

# Measuring instruments and systems





precision measuring instruments mechanical - optical - electronical 3D CNC coordinate measuring machines



## GENERAL CATALOG

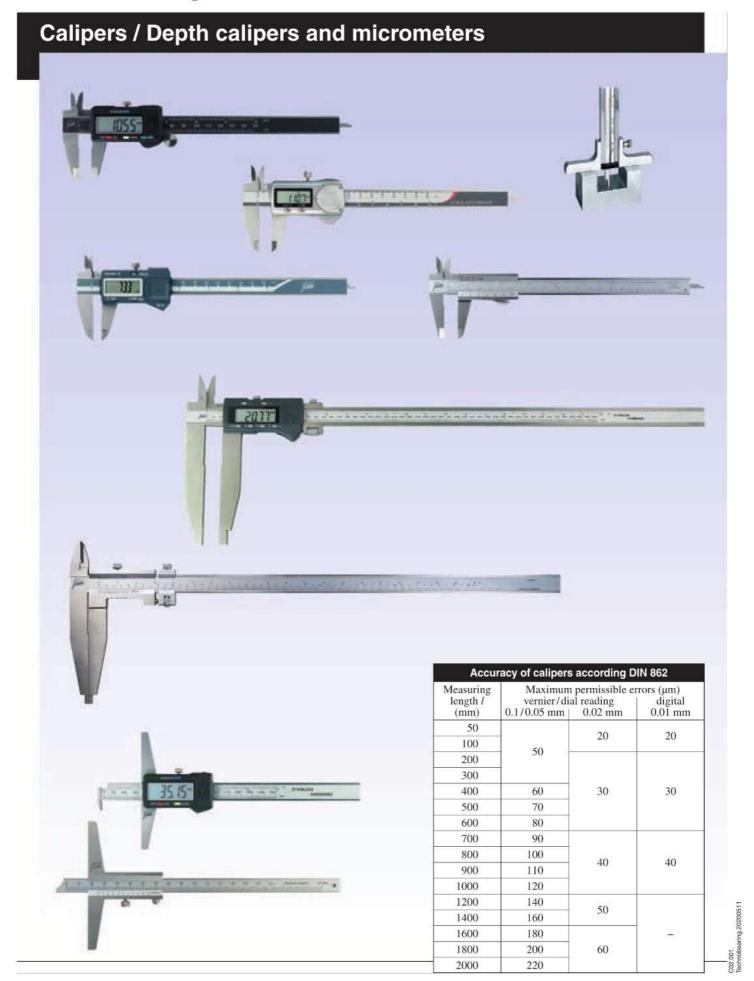
# Measuring instruments and systems

## **TECHNOBEARING**

**Technobearing OOO** 

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Calipers with an absolute measuring system for easy incremental and absolute conversion.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.

- ABS/INC switchable.
- On/off switch.
- Reset.
- Large LCD display.
- Thumb wheel/locking screw/flat depth rod.
- Power supply: 1 battery type V357.



TEC	HIN	OB	FA	R 11	VG

Item No.	Measuring range/mm	Jaw length mm	Thumb wheel	Price RUB
906.480	0-150	40	yes	
906.481	0-200	50	yes	
906.482	0-300	60	yes	

#### Option:

836.535 Spare battery

#### Digital calipers with excellent price-performance ratio

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.

- Reset.
- Large LCD display (except 906.483/484).
- Thumb wheel (except 906.483/484).
- Locking screw/flat depth rod.
- Power supply: 1 battery type V357.





Item No.	Measuring range/mm	Jaw length mm	Thumb wheel	Price RUB
906.483	0- 75	30	no	
906.484	0 - 100	30	no	
906.300	0-150	40	yes	
906.302	0-200	50	yes	
906.304	0-300	60	yes	
Left-hand	led model:			
906.299	0-150	40	yes	

## Option:

Calipers with an absolute measuring system for easy incremental and absolute conversion. The advantage of these calipers is the one-time setting of the absolute zero position until the battery has to be changed. This reduces the chance of measuring errors and enables you to use the calipers without zero setting.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.

- Automatic switch-off.
- Reset.
- Large LCD display.
- Thumb wheel/locking screw/flat depth rod.
- DIN 862.
- Delivery with an inspection report.
- Power supply: 1 battery type V357.



	Item No.	Measuring range/mm	Jaw length mm	Price RUB	
	907.546	0-150	40		
	907.547	0-200	50		
	907.548	0-300	60		×
П					7



**Option:** 836.535 Spare battery

## **Digital calipers**

The advantage of these calipers is the one-time setting of the absolute zero position until the battery has to be changed. This reduces the chance of measuring errors and enables you to use the calipers without zero setting.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Automatic switch-off.

- Reset.
- Large LCD display.
- Thumb wheel/locking screw/flat depth rod.
- DIN 862
- Delivery with an inspection report.
- Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Jaw length mm	Price RUB
907.537	0-150	40	
907.538	0-200	50	
907.539	0-300	60	

PRICE

Option:

### Digital calipers with hold function

Digital calipers with a function to hold the display value at any position.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.

- On/off switch.
- Reset.
- Hold function.
- Large LCD display.
- Thumb wheel/locking screw/flat depth rod.

STAINLESS

HARDENED

■ Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Jaw length mm	Price RUB
907.543	0-150	40	
907.544	0-200	50	
907.545	0-300	60	
Option:			
836.535	Spare battery		

## Digital calipers with min/max function

By keeping the mode button pressed you can hold the minimum and maximum measuring values.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.

- On/off switch.
- Reset.
- Min/max function.
- Large LCD display.
- Thumb wheel/locking screw/flat depth rod.

STAINLESS HARDENED

■ Power supply: 1 battery type V357.



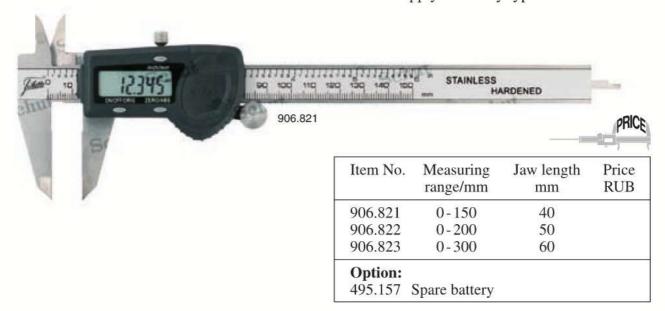
Item No.	Measuring range/mm	Jaw length mm	Price RUB
907.549	0-150	40	
907.550	0-200	50	
907.551	0-300	60	

#### Digital calipers 0.005 mm

Calipers with a higher resolution and a measuring range up to 300 mm.

- Measuring range: 0-300 mm.
- Resolution: 0.005 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.

- Automatic switch-off.
- Reset.
- Thumb wheel/locking screw/flat depth rod.
- DIN 862.
- Power supply: 1 battery type CR2032.



#### Digital solar calipers

The solar power supply functions already with a low illumination level.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.

- Automatic switch-off.
- Reset.
- Thumb wheel/locking screw/flat depth rod.
- Back-up power supply (prevents shut-down in dark places): 1 battery type V389.

STAINLESS HARDENED



Item No.	Measuring range/mm	Jaw length mm	Price RUB
906.475	0-150	40	
906.492	0-200	50	
906.493	0-300	60	
Ontion:			

498.823 Spare battery

#### Digital calipers with glass ruler

Equipped with a glass ruler. Very easy displacement by non-contact movement.

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- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable (only 909.443/444/445).
- With data output.
- On/off switch.

- Automatic switch-off.
- Reset.
- Large LCD display.
- Thumb wheel/locking screw/flat depth rod.
- DIN 862.
- Delivery with an inspection report.
- Power supply: 1 battery type CR2025.





#### **USB** interface:

- For data transfer to PC (e.g. Excel, Word).
- Operating system:
   Windows and other.
- PC connection: USB.
- No software or driver to install.
- Foot switch (optional).



Item No.	Measuring range/mm	Jaw length mm	Price RUB
909.440	0-150	40	
909.441	0-200	50	
909.442	0-300	60	
Absolute	calipers:		
909.443	0-150	40	
909.444	0-200	50	
909.445	0-300	60	

<b>Options</b> :	
495.214	Spare battery
909.446	USB interface
909.687	Footswitch for
	USB interface

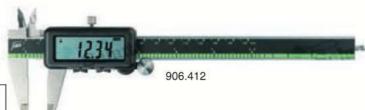
### Digital calipers with tolerance function

Digital calipers with function to set tolerance limits with Go/NoGo reading.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- With data output.
- Tolerance function.
- On/off switch.
- Automatic switch-off.
- Reset.

	Large	LCD	disp	lay.
--	-------	-----	------	------

- Thumb wheel/locking screw/flat depth rod.
- DIN 862.
- Delivery with an inspection report.
- Power supply: 1 battery type CR2025.



Item No.	Measuring range/mm	Jaw length mm	Price RUB
906.412	0-150	40	
906.413	0-200	50	
906,414	0-300	60	

909.446 USB interface

909.687 Foot switch



## Digital calipers with rotatable LCD display

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Automatic switch-off.
- Reset.

- Rotatable display.
- Rotatable display value.
- Thumb wheel/locking screw/flat depth rod.
- Power supply: 1 battery type CR2032.







Item No.	Measuring range/mm	Jaw length mm	Price RUB
910.072	0-150	40	
910.073	0-200	50	
910.074	0-300	60	

#### **Option:**

495.157 Spare battery

Calipers with an absolute measuring system for easy incremental and absolute conversion. The advantage of these calipers is the one-time setting of the absolute zero position until the battery has to be changed. This reduces the chance of measuring errors and enables you to use the calipers

without zero setting. These calipers have a protection degree of IP54 and are therefore protected against splash water and resistant to oil and dust. The models with function for setting tolerance limits are provided with a clear optical Go (NoGo) indication.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable.
- With data output.
- On/off switch.
- Automatic switch-off.

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Reset.

- Max. measuring speed: unlimited.
- Locking screw/flat depth rod.
- Protection: IP54.
- DIN 862.
- Delivery with an inspection report.
- Power supply: 1 battery type CR2032.

#### Models with tolerance display:

- Adjustable tolerance limits.
- Tolerance display by means of illuminated green LED at GO value.





- For data transfer to PC (e.g. Excel, Word).
- Operating system:
   Windows and other.
- PC connection: USB.
- No software or driver to install.
- Foot switch (optional).









Item No.	Measuring range/mm	Accuracy mm	Jaw length mm	Price RUB
906.838	0-150	0.02	40	
906.839	0-200	0.03	50	
906.840	0-300	0.03	60	
Models w	ith tolerance	display:		
906.835	0-150	0.02	40	
906.836	0-200	0.03	50	
906.837	0-300	0.03	60	

#### **Options:**

495.157 Spare battery

906.618 USB interface

909.687 Footswitch for USB interface

910.038 Wireless USB receiver

906.619 Wireless transmitter

Calipers with an absolute measuring system for easy incremental and absolute conversion. This gives you the advantage that the caliper stores the one-time setting of the absolute zero position until the battery has to be changed. This reduces the chance of measuring errors and enables you to use the caliper without zero setting. These calipers have a protection degree of IP54 and are therefore protected against splash water and resistant to oil and dust.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable.
- Digimatic data output.
- On/off switch.
- Reset.

- Max. measuring speed: unlimited.
- Thumb wheel supplied separately.
- Locking screw/flat depth rod.
- Protection: IP54.
- DIN 862.
- Delivery with an inspection report.
- Power supply: 1 battery type CR2032.

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- For data transfer to PC (e.g. Excel, Word).
- Operating system:
   Windows and other.
- PC connection: USB.
- No software or driver to install.
- Foot switch (optional).









Item No.	Measuring range/mm	Accuracy mm	Jaw length mm	Price RUB
909.602	0-150	0.02	40	
909.603	0-200	0.02	50	
909.604	0-300	0.03	60	

#### **Options:**

495.157 Spare battery

909.686 USB interface

909.687 Footswitch for USB interface

910.038 Wireless USB receiver

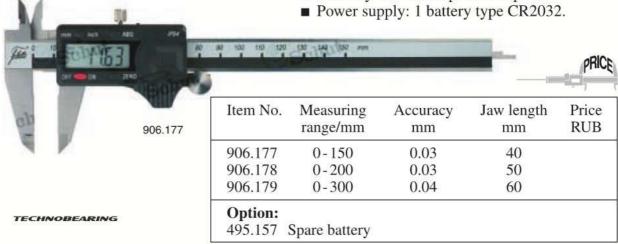
910.039 Wireless transmitter

Calipers with an absolute measuring system for easy incremental and absolute conversion. This gives you the advantage that the caliper stores the one-time setting of the absolute zero position until the battery has to be changed. This reduces the chance of measuring errors and enables you to use the caliper without zero setting. These calipers have a protection degree of IP54 and are therefore protected against splash water and resistant to oil and dust.

8 (800) 700-72-07

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.

- Automatic switch-off.
- Reset.
- Thumb wheel/locking screw/flat depth rod.
- Protection: IP54.
- DIN 862.
- Delivery with an inspection report.

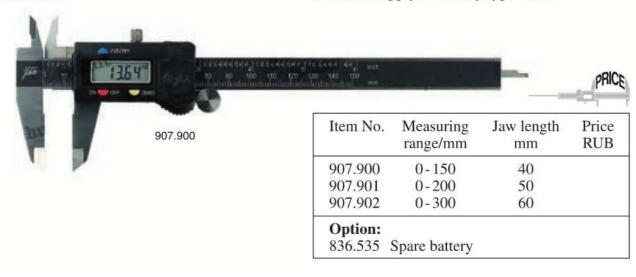


#### **Digital calipers IP54**

These calipers have a protection degree of IP54 and are therefore protected against splash water and resistant to oil and dust.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.

- Reset.
- Thumb wheel/locking screw/flat depth rod.
- Protection: IP54.
- Power supply: 1 battery type V357.



### Digital carbon fiber calipers

Digital calipers made of carbon fiber.

- Measuring range: 0-300 mm.
- Resolution: 0.1 mm.
- mm/inch conversion.
- On/off switch.

- Automatic switch-off.
- Reset.
- Flat depth rod (only 909.420).
- Power supply:

909.420/688: 1 battery type CR2032,

909.689: 1 battery type V357.



Item No.	Measuring range/mm	Jaw length mm	Price RUB
909.420	0-150	40	
909.688	0-150	75	
909.689	0-300	90.5	

Digital Ca

#### **Options:**

495.157 Spare battery type CR2032 836.535 Spare battery type V357

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#### **Digital calipers IP67**

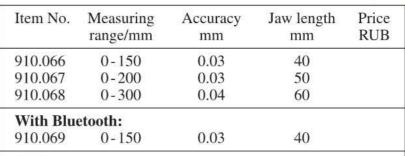
These IP67 protected calipers are especially suitable for use in production environments: they are fully protected against dust intrusion and even last temporary immersion.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- Automatic switch-off.
- Reset.

- Large LCD display.
- Thumb wheel/locking screw/flat depth rod.
- Protection: IP67.
- DIN 862.
- Delivery with an inspection report.
- Power supply: 1 battery type CR2032.







#### Option:

495.157 Spare battery

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These IP67 protected calipers are especially suitable for use in production environments: they are fully protected against dust intrusion and even last temporary immersion.

Calipers with an absolute measuring system for easy incremental and absolute conversion. The advantage of these calipers is the one-time setting of the absolute zero position until the battery has to be changed. This reduces the chance of measuring errors and enables you to use the calipers without zero setting.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable.

- On/off switch.
- Automatic switch-off.
- Reset.
- Locking screw/flat depth rod.
- Protection: IP67.
- DIN 862.
- Power supply: 1 battery type CR2032.



Item No.	Measuring range/mm	Jaw length mm	Price RUB
908.801	0-150	40	
908.802	0-200	50	
908.803	0-300	60	

495.157 Spare battery

## Digital calipers IP67

These IP67 protected calipers are especially suitable for use in production environments: they are fully protected against dust intrusion and even lasts temporary immersion.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Automatic switch-off.

- Thumb wheel/locking screw/flat depth rod.
- Protected rack.
- Protection: IP67.
- DIN 862.
- Delivery with an inspection report.
- Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Jaw length mm	Price RUB
907.500	0-150	40	
907.501	0-200	50	
907.502	0-300	60	

#### Option:

#### Digital calipers with tungsten carbide measuring faces

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.

- On/off switch.
- Reset.
- Thumb wheel/locking screw/flat depth rod.
- Tungsten carbide measuring faces.
- Power supply: 1 battery type V357.

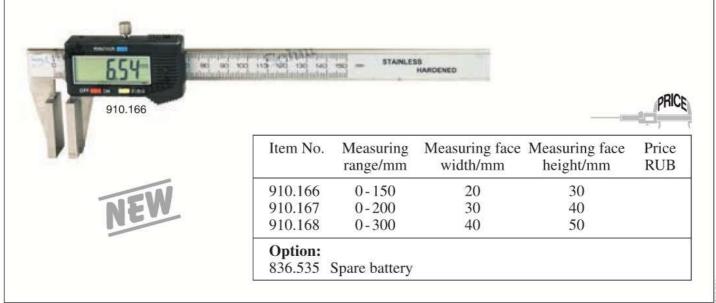


## Digtal calipers with large measuring faces

Calipers with large rectangular measuring faces for the measurements of for example round shafts and cables.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.

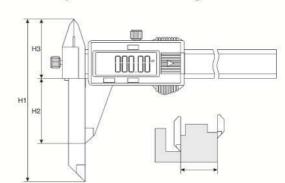
- Reset.
- Large LCD display.
- Locking screw.
- Power supply: 1 battery type V357.



## Digital calipers with slidable measuring jaw

For measuring distances between planes at different levels. Very suitable as scribing tool!

- Measuring range: 0 500 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Thumb wheel/locking screw.
- Power supply: 1 battery type V357 (except 906.348).





with fine adjustment and preset function.

Item No.	Measuring	Jaw	length	mm (	Price
	range/mm	H1	H2	H3	RUB
906.345	0-150	110	40	37	
906.346	0-200	120	50	40	
906.347	0-300	130	60	42	
906.348*	0-500	210	100	66	

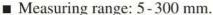
#### **Options:**

836.535 Spare battery type V357

495.157 Spare battery type CR2032

#### Digital calipers for measuring center distances

Suited for measuring center distances between bores from \( \text{\rho} \) 1 up to 4.5 mm. Because both measuring jaws are adjustable in height it is possible to measure center distances between bores that are positioned at different levels.



■ Resolution: 0.01 mm.

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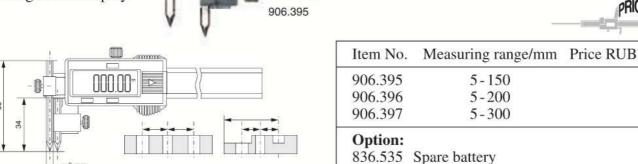
mm/inch conversion.

- On/off switch.
- Reset.
- Large LCD display.



Locking screw.

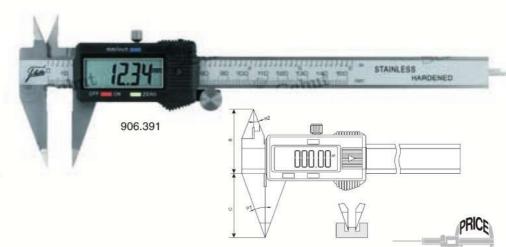
■ Power supply: 1 battery type V357.



### Digital calipers with pointed measuring jaws

The pointed measuring jaws of these calipers enable you to measure distances in places that are hard to reach.

- Measuring range: 0-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Thumb wheel/locking screw/flat depth rod.
- Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Jaw length C/mm	Length B/mm	Angle φ1	Angle φ2	Price RUB
906.391	0-150	40	37	20°	20°	
906.392	0-200	50	40	20°	22.5°	
906.393	0-300	60	42	20°	22.5°	

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Option:

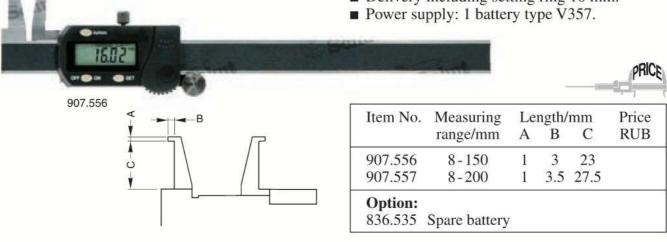
836.535 Spare battery

## Digital calipers with outside angled measuring jaws

These calipers have short, stable, V-shaped measuring jaws with a flat front. Specially designed for measuring bore and internal groove diameters.

- Measuring range: 8 200 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.

- On/off switch.
- Reset.
- Preset through SET switch.
- Thickness measuring face: 0.5 mm.
- Thumb wheel/locking screw.
- Delivery including setting ring 10 mm.



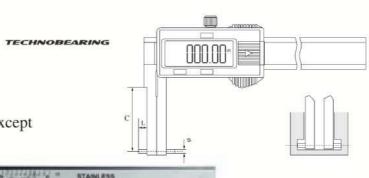
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## Digital calipers with outside angled measuring pins

These calipers are equipped with outside angled rounded pins.

- Measuring range: 35 500 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Thumb wheel/locking screw.

■ Power supply: 1 battery type V357 (except 906.383).





function.

Item No.	Measuring range/mm	Jaw length C/mm	Pin ø/mm	Pin length L/mm	Price RUB
906.374	35 - 150	60	2	6	
906.377	40-200	70	3	7	
906.380	50-300	80	3	10	
906.383*	60-500	105	3	10	
Options:					

836.535 Spare battery type V357 495.157 Spare battery type CR2032

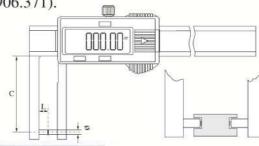
## Digital calipers with inside angled measuring pins

These calipers are equipped with inside angled rounded pins.

- Measuring range: 0-500 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Thumb wheel/locking screw.

■ Power supply: 1 battery type V357 (except 906.371).

906.374



906.368



All I
Model with absolute
digital display, without
thumb wheel, with fine
adjustment and preset
function.

Item No.	Measuring range/mm	Jaw length C/mm	Pin ø/mm	Pin length L/mm	Price RUB
906.368	0-150	40	2	5	
906.369	0-200	50	2.5	8	
906.370	0-300	60	2.5	10	
906.371*	0-500	100	3	12	

#### **Options:**

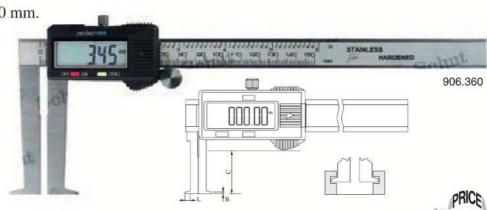
836.535 Spare battery type V357 495.157 Spare battery type CR2032

### Digital calipers with outside angled measuring jaws

These calipers are equipped with outside angled V-shaped measuring jaws.

■ Measuring range: 35 - 500 mm.

- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Thumb wheel/ locking screw.
- Power supply: 1 battery type V357 (except 906.363).





Model with absolute digital display, without thumb wheel, with fine adjustment and preset function.

Item No.	Measuring range/mm	Jaw length C/mm	Measuring face B/mm	Jaw length L/mm	Price RUB
906.360	35-150	50	1.5	6	
906.361	40-200	60	1.5	7	
906.362	50-300	70	1.5	8	
906.363*	60 - 500	110	2	10	

### Digital calipers with inside angled measuring jaws

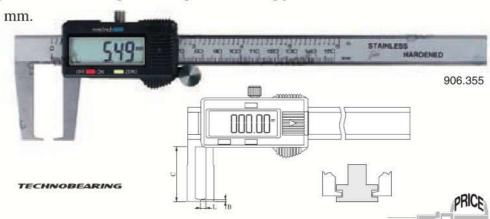
Spare battery type CR2032

These calipers are equipped with inside angled V-shaped measuring jaws.

495.157

■ Measuring range: 0-500 mm.

- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Thumb wheel/ locking screw.
- Power supply: 1 battery type V357 (except 906.358).





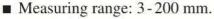
Model with absolute digital display, without thumb wheel, with fine adjustment and preset function.

Item No.	Measuring range/mm	Jaw length C/mm	Measuring face B/mm	Jaw length L/mm	Price RUB
906.355	0-150	40	1	5	
906.356	0-200	50	1	7	
906.357	0-300	60	1.5	8	
906.358"	0-500	100	2	12	

836.535 Spare battery type V357 495.157 Spare battery type CR2032

#### Digital calipers for internal length measurement

Calipers with outside angled, pointed measuring jaws for the measurement of for example internal grooves.



- Resolution: 0.01 mm.
- mm/inch conversion.

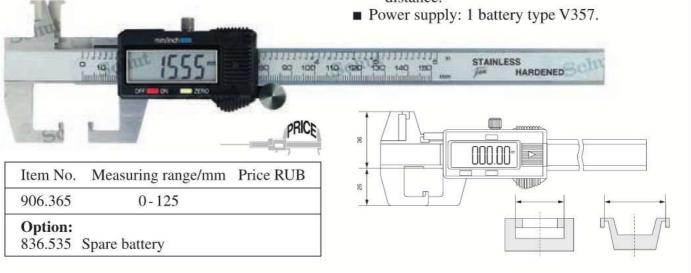
- On/off switch.
- Reset.
- Large LCD display.
- Locking screw.
- Power supply: 1 battery type V357.



#### Digital caliper for groove measurements

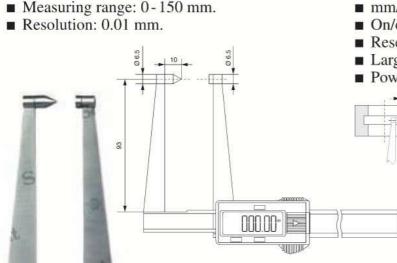
- Measuring range: 0-125 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Equipped with small measuring jaws on top of the caliper.
- Thumb wheel/locking screw.

- Also suitable for:
  - internal diameter attached collar.
  - internal diameter U-shaped flange on axis,
  - center distances blind holes under-surface flange on axis,
  - hole diameter hard-to-reach places,
  - height measurement,
  - groove width and groove distance.

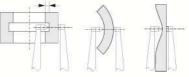


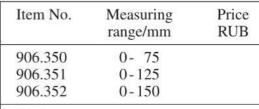
#### Digital calipers with pointed anvil

Because of the pointed anvil and the long measuring jaws you can measure with these calipers all sorts of wall thicknesses in places that are hard to reach and of for example round surfaces.



- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Power supply: 1 battery type V357.





Option:

836.535 Spare battery

#### Digital caliper with square, pointed anvil

906.350

Because of the pointed anvil and the long measuring jaws you can measure with this caliper all sorts of wall thicknesses in places that are hard to reach and of for example round surfaces.

STAINLESS

- Measuring range: 0-150 mm. Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Preset through SET switch.



#### Digital calipers with prismatic anvil

Digital calipers with prismatic anvil for measuring objects with an uneven number of grooves like cutters, reamers and drills. The angle of the prism aperture is designed for workpieces having a number of 3 or 5 flutes.

■ Measuring range: 1-40 mm.

■ Resolution: 0.01 mm.

■ Accuracy: ±0.05 mm.

mm/inch conversion.

■ On/off switch.

Reset.

■ Preset through SET switch.

■ Locking screw.

■ Including setting gauge Ø4 mm (907.552) or Ø1 mm (907.553).

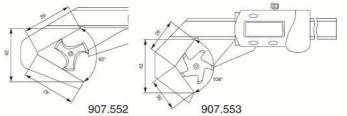
■ Power supply: 1 battery type V357.



Item No.	For work- pieces with	Measuring range/mm	Price RUB	
907.552	3 flutes	4-40		
907.553	5 flutes	1 - 40		

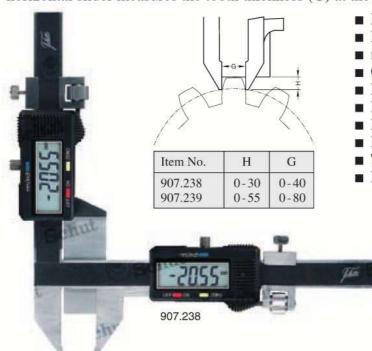
#### Option:

836.535 Spare battery



#### Digital gear tooth thickness calipers

The vertical slider sets the height (H) from the top of the tooth to the pitch line. Subsequently, the horizontal slider measures the tooth thickness (G) at the pitch line.



- Measuring range: module 1-50.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Fine adjustment.
- Locking screw.
- Tungsten carbide measuring faces.
- Power supply: 2 batteries type V357.

Item No.	Module	Price RUB
907.238	1-30	
907.239	5-50	
Option:		
	pare battery	
	needed)	

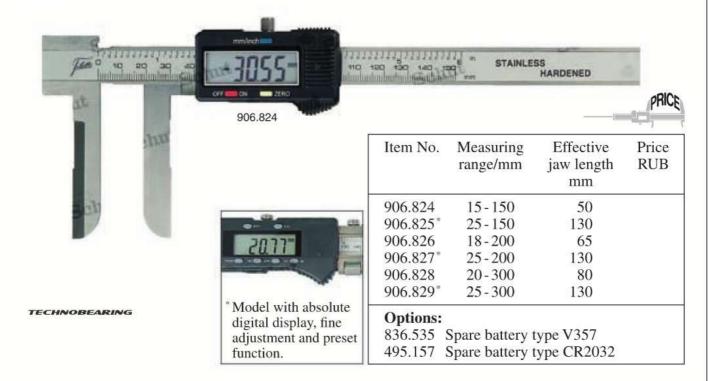
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### Digital calipers for internal measurements

Calipers with long measuring jaws for internal measurements.

- Measuring range: 15-300 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.

- Large LCD display.
- Locking screw.
- Power supply: 1 battery type V357 (except 906.825/827/829).

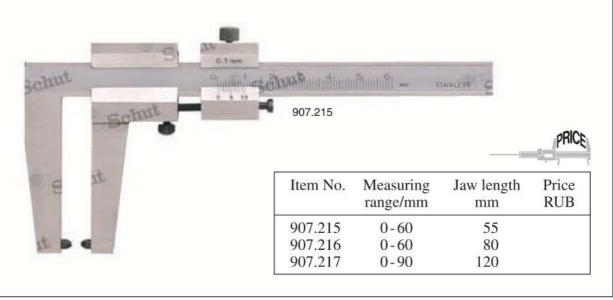


## Brake disc calipers

Brake disc calipers especially for measuring the groove depth of brake discs.

- Measuring range: 0-90 mm.
- Vernier: 0.1 mm.

- Locking screw.
- Stainless steel construction.



## Absolute digital workshop calipers

- Measuring range: 0-2000 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable (except 906.460/686/708).

*TECHNOBEARING* 

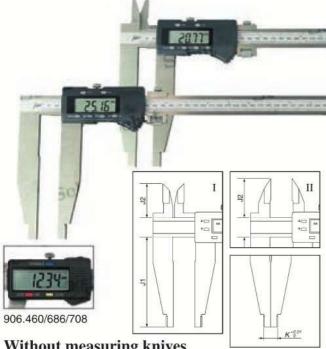
■ On/off switch.

Reset.

- Preset (except 906.460/686/708).
- Memory for measuring values when the display is switched off.
- Fine adjustment.
- Rounded jaw ends for internal measurements.
- Locking screw.
- Power supply: 1 battery type CR2032 (except 906.460/686/708).

906.688

906.466



without in	casuling kin	VES
Item No.	Measuring	Le

Item No.	Measuring range	Length mm		Price RUB	
	mm	J1	K	ROD	
906.708	0- 300	75	10		
906.709	0 - 300	150	20		
906.465	0 - 500	150	20		
906.470	0 - 500	200	20		
906.718	0 - 500	250	20		
906.466	0- 600	150	20		
906.471	0 - 600	200	20		
906.719	0 - 600	300	20		
906.467	0 - 1000	200	20		
906.472	0 - 1000	300	20		
906.468	0 - 1500	200	20		
906.473	0 - 1500	300	20		
906.469	0-2000	200	20		
906.474	0-2000	300	20		

Item No.	Description	Price RUB
495.157	Spare battery type	CR2032
	Spare battery type	

#### With measuring knives

906.697

906.698

906.699

906.766

Item No.	Measuring	Length	Price
	range	mm	RUB
	mm	J1 J2 K	

l	Meas. kni	ives for inte	ernal	mea	surements (I):
l	906.686	0- 300	75	28	10
l	906.687	0- 300	150	38	20
l	906.688	0- 500	150	38	20
l	906.689	0- 500	200	60	20
l	906.690	0 - 500	250	60	20
l	906.691	0- 600	150	45	20
l	906.692	0- 600	200	60	20
l	906.693	0- 600	300	60	20
l	906.694	0 - 1000	200	60	20
l	906.695	0 - 1000	300	60	20
١	906.696	0-1500	200	60	20

0 - 1500

0 - 2000

0 - 2000

Meas. kni	ves fo	or exte	ernal i	meas	surements (II)	:
906.460	0-	300	75	38	10	
906.758	0-	300	150	56	20	
906.461	0-	500	150	56	20	
906 759	0-	500	200	67	20	

300 60 20

200 60 20

300 60 20

300 80 20

250 0-500 906.760 80 20 906.761 0-600 150 56 20 906.762 0 - 600 200 67 20 906.763 0-600 300 80 20 906.462 200 67 20 0 - 1000906.764 0 - 1000300 80 20 906.463 0 - 1500200 80 20 906.765 0 - 1500300 80 20 906.464 0 - 2000200 80 20

0 - 2000

C02.209.

#### Digital lightweight workshop calipers

Lightweight digital aluminum workshop calipers with both measuring jaws moveable. Hardened stainless steel measuring jaws, with rounded jaw ends for internal and external measurements. Excellent sliding properties due to double prismatic joint.

- Measuring range: 0-800 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Jaw length standard delivered jaw: 90 mm.



- Length meas. knives for external measurements: 40 mm.
- Locking screws.
- Delivery in a case with a manufacturer's certificate.
- Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Accuracy mm	Weight kg	Price RUB
853.200	0-300	0.04	0.5	
853.201	0-500	0.05	0.6	
853.202	0-800	0.06	0.8	

#### **Options:**

853.2191 Pair measuring jaws 90 mm

853.220 Pair measuring jaws 125 mm

853.221 Pair measuring jaws 150 mm

836.535 Spare battery

### Digital lightweight workshop calipers

Lightweight digital aluminum workshop calipers with both measuring jaws moveable. Hardened stainless steel measuring jaws, with rounded jaw ends for internal and external measurements. Excellent sliding properties due to double prismatic joint.

- Measuring range: 0-2000 mm.
- Resolution: 0.01 mm.
- On/off switch.
- Reset.



- Locking screws.
- Delivery in a case with a manufacturer's certificate.
- Power supply: 1 battery type CR2032.





Item No.	Measuring	Accuracy	Length/mm		Weight	Price
	range/mm	mm	Α	В	kg	RUB
853.203	0 - 1000	0.06	20	150	1.8	
853.2041	0 - 1500	0.10	20	150	2.1	
$853.205^{1}$	0-2000	0.13	20	150	2.5	

TECHNOBEARING

#### Option:

495.157 Spare battery

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<sup>&</sup>lt;sup>1</sup> Standard included.

<sup>&</sup>lt;sup>1</sup> Delivery ex Groningen, Netherlands.

#### Digital aluminum workshop calipers

Lightweight digital aluminum workshop calipers with both measuring jaws moveable.

- Measuring range: 0-1500 mm.
- Resolution: 0.1 mm.
- mm/inch conversion.
- ABS/INC switchable.

- On/off switch.
- Reset.
- Aluminum scale with hollow construction (8 x 30 mm).
- Both of the measuring jaws can be moved.
- Power supply: 1 battery type V357.



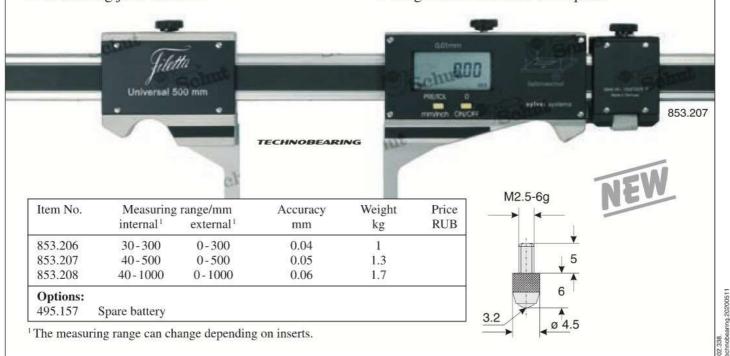
Item No.	Measuring range/mm	Measuring jaw/mm	Weight kg	Price RUB
909.795	0- 500	150	0.7	
909.796	0 - 1000	150	0.9	
909.797	0 - 1500	150	1.1	
Option:	-5000 MM			
836.535	Spare battery			

## Digital lightweight universal workshop calipers

Universal lightweight aluminum workshop calipers with exchangebale measuring inserts for special purposes with both measuring jaws moveable. All inserts with M2.5 thread can be used with these calipers. Please see the dial indicator accessories section for these inserts.

- Internal measuring range ¹: 30 1000 mm.
- External measuring range <sup>1</sup>: 0 1000 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- Tolerance function.
- On/off switch.
- Reset/preset.
- Measuring jaw: 100 mm.

- Interchangeable measuring inserts: 1 pair included (ball attachment Ø 3.2 mm, *l*=6 mm).
- Fine adjustment.
- Locking screws.
- Delivery in a case.
- Power supply: 1 battery type CR2032.
- Larger sizes available on request.



#### Dial calipers

Stainless steel dial calipers with protected rack.

- Measuring range: 0-300 mm.
- Graduation: 0.01 or 0.02 mm.
- 1 pointer revolution = 1 or 2 mm.
- Rotatable dial.
- Thumb wheel.
- DIN 862.





#### High-quality plastic calipers from Switzerland

These modern designed Swiss calipers are made of fiberglass re-enforced plastic, which makes them very firm and light, wear-proof, and resistant to all kinds of chemicals – ideal for the workshop! Each model is equipped with an easy read-out. Combined with the low price a line of very attractive calipers.

8 (800) 700-72-07

- Measuring range: 0-150 mm.
- Thumb wheel.
- Flat depth rod.
- DIN 862.
- Delivery in a case.

#### Vernier caliper

- Vernier: 0.1 mm / 1/64 inch.
- The scale lightens up with minimal light.

#### Dial caliper

- Graduation: 0.1 mm.
- 1 pointer revolution = 10 mm.
- Rotatable dial, ø32 mm.
- The dial is shockproof and can be set to zero.

#### Digital caliper

- Resolution: 0.01 mm.
- mm/inch conversion.
- TECHNOBEARING
- On/reset switch.
- Off switch.
- Power supply: 1 battery type V357.



837.209: set with folding rule of 1 m

Item No.	Description	Price RUB
837.207	Vernier caliper	
	Dial caliper	
	Set of dial caliper	
	with a folding rule	e of 1 m
837.201	Digital caliper	
Option:		
836.535	Spare battery	

837.207

837.205

837.201

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## **Calipers**

Hardened stainless steel calipers with no-glare chrome finished scale and vernier.

- Measuring range: 0-300 mm.
- Vernier: 0.05 or 0.02 mm.
- Raised sliders (except 909.538).

- Monoblock.
- Locking screw or spring release.
- Flat depth rod.
- Thread table on the back side.
- DIN 862.
- Delivery in a case.









	Solve
Schul	40 50 25 10 11 95
906.046	Semi
Sol	(CO. 10)

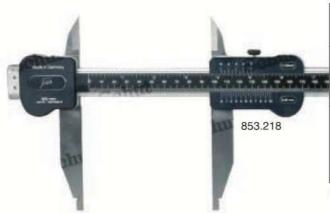
				,
Item No.	Measuring range/mm	Vernier mm	Jaw length mm	Price RUB
Locking s	screw on top:	2		
909.541	0-150	0.02	40	
909.542	0-160	0.02	40	
909.543	0-200	0.02	50	
909.544	0-300	0.02	62	
Locking s	screw on top:			
909.520	0-100	0.05	30	
909.521	0-150	0.05	40	
909.522	0-160	0.05	40	
909.523	0-200	0.05	50	
909.524	0-300	0.05	62	
With thu	mb wheel (loo	cking scre	ew on top):	
909.553	0-150	0.05	40	
909.554	0-200	0.05	50	
909.555	0-300	0.05	62	
Parallax-	free (locking	screw on	top):	
909.538	0-150	0.05	40	
Spring re	lease:			
909.525	0-150	0.05	40	
909.526	0-160	0.05	40	
909.527	0-200	0.05	50	
909.528	0-300	0.05	62	
Spring re	lease, left-ha	nded mod	lel:	
906.046		0.05	40	
906.047	0 - 150	0.02	40	

### Parallax-free lightweight workshop calipers

Lightweight parallax-free aluminum workshop calipers with exchangeable hardened stainless steel measuring jaws, with rounded jaw ends for internal and external measurements. High contrast reading due to white print on black background. Excellent sliding properties due to double prismatic joint.

- Measuring range: 0-900 mm.
- Vernier: 0.05 mm / 1/128 inch.
- Jaw length standard delivered jaw: 90 mm.
- Length meas. knives for external measurements: 40 mm.
- Parallax-free.
- Locking screw.
- Delivery in a case.





Item No.	Measuring range/mm	Weight kg	Price RUB
853.216	0-300	0.5	
853.217	0 - 500	0.6	
853.218	0-900	0.8	

#### **Options:**

853.219<sup>1</sup> Pair measuring jaws 90 mm 853.220 Pair measuring jaws 125 mm 853.221 Pair measuring jaws 150 mm

#### Workshop calipers

Hardened stainless steel workshop calipers with no-glare chrome finished scale and vernier.

- Measuring range: 0-1500 mm.
- Vernier: 0.02 mm.
- Raised sliders.
- Fine adjustment.
- With measuring knives or rounded jaw ends for internal measurements.
- Locking screws.
- DIN 862.
- Delivery in a case.





Item No.	Measuring range mm	Internal measurements from/mm	Jaw length mm	Price RUB
		ves for internal r		ents:
906.230	0- 300		65	
With rou	nded jaw er	nds for internal i	neasurem	ents:
906.231	0 - 300	10	80	
906.233	0 - 500	10	100	
906.234	0 - 600	10	100	
906.235	0 - 1000	20	125	
906.236	0-1500	20	125	

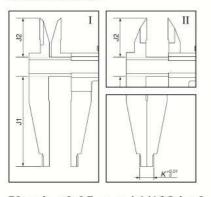


<sup>1</sup> Standard included.

## Workshop calipers

Large and solid, stainless steel calipers with no-glare chrome finished scale and vernier.

- Measuring range: 0 2000 mm.
- Vernier: 0.02 mm / 1/1000 inch or 0.05 mm / 1/128 inch.
- Fine adjustment.
- With or without measuring knives for internal or external measurements.
- Monoblock.



■ Rounded jaw ends for internal measurements; measuring range  $\leq$  600 mm: K=10 mm, measuring range > 600 mm: K=20 mm.

- Locking screws.
- DIN 862.
- Delivery in a case with a declaration of conformity.



Vernier 0.05 mm / 1/128 inch

Item No.	Measuring	L	engi	th	Price
	range		mm		RUB
	mm	J1	J2	K	
Without	measuring	knive	es:		
909.670	0- 300	90	5770	10	
909.620	0 - 450	150	200	10	
909.621	0 - 500	150	10 To 10	10	
909.622	0 - 600	150		10	
909.623	0-800	150		20	
909.624	0 - 1000	150	-	20	
909.639	0 - 1500	200	$(-1)^{-1}$	20	
909.640	0-2000	200	-	20	
Meas. kn	ives for inte	rnal	mea	sure	ments (I):
909.672	0 - 300	90	22	10	
909.632	0 - 400	100	46	10	
909.633	0 - 500	150	46	10	
909.634	0 - 600	150	46	10	
909.635	0 - 750	150	54	20	
909.636	0 - 1000	150	54	20	
909.637	0 - 1500	200	66	20	
909.638	0-2000	200	66	20	
Meas. kn	ives for exte	rnal	meas	suren	nents (II):
909.674	0 - 300	90	22	10	
909.656	0 - 400	100	46	10	
909.657	0 - 500	150	46	10	
909.658	0- 600	150		10	
909.659	0 - 750	150			
909.660	0 - 1000	150	54	20	
909.661	0 - 1500	200	66	20	
909.662	0-2000	200	66	20	

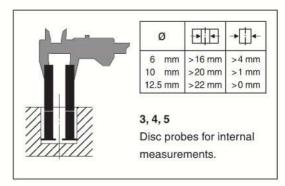
Vernie	er 0.02	mm	/ 1/	1000	inch

Item No.	Measuring	L	eng	th	Price
	range		mm		RUB
	mm	J1	J2	K	
Without	measuring	knive	es:		
909.671	0- 300	90	-	10	
909.615	0-450	150	-	10	
909.616	0- 500	150		10	
909.617	0-600	150	-	10	
909.618	0-800		1000	20	
909.619	0-1000	150	-	20	
909.641	0-1500	200	-	20	
909.642	0-2000	200		20	
Meas. kn	ives for inte	rnal	mea	suren	nents (I):
909.673	0- 300	90	22	10	
909.625	0 - 400	100	46	10	
909.626	0- 500	150	46	10	
909.627	0- 600	150	46	10	
909.628	0- 750	150	55	20	
909.629	0-1000	150	55	20	
909.630	0-1500	200	66	20	
909.631	0-2000	200	66	20	
Meas. kn	ives for exte	rnal i	neas	surem	ents (II):
909.675	0 - 300	90	22	10	
909.663	0 - 400	100	46	10	
909.664	0 - 500	150	46	10	
909.665	0-600	150	46	10	
909.666	0 - 750	150	55	20	
909.667	0-1000	150	55	20	
909.668	0-1500	200	66	20	
909.669	0-2000	200	66	20	

#### Probe set for calipers

This probe set enlarges the possibilities of a regular caliper. Probe holders are slid on the measuring jaw of the caliper. The different probes can be screwed onto them. The probe set makes it possible to execute measurements which are not possible with a regular caliper, such as measuring internal grooves and center distances.

