamps..

Art. no.	5252	-0202	-0301	-0400
Clamping diam. max.	mm	25	37	40
Length×width×height	mm	40×32×32	50×37×37	75×55×55

Rules and angles

Engineers surface spates

Manufactured of close-grained and well-aged cast iron. Planed to tolerance according to DIN 876/3.

For surface plate 800x500 there is a heavy duty, welded stand with adjuster screws and vibration damper.

Art. no.....	2494	-0504	-0801	(-1007)
Length.....	mm 400	400	600	800
Width.....	mm 300	300	400	500
Weight.....	kg 25	25	45	80
Stand	2495	-	-	(-1204)



No 2494

Manufactured of close-grained and well-aged cast iron. Planed and ground to tolerance according to DIN 876/1.

For surface plate 800x500 mm there is a heavy duty, welded stand with adjuster screws and vibration damper.

Art. no.....	2495	-0404	-0602	-0909	(-1006)
Length.....	mm 300	300	400	600	800
Width.....	mm 200	200	300	400	500
Weight.....	kg 10	10	20	45	80
Stand	2495	-	-	-	(-1204)



No 2495

Gauge blocks

Limit. Manufactured of hardened, special steel. Ground and hand polished. Supplied in wooden case.

DIN 861/2. Suitable for checking and setting dial indicators and workshop gauges etc.

DIN 861/1. Suitable for checking gauges and measuring instruments, and inspection work in instrument departments.

Only sold in complete sets.

	ea.	47	87
Total number of blocks.....	mm	1.005	1.001-1.009
Measuring range.....	unit	1 (0.005 mm)	9 (0.001 mm)
Number of blocks (range).....	mm	1.01-1.20	1.01-1.49
Measuring range.....	unit	20 (0.01 mm)	49 (0.01 mm)
Number of blocks (range).....	mm	1.30-1.90	0.50-9.50
Measuring range.....	unit	7 (0.10 mm)	19 (0.50 mm)
Number of blocks (range).....	mm	1.00-9.00	-
Measuring range.....	unit	9 (1.00 mm)	10.00-100.00
Number of blocks (range).....	mm	10.00-100.00	10 (10.00 mm)
Measuring range.....	unit	10 (10.00 mm)	
DIN 861/2.....	5272	-0109	-0208
DIN 861/1.....	5272	-0307	(-0406)

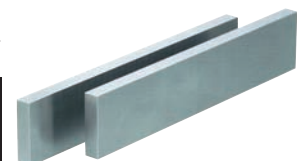


No 5272

Parallel blocks

Limit. Set of 7 pairs. Ground in pairs. Hardened steel HRC 55-62. Parallelism tolerance. ± 0.005 mm.

Art. no.....	15153	-0102	-0201	-0300
Length.....	mm 95	95	120	200
Clamping heights.....	mm 10-38	10-38	10-40	15-45
Dimensions.....	mm 10x3, 12x3, 14x4, 18x5, 24x5, 30x8, 38x8	10x8, 15x8, 20x8, 25x8, 30x8, 35x8, 40x8	15x8, 20x8, 25x8, 30x8, 35x8, 40x8, 45x8	



No 15153

Rules and angles

Machine levels

Digital precision levels



No 15123

Limit. Digital mini precision spirit level. Reading 0-90° alternative angle 0-100%. Can be reset in all positions. Freezing of the measurement value. Display automatically turns upside down when the underside passes 180°. With recessed magnet on the underside for the attachment e.g. of rulers and metal objects. Automatic switching off after 3 minutes in sleep mode. Battery 3 x 3V type CR 2032.

Art. no.	15123	-0109
Dimensions	mm	50x50x25
Reading degrees		4x90°
Reading angle		0-100°
Resolution	mm	0,1°
Precision		±0,3°
Batteries		3 x 3V CR2032



No 15124

Limit. Digital precision spirit level. Reading 0-90° alternative angle 0-100%. Can be reset in all positions. Freezing of the measurement value. Display automatically turns upside down when the underside passes 180°. Display lighting. Automatic switching off after 3 minutes in sleep mode. Battery 3 x 3V type CR 2032.

Art. no.	15124	-0108
Dimensions	mm	150x50x33
Reading degrees		4x90°
Reading angle		0-100°
Resolution	mm	0,1°
Precision		±0,3°
Batteries		3 x 3V CR2032

Even levels



No 0749

Precision level of cast iron. Adjustable, graduated longitudinal and transverse vials. Precision in accordance with DIN 877. V-groove in contact surface.

Art. no.	0749	-0055	-0154	-0204	-0402
Length	mm	100	150	200	200
Scale	mm	0.05	0.05	0.10	0.02
Widthxheight	mm	35x30	44x40	46x46	46x46
Noggrannhet	±mm/m	0.025	0.025	0.025	0.005

Frame levels



No 0757

Precision level of cast iron. Adjustable, graduated longitudinal and transverse vials. Precision in accordance with DIN 877. V-groove in contact surface.

Art. no.	0757	-0039	-0054	-0104	-0203
Length	mm	100	150	200	200
Height	mm	100	150	200	200
Scale	mm/m	0.05	0.05	0.10	0.02
Noggrannhet	±mm/m	0.025	0.025	0.025	0.005

Vinkelblock



No 15323

Limit. Set of 12 angle plates. For measurement, inspection of set-up in machines, cutting tools or protractor. Made of quality steel, precision ground and hardened. The plates are lightly magnetised for easy set-up in combinations and put to workpiece. Accuracy of angel ±0,01 mm per 100 mm. Supplied in a plastic box.

Art. no.	15323	-0107
Angel ...		1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°
Length ..	mm	76

Scribing and marking

Scribes

Double ended

Limit. With one straight and one bent point. Hardened. Round, knurled holder. Separately packed in plastic case.

Art. no.	5253	-0102	-0201
Type		Steel point	Hard metal point
Length	mm	240	240
Diameter	mm	4	4
Pack	qty	10	10



No 5253

With clip

Limit. With hard metal point. Round, knurled handle. With clip.

Art. no.	2475	-0101
Length	mm	130
Diameter	mm	7
Pack	qty	10



No 2475

Limit. With hard metal point. Hexagonal, smooth handle. With clip.

