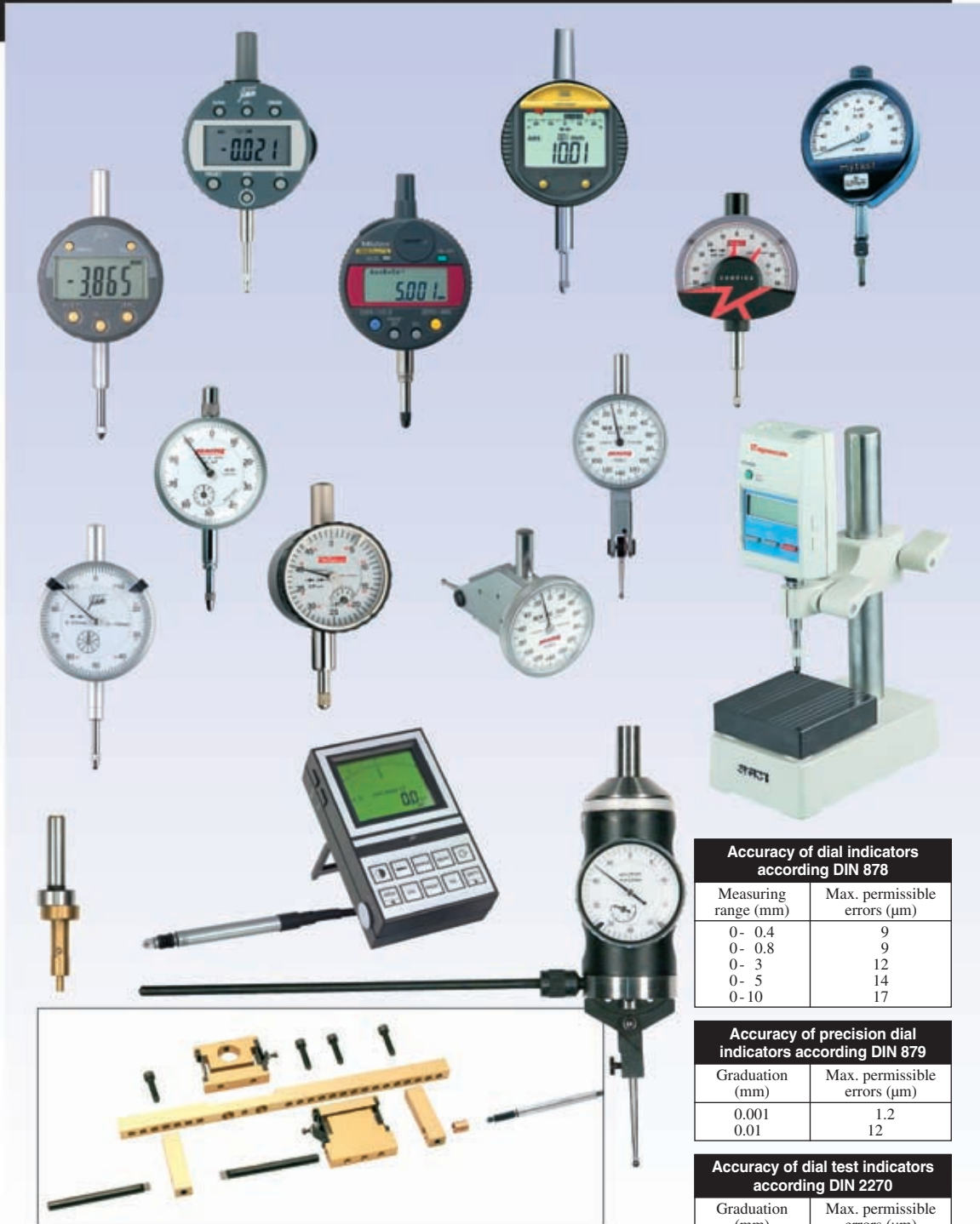


Schut for Precision

**Dial indicators / Dial test indicators / Center instruments
Edge finders / Probes / MF measuring fixture system**



Accuracy of dial indicators according DIN 878	
Measuring range (mm)	Max. permissible errors (µm)
0- 0.4	9
0- 0.8	9
0- 3	12
0- 5	14
0-10	17

Accuracy of precision dial indicators according DIN 879	
Graduation (mm)	Max. permissible errors (µm)
0.001	1.2
0.01	12

Accuracy of dial test indicators according DIN 2270	
Graduation (mm)	Max. permissible errors (µm)
0.002	4
0.01	13

005.001-EN 20151102

Digital dial indicators 0.01 and 0.001 mm

Digital dial indicators for a favourable price.

- Measuring range: 0-50 mm.
- Resolution: 0.01 or 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Reset.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 57 mm.
- Adjustable tolerance limits.
- Flat back and additional back with lug.
- Delivery with an inspection report.
- Power supply: 1 battery type CR2025.



907.646



907.649



Item No.	Measuring range/mm	Accuracy mm	Price EUR
With resolution 0.01 mm:			
907.634	0-12.5	± 0.02	47.00
907.649	0-25	± 0.03	68.00
907.652	0-50	± 0.04	127.00
With resolution 0.001 mm:			
907.646	0-12.5	± 0.015	58.00
Options:			
495.214	Spare battery		0.60
909.446	USB interface		113.00
937.179	Foot switch		43.00



909.446

USB interface:

- For data transfer to PC (e.g. Excel, Word).
- Operating system: Windows 2000/XP/Vista/7.
- PC connection: USB data output (cable length 2 m).
- No software or driver to install.
- Foot switch (optional).

Absolute digital dial indicators

- Measuring range: 0-50.8 mm.
- Resolution: 0.01 mm or 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- LCD display 330° rotatable.
- Digimatic data output.
- On/off switch.
- Reset/preset.
- Max. measuring speed: any.
- Measuring force: ≤2 N.
- Clamping stem: ø8 mm.
- Dial diameter: 60 mm.
- Reversible measuring direction.
- With determination of the reversal point (only 910.004).
- Adjustable tolerance limits (except 910.004).
- Flat back and additional back with lug.
- Protection: IP54.
- Delivery in a case with an inspection report.
- Power supply: 1 battery type CR2032.



NEW



909.998



910.004



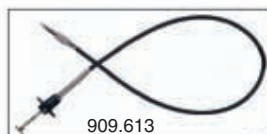
909.686



909.687



909.611



909.613



909.614

Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Price EUR
909.998	0-12.7	0.001	±0.004	132.00
909.999	0-25.4	0.001	±0.005	173.00
910.000	0-50.8	0.001	±0.006	239.00
910.001	0-12.7	0.01	±0.01	74.00
910.002	0-25.4	0.01	±0.01	95.00
910.003	0-50.8	0.01	±0.015	132.00
For internal measurements:				
910.004	0-12.7	0.001	±0.004	144.00
Options:				
495.157	Spare battery			0.50
909.686	USB interface			96.00
909.687	Footswitch			16.30
909.611	Retraction lever			1.00
909.613	Cable retraction device (1 m) (maximum travel 10 mm)			12.80
909.614	Retraction lever (maximum travel 12.7 mm)			5.70

Digital dial indicators

Digital dial indicators with digital and digital-analog read-out.

- Measuring range: 0- 12.5 mm.
- Resolution: 0.002 or 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.
- Reset/preset.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 62 mm.
- Dial 360° rotatable.
- Reversible measuring direction.
- With determination of the reversal point.
- Adjustable tolerance limits.
- Power supply: 1 battery type CR2032.



909.251

Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Measuring force/N	Price EUR
909.250	0-12.5	0.002	± 0.015	1.8-3.0	87.00
909.251	0-12.5	0.001	± 0.006	2.2-3.5	194.00
Option:					
495.157	Spare battery				0.50

Digital dial indicators

Universal digital indicators with both digital and digital-analog display of the measuring value, and can also be rotated over 340° to ensure easy read-out in all positions.

- Measuring range: 0- 12.7 mm.
- Resolution: 0.001 mm.
- Analog resolution: 0.001/0.002/0.01/0.02/0.05 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.
- Reset/preset.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 61 mm.
- Dial 340° rotatable.
- Reversible measuring direction.
- With determination of the reversal point.
- Adjustable tolerance limits.
- Protection: IP54.
- Power supply: 1 battery type CR2032.



907.879

Item No.	Measuring range/mm	Accuracy mm	Price EUR
907.879	0-12.7	± 0.01	100.00
907.878	0-12.7	± 0.005	154.00
Option:			
495.157	Spare battery		0.50



Mitutoyo Absolute Digimatic dial indicators ID-S / ID-S Solar

Standard digital dial indicators with the absolute measuring system with a very good price-performance ratio.

- Measuring range: 0- 12.7 mm.
- Resolution: 0.01 or 0.001 mm.
- Digimatic data output.
- Max. measuring speed: any.
- Measuring force:
543.781/790: ≤ 2.0 N,
543.500/505: ≤ 1.5 N.
- Clamping stem: $\varnothing 8$ mm.
- Tungsten carbide stylus tip.
- Reversible measuring direction.
- Protection: IP42.
- Conforms to factory standard.
- Power supply: 1 battery type V357 (543.781/790).

NEW



543.790

543.505

*Data cables Digimatic,
USB Input Tool Direct, U-WAVE
available on request.*

Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Price EUR
543.781	0- 12.7	0.01	± 0.02	145.00
543.790	0- 12.7	0.001	± 0.003	293.00
ID-S Solar:				
543.505	0- 12.7	0.01	± 0.02	148.00
543.500	0- 12.7	0.001	± 0.003	295.00
Option:				
836.535	Spare battery			1.60

Mitutoyo Absolute Digimatic dial indicator 0.01 mm ID-U

Dial indicator from Mitutoyo that combines the absolute system with a measuring range of 25.4 mm.

- Measuring range: 0- 25.4 mm.
- Resolution: 0.01 mm.
- Digimatic data output.
- On/off switch.
- Reset.
- Max. measuring speed: any.
- Measuring force: ≤ 1.8 N.
- Clamping stem: $\varnothing 8$ mm.
- Tungsten carbide stylus tip.
- Reversible measuring direction.
- Dimensions:
207.3 x 38 x 23 mm.
- Protection: IP42.
- Conforms to factory standard.
- Power supply: 1 battery type V357.



*Data cables Digimatic,
USB Input Tool Direct, U-WAVE
available on request.*

Item No.	Measuring range/mm	Accuracy mm	Price EUR
575.121	0-25.4	± 0.02	200.00
Options:			
836.535	Spare battery		1.60
540.774	Lift lever (12 mm)		27.00

Mitutoyo Absolute Digimatic dial indicators ID-C

Digital dial indicators with the absolute measuring system and a large display for easy reading of the measuring values and the tolerance judgement. The tolerance values are shown graphically above the current measurement or the graphical display is visible on the entire display. The 330° rotatable display guarantees an ideal read-out in any position.

- Measuring range: 0-50.8 mm.
- Resolution: 0.01 or 0.001 mm.
- ABS/INC switchable (except 543.264).
- LCD display 330° rotatable.
- Digimatic data output.
- Reset/preset.
- Max. measuring speed: any.
- Clamping stem: $\varnothing 8$ mm.
- Tungsten carbide stylus tip.
- Reversible measuring direction (except 543.264).
- Adjustable tolerance limits.
- Protection: IP42.
- Conforms to factory standard.
- Power supply: 1 or 2 batteries type V357.

Model with min/max/P-P function (543.260)

- Key lock function.

Model for internal measurements (543.264)

- Hold function.
- Spindle movement is graphically displayed (determination of the reversal point).
- Storage for 3 preset values (for example size setting ring).
- Max. measuring speed: any, for 'scanning' measurements: 0.05 mm/s.



543.390



543.264

Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Measuring force/N	Price EUR
543.400	0-12.7	0.01	± 0.02	≤ 0.9	254.00
543.474	0-25.4	0.01	± 0.02	≤ 1.8	355.00
543.494	0-50.8	0.01	± 0.04	≤ 2.3	552.00
543.390	0-12.7	0.001	± 0.003	≤ 1.5	337.00
543.470	0-25.4	0.001	± 0.003	≤ 1.8	408.00
543.490	0-50.8	0.001	± 0.005	≤ 2.3	609.00
With a reduced measuring force:					
543.404	0-12.7	0.01	± 0.02	$\leq 0.2-0.5$	310.00
543.394	0-12.7	0.001	± 0.003	$\leq 0.4-0.7$	418.00
With min/max/P-P function:					
543.260	0-12.7	0.001	± 0.003	≤ 1.5	448.00
For internal measurements:					
543.264	0-12.7	0.001	± 0.003	≤ 1.5	473.00
Options:					
836.535	Spare battery (543.260 and 543.264: 2 needed)				1.60
905.338	Digimatic signal cable, 1 m				29.00
905.409	Digimatic signal cable, 2 m				35.00
106.384	USB Input Tool Direct cable, 2 m				102.00
102.795	U-WAVE data cable				87.00

Mitutoyo Absolute Digimatic dial indicators ID-B and ID-N

Compact digital dial indicators with the Absolute measuring system and with protection degree IP66. Flexible mounting because the display can also display upside-down.

- Measuring range: 0- 12.7 mm.
- Resolution: 0.01 or 0.001 mm.
- ABS/INC switchable.
- Digimatic data output.
- On/off switch.
- Reset/preset.
- Hold function.
- Max. measuring speed: any.
- Measuring force: ≤ 2 N (0- 5 mm), ≤ 2.5 N (0- 12.7 mm).
- Clamping stem: $\varnothing 8$ mm.
- Tungsten carbide stylus tip.
- Reversible measuring direction.
- Adjustable tolerance limits.
- Protection: IP66.
- Conforms to factory standard.
- Power supply: 1 battery type V357.

Data cables Digimatic, USB Input Tool Direct, U-WAVE available on request.



Top view 543.580



543.580 (543.585)

543.575 (543.570)

Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Price EUR
543.580	0- 5	0.01	± 0.02	248.00
543.585	0- 5	0.001 / 0.01	$\pm 0.003 / \pm 0.01$	330.00
543.570	0- 12.7	0.01	± 0.02	223.00
543.575	0- 12.7	0.001 / 0.01	$\pm 0.003 / \pm 0.01$	306.00
Option:				
836.535	Spare battery			1.60

Digital dial indicator with calculation function

Robust digital dial indicator with built-in calculation function for easy determination of diameters by means of measuring a curved surface. Suitable for measuring both inside and outside diameters and multifunctional dial indicator applications. Delivery with measuring bases of 10, 20, 30, 60 and 100 mm.

- Measuring range: 0- 13 mm.
- Resolution: 0.005 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Hold function.
- Clamping stem: $\varnothing 8$ mm.
- Aluminum construction.
- Delivery in a case.
- Power supply: 1 battery type CR2032.



Item No.	Measuring range/mm	Accuracy mm	Price EUR
907.884	0- 13	$\pm 0.005^*$	240.00
Option:			
495.157	Spare battery		0.50

* Accuracy of the indicator without the use of measuring bases. The accuracy with measuring bases depends on the radius and form deviation of the workpiece.



Mitutoyo Absolute Digimatic dial indicators with calculation function ID-C

Multi-functional dial indicators with absolute measuring system and built-in calculation function for various applications. The results, for example inside and outside diameter, groove width, bore diameter and curve radius, are determined based on the spindle displacement x ; formula: $Ax + B + Cx^{-1}$. The coefficients A, B and C can be set and the calculations are processed and displayed real-time. Besides the calculation function these dial indicators have the following functions: tolerance judgement, zero point setting, memory for min/max value, hold function and data output.

- Measuring range: 0 - 50.8 mm.
- Resolution: 0.0002 to 1 mm, switchable.
- ABS/INC switchable.
- LCD display 330° rotatable.
- Digimatic data output.
- Reset/preset.
- Max. measuring speed: any.
- Clamping stem: $\varnothing 8$ mm.
- Adjustable tolerance limits.
- Protection: IP42.
- Power supply: 1 battery type V357.

Item No.	Measuring range/mm	Accuracy mm	Measuring force/N	Price EUR
543.285	0 - 12.7	± 0.003	≤ 1.5	515.00
543.480	0 - 25.4	± 0.003	≤ 1.8	594.00
543.485	0 - 50.8	± 0.006	≤ 2.3	714.00

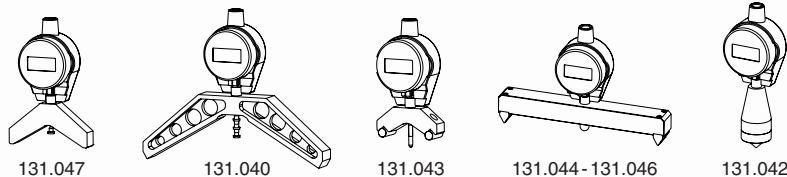
Options:

836.535	Spare battery	1.60
905.338	Digimatic signal cable, 1 m	29.00
905.409	Digimatic signal cable, 2 m	35.00
106.384	USB Input Tool Direct cable, 2 m	102.00
102.795	U-WAVE data cable	87.00
902.011	Retraction lever	6.00
540.774	Cable retraction device	27.00
101.040	Back plate with lug	8.00



Bridges

A number of standard bridges have been developed for these indicators to provide several convenient measuring solutions. The accuracy depends on the radius and form deviation of the workpiece. Custom-made bridges are also possible.



Item No.	Description	Price EUR
131.047	Bridge, $r = 15 - 80$ mm	207.00
131.040	Bridge, $r = 40 - 210$ mm	287.00
131.043	Bridge, $r > 40$ mm	217.00
131.044	Bridge, $r > 120$ mm	230.00
131.045	Bridge, $r > 420$ mm	249.00
131.046	Bridge, $r > 1000$ mm	267.00
131.042	Groove gauge 1 - 12 mm	200.00

Digital dial indicators TESA Digico

Digital dial indicators with digital and digital-analog read-out. Authentic Swiss made product.

- Measuring range: 0-25 mm.
- Resolution: 0.01 or 0.001 mm.
- mm/inch conversion.
- USB/RS232C data output.
- Automatic switch-off.
- Absolute mode (spindle position is also read after automatic switch-off).
- Reset.
- Measuring force: ≤ 2.0 N.
- Dial diameter: 57 mm.
- Reversible measuring direction.
- Adjustable tolerance markers.
- Key lock function.
- Protection: IP62 (only 783.084).
- DIN 878.
- Delivery in a case with an inspection report.
- Power supply: 1 battery type CR2032.

TESA Digico 400/500/600/700

The 270° rotatable display guarantees an ideal read-out in any position.

- Preset.
- Overall reset.
- ABS/INC switchable.
- Numerical tolerance limits.
- Function for dynamic measurements (min, max, max-min) and memory for maximum and minimum values (only Digico 600/700).
- Determination of reversal point for internal measurements (only Digico 700).