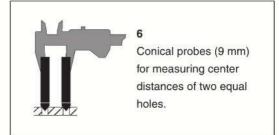
- Screw thread probe holder: M3.
- Maximum caliper jaw thickness: 3.5 mm (mostly compatible with calipers with a measuring range  $\leq 150$  mm).
- Delivery in a wooden case.

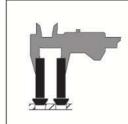




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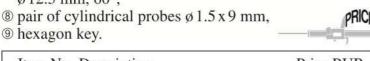




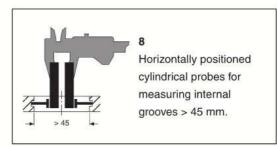
Conical probes (12.5 mm) for measuring center distances of two equal holes.

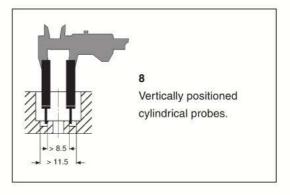
#### The set consists of:

- ① right probe holder,
- 2 left probe holder,
- ③ pair of disc probes ø6 mm,
- pair of disc probes ø 10 mm,
- 5 pair of disc probes ø 12.5 mm,
- 6 pair of cone probes ø9 mm, 60°,
- ② pair of cone probes ø 12.5 mm, 60°,
- hexagon key.



Item No. Description Price RUB 909.655 Probe set for calipers





Item No. Description

909.347 Caliper inspection set

#### Caliper inspection set

For checking the accuracy of DIN 862 calipers. The set consists of three special steel gauge blocks (30 mm, 41.3 mm and 131.4 mm, ISO 3650 class 1), two steel setting rings (\$\phi\$4 mm and \$\phi\$25 mm) and a pair of gloves.

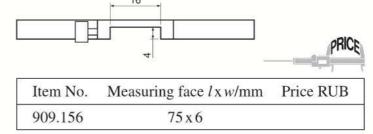




## Depth measuring base for calipers

Universal depth measuring base for stable and accurate depth measurements. Suitable for most of the calipers with a depth rod and a measuring range up to 200 mm. For more information please contact our sales department.



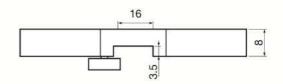


#### Depth measuring bases for calipers

Universal depth measuring bases for stable and accurate depth measurements. Suitable for most of the calipers with a depth rod and a measuring range up to 200 mm. For more information please contact our sales department.



		- 1
Item No.	Measuring face	Price
	l x w/mm	RUB
909.386	80 x 8	
909.387	$100 \times 8$	



TECHNOBEARING

## Caliper holder

Plastic holder for calipers (analog and digital; regular shaped) of 150 mm.

- For regular shaped calipers (analog and digital).
- Delivery including mounting set.
- Rotatable 360°.



Item No.	For meas. range/mm	Price RUB
360.000	150	







## Plastic hard cases for calipers

Protect calipers during transport and storage.

■ For regular shaped calipers (analog, digital and dial type).





Item No.	For meas. range/mm	Price RUB
910.108	150	
910.109	200	
910.110	300	





## Soft cases for calipers

Protect calipers during transport and storage.

■ For regular shaped vernier calipers.





Item No.	For meas. range/mm	Price RUB
909.494	100	
909.495	150	
909.496	160	
909.497	200	
909.498	300	

■ Made of synthetic leather.

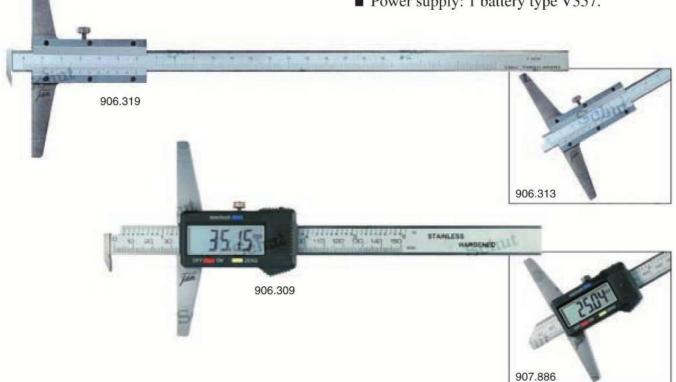
## **Depth calipers**

- Measuring range: 0-500 mm.
- Analog: vernier 0.02 mm, digital: resolution 0.01 mm.
- With or without hook  $(8 \times 3 \text{ mm}, l \times w)$ .
- Locking screw.

#### Analog

- Stainless steel construction.
- No-glare chrome finished scale and vernier.

- mm/inch conversion.
- On and off switches.
- Reset.
- Power supply: 1 battery type V357.



TECHNOBEARING

#### Analog

Item No.	Measuring range/mm	Base length/mm	Price RUB
Without l	100k:		
906.314	0-150	100	
906.313	0-200	100	
906.315	0-300	100	
906.317	0-500	100	
With hoo	k:		
906.318	0-150	100	
906.319	0-200	100	
906.321	0-300	100	
906.322	0-500	100	

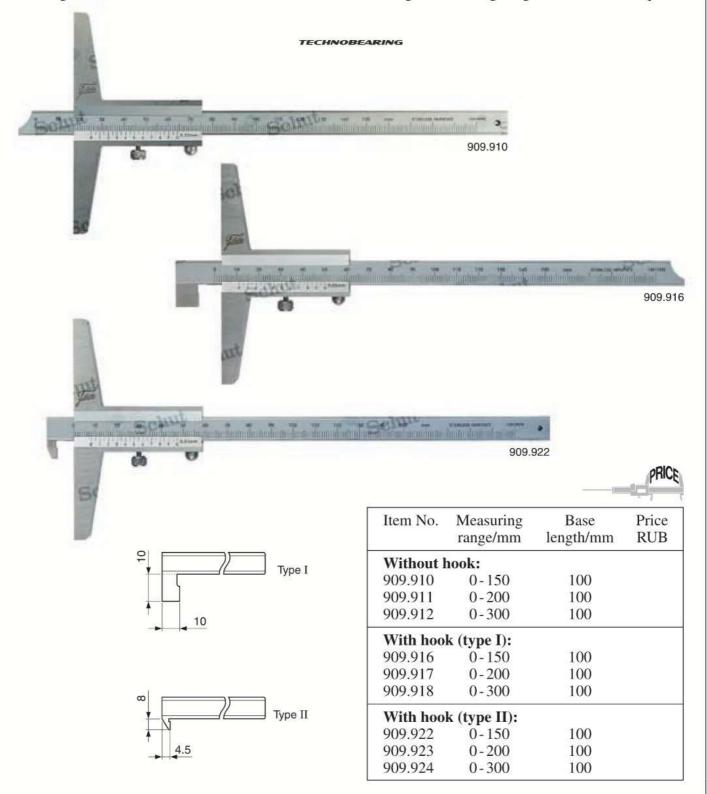
#### Digital

Item No.	Measuring range/mm	Base length/mm	Price RUB
Without l	100k:		
907.886	0-150	100	
907.887	0-200	100	
907.888	0-300	100	
907.898	0-500	100	
With hoo	k:		
906.309	0-150	100	
906.310	0-200	100	
906.311	0-300	100	
906.312	0-500	100	

## **Depth calipers**

Depth calipers with or without hook.

- Measuring range: 0-300 mm.
- Vernier: 0.05 mm.
- Locking screw.
- No-glare chrome finished scale and vernier.
- Monoblock.
- Stainless steel construction.
- DIN 862.
- Larger measuring ranges available on request.



## Digital lightweight depth calipers

Universal lightweight aluminum depth calipers with two exchangeable measuring inserts set at 90° and 3 measuring bases. All inserts with M2.5 thread can be used with these calipers. Please see the dial indicator accessories section for these inserts. Excellent sliding properties due to double prismatic joint.

- Measuring range: 0-800 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset/preset.
- Length included measuring bases: 150, 300 and 450 mm.
- Interchangeable measuring inserts: 2 measuring inserts included (ball attachments ø 3.2 mm, l=6 mm and ø 5 mm, l=12 mm).
- Locking screw.
- Delivery in a case with a manufacturer's certificate.
- Power supply: 1 battery type V357.

Item No.	Measuring range/mm	Accuracy mm	Weight kg	Price RUB
853.209	0-300	0.04	0.4	
853.210	0-500	0.05	0.5	
853.211	0-800	0.06	0.8	



### Digital lightweight depth calipers with with round depth rod

Universal lightweight aluminum depth calipers with round depth rod with M2.5 threaded hole for exchangeable inserts. Inserts with M2.5 thread can be used with these calipers. Please see the dial indicator accessories section for these inserts. Excellent sliding properties due to double prismatic joint.

- Measuring range: 0-800 mm.
- Diameter depth rod: Measuring range 0-300 mm ø4 mm Measuring range 500-800 mm ø6 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Length included measuring base: 350 mm.
- Interchangeable measuring inserts: 2 measuring inserts included (ball attachment Ø 3.2 mm, l=6 mm and disc attachment Ø 10 mm, d=2 mm at 0-300 mm or disc attachment Ø 20 mm, d=2 mm at 500-800 mm).
- Locking screw.
- Delivery in a case with a manufacturer's certificate.
- Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Accuracy mm	Weight kg	Price RUB
853.212	0-200	0.03	0.3	
853.213	0-300	0.04	0.4	
853.214	0-500	0.05	0.6	
853.215	0-800	0.06	0.8	
Options:				
853.222	Measuring base	e 550 mm		
853.223	Measuring base			
853.224	Measuring base			
836.535	Spare battery			

## Digital depth gauge

- Measuring range: 0-21.5 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Large LCD display.
- Locking screw.
- Measuring face: 45 x 6 mm.
- Measuring pin:  $6 \times 2$  mm, taper to  $4 \times 2$  mm.
- Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Price RUB
907.861	0-21.5	
Option:		
836.535	Spare battery	

# Digital depth gauge



Item No.	Measuring range/mm	Price RUB
906.428	0-80	
Option:	DO ENG	
495.157	Spare battery	

### Depth calipers for keyway depths

- Measuring range: keyway depths 0-60 mm.
- Application range: cylinders ø 5 200 mm.
- Vernier: 0.05 mm.
- Stainless steel construction.



Item No.	Application range/mm	Price RUB
907.192	ø5- 80	
907.193	ø6-120	
907.194	ø7-160	
907.195	ø8-200	

# Käfer depth dial indicators

Measuring range: 0-30 mm.Graduation: 0.01 mm.

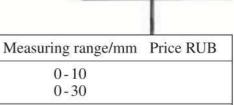
■ Measuring pin shaft: Ø2 mm.

Measuring depth with pin 852.385: 200 mm.

 Excl. measuring pin and measuring base.

 Accuracy according DIN 878 (852.383) or factory standard (852.384).





# 852.384 **Options:**

Item No.

852.383

852.385 Measuring pin ø 2 mm, 340 mm

907.153 Meas. base 63 x 17 mm 907.165 Meas. base 101.5 x 17 mm\*

<sup>\*</sup> Larger sizes available on request.

# Digital depth micrometers IP65

Digital depth micrometers with interchangeable, spherical rods or flat rods. With the flat rods mainly flat and spherical surfaces can be measured very accurately. The spherical rods are especially suitable for beveled and hollow surfaces. The high accuracy of the rods makes resetting after exchanging the rods unnecessary. Two models with different base lengths available.

- Measuring range: 0-300 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.

- Preset.
- Measuring rods: Ø4.5 mm.
- Locking screw.
- Protection: IP65.
- DIN 863 T2.
- Power supply: 1 battery type V357.



### Model with spherical rods especially for hollow and beveled surfaces

Item No.	Price RUB	Item No.	Price RUB	Measuring range/mm	Accuracy mm	Number of rods
Base 63 mm	n:	Base 101.5	mm:			
909.753		909.759		0- 25	$\pm 0.005$	1
909.754		909.760		0- 50	$\pm 0.005$	2
909.755		909.761		0-100	$\pm 0.006$	4
909.756		909.762		0-150	$\pm 0.007$	6
909.757		909.763		0-200	$\pm 0.008$	8
909.758		909.764		0-300	$\pm 0.009$	12

#### Model with flat rods especially for flat and spherical surfaces

Item No.	Price RUB	Item No.	Price RUB	Measuring range/mm	Accuracy mm	Number of rods
Base 63 mm	1:	Base 101.5	mm:			
909.765		909.771	SVIII-S TVSX-EV	0- 25	$\pm 0.005$	1
909.766		909.772		0- 50	$\pm 0.005$	2
909.767		909.773		0-100	$\pm 0.006$	4
909.768		909.774		0-150	$\pm 0.007$	6
909.769		909.775		0-200	$\pm 0.008$	8
909.770		909.776		0-300	$\pm 0.009$	12

#### Option

Item No.	Description	Price RUB
836.535	Spare battery	

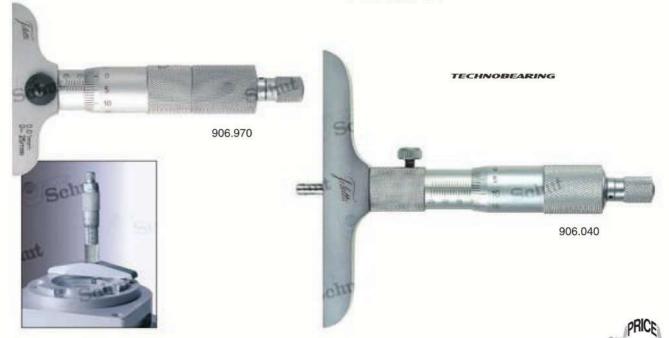
TECHNOBEARING

# **Depth micrometers**

Depth micrometers with interchangeable, spherical or flat rods. With the flat rods mainly flat and spherical surfaces can be measured very accurately. The spherical rods are especially suitable for beveled and hollow surfaces. The high accuracy of the rods makes recalibration after exchanging the rods unnecessary. Two models with different base lengths available.

- Measuring range: 0-300 mm.
- Graduation: 0.01 mm.

- Measuring rods: Ø4.5 mm.
- Locking screw.
- DIN 863 T2.



### Model with spherical rods especially for hollow and beveled surfaces

Item No.	Price RUB	Item No.	Price RUB	Measuring range/mm	Accuracy mm	Number of rods
Base 63 mm	n:	Base 101.5	mm:			
906.964		906.040	10000 90000000	0- 25	$\pm 0.005$	1
906.965		906.039		0- 50	$\pm 0.005$	2
906.966		906.041		0-100	$\pm 0.006$	4
906.967		906.042		0-150	$\pm 0.007$	6
906.968		906.043		0-200	$\pm 0.008$	8
906.969		906.044		0-300	$\pm 0.009$	12

#### Model with flat rods especially for flat and spherical surfaces

Item No.	Price RUB	Item No.	Price RUB	Measuring range/mm	Accuracy mm	Number of rods
Base 63 mm	1:	Base 101.5	mm:			
906.970		906.976		0- 25	$\pm 0.005$	1
906.971		906.977		0- 50	$\pm 0.005$	2
906.972		906.978		0-100	$\pm 0.006$	4
906.973		906.979		0-150	$\pm 0.007$	6
906.974		906.980		0-200	$\pm 0.008$	8
906.975		906.981		0-300	$\pm 0.009$	12

Technobearing 20200511



# **Digital micrometers**

Rugged digital micrometers with simple functions and an excellent price-performance ratio.

- Measuring range: 0-200 mm.
- Resolution: 0.001 mm.
- Automatic switch-off.
- Reset/preset.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- DIN 863 T1.
- From measuring range 25 50 mm including setting gauge.
- Power supply: 1 battery type V357.



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Item No.	Measuring range/mm	Accuracy mm	Price RUB
Not switc	hable:		
908.751	25 - 50	$\pm 0.004$	
908.752	50 - 75	$\pm 0.005$	
908.753	75 - 100	$\pm 0.005$	
908.754	100 - 125	$\pm 0.006$	
908.755	125 - 150	$\pm 0.006$	
908.756	150 - 175	$\pm 0.007$	
908.757	175 - 200	$\pm 0.007$	
Switchab	le mm/inch ar	nd ABS/INC:	
908.758	0- 25	$\pm 0.004$	
908.759	25 - 50	$\pm 0.004$	
908.760	50 - 75	$\pm 0.005$	
908.761	75 - 100	$\pm 0.005$	
908.762	100 - 125	$\pm 0.006$	
908.763	125 - 150	$\pm 0.006$	
908.764	150 - 175	$\pm 0.007$	
908.765	175 - 200	$\pm 0.007$	



908.769

#### Sets

Item No.	Measuring range/mm	Pieces	Price RUB
Switchab	le mm/inch an	d ABS/INC	
908.769	0 - 75	3	
908.770	0-100	4	
908.771	0-150	6	

### Option

Item No.	Description	Price RUB
836.535	Spare battery	

## **Digital micrometers**

Rugged digital micrometers with simple functions and an excellent price-performance ratio.

- Measuring range: 0-150 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.
- Reset/preset.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- From measuring range 25 50 mm including setting gauge.



Delivery in a case with ball attachment and an
inspection report.

■ Power supply: 1 battery type CR2032.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.982	0- 25	±0.003	
909.983	25 - 50	$\pm 0.003$	
909.984	50 - 75	$\pm 0.004$	
909.985	75 - 100	$\pm 0.004$	
909.986	100 - 125	$\pm 0.005$	
909.987	125 - 150	$\pm 0.005$	

#### Option:

495.157 Spare battery

## Digital micrometers with double display

This patented micrometer distinguishes itself by its the two large displays on both sides of the instrument, which can also display upside-down. Therefore the measuring value can always be presented upright, which enables ergonomic read-out at all times. Add to this its measuring range of 30 mm, the tungsten carbide measuring faces and then check out its price.

- Measuring range: 0 205 mm.
- Resolution: 0.001 mm.
  - TECHNOBEARING
- mm/inch conversion.
- ABS/INC switchable. ■ Double LCD display.
- Second display can be switched on/off separately.
- Automatic switch-off.
- Reset/preset.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- DIN 863 T1.
- From measuring range 25-55 mm including setting gauge.
- Delivery in a case.
- Power supply: 1 battery type CR2032.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
907.682	0- 30	±0.004	
907.683	25 - 55	$\pm 0.004$	
907.684	50 - 80	$\pm 0.005$	
907.685	75 - 105	$\pm 0.005$	
907.686	100 - 130	$\pm 0.006$	
907.687	125 - 155	$\pm 0.006$	
907.688	150 - 180	$\pm 0.007$	
907.689	175 - 205	$\pm 0.007$	

#### Option:

495.157 Spare battery

### Digital micrometers with tolerance indication

These absolute digital micrometers are provided with both a tolerance and a hold function. They also have a large display.

- Measuring range: 0 100 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- Digit height: 9 mm.
- Automatic switch-off.

- Reset/preset.
- Hold function.
- Adjustable tolerance limits.
- Tungsten carbide measuring faces: Ø6.5 mm.
- DIN 863 T1.
- Power supply: 1 battery type V357.



907.570

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Item No.	Measuring range/mm	Accuracy mm	Price RUB
907.570	0- 25	±0.004	
907.571	25 - 50	$\pm 0.004$	
907.572	50 - 75	$\pm 0.005$	
907.573	75 - 100	$\pm 0.005$	

#### Option:

836.535 Spare battery

### Micrometers with counter

These solid micrometers have a counter with a resolution of 0.01 mm for an error free read-out of the measuring value, and a very favourable price-performance ratio.

- Measuring range: 0-200 mm.
- Resolution: 0.01 mm.
- Numerical counter adjustable.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- Delivery with adjustment tool.
- From measuring range 25 50 mm including setting gauge.



#### Sets (delivered incl. setting gauges)

Item No.	Measuring range/mm	Pieces	Price RUB
906.564	0- 75	3	
906.565	0 - 100	4	
906.566	0-150	6	

Measuring Price Accuracy range/mm mm **RUB** 906.556 0 - 25  $\pm 0.01$ 906.557 25 - 50  $\pm 0.01$ 50 - 75 906.558  $\pm 0.01$ 906.559 75 - 100 $\pm 0.01$ 906.560 100 - 125 $\pm 0.02$ 906.561 125 - 150 $\pm 0.02$ 906.562 150 - 175 $\pm 0.02$ 906.563 175 - 200 $\pm 0.02$ 

Technobearing 2020051

## Absolute digital micrometers with tolerance indication IP54

Digital calipers with function to set tolerance limits with clear optical Go (NoGo) reading.

- Measuring range: 0-100 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- With data output.
- Adjustable tolerance limits.
- Tolerance display by means of illuminated green LED at GO value.
- On/off switch.
- Automatic switch-off.
- Reset.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- Protection: IP54.
- DIN 863 T1.
- Power supply: 1 battery type CR2032.

#### TECHNOBEARING





#### **USB** interface:

- For data transfer to PC (e.g. Excel, Word).
- Operating system:
   Windows and other.
- PC connection: USB.
- No software or driver to install.
- Foot switch (optional).









Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.862	0- 25	±0.003	
906.863	25 - 50	$\pm 0.003$	
906.864	50 - 75	$\pm 0.004$	
906.865	75 - 100	$\pm 0.004$	

#### **Options:**

495.157 Spare battery

906.618 USB interface

909.687 Footswitch for USB interface

910.038 Wireless USB receiver

906.619 Wireless transmitter

# **Digital micrometers IP54**

- Measuring range: 0-150 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- Automatic switch-off.
- Reset.

- Tungsten carbide measuring faces: Ø 6.5 mm.
- Protection: IP54.
- DIN 863 T1.
- From measuring range 25-50 mm including setting gauge.
- Power supply: 1 battery type V357.





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Item No.	Measuring range/mm	Pieces	Price RUB
910.053	0- 75	3	
910.054	0-100	4	
910.055	0-150	6	

Item No.	Measuring range/mm	Accuracy mm	Price RUB
910.041	0- 25	±0.004	
910.042	25 - 50	$\pm 0.004$	
910.043	50 - 75	$\pm 0.005$	
910.044	75 - 100	$\pm 0.005$	
910.045	100 - 125	$\pm 0.006$	
910.046	125 - 150	$\pm 0.006$	

Option:

836.535 Spare battery

## **Digital micrometers IP65**

These IP65 protected micrometers are especially suitable for use in production environments.

- Measuring range: 0 100 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.
- Reset.

- Tungsten carbide measuring faces: Ø 6.5 mm.
- Protection: IP65.
- From measuring range 25 50 mm including setting gauge.
- Delivery in a case with ball attachment and an inspection report.
- Power supply: 1 battery type CR2032.





TECHNOBEARING

Item No. Measuring Accuracy Price range/mm **RUB** mm 0 - 25  $\pm 0.003$ 909.988 909.989 25 - 50  $\pm 0.003$ 909.990 50 - 75  $\pm 0.004$ 909.991 75 - 100 $\pm 0.004$ 

Option:

495.157 Spare battery

### Digital fast adjustable external measuring instruments IP65

These digital external measuring instruments have an IP65 classification and are therefore not only resistant to dust, but can also withstand water jets. The non-rotating spindle is solely lever operated and fast adjustable.

- Measuring range: 0 100 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- Digimatic data output.
- On/off switch.
- Reset.

- Non-rotating spindle.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- Protection: IP65.
- From measuring range 25 50 mm including setting gauge.
- Delivery in a case with ball attachment and an inspection report.
- Power supply: 1 battery type CR2032.

#### TECHNOBEARING

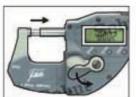














- For data transfer to PC (e.g. Excel, Word).
- Operating system: Windows and other.
- PC connection: USB.
- No software or driver to install.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.994	0- 25	$\pm 0.003$	
909.995	25 - 50	$\pm 0.003$	
909.996	50 - 75	$\pm 0.004$	
909.997	75 - 100	$\pm 0.004$	

With Blueto	oth:		
910.075	0 -	25	$\pm 0.003$

### **Options:**

495.157 Spare battery

909.686 USB interface

909.687 Footswitch for USB interface

910.038 Wireless USB receiver

910.039 Wireless transmitter

# **Digital micrometers IP65**

These digital micrometers have an IP65 classification and are therefore not only resistant to dust but can also withstand water jets. Also available as fast adjustable micrometers with a pitch of 2 mm.

- Measuring range: 0-300 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.

- Tungsten carbide measuring faces: Ø 6.5 mm.
- Protection: IP65.
- DIN 863 T1.
- From measuring range 25 50 mm including setting gauge.
- Power supply: 1 battery type V357.

### Fast adjustable micrometers

■ 1 revolution of the thimble = 2 mm.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.549	0- 25	±0.002	
909.550	25 - 50	$\pm 0.002$	
909.551	50 - 75	$\pm 0.003$	
909.552	75 - 100	$\pm 0.003$	
909.556	100 - 125	$\pm 0.003$	
909.557	125 - 150	$\pm 0.003$	
909.558	150-175	$\pm 0.004$	
909.559	175 - 200	$\pm 0.004$	
909.560	200-225	$\pm 0.004$	
909.561	225 - 250	$\pm 0.004$	
909.562	250-275	$\pm 0.005$	
909.563	275 - 300	$\pm 0.005$	

### Option:

836.535 Spare battery

### Fast adjustable micrometers

Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.545	0- 25	$\pm 0.002$	
909.546	25 - 50	$\pm 0.002$	
909.547	50 - 75	$\pm 0.003$	
909.548	75 - 100	$\pm 0.003$	

#### Sets

Item No.	Measuring range/mm	Pieces	Price RUB
909.577	0 - 75	3	
909.578	0-100	4	
909.579	0-150	6	

Technobearing 2020051

### **Micrometers**

- Measuring range: 0-300 mm.
- Graduation: 0.01 mm.
- Friction thimble.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- DIN 863 T1.
- From measuring range 25 50 mm including setting gauge.









Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.000	0- 25	±0.004	
906.001	25 - 50	$\pm 0.004$	
906.002	50 - 75	$\pm 0.005$	
906.003	75 - 100	$\pm 0.005$	
906.004	100-125	$\pm 0.006$	
906.005	125 - 150	$\pm 0.006$	
906.006	150 - 175	$\pm 0.007$	
906.007	175 - 200	$\pm 0.007$	
906.008	200-225	$\pm 0.008$	
906.009	225 - 250	$\pm 0.008$	
906.010	250-275	$\pm 0.009$	
906.011	275 - 300	$\pm 0.009$	

Model for	left- and ri	ght-handed use:
907.167	0- 25	±0.004
907.168	25 - 50	$\pm 0.004$
907.169	50 - 75	$\pm 0.005$
907.170	75 - 100	$\pm 0.005$

Sets

906.057

Item No. Measuring range/mm		Price RUB
906.055	0- 75	
906.056	0 - 100	
906.057	0-150	
906.058	150-300	
906.059	0-300	

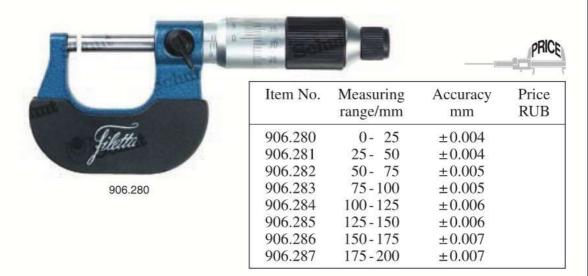


Technobearing 2020051

### Micrometers 0.001 mm, parallax-free

Rugged micrometers with a vernier graduation of 0.001 mm and a favourable price-performance ratio.

- Measuring range: 0 200 mm.
- Vernier: 0.001 mm, parallax-free by enlarged thimble.
- Friction thimble.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- DIN 863 T1.
- Delivery incl. adjustment tool.
- From measuring range 25 50 mm including setting gauge.



## Fast adjustable micrometers

Fast adjustable micrometers because one revolution results in a displacement of 1 mm. The measuring value can be read directly from the 100 step graduation on the thimble.

- Measuring range: 0 200 mm.
- Graduation: 0.01 mm.
- 1 revolution of the thimble = 1 mm.
- Thimble with 100 step graduation.
- Tungsten carbide measuring faces: Ø8 mm.
- DIN 863 T1.
- From measuring range 25 50 mm including setting gauge.



907.000

Item No. Price Measuring Accuracy range/mm mm RUB 907.000 0 - 25  $\pm 0.004$ 907.001 25 - 50  $\pm 0.004$ 50 - 75 907.002  $\pm 0.005$ 75 - 100907.003  $\pm 0.005$ 907.004 100 - 125  $\pm 0.006$ 907.005 125 - 150 $\pm 0.006$ 907.006 150 - 175 $\pm 0.007$ 907.007 175 - 200 $\pm 0.007$ 

TECHNOBEARING

# Micrometers with a large measuring range

The varnished tubular frame is very stable and equipped with heat insulating grips. With two spacers for a large measuring span.

- Measuring range: 300 2000 mm.
- Measuring span:

300 - 1000 mm: 100 mm

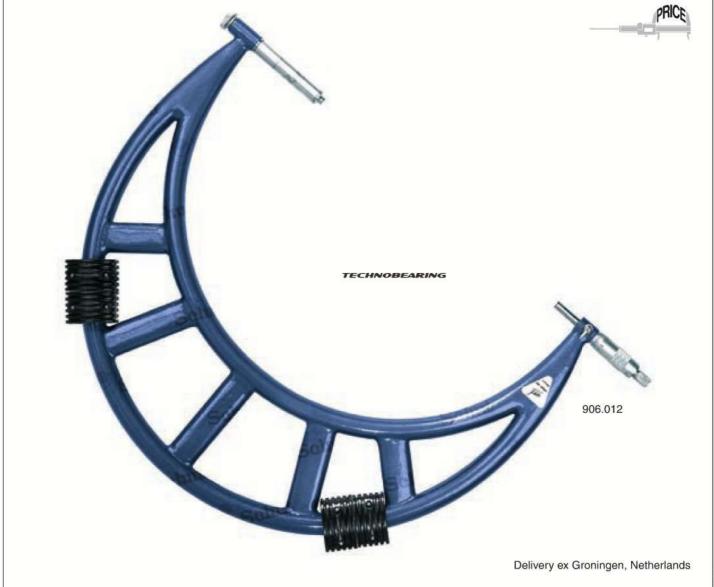
(travel 25 mm, spacers 25 and 50 mm),

1000 - 2000 mm: 200 mm

(travel 50 mm, spacers 50 and 100 mm).

- Graduation: 0.01 mm.
- Rotating spindle.
- Tungsten carbide measuring faces: Ø8 mm.
- No-glare chrome finished thimble.
- DIN 863 T3.
- With two setting gauges.

Item No.	Measuring range/mm	Accuracy mm	Price RUB
Measurin	g span 100 mi	\$777007000	
906.012	300 - 400	±0.011	
906.013	400 - 500	$\pm 0.013$	
906.014	500 - 600	$\pm 0.015$	
906.015	600 - 700	$\pm 0.016$	
906.016	700 - 800	$\pm 0.018$	
906.017	800 - 900	$\pm 0.020$	
906.018	900 - 1000	$\pm 0.020$	
Measurin	g span 200 mi	m:	
906.019	1000 - 1200	$\pm 0.020$	
906.020	1200 - 1400	$\pm 0.024$	
906.021	1400 - 1600	$\pm 0.028$	
906.022	1600 - 1800	$\pm 0.031$	
906.023	1800 - 2000	$\pm 0.034$	



### Micrometers with a large measuring range

Micrometers with a large measuring range, with very accurate, interchangeable anvils.

- Measuring range: 0-300 mm.
- Graduation: 0.01 mm.
- Tungsten carbide measuring faces: ø 6.35 mm.
- Delivery incl. setting gauges and interchangeable anvils (increasing per 25 mm).



Item No.	Measuring range/mm	Accuracy mm	Number of anvils	Number of setting gauges	Price RUB
906.290	0- 50	±0.004	2	1	
906.294	0 - 100	$\pm 0.005$	4	3	
906.292	0-150	$\pm 0.006$	6	5	
906.291	50 - 100	$\pm 0.005$	2	2	
906.295	100 - 200	$\pm 0.007$	4	4	
906.293	150 - 300	$\pm 0.009$	6	6	
906.296	200-300	$\pm 0.009$	4	4	

### Micrometers with adjustable anvil with dial indicator

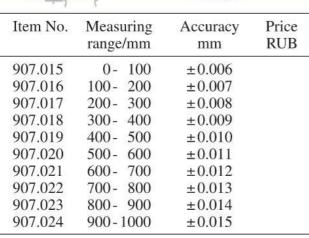
Micrometers with an adjustable anvil with dial indicator, for measurements in a wide measuring range.

- Measuring range: 0-1000 mm.
- Graduation: 0.01 mm.
- Tungsten carbide measuring faces: Ø8 mm.

#### **Specifications dial indicator:**

- Graduation: 0.01 mm.
- Range adjustable anvil: 5 mm.
- Max. measuring force anvil with dial indicator: 10 N.
- Adjustable tolerance markers.







TECHNOBEARING

# Digital micrometers IP65 with a large measuring range

- Measuring range: 0 1000 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.
- Reset/preset.
- Rotating spindle.
- Adjustable tolerance limits.

- Tungsten carbide measuring faces: ø 6.35 mm.
- 0- 300 mm: cast iron frame, 300-1000 mm: tubular steel frame with insulating grips.
- Protection: IP65.
- Delivery in a case with setting gauges and interchangeable anvils.
- Power supply: 1 battery type V357.

#### TECHNOBEARING





Item No.	Measuring range/mm	Accuracy mm	Number of anvils	Number of setting gauges	Price RUB
909.580	0- 100	±0.005	4	3	
909.581	100 - 200	$\pm 0.007$	4	4	
909.582	200 - 300	$\pm 0.008$	4	4	
909.583	300 - 400	$\pm 0.009$	4	2	
909.584	400 - 500	$\pm 0.010$	4	2	
909.585	500 - 600	$\pm 0.010$	4	2	
909.586	600 - 700	$\pm 0.011$	4	2	
909.587	700 - 800	$\pm 0.012$	4	2	
909.588	800 - 900	$\pm 0.013$	4	2	
909.589	900 - 1000	$\pm 0.013$	4	2	

Option:

# Micrometers with dial indicator

Micrometers with adjustable anvil and clamping shaft for a dial indicator. Especially suitable for Go/NoGo judgement and batch measurements.

- Measuring range: 0-175 mm.
- Graduation thimble and dial indicator: 0.01 mm.
- Range adjustable anvil: 8 mm.

■ Trigger for (fast) adjustment.

Item No.

907.014

- Tungsten carbide measuring faces: Ø 6.5 mm.
- Can also be used in combination with various other dial indicators with clamping stem Ø 8 mm.

Measuring

range/mm

150 - 175





Price RUB

Accuracy

mm

 $\pm 0.007$ 

	C		
907.008	0- 25	±0.004	
907.009	25 - 50	$\pm 0.004$	
907.010	50 - 75	$\pm 0.005$	
907.011	75 - 100	$\pm 0.005$	
907.012	100 - 125	$\pm 0.006$	
907.013	125 - 150	+0.006	

TECHNOBEARING

### Mini-micrometer

- Measuring range: 0-15 mm.
- Graduation: 0.01 mm.



- Measuring faces: ø5 mm.
- Without friction thimble.
- Dimensions: total length: 70 mm, throat depth: 14 mm.



Item No.	Measuring range/mm	Price RUB
906.180	0-15	

# Micrometer with an extra large measuring range

The measuring range of this micrometer can be 'switched' from 25-50 to 0-25 mm by easy mounting of the prolonged anvil.

■ Measuring range: 0-50 mm.



- Graduation: 0.01 mm.
- Accuracy: ±0.004 mm.
- Tungsten carbide measuring faces: Ø6.5 mm.
- Delivery incl. adjustment tool and prolonged anvil.

Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.567	0-50	±0.004	

### Tolerance micrometers with precision dial indicator

Because of the retractable anvil, the fine adjustment and the tolerance markers very suitable for batch inspection and tolerance measurements.

- Measuring range: 0 100 mm.
- Measuring range dial indicator: ±0.04 mm.
- Graduation (dial indicator): 0.001 mm.
- Accuracy:

micrometer: ±0.003 mm (only 906.568),

dial indicator: ±0.001 mm.

- Measuring force: 5-10 N (only 906.569/570/571/614).
- Adjustable tolerance markers.
- Tungsten carbide measuring faces: 906.568-599: Ø 6.5 mm, 906.569-614: Ø 10 mm.





Item No.	Measuring range/mm	Graduation mm	Vernier thimble/mm	Price RUB
906.568	0- 25	0.001	0.002	
906.597	25 - 50	0.001	-	
906.598	50 - 75	0.001	-40	
906.599	75 - 100	0.001	<u>_10</u> 0	
With pro	tection IP54:	: 6		
906.569	0- 25	0.001		
906.570	25 - 50	0.001		
906.571	50 - 75	0.001	-8	
906.614	75 - 100	0.001	<u></u>	

TECHNOBEARING

## Tolerance micrometers with two spindles

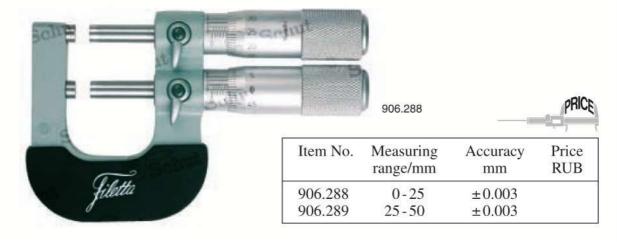
Can be used as a Go/NoGo micrometer by setting of the lower and upper limits.

■ Measuring range: 0-50 mm.

■ Vernier: 0.002 mm.

■ Accuracy: ±0.003 mm.

■ Tungsten carbide measuring faces: Ø6.5 mm.



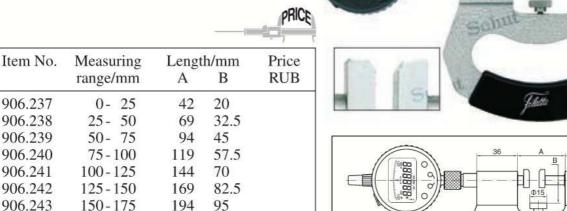
906.237

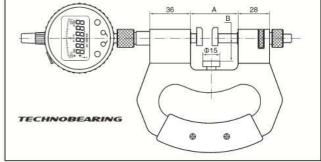
# Snap gauges with dial indicator

Snap gauges with adjustable anvil and clamping shaft for a dial indicator. Especially suitable for Go/NoGo judgement and batch measurements.

- Measuring range: 0-300 mm.
- Measuring force: 6-9 N.
- Clamping shaft: Ø8 mm (dial gauge not included).
- Travel of moving anvil: 3 mm.
- Anvil size: 14 x 11 mm.

- Chamfered anvils for easy insertion.
- For suitable dial indicators refer to the dial indicators elsewhere in this catalog.





### **Digital vertical micrometers**

219 107.5

269 132.5

319 157.5

244 120

294 145

175-200

200-225

225 - 250

250-275

275 - 300

906.244

906.245

906.246

906.247

906.248

Digital vertical micrometers for easy reading, for example, when measuring the thickness of metal or plastic sheet. These micrometers have an IP65 classification and are therefore not only resistant to dust but can also withstand water jets.

- Measuring range: 0-50 mm.
- Resolution: 0.001 mm.
- Accuracy: ±0.002 mm.
- mm/inch conversion.



- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.
- Tungsten carbide measuring faces: Ø 6.5 mm.
- Protection: IP65.
- Power supply: 1 battery type V357.

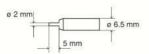
Item No.	Measuring range/mm	Price RUB
909.458	0-25	
909.459	25-50	

Option:

# Micrometers with small measuring faces

For measuring hard-to-reach measuring points such as grooves.

- Measuring range: 0-175 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Tungsten carbide measuring pins: Ø2 x 5 mm.



#### Digita

- mm/inch conversion.
- ABS/INC switchable.
- Reset/preset.
- Hold function.
- Preservation of the min/max value.
- Protection: IP65.
- Power supply: 1 battery type V357.



TECHNOBEARING



#### Analog

Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.135	0- 25	±0.004	
906.136	25 - 50	$\pm 0.004$	
906.137	50 - 75	$\pm 0.005$	
906.119	75 - 100	$\pm 0.005$	
909.320	100 - 125	$\pm 0.006$	
909.321	125 - 150	$\pm 0.006$	
909.322	150 - 175	$\pm 0.007$	

### **Digital**

Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.591	0- 25	±0.002	
909.592	25 - 50	$\pm 0.002$	
909.593	50 - 75	$\pm 0.003$	
909.594	75 - 100	$\pm 0.003$	
909.595	100 - 125	$\pm 0.003$	
909.596	125 - 150	$\pm 0.003$	
909.597	150 - 175	$\pm 0.004$	

#### **Option:**

# Micrometers with spherical anvil

Micrometers for measuring bent surfaces and wall thicknesses of tubes, bearings, rings, etc.

- Measuring range: 0-100 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Tungsten carbide measuring faces: Ø 6.5 mm.

#### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.
- Reset/preset.
- Protection: IP65.
- Power supply: 1 battery type V357.



TECHNOBEARING



#### Analog

Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.155	0- 25	±0.004	
907.044	25 - 50	$\pm 0.004$	
907.045	50 - 75	$\pm 0.005$	
907.046	75 - 100	$\pm 0.005$	

#### Digital

Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.598	0- 25	±0.002	
909.599	25 - 50	$\pm 0.002$	
909.600	50 - 75	$\pm 0.003$	
909.601	75 - 100	$\pm 0.003$	

#### **Option:**

### Universal micrometers with interchangeable anvils

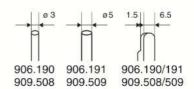
With these micrometers you are an all-rounder. The instruments have two interchangeable anvils, which gives them a lot of application possibilities. They can also be used as a height gauge, when the clamp for clamping the anvils is removed.

- Measuring range: 0-50 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Accuracy: ±0.004 mm.
- Tungsten carbide measuring face: Ø 6.5 mm.
- Delivery incl. 2 tungsten carbide anvils.

#### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Reset/preset.
- Adjustable tolerance limits (only 909.508).
- Protection: IP65.
- Power supply: 1 battery type V357.





TECHNOBEARING



#### Analog

Item No.	Measuring range/mm	Price RUB
906.190	0-25	
906.191	25-50	

#### **Digital**

Item No.	Measuring range/mm	Price RUB
909.508	0-25	
909.509	25-50	

## Digital micrometers IP65 with pin-shaped anvil

Digital micrometers for measuring e.g. (tube) wall thickness.

- Measuring range: 0-50 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.

- Reset/preset.
- Pin-shaped anvil: Ø 1.8 mm.
- Tungsten carbide measuring face: Ø6.5 mm.
- Protection: IP65.
- Power supply: 1 battery type V357.

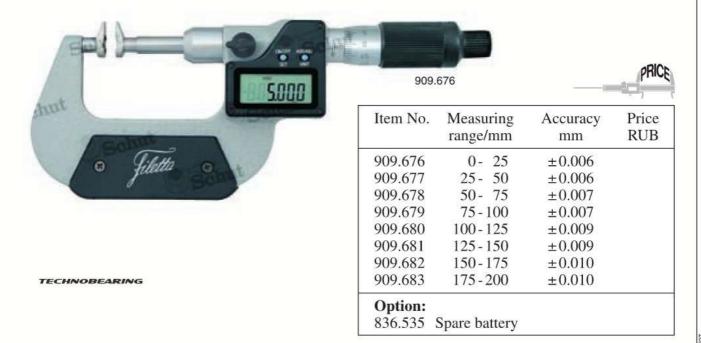


## Digital micrometers with special measuring jaws

Digital micrometers with special measuring jaws for measurements in hard-to-reach places such as cut-outs in workpieces, gear pitches, etc.

- Measuring range: 0 200 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.

- Automatic switch-off.
- Reset/preset.
- Non-rotating spindle.
- Power supply: 1 battery type V357.



# Gear pitch micrometers

Micrometers with large, disk-shaped measuring faces for measuring e.g. gear pitches and paper and foil thickness.

- Measuring range: 0 200 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Non-rotating spindle: Ø8 mm.
- Measuring faces: stainless steel (HRC 52-54).

### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.
- Reset/preset.
- Power supply: 1 battery type V357.







TECHNOBEARING



Item No.	Measuring range/mm	Accuracy mm	Measuring faces ø/mm	Price RUB
Analog:				
906.580	0 - 25	$\pm 0.006$	20	
906.581	25 - 50	$\pm 0.006$	20	
906.582	50 - 75	$\pm 0.007$	20	
906.583	75 - 100	$\pm 0.007$	20	
906.584	100 - 125	$\pm 0.009$	30	
906.585	125 - 150	$\pm 0.009$	30	
906.586	150 - 175	$\pm 0.010$	30	
906.587	175 - 200	$\pm 0.010$	30	
Digital:				
909.777	0- 25	$\pm 0.006$	20	
909.778	25 - 50	$\pm 0.006$	20	
909.779	50 - 75	$\pm 0.007$	20	
909.780	75 - 100	$\pm 0.007$	20	
909.781	100 - 125	$\pm 0.009$	30	
909.782	125 - 150	$\pm 0.009$	30	
909.783	150 - 175	$\pm 0.010$	30	
909.784	175 - 200	$\pm 0.010$	30	

### **Universal micrometers**

Thanks to the seven interchangeable measuring inserts, which are available as an option, you are very flexible with these micrometers.