Art. no.	2474	-1001
Length	mm	150
Diameter	mm	6
Ditto 10-pack.	2474	-0201
Pack	qty	10*



No 2474

Limit. Propelling pen with automatic locking. Point of hard metal. With clip.

Scriber	2482	-1001
Length	mm	150
Extra hard point for 2482-0102	2482	-0201
Length x diameter	mm	20x2
Pack	qty	10



No 2482

With automatic punch marker

Limit. For both scribing and centre punching. Pressing the tip in the pen releases the mainspring for the centre punch. Tip of chrome vanadium steel. Rubber grip.

Scriber	10230	-0100
Length	mm	140
Extra tips	10230	-0209
Length x diameter	mm	40x3



No 10230

With handle

Limit. With hard metal tip. The blade is reversible and can be pushed into the holder. With plastic holder.

Scriber	2485	-0109
Blade length, overall	mm	100
Diameter	mm	7
Pack	qty	5
Extra hard metal blade, art. no.	2485	-0208



No 2485

Surface gauges

Limit. Round base. Holder for lifting and lowering scriber. With one straight and one bent steel point.

Art. no.	5238	-0102
Spindle height	mm	300



No 5238

Scribing and marking



No 5243

Surface gauges

With fine adjustment

Limit. Heavy duty base with V-groove in bottom. The base has two through guide pins. The spindle is mounted in a rocker arm, with screw for fine adjusting. With one straight and one bent steel point.

Art. no.	5243	-0105
Spindle height	mm	300



No 2396

Marking gauges

Marking gauge

Limit. Made of steel. Scale graduated in millimetres. Enamelled. Supplied complete with lead-pencil.

Art. no.	2396	-0107
Length of graduation	mm	90



No 2379

Limit. For scribing with scriber to edge. Graduated scale. Hardened scribing edge.

Art. no.	2379	-0108	-0207
Adjustable length	mm	0-200	0-300
Width	mm	40	40



No 9717

For metal

Limit. Of stainless steel. Measuring rod and slide as sliding calliper. Roller housed in ball bearings as stock when scribing to edge of workpiece. Graduated in mm with vernier scale $\frac{1}{10}$ mm of 39 mm length. Replaceable hardened scriber. Supplied in plastic case.

Art. no.	9717	-0104
Measuring length	mm	200
Scriber diam.	mm	2.0
Scriber length	mm	21
Extra scriber.	9717	-0203



No 2413

Limit. Made completely of steel. Round bar with guide, graduated in mm and with vernier for $\frac{1}{10}$ mm. With fine-adjustment and hardened, replaceable point.

Art. no.	2413	-0106	-0205
Bar length.	mm	200	300
Extra scriber point	2413	-0304	-0304

Combined dividers and sliding calipers

Limit. Of steel. Precision design. With hardened and ground points. Graduated in mm with $\frac{1}{10}$ mm vernier.

Art. no.	2436	-0208
Length	mm	200
Length of points	mm	45



No 2436

Bar calipers

Limit. Rod of rectangular section steel. Graduated in mm with vernier for $\frac{1}{20}$ mm.

Art. no.	2420	-0107	-0206	-0305	-0404
Length	mm	500	1000	1500	2000
For max diam.	mm	1000	2000	3000	4000



No 2420

Compasses

For pencils

Limit. Wing divider. Of steel. Rectangular shanks. With side-mounted arc and holder for pencil. Supplied without pencil.

Art. no.	2428	-0109	-0208
Length	mm	175	300
Max grip width	mm	190	350
Pack.	qty	10	1



No 2428

Scribing and marking

Compasses

Dividers

Limit. Of steel. Rectangular shanks. With hardened points.

Art. no.	2432	-0400	-0707
Length	mm 200	300	580
Max grip width.....	mm 380		



No 2432

Wing dividers

Limit. Of steel. Rectangular shanks. With hardened points. Side-mounted arc. Length 400-600 mm. With round shanks.

Art. no.	2429	-0207	-0405	-0702	-0801	-1007
Length	mm 150	200	300	400	500	
Max grip width	mm 170	235	390	545	670	
Pack.	qty 1	10	1	1	1	



No 2429

Calipers

With flat shanks and adjusting nut.

Length	Outside calipers		Inside calipers	
	Max grip width	Art. no.	Max grip width	Art. no.
mm	mm	2439	mm	2440
200	300	-0502	370	-0509
300	500	-0700	570	-0707
500	850	-1005	950	utg.
800	1250	-1104	-	-



No 2439
Outside calipers



No 2440
Inside calipers

Spring dividers and calipers



No 2443
Outside calipers



No 2444
Dividers



No 2445
Inside calipers

Limit. With flat shanks and hardened points. Fitted with adjusting nut.

Length	Outside calipers		Dividers		Inside calipers	
	Max grip width	Art. no.	Max grip width	Art. no.	Max grip width	Art. no.
mm	mm	2443	mm	2444	mm	2445
150	125	-0407	150	-0406	150	-0405
200	170	-0506	190	-0505	180	-0504
300	250	-0704	275	-0703	260	-0702

Scribing and marking



No 1733-5175



Number punches

No 1733. For iron and metal. Nine stamps. For stamping in materials with a tensile strength of up to 150 kp/mm². Hardened on the engraving side in accordance with HRC 60-63. In plastic boxes.

No 5175. For hard steel. Nine stamps. Fully ground. For stamping in materials with a tensile strength of up to 200 kp/mm². Hardened on the engraving side in accordance with HRC 60-61. In plastic boxes.

Spare numbers.

Minimum sorted number 5.

Number height mm	No 1733		No 5175	
	Art. no.	Shank square mm	Art. no.	Shank square mm
2	1733		5175	
2	-0101	6	-0107	7
3	-0200	6	-0206	8
4	-0309	7	-0305	9
5	-0408	8	-0404	10
6	-0507	9	-0503	12
8	-0606	11	-0602	14
10	-0705	12	-0701	16
12	-0804	14	-	-
15	-0903	16	-	-

Letter punches

Alphabetical punches

No 1735. For iron and metal. Letters A-Z. For stamping in materials with a tensile strength of up to 150 kp/mm². Hardened on the engraving side in accordance with HRC 60-63. In plastic boxes.

No 5176. For hard steel. A-Z and & characters. Fully ground. For stamping in materials with a tensile strength of up to 200 kp/mm². Hardened on the engraving side in accordance with HRC 60-61. In plastic boxes.