Item No.	Type	Measuring range/mm	Resolution mm	Accuracy mm	Price EUR
TESA Digico 200/300:					
783.000	205 MI	0-12.5	0.01	± 0.02	237.00
783.035	305 MI	0-12.5	0.001	± 0.008	370.00
TESA Digico 400/500:					
783.142	410 MI	0-25	0.01	± 0.02	456.00
783.084	505 MIP ¹	0-12.5	0.001	± 0.004	488.00
TESA Digico 600:					
783.085	605 MI	0-12.5	0.001	± 0.004	481.00
783.144	610 MI	0-25	0.001	± 0.005	533.00
TESA Digico 700:					
783.086	705 MI	0-12.5	0.001	± 0.004	503.00
Options:					
495.157	Spare battery				0.50
783.001	Connection for AC adapter ²				156.00
782.201	AC adapter (without power cable) ²				66.00
782.202	EU power cable for AC adapter ²				8.60
783.027	Opto-USB cable (2 m)				216.00
781.887	Opto-RS232C cable 9p (2 m)				114.00
781.999	Opto-RS232C cable 9p, bidirectional (2 m)				131.00

¹ With protection IP62.

² To be used together for external power supply.



783.000



Digital mini dial indicators TESA Digico 12/12-HP

Designed for working in the toughest conditions, protected against spraying water, oil and coolants. The diameter of the housing is only 44 mm. Patented, inductive measuring system. The Digico 12-HP dial indicators (*) are high-precision models.

- Measuring range: 0- 12.5 mm.
- Resolution: 0.01 mm or 0.001/0.01 mm.
- Accuracy: ±0.01 mm.
- Repeatability: 0.005 mm.
- mm/inch conversion.
- ABS/INC switchable (except 12-HP).
- RS232C data output with external power supply.
- Automatic switch-off.
- Preset (except 12-HP) and reset.
- Max. measuring speed: 2 m/s.
- Measuring force: 0.5-0.9 (±0.15) N.
- Reversible measuring direction (except 12-HP).
- Protection: IP65.
- Delivery with an inspection report (except the 0.01 mm models) and a declaration of conformity.
- Power supply: 1 battery type CR2032.



782.435

TESA Digico 12-HP*

- Accuracy: ±0.002 mm.
- Repeatability: 0.002 mm.
- With digital-analog display of the measured value (±0.025 to ±1.25 mm).
- Lock of automatic switch-off.
- Min/max/P-P function.



782.436

Item No.	Measuring range/mm	Resolution mm	Price EUR
Electronic module IP65 protected:			
782.432	0- 12.5	0.01	308.00
782.434	0- 12.5	0.001/0.01	434.00
782.436*	0- 5	0.001/0.01	465.00
Mechanics and electronics IP65 protected:			
782.433	0- 12.5	0.01	348.00
782.435	0- 12.5	0.001/0.01	479.00
782.437*	0- 5	0.001/0.01	485.00
Option:			
495.157	Spare battery		0.50

Digital dial indicators TESA Digico 1/2

- Measuring range: 0- 60 mm.
- Resolution: 0.001/0.01 mm.
- Hysteresis: 0.001 mm.
- mm/inch conversion.
- Illuminated LCD display with digital-analog representation of the measured value.
- Display rotatable over 90°, 180° and 270°.
- RS232C data output.
- Automatic switch-off.
- Min/max/P-P function.

- Tungsten carbide stylus tip.
- Reversible measuring direction.
- Adjustable tolerance limits and color indication (only when using AC adapter).
- Protection: IP54.
- Delivery with battery, retraction lever, an inspection report and a declaration of conformity.
- Power supply: 1 lithium battery 3.6 V or AC adapter.

Item No.	Type	Measuring range/mm	Accuracy mm	Price EUR
781.416	Digico 1	0- 30	±0.002	1,103.00
781.707	Digico 2	0- 60	±0.003	1,628.00
Options:				
781.624	Spare battery			16.50
781.421	AC adapter			92.00
781.862	Cable SPC printer			373.00



781.416



Mitutoyo Absolute Digimatic dial indicators ID-F/ID-H

Very advanced Mitutoyo Absolute dial indicators for the demanding user. Besides the high accuracy, these indicators are equipped with many practical functions, among which an automatic hold function for the maximum and minimum measuring value, calculation of min-max difference value and tolerance judgements with help of a color changing display (red/green).

To optimise the reproducibility and stability of measurements for the ID-H dial indicators an optional remote control device is available with which the indicator can be set up without actually physically making contact.



- Measuring range: 0 - 60.9 mm.
- Resolution: 0.01, 0.001 or 0.0005 mm, switchable.
- RS232C data output (only 543.561/563).
- Digimatic data output.
- On/off switch.
- Reset/preset.
- Clamping stem: $\varnothing 8$ mm.
- Tungsten carbide stylus tip: $\varnothing 3$ mm.
- Reversible measuring direction.
- Adjustable tolerance limits.
- Conforms to factory standard.
- Power supply: AC adapter.



543.561

543.551



210.099

Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Measuring force/N	Price EUR
ID-F					
543.551	0- 25	0.01/0.001	± 0.003	≤ 1.8	594.00
543.553	0- 50	0.01/0.001	± 0.006	≤ 2.3	646.00
543.557	0- 50	0.01/0.001	± 0.003	≤ 2.3	794.00
ID-H					
543.561	0-30.4	0.001/0.0005	± 0.0015	≤ 2.0	620.00
543.563	0-60.9	0.001/0.0005	± 0.0025	≤ 2.5	672.00
Options:					
210.099*	Remote control				77.00
540.774	Cable retraction device, 12 mm stroke				27.00
210.131*	RS232C cable, 2 m				195.00
936.937	Digimatic signal cable without data switch, 1 m				45.00
965.014	Digimatic signal cable without data switch, 2 m				59.00
106.383	USB Input Tool Direct cable, 2 m				102.00
102.791	U-WAVE data cable				97.00

* Only for ID-H.

Magnescale digital indicators

- Measuring range: 0-60 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- RS232C data output.
- Min/max/P-P function.
- Measuring force U12B: ≤1.3 N,
U30B: ≤1.5 N,
U60B: ≤2.2 N.
- Reversible measuring direction.
- Mounting by:
 - a) clamping stem ø8 mm,
 - b) thread M12x1, length 8 mm (including nut M12).
- Air damped travel.
- Power supply: AC adapter (6 Vdc, 500 mA).
- Delivery without AC adapter.



344.431

334.690



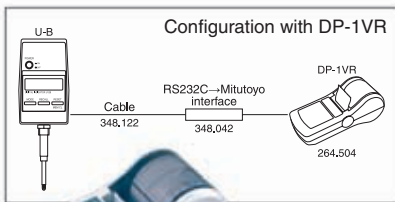
344.409



344.437



402.165



264.504

937.179

Item No.	Type	Measuring range/mm	Accuracy mm	Price EUR
344.431	U12B-F	0-12	±0.001	550.00
344.430	U30B-F	0-30	±0.001	609.00
344.432	U60B-F	0-60 ¹	±0.0015	655.00
Options:				
334.694	Mini AC adapter (6 Vdc)			28.00
344.409	Set of 4 probes DZ5100			182.00
344.437	Pneumatic retraction device DZ173 (maximum travel 34 mm)			89.00
540.774	Cable retraction device (12 mm)			27.00
402.165	Stand 150 mm, granite table			159.00
334.690	Stand 135 mm, alumina ceramic grooved table			355.00
348.122	RS232C cable 9p			46.00
264.504	Mitutoyo DP-1VR SPC printer ²			454.00
348.042	RS232C→Mitutoyo interface ³			53.00
937.179	Foot switch			43.00
900.825	Printing paper (5 rolls)			27.00

¹ The maximum travel is 34 mm with pneumatic retraction device or cable retraction device.

² Incl. AC adapter (6 Vdc) and a roll of printing paper.

³ Makes e.g. the Magnescale signal suitable for the DP-1VR printer (also requires cable 348.122).

Dial indicators 0.01 mm

Indicators with an excellent price-performance ratio.

- Measuring range: 0- 10 mm.
- Graduation: 0.01 mm.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 55 mm.
- Rotatable dial.
- Shockproof.
- Adjustable tolerance markers.
- Flat back.
- Delivery with an inspection report.



Item No.	Measuring range/mm	Price EUR
907.928	0- 3	13.20
907.929	0- 5	13.60
907.930	0- 10	14.20
Option:		
908.799	Back with lug	1.80



Dial indicators 0.01 mm

Indicators with a large dial and a locking screw. Shockproof design.

- Measuring range: 0- 10 mm.
- Graduation: 0.01 mm.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 60 mm.
- Rotatable dial.
- Shockproof.
- Adjustable tolerance markers.
- Locking screw.
- Flat back.
- Delivery with an inspection report.



Item No.	Measuring range/mm	Price EUR
907.931	0- 3	13.60
907.932	0- 5	14.20
907.933	0- 10	14.90
Option:		
908.987	Back with lug	1.80



Dial indicators 0.01 mm

Indicators with a large measuring range. Shockproof design.

- Measuring range: 0 - 100 mm.
- Graduation: 0.01 mm.
- Clamping stem: \varnothing 8 mm.
- Rotatable dial.
- Shockproof.
- Adjustable tolerance markers (except 907.916).
- Locking screw.
- Flat back.
- Delivery with an inspection report.



907.934



907.936



907.935



907.916

Item No.	Measuring range/mm	Dial \varnothing /mm	Price EUR
907.934	0 - 25	60	25.60
907.935	0 - 30	60	26.60
907.936	0 - 50	76	59.00
907.916	0 - 100	80	113.00

Options:

908.987 ¹ Back with lug	1.80
908.988 ² Back with lug	2.60

¹ For 907.934/935.

² For 907.936/916.

Splashproof dial indicators 0.01 mm

Indicators with splashproof design.

- Measuring range: 0 - 10 mm.
- Graduation: 0.01 mm.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 55 mm.
- Rotatable dial.
- Shockproof.
- Adjustable tolerance markers.
- Locking screw.
- Back with lug.
- Protection: IP54.
- Conforms to factory standard.



908.779

Item No.	Measuring range/mm	Price EUR
908.777	0 - 3	35.20
908.778	0 - 5	36.90
908.779	0 - 10	38.60



Miniature dial indicators 0.01 and 0.001 mm

Indicators with very small dimensions and an excellent price-performance ratio. Shockproof design.

- Measuring range: 0- 10 mm.
- Graduation: 0.01 or 0.001 mm.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 40 mm.
- Rotatable dial.
- Shockproof.
- Adjustable tolerance markers.
- Locking screw.
- Flat back.
- Delivery with an inspection report.



Item No.	Measuring range/mm	Price EUR
Graduation 0.01 mm:		
907.925	0- 3	15.40
907.926	0- 5	15.40
907.927	0- 8	16.20
907.914	0- 10	17.10
Graduation 0.001 mm:		
907.920	0- 1	43.00
Option:		
908.986	Back with lug	1.30



Dial indicators 0.001 mm

Indicators with micrometer reading. Shockproof design.

- Measuring range: 0- 5 mm.
- Graduation: 0.001 mm.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 60 mm.
- Rotatable dial.
- Scale numbering: 0- 100- 0 (907.921: 0- 100).
- Shockproof.
- Adjustable tolerance markers.
- Locking screw.
- Flat back.
- Delivery with an inspection report.



Item No.	Measuring range/mm	Price EUR
907.921	0- 1	36.50
907.922	0- 2	55.00
907.923	0- 3	55.00
907.924	0- 5	86.00
Option:		
908.987	Back with lug	1.80



Peacock dial indicators 0.1 and 0.01 mm

- Measuring range: 0-80 mm.
- Graduation: 0.1 or 0.01 mm.
- Clamping stem: $\varnothing 8, 10$ or 14 mm.
- Rotatable dial.
- Adjustable tolerance markers.
- Flat back or back with lug*.
- DIN 878.
- Delivery in a case.



855.547



855.517



855.507/8



855.527



855.537



855.589

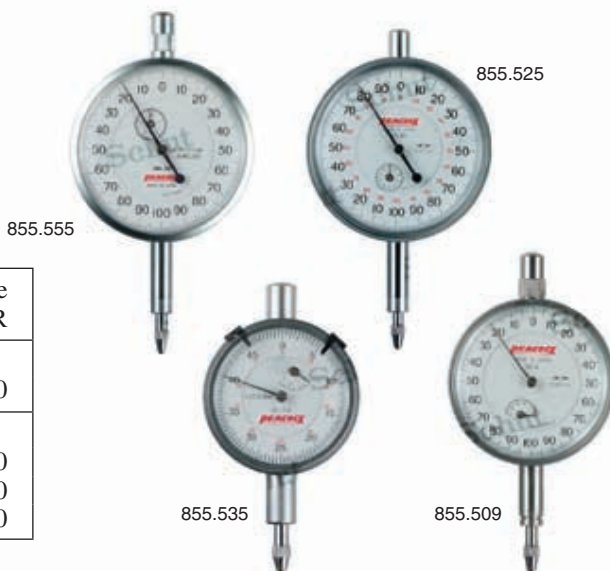


Item No.	Measuring range/mm	Clamping stem \varnothing /mm	Dial \varnothing /mm	Price EUR
Graduation 0.01 mm:				
855.547	0- 4	8	36	48.00
855.536	0- 3	8	40	91.00
855.517	0- 5	8	53	34.30
855.507	0-10	8	53	31.30
855.508*	0-10	8	53	31.30
855.527*	0-20	8	66.5	61.00
855.537*	0-30	8	76	106.00
855.557*	0-50	10	83	159.00
Graduation 0.1 mm:				
855.589*	0-80	14	112	373.00

* Back with lug.

Peacock dial indicators 0.005 and 0.001 mm

- Measuring range: 0-5 mm.
- Graduation: 0.005 or 0.001 mm.
- Clamping stem: $\varnothing 8$ mm.
- Rotatable dial.
- Flat back or back with lug*.
- DIN 878.
- Delivery in a case.



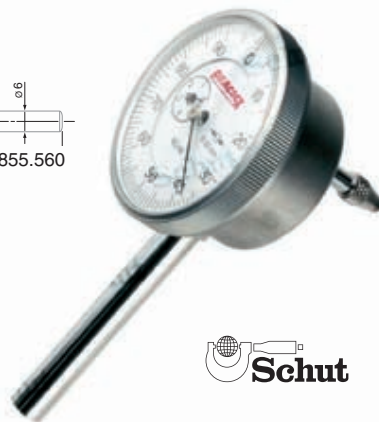
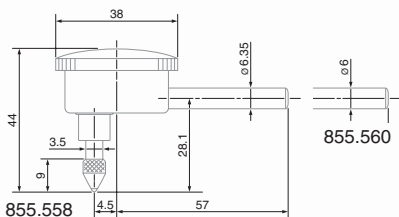
Item No.	Measuring range/mm	Dial \varnothing /mm	Price EUR
Graduation 0.005 mm:			
855.535*	0-3	47	98.00
Graduation 0.001 mm:			
855.509	0-1	53	63.00
855.525*	0-2	66.5	124.00
855.555*	0-5	66.5	126.00

* Back with lug.

Peacock dial indicators with back plunger

The back plunger dial indicator is characterized with easy handling since the spindle with the contact point is moving in the direction perpendicular to the dial face and the gauge is more compact. The dial indicator of this type is convenient for use in achieving a parallelism of the table of the machine tool, with measuring jigs, in restricted areas and on locations where scale reading is difficult.

- Measuring range: 0-5 mm.
- Graduation: 0.01 mm.
- Repeatability: 0.005 mm.
- Hysteresis: ± 0.006 mm.
- Measuring force: 1.4 N.
- Rotatable dial.
- Scale numbering: 0-100.
- DIN 878.
- Delivery in a case.



Schut



Item No.	Measuring range/mm	Clamping stem \varnothing /mm	Accuracy mm	Price EUR
855.558	0-5	6.35	± 0.02	63.00
855.560	0-5	6	± 0.02	67.00
Clamping stem on back side:				
855.559	0-5	8	± 0.02	63.00

Mitutoyo dial indicators 0.01 and 0.001 mm

Dial indicators from Mitutoyo with a very favourable price-performance ratio. In our catalog we only represent a small part of the Mitutoyo program, but we can supply all the Mitutoyo products.

- Graduation: 0.01 or 0.001 mm.
- Clamping stem: $\varnothing 8$ mm.
- Dial diameter: 55.6 mm.
- Rotatable dial with locking screw and adjustable tolerance markers.
- Delivery in a case.
- Various models available.

Graduation 0.01 mm

- Measuring range: 0-10 mm.
- Accuracy: ± 0.013 mm.
- Max. hysteresis: 0.003 mm.
- Measuring force: 1.4 N.
- 1 pointer revolution = 1 mm.
- Scale numbering: 0-100 (100-0).
- Flat back or back with lug¹.
- DIN 878.



204.608



211.000



210.911

Item No.	Measuring range/mm	Graduation mm	Price EUR
204.608 ¹	0-10	0.01	33.00
204.612	0-10	0.01	33.00
204.660 ²	0-10	0.01	116.00

¹ Back with lug.

² Splashproof model; measuring force 2.5 N.



Graduation 0.001 mm


- Measuring range: 0-1 mm.
- Accuracy: ± 0.005 mm.
- Max. hysteresis: 0.002 mm.
- Flat back. (Back with lug available on request.)
- Conforms to factory standard.


Item No.	Measuring range/mm	Graduation mm	1 pointer revolution	Scale numbering	Measuring force/N	Price EUR
210.911	0-1	0.001	0.2 mm	0-100-0	1.5	87.00
211.000	0-1	0.001	0.1 mm	0-100 (100-0)	1.5	112.00

TESA dial indicators 0.01 and 0.001 mm


TESA precision dial indicators with a high accuracy and a special construction guaranteeing a very long life.

- Measuring range: 0-30 mm.
- Graduation: 0.01 or 0.001 mm.
- Clamping stem: \varnothing 8 mm.
- Rotatable dial with adjustable tolerance markers.
- Shockproof, except 781.681/683.
- Flat back.
- DIN 878, except 783.221, 782.724.
- Delivery with an inspection report and a declaration of conformity.







783.221




781.681



779.921




782.724




783.145


Item No.	Measuring range/mm	Dial \varnothing /mm	Scale numbering	Price EUR
Graduation 0.01 mm:				
783.221	0- 1	58	50-0-50	181.00
781.681 ¹	0- 5	40	0- 50	170.00
779.921 ²	0- 5	40	0- 50	259.00
779.944 ²	0-10	57	0-100	236.00
782.724	0-10	58	0-100	60.00
781.686 ¹	0-10	58	0-100	105.00
783.145 ¹	0-30	58	0-100	348.00
Graduation 0.01 mm, protection IP54:				
781.683 ¹	0- 5	40	0- 50	147.00
779.925 ²	0- 5	40	0- 50	288.00
Graduation 0.001 mm:				
781.684 ¹	0- 1	40	0-100	327.00
779.910 ²	0- 1	40	0-100	463.00
781.693 ¹	0- 1	58	0-100	366.00
781.695 ¹	0- 5	58	0-200	376.00
Graduation 0.001 mm, protection IP54:				
781.685 ¹	0- 1	40	0-100	310.00
781.696 ¹	0- 1	58	0-100	422.00



779.925



781.685



¹ Clamping stem and measuring pin out of hardened stainless steel.