- Measuring range: 0 200 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Non-rotating spindle.
- Insert shaft: ø5 mm.

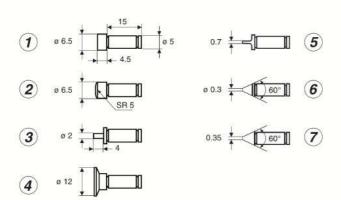
### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Preset (except 909.785).
- Power supply: 1 battery type V357.





#### TECHNOBEARING



No.	Item No.	Description measuring faces	Price RUB
Mea	suring ins	serts, per pair:	
1	906.788		
2	906.789	spherical	
3	906.790	small	
4	906.791	disc	
(5)	906.792	knife/flat	
6	906.793	point	
7	906.794	knife	
	906.795	Set of 7 pairs	

Item No.	Measuring	Accuracy	Price
	range/mm	mm	RUB
Analog,	without measu	ring inserts:	
906.780	0 - 25	$\pm 0.004$	
906.781	25 - 50	$\pm 0.004$	
906.782	50 - 75	$\pm 0.005$	
906.783	75 - 100	$\pm 0.005$	
906.784	100 - 125	$\pm 0.008$	
906.785	125 - 150	$\pm 0.008$	
906.786	150 - 175	$\pm 0.009$	
906.787	175 - 200	$\pm 0.009$	
Digital, v	without measur	ing inserts:	
909.785	0 - 25	$\pm 0.004$	
909.786	25 - 50	$\pm 0.004$	
909.787	50 - 75	$\pm 0.005$	
909.788	75 - 100	$\pm 0.005$	
909.789	100 - 125	$\pm 0.008$	
909.790	125 - 150	$\pm 0.008$	
909.791	150 - 175	$\pm 0.009$	
909.792	175 - 200	$\pm 0.009$	
Option:			
	Spare battery		

# **Deep throat micrometers**

Micrometers with a deep throat especially for measuring the thickness of e.g. sheet metal, paper and plastic sheets.

- Measuring range: 0-50 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Tungsten carbide measuring faces: Ø 6.5 mm.

### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.
- Reset/preset.
- Protection: IP65.
- Power supply: 1 battery type V357.







Item No.	Measuring range/mm	Accuracy mm	Throat depth/mm	Price RUB
Analog:				
907.068	0-25	$\pm 0.004$	50	
907.069	25 - 50	$\pm 0.004$	50	
907.070	0-25	$\pm 0.005$	100	
907.071	25 - 50	$\pm 0.005$	100	
907.072	0-25	$\pm 0.006$	150	
907.073	25-50	$\pm 0.006$	150	
Digital:				
909.694	0-25	$\pm 0.004$	50	
909.695	25-50	$\pm 0.004$	50	
909.696	0-25	$\pm 0.005$	100	
909.697	25 - 50	$\pm 0.005$	100	
909.698	0-25	$\pm 0.006$	150	
909.699	25 - 50	$\pm 0.006$	150	

TECHNOBEARING

### **Brake disc micrometers**

Micrometers especially for measuring the groove depth of brake discs.

- Measuring range: 7.6-50 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Anvil with 60° point.
- Tungsten carbide measuring face: Ø 6.5 mm.
- Throat depth: 88 mm.



### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.
- Reset/preset.
- Protection: IP65.
- Power supply: 1 battery type V357.



#### Analog

Item No.	Measuring range/mm	Accuracy mm	Price RUB
907.056	7.6-33	±0.004	
907.057	25 - 50	$\pm 0.004$	

### Digital

Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.793	7.6-33	±0.004	
909.794	25 - 50	$\pm 0.004$	

# Digital micrometers IP65 with large anvils

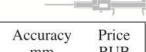
- Measuring range: 0 50 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- On/reset switch.
- Tungsten carbide measuring face: Ø 6.5 mm.



- Anvil size:
  - 909.488: 50 x 14 mm, 909.489: 60 x 14 mm.

836.535 Spare battery

- Protection: IP65.
- Power supply: 1 battery type V357.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.488	0-25	5 ±0.004	
909.489	25 - 50	$\pm 0.004$	

### Option:

### Sheet metal micrometers

Micrometers especially for measuring the thickness of metal sheets, e.g. sheet metal. The large dial makes the reading very easy and quick.

■ Measuring range: 0-25 mm.

■ Graduation: 0.01 mm.

■ Tungsten carbide measuring faces: Ø 6.5 mm.





TECHNOBEARING

Item No.	Measuring range/mm	Accuracy mm	Measuring faces	Price RUB
907.058	0-15	±0.004	flat/flat	
907.059	0-25	$\pm 0.004$	flat/flat	
907.099	0-15	$\pm 0.004$	spherical/flat	
907.100	0-25	$\pm 0.004$	spherical/flat	

# Micrometers with extra large measuring faces

Micrometers with extra large disk-shaped measuring faces for measurements of e.g. paper thickness and soft materials.

■ Measuring range: 0 - 100 mm.

■ Graduation: 0.01 mm.

- Non-rotating spindle.
- Tungsten carbide measuring faces: Ø60 mm.



### Gear micrometers

Micrometers with ball-tipped measuring faces for measurements of straight and tapered external gears. Several measuring inserts optionally available.

- Measuring range: 0-175 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Dimensions of anvil-tail: Ø5 x 15 mm.
- Tungsten carbide, ball-tipped measuring faces.

### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.
- Reset/preset.
- Protection: IP65.
- Power supply: 1 battery type V357.



#### TECHNOBEARING

Item No.	Ball ø/mm	Module	Price RUB
Measuring	inserts, per	r pair:	
907.088	1.0	0.6-0.65	
907.089	1.5	0.9 - 1.0	
907.090	2.0	1.25	
907.091	2.5	1.5	
907.092	3.0 1.75		
907.093	3.5	2	
907.094	4.0 2.25		
907.095	4.5	2.5	
907.096	5.0	2.75	
907.097	6.0	3.5	
907.098 S	et 907.088-	907.097	

Item No.	Measuring range/mm	Accuracy mm	Price RUB
Analog,	without measu	ring inserts:	
907.081	0- 25	$\pm 0.004$	
907.082	25 - 50	$\pm 0.004$	
907.083	50 - 75	$\pm 0.005$	
907.084	75 - 100	$\pm 0.005$	
907.085	100 - 125	$\pm 0.006$	
907.086	125 - 150	$\pm 0.006$	
907.087	150 - 175	$\pm 0.007$	
Digital,	without measur	ing inserts:	
909.859	0 - 25	$\pm 0.004$	
909.860	25 - 50	$\pm 0.004$	
909.861	50 - 75	$\pm 0.005$	
909.862	75 - 100	$\pm 0.005$	
909.863	100 - 125	$\pm 0.006$	
909.864	125 - 150	$\pm 0.006$	
909.865	150 - 175	$\pm 0.007$	
Option:			
	Spare battery		

## Micrometers with prism-shaped anvil

Analog and digital micrometers with prism-shaped anvil for measuring the diameters of objects with an odd number of flutes such as taps, reamers and mills. The angle of the prism aperture is designed for 3-, 5- or 7-fluted workpieces.

- Measuring range: 1-105 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Spindle: Ø 6.5 mm.
- Tungsten carbide measuring faces. The 906.160 and 909.866 have a pointed spindle for the smallest objects.
- V-groove for:
  - 3-fluted objects: 60°,
  - 5-fluted objects: 108°, 7-fluted objects: 128°.
- Delivery with a setting standard.



#### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.
- Reset/preset.
- Protection: IP65.
- Power supply: 1 battery type V357.





Item No.	Measuring range/mm	Accuracy mm	Price RUB	Item No.	Price RUB
For 3-flut	ted objects (6	0°), analog:		Digital:	
906.160	1- 15	$\pm 0.004$		909.866	
906.161	5 - 20	$\pm 0.004$		909.867	
906.162	20 - 35	$\pm 0.005$		909.868	
906.163	35 - 50	$\pm 0.005$		909.869	
906.164	50 - 65	$\pm 0.006$		909.870	
906.165	65 - 80	$\pm 0.006$		909.871	
907.060	80 - 95	$\pm 0.007$		909.872	
For 5-flut	ed objects (1	08°), analog:		Digital:	
906.166	5 - 25	±0.004		909.873	
906.167	25 - 45	$\pm 0.005$		909.874	
906.168	45 - 65	$\pm 0.006$		909.875	
906.169	65 - 85	$\pm 0.007$		909.876	
907.061	85 - 105	$\pm 0.008$		909.877	
For 7-flut	ted objects (1	28°), analog:		Digital:	
906.170		±0.004		909.878	
906.171	25 - 45	$\pm 0.005$		909.879	
906.172	45 - 65	$\pm 0.006$		909.880	
906.173	65 - 85	$\pm 0.007$		909.881	

#### Option:

836.535 Spare battery

#### TECHNOBEARING

#### Setting standards

Item No.	ø mm	Price RUB
909.323	5	
909.324	20	
909.325	25	
909.326	35	
909.327	45	
909.328	50	
909.329	65	
909.330	80	
909.331	85	



chnobearing 20200

# Micrometers with pointed measuring faces

- Measuring range: 0 100 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.

#### Digital

- mm/inch conversion.
- ABS/INC switchable.
- Preset.
- Protection: IP65.
- Power supply: 1 battery type V357.



### Analog

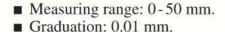
Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.145	0- 25	±0.004	
906.146	25 - 50	$\pm 0.004$	
906.147	50 - 75	$\pm 0.005$	
906.199	75 - 100	$\pm 0.005$	

### **Digital**

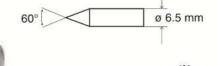
Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.643	0- 25	±0.004	
909.644	25 - 50	$\pm 0.004$	
909.645	50 - 75	$\pm 0.005$	
909.646	75 - 100	$\pm 0.005$	

# 836.535 Spare battery

# Micrometers with one pointed measuring face







Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.151	0-25	±0.004	
906.153	25 - 50	$\pm 0.004$	

# Micrometers with lamellar measuring faces

For measuring grooves, keyseats and other hard-to-reach places.

- Measuring range: 0-175 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Non-rotating spindle.
- Blade width: 0.75 mm, blade length: 6 mm.

#### Digita

- mm/inch conversion.
- ABS/INC switchable.
- Reset/preset.
- Hold function.
- Power supply: 1 battery type V357.





#### Analog

Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.141	0- 25	±0.004	
906.142	25 - 50	$\pm 0.004$	
906.143	50 - 75	$\pm 0.005$	
906.144	75 - 100	$\pm 0.005$	
906.222	100 - 125	$\pm 0.006$	
906.223	125 - 150	$\pm 0.006$	
906.224	150 - 175	$\pm 0.007$	

### **Digital**

Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.882	0- 25	±0.004	
909.883	25 - 50	$\pm 0.004$	
909.884	50 - 75	$\pm 0.005$	
909.885	75 - 100	$\pm 0.005$	
909.886	100 - 125	$\pm 0.006$	
909.887	125 - 150	$\pm 0.006$	
909.888	150 - 175	$\pm 0.007$	

#### **Option:**

836.535 Spare battery

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# Screw thread micrometers

- Measuring range: 0-200 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Insert shaft: ø5 mm.
- DIN 863 T3.
- Delivery incl. adjustment tools.
- From measuring range 25 50 mm including setting gauge 60°.
- No-glare chrome finished thimble.

#### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Reset/preset.
- Protection: IP65.
- Power supply: 1 battery type V357.

#### Analog

■ Non-rotating spindle.







#### Analog, without measuring inserts

Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.750	0- 25	±0.004	
906.751	25 - 50	$\pm 0.004$	
906.752	50 - 75	$\pm 0.005$	
906.753	75 - 100	$\pm 0.005$	
906.754	100 - 125	$\pm 0.006$	
906.755	125 - 150	$\pm 0.006$	
906.756	150 - 175	$\pm 0.007$	
906.757	175 - 200	$\pm 0.007$	

### Digital, without measuring inserts

Item No.	Measuring range/mm	Accuracy mm	Price RUB
909.889	0- 25	±0.004	
909.890	25 - 50	$\pm 0.004$	
909.891	50 - 75	$\pm 0.005$	
909.892	75 - 100	$\pm 0.005$	
909.893	100 - 125	$\pm 0.006$	
909.894	125 - 150	$\pm 0.006$	
909.895	150 - 175	$\pm 0.007$	
909.896	175 - 200	$\pm 0.007$	

#### **Option:**

Item No.

# Screw thread micrometers (continued)



Price RUB





gle, per pair:
60 -48
48 -40
40 -32
32 -24
24 -18
18 -14
14 - 10
10 - 7.0
7.0 - 4.5
4.5 - 3.5

Threads per inch

Item No.	Pitch/mm Price			
Measuring i	nserts for metric	threads,		
	gle, per pair:			
906.720	0.4-0.5			
906.721	0.6 - 0.9			
906.722	1.0 - 1.75			
906.723	2.0 - 3.0			
906.724	3.5 - 5.0			
906.725	5.5 - 7.0			

Item No.	Threads per inch Price RUB
Measuring	inserts for UN, UNC and UNF
threads, 60	° flank angle, per pair:
906.741	64 -48
906.742	44 -28
906.743	24 - 14
906.744	13 - 9
906.745	8 - 5
906.746	4.5 - 3.5
906.747 S	et 64-3.5



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Item No.	Length/mm	Price RUB
Hardened s with 60° fla	teel setting standar nk angle:	ds for threads
909.304	25	
909.305	50	
909 306	75	

Hardened stee with 60° flank	l setting standards for threads angle:	ij
909.304	25	
909.305	50	
909.306	75	
909.307	100	
909.308	125	
909.309	150	
909.310	175	
909.311	200	

Item No.	Length/mm	Price RUB
Hardened st with 55° fla	teel setting standar	ds for threads
909.312	25	
909.313	50	
909.314	75	
909.315	100	
909.316	125	
909.317	150	
909.318	175	
909.319	200	

# Thread measuring wires

For measuring external threads using the three-wire method. The flank diameter can be determined according to the measured diameter, using tables.

- For micrometers with measuring faces  $\emptyset$  6.35, Ø6.5 or Ø8 mm. (Also available for measuring faces Ø 6.8 and Ø 7.5 mm.)
- Very high measuring accuracy: ±0.001 mm.
- In pairs or in a set.
- The wire holders are held in position on the anvil and spindle by a spring clamp.
- The wires are mounted on the holder in such a way that they position themselves on the thread.



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Thread measuring wires for micrometers with measuring faces \( \text{\gamma} \) 6.5 or \( \text{\gamma} \) 8 mm

ø 6.35 i	mm	ø 6.5 n	ım	ø8 m	m	Wire	Metric,	Whitworth,	UN/UNC/UNF
Item No.	Price RUB	Item No.	Price RUB	Item No.	Price RUB	diameter d <sub>D</sub> /mm	pitch in mm	threads per inch	threads per inch
833.442		779.161		836.689		0.17	0.25; 0.3	1=	-
833.443		781.651		836.690		0.195	2 <del></del>	-	80
833.444		779.162		836.691		0.22	0.35	-	72
833.445		779.163		835.844		0.25	0.4	-	64
833.446		779.164		834.499		0.29	0.45; 0.5	-	56
833.447		779.165		834.498		0.335	0.6	40	48; 44
833.448		781.652		837.848		0.390	_	-	40
833.449		779.166		833.872		0.455	0.7 - 0.8	_	36
833.450		779.167		834.585		0.53	-	32; 28	32; 28
833.451		779.168		834.480		0.62	1	26; 24	24
833.452		779.169		834.586		0.725	1.25	22; 20; 19	20
833.453		779.170		834.290		0.895	1.5	18; 16	18; 16
833.454		779.171		834.502		1.10	1.75	14	14; 13
833.455		779.172		834.291		1.35	2	12; 11	12; 11
833.456		779.173		833.871		1.65	2.5	10; 9	10; 9
833.457		779.174		834.292		2.05	3.0; 3.5	8; 7	8; 7
833.458		779.175		834.416		2.55	4.0; 4.5		6
833.459		779.176		834.483		3.20	5.0; 5.5	5; 4.5	5; 4.5
837.501		837.642		834.509		4.00	6.0	4; 3.5	4
834.580		779.160		834.581		Set with wire	diameters 0	.17 to 3.20 mn	n

#### **Hub micrometers**

Micrometers with a shallow bracket for measuring the thickness bearing bushes, bore shoulders and other hard-to-reach places.

■ Measuring range: 0 - 100 mm.

■ Graduation: 0.01 mm.

■ Tungsten carbide measuring faces: Ø 6.5 mm.

Varnished frame.

■ Throat depth: 10.2 mm. ■ Throat height: 21.2 mm

(907.133: 18.7 mm).



907.133

Item No.	Measuring range/mm	Accuracy mm	Price RUB
907.133	0- 25	±0.004	
907.134	25 - 50	$\pm 0.004$	
907.135	50 - 75	$\pm 0.004$	
907.136	75 - 100	$\pm 0.005$	

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	range/mm	mm	RUB
907.133	0- 25	±0.004	
907.134	25 - 50	$\pm 0.004$	
907.135	50 - 75	$\pm 0.004$	
907.136	75 - 100	$\pm 0.005$	

#### Can seam micrometer

Micrometer especially for measuring the depth and thickness of e.g. the seams of steel cans.

■ Measuring range: 0-13 mm.

■ Graduation: 0.01 mm.

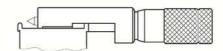
■ Accuracy: ±0.004 mm.

■ Tungsten carbide measuring faces: ø5 mm.



Item No.	Measuring range/mm	Price RUB
907.175	0-13	





# Wire and ball micrometer

■ Measuring range: 0 - 10 mm.

■ Graduation: 0.01 mm.

■ Accuracy:  $\pm 0.004$  mm.

Tungsten carbide measuring faces: Ø 6.5 mm.



Item No.	Measuring range/mm	Price RUB
906.175	0-10	



# **Setting gauges**

Cylindrical gauges for micrometers with flat parallel measuring faces.

- Measuring faces L < 100 mm:  $\emptyset$ 7 mm, flat, L < 300 mm:  $\emptyset$ 8 mm, flat,  $L \ge 300$  mm:  $\emptyset$ 8 mm, spherical.
- With plastic insulating grip.
- Larger sizes available on request.



Item No.	0	Accuracy	Price RUB
991-25-0	mm	μm	KUB
907.464	25	± 2	
907.465	50	± 2	
907.466	75	± 2.5	
907.467	100	$\pm 2.5$	
907.468	125	± 3	
907.469	150	± 3	
907.470	175	$\pm$ 3.5	
907.471	200	± 4	
907.472	225	± 4	
907.473	250	± 4	
907.474	275	$\pm 4.5$	
907.475	300	$\pm 4.5$	
907.476	325	± 5	
907.477	350	± 5	
907.478	375	$\pm$ 5.5	
907.479	400	± 5.5	
907.480	425	± 6	
907.481	450	± 6	
907.482	475	$\pm$ 6.5	
907.483	500	$\pm 6.5$	
907.484	525	± 7	
907.485	575	± 7.5	
907.486	625	± 7.5	
907.487	675	± 8	
907.488	725	$\pm$ 8.5	
907.489	775	± 9.5	
907.490	825	±10	
907.491	875	$\pm 10.5$	
907.492	925	±11	
907.493	975	±11.5	
907.494	1050	±12	
907.495	1150	±13	
907.496	1250	±14	
907.497	1350	±15	
907.498	1450	±16	
909.529	1550	±17	
909.530	1650	±18	
909.531	1750	±19	
909.532	1850	±20	
909.533	1950	±21	

# **Setting standards**

Cylindrical setting standards for micrometers with prism-shaped anvil.



Item No.	Diameter/mm	Price RUB
909.323	5	
909.324	20	
909.325	25	
909.326	35	
909.327	45	
909.328	50	
909.329	65	
909.330	80	
909.331	85	

# **Setting standards**

Hardened steel setting standards for threads with  $55^{\circ}$  or  $60^{\circ}$  flank angle.

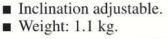


Item No.	Length/mm	Price RUB
For threads	with 60° flank an	gle:
909.304	25	
909.305	50	
909.306	75	
909.307	100	
909.308	125	
909.309	150	
909.310	175	
909.311	200	
For threads	with 55° flank an	gle:
909.312	25	
909.313	50	
909.314	75	
909.315	100	
909.316	125	
909.317	150	
909.318	175	
909.319	200	

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#### Micrometer stand

Rigid table stand for micrometers.





Item No.	Clamping range/mm	Price RUB
906.212	0-18	

#### Micrometer stand

Cast steel stand for micrometers.

- Fixed inclination: 45°.
- Weight: 0.7 kg.



Item No.	Clamping range/mm	Price RUB
908.983	4-12	

#### Foldable micrometer stand

Portable stand with a folded structure for micrometers.



Item No.	Clamping range/mm	Price RUB
907.152	7 - 14	

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# **Ball attachments**

These ball attachments can be clamped on any anvil and spindle with a diameter of 6.5 or 8 mm.



Item No.	Description	Price RUB
907.150	Ball attachment, ø 6.5	mm
907.166	Ball attachment, ø8	mm

# Measuring force indicators

Within the range of 5 to 12 N these measuring force indicators can show the measuring force of micrometers.



Item No.	For micrometers	Price RUB
907.151	0 - 25 mm	
908.947	25 - 50 mm	
908.948	50 - 75 mm	
908.949	75 - 100 mm	

# **Probe set for micrometers**

These attachments can be clamped on any anvil and spindle with a diameter of 6.5 mm. The set consists of a point-shaped, knife-edged, blade-shaped, disk-shaped, ball-shaped probe and one with a small and one with a very small measuring face.





Item No.	Description	Price RUB
909.118	Probe set	
	for micrometers	

# Micrometer inspection sets

For the inspection of micrometers according DIN 863. Suitable for micrometers with a measuring range up to 25 mm.

■ Nominal sizes (mm): 2.5-5.1-7.7-10.3-12.9-15.0-17.6-20.2-22.8-25.0.

■ Including plan parallel optical flat Ø 30 x 12 mm.



Item No.	Material	Grade	Price RUB
909.346	steel	1	
909.345	steel	0	
909.162	ceramic	1	
909.340	ceramic	0	



# Thread and tolerance tables

#### Thread table

Table with all standard international thread indications: metric, Ww, Gas, BSF, Pg, BA, UNC, UNF and UNEF.

#### Tolerance table

Table compromising all tolerances and fits according ISO R286, up to 500 mm (table with over 6400 pairs of tolerance values for internal and external measurements).

#### Conversion table mm/inch

For converting from mm to inch and from inch to mm.

Item No.	Description	Price RUB
835.162	Thread table	
835.163	Tolerance table	
835.164	Conversion table mm/	inch



#### Micrometer head with counter

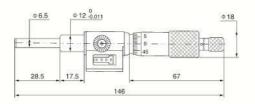
Micrometer head with an easy read-out at 0.01 mm by means of the counter mechanism.

- Measuring range: 0-25 mm.
- Resolution: 0.01 mm.
- Accuracy: ±0.003 mm.
- Numerical counter adjustable.

- Rotating spindle: Ø 6.5 mm.
- Tungsten carbide measuring face.
- Delivery with adjustment tool.



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Item No.	Measuring range/mm	Spindle ø/mm	Price RUB
906.543	0-25	6.5	

#### Micrometer heads

- Measuring range: 0-25 mm.
- Graduation: 0.01 mm or vernier 0.002 mm.

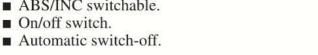


Item No.	Measuring	Graduation	Graduation Accuracy		Dimen	sions/r	nm		Price
	range/mm	mm	mm	ø/mm	clamping	D1	L1	L2	RUB
Without	friction thim	ble, steel me	asuring face	e:					
906.070	0- 6.5	0.01	$\pm 0.005$	3.5 (flat)	ø 6 x 6	ø10	23	14	
906.074	0- 6.5	0.01	$\pm 0.005$	3.5 (spherical)	ø 6 x 6	ø10	23	14	
906.071	0-13	0.01	$\pm 0.004$	5.0 (flat)	ø 9.5x 9.5	ø14	33	26	
Friction 1	thimble with	spring click	in measurii	ng thimble, tung	sten carbide	meası	ıring	face	:
906.072	0-25	0.01	$\pm 0.003$	6.5 (flat)	ø12 x17	ø19	65	46	
906.073	0-25	0.002	$\pm 0.003$	6.5 (flat)	ø12 x17	ø19	65	46	

# Digital micrometer heads

Several digital micrometer heads with different possibilities.

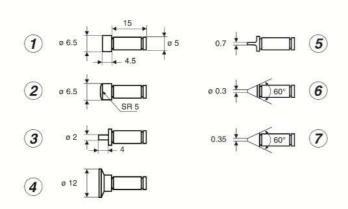
- Measuring range: 0-50 mm.
- Resolution: 0.001 mm.
- Accuracy: ±0.003 mm  $(909.900/901: \pm 0.005 \text{ mm}).$
- mm/inch conversion.
- ABS/INC switchable.



- Memory absolute measuring value.
- Preset for ABS measurement.
- Friction thimble.
- Power supply: 1 battery type V357.



Item No.	Measuring	easuring D		ensions/mm Description		Description	Price
	range/mm	spindle	clamping	L1	L2	measuring faces	RUB
With IP6	5 protection:						
909.897	0-25	ø 6.5	ø12 x 17.5	115	46	flat, tungsten carbide measuring face	
909.898	0-25	ø 6.5	ø12x17.5	115	46	spherical	
909.899	0-25	ø 6.5	ø12 x 17.5	116	56	flat, non-rotating tip	
909.900	0-50	ø7.5	ø12x35.5	140	89	flat, tungsten carbide measuring face	
909.901	0-50	ø7.5	ø12 x 35.5	140	89	spherical	
With non	-rotating spi	ndle:					
909.902	0-25	ø7.5	ø 12 x 10	124	39	flat, tungsten carbide measuring face	
909.903	0-25	ø7.5	ø 12 x 10	123	39	interchangeable measuring inserts	
906.297	0-25	ø 6.5	ø 12 x 17.5	98	48	tungsten carbide measuring face	
906.298	0-25	ø8	ø 12 x 20	98	50	tungsten carbide measuring face	



No.	Item No.	Description measuring faces	Price RUB
Mea	suring ins	serts, per pair:	
1	906.788	flat	
2	906.789	spherical	
3	906.790	small	
4	906.791	disc	
(5)	906.792	knife/flat	
6	906.793	point	
7	906.794	knife	
	906.795	Set of 7 pairs	

# Internal micrometers / Internal & external measuring instruments Accuracy of internal micrometers according DIN 863-4 Max. permissible Measuring range (mm) errors (µm) 3- 10 10- 50 50-100 5 6 7 8 9 100-150 150 - 200 200 - 250 250 - 300

# Three-point internal micrometers

Three-point internal micrometers for quick and accurate measurement of internal dimensions, within a large measuring range.

8 (800) 700-72-07

- Measuring range: Ø3.5-300 mm.
- Graduation: 0.001 mm (ø 3.5 12 mm), 0.005 mm (ø 12 300 mm).
- Self-centering.
- Tungsten carbide measuring faces.
- Sets are delivered incl. setting rings and extension (836.730 without extension).
- Setting rings are conform to factory standard.
- Delivery in a case.







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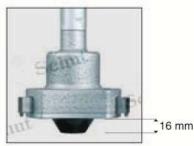
Measuring head (measuring range) Ø 3.5 - 50 mm



ø 50 - 100 mm



ø 100-300 mm



ø 100-300 mm



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# Three-point internal micrometers (continued)

Item No.	Measuring range/mm	Accuracy mm	Length L/mm	Length A/mm	Price RUB
836.700	ø 3.5- 4	±0.005	19	1.5	
836.701	ø 4.0- 4.5	$\pm 0.005$	19	1.5	
836.702	ø 4.5- 5.5	$\pm 0.005$	19	1.5	
836.703	ø 5.5- 6.5	$\pm 0.005$	19	1.5	
836.704	ø 6 - 8	$\pm 0.005$	52	1.5	
836.705	ø 8 - 10	$\pm 0.005$	52	1.5	
836.706	ø 10 - 12	$\pm 0.005$	52	1.5	
836.707	ø 12 - 16	$\pm 0.005$	71	1.5	
836.708	ø 16 - 20	$\pm 0.005$	71	1.5	
836.709	ø 20 - 25	$\pm 0.005$	82	1.5	
836.710	ø 25 - 30	$\pm 0.005$	82	1.5	
836.711	ø 30 - 35	$\pm 0.005$	84	1.5	
836.712	ø 35 - 40	$\pm 0.005$	84	1.5	
836.713	ø 40 - 50	$\pm 0.006$	100	1.5	
836.714	ø 50 - 60	$\pm 0.006$	100	1.5	
836.715	ø 60 - 70	$\pm 0.006$	100	1.5	
836.716	ø 70 - 80	$\pm 0.006$	100	1.5	
836.717	ø 80 - 90	$\pm 0.006$	100	1.5	
836.718	ø 90 -100	$\pm 0.006$	100	1.5	
836.719	ø 100 - 125	$\pm 0.008$	110	16	
836.720	ø125 -150	$\pm 0.008$	110	16	
836.721	ø150 -175	$\pm 0.008$	110	16	
836.722	ø175 -200	$\pm 0.008$	110	16	
836.723	ø200 -225	$\pm 0.012$	110	16	
836.724	ø225 -250	$\pm 0.012$	110	16	
836.725	ø250 -275	$\pm 0.012$	110	16	
836.726	ø275 -300	$\pm 0.012$	110	16	

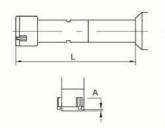
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#### **Extensions**

Item No.	Extension mm	For measuring range/mm	Price RUB
836.780	100	ø 6- 12	
836.782	150	ø12- 20	
836.784	150	ø20- 40	
836.786	150	ø40-100	







Item No.	Measuring range/mm	Setting rings mm	Extension mm	Number of instruments	Price RUB
836.730*	ø 3.5- 6.5	ø4, 5.5	<u> </u>	4	
836.735	ø 6 - 12	ø8, 10	100	3	
836.740	ø12 - 20	ø 16	150	2	
836.745	ø20 - 40	ø25, 35	150	4	
836.750	ø40 -100	ø50, 70, 90	150	6	

\* Without extension.

# Three-point internal micrometers

Three-point internal micrometers, with factory measuring report, for accurately measuring (blind) bores.

8 (800) 700-72-07

- Measuring range: Ø6-300 mm.
- Self-centering.
- Tungsten carbide measuring faces (measuring range Ø6-12 mm: hardened steel).
- Separate instruments within measuring range Ø6-100 mm and the sets are delivered incl. setting ring(s) and extension.
- Setting rings are conform to factory standard.
- To Ø 100 mm: implementation for blind bores. From Ø 100 mm: implementation for through holes or blind bores.
- DIN 863: to Ø 100 mm.
- Delivery in a case, with an inspection report.

#### Analog

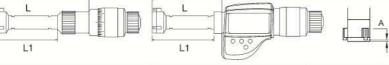
■ Graduation: 0.001 mm (ø 6- 12 mm), 0.005 mm (ø 12-300 mm).

#### **Digital**

- Resolution: 0.001 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Preset.
- Hold function.
- Protection: IP54.
- Power supply: 1 battery type V357.



# Three-point internal micrometers (continued)







Item No.	Price RUB	Item No.	Price RUB	Measuring range/mm	Accuracy mm	L/mm	Length L/mm	A/mm
Analog (blind bores):		Digital (blind bores):				Analog: L1 L	Digital: L1 L	
909.807		909.828		ø 6- 8	±0.004	27 –	43 –	1
909.808		909.829		ø 8- 10	$\pm 0.004$	50 -	43 –	1
909.809		909.830		ø 10- 12	±0.004	50 -	43 –	1
909.810		909.831		ø 12- 16	$\pm 0.004$	50 -	45 –	0.4
909.811		909.832		ø 16- 20	±0.004	50 -	45 –	0.4
909.812		909.833		ø 20- 25	±0.004	- 80	53 –	0.4
909.813		909.834		ø 25- 30	±0.004	- 80	53 -	0.4
909.814		909.835		ø 30- 40	$\pm 0.004$	- 90	- 80	0.4
909.815		909.836		ø 40- 50	±0.005	- 90	- 80	0.4
909.816		909.837		ø 50- 63	±0.005	- 100	- 80	0.5
909.817		909.838		ø 62- 75	±0.005	- 100	- 80	0.5
909.818		909.839		ø 75- 88	±0.005	- 100	- 80	0.5
909.819		909.840		ø 87-100	±0.005	- 100	- 80	0.5
910.150		910.158		ø 100 - 125	±0.008	- 140	- 140	0.5
910.151		910.159		ø 125 - 150	±0.008	- 140	- 140	0.5
910.152		910.160		ø 150 - 175	$\pm 0.008$	- 140	- 140	0.5
910.153		910.161		ø175-200	±0.008	- 140	- 140	0.5
910.154		910.162		ø200-225	$\pm 0.008$	- 140	- 140	0.5
910.155		910.163		ø225-250	±0.008	- 140	- 140	0.5
910.156		910.164		ø250-275	$\pm 0.008$	- 140	- 140	0.5
910.157		910.165		ø275-300	±0.008	- 140	- 140	0.5
Analog (through holes):		Digital (through holes):				Analog: L1 L	Digital: L1 L	
909.820		909.841		ø 100 - 125	±0.008	- 140	- 140	20
909.821		909.842		ø 125 - 150	$\pm 0.008$	- 140	- 140	20
909.822		909.843		ø 150 - 175	±0.008	- 140	- 140	20
909.823		909.844		ø 175 - 200	$\pm 0.008$	- 140	- 140	20
909.824		909.845		ø200-225	±0.008	- 140	- 140	20
909.825		909.846		ø 225 - 250	±0.008	- 140	- 140	20
909.826		909.847		ø250-275	±0.008	- 140	- 140	20
909.827		909.848		ø275-300	$\pm 0.008$	- 140	- 140	20

#### Sets

Item No.	Price RUB	Item No.	Price RUB	Measuring range/mm	Setting rings ø/mm	Extension mm	Number of instruments
Analog:		Digital:					
909.849		909.853		ø 6- 12	8, 10	50	3
909.850		909.854		ø12- 20	16	100	2
909.851		909.855		ø20- 50	25, 40	150	4
909.852		909.856		ø50-100	62, 87	150	4

#### **Options**

Item No.	Description	Price
		RUB
836.535	Spare battery	
For meas	. range ø 100 - 300 mm:	
909.857	Extension with length 150 mm	



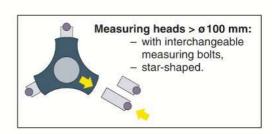


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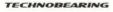
# Three-point internal micrometers

Three-point internal micrometers for accurately measuring (blind) bores.

- Measuring range: Ø6-300 mm.
- Graduation: 0.001 mm (ø 6- 12 mm), 0.005 mm (ø 12 - 300 mm).
- Self-centering.
- Tungsten carbide measuring faces.
- Interchangeable measuring bolts from measuring range ø 100 - 125 mm.
- Delivery in a case, incl. extension 150 mm (measuring range ø6-12 mm: 100 mm).
- Separate instruments within measuring range ø6-100 mm and the sets are delivered incl. setting ring(s).
- Setting rings are conform to factory standard.









908.654





Measuring head (measuring range) ø6-50 mm



ø 50 - 100 mm



ø 100-300 mm



For blind bores



# Three-point internal micrometers (continued)

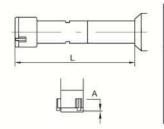


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#### Per piece

•						
Item No.	Measuring range/mm	Setting ring ø/mm	Accuracy mm	Length L/mm	Length A/mm	Price RUB
908.650	ø 6- 8	6	±0.004	54.5	0.7	
908.651	ø 8-10	8	$\pm 0.004$	54.5	0.7	
908.652	ø 10- 12	10	$\pm 0.004$	54.5	0.7	
908.653	ø 12- 16	16	$\pm 0.004$	80	0.7	
908.654	ø 16- 20	16	$\pm 0.004$	80	0.7	
908.655	ø 20- 25	25	$\pm 0.004$	90	0.7	
908.656	ø 25 - 30	25	$\pm 0.004$	90	0.7	
908.657	ø 30- 40	40	$\pm 0.004$	97	0.7	
908.658	ø 40- 50	40	$\pm 0.005$	97	0.7	
908.659	ø 50- 63	62	$\pm 0.005$	114	0.7	
908.660	ø 62- 75	62	$\pm 0.005$	114	0.7	
908.661	ø 75-88	87	$\pm 0.005$	114	0.7	
908.662	ø 87-100	87	$\pm 0.005$	114	0.7	
908.663	ø 100 - 125		$\pm 0.005$	145	0.7	
908.664	ø 125 - 150	72	$\pm 0.005$	145	0.7	
908.665	ø 150 - 175	25-	$\pm 0.005$	145	0.7	
908.666	ø 175 - 200	c—:	$\pm 0.005$	145	0.7	
908.667	ø200-225	( <del>-</del>	$\pm 0.007$	145	0.7	
908.668	ø 225 - 250	1944	$\pm 0.007$	145	0.7	
908.669	ø 250 - 275	s <del></del> 4	$\pm 0.007$	145	0.7	
908.670	ø 275 - 300	1.—	$\pm 0.007$	145	0.7	

#### Sets



Item No.	Measuring range/mm	Setting rings ø/mm	Extension mm	Number of instruments	Price RUB
908.671	ø 6- 12	6, 8, 10	100	3	
908.672	ø12- 20	16	150	2	
908.673	ø20- 50	25, 40	150	4	
908.674	ø 50 - 100	62, 87	150	4	

# Digital three-point internal micrometers IP65

Digital three-point internal micrometers with a resolution of 0.001 mm for accurately measuring (blind) bores. These micrometers have several functions, and combined with the accurate read-out this results in a favourable price-performance ratio.

- Measuring range: Ø6-300 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.
- Reset/preset.
- Self-centering.
- Tungsten carbide measuring faces.

- Complete measuring range without changing the measuring bolts.
- Protection: IP65.
- Delivery in a case, incl. extension 150 mm (measuring range ø 6 12 mm: 100 mm).
- Separate instruments within measuring range Ø6-100 mm and the sets are delivered incl. setting ring(s) (conforms to factory standard).
- Power supply: 1 battery type V357.





Measuring head (measuring range) Ø 6 - 50 mm



ø 50 - 100 mm



ø 100-300 mm



For blind bores



C04.322. Technohearing 2020

# Digital three-point internal micrometers IP65 (continued)





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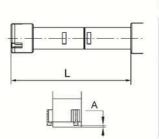
# PRICE

#### Per piece

Item No.	Measuring range/mm	Setting ring ø/mm	Accuracy mm	Length L/mm	Length A/mm	Price RUB
910.113	ø 6- 8	6	±0.004	54.5	0.7	
910.114	ø 8- 10	8	$\pm 0.004$	54.5	0.7	
910.115	ø 10- 12	10	$\pm 0.004$	54.5	0.7	
910.116	ø 12- 16	16	$\pm 0.004$	80	0.7	
910.117	ø 16- 20	16	$\pm 0.004$	80	0.7	
910.118	ø 20- 25	25	$\pm 0.004$	90	0.7	
910.119	ø 25- 30	25	$\pm 0.004$	90	0.7	
910.120	ø 30- 40	40	$\pm 0.004$	97	0.7	
910.121	ø 40- 50	40	$\pm 0.005$	97	0.7	
910.122	ø 50- 63	62	$\pm 0.005$	114	0.7	
910.123	ø 62- 75	62	$\pm 0.005$	114	0.7	
910.124	ø 75-88	87	$\pm 0.005$	114	0.7	
910.125	ø 87-100	87	$\pm 0.005$	114	0.7	
910.126	ø 100 - 125	Y=Y	$\pm 0.005$	150	0.7	
910.127	ø 125 - 150	5 <del></del> 5	$\pm 0.005$	150	0.7	
910.128	ø 150 - 175	( <del>-</del>	$\pm 0.005$	150	0.7	
910.129	ø 175 - 200	10-	$\pm 0.005$	150	0.7	
910.130	ø200-225	1-1	$\pm 0.007$	150	0.7	
910.131	ø 225 - 250	Y-9	$\pm 0.007$	150	0.7	
910.132	ø250-275	.=	$\pm 0.007$	150	0.7	
910.133	ø 275 - 300	1-	$\pm 0.007$	150	0.7	

#### **Option:**

836.535 Spare battery



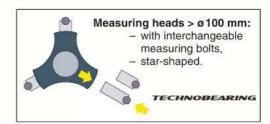
#### Sets

Item No.	Measuring range/mm	Setting rings ø/mm	Extension mm	Number of instruments	Price RUB
910.134	ø 6- 12	6, 8, 10	100	3	
910.135	ø 12 - 20	16	150	2	
910.136	ø20- 50	25, 40	150	4	
910.137	ø50-100	62, 87	150	4	

C04.326. Teabsolvening 20100

# Digital three-point internal micrometers

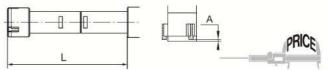
Digital three-point internal micrometers with a resolution of 0.001 mm for accurately measuring (blind) bores. These micrometers have several functions, and combined with the accurate read-out this results in a favourable price-performance ratio.





- Measuring range: ø12-300 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.
- Reset/preset.
- Self-centering.
- Tungsten carbide measuring faces.

- Interchangeable measuring bolts from measuring range Ø 100 125 mm.
- Protection: IP54.
- Delivery in a case, incl. extension 150 mm.
- Separate instruments within measuring range Ø12-100 mm are delivered incl. setting ring (conforms to factory standard).
- Power supply: 1 battery type V357.



				(5)		
Item No.	Measuring range/mm	Setting ring ø/mm	Accuracy mm	Length L/mm	Length A/mm	Price RUB
906.889	ø 12- 16	16	±0.004	80	0.7	
906.890	ø 16- 20	16	$\pm 0.004$	80	0.7	
906.891	ø 20- 25	25	$\pm 0.004$	90	0.7	
906.892	ø 25- 30	25	$\pm 0.004$	90	0.7	
906.893	ø 30- 40	40	$\pm 0.004$	97	0.7	
906.894	ø 40- 50	40	$\pm 0.005$	97	0.7	
906.895	ø 50- 63	62	$\pm 0.005$	114	0.7	
906.896	ø 62- 75	62	$\pm 0.005$	114	0.7	
906.897	ø 75-88	87	$\pm 0.005$	114	0.7	
906.898	ø 87-100	87	$\pm 0.005$	114	0.7	
906.899	ø 100 - 125	1-	$\pm 0.005$	145	0.7	
908.675	ø 125 - 150	-	$\pm 0.005$	145	0.7	
908.676	ø 150 - 175	_	$\pm 0.005$	145	0.7	
908.677	ø 175 - 200	2. <del></del> 3	$\pm 0.005$	145	0.7	
908.678	ø 200 - 225	0-0	$\pm 0.007$	145	0.7	
908.679	ø 225 - 250	-	$\pm 0.007$	145	0.7	
908.680	ø250-275	-	$\pm 0.007$	145	0.7	
908.681	ø 275 - 300	_	$\pm 0.007$	145	0.7	

**Option:** 

836.535 Spare battery

# Digital three-point internal micrometers

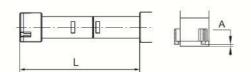
Digital three-point internal micrometers with a large measuring range. With optional extensions also for measuring in deep (blind) bores.

- Measuring range: ø50-300 mm.
- Max. measuring depth: 1100 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.
- Reset/preset.

- Self-centering.
- Tungsten carbide measuring faces.
- Protection: IP54.
- Delivery in a case, incl. extension 150 mm.
- Separate instruments within measuring range ø 50 100 mm and the sets are delivered incl. setting ring(s).
- Setting rings are conform to factory standard.
- Power supply: 1 battery type V357.







#### **Extensions**

Item No.	Extension mm	Price RUB
906.227	150	
906.228	500	
906.229	1000	

Item No.	Measuring range/mm	Setting ring ø/mm	Accuracy mm	Length L/mm	Length A/mm	Price RUB
906.904	ø 50- 70	50	±0.004	107	0.5	
906.905	ø 70-100	70	$\pm 0.004$	107	0.5	
906.906	ø 100 - 150	-	$\pm 0.005$	107	0.5	
906.907	ø 150 - 250		$\pm 0.007$	107	0.5	
906.908	ø 200 - 300	э <b>—</b> э	$\pm 0.007$	107	0.5	

Item No.	Measuring range/mm	Setting ring ø/mm	Number of instruments	Price RUB
906.909	ø 50-100	70	2	
906.910	ø 100 - 250	150	2	

#### **Option**

Item No.	Description	Price RUB
836.535	Spare battery	

# Digital three-point internal micrometers up to 1000 mm

Digital three-point internal micrometers with a large measuring range. With optional extensions also for measuring in deep bores.

- Measuring range: Ø200 1000 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Automatic switch-off.

- Reset/preset.
- Self-centering.
- Tungsten carbide measuring faces.
- Protection: IP54.
- Delivered incl. setting ring.
- Power supply: 1 battery type V357.



907.787

#### With interchangeable measuring bolts

The measuring range is extra large because of the interchangeable measuring bolts. The high accuracy of the measuring bolts enables exchanging without recalibrating the read-out.

■ Max. measuring depth:

907.787: 750 mm, 907.788: 1750 mm.