Spare letters.

Minimum sorted number 5.



No 1735-5176



Letter height mm	No 1735		No 5176	
	Art. no.	Shank square mm	Art. no.	Shank square mm
2	1735		5176	
2	-0109	6	-0106	7
3	-0208	6	-0205	8
4	-0307	7	-0304	9
5	-0406	8	-0403	10
6	-0505	9	-0502	12
8	-0604	11	-0601	14
10	-0703	12	-0700	16
12	-0802	14	-	-
15	-0901	16	-	-

Stamp sets

Complete sets in steel with holder and interchangeable types. The types are hardened for stamping in hard materials. Types hardened to HRC 37. The width of the holders permits insertion of 6-10 types at the same time. Supplied complete with 100 type – 58 letters, 35 digits and special characters, plus a number of blank types for spacing. Key and pincers also included. In wooden case.

Spare letters and digits.

Minimum sorted number 5.



No 5889

Art. no.	5889	-0104	-0203	-0302
Type height	mm	3	4	5
Total number of types		100	100	100
Number of types held in holder		10	8	6
Text length	mm	40	40	40

Scribing and marking

Grinding gauge



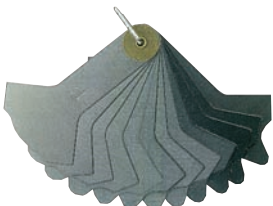
No 2565

Limit. Used for grinding twist drills. Graduated up to 25 mm.

Art. no.	2565	-0102
For drills up to	mm 50	
Nose angle		118°



Welding gauges



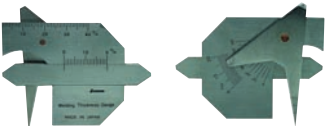
No 7403

Limit. With 12 blades for measuring the height of plane welding joints. Bright.

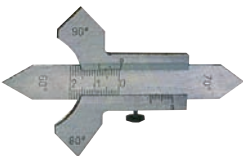
Art. no.	7403	-1006
Measuring range	mm 3-12	

Limit. Measures welding joints in corners, and height of welding joints on plane welds. Height gauge/thickness of material. Angle measuring. Gap between plates. Manufactured of stainless steel. Supplied in leather case.

Art. no.	9754	-0108
Welding gauge	mm 0-20	
Height gauge	mm 0-40	
Angles	degrees 0°-60°	
Gap	mm 0-4	



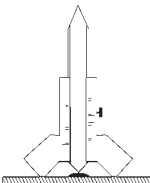
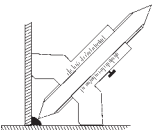
No 9754



No 2569

Limit. For measuring the height of plane weld joints, and the height in corners. Of steel. Graduated in mm and with 1/10 mm vernier. Apexes 60°-70°-80°-90°.

Art. no.	2569	-0108
Length of graduation	mm 20	



Thread gauges

Limit. Hardened. For Whitworth or metric thread system, and for checking of turning centres.

Art. no.	2575	-1009	-1108
Thread gauge		55°	60°
Thread system		W	M+UN



No 2575

Limit. Universal. For V-threads, square and acme threads.

Art. no.	2577	-1007
Thread gauges (V-threads)		55° and 60°
For number of threads (square threads) .. per inch	2 2.5 3 3.5 4 4.5 5 6 7 8	
For pitches (acme thread 30°)	mm 2 3 4 5 6 7 8 9 10 12	

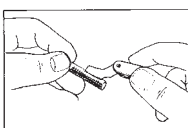


No 2577

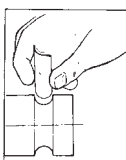
Scribing and marking



No 2580



No 2584



No 2586



No 2639



No 1441



No 2641



No 2590

Screw pitch gauges

Limit. Hardened. With folding blades. For internal and external measurements.

Art. no.	2580	-1002	-1101	-1200	-1309	-1408
Thread system		W	M	M/UNC	UNC-UNF	T-pipe (R)
Thread gauge		55°	60°	60°	60°	55°
No. of blades	ea. 28	24	55	30	6	6
For no. of threads	per inch 4-62	-	4-42	4-42	8-28	-
For pitches	mm -	0.25-6	0.25-6	-	-	-

Radius gauges

Limit. With folding blades for measuring radii on concave and convex surfaces.

Art. no.	2584	-1008	-1107	-1206
For radii	mm 1-7	7.5-15	15.5-25	15+15
No. of blades	ea. 17+17	16+16	15+15	15+15
Intervals	mm (1-3)=0.25 (3-17)=0.5	0.5	(15.5-20)=0.5 (20-25)=1	

Angle gauges

Limit. With folding blades of steel. The blade ends are bevelled at various angles.

Art. no.	2586	-1006
No. of blades	ea. 18	18
For angles, degrees		1 2 3 4 5 7 8 9 10 12 14 16 18 20 25 30 40 45

Hole size gauges

Limit. For measuring and checking nozzles and small holes.

Art. no.	2639	-0104	-0203
For diameter	mm 0.45-1.5	20	1.5-3
Number of pins	unit 20		16

Limit. For measuring and inspection of hole diameters or slot widths. Stainless steel with matt chromium-plated scale.

Art. no.	1441	-1003
Measuring range	mm 1-15	1-15
Graduation	mm 0.1	0.1
Scale length	mm 120	120
Thickness	mm 1.2	1.2
Pack.	qty 20	20

Limit. Taper of measuring needle 1:10. Direct reading 0.1 mm and vernier reading 0.01 mm. The needle is precision hardened and ground. With protective sleeve. Nickel-plated.

Art. no.	2641	-0209
Orig. no.		2
For diameter	mm 0-5	0-5

Drill and wire gauge

Limit. For drill and wire diameters with mm dimensions.

Art. no.	2590	-0309
Hole diameter	mm 0.1-10	0.1-10
Intervals	mm 0.1	0.1
No. of holes	ea. 100	100
Thickness	mm 2	2

Scribing and marking

Surface roughness blocks

Limit. For comparative determination of surface smoothness or scraping with finger tip. For machine operators, inspectors and designers etc. 6 different methods and 6 Ra values each. Manufactured of stainless steel alloy. Scratch resistant.