² With retraction device facility and dial lock.

Käfer dial indicators 0.01 mm

These recently developed Käfer dial indicators are very stable and have a very good price-performance ratio. Also available in a shockproof design, where blows against the plunger can not damage the mechanics.

- Measuring range: 0- 10 mm.
 - Graduation: 0.01 mm.
 - Clamping stem: \varnothing 8 mm.
 - Dial diameter: 40 mm.
 - Scale numbering: 0- 50 (852.291: 0- 100).
 - Adjustable tolerance markers.
 - Flat back.
 - Clamping stem and measuring pin out of hardened stainless steel.
- DIN 878.
 - Delivery in a case.

Item No.	Measuring range/mm	Graduation mm	Price EUR
852.350	0- 3	0.01	37.70
852.352	0- 5	0.01	48.00
Shockproof design:			
852.351	0- 3	0.01	46.00
852.353	0- 5	0.01	60.00
852.291	0- 10	0.01	66.00



852.353

Käfer dial indicators 0.01 mm

These dial indicators have an almost constant measuring force of 1 N over the total measuring range. This is achieved through a built-in lever construction. The shockproof design protects the mechanics against harsh blows and reduces the possibility of damage. The shockproof design has an unbreakable cover glass.

- Measuring range: 0- 10 mm.
- Graduation: 0.01 mm.
- Measuring force: approx. 1 N.
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 58 mm.
- Scale numbering: 0- 100.
- Adjustable tolerance markers.
- Flat back.
- DIN 878.
- Delivery in a case.

Item No.	Measuring range/mm	Graduation mm	Price EUR
852.354	0- 10	0.01	36.10
Shockproof design:			
852.355	0- 10	0.01	38.70



852.355



Käfer dial indicators 0.01 mm

These Käfer dial indicators combine a large measuring range with a high accuracy. The clear dials ensure an easy read-out. Thanks to the special construction, these dial indicators have an almost constant measuring force on the whole measuring range.

- Measuring range: 0- 100 mm.
- Graduation: 0.01 mm.
- Measuring force: approx. 1 N
(852.290 approx. 1.5 N, 852.289 approx. 1.2 N).
- Clamping stem: \varnothing 8 mm.
- Dial diameter: 58 mm.
- Rotatable dial.
- Adjustable tolerance markers.
- Flat back.
- Clamping stem and measuring pin out of hardened stainless steel.
- Conforms to factory standard.
- Delivery in a case.

Item No.	Measuring range/mm	Accuracy mm	Scale numbering	Price EUR
852.356	0- 30	± 0.02	0- 100	86.00
852.357	0- 50	± 0.025	0- 100	122.00
852.290	0- 80	± 0.030	0- 100	252.00
852.289	0- 100	± 0.050	0- 100	320.00

**Käfer Feinika dial indicators 0.001 mm**

The Käfer Feinika dial indicators have a special construction without gear wheels, comparable to the precision dial indicators. A special lever construction enlarges the measuring range up to 1 mm. This lever construction gives the Feinika a very low hysteresis of maximal 1.5 μ m, making it very suitable for very accurate comparative measurements where a large measuring range is necessary. Just like the precision dial indicators the Feinika has a resolution of 0.001 mm.



- Measuring range: 0- 1 mm.
- Graduation: 0.001 mm.
- Hysteresis: ≤ 0.0015 mm.
- Clamping stem: \varnothing 8 mm.
- Shockproof.
- Adjustable tolerance markers.
- Conforms to factory standard.
- Delivery in a case.

Item No.	Measuring range/mm	Accuracy mm	Dial \varnothing /mm	Scale numbering	Price EUR
852.358	0- 1	± 0.004	40	0- 100	156.00
852.359	0- 1	± 0.004	58	0- 100	156.00

Precision dial indicator

Highly accurate shockproof dial indicator for measurements from a fixed reference point. Very suitable for internal measuring instruments and dial indicator stands for example.

- Measuring range: 0.1 mm.
- Graduation: 0.001 mm.
- Measuring force: <2 N.
- Clamping stem: $\varnothing 8$ mm.
- Travel: 3 mm.
- Adjustable tolerance markers.
- Fine adjustment.
- Conforms to factory standard.



NEW

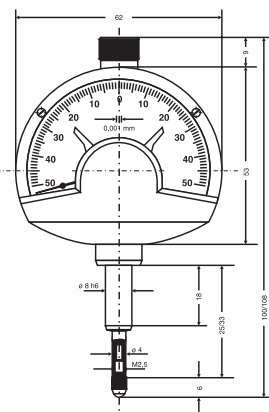


Item No.	Measuring range/mm	Dial \varnothing /mm	Price EUR
907.939	0.1	63.5	130.00

Käfer Compika precision dial indicators

Accurate precision dial indicators with stable, multiple ball-bearing mechanics. Because of that the Compika has a very low hysteresis. Easy to set by the fine adjustment on top of the dial indicator, that has a protective knob to prevent unintentional displacement of the pointer.

- Measuring range: 0.1 mm.
- Graduation: 0.001 mm.
- Measuring force: approx. 1 N.
- Clamping stem: $\varnothing 8$ mm.
- Max. probe travel: 3 mm.
- Ball bearing probe rod.
- Protective knob.
- Shockproof.
- Waterproof (only 852.386).
- Adjustable tolerance markers.
- Fine adjustment.
- Clamping stem and measuring pin out of hardened stainless steel.
- DIN 879.
- Delivery in a case.



852.360

852.386

Item No.	Measuring range/mm	Waterproof	Dial \varnothing /mm	Scale numbering	Price EUR
852.360	0.1	no	62	50-0-50	148.00
852.386	0.1	yes	62	50-0-50	189.00

Schwenk precision dial indicators

Highly accurate shockproof dial indicators for measurements from a fixed reference point. Very suitable for internal measuring instruments and dial indicator stands for example.

- Measuring range: up to 0.5 mm.
- Graduation: 0.01 or 0.001 mm.
- Measuring force: approx. 1 N.
- Clamping stem: $\varnothing 8$ mm.
- Max. probe travel: 3 mm.
- Ball bearing probe rod.
- Adjustable tolerance markers.
- DIN 879.
- Delivery in a case.



852.640



852.641

Item No.	Type	Measuring range/mm	Graduation mm	Price EUR
852.640	Mytast	0.1	0.001	167.00
852.641	Centitast	0.5	0.01	132.00

Etalon precision dial indicators

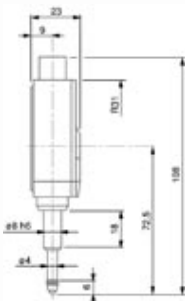
- Measuring range: 0.1 mm.
- Graduation: 0.001 mm.
- Measuring force: approx. 1 N.
- Clamping stem: $\varnothing 8$ mm.
- Max. probe travel: 3 mm.
- Shockproof.
- Waterproof (only 781.700).
- Adjustable tolerance markers.
- Fine adjustment.
- Clamping stem and measuring pin out of hardened stainless steel.
- DIN 879.
- Delivery in a case with a lifting cable.



781.699



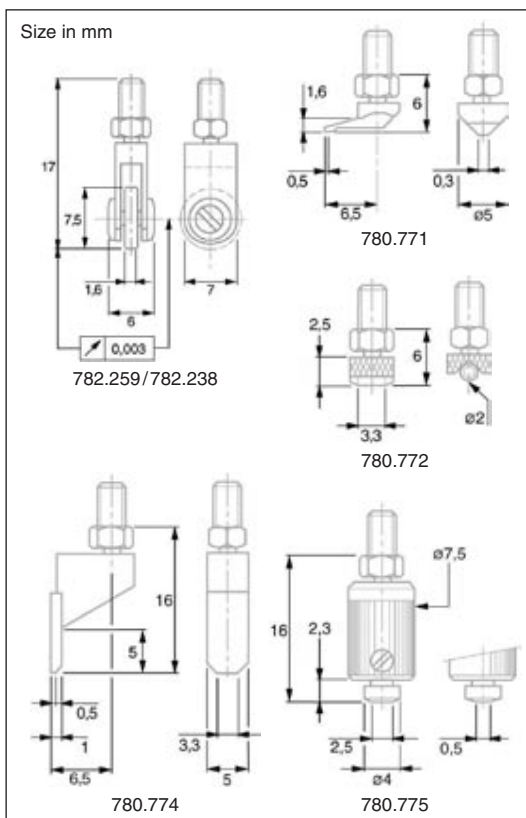
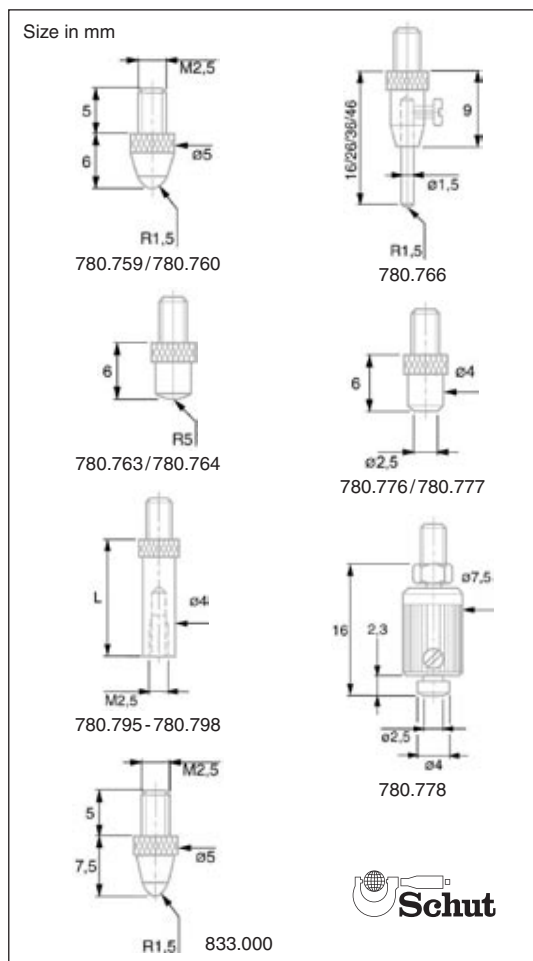
781.700



Item No.	Measuring range/mm	Waterproof	Dial \varnothing /mm	Price EUR
781.699	0.1	no	62	283.00
781.700	0.1	yes	62	321.00

Inserts and extensions

Most dial indicators are equipped with an interchangeable insert with thread M2.5. Besides the inserts shown below various other types are available.

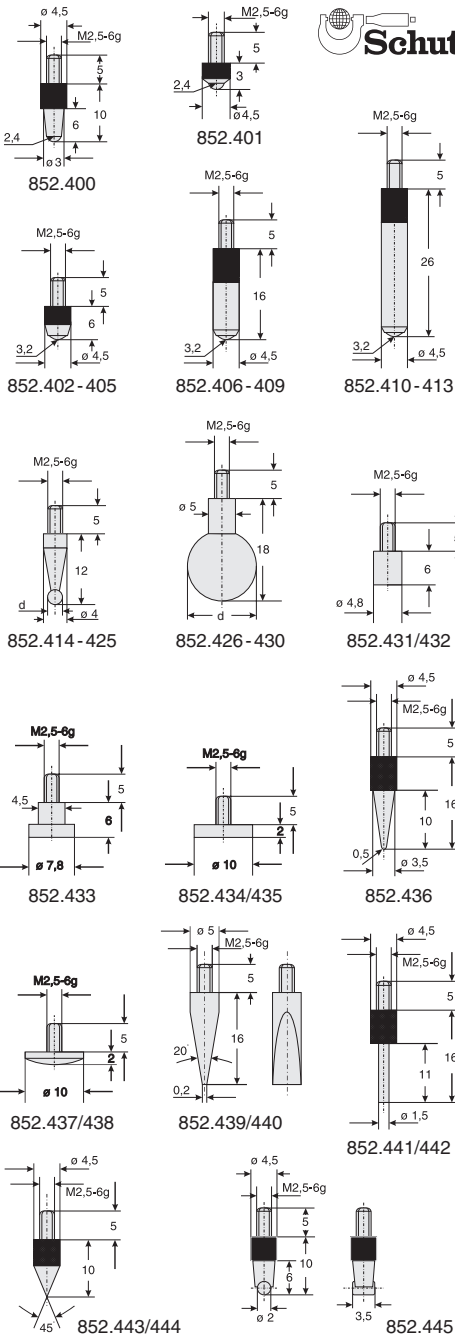


Item No.	Type	Price EUR
Ball radius 1.5 mm:		
780.759	Steel	4.80
780.760	Tungsten carbide	9.60
780.766	4 interchangeable inserts	26.00
Ball radius 5 mm:		
780.763	Steel	23.00
780.764	Tungsten carbide	46.00
Flat:		
780.776	Steel	27.00
780.777	Tungsten carbide	49.00
780.778	Flat, adjustable meas. face	351.00

Item No.	Type	Price EUR
Special forms:		
782.259	Roller with a cylindrical measuring face	111.00
782.238	Roller with a ball-shaped measuring face	103.00
780.771	Offset point	48.00
780.772	Cylindrical point	48.00
780.774	Offset line contact face	71.00
780.775	V-shaped adjustable point	435.00
Extensions:		
780.795	10 mm	8.00
780.796	15 mm	8.00
780.797	20 mm	8.00
780.798	40 mm	8.00
Special probe head:		
833.000	Ceramic ball ø3 mm	32.10

Käfer inserts

Inserts with thread M2.5. The inserts are made of steel unless otherwise indicated; tungsten carbide (TC), ruby (R) or sapphire (S).

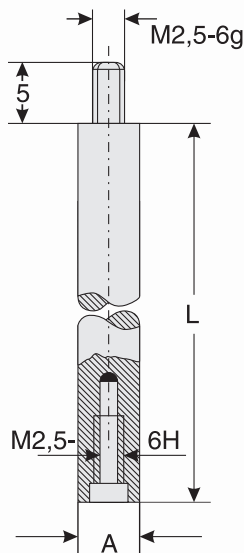


Item No.	Description	Price EUR
Ball probes:		
852.400	$d= 2.4$ mm $l= 10$ mm	3.30
852.401	$d= 2.4$ mm $l= 3.0$ mm	1.30
852.402	$d= 3.2$ mm $l= 6.0$ mm	1.00
852.403	$d= 3.2$ mm $l= 6.0$ mm	TC 4.80
852.404	$d= 3.2$ mm $l= 6.0$ mm	R 6.50
852.405	$d= 3.2$ mm $l= 6.0$ mm	S 6.50
852.406	$d= 3.2$ mm $l= 16$ mm	3.40
852.407	$d= 3.2$ mm $l= 16$ mm	TC 11.60
852.408	$d= 3.2$ mm $l= 16$ mm	R 9.40
852.409	$d= 3.2$ mm $l= 16$ mm	S 9.40
852.410	$d= 3.2$ mm $l= 26$ mm	3.40
852.411	$d= 3.2$ mm $l= 26$ mm	TC 11.60
852.412	$d= 3.2$ mm $l= 26$ mm	R 9.40
852.413	$d= 3.2$ mm $l= 26$ mm	S 9.40
852.414	$d= 1.0$ mm $l= 12$ mm	7.50
852.420	$d= 1.0$ mm $l= 12$ mm	TC 22.60
852.415	$d= 2.0$ mm $l= 12$ mm	7.50
852.421	$d= 2.0$ mm $l= 12$ mm	TC 22.60
852.416	$d= 3.0$ mm $l= 12$ mm	7.50
852.422	$d= 3.0$ mm $l= 12$ mm	TC 22.60
852.417	$d= 4.0$ mm $l= 12$ mm	7.50
852.423	$d= 4.0$ mm $l= 12$ mm	TC 22.60
852.418	$d= 5.0$ mm $l= 12$ mm	7.50
852.424	$d= 5.0$ mm $l= 12$ mm	TC 22.60
852.419	$d= 6.0$ mm $l= 12$ mm	7.50
852.425	$d= 6.0$ mm $l= 12$ mm	TC 22.60
852.426	$d= 7.0$ mm $l= 18$ mm	7.90
852.427	$d= 8.0$ mm $l= 18$ mm	7.90
852.428	$d= 9.0$ mm $l= 18$ mm	7.90
852.429	$d= 10.0$ mm $l= 18$ mm	7.90
852.430	$d= 11.0$ mm $l= 18$ mm	7.90
Flat probes:		
852.431	$d= 4.8$ mm $l= 6$ mm	4.10
852.432	$d= 4.8$ mm $l= 6$ mm	TC 27.00
852.433	$d= 7.8$ mm $l= 6$ mm	5.10
852.434	$d= 10.0$ mm $l= 2$ mm	4.60
852.435	$d= 10.0$ mm $l= 2$ mm	TC 44.00
Spherical probes:		
852.436	conical $l= 16$ mm	5.50
852.437	$d= 10.0$ mm $l= 2.0$ mm	5.90
852.438	$d= 10.0$ mm $l= 2.0$ mm	TC 92.00
Knife-edged probes:		
852.439	$d= 5.0$ mm $l= 16$ mm	8.90
852.440	$d= 5.0$ mm $l= 16$ mm	TC 58.00
Needle-shaped probes:		
852.441	$d= 1.5$ mm $l= 16$ mm	6.90
852.442	$d= 1.5$ mm $l= 16$ mm	TC 23.10
Tapered probes:		
852.443	$d= 4.5$ mm $l= 10$ mm	5.50
852.444	$d= 4.5$ mm $l= 10$ mm	TC 48.00
Probe with cylindrical measuring face:		
852.445	$d= 2 \times 3.5$ mm $l= 10$ mm	10.00

Extensions for inserts

Steel extensions for inserts with thread M2.5.