■ Accuracy:

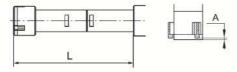
 $\pm (1 + 0.02 L) \mu m (L \text{ in mm}).$ 

■ Delivery in a case, incl. extensions and setting ring.

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Item No.	Measuring range/mm	Setting ring ø/mm	Length L/mm	Length A/mm	Extensions mm	Price RUB
907.787	ø200- 500	200	105	0.5	150, 500	
907.788	ø 200 - 1000	200	105	0.5	150, 500, 1000	



#### **Option**

Item No.	Description	Price RUB
836.535	Spare battery	

#### **Extensions**

Item No.	Extension mm	Price RUB
906.227	150	
906.228	500	
906.229	1000	

# Three-point internal micrometers

Three-point internal micrometers with a clever pistol-shaped base instrument for quick, easy and accurate measurements of internal measures such as (blind) bores. Easy single handed operation for both right and left handed use. Available as single instruments and as sets, with setting ring(s) and extension.

- Measuring range: ø6-100 mm.
- Measuring depth: 0-270 mm.
- Read-out depends on the type of dial indicator or measuring probe.
- Clamping shaft: Ø8 mm.

- Excl. dial indicator or measuring probe.
- Tungsten carbide measuring faces.
- Setting rings are conform to factory standard.
- Delivery in a case.



Item No.	Measuring	Accuracy	Setting ring	Extension	Lengt	h/mm	Price
	range/mm	mm <sup>1</sup>	ø/mm	mm	L	A	RUB
907.770	ø 6- 8	±0.004	8	100	50	2	
907.771	ø 8- 10	$\pm 0.004$	8	100	50	2	
907.772	ø10- 12	$\pm 0.004$	10	100	50	2	
907.773	ø12- 16	$\pm 0.004$	16	150	65	0.5	
907.774	ø16- 20	$\pm 0.004$	16	150	65	0.5	
907.775	ø20- 25	$\pm 0.004$	25	150	91	0.5	
907.776	ø25- 30	$\pm 0.004$	25	150	91	0.5	
907.777	ø30-40	$\pm 0.004$	40	150	97	0.5	
907.778	ø40- 50	$\pm 0.005$	40	150	97	0.5	
907.779	ø50- 63	$\pm 0.005$	62	150	112	0.5	
907.780	ø62- 75	$\pm 0.005$	62	150	112	0.5	
907.781	ø75-88	$\pm 0.005$	87	150	112	0.5	
907.782	ø87-100	$\pm 0.005$	87	150	112	0.5	

<sup>&</sup>lt;sup>1</sup> Excl. accuracy of dial indicator or measuring probe.

#### Sets

Item No.	Measuring range/mm	Setting ring(s) ø/mm	Number of pistol grips	Extension mm	Price RUB
907.783	ø 6- 12	8, 10	1::	100	
907.784	ø12-20	16	1	150	
907.785	ø20- 50	25, 40	2	150	
907.786	ø 50 - 100	62, 87	1	150	

# Internal measuring instruments

- Measuring range: 6-450 mm.
- Read-out depends on the type of dial indicator.
- Incl. standard dial indicator 0-3 mm/0.01 mm.
- Clamping shaft: Ø8 mm.
- Self-centering (except 907.230).
- Interchangeable measuring inserts with tungsten carbide stylus tip (907.230 with spherical measuring face).
- Also suitable for various dial indicators from e.g. Mitutoyo, TESA, Käfer and Peacock with clamping stem Ø 8 mm.



Item No. Measuring range/mm		Measuring depth/mm	Price RUB
907.230	6- 10	40	
907.231	10- 18	100	
907.232	18 - 35	125	
907.233	35 - 50	150	
907.235	50 - 160	150	
907.236	160-250	400	
907.237	250-450	400	





#### Optional dial indicators

puonai ui	ai marcators	50		
Item No.	Measuring range/mm	Read-out mm	Accuracy mm	Price RUB
Analog:				
907.933	0-10	0.01	-	
Digital (w	ith determin	ation of the	reversal poir	nt):
909.250	0-12.5	0.002	$\pm 0.015$	
909.251	0-12.5	0.001	$\pm 0.006$	
910.004	0-12.7	0.001	$\pm 0.004$	





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# Peacock internal measuring instruments

- Measuring range: 6-400 mm.
- Read-out depends on the type of dial indicator.
- Clamping shaft: Ø8 mm.
- Self-centering.

- Interchangeable measuring inserts with tungsten carbide stylus tip.
- Also suitable for various dial indicators from e.g. Mitutoyo, TESA and Käfer with clamping stem Ø8 mm.



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Item No.	Measuring range/mm	Measuring depth/mm	Price RUB
855.010	6- 10	50	
855.018	10 - 18	100	
855.035	18 - 35	150	
855.060	35 - 60	150	
855.150	50 - 150	150	
855.160	100 - 160	250	
855.250	160-250	250	
855.260	250-400	400	

Option:
855.507 Peacock dial indicator
0-10 mm, graduation 0.01 mm

# Setting instrument for internal measuring instruments

This instrument offers you the best way to accurately zero-set your internal measuring instruments with dial indicator. Gauge blocks are used to set the exact reference value. The special receiver assures that the centering device of the micrometer also functions when in use on this instrument, making the checking just as easy as measuring.

- Adjustment range: 18-400 mm.
- The setting instrument consists of a stand with double guidance and a flat measuring jaw.
- Excl. gauge blocks.
- Delivery in a case.



Item No.	Adjustment range/mm	Price RUB
907.877	18 - 400	



# Setting gauges for inside micrometers

Used for setting of inside micrometers.

■ Measuring range: 0-275 mm.



910.005



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Item No.	Length mm	Accuracy mm	Parallelism mm	Price RUB
910.005	50	±0.003	0.003	
910.006	75	$\pm 0.004$	0.004	
910.007	100	$\pm 0.005$	0.005	
910.008	150	$\pm 0.005$	0.005	
910.009	200	$\pm 0.005$	0.005	
910.010	250	$\pm 0.005$	0.005	
910.011	275	$\pm 0.005$	0.005	

#### Stick micrometers

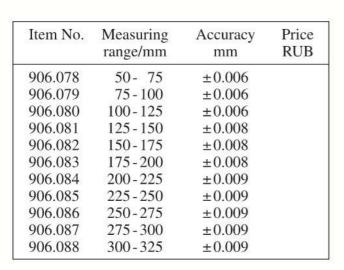
- Measuring range: 50-600 mm.
- Graduation: 0.01 mm.
- Locking screw (except 906.078).
- Spherical tungsten carbide measuring faces: Ø8x8 mm (906.078/079: Ø9x2.5 mm).
- With insulating grips (only 906.083 906.099).
- Excl. setting gauge.





906.096

#### TECHNOBEARING



Item No.	Measuring	Accuracy	Price
	range/mm	mm	RUB
906.089	325 - 350	±0.009	
906.090	350-375	$\pm 0.010$	
906.091	375 - 400	$\pm 0.010$	
906.092	400-425	$\pm 0.010$	
906.093	425 - 450	$\pm 0.010$	
906.094	450-475	$\pm 0.011$	
906.095	475 - 500	$\pm 0.011$	
906.096	500 - 525	$\pm 0.011$	
906.097	525 - 550	$\pm 0.011$	
906.098	550 - 575	$\pm 0.011$	
906.099	575 - 600	$\pm 0.011$	

#### Stick micrometer sets

■ Measuring range: 50 - 5000 mm.

■ Measuring range micrometer: 906.911-906.917: 50- 63 mm, 906.918: 150 - 175 mm, 906.919-906.923: 1000-1050 mm.



■ Graduation: 0.01 mm.

■ Accuracy:

906.911 - 906.918:  $\pm (3+n+L/50) \mu m$ , 906.919 - 906.923:  $\pm (7 + n + L/50) \mu m$ (n = number of extensions,

 $L = \max$ . measuring length in mm).

■ Locking screw.

Spherical tungsten carbide measuring faces.

■ With insulating grips (only 906.918-906.923).

■ External diameter micrometer/extensions: 906.911 - 906.917: 15.5 mm,

906.918: 22 mm, 906.919 - 906.923: 28 mm.

■ Incl. setting gauge (only 906.911-917: 50 mm, 906.918: 150 mm).

■ Delivery in a case.



Item No.	Measuring range/mm	Number of extensions	Price RUB
906.911*	50- 63	-	
906.912	50 - 100	2	
906.913	50 - 150	3	
906.914	50 - 300	5	
906.915	50 - 500	6	
906.916	50 - 1000	8	
906.917	50 - 1500	10	
906.918	150 - 2000	9	
906.919*	1000 - 1050	=	
906.920	1000 - 2000	5	
906.921	1000 - 3000	6	
906.922	1000-4000	7	
906.923	1000 - 5000	8	

<sup>\*</sup> Single instrument (without extensions).

# Digital stick micrometer sets

- Measuring range: 150 2000 mm.
- Measuring range micrometer: 150-175 mm.
- Resolution: 0.001 mm.
- Locking screw.
- Spherical tungsten carbide measuring faces.
- With insulating grips (only 906.797 - 906.799).

- External diameter micrometer/extensions: 22 mm.
- Incl. setting gauge: 150 mm.
- Delivery in a case.





Item No.	Measuring range/mm	Number of extensions	Accuracy µm	Price RUB
906.796*	150- 175	( <del></del> )	6.5	
906.797	150 - 1000	6	29	
906.798	150 - 1500	8	41	
906.799	150-2000	9	52	

Single instrument (without extensions).

# Inside micrometers with interchangeable anvils

Screw thread micrometers for internal measurements of pitch diameters. The interchangeable anvils allow measurements of several kinds of screw thread.

■ Measuring range: 75 - 300 mm.

■ Graduation: 0.01 mm. ■ Insert shaft: ø5 mm. ■ Delivery incl. setting gauge for metric thread, 60° flank angle.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
Inside mi	crometers wi	thout inserts:	
906.924	75 - 100	$\pm 0.025$	
906.925	100 - 125	$\pm 0.028$	
906.926	125 - 150	$\pm 0.030$	
906.927	150 - 175	$\pm 0.033$	
906.928	175 - 200	$\pm 0.035$	
906.929	200-225	$\pm 0.038$	
906.930	225 - 250	$\pm 0.040$	
906.931	250-275	$\pm 0.043$	
906.932	275 - 300	$\pm 0.045$	

Item No.	Threads per inch	Price RUB
Inserts for	Whitworth threads,	Ø.
55° flank a	ingle, per pair:	
906.940	60 -48	
906.941	48 -40	
906.942	40 - 32	
906.944	32 -24	
906.945	24 - 18	
906.946	18 -14	
906.947	14 - 10	
906.948	10 - 7	
906.949	7 - 4.5	
906.950	4.5 - 3.5	
906.951 S	et 60-3.5	

Item No.	Pitch/mm	Price RUB
Inserts for n	netric threads,	
60° flank an	gle, per pair:	
906.933	0.4-0.5	
906.934	0.6 - 0.9	
906.935	1 -1.75	
906.936	2 -3	
906.937	3.5-5	
906.938	5.5-7	
906.939 Set	0.4-7	

Item No.	Threads per inch	Price RUB
Inserts for	UN, UNC and UNF	threads,
60° flank a	ingle, per pair:	SCHIPCLESS CHANNE
906.952	64 -48	
906.953	44 - 28	
906.954	24 - 14	
906.955	13 - 9	
906.956	8 - 5	
906.957	4.5 - 3.5	
906.958 S	et 64 - 3.5	

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#### Internal micrometers

Internal micrometers with special measuring jaws for measurements in hard-to-reach places.

- Measuring range: 5-200 mm.
- Analog: graduation 0.01 mm, digital: resolution 0.001 mm.
- Tungsten carbide cylindrical measuring faces.
- Internal micrometers within measuring range 5-50 mm are delivered incl. setting ring.
- Delivery in a case.

#### Analog

■ No-glare chrome finished design.

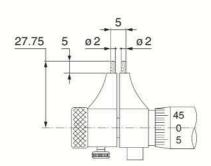
#### **Digital**

- mm/inch conversion.
- ABS/INC switchable.
- Automatic switch-off.
- Reset/preset.
- Power supply: 1 battery type V357.

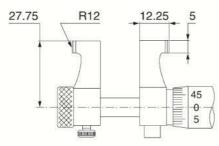




#### TECHNOBEARING



906.509 / 909.974



906.510-533 / 909.975-981



906.510-533 / 909.975-981

PRICE

Item No.	Measuring range/mm	Accuracy mm	Price RUB
Analog:			
906.509	5 - 30	$\pm 0.005$	
906.510	25 - 50	$\pm 0.006$	
906.511	50 - 75	$\pm 0.007$	
906.512	75 - 100	$\pm 0.008$	
906.530	100 - 125	$\pm 0.009$	
906.531	125 - 150	$\pm 0.009$	
906.532	150 - 175	$\pm 0.010$	
906.533	175 - 200	$\pm 0.010$	
Digital:			
909.974	5 - 30	$\pm 0.005$	
909.975	25 - 50	$\pm 0.006$	
909.976	50 - 75	$\pm 0.007$	
909.977	75 - 100	$\pm 0.008$	
909.978	100 - 125	$\pm 0.009$	
909.979	125 - 150	$\pm 0.009$	
909.980	150 - 175	$\pm 0.010$	
909.981	175 - 200	$\pm 0.010$	

#### Option:

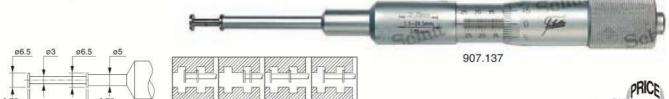
836.535 Spare battery

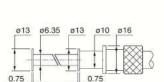
#### **Groove micrometers**

Micrometers for measuring e.g. steps in bores and internal cross grooves. With double graduation for internal and external measurements. By means of the disk-shaped measuring faces the wide, depth and location of grooves in bores can be determined.

- Measuring range: external measuring: 0 - 100 mm, internal measuring: 1.6-101.5 mm.
- Graduation: 0.01 mm.
- Accuracy: ±0.01 mm.

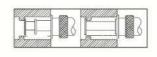
- Diameter measuring faces: 907.137: 6.5 mm, 907.138-907.141: 13 mm.
- Double graduation.





907.138-141

907.137



Item No.	Ext. measuring range/mm		Price RUB
907.137	0- 25	1.6- 26.5	
907.138	0- 25	1.6 - 26.5	
907.139	25 - 50	26.5 - 51.5	
907.140	50 - 75	51.5 - 76.5	
907.141	75 - 100	76.5 - 101.5	

# Two-point internal measuring instruments

■ Measuring range: 20 - 150 mm.

■ Graduation: 0.01 mm.

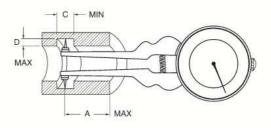
■ Interchangeable measuring inserts.

■ Delivery in a case with an measuring inserts.





Item No.	Measuring range/mm	$\begin{array}{c} A_{max} \\ mm \end{array}$	$C_{\min}$	$\begin{array}{c} D_{max} \\ mm \end{array}$	Price RUB
855.501	20 - 34	60	2	3	
855.502	30 - 60	75	2.5	5	
855.503	55 - 150	90	4	9	

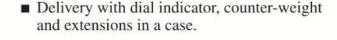


#### Diatest crankshaft meters

■ Measuring range: 45 - 500 mm.

■ Graduation: 0.01 mm.

■ Rotatable dial.







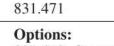
Measuring range/mm

45 - 150 60 - 300

60-500

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Item No.

831.469

831.470

831.472 Separate dial indicator for 831.469

831.473 Counterweight for 831.469

831.474 Separate dial indicator for 831.470

and 831.471

Price RUB

831.475 Counterweight for 831.470

and 831.471



#### Crankshaft meters

■ Measuring range: 60-500 mm.

■ Graduation: 0.01 mm.

■ Rotatable dial.

■ Delivery with dial indicator, counter-weight and extensions in a case.





907.919



Item No.	Measuring range/mm	Price RUB
907.918	60-300	
907.919	60 - 500	
~		

#### Option:

907.917 Separate dial indicator

# Telescopic gauges

In places that are hard to reach with standard measuring instruments, you can use these telescopic gauges. The spring gauge is put into the bore, centers itself, after that you can turn on the locking screw. Then the gauge is pulled out and you can measure the result, for instance with a micrometer.

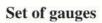
- Measuring range: 8 150 mm.
- Chrome finished.

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#### **Individual gauges**

Item No.	Measuring		Dime	Dimensions/mm			
	rang	ge/	mm	L	A	В	RUB
906.604	8	-	12.7	102	4	3	
906.605	12.	7 -	19	102	5	4	
906.606	19	-	32	102	5	4	
906.607	32	-	54	127	7.5	6	
906.608	54	-	90	127	7.5	6	
906.609	90	12	150	127	7.5	6	





Item No.	Measuring range/mm	Price RUB
906.610	8 - 150	

# Plug gauges for small bores (blind/through)

Ideal for measuring of small bores (blind and through) and grooves. The spring gauge is put into the bore, centers itself, after that you can turn on the locking screw. Then the gauge is pulled out and you can measure the result, for instance with a micrometer. Seperate set for blind bores and through bores.

- Measuring range: 3-13 mm (4 gauges: 3-5 mm, 5-7.5 mm, 7.5-10 mm and 10-13 mm).
- Chrome finished.



907.747



907.748

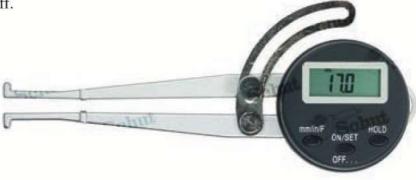
#### Set of gauges

Item No.	Description	Price RUB
907.747	For blind bores	
907.748	For through bores	

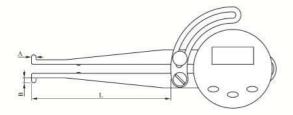
# **Digital internal measuring instrument**

- Measuring range: 12.7 170 mm.
- Resolution: 0.1 mm.
- Accuracy: ±0.2 mm.
- mm/inch conversion.
- On/off switch.
- Automatic switch-off.

- Reset
- Hold function.
- Locking screw.
- Power supply: 1 battery type CR2032.



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Item No.	Measuring	Lei	ngth/r	nm	Price
	range/mm	L	A	В	RUB
909.409	12.7 - 170	85	3	3	

#### Option:

495.157 Spare battery

# Digital external measuring instrument

- Measuring range: 0-160 mm.
- Resolution: 0.1 mm.
- Accuracy: ±0.2 mm.
- mm/inch conversion.
- On/off switch.
- Automatic switch-off.

- Reset.
- Hold function.
- Locking screw.
- Power supply: 1 battery type CR2032.

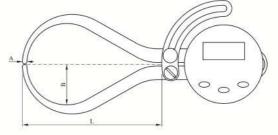




Item No.	Measuring	Length/mm		Price	
	range/mm	L	A	В	RUB
909.408	0-160	85	3	25	

#### Option:

495.157 Spare battery



# Digital internal measuring instruments

Digital internal measuring instruments for measurements of bores, internal grooves and other hard-to-reach places.

- Measuring range: 5 60 mm.
- Resolution: 0.005 mm. Digital-analog display changes automatically between 0.01, 0.02 and 0.05 mm (±20 scale divisions).
- mm/inch conversion.
- ABS/INC switchable.
- Large LCD display, 340° rotatable.

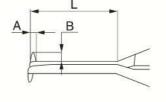
- Automatic switch-off.
- Reset/preset.
- Hold and min/max functions.
- Adjustable tolerance limits.
- Measuring faces with different contact forms.
- Power supply: 1 battery type CR2032.

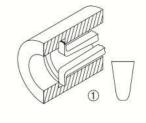


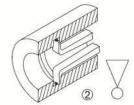


Item No.	Measuring	Accuracy	Lei	ngth/i	nm	Contact	Price
	range/mm	mm	L	A	В	form/mm	RUB
Travel 10	mm:						
908.810	5-15	$\pm 0.02$	20	1	1.5	① R 0.3	
908.811	10-20	$\pm 0.02$	25	1.5	3.0	① R 0.3	
908.812	20-30	$\pm 0.02$	30	2	6.5	① R 0.5	
908.813	30-40	$\pm 0.02$	30	2.5	9.0	① R 0.5	
908.814	40-50	$\pm 0.02$	30	2.5	9.0	① R 0.5	
908.816	10-20	$\pm 0.02$	25	1.5	3.0	② ø1.5	
908.817	20-30	$\pm 0.02$	30	2	6.5	② ø1.5	
908.818	30 - 40	$\pm 0.02$	30	2.5	9.0	② ø1.5	
908.819	40 - 50	$\pm 0.02$	30	2.5	9.0	② ø1.5	
Travel 20	mm:						
908.820	5-25	$\pm 0.03$	35	1	1.5	① R 0.3	
908.821	10-30	$\pm 0.03$	55	2	3.5	① R 0.5	
908.822	20-40	$\pm 0.03$	80	3	6.5	① R 0.5	
908.823	30-50	$\pm 0.03$	80	3	8.5	① R 0.5	
908.824	40-60	$\pm 0.03$	80	3	8.5	① R 0.5	
908.826	10-30	$\pm 0.03$	55	2	3.5	② ø1.5	
908.827	20-40	$\pm 0.03$	80	3	6.5	② ø1.5	
908.828	30-50	$\pm 0.03$	80	3	8.5	② ø1.5	
908.829	40-60	$\pm 0.03$	80	3	8.5	② ø1.5	
<b>Option:</b> 495.157	Spare battery						

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# Internal measuring instruments

Internal measuring instruments for measurements of bores, internal grooves and other hard-to-reach places.

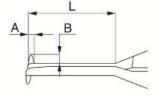
- Measuring range: 5-60 mm.Graduation: 0.01 mm.
- Rotatable dial.

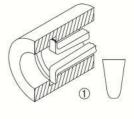
- Adjustable tolerance markers.
- Measuring faces with different contact forms.

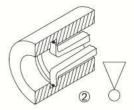




Item No.	Measuring	Accuracy	Lei	ngth/	mm	Contact	Price
	range/mm	mm	L	A	В	form/mm	RUB
Travel 10	mm:						
908.830	5 - 15	$\pm 0.02$	20	1	1.5	① R 0.3	
908.831	10-20	$\pm 0.02$	25	1.5	3.0	① R 0.3	
908.832	20 - 30	$\pm 0.02$	30	2	6.5	① R 0.5	
908.833	30-40	$\pm 0.02$	30	2.5	9.0	① R 0.5	
908.834	40 - 50	$\pm 0.02$	30	2.5	9.0	① R 0.5	
908.836	10-20	$\pm 0.02$	25	1.5	3.0	② ø1.5	
908.837	20 - 30	$\pm 0.02$	30	2	6.5	② ø1.5	
908.838	30-40	$\pm 0.02$	30	2.5	9.0	② ø1.5	
908.839	40 - 50	$\pm 0.02$	30	2.5	9.0	② ø1.5	
Travel 20	mm:						
908.840	5-25	$\pm 0.03$	35	1	1.5	① R 0.3	
908.841	10-30	$\pm 0.03$	55	2	3.5	① R 0.5	
908.842	20-40	$\pm 0.03$	80	3	6.5	① R 0.5	
908.843	30-50	$\pm 0.03$	80	3	8.5	① R 0.5	
908.844	40-60	$\pm 0.03$	80	3	8.5	① R 0.5	
908.846	10-30	$\pm 0.03$	55	2	3.5	② ø1.5	
908.847	20-40	$\pm 0.03$	80	3	6.5	② ø1.5	
908.848	30-50	$\pm 0.03$	80	3	8.5	② ø1.5	
908.849	40 - 60	$\pm 0.03$	80	3	8.5	② ø1.5	







# Digital external measuring instruments

Digital external measuring instruments for measurements of external grooves, axis diameters, wall thicknesses and other hard-to-reach places.

- Measuring range: 0-60 mm.
- Resolution: 0.005 mm. Digital-analog display changes automatically between 0.01, 0.02 and 0.05 mm (±20 scale divisions).
- mm/inch conversion.
- ABS/INC switchable.
- Large LCD display, 340° rotatable.
- On/off switch.
- Automatic switch-off.
- Reset/preset.

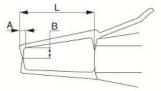
- Hold and min/max functions.
- Adjustable tolerance limits.
- Measuring faces with different contact forms.
- Power supply: 1 battery type CR2032.



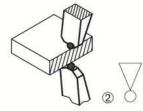


Item No.	Measuring	Accuracy	Lei	Length/mm Contact		Length/mr		Price
	range/mm	mm	L	A	В	form/mm	RUB	
Travel 10	mm:							
908.850	0-10	$\pm 0.02$	40	3	8	① R 0.5		
908.851	10-20	$\pm 0.02$	40	3	8	① R 0.5		
908.852	20-30	$\pm 0.02$	40	3	8	① R 0.5		
908.853	30-40	$\pm 0.02$	40	3	8	① R 0.5		
908.854	40 - 50	$\pm 0.02$	40	3	8	① R 0.5		
908.855	0 - 10	$\pm 0.02$	40	3	8	② ø1.5		
908.856	10-20	$\pm 0.02$	40	3	8	② ø1.5		
908.857	20-30	$\pm 0.02$	40	3	8	② ø1.5		
908.858	30-40	$\pm 0.02$	40	3	8	② ø1.5		
908.859	40 - 50	$\pm 0.02$	40	3	8	② ø1.5		
Travel 20	mm:							
908.860	0-20	$\pm 0.03$	80	6.5	25	① R 0.75		
908.861	10-30	$\pm 0.03$	80	6.5	25	① R 0.75		
908.862	20-40	$\pm 0.03$	80	6.5	25	① R 0.75		
908.863	30-50	$\pm 0.03$	80	6.5	25	① R 0.75		
908.864	40 - 60	$\pm 0.03$	80	6.5	25	① R 0.75		
908.865	0-20	$\pm 0.03$	80	6.5	25	② ø1.5		
908.866	10-30	$\pm 0.03$	80	6.5	25	② ø1.5		
908.867	20-40	$\pm 0.03$	80	6.5	25	② ø1.5		
908.868	30-50	$\pm 0.03$	80	6.5	25	② ø1.5		
908.869	40 - 60	$\pm 0.03$	80	6.5	25	② ø1.5		

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# **External measuring instruments**

External measuring instruments for measurements of external grooves, axis diameters, wall thicknesses and other hard-to-reach places.

- Measuring range: 0-60 mm.
- Graduation: 0.01 mm.
- Rotatable dial.

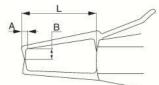
- Adjustable tolerance markers.
- Measuring faces with different contact forms.

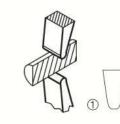


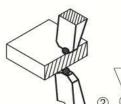
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Item No.	Measuring	Accuracy		ngth/i		Contact	Price
	range/mm	mm	L	A	В	form/mm	RUB
Travel 10	mm:						
908.870	0-10	$\pm 0.02$	40	3	8	① R 0.5	
908.871	10-20	$\pm 0.02$	40	3	8	① R 0.5	
908.872	20-30	$\pm 0.02$	40	3	8	① R 0.5	
908.873	30-40	$\pm 0.02$	40	3	8	① R 0.5	
908.874	40 - 50	$\pm 0.02$	40	3	8	① R 0.5	
908.875	0 - 10	$\pm 0.02$	40	3	8	② ø1.5	
908.876	10-20	$\pm 0.02$	40	3	8	② ø1.5	
908.877	20-30	$\pm 0.02$	40	3	8	② ø1.5	
908.878	30-40	$\pm 0.02$	40	3	8	② ø1.5	
908.879	40 - 50	$\pm 0.02$	40	3	8	② ø1.5	
Travel 20	mm:						
908.880	0-20	$\pm 0.03$	80	6.5	25	① R 0.75	
908.881	10-30	$\pm 0.03$	80	6.5	25	① R 0.75	
908.882	20-40	$\pm 0.03$	80	6.5	25	① R 0.75	
908.883	30-50	$\pm 0.03$	80	6.5	25	① R 0.75	
908.884	40-60	$\pm 0.03$	80	6.5	25	① R 0.75	
908.885	0-20	$\pm 0.03$	80	6.5	25	② ø1.5	
908.886	10-30	$\pm 0.03$	80	6.5	25	② ø1.5	
908.887	20-40	$\pm 0.03$	80	6.5	25	② ø1.5	
908.888	30-50	$\pm 0.03$	80	6.5	25	② ø1.5	
908.889	40 - 60	$\pm 0.03$	80	6.5	25	② ø1.5	





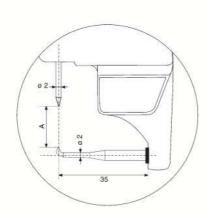


C04.309. Technobearing 20200511

# Digital thickness gauge

This digital thickness gauge has special, pointed measuring faces for measuring in hard-to-reach places of metal parts.

- Measuring range: 0-15 mm.
- Resolution: 0.01 mm.
- Accuracy: ±0.03 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Weight: 100 g.
- Power supply: 1 battery type V357.







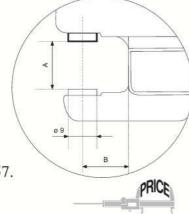
Item No.	Measuring face	Throat depth/mm	Price RUB
906.450	Pointed	35	
Option:			
836.535	Spare battery		

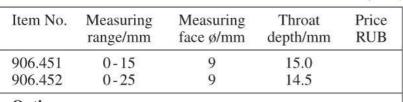


# Digital thickness gauges

The shape of the measuring faces makes this digital thickness gauge especially suitable for measuring metal or plastic film, leather, paper, etc.

- Measuring range: 0-25 mm.
- Resolution: 0.01 mm.
- Accuracy:
  - 0-15 mm:  $\pm 0.03 \text{ mm}$ ,
  - 0-25 mm:  $\pm 0.04 \text{ mm}$ .
- mm/inch conversion.
- On/off switch.
- Reset.
- Weight: 100 g.
- Power supply: 1 battery type V357.





Option:

836.535 Spare battery



34.244

# Digital external measuring instruments

■ Measuring range: 0-10 mm.

■ Resolution: 0.01 mm.

■ Repeatability: 0.01 mm.

mm/inch conversion.

■ Automatic switch-off.

■ Reset.

■ Max. measuring speed: 1.5 m/s.

■ Non-interchangeable inserts.

■ Power supply: 1 battery type V357.







906.454



TECHNOBEARING

Item No.	Measuring range/mm	Measuring faces ø/mm	Throat depth/mm	Price RUB
906.453	0-10	9	30	
906.454	0-10	9	120	

Technobearing 2020

836.535 Spare battery

# Thickness gauges

- Measuring range: 0-20 mm.
- Graduation: 0.01 mm.
- Rotatable dial.





■ Non-interchangeable inserts.

■ Measuring face: Ø10 mm (906.446: Ø6 mm).



Item No.	Measuring range/mm	Throat depth/mm	Price RUB
906.446	0-10	10	
906.447	0 - 10	30	
906.448	0-20	110	

TECHNOBEARING

### Thickness gauges with roller measuring inserts

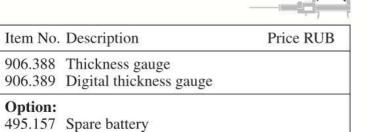
- Measuring range: 0-10 mm.
- Measuring face: 7 mm/ø22 mm.
- Throat depth: 100 mm.
- Anvil: 28 x 22 mm (3 mm wheel height in anvil).

### Analog

- Graduation: 0.01 mm.
- Rotatable dial with locking screw.
- Adjustable tolerance markers.

### **Digital**

- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Reset.
- Power supply: 1 battery type CR2032.







### Peacock external measuring instruments

■ Measuring range: 0 - 10 mm.

■ Graduation: 0.01 mm.

■ Measuring force: approx. 1.8 N.

■ Non-interchangeable measuring inserts.

■ Ceramic measuring faces.







Item No.	Measuring range/mm	Measuring faces ø/mm	Throat depth/mm	Price RUB
855.750	0-10	10	20	
855.751	0-10	10	120	

### **External measuring instruments**

■ Measuring range: 0-10 mm.

■ Graduation: 0.01 mm.

 Different types of inserts available, with hardened steel measuring faces.

■ Throat depth: 50 mm.

Item N	No. T	ype of ins	ert Price RUB
853.00	02	В	
853.00	03	C	
853.00	04	D	
853.00	05	E	
853.00	07	G	



Types of inserts				
.010	В	Wood, rubber, soft leather		
ø25	C	Soft rubber		
ø5,	D	Rubber rings, round material		
ø16	E	Paper, cardboard, fibrous plates		
N.B.12	G	Metal		

# Thickness gauge for film measurement

■ Measuring range: 0-1 mm.

■ Graduation: 0.001 mm.

■ Measuring force: approx. 3 N.

■ Non-interchangeable measuring inserts.

■ Throat depth: 25 mm.

■ Frame with insulating grip.

Item No.	Measuring range/mm	Meas. faces ø/mm	Price RUB
907.859	0-1	10	

■ Delivery with an inspection report.





Technobearing 202005

### Thickness gauge for film measurement



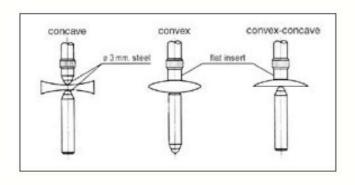
- Measuring range: 0-1 mm.
- Graduation: 0.001 mm.
- Measuring force: approx. 2 N.
- Non-interchangeable measuring inserts.
- Throat depth: 30 mm.
- Frame with insulating grip.
- Delivery with a declaration of conformity.

Item No.	Measuring range/mm	Meas. faces ø/mm	Price RUB
781.547	0-1	6.35	

### Peacock universal thickness gauge

Measuring instrument with dial indicator and adjustable anvil, multi-purpose.

- Span frame: 0-20 mm.
- Measuring range dial indicator: 10 mm.
- Graduation: 0.01 mm.
  Throat depth: 25 mm.
  With additional flat insert.





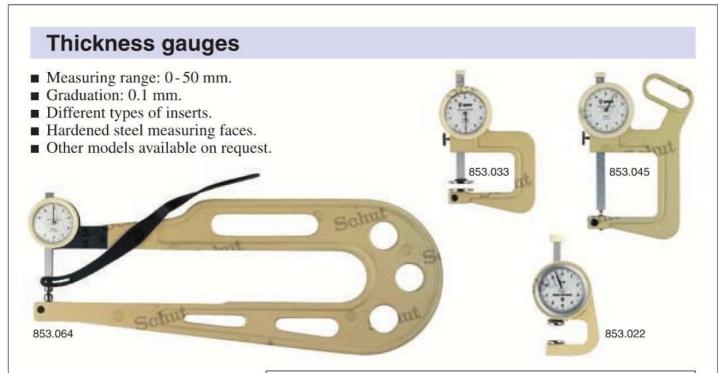
Item No.	Measuring range dial indicator/mm	Price RUB	
855.752	0-10		

### Tube wall thickness gauge

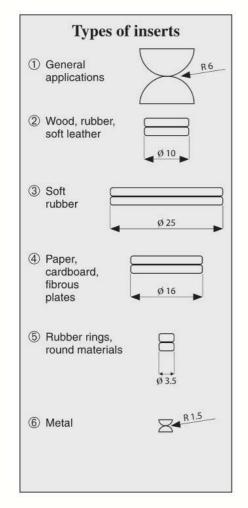


- Measuring range: 0-10 mm.
- Graduation: 0.01 mm.
- Measuring force: approx. 1 N.
- Throat depth: 25 mm.
- From inner diameter 8 mm.

Item No.	Measuring range/mm	Price RUB
853.137	0-10	



### TECHNOBEARING



Item No.	Measuring range/mm	Type of insert	Throat depth/mm	Price RUB
853.022	0-10	2	15	
853.031	0-30	(5)	50	
853.032	0-30	2	50	
853.033	0-30	3	50	
853.034	0-30	4	50	
853.035	0-30	6	50	
853.037	0-30	1	50	
853.041	0-50	(5)	50	
853.042	0-50	2	50	
853.043	0-50	3	50	
853.044	0-50	4	50	
853.045	0-50	6	50	
853.047	0-50	1	50	
853.052	0-25	2	150	
853.053	0-25	3	150	
853.054	0-25	1	150	
853.055	0-25	4	150	
853.056	0-25	6	150	
853.062	0-25	2	300	
853.063	0-25	3	300	
853.064	0-25	1	300	
853.065	0-25	4	300	
853.066	0-25	6	300	
853.082	0-25	2	500	
853.083	0-25	3	500	
853.084	0-25	1	500	
853.085	0-25	4	500	
853.087	0-25	6	500	

# Digital external measuring instruments

- Measuring range: 0-25 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.

- Reset
- Different types of inserts.
- Hardened steel measuring faces.
- Other models available on request.





# Types of inserts 1 General applications 2 Wood, rubber, soft leather 3 Soft rubber Ø 25 4 Paper,

Ø 16

**⊠** R1.5

cardboard, fibrous

⑤ Rubber rings, round materials

plates

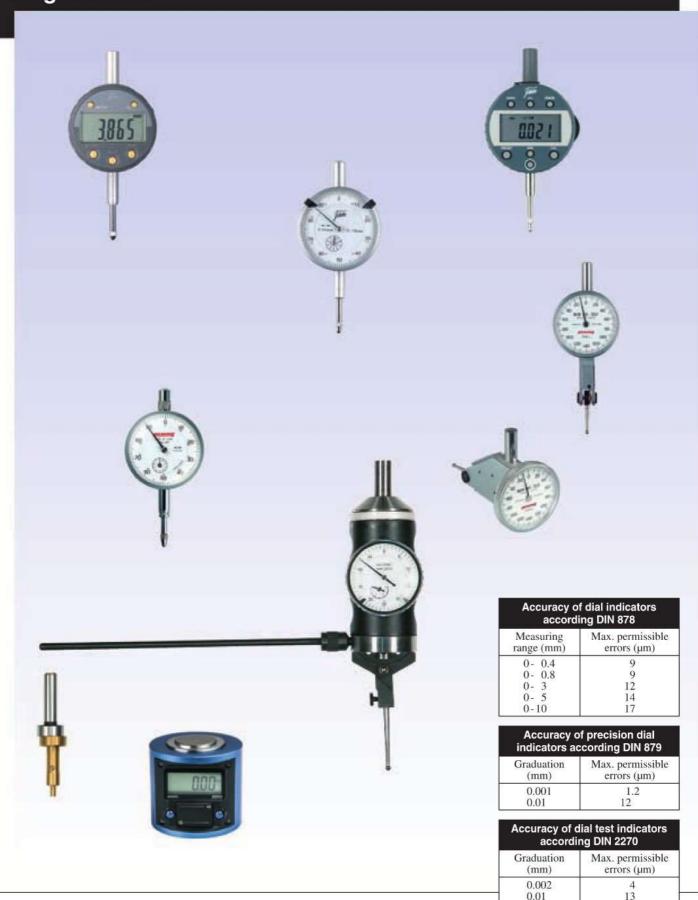
6 Metal

TE	CHA	IOB	EAI	RIN	G

Item No.	Measuring range/mm	Type of insert	Throat depth/mm	Price RUB
853.072	0-25	①	50	
853.073	0-25	2	50	
853.074	0-25	3	50	
853.075	0-25	4	50	
853.076	0-25	(5)	50	
853.077	0-25	6	50	
853.057	0-25	1	200	
853.078	0-25	2	200	
853.079	0-25	3	200	
853.080	0-25	4	200	
853.081	0-25	6	200	
853.060	0-25	1	300	
853.091	0-25	2		
853.092	0-25	3		
853.093	0-25	4	300	
853.094	0-25	6	300	

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# Dial indicators / Dial test indicators / Center instruments Edge finders



### 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: Ø8 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.



### Absolute digital dial indicators

Absolute digital dial indicators with function to set tolerance limits with clear optical Go (NoGo) reading.

- Measuring range: 0-50 mm.
- Resolution: 0.01 mm or 0.001 mm.
- mm/inch conversion.
- ABS/INC switchable.
- TECHNOBEARING
- With data output.
- Adjustable tolerance limits.
- Tolerance display by means of illuminated green LED at GO value.
- On/off switch.
- Reset/preset.
- Ceramic stylus tip.

- Max. measuring speed: unlimited.
- Clamping stem: Ø8 mm.
- Dial diameter: 60 mm.
- Reversible measuring direction.
- Flat back.
- With additional back with lug.
- Protection: IP54.
- Delivery in a case with an inspection report.
- Power supply: 1 battery type CR2032.









- For data transfer to PC (e.g. Excel, Word).
- Operating system:
   Windows and other.
- PC connection: USB.
- No software or driver to install.
- Foot switch (optional).





Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Price RUB
910.221	0-12.5	0.001	±0.004	
910.222	0-25	0.001	$\pm 0.004$	
910.223	0-50	0.001	$\pm 0.005$	
906.870	0-12.5	0.01	±0.01	
906.871	0-25	0.01	$\pm 0.01$	
906.872	0-50	0.01	$\pm 0.015$	

### **Options:**

495.157 Spare battery

906.618 USB interface

909.687 Footswitch for USB interface

910.038 Wireless USB receiver

906.619 Wireless transmitter

909.611 Retraction lever

909.613 Cable retraction device (0.7 m)

(maximum travel 10 mm)

909.614 Retraction lever

(maximum travel 12.7 mm)

TECHNOBEARING

### 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.
- Ceramic stylus tip.
- Max. measuring speed: unlimited.
- Measuring force: ≤2 N.
- Clamping stem: Ø8 mm.
- Dial diameter: 60 mm.
- Reversible measuring direction.
- With determination of the reversal point (only 910.004).

### **USB** interface:

- For data transfer to PC (e.g. Excel, Word).
- Operating system:
   Windows and other.
- PC connection: USB.
- No software or driver to install.
- Foot switch (optional).





- Adjustable tolerance limits (except 910.004).
- Flat back.
- With additional back with lug (only 909.998, 910.001/004).
- Protection: IP54.
- Delivery in a case with an inspection report.
- Power supply: 1 battery type CR2032.



Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Price RUB
909.998	0-12.7	0.001	±0.004	
909.999	0 - 25.4	0.001	$\pm 0.005$	
910.000	0-50.8	0.001	$\pm 0.006$	
910.001	0-12.7	0.01	±0.01	
910.002	0 - 25.4	0.01	$\pm 0.01$	
910.003	0-50.8	0.01	$\pm 0.015$	
For interi	nal measurem	ents:		
910.004	0-12.7	0.001	$\pm 0.004$	
With Blue	etooth:			
910.079	0 - 12.7	0.001	$\pm 0.004$	
910.082	0 - 12.7	0.01	$\pm 0.01$	

### **Options:**

495.157 Spare battery

909.686 USB interface

909.687 Footswitch for USB interface

910.038 Wireless USB receiver

910.039 Wireless transmitter

909.611 Retraction lever

909.613 Cable retraction device (0.7 m)

(maximum travel 10 mm)

909.614 Retraction lever

(maximum travel 12.7 mm)

### **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: Ø8 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.



Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Measuring force/N	Price RUB
909.250	0-12.5	0.002	±0.015	1.8-3.0	
909.251	0-12.5	0.001	$\pm 0.006$	2.2 - 3.5	

495.157 Spare battery

# 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: Ø8 mm.
- Dial diameter: 61 mm.
- Dial 340° rotatable.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
907.879	0-12.7	±0.01	
907.878	0-12.7	$\pm 0.005$	

### Option:

495.157 Spare battery

- Reversible measuring direction.
- Adjustable tolerance limits.
- Protection: IP54.

■ Power supply: 1 battery



### Absolute horizontal digital dial indicators

- Measuring range: 0-30 mm.
- Resolution: 0.001 mm.
- mm/inch conversion.
- Digimatic data output.
- On/off switch.
- Reset/preset.
- Ceramic stylus tip.
- With dovetail joint (incl. lug) and clamping stem Ø8 mm.

- Measuring force:  $\leq 2$  N.
- Reversible measuring direction.
- Protection: IP54.
- Delivery in a case with an inspection report.
- Power supply: 1 battery type CR1632.

USB interface and wireless USB receiver and transmitter available on request.





Item No.	Measuring range/mm	Resolution mm	Accuracy mm	Price RUB
910.085	0-12.7	0.001	±0.005	
910.086	0-30	0.001	$\pm 0.006$	

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Option: 497.955 Spare battery

### 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.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
907.884	0-13	±0.005*	

### Option:

495.157 Spare battery

- Hold function.
- Clamping stem: Ø8 mm.
- Aluminum construction.
- Delivery in a case.
- Power supply: 1 battery type CR2032.



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<sup>\*</sup> 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.

### Dial indicators 0.01 mm

Indicators with an excellent price-performance ratio.

■ Measuring range: 0-10 mm.

■ Graduation: 0.01 mm.

■ Clamping stem: Ø8 mm.

■ Dial diameter: 55 mm.

■ Rotatable dial.

Shockproof.

Adjustable tolerance markers.

■ Flat back.

■ Delivery with an inspection report.

■ Retraction lever available on request (only 907.929/930).



Item No.	Measuring range/mm	Price RUB
907.928	0- 3	
907.929	0- 5	
907.930	0-10	
Option:		
	Back with lug	



### 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: Ø8 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 RUB
907.931	0- 3	
907.932	0- 5	
907.933	0-10	
Options:		
908.987	Back with lug	
	Retraction lever	



### Dial indicators 0.01 mm

Indicators with a large measuring range. Shockproof design.