Art. no.	5370	-0100	
Polishing			
Broaching			
Surface grinding	Ra	1.6 0.8 0.4 0.2 0.1 0.005	
Horizontal milling			
End face milling			
Straight-turning	Ra	12.5 6.3 3.2 1.6 0.8 0.4	



No 5370

Surface gauge

Limit. For comparative determination of surface smoothness or scraping with finger tip. For machine operators, inspectors and designers etc. 6 different methods and 6 Ra values each. Manufactured of stainless steel alloy. Scratch resistant.

Art. no.	5370	-0100	
Polishing			
Broaching			
Surface grinding	Ra	1.6 0.8 0.4 0.2 0.1 0.005	
Horizontal milling			
End face milling			
Straight-turning	Ra	12.5 6.3 3.2 1.6 0.8 0.4	



No 5370

Profile patterns

Limit. For impression of required profile, where curved and irregular lines are to be formed. For carpet and floor laying, manufacturing of shelves and benches, and turning etc. Round gauges of stainless steel.

Art. no.	9739	-0108	-0207
Length	mm	150	300
Max profile depth	mm	48	105
Pack	qty	6	4

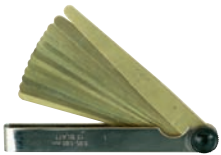


No 9739

Feeler gauges

Limit. With blades of **brass** in mm dimensions. Nickel-plated, lockable holder and tapered blades.

Art. no.	6792	-1007	-1106	-1205
No. of blades	unit	8	13	20
Measuring range	mm	0.05-0.50	0.05-1.00	0.05-1.00
Blade length	mm	100	100	100



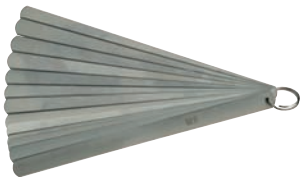
No 6792

Limit. With blades in mm dimensions. For measuring slots and bearing play, etc. With nickel-plated, lockable holder, tapered blades.

			No 2595/100			No 2595/200	
Blade length 100 mm	2595	-3001	-3100	-3209	-3308	-3407	-0601
Range of measuring	mm	0.03-0.10	0.05-0.50	0.10-0.50	0.05-1.00	0.05-1.00	0.10-2.00
No. of blades		8	8	21	13	20	20
Pack	qty	1	1	1	1	1	5
Blade length 200 mm	2595	-	-	-	-3506	-3605	-1104
Range of measuring	mm	-	-	-	0.05-1.00	0.05-1.00	0.10-2.00
No. of blades		-	-	-	13	20	20
Pack	qty	-	-	-	1	1	5



No 2595/100



No 2595/200

Scribing and marking



No 2595/Calibrated

Feeler gauges

Limit. Calibrated. Tolerance according to DIN 2275. Certificate included. Calibrated at two measuring points per blade. Blades in mm dimensions. For measuring slots and bearing play, etc. With nickel-plated, lockable holder.

Art. no.	2595	-2003	-2102	-2201
No. of blades.....	unit	8	13	20
Measuring range	mm	0.03-0.10	0.05-1.00	0.05-1.00
Blade length	mm	100	100	100



No 2597

Limit. With blades in mm dimensions. Held in key ring. Cylindrical blades.

Art. no.	2597	-1003
Orig. no.		133
No. of blades	ea.	13
Measuring range	mm	0.05-1.00
Blade width.....	mm	12.7
Blade length.....	mm	300



No 2599

Feeler strips

Limit. Cold-rolled, hardened and polished bright. With rounded edges. Etched dimensions every 150 mm. Supplied in plastic boxes (thicknesses over 0.60 mm in metal boxes). Length per box, 3 m. Width 13 mm. (Other widths on request.)

Art. no.	2599	-0052	-0102	-0201	-0300	-0409	-0508	-0607	-0706
Blade thickness.....	mm	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
Tolerance	mm	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004
Art. no.	2599	-0805	-0904	-1308	-1506	-1605	-1704	-1902	-2009
Blade thickness.....	mm	0.09	0.10	0.15	0.20	0.25	0.30	0.35	0.40
Tolerance	mm	±0.004	±0.005	±0.005	±0.007	±0.008	±0.009	±0.009	±0.010
Art. no.	2599	-2108	-2207	-2405	-2504	-2702	-2801	-2900	
Blade thickness.....	mm	0.45	0.50	0.60	0.70	0.80	0.90	1.00	
Tolerance	mm	±0.010	±0.013	±0.015	±0.015	±0.017	±0.017	±0.017	



No 2600

Feeler strip holder

Limit. For feeling strips 2599.

Art. no.	2600	-0109
Length.....	mm	135
Width.....	mm	13

Measuring instruments

Multimeters

Limit. Digital multimeter in pocketsize with autorange. Measuring DC/AC voltage, resistance, frequency and capacitance. Also diodtest, continuity with buzzer, datahold, relative mode, low battery capacity warning and auto off after 15 minutes.
Supplied complete with testleads, battery, cover and manual.
Max display 3999. Safety isolation CAT II 300 V, IEC 61010.



No 14488

Art. no.	14488	-0101
Limit.	No	200
DC Voltage		400 mV-4-40-300 V
Resolution		0.1 mV
Accuracy		±0.8% + 1 digit
AC Voltage		4-40-300 V
Resolution		1 mV
Accuracy		±1.2% + 3 digits
Resistance		400 Ω-4-40 KΩ-4-40 MΩ
Recplution		0.1 Ω
Accuracy		±1% + 2 digits
Capacitance		4-40-400 nF-4-40-200 μF
Resolution		0.001 nF
Accuracy		4% + 3 digits
Frequency		10 Hz-100 KHz
Resolution		0.01 Hz
Accuracy		±0.5% + 3 digits
Duty cycle		0.1 - 99.9%
Battery		1pc 3V (CR2032)
Dimension	mm	108x58x12
Weight	g	62

Limit. Digital multimeter palmsize and display backlight. Measuring DC/AC voltage, DC current, resistance, temperature. Aslo diodetest, continuity test with buzzer, datahold, low battery capacity warning.
Suplied completely with test leads, temperature probe, battery and English manual. Rubber cover and bench stand. Max. display 1999. Safety insulation CAT I 600 V / CAT II 300 V, IEC 61010. Fused to max. 200 mA.