Item No.	Length mm	Price EUR
Extensions with A = $\varnothing 4$ mm:		
852.446	10	4.00
852.447	15	4.00
852.448	20	4.00
852.449	25	4.00
852.450	30	4.00
852.451	35	4.00
852.452	40	4.00
852.453	45	4.00
852.454	50	4.00
852.455	55	4.00
852.456	60	4.00
852.457	65	4.00
852.458	70	4.00
852.459	75	4.00
852.460	80	4.00
852.461	85	4.00
852.462	90	4.00
852.463	95	4.00
852.464	100	4.00

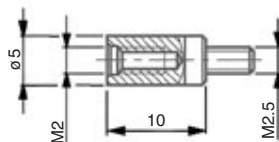


Item No.	Length mm	Price EUR
Extensions with A = $\varnothing 5$ mm:		
852.465	10	4.20
852.466	15	4.20
852.467	20	4.20
852.468	25	4.20
852.469	30	4.20
852.470	35	4.20
852.471	40	4.20
852.472	45	4.20
852.473	50	4.20
852.474	55	4.20
852.475	60	4.20
852.476	65	4.20
852.477	70	4.20
852.478	75	4.20
852.479	80	4.20
852.480	85	4.20
852.481	90	4.20
852.482	95	4.20
852.483	100	4.20

Adapters for inserts

Adapter for attaching other inserts to dial indicators and probes with an interchangeable insert with thread M2.5.

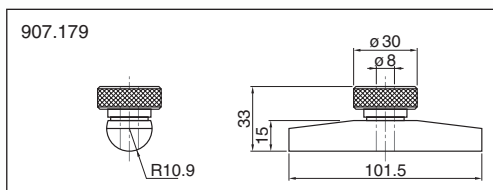
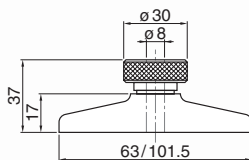
Item No.	External/internal thread	Price EUR
783.034	M2.5/M2	15.00



Depth measuring bases for dial indicators

Bases which make dial indicators and probes suitable for depth measurements.

- Clamping shaft: 8H7.



Item No.	Measuring face l x w/mm	Price EUR
907.153	63 x 17	15.40
907.165	101.5 x 17	16.20
With cylindrical measuring face:		
907.179	101.5 x R10.9	18.10

Retraction levers

To determine the right type of retraction lever please contact our sales department.

Retraction lever

Universal retraction lever, bottom mounted. This lever is fully compatible with TESA dial indicators, but can also be used with a wide range of other dial indicators.



780.782

Item No.	Description	Price EUR
780.782	Retraction lever	73.00
Consisting of:		
780.779	Lever	71.00
780.780	Washer	3.50

Retraction lever

Universal retraction lever, bottom mounted and compatible with any dial indicator with an interchangeable probe with M2.5 thread.



Item No.	Description	Price EUR
781.727	Retraction lever	22.00

Retraction lever

Universal retraction lever, bottom mounted and compatible with any dial indicator.



Item No.	Description	Price EUR
137.693	Retraction lever	2.00

Retraction levers

Universal retraction levers, top mounted. These levers are fully compatible with TESA and Käfer dial indicators of the given diameters, but can also be used with a wide range of other dial indicators.



782.321

Item No.	Description	Dial ø/mm	Price EUR
782.320	TESA lever	40	25.00
782.321	TESA lever	58	23.00
852.387	Käfer lever	58	5.90

Mitutoyo retraction levers

Universal retraction levers, top mounted. These levers are fully compatible with Mitutoyo dial indicators of the given series, but can also be used with a wide range of other dial indicators.



Item No.	Description	Price EUR
900.527	For series 1	6.00
900.525	For series 2	6.00
903.424	For series 3 and ID-S	7.00
902.011*	For series ID-C	6.00

* Only for ID-C with 12 mm measuring range.

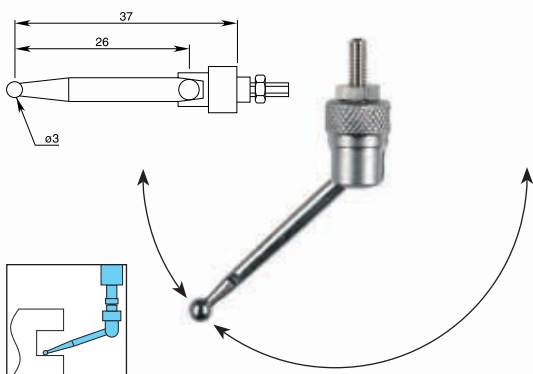
Clamping bush



Item No.	Description	Price EUR
780.398	Clamping bush VKE	9.30
780.397	Clamping screw VKD	4.30

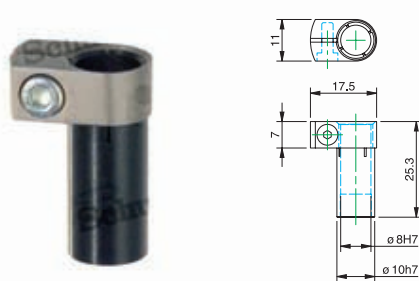
Swivel-type probe

Swivel-type probe for dial indicators with M2.5 thread. The probe can be oriented over 180°. Equipped with a steel ball probe $\varnothing 3$ mm.



Item No.	Description	Price EUR
900.391	Swivel-type probe	24.00

Clamping bush



Item No.	Description	Price EUR
906.497	Clamping bush	39.20

Angle probe

Angle probe used for the transmission of the plunger movements up to 10 mm. Suited for dial indicators with a 0.01 mm graduation. Delivery incl. flat insert $\varnothing 5$ mm.

- Probe measuring range: 10 mm.
- Clamping shaft: $\varnothing 8$ mm.



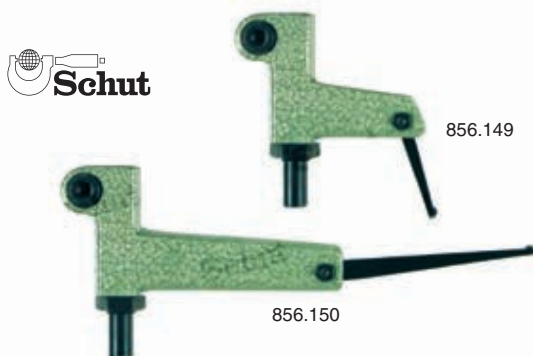
Item No.	Description	Price EUR
782.440	Angle probe	157.00

Angle probe and special probe

Probes e.g. for checks and alignments of bores on lathes.

- Probe measuring range: 10 mm.
- Measuring depth: 30 mm (856.149) or 60 mm (856.150).
- Clamping stem: $\varnothing 8$ mm.
- Clamping shaft: $\varnothing 8$ mm.

Item No.	Description	Price EUR
856.149	Angle probe	46.00
856.150	Special probe	44.00



Peacock dial indicator tester

For checking the accuracy of dial indicators, lever-type dial test indicators and gauges.

- Measuring range: 20 mm (max. spindle thread pitch: 25 mm).
- Graduation: 0.001 mm.
- Accuracy: ± 0.002 mm.
- Several mounting possibilities: vertical intake $\varnothing 8$ mm, horizontal intake $\varnothing 6$ mm.
- Please see the dial test indicator accessories section for other mounting possibilities.
- Provided with mirror for dials facing upward.
- Type NB.
- Delivery in a case with an inspection report.



Item No.	Description	Price EUR
855.620	Dial indicator tester	1,188.00

Dial indicator backs

Dial indicators are by default delivered with either a flat back or a back with lug. For many dial indicators alternative back plates are available, which considerably increases the flexibility for mounting the dial indicators.

The many possible combinations make it impossible to specify them all. The given selection is an impression of the possibilities.



With lug in the middle



With threaded bush



With shifted lug



With adjustable fixture



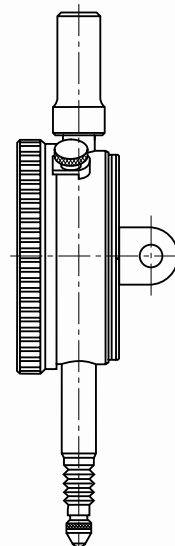
With magnet



With fixing shank



Flat back



Lever-type digital test indicator

Lever-type digital test indicator with tolerance judgement. Suitable for measurements in both directions. Equipped with three dovetail mountings.

- Measuring range: up to 0.5 mm.
- Resolution: 0.001 mm.
- Accuracy: ± 0.02 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Measuring force: ≤ 0.6 N.
- With dovetail joint and clamping stems $\varnothing 6$ and $\varnothing 8$ mm.
- Ruby stylus tip: $\varnothing 2$ mm.
- 230° adjustable measuring insert.
- Adjustable tolerance limits.
- Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Resolution mm	Insert length/mm	Price EUR
907.574	0.5	0.001	20	156.00
Option:				
836.535	Spare battery			1.60



Lever-type test indicators

- Measuring range: up to 0.8 mm.
- Graduation: 0.01 or 0.002 mm.
- With dovetail joint and clamping stems $\varnothing 6$ and $\varnothing 8$ mm.
- Dial diameter: 40 mm.
- Rotatable dial.
- Stylus tip: $\varnothing 2$ mm.
- Conforms to factory standard.



Item No.	Measuring range/mm	Graduation mm	Scale numbering	Insert length/mm	Price EUR
907.941	0.8	0.01	0-40-0	19	29.90
907.942	0.2	0.002	0-100-0	12	54.00
Options:					
909.114	Spare stylus tip for 907.941				7.10
909.115	Spare stylus tip for 907.942				7.10



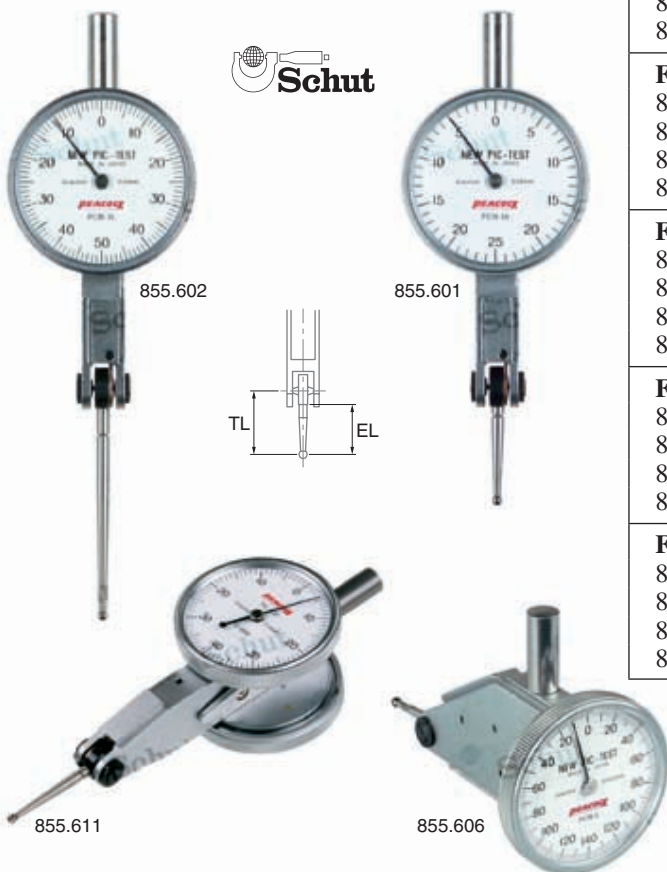
907.941

Peacock lever-type dial test indicators

- Measuring range: up to 1 mm.
- Graduation: 0.01, 0.002 or 0.001 mm.
- With dovetail joint and clamping stem $\varnothing 6$ mm.
- Measuring force: <0.3 N.
- Tungsten carbide stylus tip: $\varnothing 2$ mm.
- Insert thread: M1.7.

Inserts for lever-type dial test indicators

Item No.	Effective length (EL)/mm	Ball \varnothing /mm	Price EUR
For 855.601:			
859.016	17.74	2	5.60
859.152	17.74	1	11.30
859.151	17.74	0.8	11.30
859.290	17.74	0.5	56.00
For 855.602:			
859.126	39.00	2	9.00
859.291	39.00	1	13.50
859.292	39.00	0.8	13.50
859.293	39.00	0.5	56.00
For 855.603, 855.605 and 855.606:			
859.200	14.18	2	6.80
859.294	14.18	1	11.30
859.295	14.18	0.8	11.30
859.296	14.18	0.5	56.00
For 855.604:			
859.259	8.13	2	6.80
859.297	8.13	1	11.30
859.298	8.13	0.8	11.30
859.299	8.13	0.5	56.00
For 855.611:			
859.464	19.24	2	5.60
859.465	19.24	1	11.30
859.466	19.24	0.8	11.30
859.467	19.24	0.5	56.00



Item No.	Measuring range/mm	Graduation mm	Dial \varnothing /mm	Scale numbering	Insert	Total insert length (TL)/mm	Price EUR
Horizontal:							
855.601	0.5	0.01	35	0-25-0	859.016	21.3	78.00
855.602	1	0.01	35	0-50-0	859.126	42.8	84.00
855.603	0.28	0.002	35	0-140-0	859.200	17.8	84.00
855.604	0.14	0.001	30	0-70-0	859.259	11.7	98.00
855.605	0.5	0.01	35	0-25-0	859.200	17.8	84.00
Perpendicular:							
855.606	0.28	0.002	35	0-140-0	859.200	17.8	88.00
855.611	0.8	0.01	35	0-40-0	859.464	21.8	132.00

Mitutoyo lever-type dial test indicators

These dial test indicators are able to measure in both directions without having to switch direction.

- Measuring range: up to 1 mm.
- Graduation: 0.001 or 0.01 mm.
- With dovetail joint and clamping stem \varnothing 8 mm.
- Rotatable dial, \varnothing 39 mm.
- Tungsten carbide stylus tip: \varnothing 2 mm.
- Insert thread: M1.7 (optional inserts on request).
- Adjustable probe.
- Jewel beared clockwork (except 513.415).
- Antimagnetic.
- Conforms to factory standard (graduation 0.001 mm) or DIN 2270 (graduation 0.01 mm).
- Delivery in a case with a clamping stem.
- Various different models available.
- Single inserts available.



513.401



513.404

The set consists of:

- lever-type dial test indicator 513.403,
- insert with hard chrome plated tip \varnothing 1 mm,
- insert with tungsten carbide tip \varnothing 2 mm,
- insert with hard chrome plated tip \varnothing 3 mm,
- union nut,
- clamping stem \varnothing 4 mm,
- clamping stem \varnothing 8 mm,
- universal rotatable holder,
- clamping stem for height gauge (9 x 9 x 100 mm),
- case.

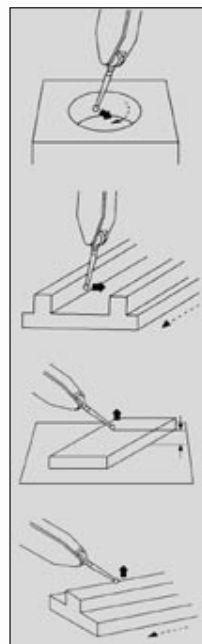
Item No.	Measuring range/mm	Accuracy f_{gs} /mm	Hysteresis mm	Measuring force/N	Scale numbering	Insert length/mm	Price EUR
Graduation 0.01 mm:							
513.403	0.8	0.013	0.003	≤ 0.3	0-40-0	20.9	82.00
513.415	1	0.013	0.004	≤ 0.2	0-50-0	44.5	135.00
Graduation 0.001 mm:							
513.401	0.14	0.004	0.002	≤ 0.3	0-70-0	12.8	146.00
Mitutoyo lever-type dial test indicator set:							
513.404	Lever-type dial test indicator 513.403 with several accessories						113.00

TESA lever-type dial test indicators

- Measuring range: up to 2 mm.
- Graduation: 0.02, 0.01 or 0.002 mm.
- With dovetail joint.
- Tungsten carbide (Tesastast) or ruby (Swisstast) stylus tip, $\varnothing 2$ mm.
- Insert thread: M1.4.
- DIN 2270.
- Delivery with a clamping stem (780.172) and a declaration of conformity.



Item No.	Measuring range/mm	Graduation mm	Dial \varnothing /mm	Scale numbering	Insert length/mm	Price EUR
Tesastast, horizontal:						
780.143	0.8	0.01	28	0-0.4-0	12.53	113.00
780.144	0.8	0.01	38	0-0.4-0	12.53	127.00
780.145	0.5	0.01	28	0-0.25-0	36.53	147.00
780.146	0.5	0.01	38	0-0.25-0	36.53	162.00
780.147	0.2	0.002	28	0-100-0	12.53	133.00
780.148	0.2	0.002	38	0-100-0	12.53	147.00
Tesastast, lateral:						
780.149	0.8	0.01	28	0-0.4-0	12.53	227.00
780.150	2.0	0.02	38	0-1.0-0	36.53	250.00
780.151	0.2	0.002	28	0-100-0	12.53	262.00
Tesastast, perpendicular:						
780.152	0.8	0.01	28	0-0.4-0	12.53	241.00
780.153	0.5	0.01	28	0-0.25-0	36.53	339.00
780.154	0.2	0.002	38	0-100-0	12.53	309.00
Swisstast, horizontal:						
781.466	0.8	0.01	28	0-0.4-0	12.53	127.00
781.467	0.2	0.002	38	0-100-0	12.53	162.00



Interapid lever-type dial test indicators

- Measuring range: up to 1.6 mm.
- Graduation: 0.01 or 0.002 mm.
- Angle between insert and workpiece for true reading: 12°.
- With dovetail joint and clamping stem $\varnothing 4$ mm.
- Hardened steel stylus tip: $\varnothing 2$ mm.
- Insert thread: M1.7 (optional inserts on request).
- Delivery in a case with a declaration of conformity.

The sets consist of:

- dial test indicator,
- rectangular holder with clamp,
- reducing sleeve,
- swivel holder,
- key,
- case.



781.520



781.524



781.526

Item No.	Measuring range/mm	Graduation mm	Dial \varnothing /mm	Scale numbering	Insert length/mm	Price EUR	Item No.	Price EUR
Horizontal:							In a set:	
781.520	1.6	0.01	37.5	0-40-0	16.5	231.00	781.526	320.00
781.521	1.6	0.01	30	0-40-0	16.5	230.00	781.527	315.00
781.522	0.4	0.002	37.5	0-10-0	15.2	283.00	781.528	370.00
781.523	0.4	0.002	30	0-10-0	15.2	280.00	781.529	364.00
Perpendicular:								
781.524	1.6	0.01	37.5	0-40-0	16.5	259.00		
781.525	1.6	0.01	30	0-40-0	16.5	252.00		

Käfer lever-type dial test indicators

Käfer lever-type dial test indicators have a very high accuracy because of the ruby ball bearing. The direction of the rotation is independent of the measuring direction. Equipped with three dovetail mountings. Are standard delivered with a clamping stem $\varnothing 8$ mm.

- Measuring range: up to 0.8 mm.
- Graduation: 0.01 or 0.002 mm.
- With dovetail joint and clamping stem $\varnothing 8$ mm.
- Rotatable dial.
- Tungsten carbide stylus tip: $\varnothing 2$ mm.
- Insert thread: M1.6
(optional inserts on request).
- 240° adjustable measuring insert.
- Ruby ball bearing.
- DIN 2270.
- Delivery in a case incl. key.
- Various different models available.