- Measuring range: 0-100 mm.
- Graduation: 0.01 mm.
- Clamping stem: Ø8 mm.
- Rotatable dial.
- Shockproof.
- Adjustable tolerance markers (except 907.916).
- Locking screw.
- Flat back.
- Delivery with an inspection report.



Item No.	Measuring range/mm	Dial ø/mm	Price RUB
907.934	0- 25	60	
907.935	0- 30	60	
907.936	0- 50	76	
907.916	0 - 100	80	

# 908.987<sup>1</sup> Back with lug 908.988<sup>2</sup> Back with lug



# Splashproof dial indicators 0.01 mm

Indicators with splashproof design.

- Measuring range: 0 10 mm.
- Graduation: 0.01 mm.
- Clamping stem: Ø8 mm.
- Dial diameter: 55 mm.
- Rotatable dial.
- Shockproof.
- Adjustable tolerance markers.
- Locking screw.
- Back with lug.
- Protection: IP54.
- Conforms to factory standard.



Item No.	Measuring range/mm	Price RUB
908.777	0- 3	
908.778	0- 5	
908.779	0-10	

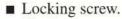


<sup>&</sup>lt;sup>1</sup> For 907.934/935. <sup>2</sup> For 907.936/916.

### 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: Ø8 mm.
- Dial diameter: 40 mm.
- Rotatable dial.
- Shockproof.
- Adjustable tolerance markers.



- Flat back.
- Delivery with an inspection report.

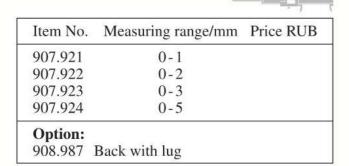


Item No.	Measuring range/mm	Price RUB
Graduati	on 0.01 mm:	
907.925	0-3	
907.926	0- 5	
907.927	0-8	
907.914	0 - 10	
Graduati	on 0.001 mm:	
907.920	0 - 1	
Option:		
	Back with lug	

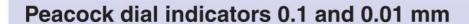
### Dial indicators 0.001 mm

Indicators with micrometer reading. Shockproof design.

- Measuring range: 0-5 mm.
- Graduation: 0.001 mm.
- Clamping stem: Ø8 mm.
- Dial diameter: 60 mm.
- Rotatable dial.
- Scale numbering: 0-100-0.
- Shockproof.
- Adjustable tolerance markers.
- Locking screw.
- Flat back.
- Delivery with an inspection report.

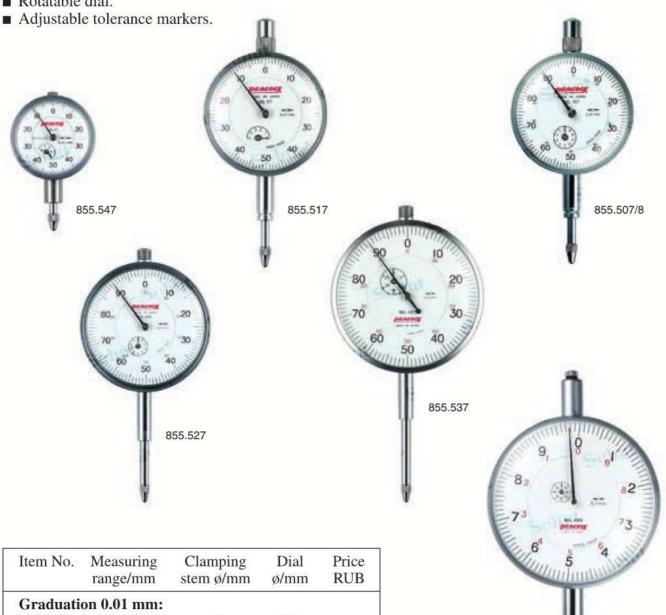






- Measuring range: 0-80 mm.
- Graduation: 0.1 or 0.01 mm.
- Clamping stem: Ø8, 10 or 14 mm.
- Rotatable dial.

- Flat back or back with lug\*.
- DIN 878.
- Delivery in a case.



Item No.	Measuring range/mm	Clamping stem ø/mm	Dial ø/mm	Price RUB
Graduati	on 0.01 mm:			
855.547	0-4	8	36	
855.536	0-3	8	40	
855.517	0-5	8	53	
855.507	0-10	8	53	
855.508*	0-10	8	53	
855.527*	0-20	8	66.5	
855.537*	0-30	8	76	
855.557*	0-50	10	83	
Graduati	on 0.1 mm:			
855.589*	0-80	14	112	

<sup>\*</sup> Back with lug.

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855.589

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### Peacock dial indicators 0.005 and 0.001 mm

■ Measuring range: 0-5 mm.

■ Graduation: 0.005 or 0.001 mm.

■ Clamping stem: Ø8 mm.

■ Rotatable dial.

Flat back or back with lug\*.

■ DIN 878.

■ Delivery in a case.

Item No.	Measuring range/mm	Dial ø/mm	Price RUB
Graduatio	on 0.005 mm:		
855.535*	0-3	47	
Graduatio	on 0.001 mm:		
855.509	0 - 1	53	
855.525*	0-2	66.5	
855.555*	0-5	66.5	

<sup>\*</sup>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.

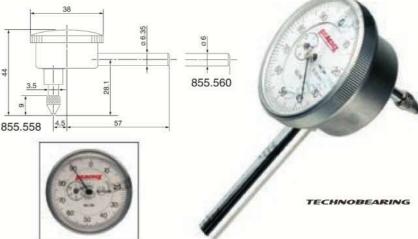
■ DIN 878.

■ Delivery in a case.

3.5

855.559





Item No.	Measuring range/mm	Clamping stem ø/mm	Accuracy mm	Price RUB
855.558	0-5	6.35	±0.02	
855.560	0-5	6	$\pm 0.02$	
Clamping	g stem on bac	k side:		
855.559	0-5	8	$\pm 0.02$	

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### 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: Ø8 mm.
- Travel: 3 mm.
- Adjustable tolerance markers.
- Fine adjustment.
- Delivery with an inspection report.



Item No.	Measuring range/mm	Dial ø/mm	Price RUB
907.939	0.1	63.5	

### **Precision dial indicators**

- Measuring range: 0.06 mm.
- Graduation: 0.0005 mm or 0.001 mm.
- Measuring force: approx. 1 N.
- Clamping stem: Ø28 mm.
- Shockproof.
- Fine adjustment.
- Delivery with an inspection report.

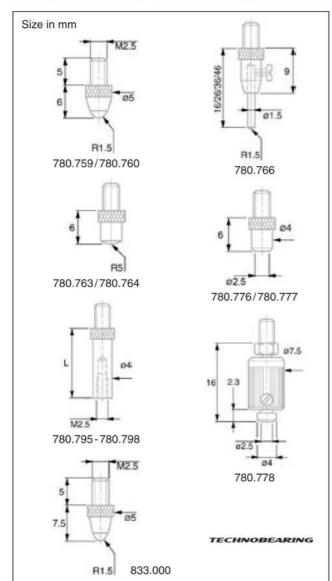


Item No.	Measuring range/mm	Resolution mm	Scale numbering	Price RUB
906.332 0.03 0.0005		15-0-15		
906.333	0.06	0.001	30-0-30	

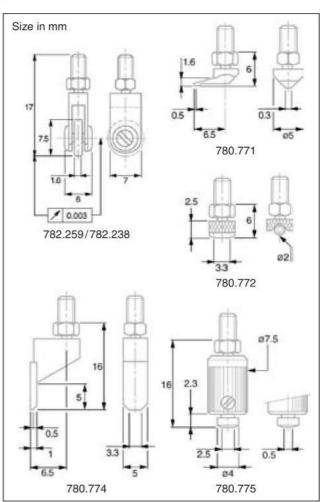
906.333

### 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.



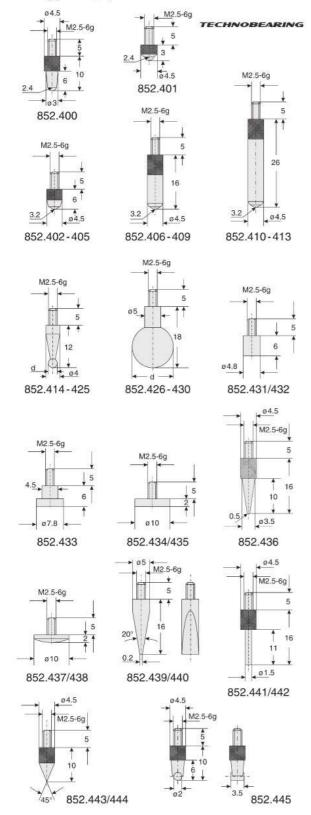
Item No.	Type	Price RUB
Ball rad	ius 1.5 mm:	
780.759	Steel	
780.760	Tungsten carbide	
780.766	4 interchangeable in	nserts
Ball rad	ius 5 mm:	
780.763	Steel	
780.764	Tungsten carbide	
Flat:		
780.776	Steel	
780.777	Tungsten carbide	
	Flat, adjustable mea	s. face



Item No.	Type	Price RUB
Special f	orms:	
782.259	Roller with a	
	cylindrical meas	suring face
782.238	Roller with a ba	11-
	shaped measuring	ng face
780.771	Offset point	7000
780.772	Cylindrical poir	nt
780.774	Offset line conta	act face
780.775	V-shaped adjust	able point
Extensio	ns:	
780.795	10 mm	
780.796	15 mm	
780.797	780.797 20 mm	
780.798	40 mm	
Special p	robe head:	
	Ceramic ball ø3	mm

### **Inserts**

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



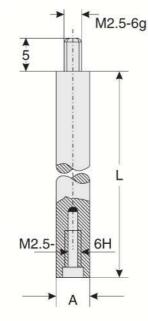
Item No. Description		Price RUB	
Ball probes:  852.400	l=10 mm l= 3.0 mm l= 6.0 mm l=16 mm l=16 mm l=16 mm l=26 mm l=26 mm l=26 mm l=21 mm l=12 mm	TC R S TC R S TC TC TC TC TC TC	
852.429 $d = 10.0 \text{ mm}$ 852.430 $d = 11.0 \text{ mm}$	l=18 mm $l=18$ mm		
Flat probes: 852.431 d= 4.8  mm 852.432 d= 4.8  mm 852.433 d= 7.8  mm 852.434 d=10.0  mm 852.435 d=10.0  mm	l=6 mm l=6 mm l=6 mm l=2 mm l=2 mm	TC TC	
Spherical probes:	1 12		
852.436 conical 852.437 $d=10.0 \text{ mm}$ 852.438 $d=10.0 \text{ mm}$	l=16 mm $l=2.0$ mm $l=2.0$ mm	TC	
<b>Knife-edged probes:</b> 852.439 $d$ =5.0 mm 852.440 $d$ =5.0 mm	<i>l</i> =16 mm <i>l</i> =16 mm	TC	
Needle-shaped probes: $852.441 d=1.5 \text{ mm}$ $852.442 d=1.5 \text{ mm}$	<i>l</i> =16 mm <i>l</i> =16 mm	TC	
Tapered probes:	<i>I</i> =10		
852.443	l = 10  mm l = 10  mm	TC	
Probe with cylindrical measuring face:			

852.445  $d = 2 \times 3.5 \text{ mm}$  l = 10 mm

# **Extensions for inserts**

Steel extensions for inserts with thread M2.5.

Item No.	Length mm	Price RUB
Extensions	with A = ø4 mm:	
852.446	10	
852.447	15	
852.448	20	
852.449	25	
852.450	30	
852.451	35	
852.452	40	
852.453	45	
852.454	50	
852.455	55	
852.456	60	
852.457	65	
852.458	70	
852.459	75	
852.460	80	
852.461	85	
852.462	90	
852.463	95	
852.464	100	

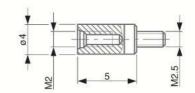


Item No.	Length mm	Price RUB
Extensions	with A = ø5 mm:	
852.465	10	
852.466	15	
852.467	20	
852.468	25	
852.469	30	
852.470	35	
852.471	40	
852.472	45	
852.473	50	
852.474	55	
852.475	60	
852.476	65	
852.477	70	
852.478	75	
852.479	80	
852.480	85	
852.481	90	
852.482	95	
852.483	100	

# **Adapters for inserts**

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

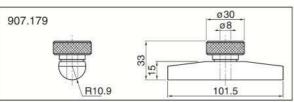
Item No.	External/internal thread	Price RUB
960.276	M2.5/M2	



# Depth measuring bases for dial indicators

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







	PUICE
	1
suring face lxw/mm	Price RUB
63 x 17	
101.5 x 17	

906.644	66	x 16	
With cylindr	ical meas	suring face:	
907.179	101.5	5 x R 10.9	

Item No.

907.153

907.165

Mea

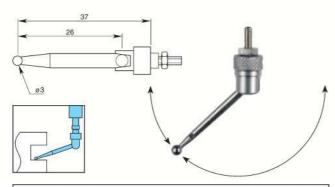
### Clamping bush



Item No.	Description	Price RUB
780.398	Clamping bush VKE	
780.397	Clamping screw VKD	

### 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 ø3 mm.



Item No.	Description	Price RUB
900.391	Swivel-type probe	

### 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: Ø8 mm.
- Clamping shaft: Ø8 mm.

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Item No.	Description	Price RUB
856.149	Angle probe	
	Special probe	

### Clamping bush



Item No.	Description	Price RUB
906.497	Clamping bush	

### 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 Ø5 mm.

- Probe measuring range: 10 mm.
- Clamping shaft: ø8 mm.

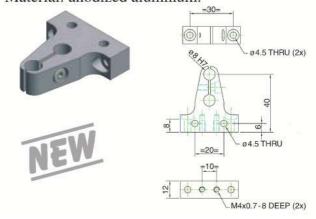


Item No. Description	Price RUB
782.440 Angle probe	

### Probe holder

Probe holder for for surfacemounting.

- Clamping shaft: Ø8 mm.
- For attaching with M4 bolts.
- Material: anodized aluminum.



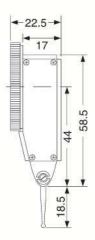
Item No.	Description	Price RUB
993.054	Probe holder	

Technobearing 2020051

# Lever-type test indicators

- Measuring range: up to 0.8 mm.
- Graduation: 0.01 or 0.002 mm.
- With dovetail joint and clamping stems Ø6 and Ø8 mm
- Dial diameter: 40 mm.
- Rotatable dial.
- Stylus tip: ø2 mm.
- Delivery with an inspection report.



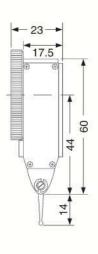
















Item No.	Measuring range/mm	Graduation mm	Scale numbering	Insert length/mm	Price RUB
907.941	0.8	0.01	0-40-0	19	
907.942	0.2	0.002	0-100-0	13	

### **Options:**

909.114 Steel spare stylus tip for 907.941

909.115 Steel spare stylus tip for 907.942

906.663 Ruby spare stylus tip for 907.941

906.664 Ruby spare stylus tip for 907.942





909.114/115

906.663/664



Clamping stem ø6/ø8 mm.

# 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 Ø6 mm.

■ Measuring force: <0.3 N (except 855.610: 0.05 N).

■ Tungsten carbide stylus tip: ø2 mm.

■ Insert thread: M1.7.



### Inserts for lever-type dial test indicators

Item No.	Effective length (EL)/mm	Ball ø/mm	
For 855.6	601, 855.605 and	855.610	:
	17.74	2	
859.152		1	
859.151	17.74	0.8	
859.290	17.74	0.5	
For 855.6	502:		
859.126	39.00	2	
859.291	39.00	1	
859.292	39.00	0.8	
859.293	39.00	0.5	
For 855.6	603 and 855.606:		
859.200	14.33	2	
859.294	14.33	1	
859.295	14.33	0.8	
859.296	14.33	0.5	
For 855.6	504:		
859.259	8.13	2	
859.297	8.13	1	
859.298	8.13	0.8	
859.299	8.13	0.5	
For 855.0	611:		
859.464	19.24	2	
859.465	19.24	1	
859.466	19.24	0.8	
859.467	19.24	0.5	

Item No.	Measuring range/mm	Graduation mm	Dial ø/mm	Scale numbering	Insert	Total insert length (TL)/mm	Price RUB
Horizonta	ıl:						
855.601	0.5	0.01	35	0-25-0	859.016	21.3	
855.602	1	0.01	35	0-50-0	859.126	42.8	
855.603	0.28	0.002	35	0-140-0	859.200	17.9	
855.604	0.14	0.001	35	0-70-0	859.259	11.7	
855.611	0.8	0.01	35	0-40-0	859.464	22.4	
855.610	0.5	0.01	35	0-25-0	859.016	21.3	
Perpendic	cular:						
855.605	0.5	0.01	35	0-25-0	859.200	21.3	
855.606	0.28	0.002	35	0-140-0	859.200	17.9	

### Accessories dial indicators/dial test indicators

Item No.	Description	Price RUB
909.433	Centering support Ø8 x 25 mm, holder Ø4 mm	
909.434	Rectangular fixing shaft 12 x 6 x 76 mm,	
	holder ø 4/ø 8 mm and dovetail clamp	
909.435	Rectangular fixing shaft 12 x 6 x 76 mm,	
	holder ø 6/ø 8 mm and dovetail clamp	
909.436	Rectangular fixing shaft 9x9x76 mm,	
	holder ø 4/ø 8 mm and dovetail clamp	
909.437	Rectangular fixing shaft 9 x 9 x 76 mm,	
	holder ø 6/ø 8 mm and dovetail clamp	
909.438	Round, swivelling fixing shaft ø6x70 mm,	
	holder with dovetail clamp	
909.439	Round, swivelling fixing shaft Ø8 x 70 mm,	
	holder with dovetail clamp	











### Reducer



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Item No.	Thread	Price RUB
	$\emptyset 8 \rightarrow 4 \text{ mm}$ $\emptyset 8 \rightarrow 6 \text{ mm}$	

# 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 ø27 mm.

■ Universal pivot with dovetail clamp.

Delivery incl. cylindrical support ø9.5 mm for insert in the collet chuck of a machine center.



Item No. Description Price R
781.997 Center-accessory

### **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: Ø 10 mm.
- Delivery in a case.



Item No.	Description	Price RUB
907.451	Centering device	
<b>Option:</b>	Probe set (7 pieces)	

# **Edge finders**

Edge finders for both stationary and rotating use. As soon as the workpiece is touched by the ball-probe 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.

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907.458

Clamping stem ø/mm	Length mm	Price RUB
20	162	
20	100	
nd signal:		
20	162	
20	100	
	ø/mm  20 20 and signal: 20	ø/mm mm  20 162 20 100  nd signal: 20 162

### Options:

836.535 Spare battery (2 needed) 497.931 Spare battery

# 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: Ø20 mm.
- Insert length 25 mm, stylus tip Ø4 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. TECHNOBEARING







Item No. Description	Accuracy mm	Repeatability mm	Price RUB
853.821 Analog 3D probe	±0.01	0.01	
853.822 Digital 3D probe	$\pm 0.005$	0.001	
Ontional			

### **Options:**

495.157 Spare battery

853.823 Spare insert 25 mm, tip diameter 4 mm

853.824 Spare insert 65 mm, tip diameter 8 mm

# **Edge finders**

Rotating edge finders for accurate edge location.

- Resolution: 0.005 mm.
- Repeatability: 0.005 mm.
- Range of use: 400 600 rpm.
- Hardness TiN measuring face: 2200 HV.



Item No.	Clamping stem ø/mm	Probe ø/mm	Material (measuring face)	Price RUB
909.360	8	10	steel	
909.361	10	10	steel	
909.362	8	4 and 10	steel	
909.363	10	4 and 10	steel	
909.364	6	6	steel	
909.365	10	10	steel + ceramic	
909.366	10	10	steel+TiN	
909.367	10	4 and 10	steel+TiN	

<b>Options:</b>
000 000

Options:		
909.368	Spring for 909.360/362	
909.369	Spring for 909.364	
909.359	Spring for 909.365	

Spring for 909.361/363/366/367

### 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 RUB
908.804	Z-axis setting gauge	
Option:		
498.823	Spare battery (2 need	led)

- Dimensions: ø54 x 50 mm (precise height to determine with external measuring instrument).
- Weight: 450 g.
- Power supply: 2 batteries type V389.



### Digital 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: 0.01 mm.
- With magnetic base.
- mm/inch conversion.





- Automatic switch-off.
- Height: 50 mm (precise height to determine with external measuring instrument).
- Weight: 377 g.
- Power supply: 1 battery type V357.
- Delivery with reference pin for insert in tool holder.

Item No.	Description	Price RUB
910.169	Z-axis setting gauge	
Option:		
836.535	Spare battery	

### 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.

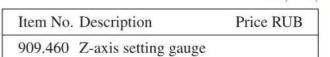
- Graduation: 0.01 mm.
- Repeatability: 0.02 mm.
- With magnetic base.
- Diameter dial



indicator: ø35 mm.

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- Height: 50 mm (precise height to determine with external measuring instrument).
- Weight: 1013 g.
- Delivery with reference pin for insert in tool holder.





### **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.



Item No.	Clamping shaft/mm	Column mm	Arm mm	Desc. of base	Dimensions $l \times w \times h/mm$	Magn. force 1/N	Thread of base	Price RUB
908.950	ø4/ø8	ø12 x 176	ø 10 x 150	V-groove	58 x 50 x 55	600 (S)	M8 x 1.25	
908.951	ø4/ø8	ø 12 x 176	ø10x150	V-groove	60 x 50 x 55	800 (S)	M8 x 1.25	
908.952	ø6/ø8	ø20 x 350	2 arms: ø 12 x 220 ø 10 x 150	V-groove	74 x 50 x 55	1000 <sup>(S)</sup>	M10x1.5	
908.958	ø8	ø 8 x 130		V-groove	36 x 30 x 35	400 (S)	M5 x 0.8	
908.972	ø8	ø 12 x 176	ø 10 x 210	V-groove	60 x 50 x 55	800 (S)	M8 x 1.25	
908.973	ø4/ø8	ø12 x 176	ø10x150	flexform	75 x 46 x 55	400 (P)	M8 x 1.25	
908.974	ø6	ø 7x 50		flat	$30 \times 30 \times 30$	170 (S)	$M5 \times 0.8$	
$908.946^{2}$	ø8	ø 12 x 190	ø 10 x 160	V-groove	54 x 40 x 47	800 (S)	M8 x 1.25	

<sup>&</sup>lt;sup>1</sup>S=switchable magnet; P=permanent magnetic force.

<sup>&</sup>lt;sup>2</sup> V-groove on 3 sides.

### **Dial indicator stands**

- Clamping shaft Ø8 mm for dial indicators and probes, and dovetail joint for lever-type dial
- Arm with mechanical central clamping device
- except 908.964 (permanent magnetic force), base with locking mechanism and permanent



Item No.	Clamping	Arm length¹/mm	Description of base	Dimensions lxwxh/mm	Magnetic force <sup>2</sup> /N	Thread of base	Price RUB
908.953	mechanical	320	V-groove	58 x 50 x 55	600 (S)	M8 x 1.25	
908.959	mechanical	340	V-groove	60 x 50 x 55	800 (S)	M8 x 1.25	
908.960	mechanical	285	V-groove	60 x 50 x 55	800 (S)	M8 x 1.25	
908.954	hydraulic	380	V-groove	58 x 50 x 55	600 (S)	M8 x 1.25	
	hydraulic	380	V-groove	60 x 50 x 55	800 (S)	M8 x 1.25	
	mechanical	150	V-groove	36 x 30 x 35	400 (S)	$M5 \times 0.8$	
908.964	mechanical	65	cylinder	ø30 x 25	170 (P)	M8 x 1.25	
908.975	mechanical	280	flexform	75 x 46 x 55	400 (P)	M8 x 1.25	
908.961	mechanical	280	vacuum base	ø90 x 25		M8 x 1.25	
908.956	mechanical	360	V-groove	60 x 50 x 55	800 (S)	M8 x 1.25	
908.957	mechanical	320	V-groove	60 x 50 x 55	800 (S)	M8 x 1.25	

<sup>&</sup>lt;sup>1</sup> The outstretched length between base and clamping shaft.

<sup>&</sup>lt;sup>2</sup> 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.

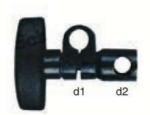


Item No. Des	scription	Dimensions lxwxh/mm	Magnetic force*/N	Thread	Price RUB
908.971 V-g	roove	60 x 50 x 55	800 (S)	M8 x 1.25	
908.970 V-g	roove	$74 \times 50 \times 55$	1000 (S)	M8 x 1.25	
908.969 flat	base	118 x 50 x 52	1500 <sup>(S)</sup>	M8 x 1.25	
908.967 V-g	roove	36 x 30 x 35	400 (S)	$M5 \times 0.8$	
908.976 flat	base	$30 \times 30 \times 30$	170 <sup>(S)</sup>	$M5 \times 0.8$	
908.968 flex	form	75 x 46 x 55	400 <sup>(P)</sup>	M8 x 1.25	
908.965 cyli	nder	ø 40 x 30	300 <sup>(P)</sup>	M8 x 1.25	
908.977 vac	uum base	ø90 x 25		M8 x 1.25	
402.196 grai	nite base	$150 \times 100 \times 40$		M8	

<sup>\*</sup>S=switchable magnet; P=permanent magnetic force.

### Fixing clamps for dial indicator stands

Item No.	Fixing cla	Fixing clamp ø/mm	
	d1	d2	
907.443	10	8/4	
907.442	10	8/6	
906.398	12	8/6	
907.440	12	10	
907.444	14	8/6	
906.399	20	12	
907.441	20	14	





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### Magnetic dial indicator stands

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

- Clamping shaft: Ø6 and Ø8 mm.
- Magnetic base with V-groove.
- Magnetic face at the back (except 855.707).







Item No.	Dimensions base $l \times w \times h/mm$	Magnetic force/N	Column mm	Arm mm	Thread of base	Price RUB
855.701	58 x 50 x 55	800	ø12 x 176	ø 10 x 150	M8	
855.705	$73 \times 50 \times 55$	1000	ø 20 x 178	ø 14 x 165	M8	
855.707	117 x 50 x 55	1300	ø20 x 365	ø 14 x 200	M20	

### Magnetic dial indicator stands

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

- Clamping shaft: Ø6 and Ø8 mm.
- Screw thread base: M8.
- Magnetic base with V-groove.
- Magnetic face at the back.

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

<sup>\*</sup> The outstretched length between base and clamping shaft.

### Flexible hoses for coolant with magnetic base

- Suitable for cooling on machines in places of the workpiece that are difficult to reach.
- With 1, 2 or 3 flexible hoses.
- Special coupling for supply hose Ø 8.5 mm.



### Support with magnetic base

- On/off switchable magnetic base with V-groove.
- Magnetic force: 588 N.
- Separate on/off switch for every flexible hose.
- Dimensions base  $l \times w \times h$ : 906.213: 62 x 51 x 73 mm, 906.214: 62 x 51 x 74 mm, 906.215: 69 x 51 x 75 mm.

### With round magnetic base

Item No.

906.216 906.217

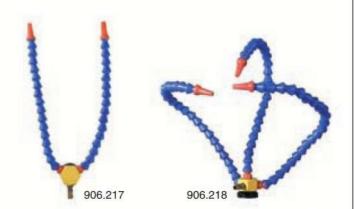
906.218

- Magnetic base Ø35 mm, with high adhesive force.
- Metal protection plate under magnetic base.

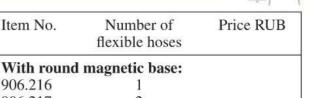




Number of flexible hoses	Price RUB
th magnetic base:	
1	
2	
3	
	flexible hoses

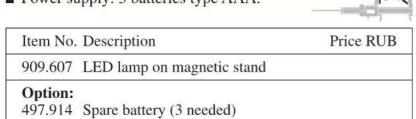


2 3



# LED lamp on magnetic stand

- Total length: 215 mm. ■ Magnetic force: 120 N.
- Power supply: 3 batteries type AAA.





# **Measuring stands**

- Clamping shaft: Ø8 mm.
- Transverse arm with fine adjustment.
- Arm length: 150 mm.
- Ground base.
- Base with V-groove (only 857.120).





857.121

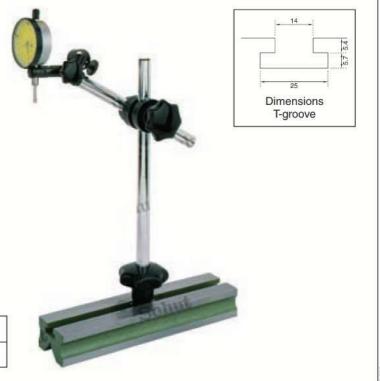
Item No.	Column ø/mm	Dimensions base/mm	Effective arm length/mm	Price RUB
857.120	16	65 x 40 x 140	250	
857.121	22	$60 \times 55 \times 250$	300	

# Measuring stand

- Clamping shaft: Ø8 mm.
- Effective arm length: 180 mm.
- Fine adjustment.
- Ground base with V- and T-groove, 250 x 60 x 35 mm.
- Column: Ø16 x 295 mm.
- Arm: ø16 x 235 mm.
- Mechanical clamping device.
- Dial indicator not included.



Item No.	Description	Price RUB
856.720	Measuring stand	



### **Measuring stands**

- Clamping shaft: Ø8 mm.
- Transverse arm with fine adjustment.
- Ground base with T-groove.
- Base with V-groove (only 909.376).

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Item No.	Column mm	Arm mm	Dimensions base/mm	Price RUB
906.219	ø 14 x 185	ø12 x 245	220 x 60 x 35	
909.376	ø16x290	ø16x310	$260 \times 60 \times 50$	



# Measuring stand with spindle adjustment

Measuring stand with clear graduation 0.02 mm on the spindle and a hand wheel for easy adjustment of the height setting.

- Clamping shaft: Ø8 mm.
- Spindle thread pitch: 2 mm.
- Column: ø35 mm.
- Transverse arm: Ø20 mm.
- Granite measuring table: 260 x 150 x 50 mm, measuring face: 250 x 150 mm, flatness according DIN 876/00.
- Total height: 410 mm.
- Max. measuring height: 160 mm.
- Delivery in a wooden case.



Item No. Description	Price RUB
907.789 Measuring stand	



### Measuring stand

Universal measuring stand, also suitable as a controlling measuring instrument.

- Clamping shaft Ø8 mm and dovetail joint.
- Fine adjustment.
- Granite measuring table:  $150 \times 100 \times 40$  mm, flatness:  $\leq 10 \mu m$ .
- Base with groove in the center.
- Screw thread base: M8.
- Long, right side face with two mounting bores (thread M5, distance 120 mm).
- Mechanical clamping device.
- Arm length: 300 mm (the outstretched length between base and clamping shaft).
- Delivery in an aluminum case.





Item No.	Description
----------	-------------

Price RUB

402.195 Measuring stand

### Measuring stand

- Clamping shaft: Ø8 mm.
- Total height: 200 mm.
- Max. measuring height: 90 mm.
- Effective arm length: 80 mm.
- Measuring table: 60 x 68 mm, ground and lapped.
- Dimensions transverse arm: Ø18 x 120 mm.
- Column: ø22 mm.
- Other dial gauge holders are available on request.



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Item No	. Description	Price RUB
857.130	Measuring stand	

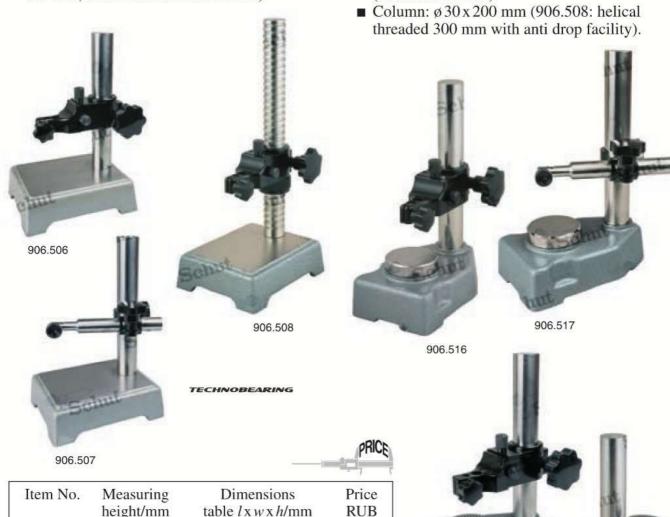


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#### **Measuring stands**

Universal measuring stands with a cast iron, ground measuring table.

- Clamping shaft: Ø8 mm (optional available clamp with clamping shaft Ø28 mm).
- Fine adjustment: 5 mm (906.506/508/516/518).
- Total height: 250 mm (906.508: 350 mm).
- Max. measuring height: 160 mm (906.508: 260 mm).
- Effective arm length: 68 mm (906.507: max. 105 mm, 906.517/519: max. 95 mm).
- Measuring table: ground, 906.506/507/508: flat anvil/base, 906.516/517: round flat anvil (height anvil: 13.5 mm), 906.518/519: round serrated anvil (height anvil: 13.5 mm).
- Flatness table: ≤10 μm.
- Dimensions transverse arm: Ø20 x 150 mm (906.507/517/519).



Item No.	Measuring height/mm	Dimensions table $l \times w \times h/mm$	Price RUB
906.506	140	140 x 105 x 50	
906.507	160	$140 \times 105 \times 50$	
906.508	260	140 x 105 x 50	
906.516	130	ø60 x 65	
906.517	145	ø60 x 65	
906.518	130	ø60 x 65	
906.519	145	ø60x 65	

Option:

999.679 Clamp ø 28 mm



8 (800) 700-72-07

#### **Measuring stands**

Universal measuring stands with a granite measuring table.

- Clamping shaft: Ø8 mm (optional available clamp with clamping shaft Ø28 mm).
- Fine adjustment: 5 mm (999.680).
- Total height: 240 mm (999.680/681), 355 mm (999.682/683), 370 mm (999.684/685).
- Max. measuring height: 260 mm (999.682/683/684/685).
- Effective arm length: max. 165 mm (999.682/683/684/685), (999.681: max. 105 mm, 999.680: 68 mm).

- Measuring table: granite.
- Flatness table:  $\leq 5 \mu m$  (999.684/685: delivery with an inspection report),  $\leq 10 \mu m$  (999.680/681/682/683).
- Dimensions transverse arm: Ø 20 x 150 mm (999.681), Ø 20 x 210 mm (999.682/683/684/685).
- Column: ø 30 x 200 mm (999.680/681), ø 30 x 300 mm (999.682/684), ø 30 x 300 mm (999.683/685: helical threaded with anti drop facility).



999.683/685

## Measuring stands

Measuring stands with a granite base in two models with a competitive priceperformance ratio.

- Clamping shaft: Ø8 mm.
- Max. measuring height: 250 mm.
- Anti drop facility.
- Granite table.
- Own product.

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Item No.	Measuring height/mm	Flatness table/µm	Dimensions table $l \times w \times h/mm$	Column ø/mm	Effective arm length/mm	Price RUB
402.165	150	10	150 x 100 x 40	25	62	
402.168	250	10	250 x 200 x 55	35	100	

# **Measuring stand**

Heavy-duty precision stand with alumina ceramic grooved table and plain column.

■ Clamping shaft: ø8 mm.

Max. measuring height: 135 mm.
Effective arm length: 62 mm.

■ Measuring table: 80 x 80 x 22 mm.

■ Flatness table:  $\pm 2 \mu m$ .

■ Column: Ø25 mm.

■ Base: 150 x 89 x 37 mm.

■ Anti drop facility.



# Measuring table

Grooved measuring table made of alumina ceramics as applied to measuring stand 334.690, with the typical advantages of ceramics: high degree of hardness and wear resistance.

■ Flatness: ±2 µm.

Dimensions: 80 x 80 x 22 mm.
Bottom-side: 3 tapped holes M6.



Item No.	Description	Price RUB
334.690	Precision stand	



Item No.	Description	Price RUB
841.078	Measuring table	

## **Measuring stands**

- Clamping shaft: Ø8 mm.
- Total height: 310 mm.
- Max. measuring height: 180 mm.
- Hard-chrome plated and ground column: ø35 mm.
- 857.126 and 857.128 with adjustable transverse arm (ø22 mm), length 220 mm.
- Granite measuring table: 260 x 150 x 48 mm (lxwxh), measuring face: 200 x 150 mm, flatness according DIN 876/00.



Item No.	Column	Effective arm length/mm	Price RUB
857.125	plain	104	
857.126		175	
857.127	helical threaded	104	
857.128	helical threaded	175	



## Measuring stands

- Clamping shaft: Ø20 mm or Ø32 mm.
- Max. measuring height: 290 mm.
- Effective arm length: 167 mm.
- Column: ø50 mm.
- 996.190/315 with anti drop facility.
- Granite measuring table:  $400 \times 400 \times 70$  mm, flatness:  $\leq 5 \mu m$ .
- Delivery with an inspection report.
- DIN 876/0.
- Own product.

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996.190

Item No. Column	Clamping shaft/mm	Price RUB
996.190 plain	ø20	
996.189 helical threaded	ø 20	
996.315 plain	ø 32	

#### Option:

344.470 Reducing bush ø 20/8 mm

#### Bench center

Cast iron base with the measuring face's accuracy according DIN 876/1. Supplied with two tailstocks, one with a fixed center point and one with an adjustable center point by means of a lever.

■ Center height: 100 mm.

■ Max. center distance: 450 mm.

■ Center points: 60°.

■ Stroke moveable center point: 8 mm.

■ Delivery incl. measuring stand 857.141 (column ø 22 x 230 mm, clamping shaft 8H7, with fine adjustment), excl. dial indicator or measuring probe.

■ Larger models with granite base are available on request.

Item No. Type	Price RUB	
857.131 RP 100-450		

■ Dimensions measuring face: 700 x 180 mm (incl. face for stand). ■ Total height: 320 mm.

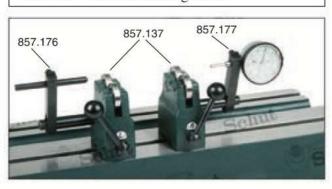
■ Width T-slot: 12H7.

■ Weight: 35 kg.



8	57	.1	3	1

Item No.	Description	Price RUB
857.179	Pair of center points with tungsten carbid	
857.178	Pair of center points with bore	COST LINE CONTRACTOR AND A SAME A
857.175	Pair of prism inserts	
857.136	Pair of V-blocks	
857.137	Pair of roller blocks	
857.176	Stop	
857.177	Dial indicator holder	•
857.141	Extra measuring star	nd



#### Center points (ø 22 mm)

■ With tungsten carbide point 60°, or with bore according DIN 332-A 1.6 x 3.8.



#### Prism inserts 90°

- Capacity: Ø8-45 mm.
- Center height at Ø 10 mm: 130 mm.



#### V-blocks 90° and roller blocks

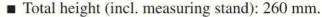
- Capacity V-blocks: Ø8-50 mm.
- Capacity roller blocks: Ø2-60 mm.
- Center height at ø 10 mm: 100 mm.
- Stop (857.176): Ø8 mm.
- Dial indicator holder (857.177): shaft 8H7.

#### **Bench centers**

Cast iron base with the measuring face's accuracy according DIN 876/1. Supplied with two tail-stocks, one with a fixed center point and one with an adjustable center point by means of a lever.

- Center height: 50 mm (without V-shaped supports) or 75 mm (P models; with V-shaped supports on the tailstocks).
- Max. center distance: 200 or 350 mm.
- Center points: 60°.
- Capacity V-shaped supports: ø5-20 mm.
- Stroke moveable center point: 8 mm.
   Delivery incl. measuring stand 857.140 (column ø 16 x 220 mm, clamping shaft 8H7, with fine adjustment), excl. dial
- Dimensions measuring face: 350 x 110 or 500 x 110 mm (including face for measuring stand).

indicator or measuring probe.



- Width T-slot: 10H7.
- Vertical models are also available.



85	7	1	3	3

Item No. Type	Center height mm	Max. center distance/mm	Measuring face/mm	Weight kg	Price RUB
857.132 RP 50-200	50	200	350 x 110	8	
857.133 RP 75-200P	75	200	$350 \times 110$	9	
857.134 RP 50-350	50	350	500 x 110	11	
857.135 RP 75-350P	75	350	$500 \times 110$	12	

Item No.	Description	Price RUB			
857.174	Pair of center points				
857.155	Pair of center points with bore	[1] 등장성장은 - 장난이터(1985년 1987년 1987년 1948년 1947년 1941년 1987년 1941년 1987년			
857.180	Pair of prism inserts				
857.138	Pair of V-blocks				
857.139	Pair of roller blocks				
857.172	Stop				
857.173	Dial indicator holder				
857.140	Extra measuring stand				



857.138



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#### Center points (ø 16 mm)

■ With tungsten carbide point 60°, or with bore according DIN 332-A 1.6 x 3.8.





#### Prism inserts 90°

- Capacity: Ø3-15 mm.
- Center height at ø 10 mm: 70 mm (RP 50) or 95 mm (RP 75).



#### V-blocks 90° and roller blocks

- Capacity V-blocks: Ø5-25 mm.
- Capacity roller blocks: Ø2-40 mm.
- Center height at Ø 10 mm: 65 mm.
- Stop (857.172): Ø8 mm.
- Dial indicator holder (857.173): shaft 8H7.

#### **Granite surface plates**

Black granite surface plates according to DIN 876 specifications. Sizes vary from 250 x 250 mm to 2000 x 1000 mm.

- Delivery with an inspection report.
- Straight beveled edges.
- Cover (synthetic leather) optionally available.
- Surface plate stand optionally available (see "surface plate accessories" elsewhere in this catalog).

#### Granite plate cleaner

Special granite plate cleaner to keep the surface of your granite surface plate clean and useable for a long period. Dust, dirt, grease stains, finger and hand prints can easily be removed. A clean and smooth surface provides low friction, less wear and the most accurate measurements. The non-corrosive property of the cleaner prevents corrosion damage to metal products.



Delivery ex Groningen, Netherlands

Dimensions $lxwxh$	Weight <sup>1</sup>	Accuracy according DIN 876/1	Accuracy according DIN 876/0	Accuracy according DIN 876/00	Cover <sup>2</sup>
mm	kg	Item No. Price RUB	Item No. Price RUB	Item No. Price RUB	Item No. Price RUB
250x 250x 50	) 13	402.000	402.020	402.040	402.250
400 x 250 x 50	20	402.001	402.021	402.041	402.251
400 x 400 x 70	) 41	402.002	402.022	402.042	402.252
630 x 400 x 70	) 65	402.003	402.023	402.043	402.253
630x 630x 80	108	402.004	402.024	402.044	402.254
800 x 500 x 100	136	402.005	402.025	402.045	402.255
900x 600x100	188	402.006	402.026	402.046	402.256
1000x 630x100	223	402.007	402.027	402.047	402.257
1000x 630x150	317	402.008	402.028	402.048	402.257
1000 x 1000 x 100	342	402.009	402.029	402.049	402.258
1000 x 1000 x 150	504	402.010	402.030	402.050	402.258
1200 x 800 x 120	394	402.011	402.031	402.051	402.259
1200 x 800 x 150	) 467	402.012	402.032	402.052	402.259
1500 x 1000 x 150	750	402.013	402.033	402.053	402.260
1500 x 1000 x 200	971	402.014	402.034	402.054	402.260
2000 x 1000 x 200	1295	402.015	402.035	402.055	402.261
2000 x 1000 x 250	1600	402.016	402.036	402.056	402.261

<sup>&</sup>lt;sup>1</sup> Weight including wooden packing.

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<sup>&</sup>lt;sup>2</sup> Dimensions of the covers are equal to the length and the width of the surface plate, all covers have a depth of 50 mm.

# Cast iron surface plates

Extra heavy, cast iron surface plates.

- Three models:
  - milled (smoothened), accuracy according DIN 876/3,
  - hand scraped, accuracy according DIN 876/1,
  - fine scraped, accuracy according DIN 876/0.
- The side faces of all plates are milled and varnished.
- Surface plate stand optionally available (see "surface plate accessories" elsewhere in this catalog).





Delivery ex Groningen, Netherlands

Dimensions $lxw$	Weight kg	Accuracy according DIN 876/3	Accuracy according DIN 876/1	Accuracy according DIN 876/0
mm	(approx.)	Item No. Price RUB	Item No. Price RUB	Item No. Price RUB
200 x 200	7	403.236	403.208	403.185
250x 250	12	403.237	403.209	403.186
300 x 300	15	403.238	403.210	403.187
400 x 250	25	403.239	403.211	403.188
400 x 400	35	403.240	403.212	403.189
500 x 500	50	403.241	403.213	403.190
600 x 400	45	403.242	403.214	403.191
630x 630	90	403.243	403.215	403.192
800 x 500	95	403.249	403.221	403.193
1000 x 600	140	403.245	403.217	403.194
$1000 \times 1000$	270	403.246	403.218	403.195
1200 x 800	300	403.250	403.222	403.196
$1500 \times 1000$	650	403.247	403.219	403.197
2000 x 1000	1000	403.248	403.220	403.198

## Surface plate supports

- For use with large granite or cast iron surface plates with a minimum size of 1000 x 630 mm.
- Support adjustable in height, with adjusting bolt and lock nut.
- For granite and cast iron surface plates it is advisable to use 5 surface plate supports, 3 for the Bessel points and 2 for tilt protection or a set of 5 supports, consisting of 3 surface plate supports and 2 sleeping points.

■ Delivery incl. adjusting bolt and lock nut, excl. required supporting cup.