No 12860

Art. no.	12860	-0103
Limit.	No	300
DC voltage	DCV	200-2000 mV- 20-200-500 V
resolution	μV	100
accuracy		± 1.2% + 2
AC voltage	ACV	200-500 V
resolution	μV	100
accuracy		± 1.2% + 10
DC current	DCA	2000 μA-20-200mA-10A
resolution	μV	0.1
accuracy	μV	± 1% + 2
Resistance		200 Ω -2-20-200 KΩ-20 MΩ
resolution	Ω	0.1
accuracy		± 0.8% + 2
Temperature	°C	-40 -+1000
resolution	°C	1
accuracy	°C	± 1% + 3
Battery		1 pcs 9 V (6F22)
Dimension	mm	130x74x35
Weight	g	156
Extra test leads	12860	-0202
Extra temp. probe	12860	-0301

Measuring instruments

Multimeters



No 12859

Limit. Digital multimeter with large display, shows correct input for test lead and selected function. Measuring AC/DC voltage, DC/AC current, resistance, capacitance, frequency, temperature. Also diode test, transistor test, continuity test with buzzer, data hold, low battery capacity warning.

Supplied completely with leads, multi purpose socket, temperature probe type K and English manual. Rubber cover and bench stand.

Max. display 1999. Safety insulation CAT II 1000 V / CAT III 600 V, IEC 61010. Fused to max. 200 mA.

Art. no.	12859	-0106
Limit	No	500
DC voltage	DCV	200 mV-2-200-200-1000 V
resolution	mV	0.1
accuracy		± 0.5% + 1
AC voltage	ACV	2-20-200-1000 V
resolution	mV	1
accuracy	μV	± 0.8% + 3
DC current	DCA	2-200 mA-10 A
resolution	μA	0.01
accuracy		± 0.8% + 1
AC current	ACA	2-200 mA-10 A
resolution	μA	1
accuracy		± 1% + 3
Resistance	Ω	200 Ω -2-20 KΩ-2-20 MΩ
resolution		0.1
accuracy		± 0.8% + 1
Capacitance		2-200 nF-100 μF
resolution		1 pF
accuracy		± 4% + 3
Frequency	KHz	2-20
resolution	Hz	1
accuracy		± 1.5% + 5
Temperature	°C	-40 -+1000
resolution	°C	1
accuracy		± 1% + 3
Automatic off after	min	15
Battery		1 pcs 9 V (6F22)
Dimensions	mm	179x88x39
Weight	g	380
Extra test leads	12860	-0202
Extra temp. probe	12860	-0301
Extra multi socket	12859	-0205



No 12858

Limit. Digital multimeter for auto and engine mechanicals. Large display, shows beside measure value also correct input for test leads and selected function. Measuring DC/AC voltage, DC current, resistance, capacitance, Dwell and engine tach. Also diode test, continuity test with buzzer, data hold, low battery capacity warning.

Supplied completely with test leads and alligator clip, battery and English manual. Rubber cover and bench stand.

Max. display 1999. Safety insulation CAT II 1000 V / CAT III 600 V, IEC 61010. Fused to max. 10 A.

Art. no.	12858	-0107
Limit	No	500 Auto
DC voltage	DCV	200 mV-2-20-200-1000 V
resolution	mV	0.1
accuracy		± 0.5% + 5
AC voltage	V	2-20-200-750 V
resolution	mV	1
accuracy	μV	± 0.8% + 5
DC current	DCA	200 mA-10 A
resolution	mA	0.01
accuracy		± 0.8% + 5
Resistance	Ω	200 Ω-2-20 KΩ-2-20 MΩ
resolution		0.1
accuracy		± 0.8% + 5
Dwell: resolution		0.1°
accuracy		± 3% + 5
Engine tach: resolution	rpm	10
accuracy		± 3% + 5
Battery		1 pcs 9 V (6F22)
Dimension	mm	179x88x39
Weight	g	380
Extra test leads	12860	-0202

Measuring instruments

Multimeters

Limit. Digital multimeter with auto range and large display with backlight. Measuring DC/AC voltage, DC/AC current, resistance, capacitance, frequency, temperature. Also diode test, continuity test with buzzer, datahold, low battery capacity warning. Supplied completely with test leads, temperature probe and English manual. Rubber cover and bench stand. Max. display 3999. Safety insulation CAT III 1000 V / CAT IV 600 V, IEC 61010. Fused to max. 10 A.

Art. no.	12857	-0108
Limit	No	600
DC voltage	DCV	400 mV-4-40-400-1000 V
resolution	mV	0.1
accuracy		± 0.8% + 1
AC voltage	ACV	4-40-400-750 V
resolution	mV	1
accuracy	µV	± 1% + 5
DC current	DCA	400-4000 µA-40-400 mA-4-10 A
resolution	µA	0.1
accuracy		± 1% + 2
AC current	ACA	400-4000 µA-40-400 mA-4-10 A
resolution	µA	0.1
accuracy		± 1.5% + 5
Resistance		400 Ω-4-40 KΩ-4-40 MΩ
resolution	Ω	0.1
accuracy		± 1% + 2
Capacitance		40-400 nF-4-40-100µF
resolution		10 pF
accuracy		± 3% + 5
Frequency		10 Hz-10 MHz
resolution	Hz	1
accuracy		± 0.1% + 3
Temperature	°C	-40 --+1000
resolution	°C	1
accuracy		± 1% + 3
Automatic off after	min	30
Battery		1 pcs 9 V (6F22)
Dimension	mm	177x85x40
Weight	g	300
Extra test leads	12860	-0202
Extra temp. probe	12860	-0301



No 12857

Limit

Measuring instruments

Multimeters



No 15322

Limit. Digital multimeter with autorange. Large display with backlight. Analogue bar graph for quick and stable signals. True RMS for voltage and current measurements of non linear signals. Reading of Max and Min value. Connectable to PC for transfer data. Measuring DC/AC voltage, DC/AC current, resistance, capacitance, frequency. Also diode test, continuity test with buzzer, data hold, low battery warning. Supplied with test leads, PC cable and software, battery and manual. Max display 6000. Safety isolation CAT III 1000 V / CAT IV 600 V, IEC 61010. Fused to max 10 A.