Item No.	Measuring range/mm	Graduation mm	Dial \varnothing /mm	Scale numbering	Insert length/mm	Price EUR
852.361	0.8	0.01	32	0-40-0	12	69.00
852.362	0.5	0.01	32	0-25-0	35	93.00
852.363	0.2	0.002	40	0-100-0	12	86.00

Käfer saw tooth indicator

By placing the indicator on the saw blade you can easily measure the flatness of the blade, enabling you to saw very precisely. With the indicator you can also measure the height difference between the saw blade and the tooth. This principal of differential measuring of thickness or heights is not only suited for saw blades, but has many other applications.

Because the indicator has a two-sided read-out, it is usable for left- as well as right-handers.

- Measuring range: 0-2 mm.
- Graduation: 0.05 mm.
- Rotatable dial.
- Adjustable tolerance marker.



Item No.	Description	Price EUR
852.364	Saw tooth indicator	58.00

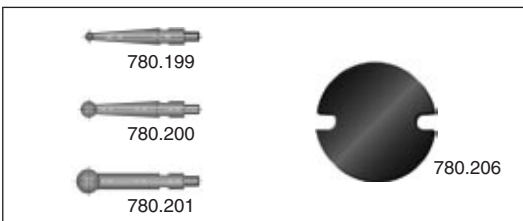
TESA dial test indicator accessories

Item No.	Description	Price EUR
780.171	① Fixing shaft $\varnothing 4 \times 12$ mm	16.00
780.172	② Fixing shaft $\varnothing 8 \times 12$ mm	16.00
780.173	③ Cylindrical fixing shaft $\varnothing 8 \times 80$ mm, clamping shaft $\varnothing 5.6$ mm	20.00
780.175	④ Swivelling holder $\varnothing 8 \times 25$ mm	44.00
780.176	⑤ Swivelling holder $\varnothing 8 \times 90$ mm	47.00
780.177	⑥ Angle holder $\varnothing 8 \times 25$ mm, clamping shaft $\varnothing 8$ mm	44.00
780.178	⑦ Centering support $\varnothing 8 \times 25$ mm, clamping shaft $\varnothing 4$ mm	105.00
780.208	⑧ Double fixing clamp $\varnothing 5.6 / \varnothing 9.5$ mm, with dovetail clamp	25.00
782.787	⑨ Swivelling holder $\varnothing 8 \times 125$ mm, with fine adjustment	82.00
782.590	⑩ Fixing shaft $\varnothing 6 \times 12$ mm	15.00
855.600	⑪ Fixing shaft $9 \times 11 \times 106$ mm complete with dovetail clamp and clamping shaft $\varnothing 6$ mm	26.40




Measuring inserts for lever-type dial test indicators

Inserts for TESA lever-type dial test indicators, with tungsten carbide* tip and thread M1.4



* Also available with ruby tip.

Item No.	Length/mm	\varnothing /mm	Price EUR
780.199	12.53	1	12.00
780.200	12.53	2	12.00
780.201	12.53	3	12.00
780.202	36.53	1	28.00
780.203	36.53	2	28.00
780.204	36.53	3	29.00
780.206	Key		2.20

Accessories dial indicators/dial test indicators

Item No.	Description	Price EUR
909.433	Centering support $\varnothing 8 \times 25$ mm, holder $\varnothing 4$ mm	15.50
909.434	Rectangular fixing shaft $12 \times 6 \times 76$ mm, holder $\varnothing 4/\varnothing 8$ mm and dovetail clamp	10.80
909.435	Rectangular fixing shaft $12 \times 6 \times 76$ mm, holder $\varnothing 6/\varnothing 8$ mm and dovetail clamp	10.80
909.436	Rectangular fixing shaft $9 \times 9 \times 76$ mm, holder $\varnothing 4/\varnothing 8$ mm and dovetail clamp	10.80
909.437	Rectangular fixing shaft $9 \times 9 \times 76$ mm, holder $\varnothing 6/\varnothing 8$ mm and dovetail clamp	10.80
909.438	Round, swivelling fixing shaft $\varnothing 6 \times 70$ mm, holder with dovetail clamp	10.80
909.439	Round, swivelling fixing shaft $\varnothing 8 \times 70$ mm, holder with dovetail clamp	10.80



909.434/909.435



909.436/909.437



909.438/909.439



909.433

Reducer



837.190



Item No.	Thread	Price EUR
781.819	$\varnothing 8 \rightarrow 4$ mm	14.50
837.190	$\varnothing 8 \rightarrow 6$ mm	0.70

Center-accessory

Small magnetic dial indicator stand which, in combination with a lever, could also be used as center-accessory to align bores in workpieces. For use in combination with a machine center.

- Permanent magnet $\varnothing 27$ mm.
- Universal pivot with dovetail clamp.
- Delivery incl. cylindrical support $\varnothing 9.5$ mm for insert in the collet chuck of a machine center.

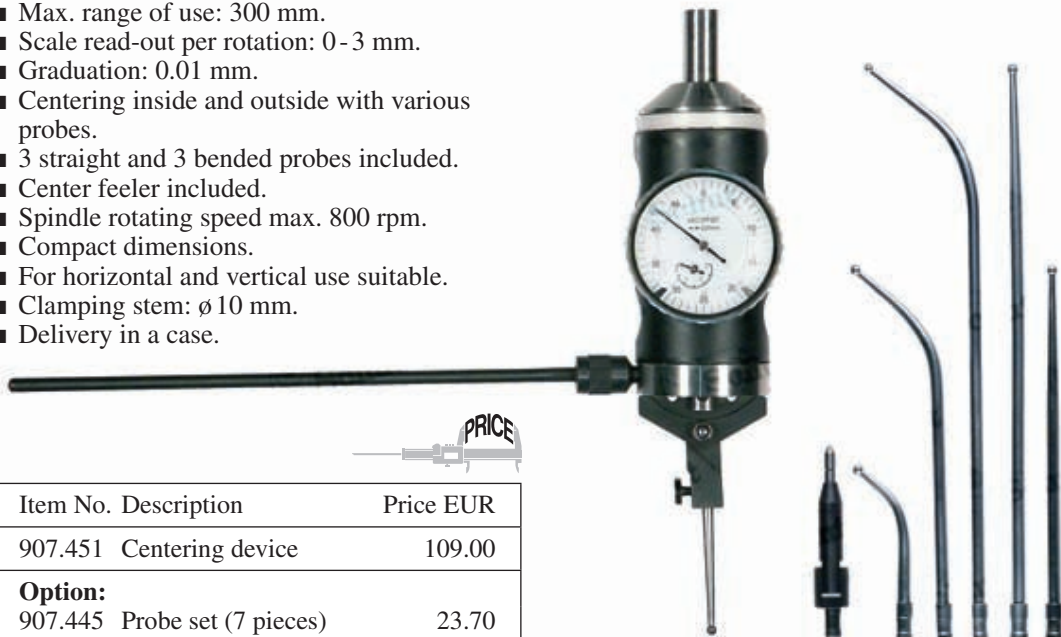


Item No.	Description	Price EUR
781.997	Center-accessory	170.00

Centering device

Convenient tool to find and set up the position of a workpiece on vertical and horizontal machines. It can also be used to determine the position of a workpiece when the spindle is rotated by hand or automatic. Easy read-out from stationary dial indicator. Instrument with compact dimensions.

- Max. range of use: 300 mm.
- Scale read-out per rotation: 0-3 mm.
- Graduation: 0.01 mm.
- Centering inside and outside with various probes.
- 3 straight and 3 bended probes included.
- Center feeler included.
- Spindle rotating speed max. 800 rpm.
- Compact dimensions.
- For horizontal and vertical use suitable.
- Clamping stem: \varnothing 10 mm.
- Delivery in a case.



Item No.	Description	Price EUR
907.451	Centering device	109.00
Option:		
907.445	Probe set (7 pieces)	23.70

3D probe for centering

For easy and accurate centering of workpieces. Easy read-out from stationary dial indicator.

- Detection range:
 - radial: \pm 1 mm,
 - axial: \pm 0.3 mm.
- Radial graduation:
 - for detection range \pm 0.1 mm: 0.01 mm,
 - for detection range 0.1 - 1.0 mm: 0.05 mm.
- Axial graduation:
 - for detection range \pm 0.1 mm: 0.01 mm,
 - for detection range 0.1 - 0.3 mm: 0.05 mm.
- Accuracy: 0.01 mm.
- Clamping stem: \varnothing 20 mm.



Item No.	Description	Price EUR
907.450	Universal 3D probe	189.00
Option:		
907.449	Spare insert	43.00

3D probes for centering and measuring

For easy and with high accurate setting the reference point of workpiece in all three axes (X, Y and Z), vertically and horizontally.

- Measuring range: max. ±2 mm (rupture point in probe).
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Clamping stem: $\varnothing 20$ mm.
- Insert length 25 mm, stylus tip $\varnothing 4$ mm (insert length 65 mm and diameter 8 mm optional).
- mm/inch conversion (only 853.822).
- Digit height: 8.5 mm (only 853.822).
- Isolation between insert and insert thread; for use on all machining centres and EDM machines.
- Insert thread: M3.
- Protection:
analog: IP67,
digital: IP64.



Item No.	Description	Accuracy mm	Repeatability mm	Price EUR
853.821	Analog 3D probe	±0.01	0.01	279.00
853.822	Digital 3D probe	±0.005	0.001	496.00
Options:				
495.157	Spare battery			0.50
853.823	Spare insert 25 mm, tip diameter 4 mm			22.80
853.824	Spare insert 65 mm, tip diameter 8 mm			38.10

Edge finders

Edge finders for both stationary and rotating use. As soon as the workpiece is touched by the ballprobe the all around visible LED will light up due to galvanic contact. The ballprobe is held in place by a spring. When the pressure on the tip becomes too large the ball wil flip away sideways. The edge finders are also available with additional sound signal for extra working comfort.

- Concentricity: <0.01 mm.
- Diameter ballprobe: 10 mm.
- Delivery in a case.
- Power supply:
907.456/460: 2 batteries type V357,
907.454/458: 1 battery type 23A.



Item No.	Clamping stem \varnothing /mm	Length mm	Price EUR
907.454	20	162	47.00
907.456	20	100	41.00
With sound signal:			
907.458	20	162	59.00
907.460	20	100	51.00
Options:			
836.535	Spare battery (2 needed)		1.60
497.931	Spare battery		0.90

Edge finders

Rotating edge finders for accurate edge location.

- Resolution: 0.005 mm.
- Repeatability: 0.005 mm.
- Range of use: approx. 600 rpm.
- Hardness TiN measuring face: 2200 HV.



Item No.	Clamping stem ϕ /mm	Probe ϕ /mm	Material (measuring face)	Price EUR
909.360	8	10	steel	16.50
909.361	10	10	steel	16.50
909.362	8	4 and 10	steel	17.80
909.363	10	4 and 10	steel	17.80
909.364	6	6	steel	18.70
909.365	10	10	steel + ceramic	51.00
909.366	10	10	steel + TiN	29.80
909.367	10	4 and 10	steel + TiN	29.80

Options:

909.368	Spring for 909.360/362	2.00
909.369	Spring for 909.364	2.80
909.359	Spring for 909.365	2.80
909.349	Spring for 909.361/363/366/367	2.80

Z-axis setting gauge

For easy presetting the Z-axis with a tool, with or without in combination with parallel blocks to set a specific height. As soon as the tool touches the setting gauge (with floating top) the built-in red LED illumination will light up. After this the axis will move in opposite direction until the lamp turns off, this is the turning point, and so the setting gauge, to determine the accuracy.

- Repeatability: 0.01 mm.
- With magnetic base.
- Galvanic contact principle.



Item No.	Description	Price EUR
908.804	Z-axis setting gauge	152.00
Option:		
498.823	Spare battery (2 needed)	1.70

- Dimensions: $\phi 54 \times 50$ mm (precise height to determine with external measuring instrument).
- Weight: 450 g.
- Power supply: 2 batteries type V389.



Z-axis setting gauge

For easy presetting the Z-axis with a tool, with or without in combination with parallel blocks to set a specific height.

- Graduation: 0.01 mm.
- Repeatability: 0.02 mm.
- Diameter dial indicator: $\phi 35$ mm.



- Dimensions: $\phi 50 \times 50$ mm (precise height to determine with external measuring instrument).
- Weight: 654 g.
- Delivery with protective cover and reference pin (length 60 mm, $\phi 15$ mm) for insert in tool holder.



Item No.	Description	Price EUR
909.460	Z-axis setting gauge	144.00

Tool presetters

Cost effective solution as an additional setup directly next to your machine, for setting up and accurately measuring length and diameter of milling, turning and drilling tools. Increase your machine up-time through rapid manual movement with release/hook-up button and fine adjustment using the hand wheel (only 837.928/916).

- Resolution: 0.01 mm.
- mm/inch conversion.
- RS232C data output.
- On/off switch.
- Preset.
- Interchangeable rotating chuck.
- Delivery incl. rotating chuck ISO 40.
- Conforms to factory standard.
- Delivery in a wooden case.
- Power supply: 2 batteries type CR2032.
- Various models with extended functionality available on request.

**Options**

Item No.	Type	Price EUR
Rotating chuck:		
837.930	ISO 30	293.00
837.917	ISO 40	293.00
837.931	ISO 45	293.00
837.932	ISO 50	293.00
837.933	HSK 40	293.00
837.934	HSK 50	293.00
837.935	HSK 63	293.00
837.936	VDI 40	293.00
837.937	DLBH-SKF 63	293.00
ISO reductions:		
837.938	50-45	247.00
837.939	50-40	247.00
837.940	50-30	247.00
837.941	40-30	247.00
837.942	50HSK40	303.00
837.943	50HSK50	303.00
837.944	50HSK63	303.00
Spare battery:		
495.157	CR2032	0.50

Item No.	Measuring range/mm		Dimensions	Weight	Price
	X-axis	Z-axis	l x w x h/mm	kg	EUR
Without fine adjustment:					
837.929	160(ø 320)	320	420 x 150 x 755	20	2,530.00
With hand wheel for fine adjustment:					
837.928	160(ø 320)	320	584 x 150 x 520	25	3,540.00
837.916	260(ø 520)	520	684 x 150 x 848	30	4,240.00

Electronic probe and read-out unit

Inductive, absolute electronic probe for precision measurements. The measured value is displayed both digitally and digital-analogue. The 2-axes model of the read-out unit has an addition function for the probes.

Electronic probe

- Measuring range: ± 1 mm.
- Resolution: $0.1 \mu\text{m}$.
- Accuracy: $\pm 3.5 \mu\text{m}$.
- Measuring force: 1.2 N.
- Clamping stem: $\varnothing 8$ mm.



Digital read-out units

- Measuring range: 2 mm.
- Resolution: $0.1 \mu\text{m}$.
- Digital-analogue graduation: 100/20/10/2/1/0.2/0.1 μm .
Range: $\pm 20x$ graduation.
- $\mu\text{m}/\text{inch}$ conversion.
- ABS/INC switchable.
- On/off switch.
- Reset/preset.
- Hold function.
- Addition function: $\pm A \pm B$ (only 907.858).
- Adjustable tolerance limits.
- Power supply: 3 batteries type AA.



907.791



907.790



Item No.	Description	Price EUR
907.790	Electronic probe	180.00
907.791	Read-out unit, 1 axis	464.00
907.858	Read-out unit, 2 axes	527.00
Option:		
495.111	Spare battery (3 needed)	0.40



Tesatronic TT10

Compact electronic display unit compatible with all standard TESA inductive probes.

- Measuring range: $\pm 5 \mu\text{m}$, $\pm 50 \mu\text{m}$, $\pm 500 \mu\text{m}$.
- Zoom function allows temporary switching of measuring range from $50 \mu\text{m}$ or $500 \mu\text{m}$ to $10 \mu\text{m}$ or $100 \mu\text{m}$.
- Digital and digital-analog reading: resolution $0.1 \mu\text{m}$, $1 \mu\text{m}$ or $10 \mu\text{m}$, when using zoom function $0.2 \mu\text{m}$ or $2 \mu\text{m}$.
- Resolution manually or automatically switchable.
- Switch over polarity, choice between internal and external measurement.
- Large display for static and dynamic measurements ($66 \times 57 \text{ mm}$).
- mm/inch conversion.
- Opto-RS232C data output.
- Dimensions: $95 \times 170 \times 68 \text{ mm}$.
- Protection: IP42.
- DIN 32876/1.
- Delivery with batteries, template for value classification and a declaration of conformity.
- Power supply: 3 batteries type AA.



780.901

Item No.	Type/description	Price EUR
780.901	Tesatronic TT10	1,217.00
782.319	Visual template (10 pcs.) for value classification	35.00
Options:		
495.111	Spare battery (3 required)	0.40
348.155	Cable from TT10 to Smartbox and SPC printer (with 9p sub-D female connector), 2 m	47.00
348.187	Foot switch	57.00



Tesatronic TT20, TT60 and TT80

The TT20, TT60 and TT80 are provided with two probe inputs for single, sum or difference measurements. The instrument automatically recognizes the type of the connected probe and sets the measuring range. This increases the ease of operation and ensures the reliability of the measurement.

The combination of the digital and digital-analog display simplifies the reading of the correct measurement value considerably.

- Two probe inputs.
- Automatic display setting of the probes used (only applies to TESA probes).
- Digital (6 digits) and digital-analog read-out.
- 7 measuring ranges: $\pm 5000 \mu\text{m}$ - $\pm 5 \mu\text{m}$ and an automatic setting.
- Resolution: $0.1 \mu\text{m}$.
- Opto-RS232C data output.
- Hold function.
- Addition function: $\pm A \pm B$.
- Measure with or without tolerance limits.
- LEDs for classification: green=Go, yellow=process, red=NoGo.
- Relays output of the classification.
- Switch over polarity, choice between internal and external measurement.
- Memory of the setup when switching off.
- Reference point to be adjusted per channel.
- Stackable casing.
- Dimensions: 255 x 235 x 120 mm.
- Protection: IP54 (front).
- DIN 32876 T1.
- Delivery with AC adapter and a declaration of conformity.
- Power supply: AC adapter (230 Vac - 7.3 Vdc).

Only TT60

- Memory for min., max., difference and average between max. and min. value.
- Dynamic measuring (more than 100 measurements per second).
- Output for 5, 10, 20 or 40 "Go" measurements.
- Analog output $\pm 2 \text{ V}$ or $\pm 10 \text{ V}$ to connect a recorder or a separate display.

Only TT80

- 9 measuring ranges: $\pm 5000 \mu\text{m}$ - $\pm 0.5 \mu\text{m}$.
- Resolution: $0.01 \mu\text{m}$.