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	-	ø50 ø42	
<b>+</b>		1	0
ţ			999.55



403.298 + 999.553 (5 pieces) + 997.343

Item No.	Description	Heigl	Price	
	THE STATE OF A STATE OF STATE	min.1	max.1	RUB
403.253	Surface plate support	550	580	
403.254	Surface plate support	650	680	
403.298 <sup>2</sup>	Set of 5 supports	550	580	
$403.299^2$	Set of 5 supports	650	680	
999.5533	Supporting cup (per piece)			
997.3434	Support set			

<sup>&</sup>lt;sup>1</sup>Height without supporting cup and supporting set (incl. adjusting bolt and lock nut).



Support with supporting cup and supporting set.



Sleeping point with supporting cup and supporting set.

## Support set for surface plates

Support set for placing a small surface plate on a working table.

- Set consists of support based on 3 Bessel points and two tilt protectors.
- 35 37 17.5 ø40 ø40

Item No. Description	Price RUB
997.343 Support set	

- Stainless steel construction.
- Diameter: 40 mm.



<sup>&</sup>lt;sup>2</sup> Set consists of 3 supports and 2 tilt protectors.

<sup>&</sup>lt;sup>3</sup> Required for granite and cast iron surface plates.

<sup>&</sup>lt;sup>4</sup>Required for granite surface plates (in combination with supporting cups).

#### Surface plate stands

Extremely solid surface plate stands with excellent price-performance ratio. Support of the surface plate is determined on the basis of the bessel points and has an optional slide protection and chest of drawers. Working height is depending on the surface plate thickness. The models for surface plates equal to or larger than 1000 x 1000 mm directly bear the load at the bessel points to the floor.

■ Delivered incl. support (bessel) and sleeping points.

■ Difference min. and max. height incl. surface plate: 25 mm.

■ Delivered in color RAL 7035.

■ Custom made is optionally available.



Sleeping point.



131.100 + 402.028

Delivery ex Groningen, Netherlands

Ontions

Item No.	For granite surface plates dimensions	25500 255	ace plate	Price RUB
_	lxwxt/mm	min./mm	max./mm	_
Surface pla	nte stand (standard mod	el):		
$131.100^{1}$	630x 630x 80	880	905	
$131.100^{1}$	800 x 500 x 100	900	925	
$131.100^{1}$	900x 600x100	900	925	
$131.100^{1}$	1000 x 630 x 100	900	925	
131.100 <sup>1</sup>	1000x 630x150	950	975	
131.104	2000 x 1000 x 200	850	875	
131.104	2000 x 1000 x 250	900	925	
Surface pla	nte stand (prepared for c	hest of draw	ers):	
131.1011	630x 630x 80	880	905	
$131.101^{1}$	800 x 500 x 100	900	925	
131.1011	900x 600x100	900	925	
131.1011	1000 x 630 x 100	900	925	
131.1011	1000x 630x150	950	975	
131.102	1000 x 1000 x 100	850	875	
131.102	1000 x 1000 x 150	900	925	
131.102	1200 x 800 x 120	870	895	
131.102	1200 x 800 x 150	900	925	
131.103	1500 x 1000 x 150	850	875	
131.103	1500 x 1000 x 200	900	925	

<sup>&</sup>lt;sup>1</sup>Does not directly bear the load to the floor at the bessel points.

Item No.	For granite surface Price					
	plates dimensions RUE lxwxt/mm					
Slide prot	ection <sup>2</sup> for surface plate stands:					
131.105	630x 630x 80					
131.106	800 x 500 x 100					
131.107	900 x 600 x 100					
131.108	1000 x 630 x 100/150					
131.109	1000 x 1000 x 100/150					
131.110	1200 x 800 x 120/150					
131.111	1500 x 1000 x 150/200					
131.112	2000 x 1000 x 200/250					
Bessel and	d sleeping points:					
$131.115^3$	Sleeping point (tilt protection)					
	(height: 30 mm higher than standard					
$131.116^3$	Bessel point					
	(height: 30 mm higher than standard)					
Chest of d	Irawers:					
131.113 <sup>2</sup>	Chest of drawers					
	(RAL 5015), incl. fasteners,					
	$610 \times 480 \times 470 \text{ mm } (w \times d \times h);$					
	3 drawers.					
	Inside dimensions drawers $(w \times d \times h)$ :					
	upper drawer: 515 x 395 x 90 mm,					
	middle drawer: 515 x 395 x 105 mm,					
	lower drawer: 515 x 395 x 135 mm.					

<sup>&</sup>lt;sup>2</sup> Incl. fasteners.

<sup>&</sup>lt;sup>3</sup>Sleeping 2 and bessel points 3 needed.

# V-blocks / Vises / Angle plates / Cylindrical squares Squares / Parallels / Straight edges



## V-blocks in pairs

V-blocks for clamping, processing, aligning and inspecting cylindrical objects, available in three classes.

Class 3: Parallelism: 60 μm. Base and prism face smooth planed, short and long side processed.

Class 1: Parallelism: 16 µm. Base and prism face hand scraped, short and long side processed.

Class 0: Parallelism: 8 µm. Base and prism face and short side fine scraped, long side processed.

Ground in matched pairs.

■ V-groove: 90°.



Dimensions $lxwxh$ mm	Capa- city ø/mm	Weight p. pair kg	Item No.	Class 3 Price RUB p. pair	Item No.	Class 1 Price RUB p. pair	Item No.	Class 0 Price RUB p. pair
Steel:			E.				-	
100 x 40 x 30	6- 50	1.4	403.39	6	403.39	0	403.38	0
150x 50x40	8 - 60	3.6	403.39	7	403.39	1	403.38	1
High-quality g	ray cast ir	on:						
200 x 70 x 50	8 - 75	6.1	403.39	8	403.39	2	403.38	2
250x 85x60	10-100	10	403.39	9	403.39	5	403.38	3
$300 \times 100 \times 70$	15 - 120	15	403.40	0	403.39	3	403.38	4

#### X-blocks in pairs

The X-blocks have four V-grooves of 90°, all varying in size.

- Class 1: Parallelism: 16 μm.
   Flatness of the measuring faces according DIN 876/1.
   All surfaces hand scraped.
   Class 0: Parallelism: 8 μm.
   Flatness of the measuring faces according DIN 876/0.
   All surfaces fine scraped.
- All four V-grooves are ground in matched pairs.
- Material: high-quality gray cast iron.
- V-groove: 90°.
- Holds workpieces on all faces.



Dimensions	Capa-	Weight		Class 1	(	Class 0
lxwxh mm	city ø/mm	p. pair kg	Item No.	Price RUB p. pair	Item No.	Price RUB p. pair
120 x 100 x 60	8- 90	6	403.37	0	403.36	60
150 x 130 x 75	8 - 110	10.4	403.37	1	403.36	51
200 x 170 x 90	8 - 150	25	403.37	2	403.36	52

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# **Magnetic V-blocks**

■ Accuracy: ±0.02 mm/100 mm.

■ On/off switch.

■ V-groove: 90°.







Item No.	Dimensions $l \times w \times h/mm$	Capacity ø/mm	Magnetic force/N	Weight kg	Price RUB
906.207	70 x 60 x 72	8-50	686	1.8	
906.208	$100 \times 70 \times 95$	6-55	1178	3.7	

# **Magnetic V-blocks**

Magnetic force: 200 N.Ground in matched pairs.

■ V-groove: 90°.

■ Weight: 2.2 kg (per piece).



Item No.	Dimensions $l \times w \times h/mm$	Capacity ø/mm	Price RUB
906.210	100 x 50 x 80	6-70	



# **Magnetic V-block**

■ V-groove: 90°.

■ Magnetic force of round spindle axis in V-groove: 450 N, magnetic force of base

plate: 450 N.

TECHNOBEARING

Item No.	Dimensions $l \times w \times h/mm$	Capacity ø/mm	Price RUB
855.200	125 x 60 x 73	6-50	



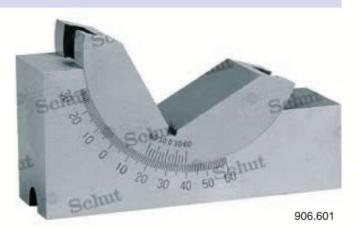
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## Adjustable V-blocks

V-blocks adjustable from 0 to +60 degrees and 0 to -15 degrees. Suitable for metal cutting machines and for various measuring purposes.



Item No.	Dimensions $lxwxh/mm$ Price RUB
906.600	75 x 25 x 32.5
906.601	102 x 30 x 48
906.602	102 x 46 x 48



## V-blocks in pairs

- Parallelism measuring faces: ±4 μm.
- Squareness of front face with bottom face according DIN 2274.
- Hardened (650 ± 100 HV5).
- Ground in matched pairs.
- V-groove: 90°.
- Delivery incl. clamp.

# V-blocks in pairs

- Parallelism measuring faces: ±4 µm.
- Squareness of all side faces with each other according DIN 2274.
- Hardened (650 ± 100 HV5).
- Ground in matched pairs.
- V-groove: 90°.
- Delivery incl. clamp.



Item No.	Dimensions $l \times w \times h/mm$	Capacity ø/mm	Price RUB
666.550	50 x 40 x 40	5-30	
666.551	75 x 55 x 55	5-50	
666.552	$100 \times 75 \times 75$	7 - 70	



Item No.	Dimensions $l \times w \times h/mm$	Capacity ø/mm	Price RUB
666.540	60 x 58 x 40	5-30	
666.541	75 x 70 x 54	5-50	
666.542	$100 \times 96 \times 75$	7 - 70	

#### **Granite V-blocks in pairs**

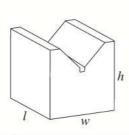
■ V-groove: 90°.

■ Material: granite.

Processed in matched pairs.

■ Delivery in a aluminum case (except 402.158/162).

■ Delivery with an inspection report.





Dimensions lxwxh/mm	Capacity ø/mm	Weight kg <sup>1</sup>	Item No.	Accuracy μm <sup>2</sup>	Price RUB	Item No.	Accuracy μm <sup>2</sup>	Price RUB
			Class 1:			Class 0:		
63 x 63 x 63	10- 50	1.4	402.155	± 6		402.159	±3	
$100 \times 100 \times 100$	15 - 75	5.6	402.156	± 8		402.160	±4	
100 x 160 x 160	25 - 125	14.2	402.157	± 8		402.161	±4	
160 x 250 x 250	60 - 200	55.2	402.158	±10		402.162	±5	

<sup>&</sup>lt;sup>1</sup> Weight per pair.

# Magnetic induction blocks in pairs

These magnetic induction blocks are not magnetized themselves. They are placed on a magnetic chuck to induce, to hold objects as for example round bars.



Item No.	Dimensions lxwxh/mm	Weight kg	Price RUB
909.377	100 x 50 x 25	1.18	
909.378	50 x 60 x 48	1.13	

- Material: steel and aluminum alloy.
- Ground in matched pairs.

#### V-blocks (909.378)

■ Capacity: ø7-50 mm.

■ V-groove: 90°.



#### **Magnetic holders**

**Dimensions** 

h x w/mm

 $80 \times 120$ 

100 x 155

■ Angles 45°, 90° and 135°.



Item No.

909.342

909.332

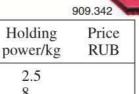
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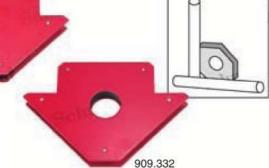
Thickness

mm

14

17





8

<sup>&</sup>lt;sup>2</sup> Parallelism between measuring faces and base.

## **Precision clamping tools**

Miniature clamping tools for clamping of small products. Very well suited for measuring for example with roughness testers, microscopes or measuring machines.

#### **Precision vises**

- Accuracy (parallelism, flatness and squareness): 0.02 mm.
- 856.081: brass, matt chrome-plated; 856.082 and 856.083: aluminum, matt anodized.
- Standard supplied with 2 pairs of jaws (hardened stainless steel and plastic): 1 side with a ground horizontal and vertical prism and 1 flat side.
- 856.081 and 856.082: provided with 2 x M4 threaded bores with center distances 42 and 62.5 mm;

856.083: provided with 2 x M6 threaded bores with center distance approx. 83 mm.

#### Clamp jaw sets

Sets consisting of 1 pair plastic jaws, 1 pair with stepped jaws and 1 jaw with a stopper in the horizontal prism.

#### Base plates

For mounting of the precision vises using a central M6 threaded bore.



Item No.	Jaw opening mm	Jaw width mm	Jaw depth mm	Length mm	Weight kg	Price RUB
856.081	14	15	8	50	0.075	
856.082	23	25	15	75	0.16	
856.083	32	35	21	100	0.4	



#### **Options**

Item No.	Description	Price		
	•	RUB		
Clamp ja	w sets:			
856.084	For 856.081			
856.085	For 856.082			
856.086	For 856.083			
Base plate	es:			
856.087	For 856.081			
856.088	For 856.082			
856.089	For 856.083			





#### Indexable collet

- Clamping range: 0.4-6 mm.
- Per approx. 45 degrees indexable.
- Aluminum, blasted.



Mounting by means of two M6 threaded bores on the bottom-side.



Item No.	Clamping range mm	Dimensions lxwxh/mm	Price RUB
856.090	0.4-3.5	26 x 21 x 34	
856.091	1.2-6	26 x 26 x 39	

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#### **Precision vises**

Hardened precision vises for accurate measurements and machine operations.

- Accuracy (parallelism, flatness and squareness):
  - $\leq$ 100 mm jaw opening = 0.005 mm,
  - > 100 mm jaw opening = 0.005 mm per 100 mm.
- With horizontally and vertically ground prism in the moveable jaw.







■ Stable and accurate to fix in each angle position (0 to 45°).

#### Universal precision vise

- With 360° rotatable base.
- Accurate degree scale.
- Stable and accurate to fix in each angle position (0 to 45°).



909.746

Item No.	Jaw opening mm	Jaw width mm	Jaw depth mm	Length mm	Price RUB
Precision	vises:				
909.733	60	50	25	150	
909.734	80	75	35	200	
909.735	120	100	45	250	
909.736	155	125	50	300	
909.737	25	25	10	65	
909.738	65	50	25	140	
909.739	100	75	35	190	
909.740	120	100	45	240	
909.741	155	125	50	280	
Precision	sine vises wit	h swivelling	front axis:	e 2000e	
909.742	60	50	25	140	
909.743	100	75	35	190	
909.744	120	100	45	250	
Precision	sine vises wit	h swivelling	rear axis:		
909.745	60	50	25	140	
909.746	100	75	35	190	
909.747	120	100	45	250	
Universa	l sine vises:	Latina .		23.000	
909.748	60	50	25	140	
909.749	90	75	35	200	
909.750	120	100	45	250	
909.751	155	125	50	300	
Universa	l precision vis	e:			
909.752	80	70	30	-	





909.752

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## Modular precision vises

Hardened precision vises for fixation for various machine operations.

- With or without 90° rotatable base.
- Accuracy (parallelism, flatness and squareness):
  - $\leq$  100 mm jaw opening = 0.005 mm,
  - >100 mm jaw opening = 0.005 mm per 100 mm.
- Also available:
  - intermediate sizes with other jaw depths and jaw openings,
  - larger models with jaw width 200 or 300 mm and jaw opening up to 600 mm.



909.702



#### TECHNOBEARING

Jaw opening	Jaw width	Jaw depth	Length	Without ro	tatable base	With rota	atable base
mm	mm	mm	mm	Item No.	Price RUB	Item No.	Price RUB
100	100	30	270	909.702		909.706	
150	125	40	345	909.703		909.707	
200	150	50	420	909.704		909.708	
400	175	60	655	909.705		909.709	



### Long modular vises

Long hardened vises for fixation for various machine operations.

- Single or two-sided model.
- Also available:
  - intermediate sizes with other jaw depths and jaw openings,

 larger models with jaw width 200 mm and jaw opening up to 700 mm (single) or 250 mm (two-sided).





909.714



Jaw width mm	Jaw depth mm	Length mm	Item No. Ja	Single w opening/mm Price RUB	Item No. Ja	Two-sided w opening/mm Price RUB
100	30	460	909.710	290	909.714	90
125	40	520	909.711	320	909.715	100
150	50	580	909.712	360	-	1.—1:
150	50	680	s—s	-	909.716	160
175	60	866	909.713	600	909.717	220

#### Short modular vises

Short hardened vises for fixation for various machine operations.

■ With fixed jaw, fixed double jaw or moveable jaw.







909.723

909.728

909.718

		PRICE
10	4	-

Jaw width	Jaw depth	Length	Height	Fixe	ed jaw	Fixed d	ouble jaw	Movea	able jaw
mm	mm	mm	mm	Item No.	Price RUB	Item No.	Price RUB	Item No.	Price RUB
100	30	140	65	909.723		909.728	Ş	909.718	
125	40	160	80	909.724		909.729		909.719	
150	50	230	100	909.725		909.730		909.720	
175	60	240	118	909.726		909.731		909.721	
200	65	300	135	909.727		909.732		909.722	

### Precision sine plates

■ Stable and accurate to fix in each angle position (0 to 45°).

#### **Precision sine plates**

■ Accuracy (parallelism and squareness):  $\leq 100 \text{ mm dimension } l \text{ or } w = 0.005 \text{ mm},$ 

> 100 mm dimension l or w = 0.005 mm per 100 mm.

■ Mounting hole pattern 909.690: 13x M5, 909.691: 23x M5.

#### Magnetic precision sine plates

Permanently magnetic sine plates for positioning and holding small or odd-shaped workpieces.

■ Center distance of the support cylinders:

909.692: 76 mm, 909.693: 127 mm.



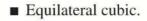
Item No.	Dimensions/mm	Price RUB
Precision s	sine plates:	
909.690	$100 \times 100 \times 50$	
909.691	152 x 152 x 57	
Magnetic 1	precision sine plates:	
909.692	100 x 100 x 117	
909.693	152 x 152 x 117	



## Granite square blocks with V-nut and tapped holes

Multifunctional granite blocks for e.g. flatness and squareness measurements, with V-nut and several tapped holes. Hold workpieces on several faces.

- Accuracy measuring faces: flatness conforms to DIN 876/0, squareness conforms to DIN 875/1.
- Screw thread of tapping holes: 402.170: M6, 402.171/172: M8.





Item No.	Dimensions mm	Flatness µm	Squareness µm	Weight kg	Price RUB
402.170 <sup>1</sup>	160 x 160 x 160	4	8	9.6	
402.171	200 x 200 x 200	5	9	17	
402.172	250 x 250 x 250	5	10	34	



## Four-sided cast iron parallel blocks in pairs

Hollow but yet stable cast iron parallel blocks because of the internal bridge construction.

- Class 3: Parallelism: 64 µm. Smooth planed.
  - Class 1: Parallelism: 16 µm. Hand scraped.
- Class 0: Parallelism: 8 µm. Fine scraped.
- Flatness conforms to DIN 876.
- Squareness conforms to DIN 875.
- Plan parallel and square matched in pairs.

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Dimensions lxwxh/mm	Weight p. pair/kg	Class 3 Item No. Price RUB	Class 1 Item No. Price RUB	Class 0 Item No. Price RUB
150 x 150 x 100	18	403.628	403.624	403.620
200 x 150 x 100	28	403.629	403.625	403.621
300 x 225 x 150	60	403.630	403.626	403.622
400 x 300 x 200	140	403.631	403.627	403.623

### Cast iron angle blocks with several clamping possibilities

Cast iron angle block, with four clamping faces with several slots and taps, for aligning and clamping of tools and products. The four faces are planparallel and square matched.

■ Slot width: 18 mm (403.607: 20 mm).

Item No.	Dimensions lxwxh/mm	Parallelism µm	Squareness µm	Weight kg	Price RUB
403.605	250 x 150 x 100	50	35	13	
403.606	300 x 200 x 150	52	40	23	
403.607	$400 \times 250 \times 200$	56	46	55	



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<sup>&</sup>lt;sup>1</sup> Delivery with an inspection report.

#### Cast iron clamping tables with several clamping possibilities

These cast iron clamping tables offer many possibilities for aligning and clamping products for mechanical processing. The six faces are parallel and square milled. Four of these faces are equipped with several clamping slots and the top face with T-slots.

- Flatness according DIN 876/3.
- T-slots according DIN 650.



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Item No.	Dimensions $l \times w \times h/mm$	Weight kg	Nom. value T-slots/mm	Slot width mm	Price RUB
403.610	250 x 180 x 150	25	14	16	
403.611	$300 \times 220 \times 200$	37	14	18	
403.612	$350 \times 280 \times 250$	70	22	22	
403.613	400 x 350 x 300	115	22	22	
403.614	500 x 450 x 400	180	22	22	
403.615	800 x 700 x 600	670	28	30	

### Cast iron angle plates with several clamping slots

These cast iron angle plates have several clamping slots both in the base and the clamping face, which make them suitable for all kind of fixtures.

- Flatness according DIN 876.
- Squareness according DIN 875.
- Strengthened outsides.
- Slots in base and clamping face.



Item No.	Dimensions lxwxh/mm	Weight kg	Flatness and square- ness/µm	Slot width mm	Price RUB
Class 3, I	DIN 876/3, DIN 8	75/2:			
403.292	150 x 75 x 100	4	30	12	
403.293	200 x 100 x 150	8	30	14	
403.294	275 x 150 x 200	20	40	17	
403.295	300 x 150 x 250	24	45	19	
403.296	400 x 225 x 300	45	50	23	
403.297	500 x 300 x 400	85	60	23	
Class 1, I	DIN 876/2, DIN 8	375/1:			
403.286	150 x 75 x 100	4	15	12	
403.287	200 x 100 x 150	8	15	14	
403.288	275 x 150 x 200	20	20	17	
403.289	300 x 150 x 250	24	22	19	
403.290	400 x 225 x 300	45	25	23	
403.291	500 x 300 x 400	85	30	23	
Class 0, I	DIN 876/1, DIN 8	75/0:			
403.280	150 x 75 x 100	4	7	12	
403.281	200 x 100 x 150	8	7	14	
403.282	275 x 150 x 200	20	9	17	
403.283	300 x 150 x 250	24	11	19	
403.284	400 x 225 x 300	45	12	23	
403.285	500 x 300 x 400	85	15	23	

## Cast iron angle plates

- Ground faces.
- With T-slots.
- Accuracy: flatness according DIN 876, squareness according DIN 875.

#### TECHNOBEARING



Dimensions $l \times w \times h/mm$	Weight kg	DIN 876/3 and 875/2 Item No. Price RUB	DIN 876/2 and 875/1 Item No. Price RUB	DIN 876/1 and 875/0 Item No. Price RUB
150x 75x100	6	403.264	403.261	403.267
200 x 100 x 150	11	403.276	403.273	403.270
275 x 150 x 200	24	403.265	403.262	403.268
300 x 150 x 250	33	403.277	403.274	403.271
400 x 225 x 300	54	403.266	403.263	403.269
500 x 300 x 400	105	403.278	403.275	403.272

## Steel cylindrical squares

Ground and lapped steel cylinder for checking squareness e.g. during the acceptation process of machines and instruments. Out of roundness and straightness:  $\leq 1.5 \, \mu m$ .

Item No.	Dimensions mm	Squareness p-p/µm	Price RUB
852.190	ø 90 x 200	2	
852.191	ø90 x 250	2.2	
852.192	ø90 x 300	2.5	
852.193	ø90 x 350	2.8	
852.194	ø90 x 400	3	



## Steel cylindrical squares

Ground and lapped steel cylinder for checking squareness.

- Out of roundness and straightness:  $\leq 5 \mu m$ .
- Delivery with an inspection report.

Item No.	Dimensions mm	Squareness p-p/µm	Price RUB
906.436	ø 80 x 200	3	
906.437	ø 80 x 315	4	
906.438	ø 100 x 500	5	
906.439	ø 140 x 800	7	

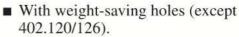




Technobearing 2020

# **Granite squares**

- Triangular model.
- Material: granite.
- Straight beveled edges.



 Delivery in an aluminum case with an inspection report.





Item No.	Dimensions h x w x t/mm	Squareness <sup>1</sup> µm	Flatness <sup>2</sup> µm	Weight kg	Price RUB
DIN 875/	<b>'0:</b>				
402.120	100 x 63 x 16	±4	2	0.3	
402.121	$160 \times 100 \times 20$	±4	2	0.8	
402.122	250 x 160 x 25	±5	2 2	2.4	
402.123	$400 \times 250 \times 40$	±7	2.5	7.5	
402.124	630 x 400 x 63	±9	3	25.5	
$402.125^3$	1000 x 630 x 80	±12	5	102	
DIN 875/	<b>'00:</b>				
402.126	100 x 63 x 16	±2	1	0.3	
402.127	$160 \times 100 \times 20$	±2	1	0.8	
402.128	250 x 160 x 25	$\pm 2.5$	1	2.4	
402.129	$400 \times 250 \times 40$	$\pm 3.5$	1.2	7.5	
402.130	630 x 400 x 63	$\pm 4.5$	1.5	25.5	
$402.131^3$	1000 x 630 x 80	±6	2.5	102	

<sup>&</sup>lt;sup>1</sup> Squareness between measuring face and base.

# **Granite squares**

- Square model.
- Material: granite.
- Straight beveled edges.
- With weight-saving holes.

Delivery in an aluminum case with an inspection report.



Item No.	Dimensions h x w x t/mm	Squareness $\mu m^1$	Weight kg	Price RUB
Class 0:				
402.145	200 x 200 x 25	±4	2.6	
402.146	250 x 250 x 30	$\pm 4.5$	4.9	
402.147	315 x 315 x 30	$\pm 5.2$	7.7	
402.148	$400 \times 400 \times 40$	±6	14.5	
402.149	$500 \times 500 \times 50$	±7	33	
Class 00:	8			
402.150	$200 \times 200 \times 25$	±2	2.6	
402.151	250 x 250 x 30	$\pm 2.2$	4.9	
402.152	315 x 315 x 30	$\pm 2.6$	7.7	
402.153	$400 \times 400 \times 40$	±3	14.5	
402.154	500 x 500 x 50	$\pm 3.5$	33	

<sup>&</sup>lt;sup>1</sup> Squareness between adjacent measuring faces.





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<sup>&</sup>lt;sup>2</sup> Flatness of measuring face and base.

<sup>&</sup>lt;sup>3</sup> Weight included package.

# Flat steel squares

- Lapped measuring faces.
- Accuracy according DIN 875.

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Item No.		Cross- section/mm	
Class III:	200		
670.061	100 x 70	20 x 5	
670.065	$300 \times 175$	35 x 7	
670.066	$400 \times 200$	35 x 7	
670.067	$500 \times 250$	40 x 8	
DIN 875/2	2:		
670.041	75 x 50	15 x 5	
670.042	100 x 70	20 x 5	
670.043	$150 \times 100$	25 x 5	
670.044	$200 \times 130$	30x 6	
670.045	250 x 165	35 x 7	
670.046	$300 \times 175$	35 x 7	
670.047	$400 \times 200$	35 x 7	
670.048	$500 \times 250$	40 x 8	
670.0491	$600 \times 300$	40 x 8	
670.051 1,2	$1000 \times 500$	50 x 10	

Item No.	Dimensions mm	Cross- section/mm	
DIN 875/	1:		
670.022	75 x 50	15 x 5	
670.023	100 x 70	20 x 5	
670.024	$150 \times 100$	25 x 5	
670.025	$200 \times 130$	30x 6	
670.026	250 x 165	35 x 7	
670.027	$300 \times 200$	40 x 8	
670.028	$400 \times 265$	45 x 10	
670.029	500 x 330	$50 \times 10$	
$670.030^{1}$	$600 \times 400$		
DIN 875/	0 (with inspec	tion report):	
670.002	$75 \times 50$	15 x 5	
670.003	100 x 70	20 x 5	
670.004	$150 \times 100$	25 x 5	
670.005	$200 \times 130$	30x 6	
670.006	250 x 165	35 x 7	
670.007	$300 \times 200$	40 x 8	
670.008	$400 \times 265$	45 x 10	
670.009	500 x 330	$50 \times 10$	

<sup>&</sup>lt;sup>1</sup> Incl. transport package.

<sup>&</sup>lt;sup>2</sup> Delivery ex Groningen, Netherlands.

# Flat stainless steel squares

Item No.	Dimensions mm	Cross- section/mm	Price RUB
DIN 875/2	2:		
670.142	75 x 50	15 x 5	
670.143	100 x 70	20 x 5	
670.144	$150 \times 100$	25 x 5	
670.145	$200 \times 130$	30x 6	
DIN 875/	1:		
670.122	75 x 50	15 x 5	
670.123	100 x 70	20x 5	
670.124	$150 \times 100$	25 x 5	
670.125	$200 \times 130$	30x 6	
670.126	250 x 165	35 x 7	
670.127	$300 \times 200$	40 x 8	
670.128	$400 \times 265$	45 x 10	
670.129	500 x 330	$50 \times 10$	
$670.130^{1}$	600 x 400	$50 \times 10$	
DIN 875/0	, hardened (wi	ith inspection r	eport):
670.751	50 x 40	12x 5	
670.752	$75 \times 50$	15 x 5	
670.753	100 x 70	20 x 5	
670.754	$150 \times 100$	25 x 5	
670.755	$200 \times 130$	30x 6	
670.758	$250 \times 165$	35 x 7	
670.759	$300 \times 200$	40 x 8	
670.760	$400 \times 265$	$45 \times 10$	
670.761	500 x 330	50 x 10	

<sup>&</sup>lt;sup>1</sup> Incl. transport package.

- Hardened stainless steel.
- Lapped measuring faces.
- Accuracy according DIN 875.



# Wooden cases for squares

Wooden cases for flat squares.



#### TECHNOBEARING

Item No.	Dimensions square/mm Price RUB
670.464	50 x 40/75 x 50
670.465	100 x 70
670.466	150 x 100
670.467	200 x 130
670.468	250 x 165/300 x 200
670.888	400 x 265
670.470	500 x 330

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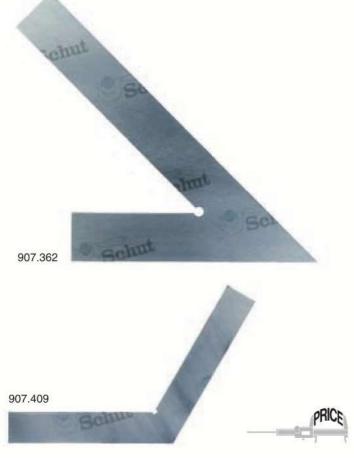
# Flat stainless steel squares

- Hardened stainless steel.
- Lapped measuring faces.
- Accuracy according DIN 875.

Item No.	Dimensions mm	Cross- section/mm	Price RUB
DIN 875/	1:		
907.301	75 x 50	15 x 5	
907.302	100 x 70	20 x 5	
907.303	$150 \times 100$	25 x 5	
907.304	$200 \times 130$	30 x 6	
907.305	$250 \times 160$	35 x 7	
907.306	$300 \times 200$	$40 \times 8$	
DIN 875/	0:		
907.282	50 x 40	$12 \times 3.5$	
907.283	75 x 50	15 x 5	
907.284	100 x 70	20 x 5	
907.285	$150 \times 100$	25 x 7	
907.286	$200 \times 130$	30 x 7	



# Flat steel squares



Item No.		Cross- section/mm	
Acute an	gle squares 45	°, DIN 875/2:	
907.359	100 x 70	20 x 5	
907.360	120 x 80	20 x 5	
907.361	$150 \times 100$	$20 \times 5$	
	$200 \times 130$		
Acute an	gle squares 60	°, DIN 875/2:	
907.383	100 x 70 120 x 80	20 x 5	
907.384	120 x 80	$20 \times 5$	
	$150 \times 100$		
907.386	$200 \times 130$	25 x 5	
Hexagon	squares 120°,	DIN 875/2:	
907.407	50 x 50	15 x 5	
907.408	75 x 75	18 x 5	
907.409	$100 \times 100$	20 x 5	
907.410	$150 \times 150$	25 x 5	
907.411	$200 \times 200$	30 x 6	
	squares 135°,		
907.417	50 x 50	15 x 5	
907.418	75 x 75	18 x 5	
907.419	$100 \times 100$	$20 \times 5$	
907.420	$150 \times 150$	25 x 5	
	$200 \times 200$		

# Steel squares with base

- Lapped measuring faces.
- Accuracy according DIN 875.

TECHNOBEARING



Item No.		Cross- section/mm	
Class III:			
670.264	$250 \times 165$	35 x 7	
670.265	$300 \times 175$	35 x 7	
670.268	$600 \times 300$	40 x 8	
$670.270^2$	$1000 \times 500$	$50 \times 10$	
DIN 875/2	2:		
670.241	75 x 50	15 x 5	
670.242	100 x 70	20 x 5	
670.243	$150 \times 100$	25 x 5	
670.244	$200 \times 130$	30x 6	
670.245	$250 \times 165$	35 x 7	
670.246	$300 \times 175$	35 x 7	
670.247	$400 \times 200$	35 x 7	
670.248	$500 \times 250$	40 x 8	
670.2491	$600 \times 300$	40 x 8	
$670.250^{1}$	$750 \times 375$	45 x 10	
670.251 1,2	$1000 \times 500$	$50 \times 10$	

Item No.		Cross- section/mm	
DIN 875/	1:		
670.222	75 x 50	15 x 5	
670.223	100 x 70	20 x 5	
670.224	$150 \times 100$	25 x 5	
670.225	$200 \times 130$	30x 6	
670.226	250 x 165	35 x 7	
670.227	$300 \times 200$	40 x 8	
670.228	$400 \times 265$	45 x 10	
670.229	$500 \times 330$	50 x 10	
$670.230^{1}$	$600 \times 400$		
DIN 875/	0 (with inspec	tion report):	
670.202	$75 \times 50$	15 x 5	
670.203	100 x 70	20 x 5	
670.204	$150 \times 100$	25 x 5	
670.205	$200 \times 130$	30x 6	
670.206	250 x 165	35 x 7	
670.207	$300 \times 200$	40 x 8	
670.208	400 x 265	45 x 10	
670.209	500 x 330	50 x 10	

<sup>&</sup>lt;sup>1</sup> Incl. transport package.

<sup>&</sup>lt;sup>2</sup> Delivery ex Groningen, Netherlands.

## Stainless steel squares with base

Item No.	Dimensions	Cross-	Price
	mm	section/mm	RUB
DIN 875/	2:		
670.343	100 x 70	20 x 5	
670.344	$150 \times 100$	25 x 5	
670.345	$200 \times 130$	30x 6	
670.346	250 x 165	35 x 7	
670.347	$300 \times 200$	40 x 8	
DIN 875/	1:		
670.322	75 x 50	15 x 5	
670.323	100 x 70	20 x 5	
670.324	$150 \times 100$	25 x 5	
670.325	$200 \times 130$	30x 6	
670.326	250 x 165	35 x 7	
670.327	$300 \times 200$	40 x 8	
670.328	$400 \times 265$	$45 \times 10$	
670.329	$500 \times 330$	$50 \times 10$	
670.3301	$600 \times 400$	$50 \times 10$	
DIN 875/0	, hardened (wi	ith inspection r	eport):
670.851	50 x 40	12x 5	
670.852	75 x 50	15 x 5	
670.853	100 x 70	20x 5	
670.854	$150 \times 100$	25 x 5	
670.855	$200 \times 130$	30x 6	
670.762	250 x 165	35 x 7	
670.763	$300 \times 200$	40 x 8	
670.764	$400 \times 265$	45 x 10	
670.765	$500 \times 330$	$50 \times 10$	

<sup>&</sup>lt;sup>1</sup> Incl. transport package.

- Hardened stainless steel.
- Lapped measuring faces.
- Accuracy according DIN 875.



All squares can be delivered with an inspection report or a certificate of a recognized measuring laboratory.

For the larger squares it is important to realize that external factors affect the stability of squares, which may influence the accuracy unfavourably.

# Wooden cases for squares

Wooden cases for squares with base.



#### TECHNOBEARING

Item No.	Dimensions square/mm Price RUB
670.464	50 x 40/75 x 50
670.465	100 x 70
670.884	150 x 100
670.885	200 x 130
670.887	250 x 165/300 x 200
670.888	400 x 265
670.889	500 x 330

Technobearing 2020

# Stainless steel squares with base

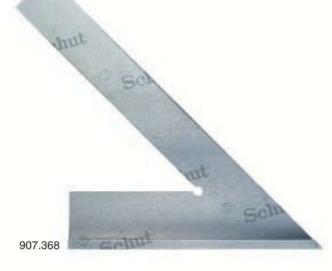
- Hardened stainless steel.
- Lapped measuring faces.
- Accuracy according DIN 875.

Item No.	Dimensions mm	Cross- section/mm	Price RUB
DIN 875/	1:		
907.287	75 x 50	15 x 5	
907.288	100 x 70	20 x 5	
907.289	$150 \times 100$	25 x 5	
907.290	$200 \times 130$	30x6	
907.291	$250 \times 160$	35 x 7	
907.292	$300 \times 200$	40 x 8	
DIN 875/	0:		
907.272	50 x 40	12 x 5	
907.273	75 x 50	15 x 5	
907.274	100 x 70	20 x 5	
907.275	$150 \times 100$	25 x 5	
907.276	$200 \times 130$	30x6	



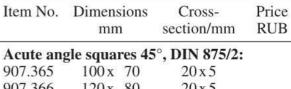


# Steel squares with base





#### TECHNOBEARING



Acute angle squares 60°, DIN 875/2:					
907.368	200 x 130	25 x 5			
907.367	$150 \times 100$	20 x 5			
907.366	120 x 80	20 x 5			

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907.389	100 x 70	20 x 5
907.390	120 x 80	$20 \times 5$
907.391	$150 \times 100$	20 x 5
907.392	$200 \times 130$	25 x 5

Mitre squ	ares 135°, DIN	N 875/2:
907.427	100 x 70	$20 \times 5$
907.428	120 x 80	$20 \times 5$
907.429	$150 \times 100$	$20 \times 5$
907.430	$200 \times 130$	$25 \times 5$

C07.307.

# Hardened stainless steel squares with heavy beam

#### TECHNOBEARING

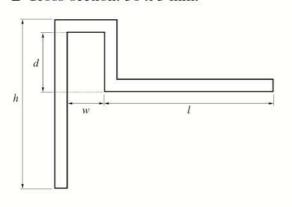
Item No.	Dimensions mm	Cross- section/mm	Price RUB
With knif	fe-edges (DIN	875/00):	
670.601	50 x 40	14x10/16x2	
670.602	75 x 50	$14 \times 10 / 18 \times 2$	
670.603	100 x 70	$16 \times 10 / 18 \times 2$	
670.604	$150 \times 100$	$20 \times 12/22 \times 2$	
670.605	$200 \times 130$	24 x 14/26 x 3	

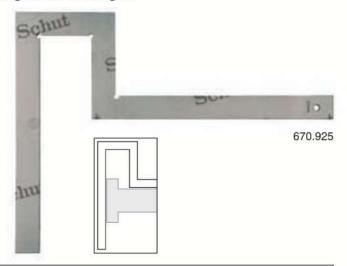


# Flange squares

Special fitter's square. For instance for accurate alignment of flanges.

- Material: steel, galvanised.
- Cross-section: 30 x 5 mm.





Item No. D		Dimensions/mm		m	Max. deviation from squareness	Max. deviation from flatness	Price RUB
	l	h	w	d	of test surfaces/mm	of test surfaces/mm	
670.925	300	300	65	105	0.3	0.12	
670.926	400	400	65	115	0.3	0.12	
670.927	500	500	70	125	0.4	0.16	
670.928	600	600	70	125	0.4	0.16	

### Adjustable squares

Precise base with sliding straight edge. The straight edge can be moved continuously along the base and can be firmly clamped by the spindle. All measuring faces are ground and the complete square is hardened. The adjustable straight edge enables working with for instance short edges and grooves.



Item No.	Dimensions straight edge/mm	Dimensions base/mm	Price RUB
907.874	60 x 4 x 4	23 x 40 x 10	
909.407	125 x 8 x 8	$30 \times 75 \times 12$	



### Squares with heavy beam

- Hardened stainless steel.
- Lapped measuring faces.
- Accuracy according DIN 875/0.



Item No.	Dimensions mm	Cross- section/mm	Price RUB
907.262	50 x 40	14x10/16x2	
907.263	75 x 50	$14 \times 10 / 16 \times 2$	
907.264	100 x 70	$18 \times 12/20 \times 3$	
907.265	$150 \times 100$	24 x 14/25 x 3	
907.266	$200 \times 130$	28 x 16/30 x 4	



# Squares with heavy beam and knife-edges

- Hardened stainless steel.
- Lapped measuring faces.
- Accuracy according DIN 875/00.



Item No.	Dimensions mm	Cross- section/mm	Price RUB
907.245	50 x 40	14 x 10/16 x 2	
907.246	75 x 50	$14 \times 10 / 16 \times 2$	
907.247	100 x 70	$18 \times 12/20 \times 3$	
907.248	$150 \times 100$	24 x 14/25 x 3	
907.249	$200 \times 130$	28 x 16/30 x 4	



C07.304. Technobearing 202008

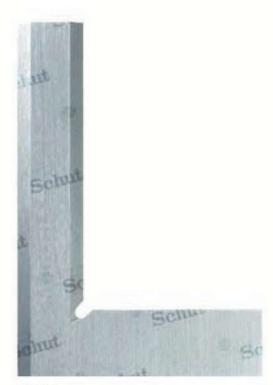
# **Beveled edge squares**

- Hardened stainless steel.
- Lapped measuring faces.
- Accuracy according DIN 875/00.

#### TECHNOBEARING



Item No.	Dimensions mm	Cross- section/mm	Price RUB
907.250	50 x 40	12 x 4	
907.251	75 x 50	16 x 4	
907.252	100 x 70	20 x 5	
907.253	$150 \times 100$	25 x 6	
907.254	$200 \times 130$	$30 \times 7$	



907.252

# **Beveled edge squares**

- Hardened steel.
- Ground and lapped measuring faces.
- Accuracy according DIN 875/00.

Item No.	Dimensions/mm	Price RUB
Bright stee	el:	
670.403	50 x 40	
670.404	75 x 50	
670.405	100 x 70	
670.406	$150 \times 100$	
670.407	$200 \times 130$	
Stainless s	teel:	
670.433	50 x 40	
670.434	75 x 50	
670.435	100 x 70	
670.436	$150 \times 100$	
670.437	200 x 130	



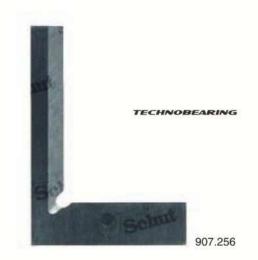
C07.215. Technobearing 20200

# Toolmakers' squares

- Hardened stainless steel.
- Lapped measuring faces.
- Accuracy according DIN 875/00.



Item No.	Dimensions mm	Cross- section/mm	Price RUB
907.255	25 x 20	6x3.5/5x3.5	
907.256	$40 \times 28$	$8 \times 3.5 / 5 \times 3.5$	



## Toolmakers' squares

Flat beveled edge squares, with the knifeedge on the inside.

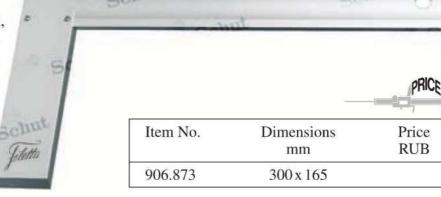
Item No.	Dimensions mm	Angle	Price RUB
852.220	25 x 20	90°	
852.222	$40 \times 28$	90°	
852.223	$40 \times 28$	89°30'	
852.224	$40 \times 28$	90°30'	



# Aluminum square with graduation

- Measuring range: 0-300 mm.
- Graduation: 1 mm.
- Anodized aluminum.
- With base for scribing lines in 90° and 45°.
- Cross-section base: 40 x 14 mm, Cross-section ruler: 50 x 5 mm.





#### Toolmakers' set

#### Consisting of:

- 1 beveled straight edge: 100 mm,

- 1 flat beveled edge square: 75 x 50 mm,

- 1 flat beveled edge square: 40 x 28 mm,

- 1 flat beveled edge square: 25 x 20 mm,

-1 scriber: 8 x 8 x 60 mm.

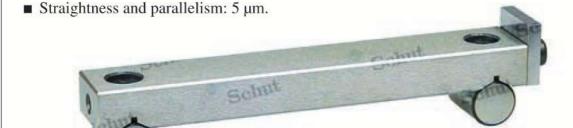
#### TECHNOBEARING

Item No. Description	Price RUB
852.201 Toolmakers' set	



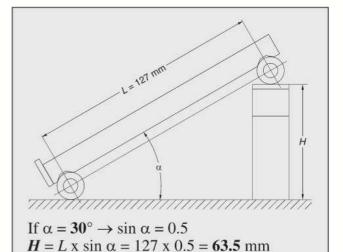
#### Sine bar

By means of a sine bar and with gauge blocks, a reference plane can be created (l=150 mm, w=25 mm) at an angle of  $0^{\circ}$  to  $60^{\circ}$  with respect to the base. The base of the sine bar consists of two rollers with a center to center distance of  $127 \pm 0.004$  mm. In order to make a curve the gauge blocks are placed under one of the rollers.





Item No.	Description	Price RUB
909.417	Sine bar	



207.216. Technobearing 2020

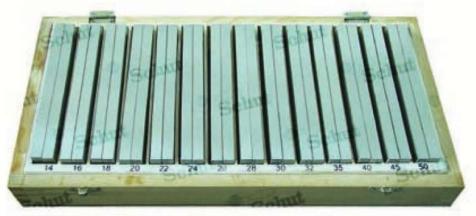
## Steel parallel blocks

Parallels to position and layout workpieces in e.g. clamping jaws for drilling, grinding, milling and measuring. The workpieces and assemblies can easily be set up to the desired working height.