Art. no.	15322	-0108
Limit	No	610
DC voltage		60-600 mV-6-60-600-1000 V
Max resolution		0.10 mV
Accuracy		±1% +3 digits
AC voltage		60-600 mV-6-60-600-750 V
Max resolution		0.01 mV
Accuracy		±1.2 % 5 digits
DC current		600-6000 µA-60-600 mA-6-10A
Max resolution		0.1 µA
Accuracy		±1.2% +3 digits
AC current		600-6000 µA-60-600 mA-6-10A
Max resolution		0.1 µA
Accuracy		±1.2% +5 digits
Resistance		600 Ω-6-60-600 KΩ-6-60 MΩ
Max resolution		0.1 Ω
Accuracy		±1.2 % + 2 digits
Capacitance		40-400 nF-4-40-400-4000 µF
Max resolution		0.01 nF
Accuracy		±3% + 5 digits
Frequency		10 Hz-10 MHz
Max resolution		0.001 Hz
Accuracy		±0.1% + 4 digits
Operation temperature		0-40 °C
Storage temperature		-10 - 50 °C
Battery		1 pc 9 V6F22
Dimension	mm	177x85x40
Weight	g	300

Clamp multimeter



No 14486

Limit. Digital clamp multimeter with autorange. Measures DC/AC voltage DC/AC current, Resistance, Frequency. Also surge Current measurement, Max/Min mode, true RMS for AC voltage, testing diode, continuity with buzzer, datahold, low battery capacity warning. Supplied completely with test leads, carrying case, battery and manual. Max display 6666. Safety isolation CAT II 600V/ CAT III 300 V, IEC 61010.

Art. no.	14486	-0103
Limit	No	23
DC Voltage		6.6-66-600 V
Resolution		0.1 mV
Accuracy		±0.8% + 1 digit
AC Voltage	mm	6.6-66-600 V
Resolution		1 mV
Accuracy		±1,2% + 5 digits
DC Current		66-1000 A
Resolution		0.01 A
Accuracy		±1.5% + 8 digits
AC Current		66-1000 A
Resolution		0.01 A
Accuracy		±2% + 8 digits
Resistance		600 Ω-46.6-66-600 KΩ-6.6-66 MΩ
Resolution		0.1 Ω
Accuracy		±1.2% + 2 digits
Frequency		660 Hz-6.6-66-660 Khz-6.6-66 MHz
Resolution		0.1 Hz
Accuracy		±0.1% + 3 digits
Duty cycle		0.1%-99.9%
Battery		9 V (6F22)
Dimension	mm	285x105x45
Weight	g	533

Measuring instruments

Multimeters

Clamp multimeter

Limit. Digital clamp multimeter with autorange. Measures DC/AC voltage DC/AC current, Resistance, Frequency. Also testing diode, continuity with buzzer, datahold, low battery capacity warning. Supplied completely with test leads, carrying case, battery and manual. Max display 3999. Safety isolation CAT II 600V/ CAT III 300 V, IEC 61010.

Art. no.....	14487	-0102
Limit.....	N	21
DC Voltage.....		400 mV-4-40-400-600 V
Resolution.....		0.1 mV
Accuracy.....		±0.8% + 1 digit
A Voltage.....	mm	4-40-400-600 V
Resolution.....		1 mV
Accuracy.....		±1% + 5 digits
DC Current.....		40-400 A
Resolution.....		0.01 A
Accuracy.....		±2% + 3 digits
AC Current.....		40-400 A
Resolution.....		0.01 A
Accuracy.....		±2.5% + 5 digits
Resistance.....		400 Ω-4-40-400 KΩ-4-40 MΩ
Resolution.....		0.1 Ω
Accuracy.....		±1% + 2 digits
Frequency.....		10 Hz - 1 MHz
Resolution.....		0.001 Hz
Accuracy.....		±0.1% + 3 digits
Duty cycle.....		0.1%-99.9%
Batter.....		9 V (6F22)
Dimension.....	mm	210x76x30
Weight.....	g	200



No 14487

Limit. Digital clamp multimeter with autorange Measures DC/AC voltage, AC current, resistance. Also testing diode, continuity with buzzer, datahold, low battery capacity warning. Supplied completely with test leads, carrying case, battery and English manual. Max. display 1999. Safety insulation CAT II 600 V/CAT 300 V, IEC 61010.

Art. no.....	12856	-0109
Limit.....	No	20
DC voltage.....	DCV	200 mV-2-20-200-600 V
resolution.....	mV	0.1
accuracy.....		± 0.8% + 1
AC voltage.....	ACV	2-20-200-600 V
resolution.....	mV	1
accuracy.....		± 1.2% + 5
AC current.....	ACA	2-20-200-400 A
resolution.....	mA	1
accuracy.....		± 4% + 5
Resistans.....		200 Ω-2-20-200 KΩ-2-20 MΩ
resolution.....	Ω	0.1
accuracy.....		± 1% + 2
Automatic off after.....	min	15
Battery.....		2 pcs 1.5 V (LR06)
Dimension.....	mm	208x76x30
Weight.....	g	260
Extra test leads.....	12860	-0202



No 12856

Voltage testers

Limit. Voltage and continuity tester with 3 phase rotation detection. Distinguish between phase and zero. Checking function of earth leakage circuit breaker. Single hand test on 19 mm wallsockets. Buzzer indicate continuity. Shows DCV polarity + or -. Flashlight in handle. Automatic on and off. Supplied with battery, probe tips protection and manual. Safety isolation CAT IV 600 V, IEC 61010. Water and dust protection IP 65.

Limit 110. Ledlights shows voltage in 7 levels. 12-24-50-120-230-400-690 V.

Limit 112. Display shows real voltage value and also ledlights in 7 levels.

Art. no.....	14489	-0100	-0209
Limit.....	No	110	112
Display.....		No	Yes
Ledlights.....		Yes	Yes
Voltage.....	ACV	12-690	12-690
Voltage.....	DCV	12-690	12-690
Continuity.....		Summer	Summer
Battery.....		2 pcs 1.5V AA	2 pcs 1.5V AA
Dimension.....	mm	260x56x20	260x56x20



No 14489-0100



No 14489-0209

Limit

Measuring instruments



No 14501

Voltage detector

Limit. Controll of electrical voltage or not in conductors, wallsocket etc. Distinguish between phase and zero. Non-contact, just place the tip near an AC voltage conductor. Led flash and buzzer when conductor is live. Buzzer can be turned off. Both automatic and manuel off. The instrument is continual checking function and battery status by regular ledflash.