781.885



781.884

Item No.	Type/description	Price EUR
781.884	Tesatronic TT20	1,390.00
781.885	Tesatronic TT60	1,930.00
782.367	Tesatronic TT80	2,317.00
Options:		
781.854	TESA SPC printer	646.00
781.999	Opto-RS232C cable 9p, bidirectional (2 m)	131.00

Display-unit for measuring probes

Robust, splashproof display-unit, machined from a solid aluminum block, that can be employed in both simple and complex measurements. Both analog and digital display of up to 32 dimensions simultaneously, with (green, yellow, red) tolerance assessment per dimension. The display-unit is universally applicable due to its compatibility with many probe brands, and powerful due to its ability to display up to 32 dimensions at the same time and it's trigonometrical-, statistical and PLC functions. The device is very suitable for efficient quality control without the need for a PC in the workspace.

- 7" colour touch screen.
- Up to 99 probes can be connected.
- Display up to 32 dimensions.
- Store up to 128 measurement configurations.
- Memory for max, min, difference, average.
- Dynamic or static measurements.
- mm/inch conversion.
- ABS/INC switchable.
- RS232C input and output.
- Hold function.
- Statistical functions, e.g. histograms with Gauss curve, Pareto graph, q-q plot, CM, CMK.
- Configuration protection by password.
- Multilingual software, e.g. English, French, German, Dutch.

- I/O via Modbus TCP module.
- Dimensions: 200 x 151.6 x 143 mm.
- Storage of measuring data.
- Power supply: AC adapter.
- Modules can be mounted on a standard DIN rail.

Connections:

- Footswitch.
- USB port for USB stick.
- Ethernet (ASCII/Modbus TCP).
- RS232 (ASCII/Modbus RTU).
- M-Bus input for probes.



Item No.	Type/description	Price EUR
857.880	Display-unit	
Options:		
857.881 ¹	Module for 8 TESA probes	
857.882 ¹	Module for 2 Magnescale probes	
857.883 ¹	Module for 4 Magnescale probes	
857.884 ²	Power module	
348.287	Connecting cable display-unit/probe module (3 m)	

¹ Modules for other probes on request, e.g. Heidenhain, Sylvac and Mitutoyo.

² For applications using more than 30 analog TESA probes, or 4 Magnescale probes on 1 display-unit.



TESA analog and digital probes

- Measuring range: ± 1.5 , ± 2 or ± 5 mm.
- Protection: IP65.
- Other models, ranges and voltages available on request.

TESA analog DC probes

Probes that produce a linear voltage proportional to displacement that can be connected to AD converters in a PC or to PLCs and X-t plotters.

The probe consists of two parts that are connected by a cable (2 m):

- a conventional analog probe (diameter 8 mm),
- the electronics module that converts the signal to DC.

- Accuracy: from $(0.2 + 3.5 L^2) \mu\text{m}$ (L in mm).
- Signal output: 782.977/978: ± 2 Vdc,
782.979/980: ± 5 Vdc.
- Power supply: ± 15 Vdc.

TESA digital USB probes

USB probes are easy to connect, using plug & play and without using interface boards. High accuracy guaranteed within the complete measuring range.

- Compatible with software Data-Direct and Stat-Express.
- Simple link with for example Excel files.

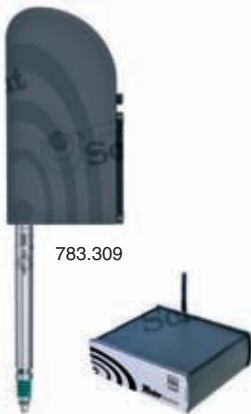


Item No.	Type	Measuring range/mm	Price EUR
Analog DC probes:			
782.977	GTL21DC	± 2	722.00
782.978	GTL22DC	± 2	735.00
782.979	GT61DC	± 5	855.00
782.980	GT62DC	± 5	873.00
Digital USB probes:			
783.097	GTL21 USB	± 2	587.00
783.098	GTL22 USB	± 2	601.00
783.226	GTL222 USB	± 1.5	713.00
783.099	GT61 USB	± 5	725.00
783.100	GT62 USB	± 5	737.00

Type	Protection	Measuring force/N	Repeatability μm	Accuracy μm (L in mm)	Max. travel/mm	Cable exit	Probe movement
GTL21DC	IP65	0.63	0.1	$0.2 + 3.5 L^2$	4.3	axial	spring, extend
GTL22DC	IP65	0.63	0.1	$0.2 + 3.5 L^2$	4.3	square	vacuum, retract
GT61DC	IP65	0.9	0.1	$1 + 4L$	10.3	axial	spring, extend
GT62DC	IP65	0.9	0.1	$1 + 4L$	10.3	square	vacuum, retract
GTL21 USB	IP65	0.63	0.1	$0.4 + 0.8L$	4.3	axial	spring, extend
GTL22 USB	IP65	0.63	0.1	$0.4 + 0.8L$	4.3	square	vacuum, retract
GTL222 USB	IP65	1.2	0.1	$0.4 + 0.8L$	3.1	square	air pressure
GT61 USB	IP65	0.9	0.24	$0.8 + 0.8L$	10.3	axial	spring, extend
GT62 USB	IP65	0.9	0.24	$0.8 + 0.8L$	10.3	square	vacuum, retract

TESA wireless probes

- Measuring range: ± 1.5 , ± 2 or ± 5 mm.
- Clamping stem: $\varnothing 8$ mm.
- Protection: IP54.



Item No.	Type	Measuring range/mm	Price EUR
783.309	GTL21W	± 2	816.00
783.310	GTL212W	± 1.5	923.00
783.311	GT61W	± 5	862.00
783.312	GT612W	± 5	975.00
Option:			
783.316	Charger for TESA wireless probe		59.00

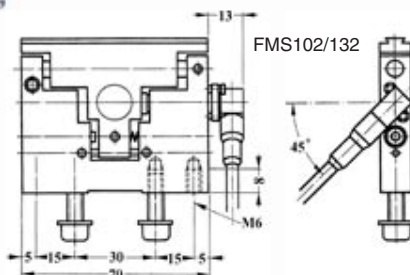
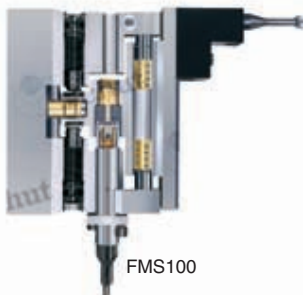
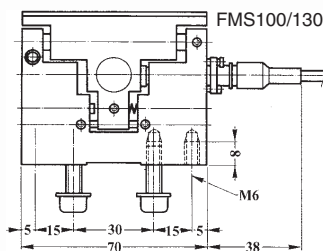
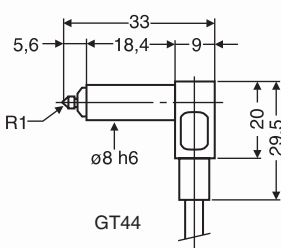
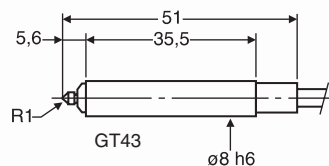
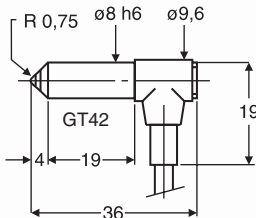
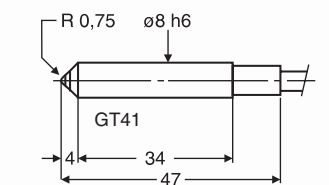
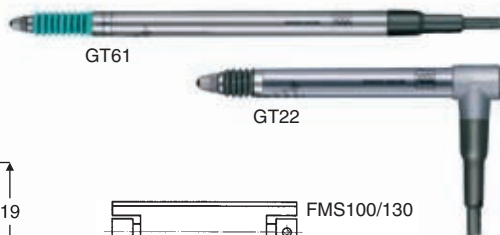
Type	Measuring force/N	Repeatability μm	Maximum inaccuracy/ μm^*	Probe movement
GTL21W	0.63	<0.10	$0.4+0.8L$	spring, extend
GTL212W	1.20	<0.10	$0.4+0.8L$	air pressure
GT61W	0.90	<0.24	$0.8+0.8L$	spring, extend
GT612W	2.00	<0.24	$0.8+0.8L$	air pressure

* In combination with TWIN Station.

TESA analog probes

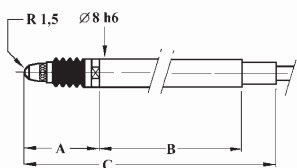
For years, TESA measuring probes have been used in both complex and simple measuring systems. The top quality and absolute reliability of these probes is reason enough to use TESA probes again and again.

- Sensitivity: 73.75 mV/V/mm (GT61 and GT62: 29.5 mV/V/mm).

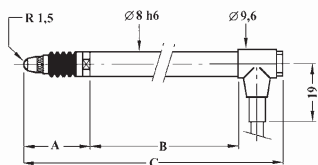


TESA analog probes (continued)

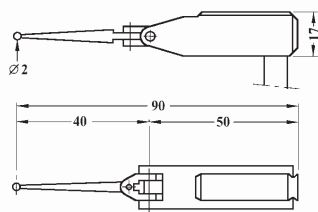
The most popular half-bridge probes, delivered calibrated, are noted in the following table. For more information, also on LVDT probes, please refer to the comprehensive TESA catalog.



GT21(HP)/GT61



GT22(2)(HP)/GT62(2)



GT31



GT21

Item No.	Type	Measuring range/mm	Dimensions/mm			Price EUR
			A	B	C	
780.654	GT21	± 1	20.5	61.5	92	338.00
780.687	GT21HP	± 0.2	20.5	61.5	92	645.00
780.662	GT22	± 1	20.5	47	81.5	349.00
780.673	GT22HP	± 0.2	20.5	47	81.5	661.00
780.692	GT61	± 5	29.5	81	120	469.00
780.693	GT62	± 5	29.5	67.2	110.7	481.00
783.076	612-A	± 5	29.5	67.2	110.7	478.00
781.945	GT622	± 5	29.5	67.2	110.7	531.00
780.667	GT41	± 0.3	–	–	–	479.00
780.668	GT42	± 0.3	–	–	–	499.00
780.686	GT43	± 1	–	–	–	425.00
780.670	GT44	± 1	–	–	–	417.00
780.652	GT31	± 0.3	–	–	–	763.00
780.672	FMS100	± 2	–	–	–	663.00
780.679	FMS102	± 2	–	–	–	748.00
781.946	FMS130	± 2.9	–	–	–	750.00
781.947	FMS132	± 2.9	–	–	–	852.00
782.328	Set (10 pcs.) GT21					2,728.00
782.329	Set (10 pcs.) GT22					2,904.00
Options:						
783.225	DIN/USB adapter for analog probes with measuring range ± 2 mm					383.00
783.284	DIN/USB adapter for analog probes with measuring range ± 5 mm					383.00

Type	IEC 60529	Measuring force/N	Repeatability µm	Maximum inaccuracy/µm	Max. travel/mm	Cable exit	Probe movement
GT21	IP65	0.63	0.01	0.2 + 3L ³	4.3	axial	spring, extend
GT21HP	IP64	0.63	0.01	0.07 + 0.4L	4.3	axial	spring, extend
GT22	IP65	0.63	0.01	0.2 + 3L ³	4.3	square	vacuum, retract
GT22HP	IP64	0.63	0.01	0.07 + 0.4L	4.3	square	vacuum, retract
GT61	IP65	0.9	0.05	1 + 4L	10.3	axial	spring, extend
GT62	IP65	0.9	0.05	1 + 4L	10.3	square	vacuum, retract
612-A ¹	IP50	1.0	0.05	1 + 4L	10.3	axial	air pressure
GT622	IP65	2.0	0.05	1 + 4L	10.3	square	1.1 bar, extend
GT41	IP65	0.63	0.01	0.2 + 5L ²	0.7	axial	spring, extend
GT42	IP65	0.63	0.01	0.2 + 5L ²	0.7	square	vacuum, retract
GT43	IP65	0.4	0.1	0.2 + 5L ²	2.1	axial	spring, extend
GT44	IP65	0.4	0.1	0.2 + 5L ²	2.1	square	vacuum, retract
GT31	IP40	0.1	0.1	0.2 + 50L ²	0.7	square	–
FMS100	IP50	2.0	0.5	0.2 + 3L ³	5.8	parallel	air pressure
FMS102	IP50	2.0	0.5	0.2 + 3L ³	5.8	square	air pressure
FMS130	IP50	2.0	0.5	0.2 + 3L ³	5.8	parallel	air pressure
FMS132	IP50	2.0	0.5	0.2 + 3L ³	5.8	square	air pressure

¹No bellows.

Analog probes

- Half-bridge probes.
- Measuring range: ± 0.25 to ± 10 mm.
- Repeatability: $< 0.15 \mu\text{m}$.
- Non-linearity: $< 0.3\%$.
- All non-pneumatic probes with cable guide have a cable exit square to probe body.



Feather Touch probes

Probes with a very small measuring force to measure sensitive materials like electronic components and thin-walled glass products.

Item No.	Type	Measuring range/mm	Max. travel mm	Measuring force/N	Total length mm	Price EUR
Feather Touch probes with a small measuring force and tungsten carbide probe tip:						
360.964	PRFC2P	± 1	3	0.18/1.10 ¹	75.6	394.00
360.965	PRFC5P	± 2.5	6	0.18/1.10 ¹	99.6	429.00
360.966	PRFC10P	± 5	11	0.18/1.10 ¹	130.1	456.00
360.960	PRFC2S	± 1	2.5	0.30	61.3	348.00
360.962	PRFC5S	± 2.5	6	0.30	96.3	391.00
360.963	PRFC10S	± 5	11	0.30	118.3	421.00
Option:						
360.967	Nylon probe tip					14.40
Probes with regular measuring force³:						
360.916	PR05	± 0.25	0.6	0.70	26	304.00
360.917	PR1	± 0.5	1.5	0.70	30.5	270.00
360.911	PR2	± 1	2.5	0.70	62	195.00
360.912	PR2P	± 1	3.5	0.80 ²	67	233.00
360.926	PR101P	± 1	11	0.70 ²	117.5	345.00
360.913	PR3	± 1.5	4	0.70	83.5	248.00
360.906	PR5	± 2.5	6	0.70	87.5	262.00
360.914	PR5P	± 2.5	6	0.85 ²	96.5	257.00
360.910	PR10	± 5	11	0.70	118	335.00
360.909	PR10P	± 5	11	0.70 ²	117	345.00
360.905	PR20	± 10	21	0.70	176	394.00
360.904	PR20P	± 10	21	0.70 ²	169	416.00

Measuring range, measuring force and extended probe length defined at electrical zero.

P = Pneumatic, probe is operated by air pressure.

¹ Air pressure 0.3 bar (nominal) / Air pressure 1.0 bar (nominal).

² Air pressure 0.4 bar (nominal).

³ Protection: IP65.

Digital absolute measuring probes

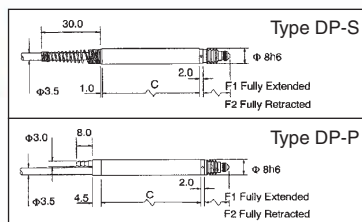
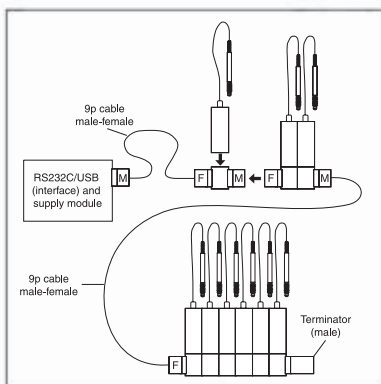
The measuring probe, which replaces the conventional analog probe more and more. These probes, that combine the advantages of the analog and not absolute digital models, are a solution to measuring systems which have to process the measuring data in a PC.

Configuration:

- Probe (clamping shaft 8h6) fixed via a cable (2 m) to the electronics module.
- T-CON connector.
- Cable (standard up to 5 m).
- Supply module (necessary with RS232C module, and with more than five probes on a board or module).
- RS232C/USB module or digital absolute measuring probe board (supports up to 100 probes).

Technical data:

- A maximum of 240 measurements per second.
- Repeatability: <math>< 0.15 \mu\text{m}</math>.
- Accuracy:
 - DP-2S, DP-2P: $\pm 1 + 0.05 \%$,
 - DP-5S, DP-5P: $\pm 1 + 0.05 \%$,
 - DP-10S, DP-10P: $\pm 1 + 0.06 \%$,
 in which K is the displacement (in mm).
- Protection: IP65.
- Measuring force S-types: 0.7 N, P-types (at 0.4 bar pressure): 0.8 N.
- Also available on request as low measuring force *Feather Touch* models.



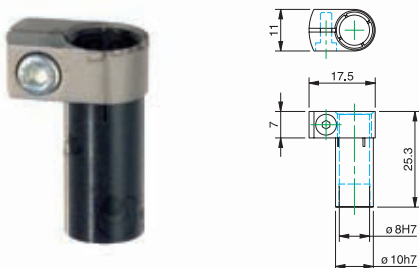
Item No.	Type	Measuring range/mm	Max. travel/mm	Probe movement	Dimensions/mm			Price EUR
					C	F1	F2	
360.880	DP-2S	± 1	3	spring push	46	13.9	10.9	538.00
360.881	DP-5S	± 2.5	6	spring push	65	17.4	11.4	603.00
360.882	DP-10S	± 5	11	spring push	89	25.4	14.4	649.00
360.883	DP-2P	± 1	3	pneumatic push	52	13.9	10.9	580.00
360.884	DP-5P	± 2.5	6	pneumatic push	71	17.4	11.4	626.00
360.885	DP-10P	± 5	11	pneumatic push	96	25.4	14.4	672.00
360.852	T-CON connector (has to be ordered separately per probe)							35.50
360.849	RS232C module to connect a maximum of 100 probes (delivered with OEM software for Win98/Win2000/WinXP)							512.00
360.835	Supply module (required when using a RS232C module and when connecting more than five probes to a board or module, excl. power cable)							398.00
420.300	Power cable							5.60
495.208	RS232C-USB adapter							26.40
360.890	Digiprobe PCI board Orbit 3							551.00
360.888	Digiprobe USB module Orbit 3							503.00
348.287	Cable 3 m between electronic module and board/module							18.30
348.288	Cable 5 m between electronic module and board/module							26.40

Clamping bush



Item No.	Description	Price EUR
780.398	Clamping bush VKE	9.30
780.397	Clamping screw VKD	4.30

Clamping bush



Item No.	Description	Price EUR
906.497	Clamping bush	39.20

Retraction device DZ801

Pneumatic retraction device for Magnescale and TESA gauges, with 1 meter hose and air tube connector.