- Parallelism of the two measuring faces: ±0.005 mm.
- Size deviation (height): ±0.01 mm.
- Hardness: 55 HRC.

- Ground in matched pairs.
- Produced of a high-grade steel alloy.
- Delivery in a case with a manufacturer's certificate.





906.996



Item No.	Length mm	Price RUB	Width mm	Height mm
Set of 12 909.800 909.804 906.995	pairs: 100 125 150		10	14-16-18-20-22-24- 26-28-30-32-35-40
Set of 14 909.802 909.805 906.996	pairs: 100 125 150		10	14-16-18-20-22-24- 26-28-30-32-35-40- 45-50
Set of 24 909.803	100		8 10	11-16-21-26-31-36 13-18-23-28-33-38
909.806 906.997	125 150		12 14	15-20-25-30-35-40 17-22-27-32-37-42

TECHNOBEARING

# Granite parallels in pairs

Flatness, parallelism and straightness of measuring surfaces according DIN 874.

- Material: granite.
- Straight beveled edges.
- Delivery with an inspection report.



Item No.	Flatness/ Parallelism µm¹	Price RUB	Item No.	Flatness/ Parallelism µm¹	Price RUB	Dimensions mm	Weight per pair kg
Class 0, 2	-sided:		Class 00,	2-sided:			
402.104	± 3		402.112	±1.5		160 x 25 x 16	0.5
402.105	± 4		402.113	±2		250 x 40 x 25	1.6
402.106	± 8		402.114	±4		400 x 63 x 40	6.5
402.107	±12		402.115	±6		630 x 100 x 63	24.7
Class 0, 4	-sided:		Class 00,	4-sided:			
402.100	± 3		402.108	±1.5		160 x 25 x 16	0.5
402.101	± 4		402.109	±2		250 x 40 x 25	1.6
402.102	± 8		402.110	±4		400 x 63 x 40	6.5
402.103	±12		402.111	±6		630 x 100 x 63	24.7

<sup>&</sup>lt;sup>1</sup> Flatness and parallelism between opposite surfaces.

## **Granite straight edges**

Flatness, parallelism and straightness of measuring surfaces according DIN 874.

- From length 1000 mm equipped with two bores.
- Material: granite.
- Straight beveled edges.
- Delivery with an inspection report.



Item No.	Dimensions mm	Weight kg	Straightness/ Flatness/µm	Parallelism µm	Price RUB
Class 0:					
402.135	400 x 60 x 25	2	$\pm 2.6$	±13	
402.136	630 x 100 x 35	7	$\pm 3.5$	±18	
402.137	1000 x 160 x 50	27	±5	$\pm 25$	
$402.138^{1}$	1600 x 250 x 80	138	±7.4	±37	
$402.139^{1}$	2000 x 300 x 100	210	±9	±45	
Class 00:					
402.140	400 x 60 x 25	2	$\pm 1.6$	±8	
402.141	630 x 100 x 35	7	$\pm 2.1$	$\pm 10.5$	
402.142	1000 x 160 x 50	27	±3	±15	
$402.143^{1}$	1600 x 250 x 80	138	±4.4	±22	
$402.144^{1}$	2000 x 300 x 100	210	±5.4	±27	

TECHNOBEARING

<sup>&</sup>lt;sup>1</sup> Weight included package.

# Bright steel and stainless steel straight edges DIN 874/1 and 874/0

- Length: 500-6000 mm.
- Rectangular cross-section up to length 1500 mm, from length 2000 mm I-shaped with two grip slots.
- Flatness of the measuring faces according DIN 874.
- Straight edges of length 1000 mm and longer are marked on the side face at the Bessel points.



#### **Bright steel**

Item No.	Dimensions/mm	Price RUB
DIN 874/1		
776.131	500 x 40 x 8	
776.140	750x 50x10	
776.132	1000 x 50 x 10	
776.133	1500x 60x12	
776.134	2000 x 70 x 15	
776.135	2500x 80x15	
776.136	3000 x 100 x 16	
776.137	$4000 \times 120 \times 20$	
776.138	5000 x 140 x 20	
776.139	$6000 \times 140 \times 20$	
DIN 874/0		
776.121	500x 50x10	
776.120	750x 50x10	
776.122	1000x 60x12	
776.123	1500x 70x15	
776.124	2000 x 80 x 15	
776.125	2500 x 100 x 16	
776.126	$3000 \times 120 \times 20$	
776.127	$4000 \times 140 \times 20$	
776.128	5000 x 140 x 20	
776.129	6000 x 140 x 20	

#### Stainless steel

Item No.	Dimensions/mm	Price RUB		
DIN 874/1	1			
776.231	$500 \times 40 \times 8$			
776.374	$750 \times 50 \times 10$			
776.232	$1000 \times 50 \times 10$			
776.233	1500 x 60 x 12			
776.234	2000 x 70 x 15			
776.235	$2500 \times 80 \times 15$	2500 x 80 x 15		
DIN 874/0	<u>.</u>			
776.221	$500 \times 50 \times 10$			
776.130	750 x 50 x 10			
776.222	1000 x 60 x 12			
776.223	1500 x 70 x 15			
776.224	2000 x 80 x 15			

TECHNOBEARING

### Bright steel and stainless steel straight edges DIN 874/2

- Length: 500-6000 mm.
- Rectangular cross-section up to length 3000 mm, from length 4000 mm I-shaped with two grip slots.

■ Flatness according DIN 874/2.



#### **Bright steel**

Item No.	Dimensions/mm	Price RUB	
776.141	500x 30x 6		
776.142	750x 40x 8		
776.143	1000 x 40 x 8		
776.144	1500x 50x10		
776.145	2000 x 60 x 12		
776.146	2500x 70x15		
776.147	3000 x 80 x 15		
776.148	4000 x 100 x 16		
776.149	5000 x 120 x 20		
776.150	$6000 \times 120 \times 20$		

#### Stainless steel

Item No.	Dimensions/mm	Price RUB
776.388	500 x 30 x 6	
776.389	$750 \times 40 \times 8$	
776.380	$1000 \times 40 \times 8$	
776.381	$1500 \times 50 \times 10$	
776.382	2000 x 60 x 12	
776.383	$2500 \times 70 \times 15$	
776.384	$3000 \times 80 \times 15$	

#### Bright steel and stainless steel straight edges class 3

Class 3 straight edges are not standardized, i.e. there is no standard in which the accuracy classes are laid down. The accuracy is approximately maximum the double of the permissible error conform DIN 874/2.

#### **Bright steel**

Item No.	Dimensions/mm	Price RUB
776.151	500 x 30 x 6	
776.152	750 x 30 x 6	
776.153	$1000 \times 30 \times 6$	
776.154	1500 x 40 x 8	
776.155	$2000 \times 40 \times 8$	
776.156	$2500 \times 40 \times 8$	
776.157	$3000 \times 50 \times 10$	
776.158	4000 x 60 x 12	
776.159	5000 x 70 x 15	
776.160	6000 x 80 x 15	

#### Stainless steel

Item No.	Dimensions/mm	Price RUB
776.161	500 x 30 x 6	
776.162	$750 \times 30 \times 6$	
776.163	$1000 \times 30 \times 6$	
776.164	1500 x 40 x 8	
776.165	$2000 \times 40 \times 8$	
776.166	2500 x 40 x 8	
776.167	$3000 \times 50 \times 10$	
776.168	4000 x 60 x 12	
776.169	$5000 \times 70 \times 15$	
776.170	6000 x 80 x 15	

### **Aluminum straight edges**

Light and therefore easy-to-use straight edges. Especially when using longer straight edges this is undoubtedly of great significance.

- Highly wear resistant.
- Highly corrosion resistant.
- Surface hardness: 500-550 HV.
- Highly insulating.
- With protective coating, thickness: 50 µm.
- With grip slots: class 2: from length 2500 mm, class 1 and 0: from length 1500 mm.
- Accuracy according DIN 874.



Item No.	Dimensions mm	Weight kg	Price RUB
DIN 874/	2:		
776.191*	500x 60x12	0.7	
776.192*	1000 x 60 x 12	1.4	
776.193*	1500x 60x12	2.1	
776.194*	2000 x 60 x 12	2.8	
776.195	2500 x 100 x 16	7.2	
776.196	3000 x 100 x 16	8.7	
776.197	4000 x 100 x 16	11.6	
776.198	5000 x 150 x 20	26.7	
776.199	6000 x 150 x 20	32.1	

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\* Without grip slots.

Item No.	Dimensions mm	Weight kg	Price RUB
DIN 874/	1:		
776.181*	500x 60x12	0.7	
776.182*	1000x 60x12	1.4	
776.183	1500 x 100 x 12	4.3	
776.184	2000 x 100 x 12	5.8	
776.185	2500 x 100 x 12	7.2	
776.186	$3000 \times 150 \times 20$	15.9	
776.187	4000 x 150 x 20	21.3	
776.188	5000 x 150 x 20	26.7	
776.189	6000x150x20	32.1	
DIN 874/	0:		
776.171*	500x 60x12	0.7	
776.172*	1000 x 60 x 12	1.4	
776.173	1500 x 100 x 16	4.3	
776.174	2000 x 100 x 16	5.8	
776.175	2500 x 100 x 16	7.2	
776.176	3000 x 150 x 20	15.9	
776.177	4000 x 150 x 20	21.3	
776.178	5000 x 150 x 20	26.7	
776.179	6000 x 150 x 20	32.1	

# Steel straight edges for mounting

I-shaped construction with wide and extra wide measuring faces for application of spirit levels.

- Length: 500-6000 mm.
- Flatness of the measuring faces according DIN 874.
- Larger sizes available on request.



#### **DIN 874/1**

Item No.	Dimensions/mm	Price RUB
406.610	1000 x 100 x 30	
406.615	1500 x 100 x 30	
406.620	2000 x 120 x 40	
406.625	2500 x 120 x 40	
406.630	3000 x 140 x 40	
406.640	$4000 \times 140 \times 40$	
406.622	5000 x 160 x 40	
406.641	6000 x 160 x 40	
With extra	wide measuring fac	ces:
406.636	500x 80x40	
406.637	750x 80x40	
406.614	1000 x 160 x 50	
406.638	$1500 \times 160 \times 50$	
406.643	$2000 \times 160 \times 50$	
406.644	2500 x 160 x 50	
406.631	3000 x 180 x 60	
406.645	4000 x 180 x 60	
406.646	5000 x 200 x 80	
406.647	6000 x 200 x 80	

#### **DIN 874/0**

Item No.	Dimensions/mm	Price RUB
406.613	1000 x 100 x 30	
406.617	$1500 \times 100 \times 30$	
406.621	2000 x 120 x 40	
406.626	2500 x 120 x 40	
406.632	3000 x 140 x 40	
406.639	$4000 \times 140 \times 40$	
406.618	5000 x 160 x 40	
406.619	$6000 \times 160 \times 40$	
With extra	wide measuring fac	es:
406.624	500x 80x40	
406.627	750x 80x40	
406.611	$1000 \times 160 \times 50$	
406.616	$1500 \times 160 \times 50$	
406.623	2000 x 160 x 50	
406.628	2500 x 160 x 50	
406.629	3000 x 180 x 60	
406.633	4000 x 180 x 60	
406.634	5000 x 200 x 80	
406.635	6000 x 200 x 80	

### Cast iron straight edges with handles

Especially suitable for measuring small surfaces.

- Tension free.
- Flatness and parallelism according DIN 876.
- DIN 876/1: hand scraped, DIN 876/0: fine scraped.
- Both measuring faces are flat and parallel matched in pairs.



Dimensions lxw/mm	Weight approx./kg	DIN 876/1 Item No. Price RUB	DIN 876/0 Item No. Price RUB
500 x 35	12	403.705	403.700
750 x 50	17	403.706	403.701
$1000 \times 56$	25	403.707	403.702
$1500 \times 70$	65	403.708	403.703
$2000 \times 80$	90	403.709	403.704

### **Aluminum straight edges**

I-shaped straight edges with wide measuring faces. Lightweight construction and material especially promote handling of longer straight edges.

- Highly wear resistant.
- Highly corrosion resistant.
- Surface hardness: 500-550 HV.
- High insulation:  $4 \cdot 10^{15} \Omega \text{ mm}^2/\text{m}$ .
- Accuracy according DIN 874/1.
- Larger sizes and class 0 available on request.



TECHNOBEARING

Item No.	Dimensions mm	Weight kg	Tolerance µm	Price RUB
406.650	500 x 100 x 40	1.65	12	
406.651	$1000 \times 100 \times 40$	3.31	21	
406.652	1500 x 100 x 40	4.97	29	
406.653	2000 x 100 x 40	6.62	37	
406.654	2500 x 100 x 40	8.28	46	
406.655	$3000 \times 100 \times 40$	9.93	54	

### **Bridge-type straight edges**

Made of special close-grained cast iron.

- Tension relieved.
- Flatness according DIN 876: class 1: hand scraped, class 0: fine scraped.



Item No.	lxw mm	Weight kg	Flatness µm	Price RUB
DIN 876	/1:			
403.658	$500 \times 40$	6	15	
403.659	750 x 45	9	18	
403.680	$1000 \times 50$	17	20	
403.690	1500 x 60	45	25	
403.692	2000  x  70	65	30	
403.698	$3000 \times 90$	210	40	
DIN 876	/0:			
403.657	$500 \times 40$	6	6	
403.660	$750 \times 45$	9	7	
403.679	$1000 \times 50$	17	8	
403.691	1500 x 60	45	10	
403.696	2000  x  70	65	12	
403.697	$3000 \times 90$	210	16	

### Triangular straight edges

On two sides scraped, triangular straight edge with screwed-in handles. The edge between the scraped sides (45° or 60°) has been accurately processed. The third side has been ground, and recessed for weight reduction at the larger types (from 500 mm).

- Tension relieved.
- Flatness of both scraped sides according DIN 876:

class 1: hand scraped, class 0: fine scraped.



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Item No.	lxw/mm	Weight/kg Price RUI
Triangul	ar straight e	dge 45°, DIN 876/1:
403.525	250 x 50	2
403.550	500 x 75	7
403.575	750 x 90	15
403.600	$1000 \times 120$	27
403.602	1500 x 120	48
Triangul	ar straight e	dge 45°, DIN 876/0:
403.524	250x 50	2
	500x 75	
403.574	750 x 90	15
403.599	$1000 \times 120$	27
403.601	1500 x 120	48
Triangul	ar straight e	dge 60°, DIN 876/1:
403.425	250 x 45	3
403.450	500x 60	6
403.475	750 x 90	16
403.500	$1000 \times 100$	28
403.502	1500 x 110	50
Triangul	ar straight e	dge 60°, DIN 876/0:
	250 x 45	3
	500 x 60	
	750 x 80	
403.499	$1000 \times 100$	28
403.501	1500 x 110	50

# **Beveled straight edges**

- Straightness tolerance according DIN 874/00.
- Hardened and ground.
- Lapped measuring faces.
- With insulated grip over the entire length.

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Item No.	Length/mm	Price RUB
Bright steel	:	
772.075	75	
772.100	100	
772.125	125	
772.150	150	
772.200	200	
772.300	300	
772.400	400	
772.500	500	

Item No.	Length/mm	Price RUB
Stainless ste	eel:	
772.076	75	
772.101	100	
772.126	125	
772.151	150	
772.201	200	
772.301	300	
772.401	400	
772.501	500	

# **Beveled straight edges**

- Straightness tolerance according DIN 874/00.
- Hardened and ground.
- Lapped measuring faces.
- With insulated grip over the entire length.





Item No.	Length/mm	Price RUB
Chrome fin	ished steel:	
907.750	75	
907.751	100	
907.752	125	
907.753	150	
907.754	200	
907.755	300	
907.756	400	
907.765	500	
909.237	600	

Item No.	Length/mm	Price RUB
Stainless ste	eel:	
907.757	75	
907.758	100	
907.759	125	
907.760	150	
907.761	200	
907.762	300	
907.763	400	
907.764	500	
909.240	600	



### Universal digital bevel protractor

This digital bevel protractor displays both decimal degrees and degrees-minutes-seconds at the same time.

- Measuring range (switchable): 1x 360°, 2x 180°,
  - 4x 90°.
- Resolution: 0.008° and 30".
- Accuracy:  $\pm 0.08^{\circ}$  or  $\pm 5'$ .
- On/off switch.
- Reset/preset.

- Reversible measuring direction.
- Fine adjustment.
- Delivery in a case with three blades (150, 200 and 300 mm), a square and an acute angle attachment.
- Power supply: 1 battery type CR2032.





Item No.	Description	Price RUB
907.885	Bevel protractor	
Option:		
495.157	Spare battery	

#### Single blades

Item No.	Blade length/mm	Price RUB
909.380	150	
909.381	200	
909.382	300	
909.383	500	
909.384	600	
909.385	800	

#### Universal digital bevel protractors

Digital bevel protractors made of stainless steel, with blades of 150, 200, 300 or 500 mm. The blades and all the measuring faces are hardened.

- Measuring range (switchable): 1x 360°, 2x 180°, 4x 90°.
- Resolution: 1', or decimal 0.01°.
- Accuracy: ±2'.
- Clamping spring system for blade.
- Indication switchable from degrees and minutes to decimal degrees.
- Automatic switch-off after 10 minutes of idle time with storage of the displayed measuring value.
- Proximity data output.
- Reset/preset/hold functions.
- Fine adjustment.
- Delivery in a case.
- Power supply: 1 battery type CR2032.



#### Complete bevel protractors

Item No.	Blade length/mm	Price RUB
856.688	150	
856.689	200	
856.690	300	
856.691	500	

#### **Options:**

495.157 Spare battery 856.694 Prism base 856.695 Ledge

840.666 Proximity USB cable (2 m)

#### Single blades

Item No.	Blade length/mm	Price RUB
856.685	150	
856.693	200	
856.687	300	
856.686	500	

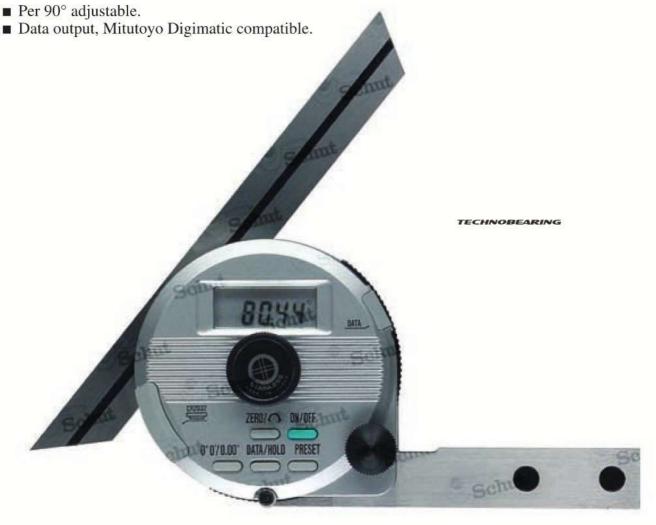


# Universal digital bevel protractor

This stainless steel, digital bevel protractor is available with blades from 150 to 1000 mm. The blades and all the measuring faces are hardened.

- Measuring range: ±360°.
- Resolution: 1', or decimal 0.01°.
- Accuracy: ±2'.
- Repeatability: 1'.
- Indication switchable from degrees and minutes to decimal degrees.
- + and direction reversible.

- On/off switch.
- Reset/preset/hold functions.
- Control with 5 keys for several functions.
- Fine adjustment.
- Delivery in a case without blade.
- Power supply: 1 battery type CR2032.



Item No. Description	Price RUB
855.820 Bevel protr	actor
Options:	
495.157 Spare batte	ry
905.409 Data cable	

#### Single blades

Item No.	Blade length/mm	Price RUB
909.380	150	
909.381	200	
909.382	300	
909.383	500	
909.384	600	
909.385	800	
855.827	1000	

### **Dial bevel protractor**

■ Measuring range: 4 x 90°.

■ Graduation: 5'.

■ Fine adjustment.

■ Hardened stainless steel construction.

■ Delivery in a case with 300 mm blade and an acute angle attachment.



#### Single blades

Item No.	Blade length/mm	Price RUB
909.380	150	
909.381	200	
909.382	300	
909.383	500	
909.384	600	
909.385	800	

# Item No. Description Price RUB 906.504 Bevel protractor

# Bevel protractor with magnifier

■ Measuring range: 4 x 90°.

■ Vernier: 5', parallax-free.

■ Hardened stainless steel construction.



Item No.	Description	Price RUB
906.502	Bevel protractor with magnifier	
<b>Option:</b> 906, 505	Spare magnifier	

#### Single blades

Item No.	Blade length/mm	Price RUB
909.380	150	
909.381	200	
909.382	300	
909.383	500	
909.384	600	
909.385	800	



#### **Bevel protractor with magnifier**

- Measuring range: 4 x 90°.
- Vernier: 5', parallax-free.
- Fine adjustment.
- Hardened stainless steel construction.
- No-glare chrome finished scale.

Item No.	Description	Price RUB
855.801	Bevel protractor with magnifier	
Option:		
859.179	Spare magnifier	

#### Single blades

Item No.	Blade length/mm	Price RUB
909.380	150	
909.381	200	
909.382	300	
909.383	500	
909.384	600	
909.385	800	

■ Delivery in a case with two blades (150 and 300 mm) and an acute angle attachment.

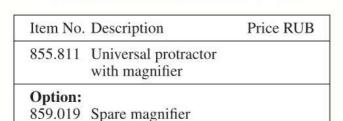


### Universal bevel protractor

Universal bevel protractor with micrometer screw adjustment. One rotation of the screw corresponds to an angular change of 1°. Retraction of the micrometer screw enables fast adjustment of the blade and the scale.

- Measuring range: 4 x 90°.
- Graduation: 1'.
- Stainless steel construction, main parts are hardened.
- Delivery in a case with two blades (150 and 300 mm) and a reference square for checking the bevel protractor.





#### Single blades

Item No.	Blade length/mm	Price RUB
909.380	150	
909.381	200	
909.382	300	
909.383	500	
909.384	600	
909.385	800	

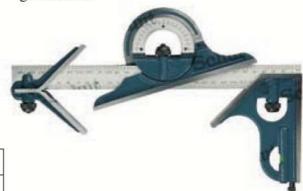
### **Combination bevel protractor**

Can be used as bevel protractor, ruler, depth gauge, try square, center square and spirit level.

- Measuring range:  $0-180^{\circ}$  (90-0-90°).
- Graduation: 1°.
- Double graduation.
- Rotatable.
- Scriber (included in square head).
- Protractor head and square head provided with a spirit level.

■ Ruler length: 300 mm.

 Delivery with protractor head, square head, center head, and ruler with mm/mm graduation.



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Item No. Description

Price RUB

906.503 Combination bevel protractor

### Combination bevel protractor

Stainless steel combination bevel protractor with blade and flat square.

- Measuring range: 0-320°.
- Measuring inside and outside angles.
- Accurate adjustment by rack railway.
- Vernier: 2'.
- Delivery in a case.



Item No. Description

Price RUB

910.215 Combination bevel protractor



#### **Bevel protractors**

Simple and easy to use protractors with a semicircular or rectangular head and swivelling blade.

- Measuring range: 0-180°.
- Graduation: 1°.
- Scale diameter: 85 mm.
- Locking screw.
- Blade length: 150 mm.
- Hardened steel, no-glare chrome finished.

Item No.	Shape	Price RUB
	semicircular	
909.399	rectangular	



Price

**RUB** 

Blade

length/mm

### Digital bevel protractors

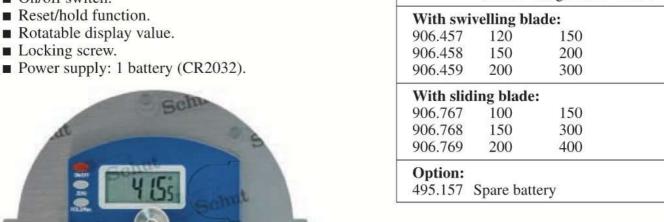
■ Measuring range: 0-180° (with swivelling blade) or 10-170° (with sliding blade).

■ Graduation: 0.05°.

■ Accuracy: 0.3°.

■ On/off switch.

■ Locking screw.



906.457

Item No.

Scale

ø/mm

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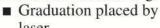
#### **Bevel protractors**

■ Measuring range: 0-180° (with swivelling blade) or 10-170° (with sliding blade).

■ Graduation: 1°.

■ Locking screw.

■ Hardened steel, no-glare chrome finished.

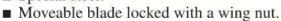




Item No.	Scale ø/mm	Blade length/mm	Price RUB
With swi	velling b	lade:	
907.864	80	120	
907.865	120	150	
907.866	150	200	
907.867	200	300	
907.868	300	500	
With slid	ing blad	e:	
907.869	100	150	
907.870	150	300	
907.871	200	400	
907.872	250	500	
907.873	300	600	

### **Setting bevel**

■ Special steel.





Blade	Price
length/mm	RUB
200	
300	
500	
	200 300

### Universal digital bevel protractor with spirit level

Digital bevel protractor for measuring both inside and outside angles. The measuring value is displayed upright at any time. Equipped with four holes and a locking knob for measuring a specific angle.

- Measuring range: 360°.
- Resolution: 0.05°.
- Accuracy: ±0.2°.
- ABS/INC switchable.
- With digital-analog display of the measured value.
- Reversal of display value.
- On/off switch.
- Hold function.



Item No.	Description	Price RUB
909.503	Bevel protractor	
Option:	Market Control	
495.157	Spare battery	

- Reversible measuring direction.
- Aluminum casing.
- Rotatable blade of metal.
- Dimensions: 254 x 50 x 36 mm.
- Power supply: 1 battery type CR2032.



### Universal digital bevel protractors

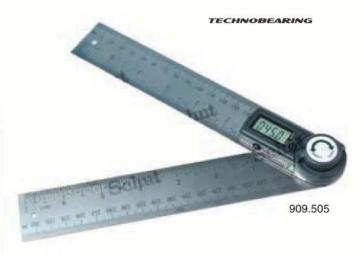
Digital bevel protractors for measuring both inside and outside angles. Equipped with a locking knob for measuring a specific angle.

- Measuring range: ±360°.
- Resolution: 0.1°.
- Accuracy: ±0.3°.
- On/off switch.
- Automatic switch-off.
- Zero setting at any position.
- Graduation rulers: 1 mm and 1/32 inch.
- Cross-section rulers: 35 x 2.5 mm.
- With fixing holes.



Item No.	Ruler length/mm	Price RUB
909.505	200	111001101
909.506	300	
909.507	500	

- Locking screw.
- Power supply: 1 battery type CR2032.



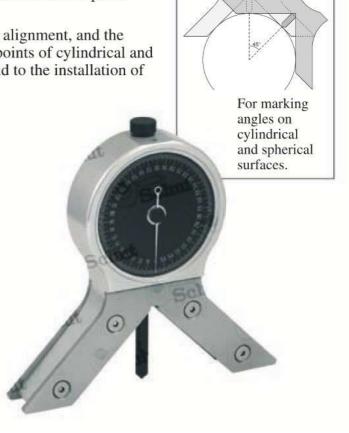
#### Magnetic clinometers with center point finder

Accurate clinometers with an extremely sensitive, balanced needle. The magnetic base with  $90^{\circ}$  V-groove is precision milled. The center point finder can be used as a center punch.

Very suitable for angular measurements, surface alignment, and the determination of center points and highest/lowest points of cylindrical and spherical surfaces. Therefore ideal as a universal aid to the installation of larger constructions.

- Measuring range: 360°.
- Graduation: 1°.
- Scale numbering: 0-360 clockwise (CW) or counterclockwise (CCW), or 0-90-0.
- Aperture V-groove (horizontal): 82 mm (for shafts up to Ø115 mm).
- Dimensions  $h \times w \times d$ : 130 x 130 x 27 mm.

Item No.	Scale numbering	Price RUB
856.702	0-360 CCW	
856.703	0-360 CW	
856.704	0-90-0	
Options:		
	Wooden case	
856.706	Suction magnifier glass	S



### Digital clinometer

- Measuring range: 0-±180°.
- Resolution: 0.1°.
- Accuracy: ±0.2°.
- Rotatable display.
- Automatic switch-off.
- Hold function.
- Reference measurement function.









#### Item No. Description

Price RUB

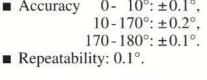
906.427 Digital clinometer

#### Option:

497.914 Spare battery (2 needed)

### Digital clinometers

- Measuring range: ± 180° (with external sensor:  $\pm 360^{\circ}$ ).
- Resolution: 0.1°.
- Accuracy 0- 10°: ±0.1°,  $10-170^{\circ}$ :  $\pm 0.2^{\circ}$ .







■ ABS/INC switchable (except 906.476).

■ With digital-analog read-out of the vial.

With magnetic base with V-groove.

■ Power supply: 2 batteries type AAA.

Dimensions:  $60 \times 56 \times 33$  mm.

- Automatic switch-off.
- Hold function (only 906.479).
- With magnetic base (906.476/479) or magnetic upper part (909.501/502).
- Dimensions: 51 x 51 x 33 mm (906.476 and 909.501/502).
- Power supply: 1 battery type CR2032.

#### Models with external sensor

- $0 10^{\circ}: \pm 0.1^{\circ},$ Accuracy  $10-350^{\circ}: \pm 0.2^{\circ}$  $350 - 360^{\circ}$ :  $\pm 0.1^{\circ}$ .
- Sensor with mounting holes.
- Cable length: 1 m.
- Max. rotation speed: 600 rpm.





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Item	No.	Description

Price RUB

906.476 Standard model

906.479 With vial

909.501 With external sensor

909.502 With external sensor with axis \( \text{\general } 6 \text{ mm} \)

#### Option:

495.157 Spare battery

### **Digital clinometers**

Instruments for easy measurement of angles, flatness and squareness. All four sides are measuring faces. The measuring value is displayed upright at any time.

- Measuring range: 4 x 90°.
- Resolution: 0.1° (909.504: 0.05°).
- Accuracy  $0-10^{\circ}$ :  $\pm 0.1^{\circ}$ ,

10-80°: ±0.2°

 $80-90^{\circ}: \pm 0.1^{\circ}.$ 

- Repeatability: 0.1°.
- ABS/INC switchable.
- Large, easy-to-read LCD display.
- Automatic switch-off.
- Hold function.
- Delivery in a case.

#### 908,926

- Width measuring face: 6 mm.
- Measuring face bottom-side: 2 tapped holes M4, center distance 130 mm.
- Dimensions  $l \times w \times h$ : 151 x 33 x 53 mm.
- Power supply: 1 battery type CR2032.

#### 909.504

- Blue backlight.
- Sound signal at stable value.
- °, mm/m, %, inch/ft conversion.
- Reference plane function.
- Measuring faces bottom- and upper-side with V-groove.
- With magnetic base (2 magnets).
- Protection: IP65.
- Dimensions lxwxh: 151x32x60 mm.
- Power supply: 2 batteries type AAA.



908.926



909.504





908.926 With tapped holes 909.504 With V-grooves and magnetic base

#### Options:

495.157 Spare battery type CR2032 497.914 Spare battery type AAA (2 needed)

Price RUB

### **Digital clinometers**

Instruments for easy measurement of inclination. Equipped with a horizontal and vertical vial. The measuring value is displayed upright at any time.

- Measuring range: 4 x 90°.
- Resolution: 0.1°.
- Accuracy 0-10°: ±0.1°,

 $10-80^{\circ}$ :  $\pm 0.2^{\circ}$ ,

 $80-90^{\circ}$ :  $\pm 0.1^{\circ}$ .



- Large, easy-to-read LCD display.
- On/off switch.
- Hold function.
- Sound signal at:  $0^{\circ}$ ,  $45^{\circ}$ ,  $90^{\circ}$ .
- Laser spot (only 906.478).
- Measuring face on the bottom-side.
- Length: 600 mm.
- Delivery in a case.
- Power supply: 2 batteries type AAA.



Item No.	Description	Price RUB
906.477	Clinometer	

Option:

497.914 Spare battery (2 needed)

906.478 Clinometer with laser spot



#### Laser alignment tool

With this alignment tool you can exactly, quickly and easily project vertical, horizontal and crossed laserlines. Within a range of  $\pm 4^{\circ}$  minor inclination errors are automatically compensated by means of the integrated spirit level, to level the projected horizontal line.

- Range: up to 5 m (dependent on the lighting conditions).
- Self-levelling range: 4°.
- Horizontal and vertical accuracy: ±2 mm/m.
- Laser: 650 nm, class 2 conform to IEC 60825-1.
- Lock function for projecting at an angle and transport protection.
- Mounted on rotatable base.
- On/off switch.
- Diameter: ø120 mm.
- Height: 170 mm.
- Weight: 420 g.



Item No.	Description	Price RUB
909.499	Alignment tool	
Option:		
495.111	Spare battery (2 nee	ded)

- Delivery in a case incl tripod.
- Power supply: 2 batteries type AA.



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208.307. Jachnohaaring 2020

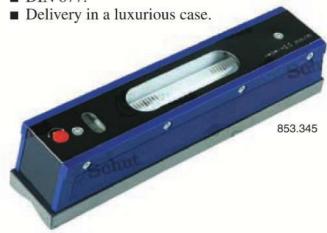
# Inspection spirit levels

- Graduation main vial: 0.01 0.3 mm/m.
- With cross test vial.
- Base with V-groove.
- Base width: 42 mm (spirit levels with length 500 mm: 44 mm).
- DIN 877.
- Delivery in a luxurious case.

Item No.	Length mm	Graduation mm/m	Price RUB
853.601	160	0.3	
853.606	160	0.1	
853.611	160	0.04	
853.616	160	0.02	
853.602	200	0.3	
853.607	200	0.1	
853.612	200	0.04	
853.617	200	0.02	
853.621	200	0.01	
853.603	250	0.3	
853.608	250	0.1	
853.613	250	0.04	
853.618	250	0.02	
853.622	250	0.01	
853.604	300	0.3	
853.609	300	0.1	
853.614	300	0.04	
853.619	300	0.02	
853.623	300	0.01	
853.605	500	0.3	
853.610	500	0.1	
853.615	500	0.04	
853.620	500	0.02	
853.624	500	0.01	

### Inspection spirit levels

- Graduation main vial: 0.02 0.5 mm/m.
- Adjustable main vial.
- With cross test vial.
- Base with V-groove, interrupted at the center over <sup>1</sup>/<sub>3</sub> of the length.
- Base width: 40 mm.
- DIN 877.



Item No.	Length mm	Graduation mm/m	Price RUB
853.343	150	0.5	
853.341	150	0.1	
853.315	150	0.05	
853.348	150	0.02	
853.345	200	0.5	
853.344	200	0.1	
853.323	200	0.05	
853.322	200	0.02	
853.347	300	0.5	
853.346	300	0.1	
853.324	300	0.05	
853.325	300	0.02	



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908.685

# Inspection spirit levels

■ Graduation main vial: 0.05 or 0.02 mm/m.

■ Adjustable main vial.

■ With cross test vial.

■ Base with V-groove.

■ Base width: 46 mm.

■ Robust cast iron construction.

■ With insulating grip.

■ DIN 877.



Item No.	Length mm	Graduation mm/m	Price RUB
908.688	150	0.05	
908.684	150	0.02	
908.689	200	0.05	
908.685	200	0.02	
908.690	250	0.05	
908.686	250	0.02	
908.691	300	0.05	
908.687	300	0.02	

TECHNOBEARING

# Frame spirit levels

- Graduation main vial: 0.05 or 0.02 mm/m.
- Adjustable main vial.
- With cross test vial.
- Two faces with V-groove, two flat faces.
- Robust cast iron construction.
- With insulating grip.
- DIN 877.



Item No.	Dimensions mm	Graduation mm/m	Price RUB
908.696	150 x 150 x 40	0.05	
908.692	150 x 150 x 40	0.02	
908.697	200 x 200 x 40	0.05	
908.693	200x200x40	0.02	
908.698	250 x 250 x 40	0.05	
908.694	250 x 250 x 40	0.02	
908.699	300 x 300 x 40	0.05	
908.695	$300 \times 300 \times 40$	0.02	



208.301. Jechnobearing 202005

# Frame spirit levels

- Graduation main vial: 0.01 0.3 mm/m.
- With cross test vial.
- Three faces with V-groove, one flat face.
- DIN 877.
- Delivery in a luxurious case.

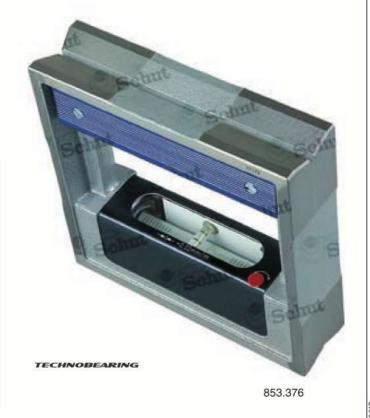


Item No.	Dimensions mm	Graduation mm/m	Price RUB
853.625	100 x 100 x 34	0.3	
853.629	$100 \times 100 \times 34$	0.1	
853.633	$100 \times 100 \times 34$	0.04	
853.626	150 x 150 x 42	0.3	
853.630	150 x 150 x 42	0.1	
853.634	150 x 150 x 42	0.04	
853.637	150 x 150 x 42	0.02	
853.627	200 x 200 x 42	2 0.3	
853.631	$200 \times 200 \times 42$	2 0.1	
853.635	$200 \times 200 \times 42$	0.04	
853.638	200 x 200 x 42	0.02	
853.640	200 x 200 x 42	0.01	
853.628	300 x 300 x 44	0.3	
853.632	300 x 300 x 44	0.1	
853.636	300 x 300 x 44	0.04	
853.639	300 x 300 x 44	0.02	
853.641	300 x 300 x 44	0.01	

# Frame spirit levels

- Graduation main vial: 0.02 0.5 mm/m.
- Adjustable main vial.
- With cross test vial.
- Three faces with V-groove, interrupted at the center over <sup>1</sup>/<sub>3</sub> of the length. One flat face.
- DIN 877.
- Delivery in a luxurious case.

Item No.	Dimensions mm	Graduation mm/m	Price RUB
853.372	150 x 150 x 40	0.5	
853.371	150 x 150 x 40	0.1	
853.375	$150 \times 150 \times 40$	0.05	
853.376	150 x 150 x 40	0.02	
853.374	200 x 200 x 40	0 0.5	
853.373	$200 \times 200 \times 40$	0.1	
853.385	$200 \times 200 \times 40$	0.05	
853.382	200x200x40	0.02	
853.395	250 x 250 x 40	0.05	
853.392	250 x 250 x 40	0.02	



### Crankshaft spirit levels

- Graduation main vial: 0.04-0.6 mm/m.
- With cross test vial.
- Base with a longitudinal and a lateral V-groove.



- Base width: 42 mm.
- DIN 877.

Item No.	Length mm	Graduation mm/m	Price RUB
853.684	60	0.6	
853.687	60	0.2	
853.682	90	0.3	
853.685	90	0.1	
853.688	90	0.04	
853.683	120	0.3	
853.686	120	0.1	
853.689	120	0.04	

# **Aluminum spirit levels**

■ Graduation vial: 0.6 mm/m.



TECHNOBEARING

Ite	em No.	Length/mm	Price RUB
85	3.675	100	
85	3.676	150	
85	3.677	200	
85	3.678	250	
85	3.679	300	

### **Small spirit levels**

Intended for simple tasks.

- Graduation vial: 0.1 or 0.3 mm/m.
- With longitudinal spirit level.
- Width: 24 mm.

Item No.	Length mm	Graduation mm/m	Price RUB
853.665	100	0.3	
853.666	100	0.1	
853.667	150	0.3	
853.668	150	0.1	

- Equipped with mounting holes ø5 mm.
- Flat base.

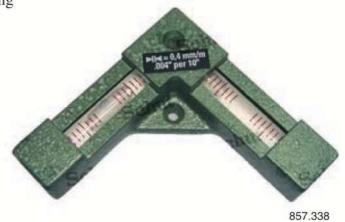


### **Crankpin levels**

Crankpin levels with two vials, in cast iron casing 80 x 80 mm, cross-section 20 x 20 mm, with two screw holes  $\phi$ 4 mm.

#### TECHNOBEARING

Item No.	Graduation mm/m	Price RUB
857.338	0.4	
857.339	0.1	
857.340	0.05	





Crankpin levels with two vials, in circular chrome casing with three screw holes  $\emptyset 4$  mm.

Item No.	Graduation mm/m	Dimensions mm	Screw holes ø/mm	Price RUB
857.342	0.4	ø80 x 23	4	
857.343	0.1	ø80 x 23	4	

# Spirit levels with flat base

Spirit levels with a stainless steel strip base, no screw mounting, with an adjustable plexiglass vial mounted onto it, graduation approx. 5 mm/m.

Item No.	Dimensions base $lxwxt/mm$	Price RUB
857.344	100 x 20 x 5	
857.345	$150 \times 20 \times 5$	
857.346	200 x 20 x 5	



857.344

Spirit levels with a stainless steel strip base, no screw mounting, with two ground contact planes. Mounted onto this an adjustable spirit level with cast iron housing, graduation 1 mm/m.

Item No.	Dimensions base $l \times w \times t / mm$	Price RUB
857.347	100 x 20 x 5	
857.348	150 x 20 x 5	
857.349	$200 \times 20 \times 5$	



# Circular spirit levels

Item No.	Diameter	Heigth	Sensitivity*	Price
	mm	mm	mm/m	RUE
Plexiglass	model with ye	ellow and gree	n base:	
857.315	12	7	approx. 22	
857.316	15	8	approx. 22	
857.317	18	9	approx. 22	
857.318	30	10	approx. 22	
		ith frame and	screw holes ø 2.5	mm and
	l green base:			
857.320	26/17	7 + 3	approx. 19	
857.321	30/20	7.5 + 3.5	approx. 19	
Chrome ca	asing and whi	te base:		
857.323	15	10	approx. 8	
857.324	18	10	approx. 8	
Chrome ca	asing with fra	me and screw	holes ø 2.5 mm	
			mm) and white b	ase:
857.325	20/13.5	7 +2	approx. 8	
857.326	25/17	7.5 + 2.5	approx. 8	
857.327	30/17	6.5 + 3.5	approx. 8	
857.328	35/20	7.5 + 3.5	approx. 6	
857.329	40/25	8 +4	approx. 6	
857.330	50/34	9.5 + 5.5	approx. 3	
857.331	60/39	10 + 7	approx. 3	
857.332	25/17	7.5 + 2.5	approx. 2	
White, syn	thetic casing	with frame an	d screw holes ø3	mm.
		nd white base		
857.336	60/45	4+6	Reading	
			0°-2°-5°	
Black syn	thetic casing	with frame and	d screw holes ø5 r	nm.
		and white base		,

<sup>857.318</sup> 857.320 857.323 857.331 857.336 857.337

5 + 10

#### Hose water level

100/75

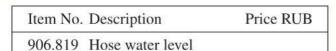
■ Measuring range: 15 cm.

■ Graduation: 1 mm.

857.337

Scale numbering: 0.5 - 15.5 cm.
Hose length: 20 m (reducible).

■ Hose cross-section: 9.5 mm.





Reading 0°-3°-6°





<sup>\*</sup> Sensitivity means: the angle at which the air bubble is moved to the next scale mark or edge of the vial.

# Gauge blocks / Measuring balls / Optical flats and parallel optical flats / Feeler gauges / Roughness specimens



### Gauge blocks general

Which gauge block is the most suitable for you?

#### MATERIALS

#### Steel

Steel is the oldest material and remains the most commonly accepted for gauge blocks. If well taken care of, steel gauges guarantee many years of useful life. They must be cleaned carefully before and after use and stored in a protective case in a dry environment.

#### Tungsten carbide

When a higher degree of hardness is needed, tungsten carbide is the material to choose. It is less sensitive to wear and damage compared to hardened steel. Especially when used frequently, tungsten carbide has an increased life span compared to steel gauge blocks.

#### Ceramics

Ceramics is relatively wear resistant and has a high degree of strength and stability. It will not rust and is unaffected by chemicals.

#### ACCURACY CLASSES

Gauge blocks are classified in upgrading order of accuracy according EN ISO 3650: 1998 in the classes: 2, 1, 0, K. The ISO 3650 is an international standard, which is adopted by national standards such as RvA, DAkkS, UKAS, BKO, SCS and COFRAC.

#### TECHNOBEARING

#### Class 2

Class 2 gauge blocks are intended for general workshop use by skilled workers to set up, for example, measuring instruments.

#### Class 1

Class 1 gauge blocks are used as working standards in inspection rooms within the production to set and calibrate measuring instruments and equipment as well as to inspect tools, fixtures and machines.

#### Class 0

Class 0 gauge blocks, with their high accuracy, are intended for use by measuring technicians in environmentally controlled inspection rooms, for example to calibrate measuring equipments.

#### Class K

Class K gauge blocks have the highest class of accuracy. They are *the* length standards in a calibration laboratory and other calibration values are derived from these gauges. Only with a UKAS certificate – or with another certificate, accepted by UKAS as equivalent (e.g. DAkkS, RvA and COFRAC) – will these gauge blocks be at their best. The most accurate gauges can meet a tolerance of  $\pm 0.05 \, \mu m$ .