Supplied with battery and manual. Safety isolation CAT IV 1000V.

Art. no.	14501	-0104
Limit	No	100
AC Voltage	V	90-1000
Dimension	mm	18x150
Batteriery		2 pcs 1.5V AAA



No 13237

Tachometer

Limit. Digital reading. Combined photo measuring alternative mechanical contact measuring.

Photo measuring. Point the instrument against a reflecting tape or contrast part on the rotating object. Measuring distance 50-150 mm.

Contact measuring. Measuring rev/min or surface speed. Press measuring ring/point against center of the rotation object for rpm reading. Alternative press measuring wheel against surface of the object for speed reading.

Memory for last measured value and max and min value.

Supplied with english manual. Batteries ar not included.

Battery 4 pcs 1.5V LR06.

Art. no.	13237	-0107
Limit		R 2000
Range: Photo	rpm	2.5-100 000
Contact	rpm	2.5-20 000
Contact	m/min	0.05-2000
Contact	ft/min	0.02-6560
Spare rlecting tapeeipj 5x350 mm.	13237	-0206
Spare measuring points 3 pcs	13237	-0305



No 13528

Torque tester

Limit. Torque Check Digital measurement instruments designed to check torque wrenches. Robust and easy. Accuracy is $\pm 1\%$ of the measurement value. The instrument is available in two variants: 35-350 Nm or 100-1000 Nm. As standard supplied with factory calibration certificate clockwise.

Art. no.	13528	-0105	-0204
Limit.	No	TC350	TC1000
Torque range	Nm	35-350	100-1000
Torque range	lbf-ft	25-250	75-750
Drive	inch	$\frac{1}{2}$ "	$\frac{3}{4}$ " $\square$ ext.



No 13235

Tyre pressure tester

Limit. Digital gauge to measure air pressure in car tyres, etc. Easy to use. One button for both ON and reading mode selection in PSI, BAR kg/cm² or kPa. Automatic shutoff after 10 sec.

Extra battery 3 V CR2032.

Art. no.	13235	-0109
Type		P 3000
Measurement range	PSI	0-100
.....	bar	0-7
.....	kg/cm ²	0-7
Ditto 6-pack in display pack.....	13235	-0208
Extra battery	10960	-0304

Measuring instruments

Thermometer

Limit. Digital thermometer. Two inputs for measuring with two probes at same time. Up to 99 measurements can be stored over a period of time, by setting automatic logging interval or manually stored. Stored measurements can be transfer to PC. The display shows Max-Min-Average and differences between two probes. Hold function. Easy to compensate for errors of a probe. Display backlight. Switchable between °C and °F. Warning of low battery capacity. Probes of type K, J, T and E can be used. Supplied with probe type K max 260 °C, PC-cable with software, battery and manual.

15321-0208 Probe for air/fluid type K, -50 to +600 °C. Probe length 180 mm. Cable length 1000 mm.

15321-0307 Probe for surface area type K, -50 to +500 °C. Probe length 125 mm. Cable length 1000 mm.

12860-0301 Cable probe type K, -50 to +260 °C. Cable length 900 mm.

Art.no.	15321	-0109
Limit.....	No	60
Range type K.....	°C	-200 to +1370
Reading.....	°C	0.1
Accuracy.....	°C	0.8 ±0.5%
Operation temperature.....	°C	-10 to +50
Storage temperature.....	°C	-40 to +60
Dimension.....	mm	175x8x30
Weight.....	g	270
Battery.....		1pc 9 V 6F22
Probe for air / fluid type K, -50 to +600 °C.....	15321	-0208
Probe for surface area type K, -50 to +500 °C.....	15321	-0307
Cable probe type K, -50 to +260 °C.....	12860	-0301



No 15321

IR Thermometer/Lampa

Limit. Infrared thermometer that measures the outdoor temperature without contact and is combined with a lamp on the opposite end of the instrument.

Direct the thermometer towards the object and then press the button. Read the temperature on the display.

Five batteries SR-44/LR-1154 included.



No 13156

Art. no.	13156	-0104
Limit.....	No	80
Measurement range.....	°C	-33 - +110
Resolution.....	°C	0.2
Inaccuracy.....		±2.5 °C alternative ±2.5%
Automatic shutdown.....		15 sec
Emission factor.....		0,95
Distance / Measurement surface.....		1:1

IR Thermometer

Limit. Non contact IR thermometer for measuring temperature on most kind of surfaces. Quick response time and high accuracy. Laser sight shows centre of spot area. Registration of max and min value. Automatic off after 8 seconds. Display backlight. Switchable between °C and °F. Warning of low battery capacity. Battery and manual are included.

Art. no.	15318	-0104
Limit.....	No	91
Range.....	°C	-18 to +380
Reading.....	°C	0.1
Accuracy.....	°C	2 or 2%
Spot area : Distance.....		1:10
Emmissivity.....		Fixed 0.95
Operation temperature.....	°C	0-50
Storage temperature.....	°C	-20 - 65
Dimension.....	mm	169x138x53
Weight.....	g	270
Battery.....		1 pc 9 V 6F22



No 15318

Limit

Measuring instruments

IR Thermometer



No 15319

Limit. Non contact IR thermometer for measuring temperature on most kinds of surfaces. Quick response times and high accuracy. Laser shows centre of spot area. Registration of max-min-difference-average value. Adjustable emissivity. Scanning function for continuous measuring. Thread 1/4" for assembling on camera tripod. Automatic off after 8 seconds. Display backlight. Switchable between °C and °F. Warning of low battery capacity. Holster, battery and manual are included.

Art. no.	15319	-0103	-0202
Limit	No	92	93
Range	°C	-18 to +550	-32 to +1050
Reading	°C	0.1	0.1
Accuracy	°C	1.8 or 1.8%	1.8 or 1.8%
Spotarea : Distance		1:12	1:30
Emissivity		0.10-1.00	0.10-1.00
Operation temperature	°C	0 - 50	0 - 50
Storage temperature	°C	-20 - 65	-20 - 65
Dimension	mm	169x138x53	169x138x53
Weight	g	270	270
Battery		1 pc 9 V 6F22	1 pc 9 V 6F22



No 13955

Limit. Infrared non-contact thermometer for measuring temperature on most kind of surfaces. Automatic off after 6 seconds. Laser sight with on/off button. Switchable between °C or °F. Display backlight. Low battery voltage warning.