Item No.	Description	Price EUR
344.465	Retraction device	147.00

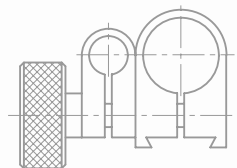
Inserts

Many inserts with thread M2.5 are available. See the dial indicator accessories section for more information.

Clamp collar with dovetail

For clamping TESA GT31 probes and e.g. lever type dial indicators.

- Fastening points: $\varnothing 5.6$ mm, $\varnothing 9.5$ mm and with dovetail.



Item No.	Description	Price EUR
780.208	Clamp collar	25.00

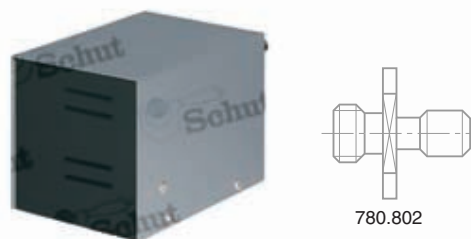
Retraction levers

Universal retraction levers, bottom or top mounted, compatible with a wide range of probes and dial indicators. You can find various models in the dial indicator accessories section.



TESA vacuum pump

Electropneumatic vacuum pump for lifting up to 20 measuring probes simultaneously with a measuring force of up to 0.63 N.



Item No.	Description	Price EUR
780.721	Vacuum pump	1,601.00
Option:		
780.802*	Air tube connector	21.00

* Also other models available.

MF measuring fixture system

MF is a universal construction system based on components to quickly and easy build custom measuring fixtures.

The system has been developed by Schut Geometrical Metrology. The parts of MF are made from high quality steel and colored, anodized aluminum.

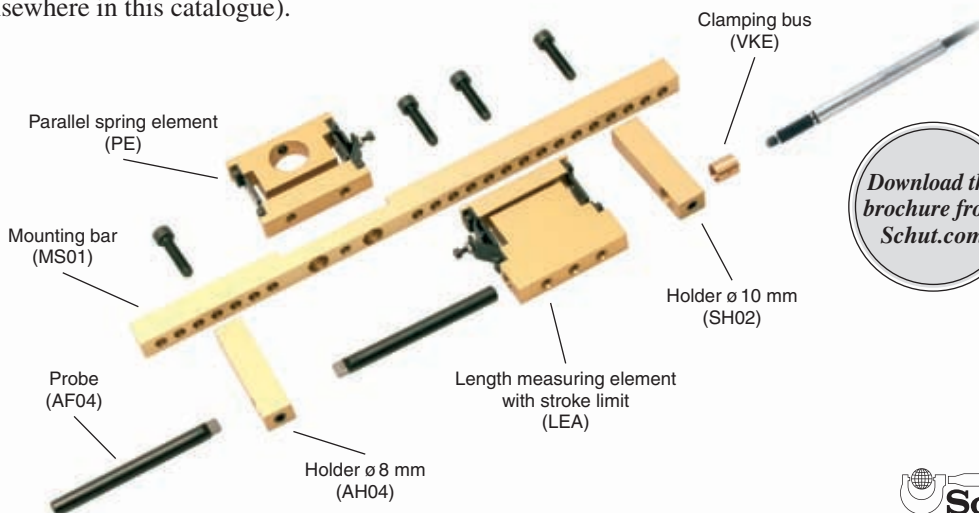
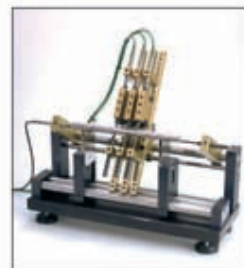
The system consists of, among other things, base plates, parallel spring elements, mounting bars, probe holders and probes. A stable product positioning is required for accurate measurements and because of the system's sophisticated composition, it is possible to generate a complete measuring system with only a few parts. Ideal for repeating measurements.

The components of MF are based on both horizontal support or vertical clamping. The wide range and shapes of probes make the system suitable for e.g. lathed parts but also for (more complicated) milling parts. For these various applications some complete sets are available, as a starter-set or for specific applications. Besides this, the variety of individual components and the ease of use enable almost endless possibilities of applying and incorporating MF in other measuring fixtures that may be custom build or composed of other construction systems.

All individual components are available separately, increasing flexibility of use. Schut Geometrical Metrology has incorporated MF many times in custom built measuring systems (see elsewhere in this catalogue).

MF's high quality and low price make an ideal addition to existing measuring systems and can be applied in production plants.

The universal properties of MF result in a highly flexible construction system. The use of internationally applied units of fit for e.g. dial indicators and electronic probes make the system's components widely applicable. With just some base elements it is very easy to create some individual measuring points on e.g. production machines.



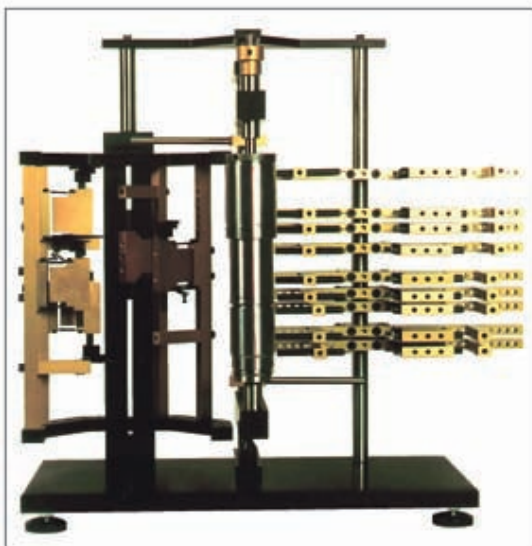
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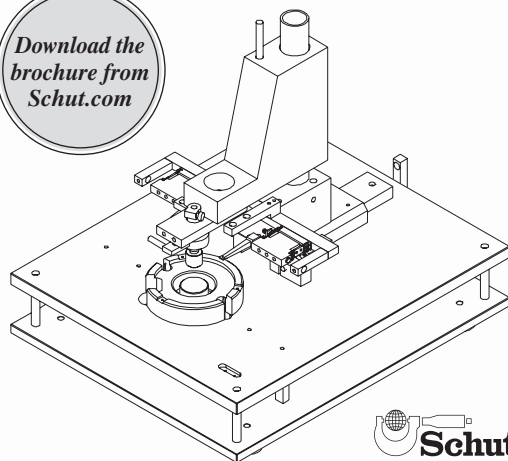
MF measuring fixture system (continued)

For a quick start MF is also available in standard sets for a complete and quick solution for both horizontal support or vertical clamping.

One of the big advantages of MF is the ease and flexibility to create a stable measuring fixture especially suitable for repeating measurements with only very little effort and investments. To make the start with MF as easy as possible some standard sets have been composed that can realize the most occurring measuring fixtures.

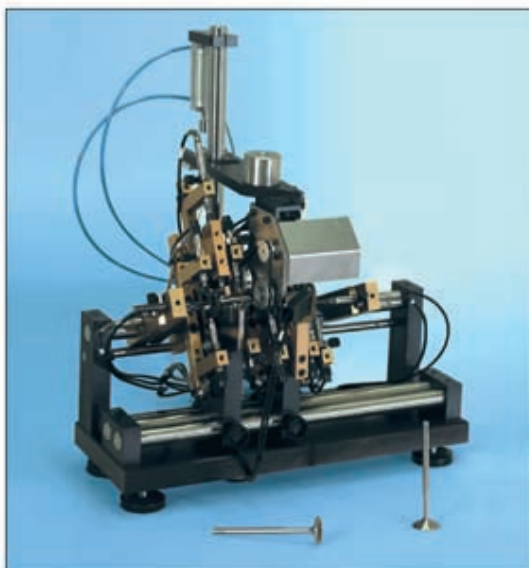


These sets consist of a composition of standard MF components, so it can be easily extended to your liking for specific applications. All in this catalogue depicted measuring fixtures are just a few of the many possibilities of MF.

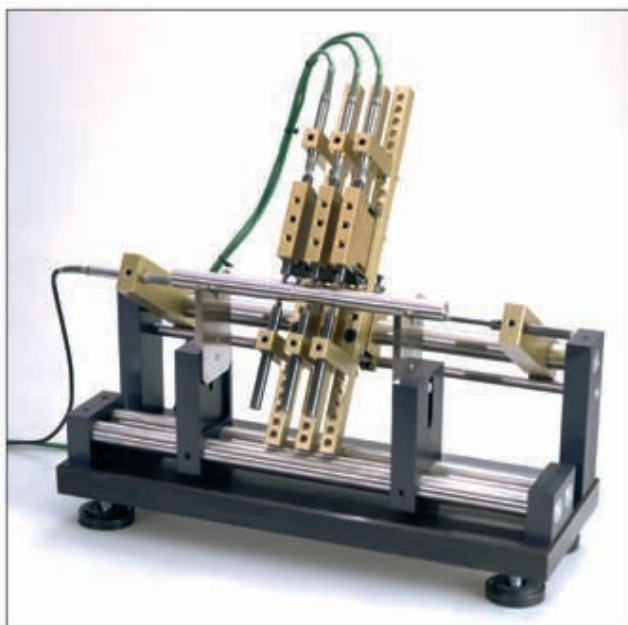
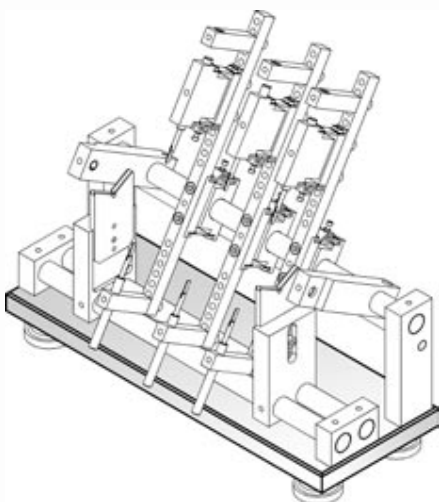
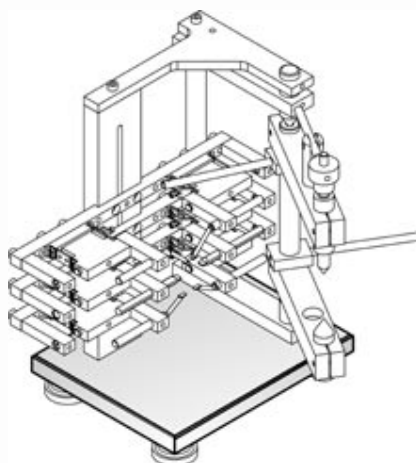


The easy assembly and modular setup make MF especially suitable for application in tailor-made and designed measuring systems.

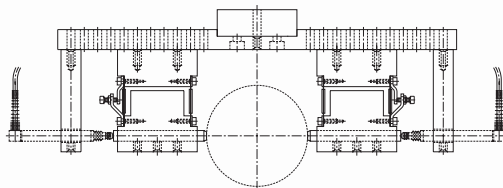
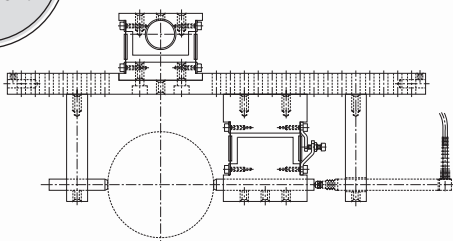
For many years now Schut has been developing tailor-made solutions in measuring systems for its customers nationwide and abroad. On many occasions MF parts have been incorporated in these systems. We would be pleased to inform you about the possibilities to have your measuring system custom built, updated or extended.



MF measuring fixture system – examples



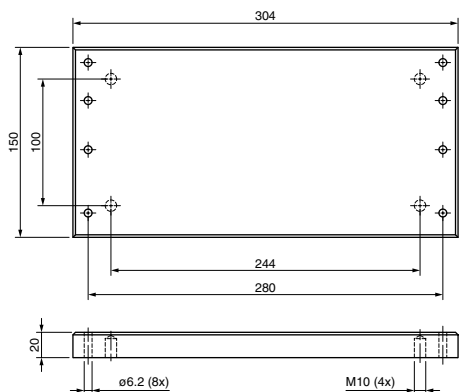
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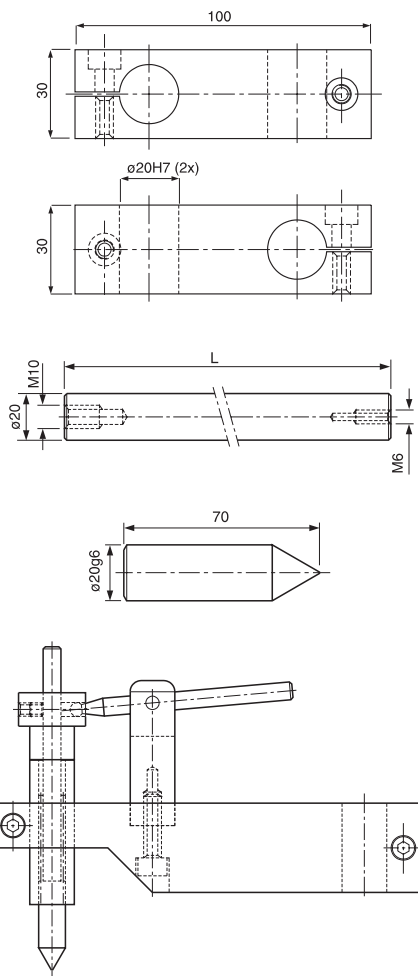
MF measuring fixture system – components

Besides the components shown below, there are various other types available.

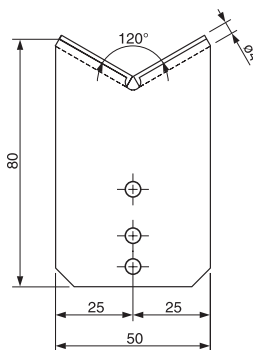
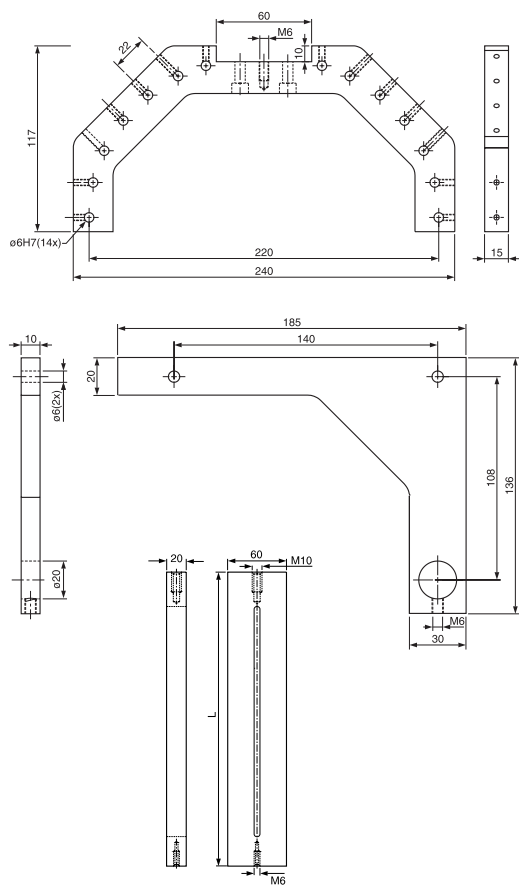
Base plates



Shaft holders / shafts / support for V-block



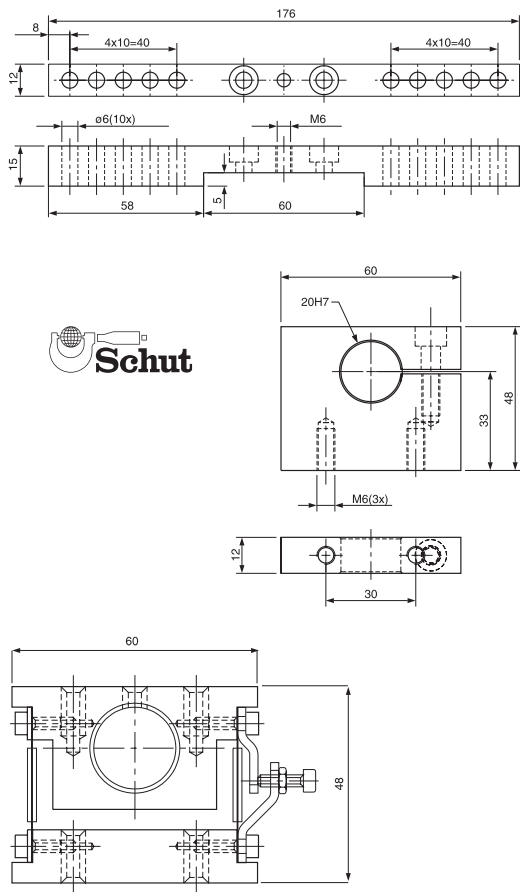
Connecting and mounting brackets



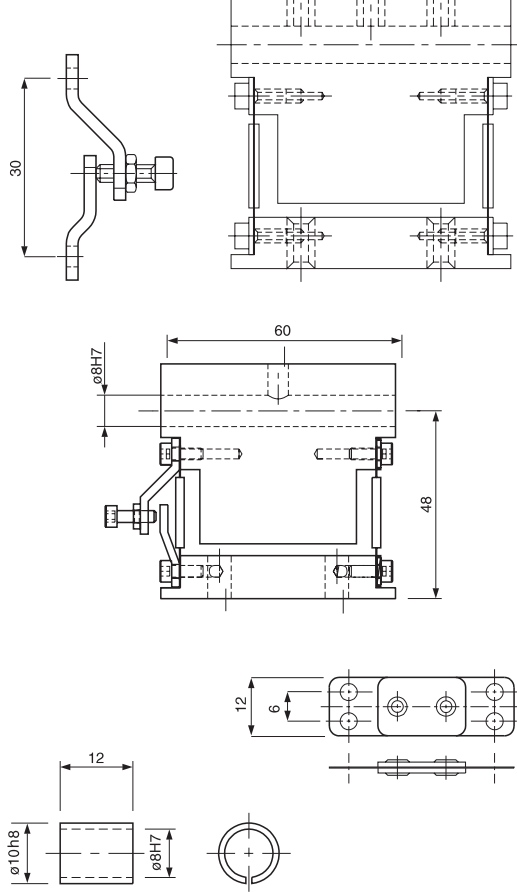
MF measuring fixture system – components (continued)

Besides the components shown below, there are various other types available.