Art. no.	13955	-0107
Limit	No	T 90
Temperature range	°C	-20 - +500
Temperature range	°F	-4 - + 930
Resolution	°C	0.2
Accuracy		±2°C (-20 - +100°C)
Accuracy		±2% (100 - 500°C)
Spot area : Distance		1:8
Emissivity		0.95%
Operation temp.	°C	0-50
Storage temp.	°C	-10 - + 60
Battery type		9V 6F22 or NEDA1604 or 006P
Battery live.	hrs	16

Rubber hardness tester



No 14485

Limit. Measures soft materials, hardness e.g. rubber, soft plastic materials, leather etc. A spring loaded measurement tip is held against the material and the hardness is stated in Shore A. The measurement surface should be relatively flat and the measurement surface size at least 12 mm in diameter and the measurement is made at least 12 mm from the outer edge. Calibration can be done with the enclosed test block. The instrument has a mean value function for 2 to 9 measurements. Automatic shutoff after 1 minute. The instrument follows the standards according to DIN 53505, ISO 868, ASTM D 2240.

Art. no.	14485	-0104
Limit	No	4000
Measurement range	Shore A	0-100
Min. material thickness	mm	6
Precision	%	±1
Working temperature	°C	0-50
Relative humidity	% RH	0-80
Batteries	V	1.5 (4 x LR 03 AAA)
Weight	g	170

Coating thickness gauge



No 14483

Limit. Measures layer thickness of lacquer, plastic, zinc, etc. on different metals. Can measure both on underlying magnetic metals and non-magnetic metals such as copper, aluminium, stainless steel, etc. Easy to calibrate with the supplied control films. Instructions included. Automatic switching off after 2 minutes.

Art. no.	14483	-0106
Limit	No	5100
Measurement range	µm	0-1000
Resolution 0-100	µm	0.1
Resolution 100-1000	µm	1
Precision		±2.5 µm or 1-3%
Batteries 1.5 V		4 x LR03 AAA
Dimensions	mm	161x69x32
Weight	g	200

Measuring instruments

Ultrasound thickness gauge

Limit. Digital instrument that measures material thickness using ultrasound technology on most homogeneous materials. To measure material thickness using ultrasound technology is very suitable when access is only possible from one side. E.g. pipes, tanks, cisterns, glass structures, etc. Suitable materials to measure material thickness with ultrasound technology are metals, glass and plastics. The condition is that the material is homogeneous, that both sides are parallel and that the surfaces are not too uneven. Automatic switching off after 2 minutes. Instructions included.



No 14484

Art. no.	14484	-0105
Limit	No	5500
Measurement range	mm	1.2-200
Resolution	mm	0,1
Measurement sensor Ø	mm	10
Accuracy 1-10 mm	mm	±0.4
Accuracy 10-100 mm	mm	±0.4 + 1%
Accuracy 100-250 mm	mm	±3%
Working temperature	°C	0-50
Relative humidity	% RH	0-80
Batteries		4 x 1.5V LR03 AAA
Weight	g	165

Sound level meter

Soundmeter

Limit. Digital sound level meter. Two different filter curves A or C and quick or slow sound recording. The A-filter corresponds to the human ear's frequency sensitivity and is suitable for environmental sound measurements. The C-filter is linear and is ideal for inspecting machines. Quick (fast) sound recording is used when you want to see rapid sound peaks. The slow mode gives a stable measurement result of sound that varies or pulses. The sound can be read instantaneously or gives a mean value under a selected time period, from 10 sec to 24 hours. Integrated memory for 30 measurements or the instrument can be connected to a PC for registration of measurement values. Registration of max. value. Alarm function which indicates with a LED when the sound level is above a set value. The number of measurement values that exceed the alarm value during the measurement period can be shown. Adjustable automatic or manual shutoff. Integrated calibration function 94 dB. Instructions included.

Conforms to standard IEC 651 Type 2, ANSI 1.4 Type 2.



No 15152

Art. no.	15152	-0103
Limit	No	7000
Measurement range	dB	30-130
Resolution	dB	0,1
Precision	dB	±1
Speed Fixed	ms	125
Speed Slow	sec	1
Measurement periods		10 sec, 1 min, 5 min, 10 min, 15 min, 30 min, 1 hour, 8 hours, 24 hours
Memory capacity	number of measurements	30
Frequency range	Hz	20-12500
Batteries		4 x 1.5V LR03 AAA
Size	mm	236x63x26
Weight	g	170
Computer cable with software for connection to PC.		
Connection RS-232.	15152	-0202
Sound calibrator 94 and 114 dB	15152	-0301
Battery adapter	15152	-0400

Limit

Measuring instruments

Digital Linear Scales and Readout



Limit. For setting and positioning on lathes and millers.
15139-0101. 3-axis display unit for millers. The display unit features functions for radius milling, angle milling, pocket milling, linear and circular hole patterns, tool compensation, etc. Memory for 200 coordinate settings. Complete including arm and assembly accessories.
15139-0200. 2-axis display unit for lathes. The display unit features functions for radius/diameter setting, tool exchange, measures tapers. Memory for 200 coordinate settings. Complete including arm and assembly accessories.
The equipment conforms to the CE low voltage directive 73/23/EEC and 89/336/EEC.
Linear scales with photoelectric reading technique. Complete incl. cable, protective plate and assembly accessories.

Display unit	15139	-0101	-0200
Limit.....	No	DRO-3M	DRO-2L
Intended for.....		millers	lathe
Resolution.....	mm	0,005	0,005
Precision.....	mm	± 0,005	± 0,005
Power supply.....	V	240	240
Working temperature.....	°C	0-45	0-45
Storage temperature.....	°C	-30 - 70	-30 - 70
Relative humidity max.....		90%	90%
Enclosure class.....		IP53	IP53

Linear scales	15139	-0309	-0408	-0507	-0606	-0705	-0804	-0903	-1000
Length.....	mm	150	200	250	300	400	500	600	700

Linear scales	15139	-1109	-1208	-1307	-1406	-1505	-1604	-1703	-1802
Length.....	mm	800	900	1000	1200	1400	1600	1800	2000