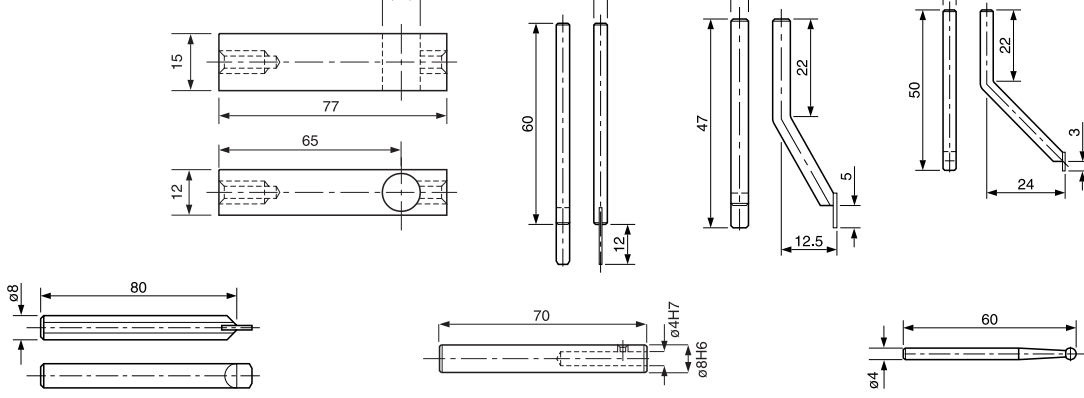
Mounting bars / mounting blocks



Measuring elements



Probes / probe holders



Schut for Precision

Stands / Bench centers / Surface plates



Flatness tolerances according DIN 876

Class	Flatness t_1 (μm)	L = length in mm
00	$2 + L/500$	
0	$4 + L/250$	
1	$10 + L/100$	
2	$20 + L/50$	
3	$40 + L/25$	

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Dial indicator stands

- With dovetail joint (only 908.958/972).
- With fine adjustment (except 908.958/974).
- On/off switchable magnetic base with V-groove, except 908.973 (*flexform* base with locking mechanism and permanent magnetic force) and 908.974 (flat on/off switchable magnetic base).
- Various bases available.



908.958

908.974



908.950/951

908.946

908.973

908.952

908.972

PRICE

Item No.	Clamping shaft/mm	Column mm	Arm mm	Desc. of base	Dimensions l x w x h/mm	Magn. force ¹ /N	Thread of base	Price EUR
908.950	ø4/ø8	ø12x176	ø10x150	V-groove	58x50x55	600 ^(S)	M8x1.25	12.90
908.951	ø4/ø8	ø12x176	ø10x150	V-groove	58x50x55	800 ^(S)	M8x1.25	14.10
908.952	ø4/ø8	ø20x350	2 arms: ø14x200 ø10x150	V-groove	73x50x55	1000 ^(S)	M8x1.25	37.70
908.958	ø8	ø8x130	ø8x110	V-groove	36x30x35	400 ^(S)	M5x0.8	18.70
908.972	ø8	ø12x176	ø10x110	V-groove	58x50x55	800 ^(S)	M8x1.25	16.20
908.973	ø4/ø8	ø12x176	ø10x150	<i>flexform</i>	77x48x55	400 ^(P)	M8x1.25	17.50
908.974	ø6	ø7x55		flat	30x30x30	170 ^(S)	M5x0.8	18.70
908.946 ²	ø8	ø12x190	ø10x160	V-groove	54x40x47	800 ^(S)	M8x1.25	90.00

¹ S = switchable magnet; P = permanent magnetic force.

² V-groove on 3 sides.

Dial indicator stands

- Clamping shaft $\varnothing 8$ mm for dial indicators and probes, and dovetail joint for lever-type dial test indicators (908.957 without dovetail joint).
- With fine adjustment (except 908.962/964/957).
- Arm with mechanical central clamping device (908.954/955: hydraulic).
- On/off switchable magnetic base with V-groove, except 908.964 (permanent magnetic force), 908.961 (vacuum base) and 908.975 (*flexform* base with locking mechanism and permanent magnetic force).
- Various bases available.



908.953/959

908.960



908.954/955



908.962



908.975



908.961



908.956/957



908.964

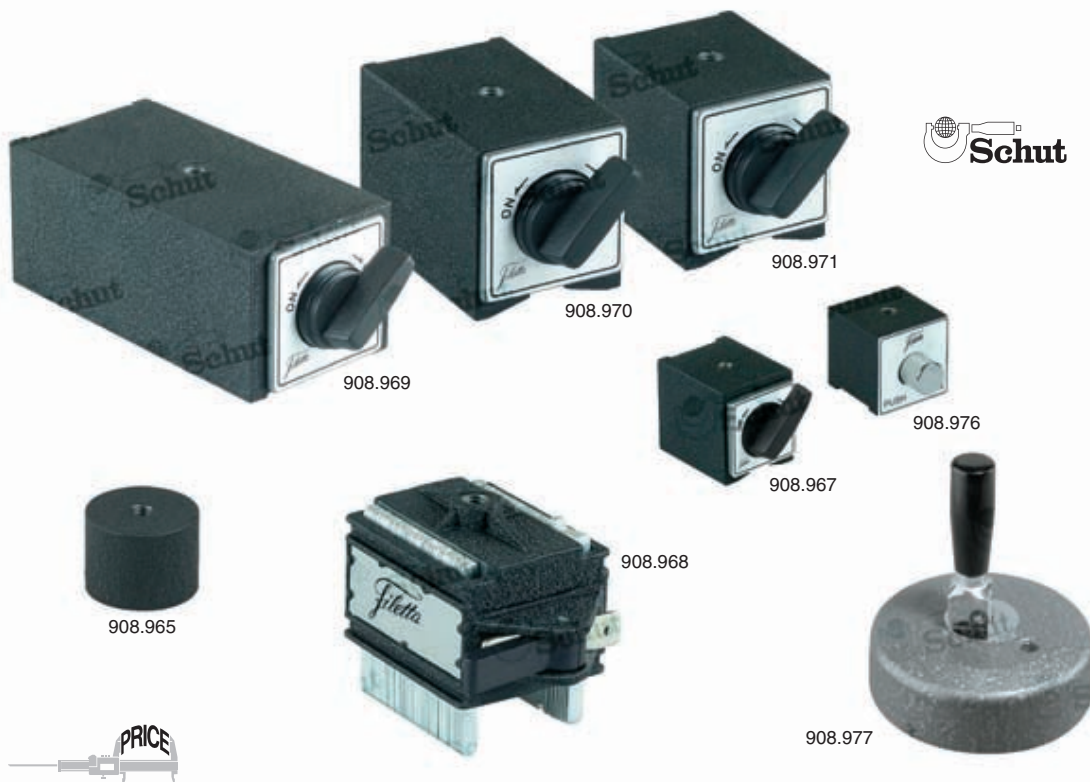
Item No.	Clamping	Arm length ¹ /mm	Description of base	Dimensions l x w x h/mm	Magnetic force ² /N	Thread of base	Price EUR
908.953	mechanical	300	V-groove	58 x 50 x 55	600 ^(S)	M8 x 1.25	24.50
908.959	mechanical	330	V-groove	58 x 50 x 55	800 ^(S)	M8 x 1.25	26.40
908.960	mechanical	285	V-groove	58 x 50 x 55	800 ^(S)	M8 x 1.25	29.80
908.954	hydraulic	385	V-groove	58 x 50 x 55	600 ^(S)	M8 x 1.25	48.00
908.955	hydraulic	370	V-groove	58 x 50 x 55	800 ^(S)	M8 x 1.25	50.00
908.962	mechanical	145	V-groove	36 x 30 x 35	400 ^(S)	M5 x 0.8	27.30
908.964	mechanical	65	cylinder	$\varnothing 30 \times 25$	170 ^(P)	M8 x 1.25	17.80
908.975	mechanical	270	<i>flexform</i>	77 x 48 x 55	400 ^(P)	M8 x 1.25	33.60
908.961	mechanical	280	vacuum base	$\varnothing 90 \times 28$		M8 x 1.25	33.60
908.956	mechanical	350	V-groove	58 x 50 x 55	800 ^(S)	M8 x 1.25	26.90
908.957	mechanical	330	V-groove	58 x 50 x 55	800 ^(S)	M8 x 1.25	26.40

¹ The outstretched length between base and clamping shaft.

² S=switchable magnet; P=permanent magnetic force.

Bases for dial indicator stands

A solid base is essential for accurate measurements. The dial indicator arms can be mounted on a strong magnetic or vacuum base.



Item No.	Description	Dimensions <i>l x w x h</i> /mm	Magnetic force*/N	Thread	Price EUR
908.971	V-groove	58 x 50 x 55	800 ^(S)	M8 x 1.25	12.50
908.970	V-groove	73 x 50 x 55	1000 ^(S)	M8 x 1.25	17.40
908.969	flat base	117 x 50 x 52	1500 ^(S)	M8 x 1.25	52.00
908.967	V-groove	36 x 30 x 35	400 ^(S)	M5 x 0.8	13.70
908.976	flat base	30 x 30 x 30	170 ^(S)	M5 x 0.8	10.50
908.968	flexform	77 x 48 x 55	400 ^(P)	M8 x 1.25	24.10
908.965	cylinder	∅40 x 30	300 ^(P)	M8 x 1.25	13.10
908.977	vacuum base	∅90 x 28		M8 x 1.25	20.90

* S = switchable magnet; P = permanent magnetic force.

Fixing clamps for dial indicator stands

Item No.	Fixing clamp ∅/mm	Price EUR
907.440	12/10	6.50
907.442	10/8+6/6.5	6.50
907.443	10/8+4	6.50
907.444	14/8+6/6.5	9.40
907.441	20/14	21.80

NEW

Magnetic dial indicator stands

Solid dial indicator stands with on/off switchable magnetic base.

- Clamping shaft: $\varnothing 6$ and $\varnothing 8$ mm.
- Magnetic base with V-groove.
- Magnetic face at the back (except 855.707).



855.701



855.705



855.707

Item No.	Dimensions base $l \times w \times h$ /mm	Magnetic force/N	Column mm	Arm mm	Thread of base	Price EUR
855.701	58 x 50 x 55	800	$\varnothing 12 \times 176$	$\varnothing 10 \times 150$	M8	52.00
855.705	73 x 50 x 55	1000	$\varnothing 20 \times 178$	$\varnothing 14 \times 165$	M8	135.00
855.707	117 x 50 x 55	1300	$\varnothing 20 \times 365$	$\varnothing 14 \times 200$	M20	228.00

Magnetic dial indicator stands

Solid dial indicator stands with on/off switchable magnetic base.

- Clamping shaft: $\varnothing 6$ and $\varnothing 8$ mm.
- Screw thread base: M8.
- Magnetic base with V-groove.
- Magnetic face at the back.



855.706



855.710

Item No.	Clamping	Dimensions base $l \times w \times h$ /mm	Magnetic force/N	Arm length* mm	Price EUR
855.706	hydraulic	73 x 50 x 55	1000	335	296.00
855.710	mechanical	58 x 50 x 55	800	335	121.00

* The outstretched length between base and clamping shaft.

Fisso Classic Line dial indicator stands

These dial indicator stands are manufactured according to the classic principle with chrome plated arm parts, joint together with the three hinge points by means of a central mechanic clamping device. Because this is done with one on/off switch control, the stand can be positioned easily and precisely.

- Fine adjustment: with clamping shaft $\varnothing 8$ mm (for dial indicators and probes) and dovetail joint (for lever-type dial test indicators).
- Dial indicator not included.
- Various bases, fine adjustments and other accessories available; see "Fisso dial indicator stand accessories".



Complete stands (incl. base and fine adjustment)

Item No.	Arm length/mm	Base type*	Magnetic force/N	Price EUR
837.262	200	M	800	187.00
837.263	200	AM	600	216.00
837.290	200	AMO	600	237.00
837.264	200	TM	300	170.00
837.237	200	V	–	241.00
837.245	280	M	800	215.00
837.265	280	SM	1000	235.00
837.238	280	V	–	270.00
837.287	450	SM	1000	383.00
837.266	450	MM	1500	462.00
837.246	630	MM	1500	601.00

*For an extensive description of the base types see "Fisso dial indicator stand accessories".



837.264



837.287



837.238



837.245



837.290

Item No.	Arm length/mm	Thread of head	Thread of base	Price EUR	Item No.	Price EUR
Separate arm without fine adjustment:					With fine adjustment:	
837.283	197	M6	M8	103.00	837.267	128.00
837.284	288	M6	M8	133.00	837.252	157.00
837.285	453	M8	M8	287.00	837.268	305.00
837.286	635	M8	M10 x 1.25	439.00	837.253	451.00



Fisso Strato Line and Strato μ -Line dial indicator stands

These dial indicator stands have a modern design with light metal arm parts in one piece, which, together with the three hinge points, are fixated by means of a mechanical clamping device. Because this is done with one on/off switch, the bases can be positioned easily and precisely.

Also available are the small dial indicator stands with an arm length of 130 mm – especially useful for places with confined space.

- Fine adjustment: with clamping shaft $\varnothing 8$ mm (for dial indicators and probes) and dovetail joint (for lever-type dial test indicators).
- Dial indicator not included.
- Various bases, fine adjustments and other accessories available; see “Fisso dial indicator stand accessories”.
- The Strato μ -Line models are equipped with a precision fine adjustment.

Complete stands (incl. base and fine adjustment)

Item No.	Arm length/mm	Base type ¹	Magnetic force/N	Price EUR
837.297	130	S2	300	170.00
837.270	130	TMS	150	156.00
837.288	130	C ²	–	117.00
839.455 ³	130	S3	600	316.00
837.242	200	M	800	200.00
837.243	200	TM	300	183.00
837.244	200	AM	600	229.00
837.289	200	AMO	600	250.00
837.239	200	V	–	233.00
839.456 ³	200	M	800	337.00
837.240	280	M	800	259.00
837.271	280	SM	1000	279.00
837.241	280	V	–	313.00
837.261	280	G	–	530.00
839.457 ³	280	M	800	400.00
837.230 ³	330	SM	1000	453.00
837.231 ³	330	G	–	704.00

¹ For an extensive description of the base types see “Fisso dial indicator stand accessories”.

² Long stem, $\varnothing 10 \times 40$ mm, thread M6 (not separately available).

³ With μ -Line precision fine adjustment (837.204).



837.288



Item No.	Arm length/mm	Thread of head	Thread of base	Price EUR	Item No.	Price EUR
Separate arm without fine adjustment:					With fine adjustment:	
837.281	130	M6	M6	98.00	837.272	124.00
837.282	200	M6	M8	117.00	837.251	142.00
837.247	280	M6	M8	178.00	837.250	201.00
837.912	330	M8	M8	222.00	837.232 ³	375.00

Fisso dial indicator stand accessories



837.275



837.294



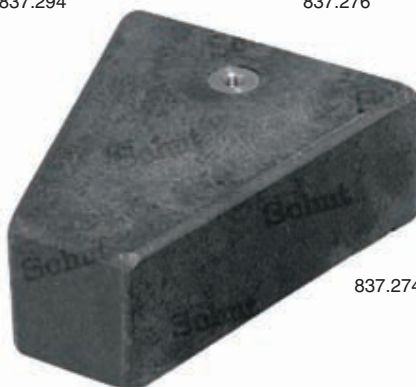
837.276



837.273



837.194



837.274



837.227



837.280



837.803

Item No.	Type/ description	Magnetic force*/N	Dimensions l x w x h/mm	Thread	Price EUR
Magnetic bases:					
837.294	S2 V-groove	300 ^(S)	34 x 30 x 35	M6	48.00
837.750	S3 V-groove	600 ^(S)	40 x 40 x 40	M6	57.00
837.254	M V-groove	800 ^(S)	60 x 50 x 55	M8	61.00
837.255	SM V-groove	1000 ^(S)	75 x 50 x 55	M8	82.00
837.256	MM flat	1500 ^(S)	120 x 60 x 55	M10 x 1.25	157.00
837.275	AM anyform	600 ^(P)	77 x 48 x 55	M8	91.00
837.291	AMO anyform	600 ^(S)	91 x 52 x 55	M8	113.00
837.276	TMS cylinder	150 ^(P)	∅ 30 x 25	M6	33.00
837.257	TM cylinder	300 ^(P)	∅ 40 x 30	M8	36.50
Other bases:					
837.273	V vacuum base		∅ 88 x 27	M8	117.00
837.274	G granite base		150 x 120 x 50	M8	343.00
837.194	– steel base		∅ 100 x 20	3x M6	45.00
837.195	– steel base		∅ 100 x 20	M8	45.00
837.196	– steel base		∅ 150 x 20	M6	48.00
837.292	– steel base		∅ 150 x 20	M8	48.00
837.193	– clamping base		80 x 20 x 40	2x M6	26.10
837.227	– clamping base		80 x 30 x 40	2x M8	33.90
Adapters for thread arm → base:					
837.280	Adapter M6 → M8 (hexagonal 13 x 25 mm, CrNi steel)				10.40
837.211	Adapter M8 → M6 (hexagonal 13 x 25 mm, CrNi steel)				10.40
837.804	Adapter M8 → M10 (∅ 20 x 37 mm, steel)				13.10
837.803	Adapter M8 → M12 (∅ 20 x 40 mm, steel)				13.10

* S=switchable magnet; P=permanent magnetic force.



Fisso dial indicator stand accessories (continued)

Item No.	Thread	Price EUR
Fine adjustments*:		
837.279	M6	31.30
837.260	M8	31.30
Precision fine adjustment (μ-Line)*:		
837.204	M8	170.00
Dial indicator holders*:		
837.192	M6	17.40
837.191	M8	17.40
Reducer:		
837.190	$\varnothing 8 \rightarrow 6$ mm	0.70

*With clamping shaft $\varnothing 8$ mm and dovetail joint.



Item No.	Span	Thread	Clamping jaws	Price EUR
Quick clamps:				
837.220	25 mm	M6	steel	48.00
837.228	50 mm	M8	steel	52.00
837.221	75 mm	M8	steel	71.00
Spring quick clamps:				
837.219	15 mm	M6	rubber, 50 mm	46.00
837.218	15 mm	M6	plastic, 21 mm	21.70

For more clamping and positioning possibilities (e.g. for medical applications) please contact our sales department.

Fisso Base Line dial indicator stands

Easy and handy dial indicator stands with high stability and accuracy.

- Fine adjustment: with clamping shaft $\varnothing 8$ mm (for dial indicators and probes) and dovetail joint (for lever-type dial test indicators).
- Mechanical clamping device.
- Dial indicator not included.



Complete stands (incl. base and fine adjustment)

Item No.	Column mm	Arm mm	Base type*	Magnetic force/N	Price EUR
837.224	$\varnothing 10 \times 106$	$\varnothing 8 \times 75$	S2	300	112.00
837.225	$\varnothing 12 \times 156$	$\varnothing 10 \times 106$	M	800	121.00
837.226	$\varnothing 14 \times 184$	$\varnothing 12 \times 164$	M	800	127.00

*For an extensive description of the base types see "Fisso dial indicator stand accessories".