#### Accuracy according ISO 3650

Nominal	Class I	K	Class	)	Class	1	Class 2	2
size mm	Tolerance on nominal size µm	Devi- ation* µm	Tolerance on nominal size µm	Devi- ation* µm	Tolerance on nominal size µm	Devi- ation" µm	Tolerance on nominal size µm	Devi- ation" µm
0.5 - 10	±0.20	0.05	±0.12	0.10	±0.20	0.16	±0.45	0.30
10 - 25	$\pm 0.30$	0.05	$\pm 0.14$	0.10	$\pm 0.30$	0.16	±0.60	0.30
25 - 50	$\pm 0.40$	0.06	$\pm 0.20$	0.10	$\pm 0.40$	0.18	$\pm 0.80$	0.30
50 - 75	$\pm 0.50$	0.06	±0.25	0.12	$\pm 0.50$	0.18	±1.00	0.35
75 - 100	$\pm 0.60$	0.07	$\pm 0.30$	0.12	$\pm 0.60$	0.20	±1.20	0.35
100 - 150	$\pm 0.80$	0.08	$\pm 0.40$	0.14	$\pm 0.80$	0.20	±1.60	0.40
150 - 200	$\pm 1.00$	0.09	$\pm 0.50$	0.16	$\pm 1.00$	0.25	±2.00	0.40
200 - 250	$\pm 1.20$	0.10	$\pm 0.60$	0.16	$\pm 1.20$	0.25	±2.40	0.45
250 - 300	$\pm 1.40$	0.10	$\pm 0.70$	0.18	$\pm 1.40$	0.25	$\pm 2.80$	0.50
300 - 400	$\pm 1.80$	0.12	$\pm 0.90$	0.20	$\pm 1.80$	0.30	$\pm 3.60$	0.50
400 - 500	$\pm 2.20$	0.14	$\pm 1.10$	0.25	$\pm 2.20$	0.35	$\pm 4.40$	0.60
500 - 600	$\pm 2.60$	0.16	$\pm 1.30$	0.25	$\pm 2.60$	0.40	±5.00	0.70
600 - 700	$\pm 3.00$	0.18	$\pm 1.50$	0.30	$\pm 3.00$	0.45	$\pm 6.00$	0.70
700 - 800	$\pm 3.40$	0.20	$\pm 1.70$	0.30	$\pm 3.40$	0.50	$\pm 6.50$	0.80
800 - 900	$\pm 3.80$	0.20	$\pm 1.90$	0.35	$\pm 3.80$	0.50	$\pm 7.50$	0.90
900 -1000	$\pm 4.20$	0.25	$\pm 2.00$	0.40	$\pm 4.20$	0.60	$\pm 8.00$	1.00

<sup>\*</sup>Deviation of the measuring face.

# Steel gauge blocks

Steel gauge blocks with an excellent price-performance ratio.

■ Hardness: 63-65 HRC.

■ Expansion coefficient:  $(11.5 \pm 1) \cdot 10^{-6}$  °C.

■ Cross-section: 0.5 - 10 mm: 30 x 9 mm,

>10 mm:  $35 \times 9$  mm.

■ ISO 3650.

■ Delivery with an inspection report.

■ Sets delivered in case.

#### TECHNOBEARING



Item No.	Class	Price RUB	Size mm	Increment mm	Pie- ces
M32:			1.005	₩.	1
906.622	2		1.01 - 1.09	0.01	9
906.621	1		1.1-1.9	0.1	9
906.620	0		1-9	1	9
			10-30	10	3
			50	_	1
M47:			1.005	121	1
906.625	2		1.01 - 1.09	0.01	9
906.624			1.1-1.9	0.1	9
906.623	0		1-24	1	24
			25 - 100	25	4
M87:			1.001 - 1.009	0.001	9
906.613	2		1.01 - 1.49	0.01	49
906.612	1		0.5-9.5	0.5	19
906.611	0		10-100	10	10
M88:			1.0005	=	1
906.628	2		1.001 - 1.009	0.001	9
906.627	1		1.01 - 1.49	0.01	49
906.626	0		0.5-9.5	0.5	19
			10-100	10	10
M112:			1.0005	-	1
906.631	2		1.001 - 1.009	0.001	9
906.630	2 1		1.01 - 1.49	0.01	49
906.629	0		0.5 - 24.5	0.5	49
			25 - 100	25	4



Size mm	Increment mm	ISO 3650/1 Price RUB	ISO 3650/0 Price RUB
0.5	=		
1	-		
1.0005	-		
1.001 - 1.009	0.001		
1.01 - 1.50	0.01		
1.6 - 2.0	0.1		
2.5 - 7.5	0.5		
8.0 - 10.0	0.5		
10.5 - 25.0	0.5		
30	<u> 2000</u> 2		
40	_		
50	-		
60	-		
70	-		
75	-		
80	_		
90	_		
100	_		



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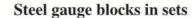
#### Select steel gauge blocks

High quality steel gauge blocks, can be very well wringed to make a combination size. The steel gauge blocks are available in all accuracy classes of ISO 3650 (2, 1, 0, K). Only the most commonly used sizes can be found in this catalog. Special sizes and sets are available on request, as well as special sets for calibration of micrometers and calipers.

- Hardness: 800 HV.
- Expansion coefficient:  $(11.5 \pm 1) \cdot 10^{-6}$  °C.
- Cross-section: 0.5 10 mm: 30 x 9 mm,
  - >10 mm:  $35 \times 9$  mm.
- ISO 3650.

- Delivery with a traceable inspection report.
- Delivery on request with a DAkkS certificate, UKAS acknowledged.
- Sets delivered in luxurious case.





Item No.	Class	Price RUB	Size	Increment mm	Pie- ces
M32:			1.005	_	1
831.915	1		1.01-1.09	0.01	9
831.914	0		1.1-1.9	0.01	9
051.714	U		1-9	1	9
			10-30	10	3
			60	-	1
M47:			1.005	_	1
831.911	1		1.00 - 1.09	0.01	10
831.910	0		1.1 - 1.9	0.1	9
			2-25	1	24
			50 - 100	25	3
M87:	888		0.5	-	1
831.909	1		1.001 - 1.009	0.001	9
831.908	0		1.00 - 1.50	0.01	51
			2.0 - 10.0	0.5	17
			20-100	10	9
M103:			0.5	-	1
831.907	1		1.005	-	1
831.906	0		1.00 - 1.50	0.01	51
			2.0-25.0	0.5	47
			50 - 100	25	3
M112:			0.5	_	1
831.905	1		1.0005	_	1
831.904	0		1.001 - 1.009	0.001	9
			1.00 - 1.50	0.01	51
			2.0-25.0	0.5	47
			50 - 100	25	3
M122:			0.5	=	1
831.903	1		1.0005	722	1
831.902	0		1.001 - 1.009	0.001	9
			1.00 - 1.50	0.01	51
			1.6-1.9	0.1	4
			2.0-25.0	0.5	47
			30-70	10	5
			75	-	1
			80 - 100	10	3



#### Steel gauge blocks, per piece

Size mm	Increment mm	ISO 3650/1 Price RUB	ISO 3650/0 Price RUB
0.5	(=)		
1	\$ <b></b> 3		
1.0005	85-08		
1.001 - 1.009	0.001		
1.01 - 1.5	0.01		
1.6-1.9	0.1		
2.0-5.5	0.5		
6.0 - 10.0	0.5		
10.5 - 15.0	0.5		
15.5 - 20.0	0.5		
20.5 - 25.0	0.5		
30	8_8		
40	_		
50	8-8		
60	(i <del>,,</del> );		
70	8-8		
75	-		
80	-		
90	3-3		
100	33-33		

# Tungsten carbide gauge blocks

Tungsten carbide gauge blocks with an excellent price-performance ratio and a low expansion coefficient. High resistance against corrosion.

■ Hardness: 70-72 HRC.

■ Expansion coefficient:  $(8.5 \pm 1) \cdot 10^{-6}$  C.

■ Cross-section: 0.5 - 10 mm: 30 x 9 mm,

>10 mm:  $35 \times 9$  mm.

■ ISO 3650.

■ Delivery with an inspection report.

■ Sets delivered in case.





#### Tungsten carbide gauge blocks, per piece

Size mm	Increment mm	ISO 3650/1 Price RUB	ISO 3650/0 Price RUB
0.5	N=0		
1	7 <u>—</u> 37		
1.0005	8-8		
1.001 - 1.009	0.001		
1.01 - 1.50	0.01		
1.6-1.9	0.1		
2.0 - 10.0	0.5		
10.5 - 15.0	0.5		
15.5 - 25.0	0.5		
30	<del>5-</del> 5		
40	8-8		
50	_		
60	6 <u>—</u> 8		
70	S=35		
75	( <b>-</b> )		
80	0-0		
90	85=20.		
100	72N		

Tungsten carbide gauge blocks in sets

Item No.	Class	Price RUB	Size mm	Increment mm	Pie- ces
M32:			1.005	-	1
906.634	2		1.01 - 1.09	0.01	9
906.633	1		1.1-1.9	0.1	9
906.632	0		1-9	1	9
			10-30	10	3
			50	-	1
M47:			1.005	-	1
906.637	2		1.01 - 1.09	0.01	9
906.636	1		1.1-1.9	0.1	9
906.635	O		1 - 24	1	24
			25 - 100	25	4
M87:			1.001 - 1.009	0.001	9
906.662	2		1.01 - 1.49	0.01	49
906.661	1		0.5 - 9.5	0.5	19
906.660	0		10-100	10	10
M112:			1.0005	-	1
906.643	2		1.001 - 1.009	0.001	9
906.642	1		1.01 - 1.49	0.01	49
906.641	0		0.5 - 24.5	0.5	49
			25 - 100	25	4

### Select tungsten carbide gauge blocks

High quality tungsten carbide gauge blocks, can be very well wringed to make a combination size. The tungsten carbide gauge blocks are available in all accuracy classes of ISO 3650 (2, 1, 0, K). Only the most commonly used sizes can be found in this catalog. Special sizes and sets are available on request.

- Hardness: 1600 HV.
- Expansion coefficient:  $(5.0 \pm 1) \cdot 10^{-6}$  °C.
- Cross-section: 0.5 10 mm: 30 x 9 mm,
  - >10 mm:  $35 \times 9$  mm.
- ISO 3650.



#### Tungsten carbide gauge blocks, per piece

Size mm	Increment mm	ISO 3650/1 Price RUB	ISO 3650/0 Price RUB
0.5	(=)		
1	2-3		
1.0005	0-0		
1.001 - 1.009	0.001		
1.01 - 1.50	0.01		
1.6-1.9	0.1		
2.0-5.5	0.5		
6.0 - 10.0	0.5		
10.5 - 15.0	0.5		
15.5 - 20.0	0.5		
20.5 - 25.0	0.5		
30	70_7		
40	72-22		
50	8-0		
60	( <del>)</del> ()		
70	8778		
75	-		
80	11-11		
90	9-3		
100	3-3		

- Delivery with a traceable inspection report.
- Delivery on request with a DAkkS certificate, UKAS acknowledged.
- Sets delivered in luxurious case.

#### Tungsten carbide gauge blocks in sets

Item No.	Class	Price RUB	Size mm	Increment mm	Pie- ces
M32: 828.592 828.606			1.005 1.01-1.09 1.1-1.9 1-9 10-30 60	- 0.01 0.1 1 10	1 9 9 9 3 1
M46: 828.590 828.604			1.001-1.009 1.00-1.09 1.1-1.9 2-10 20-100	0.001 0.01 0.1 1	9 10 9 9
M47: 828.589 828.603			1.005 1.00-1.09 1.1-1.9 2-25 50-100	- 0.01 0.1 1 25	1 10 9 24 3
M87: 828.587 828.601	1 0		0.5 1.001 - 1.009 1.00 - 1.50 2.0 - 10.0 20 - 100	0.001 0.01 0.5	1 9 51 17 9
M103: 828.585 828.599			0.5 1.005 1.00-1.50 2.0-25.0 50-100	- 0.01 0.5 25	1 1 51 47 3
M112: 828.584 828.598			0.5 1.0005 1.001-1.009 1.00-1.50 2.0-25.0 50-100	- 0.001 0.01 0.5 25	1 1 9 51 47 3
M122: 828.583 828.597	1 0		0.5 1.0005 1.001-1.009 1.00-1.50 1.6-1.9 2.0-25.0 30-70 75 80-100	- 0.001 0.01 0.1 0.5 10 -	1 1 9 51 4 47 5 1 3

### Ceramic gauge blocks

Ceramic gauge blocks with an excellent price-performance ratio, made of Zirconia ceramics. Because of this, these gauge blocks are highly durable, corrosion proof and completely stable for long-term use.

- Highly wear-resistant. Can be used 5 to 10 times longer than steel gauge blocks.
- Rustproof.



Ceramic gauge blocks, per piece

Size mm	Increment mm	ISO 3650/1 Price RUB	ISO 3650/0 Price RUB
0.5	<b>(=3</b> )		
1	0.000		
1.0005	S <del>-</del> 8		
1.001 - 1.009	0.001		
1.01 - 1.49	0.01		
1.5 - 1.9	0.1		
2.0-5.5	0.5		
6.0-9.5	0.5		
10.0-20.0	0.5		
20.5 - 25.0	0.5		
30	72_7		
40	25-22		
50	2-0		
60	( <del>) - (</del> )		
70	8778		
75	_		
80	12-21		
90	5		
100	3-3		

- Hardness: 88-90 HRC.
- Expansion coefficient:  $(9.2 \pm 1) \cdot 10^{-6}$  °C.
- Cross-section: 0.5 10 mm: 30 x 9 mm,
  - >10 mm:  $35 \times 9$  mm.
- ISO 3650.
- Delivery with an inspection report.
- Sets delivered in case.

#### TECHNOBEARING

#### Ceramic gauge blocks in sets

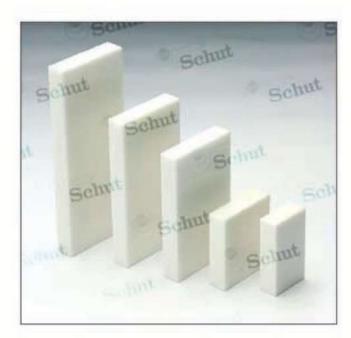


Item No.	Class	Price RUB	Size mm	Increment mm	Pie- ces
M32:			1.005	-	1
906.646	1		1.01 - 1.09	0.01	9
906.645	0		1.1 - 1.9	0.1	9
			1-9	1	9
			10-30	10	3
			50	-	1
M47:			1.005	_	1
906.649	1		1.01 - 1.09	0.01	9
906.648	0		1.1-1.9	0.1	9
			1 - 24	1	24
			25 - 100	25	4
M87:			1.001 - 1.009	0.001	9
906.652	1		1.01 - 1.49	0.01	49
906.651	0		0.5-9.5	0.5	19
			10-100	10	10
M103:			1.005	-	1
906.655	1		1.01 - 1.49	0.01	49
906.654	0		0.5 - 24.5	0.5	49
			25 - 100	25	4
M112:			1.0005	-	1
906.658	1		1.001 - 1.009	0.001	9
906.657	0		1.01 - 1.49	0.01	49
			0.5 - 24.5	0.5	49
			25-100	25	4

### Select ceramic gauge blocks

High quality ceramic gauge blocks, can be very well wringed to make a combination size. The ceramic gauge blocks are available in all accuracy classes of ISO 3650 (2, 1, 0, K). Only the most commonly used sizes can be found in this catalog. Special sizes and sets are available on request, as well as special sets for calibration of micrometers and calipers.

- Hardness: 1350 HV.
- Expansion coefficient:  $(9.5 \pm 1) \cdot 10^{-6}$  °C.



TECHNOBEARING



#### Ceramic gauge blocks, per piece

Size mm	Increment mm	ISO 3650/1 Price RUB	ISO 3650/0 Price RUB
0.5	<b>a</b>		
1	\$ <b></b> 3		
1.0005	0.000		
1.001 - 1.009	0.001		
1.01 - 1.50	0.01		
1.6-1.9	0.1		
2.0-5.5	0.5		
6.0 - 10.0	0.5		
10.5 - 15.0	0.5		
15.5 - 20.0	0.5		
20.5 - 25.0	0.5		
30	8_8		
40	-		
50	8-0		
60	\$ ( <del>-</del> )		
70	8 <del>-</del> 8		
75	-		
80	11-11		
90	3-3		
100	33-33		

- Cross-section: 0.5 10 mm: 30 x 9 mm, > 10 mm: 35 x 9 mm.
- ISO 3650.
- Delivery with a traceable inspection report.
- Delivery on request with a DAkkS certificate, UKAS acknowledged.
- Sets delivered in luxurious case.

#### Ceramic gauge blocks in sets

Item	Class	Price	Size	Increment	Pie-
No.		RUB	mm	mm	ces
M32:			1.005	-	1
831.085	1		1.01 - 1.09	0.01	9
831.084	0		1.1 - 1.9	0.1	9
			1-9	1	9
			10-30	10	3
			60	-	1
M47:			1.005		1
831.081	1		1.00 - 1.09	0.01	10
831.080	0		1.1-1.9	0.1	9
			2-25	1	24
			50 - 100	25	3
M87:			0.5	-	1
831.079	1		1.001 - 1.009	0.001	9
831.078	0		1.00 - 1.50	0.01	51
			2.0 - 10.0	0.5	17
			20 - 100	10	9
M103:			0.5	-	1
831.077	1		1.005	=	1
831.076	0		1.00 - 1.50	0.01	51
			2.0-25.0	0.5	47
			50-100	25	3
M112:			0.5		1
831.075			1.0005	-	1
831.074	0		1.001 - 1.009	0.001	9
			1.00 - 1.50	0.01	51
			2.0-25.0	0.5	47
			50 - 100	25	3
M122:			0.5	~	1
831.073	1		1.0005	=	1
831.072	0		1.001 - 1.009		9
			1.00 - 1.50	0.01	51
			1.6-1.9	0.1	4
			2.0-25.0	0.5	47
			30-70	10	5
			75	-	1
			80 - 100	10	3

### Long gauge blocks from 125 mm

Long steel gauge blocks with an excellent price-performance ratio. These steel gauge blocks are available in the accuracy classes 0, 1 and 2 of ISO 3650. All gauge blocks have two coupling holes on both ends so that they can be coupled by means of a toggle clamp.

- Hardness: 63-65 HRC.
- Expansion coefficient:  $(11.5 \pm 1) \cdot 10^{-6}$  C.
- Cross-section: 35 x 9 mm.

- ISO 3650
- Delivery in a case with an inspection report.



Size/mm	Item No. Price RUB	Item No. Price RUB	Item No. Price RUB
	ISO 3650/2:	ISO 3650/1:	ISO 3650/0:
125	907.728	907.715	907.702
150	907.729	907.716	907.703
175	907.730	907.717	907.704
200	907.731	907.718	907.705
250	907.732	907.719	907.706
300	907.733	907.720	907.707
400	907.734	907.721	907.708
500	907.735	907.722	907.709
600	907.736	907.723	907.710
700	907.737	907.724	907.711
800	907.738	907.725	907.712
900	907.739	907.726	907.713
1000	907.740	907.727	907.714
Gauge block s	et consisting of 125, 150, 175,	, 200, 250, 300, 400 and 500	mm:
	907.743	907.742	907.741
Gauge block s	et consisting of 600, 700, 800,	, 900 and 1000 mm:	
	907.746	907.745	907.744

### Select long gauge blocks from 125 mm

High quality long steel gauge blocks. These steel gauge blocks are available in the accuracy classes 0, 1 and 2 of ISO 3650. All gauge blocks have two coupling holes on both ends so that they can be coupled by means of a toggle clamp.

■ Hardness: 800 HV.

■ Expansion coefficient:  $(11.5 \pm 1) \cdot 10^{-6}$  C.

■ Cross-section: 35 x 9 mm.

■ ISO 3650.

■ Delivery in a luxurious case with a traceable inspection report.

 Delivery on request with a DAkkS certificate, UKAS acknowledged.

 Gauge blocks of 1000-1500 mm incl. a DAkkS certificate, UKAS acknowledged available on request.







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SELECT/

Size/mm	Item No.	Price RUB	Item No.	Price RUB	Item No.	Price RUE	
	ISO 3650/2:		ISO 3650/1:		ISO 3650/0:		
125	831.019		831.008		831.000		
150	831.020	831.020		831.009		831.001	
175	831.021		831.010	831.010		831.002	
200	831.022	831.022 831.011			831.003		
250	831.023		831.012		831.936		
300	831.024		831.013		831.937		
400	831.025		831.981		831.946		
500	831.026		831.738		831.004		
600	831.027		831.014		831.947		
700	831.028		831.015		831.005		
800	831.029		831.016		831.948		
900	831.030		831.017		831.006		
1000	831.031		831.018		831.007		
Gauge block set	consisting of 125, 1	50, 175, 200, 250,	300, 400 and 50	00 mm:			
.T.N	831.088	70 (UR) (125 (S	831.087		831.086		
Gauge block set	consisting of 600, 7	700, 800, 900 and	1000 mm:				
(m)	831.091		831.090		831.089		

# Toggle clamp for long series gauge blocks

Toggle clamp for the coupling of gauge blocks over 100 mm which have coupling holes on both ends. Very quick assembly by means of spring clamping device (with locking screw).

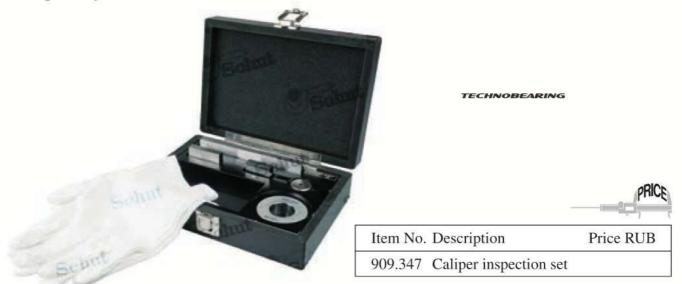
Description	Price RUB
Toggle clamp for long	



C11,315. Technobearing 2020

# Caliper inspection set

For checking the accuracy of DIN 862 calipers. The set consists of three special steel gauge blocks (30 mm, 41.3 mm and 131.4 mm, ISO 3650 class 1), two steel setting rings (ø4 mm and ø25 mm) and a pair of gloves.



# Micrometer inspection sets

For the inspection of micrometers according DIN 863. Suitable for micrometers with a measuring range up to 25 mm.

- Nominal sizes (mm): 2.5 - 5.1 - 7.7 - 10.3 - 12.9 - 15.0 - 17.6 - 20.2 - 22.8 - 25.0.
- Including plan parallel optical flat ø 30 x 12 mm.

			5 7 7
Item No.	Material	Grade	Price RUB
909.346	steel	1	
909.345	steel	0	
909.162	ceramic	1	
909.340	ceramic	0	



# Select microfibre cleaning cloth

Microfibre cleaning cloth for gauge blocks. Ideal for measuring rooms.

■ Dimensions: 22.5 x 22.5 cm.

Item No.	Description	Price RUB
831.739	Microfibre cleaning cloth	



# Gauge block accessories

Various accessories to extract the resulting size of one or more gauge blocks outside or to convert it into an inside gauge. This also enables the creation of setting gauges and marking tools. These accessories considerably increase the applicability of standard gauge blocks.

#### TECHNOBEARING

907.202 M12



907.204





907.202



PRICE

Item No. Description	Price		Set	
	RUB	M8	M10	M12
Holder for gauge blocks:				
907.203 Up to 50 mm		•	•	•
907.204 Up to 100 mm		•	•	•
907.205 Up to 200 mm		•	•	•
Pair of measuring jaws, with measuring faces:				
907.206 Cylindrical $\emptyset$ 2 mm and flat ( $l$ =40 mm)		•	•	•
907.207 Cylindrical $\emptyset$ 5 mm and flat ( $l$ =45 mm)		•	•	•
907.208 Cylindrical $\emptyset$ 10 mm and flat ( $l$ =70 mm)			•	•
907.209 Flat ( $l = 100 \text{ mm}, h = 19 \text{ mm}$ )			•	•
907.213 V-shaped ( <i>l</i> =60 mm, max. ø60 mm)			•	•
907.210 Straight edge ( <i>l</i> =100 mm)				•
907.211 Scriber ( <i>l</i> =45 mm)		•	•	•
907.212 Center point ( $l=45 \text{ mm}$ )		•	•	•
907.214 Base for holder ( $h=25 \text{ mm}$ )		•		•
Accessory sets, delivered in a case:		<b>A</b>	<b>^</b>	<b>A</b>
907.200 M8				
907.201 M10		-		



907.207



907.213



907.211 907.212

TECHNOBEARING

#### Holder for gauge blocks

Holder for gauge blocks for fixation of gauge blocks for serial inspection. Can also be used in combination with inspection sets for micrometers and calipers.

- Suited for use with 10 gauge blocks.
- Anodized aluminum with steel base and hard plastic clamping blocks.
- Thickness gauge block: 9 mm conform ISO 3650.
- Delivery in a luxury plastic case incl. Allen key.





Item No.	Description	Price RUB
910.192	Holder for gauge blocks	

# Holder for gauge blocks

- Anodized aluminum.
- Thickness gauge block: 9 mm conform ISO 3650.



Item No. Description Price RUB

906.434 Holder for gauge blocks

#### **Gloves**

Comfortable, smooth, lint-free gloves with universal, perfect fit. Ideal for handling gauge blocks and other measuring instruments.

- Perfect thermal isolation.
- Washing machine safe.

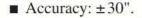


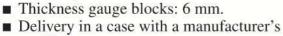
Item No.	Description	Price RUB
191.069	Pair of gloves	

C11.317. Technobearing 2020

# Angle gauge block set

Set of twelve hardened steel angle gauge blocks, comprising the angles  $\frac{1}{4}$ ° (15'),  $\frac{1}{2}$ ° (30'), 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25° and 30°. A combination of angle gauge blocks is possible.





certificate.



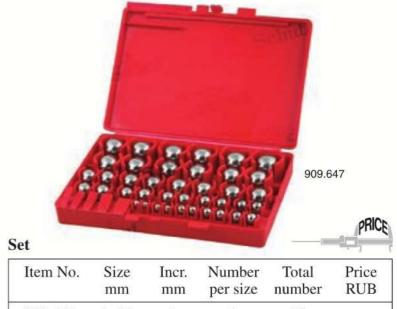
#### Steel measuring balls

Set of steel measuring balls for measuring e.g. internal tapers. This set contains of a series of balls of different sizes, with two balls of each size.

■ Material: chrome alloy steel.

Item No.	Size	Pieces	Price
	mm		RUE
910.224	1	2	
910.225	2	2	
910.226	2	2 2 2 2	
910.227	4	2	
910.228	5	2	
910.229	6	2	
910.230	7	2 2 2 2	
910.231	8	2	
910.232	9	2	
910.233	10	2	
910.234	11		
910.235	12	2	
910.237	13	2	
910.238	14	2	
910.239	15	2 2 2 2 2	
910.240	16	2	
910.241	17	2	
910.242	18	2	
910.243	19	2 2 2 2	
910.244	20	2	
910.245	21	2	
910.246	22	2	
910.247	23	2 2 2	
910.248	24	2	
910.249	25	2	

- Hardness: 63 HRC.
- Nominal dimension tolerance: <2.5 µm.
- Roundness: < 0.6 µm.
- Surface roughness: <0.05 µm.
- Set 909.647: Delivery in a plastic case.
- Delivery with a manufacturer's certificate.



Item No.	Size	Incr.	Number	Total	Price
	mm	mm	per size	number	RUB
909.647	1 - 25	1	2	50	

#### Select optical flats

Optical flats can be used for inspection of the flatness of reflecting surfaces of for example gauge blocks, settings gauges and other lapped surfaces by optical interference.

- Flatness measuring faces:  $\leq 0.10 \, \mu \text{m}$ .
- Wedge angle error: >10.0' (optical flats, double sided).

Item No.	Diameter mm	Thickness mm	Price RUB
Single optic	al flats, single sic	led:	
826.625	30	15	
826.626	45	15	
826.627	50	20	
826.628	60	20	
826.629	75	20	
Single optic	al flats, double si	ided:	
827.011	30	15	
826.631	45	15	
826.632	50	20	
826.633	60	20	
826.634	75	20	

- On request with a DAkkS certificate, UKAS acknowledged.
- Delivery in a case.





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#### Select plan parallel optical flats

Plan parallel optical flats can be used for inspection of the parallelism and flatness of measuring surfaces of micrometers and other measuring instruments. Each set consists of 4 sizes plan parallel optical flats for inspection of micrometers on every fourth rotation of the spindle.

■ For micrometers with a spindle pitch of 0.5 mm.



Item No.	Thicknesses/mm	Price RUB
826.635	12.00/12.12/12.25/12.37	
826.636	25.00/25.12/25.25/25.37	
907.909	50.00/50.12/50.25/50.37	
907.910	75.00/75.12/75.25/75.37	
Option:		
826.630	Single plan parallel optical flat, thickness 12.00 mm	

- Sets for micrometers with a measuring range of 0-25 mm, 25-50 mm, 50-75 mm and 75-100 mm.
- Flatness measuring faces:  $\leq 0.15 \, \mu \text{m}$ .
- Parallelism measuring faces: ≤0.3 µm.
- Diameter: 30 mm.
- On request with a DAkkS certificate, UKAS acknowledged (except 907.909 and 907.910).
- Delivery in a case.



echnobearing 20200

# Feeler gauges

Feeler gauge sets in a holder, for individual use or in combination to measure slits and gaps and also for checking the amount of clearance in sliding guides, bearings, pistons etc.

- Measuring range: 0.03 2.00 mm.
- Blade length: 100 mm.
- Nickel plated handle with locking screw.
- Blade width: 10 mm (except stainless steel models: 12 mm), tapered.
- Accuracy according DIN 2275 T2.
- Also available in brass model (anti-magnetic).





Item No.	Number of blades	0.01 mm	Incre 0.02 mm	ment(s) 0.05 mm	0.10 mm	Material	Price RUB
909.904	8	\$6.00 Page 101 ST 0 ST 0 ST 0 PER 100	***************************************	$0.05 \to 0.30$	$0.40 \rightarrow 0.50$	hardened steel	3 * 755 * 5 755 * 5 75 75 75 75 75 75 75 75 75 75 75 75 7
909.905	8			$0.05 \to 0.30$		stainless steel	
909.906	8			$0.05 \! \to \! 0.30$	$0.40 \! \to \! 0.50$	brass	
909.907	13			$0.05 \to 0.30$	$0.40 \rightarrow 1.00$	hardened steel	
909.908	13			$0.05 \to 0.30$	$0.40 \rightarrow 1.00$	stainless steel	
909.909	13			$0.05 \to 0.30$	$0.40\!\rightarrow\!1.00$	brass	
910.019	20			$0.05 \to 1.00$		hardened steel	
910.020	20			$0.05 \rightarrow 1.00$		stainless steel	
910.021	20			$0.05 \rightarrow 1.00$		brass	
910.022	8	$0.03 \to 0.10$				hardened steel	
910.023	10	$0.03 \to 0.05$		$0.10 \to 0.30$	$0.40 \rightarrow 0.50$	hardened steel	
910.024	10				$0.10 \to 1.00$	hardened steel	
910.026	14	$0.03 \to 0.10$		$0.15 \to 0.30$	$0.40 \rightarrow 0.50$	hardened steel	
910.027	18	$0.05 \to 0.10$		$0.15 \to 0.40$	$0.50 \rightarrow 1.00$	hardened steel	
910.028	19	$0.03 \to 0.10$		$0.15 \to 0.30$	$0.40 \rightarrow 1.00$	hardened steel	
910.029	20	$0.04 \rightarrow 0.10$		$0.15 \to 0.50$	$0.60 \rightarrow 1.00$	hardened steel	
908.978	22	$0.03 \to 0.05$		$0.10 \rightarrow 1.00$		hardened steel	
908.979	28	$0.03 \to 0.10$	$0.12 \rightarrow 0.50$	)		hardened steel	
910.034	21			$0.05 \to 0.10$	$0.20 \rightarrow 2.00$	hardened steel	

910.031

# Feeler gauges

■ Measuring range: 0.05 - 1.00 mm; 20 blades:  $0.05 / 0.10 \rightarrow 1.00$ .

■ Material: hardened steel.

■ Blade width: 12.8 mm.



Item No.	Blade length/mm	Price RUB
910.030	200	
910.031	300	
910.033	500	



#### Feeler stock coils

Feeler stock coils made of steel.

■ Measuring range: 0.005 - 1.00 mm. TECHNOBEARING

■ Length: 5 m. ■ Width: 13 mm.

■ Other widths or material (stainless steel or brass) available on request.







#### **Options**

Item No.	Description	Price RUB
856.030	Set 0.01 - 0.25 mm	
856.031	Set 0.3 - 1.00 mm	
856.032	Holder for feeler stock coils	

Item No.	Thickness/mm	Price RUB
856.036	0.005	
856.037	0.01	
856.038	0.02	
856.039	0.03	
856.040	0.04	
856.041	0.05	
856.042	0.06	
856.043	0.07	
856.044	0.08	
856.045	0.09	
856.046	0.10	
856.047	0.12	
856.048	0.15	
856.049	0.18	
856.050	0.20	
856.051	0.25	
856.052	0.30	
856.053	0.35	
856.054	0.40	
856.055	0.45	
856.056	0.50	
856.057	0.55	
856.058	0.60	
856.059	0.65	
856.060	0.70	
856.061	0.75	
856.062	0.80	
856.063	0.85	
856.064	0.90	
856.065	0.95	
856.066	1.00	

#### Roughness specimens in a set



This set consists of 30 specimens, mounted in an attractive wallet with instruction card. In addition to the *R*a values, the standardized *N* values and the *R*z values are specified.

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**Set composition** 

Item No.	Language	Price RUB	
850.130	English		
850.131	French		
850.132	German		

On request available with a declaration of conformity.

Number of specimens	Machining method	Roughness Ra/µm	Roughness class
3	Flat lapping	0.05 - 0.2	2, 3, 4
3	Reaming	0.4 - 1.6	5, 6, 7
6	Grinding	0.05 - 1.6	2, 3, 4, 5, 6, 7
6	Horizontal milling	0.4 -12.5	5, 6, 7, 8, 9, 10
6	Vertical milling	0.4 - 12.5	5, 6, 7, 8, 9, 10
6	Turning	0.4 -12.5	5, 6, 7, 8, 9, 10

# Roughness specimens

Series of roughness specimens, type Microsurf, covering the nine most frequently occurring manufacturing operations.



850.316

Item No.	Machining- method	Number of specimens per set	Roughness Ra µm	Roughness CLA µin	Roughness class N	Price RUB
850.315	Surface grinding	8	0.025 - 3.2	1- 125	1- 8	
850.316	Cylindr. grinding	8	0.025 - 3.2	1 - 125	1 - 8	
850.319	Face turning	8	0.4 - 50	16-2000	5-12	
850.320	Turning	8	0.4 - 50	16-2000	5-12	
850.321	End milling	8	0.4 - 50	16-2000	5-12	
850.322	Reaming & drilling	8	0.4 - 12.5	16 - 500	5 - 10	
850.323	Horizontal milling	8	0.4 - 50	16-2000	5-12	
850.325	Planing	8	0.8 -100	32-4000	6-13	
850.331	Spark erosion	8	0.4 - 50	16-2000	5-12	

Available with declaration of conformity on request.

#### Roughness specimens for blasted surfaces

■ Each plate consists of four roughness specimens for grit and shot blasting, in 4 segments.

Item No. Description		Price RUB
850.017	Shot blasting	
850.018	Grit blasting	

■ Delivery in a solid, leather wallet.

■ Standardized to ISO specifications.



Technobearing 20200

# Gauges / Pin gauges / Thread and tolerance tables 40.000 C

#### Plug gauges

Manufactured according DIN 2245 and 7164. Available from 1 to 100 mm; up to 50 mm with Go and NoGo on one handle, over 50 mm in two parts. Prices are for H7 plug gauges with Go and NoGo ends in hardened steel.

- H7 fit size in hardened steel.
- Available from 1 to 100 mm; up to 50 mm with Go and NoGo on one handle, over 50 mm in two parts.
- Delivery with an inspection report.
- Including wear allowance at the Go end.

#### Wear allowance

New gauges are supplemented with a wear allowance on the Go end: *z* (plus) for plug gauges. Accordingly, the size indicated on the handle is not similar to the measured value of the new Go end.







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Item No.	Size H7 mm	Price RUB	Item No.	Size H7 mm	Price RUB	Item No.	Size H7 mm	Price RUB
911.000	1		911.023	19		911.047	47	
911.001	1.5		911.024	20		911.048	48	
911.002	2		911.025	21		911.049	50	
911.003	2.5		911.026	22		911.050	52	
911.004	3		911.027	23		911.051	55	
911.005	3.5		911.028	24		911.052	58	
911.006	4		911.029	25		911.053	60	
911.007	4.5		911.030	26		911.054	62	
911.008	5		911.031	27		911.055	65	
911.009	5.5		911.032	28		911.056	68	
911.010	6		911.033	30		911.057	70	
911.011	7		911.034	32		911.058	72	
911.012	8 9		911.035	33		911.059	75	
911.013	9		911.036	34		911.060	78	
911.014	10		911.037	35		911.061	80	
911.015	11		911.038	36		911.062	82	
911.016	12		911.039	37		911.063	85	
911.017	13		911.040	38		911.064	88	
911.018	14		911.041	40		911.065	90	
911.019	15		911.042	42		911.066	92	
911.020	16		911.043	44		911.067	95	
911.021	17		911.044	45		911.068	98	
911.022	18		911.045	46		911.069	100	

#### Plug gauges

Manufactured according DIN 2245, 2246 and 2247. Available from 0.5 to 160 mm; up to 70 mm with Go and NoGo on one handle, over 70 mm in two parts. Prices are for H7 plug gauges with Go and NoGo ends in hardened steel.

- H7 fit size in hardened steel.
- Available from 0.5 to 160 mm; up to 70 mm with Go and NoGo on one handle, over 70 mm in two parts.
- Including wear allowance at the Go end.

#### Wear allowance

New gauges are supplemented with a wear allowance on the Go end: z (plus) for plug gauges. Accordingly, the size indicated on the handle is not similar to the measured value of the new Go end.

# Example: plug gauge 20 H7 New Go end:

size	20.000 mm
wear allowance $(+z)$	0.003 mm
	20.003 mm
manufacturing tolerance	± 0.002 mm
largest value measured	20.005 mm
smallest value measured	20.001 mm

#### Also available:

- larger sizes,
- without wear allowance,
- many other fit sizes, like H6, H8, P7, G7 etc.,
- hard-chrome plated plug gauges,
- tungsten carbide plug gauges,
- extended plug gauges,
- plug gauges with vent hole,
- plug gauges with easy-entry pilot.

# 0 5 W 800 15





#### **Measuring reports**

For all gauges also measuring reports can be ordered.

- ① Inspection report (German) per gauge. Stating of product specifications, measured values after production, used traceable measuring devices, measuring inaccuracy and measuring date. A favourable choice when your quality system does not require traceable certificates.
- ② Traceable certificate (Dutch) with measuring reports of the ordered gauges. Besides stating of the measured values the extra assurance of an external inspection.

#### TECHNOBEARING

Size H7 mm	Price RUB	Size H7 mm	Price RUE						
1		10		24		42		70	
1.5		11		25		44		72	
2		12		26		45		75	
2.5		13		27		46		78	
3		14		28		47		80	
3.5		15		30		48		82	
4		16		32		50		85	
4.5		17		33		52		88	
5		18		34		55		90	
5.5		19		35		58		92	
6		20		36		60		95	
7		21		37		62		98	
8		22		38		65		100	
9		23		40	- 1	68			

Larger sizes available on request.

#### Pin gauges in sets

Hardened steel pin gauges in sets with favourable price-performance ratio, very well suited for workshop use. Delivery in plastic case with a declaration of conformity and holder for Go/NoGo determination.

■ Hardened steel.

■ Diameter range: 0.50 - 20.00 mm.

■ Increment: 0.01 mm.

■ Accuracy: ±0.003 mm.

■ Without handle.

■ Pin gauges  $> \emptyset$  1.5 mm with size indication.

■ Length: 50 mm.

■ Delivery with a declaration of conformity.

■ Delivery in a plastic case with pin gauges in separate plastic tubes with size indication.

Delivery with holder with Go/NoGo indication.





Item No.	Diameter mm	Increment mm	Number per set	Price RUB
910.193	0.50 - 1.00	0.01	51	
910.194	1.00 - 2.00	0.01	101	
910.195	2.00 - 3.00	0.01	101	
910.196	3.00 - 4.00	0.01	101	
910.197	4.00 - 5.00	0.01	101	
910.198	5.00 - 6.00	0.01	101	
910.199	6.00 - 7.00	0.01	101	
910.200	7.00 - 8.00	0.01	101	
910.201	8.00 - 9.00	0.01	101	
910.202	9.00 - 10.00	0.01	101	
910.203	10.00 - 11.00	0.01	101	
910.204	11.00 - 12.00	0.01	101	
910.205	12.00 - 13.00	0.01	101	
910.206	13.00 - 14.00	0.01	101	
910.207	14.00 - 15.00	0.01	101	
910.208	15.00 - 16.00	0.01	101	
910.209	16.00 - 17.00	0.01	101	
910.210	17.00 - 18.00	0.01	101	
910.211	18.00 - 19.00	0.01	101	
910.212	19.00 - 20.00	0.01	101	

Ont	ione.
<b>V/I/I</b>	HUHS.

910.213 Pin gauge handle Go-NoGo 0.5-13 mm 910.214 Pin gauge handle

Go-NoGo 13-20 mm



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C12.306.

#### Pin gauges

Swiss made, hardened and ground steel pin gauges, conforms to DIN 2269; available **loose and in sets**.

- Hardened, ground, and seasoned steel (HV 760±50).
- Diameter range: without handle: 0.06 - 20.00 mm, with handle: 0.06 - 10.00 mm.
- Increment: 0.01 mm.
- Accuracy: ±0.0015 mm.
- Pin gauges ø 5.00 20.00 mm without handle: indication on head.



#### Also available:

With an accuracy of  $\pm 0.0003$  or  $\pm 0.001$  mm;

- hardened steel Ø 0.06 20.00 mm,
- tungsten carbide or ceramics Ø 0.50-9.99 mm, with 0.01 mm increments. The length may deviate. More information available on request.

Diameter/mm	Length/mm	Price RUB
Pin gauge witho	out handle:	
$0.06 - 0.09^{1}$	30	
$0.10 - 0.19^{1}$	40	
$0.20 - 0.29^{1}$	40	
$0.30 - 0.49^{1}$	40	
$0.50 - 0.99^{1}$	40	
1.00 - 2.99	70	
3.00 - 4.00	70	
4.01 - 5.00	70	
5.01 - 5.99	70	
6.00 - 9.99	70	
10.00 - 11.99	70	
12.00 - 13.99	70	
14.00 - 15.99	70	
16.00 - 18.99	70	
19.00 - 20.00	70	
Pin gauge with	handle <sup>2</sup> :	
$0.06 - 0.09^{1}$	23	
$0.10 - 0.19^{1}$	33	
$0.20 - 0.29^{1}$	33	
$0.30 - 0.49^{1}$	33	
$0.50 - 0.99^{1}$	33	
1.00 - 2.99	62	
3.00 - 4.00	62	
4.01 - 5.00	62	
5.01 - 5.99	62	
6.00 - 10.00	62	



<sup>&</sup>lt;sup>2</sup> The length here indicates the measuring length and not the total length of the pin gauges.



Item No.	Description	Price RUB
Wooden	case (tubes not in	cluded):
833.211	For 50 pin gauges	
	Ø 0.10 - 10.00 mm	without handle
833.704	For 100 pin gauge	S
	ø 0.10 - 10.00 mm	without handle
833.264	For 50 pin gauges	
	ø 0.10 - 10.00 mm	with handle
833.118	For 40 pin gauges	
	ø 10.01 - 15.00 mm	ı
833.705	For 80 pin gauges	
	ø 10.01 - 15.00 mm	ı
833.706	For 30 pin gauges	
	ø 15.01 - 20.00 mm	1

#### Pin gauge tube for pin gauges<sup>1</sup>:

833.066 Without handle up to Ø 0.99 mm 838.224 Without handle Ø 1.00 - 7.00 mm 838.089 With handle up to Ø 0.99 mm

#### TECHNOBEARING



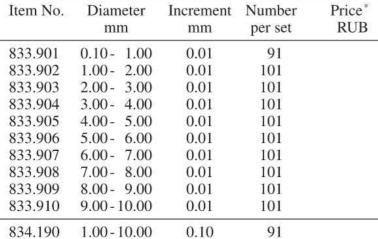
C12.204.

<sup>&</sup>lt;sup>1</sup> For insert in wooden case.

# Pin gauges in sets

- Hardened, ground, and seasoned steel  $(HV760 \pm 50).$
- Diameter range: 0.10 10.00 mm.
- Increment: 0.01 mm.
- Accuracy: ±0.0015 mm.
- Without handle.
- Pin gauges ø 5.00 10.00 mm: indication on head.
- Length: Ø0.10 0.99 mm: 40 mm, ø 1.00 - 10.00 mm: 70 mm.
- Sets with larger diameters and/or with handle are available on request.

Item No.	Diameter mm	Increment mm	Number per set	Price* RUB
833.901	0.10 - 1.00	0.01	91	
833.902	1.00 - 2.00	0.01	101	
833.903	2.00 - 3.00	0.01	101	
833.904	3.00 - 4.00	0.01	101	
833.905	4.00 - 5.00	0.01	101	
833.906	5.00 - 6.00	0.01	101	
833.907	6.00 - 7.00	0.01	101	
833.908	7.00 - 8.00	0.01	101	
833.909	8.00 - 9.00	0.01	101	
833.910	9.00 - 10.00	0.01	101	
834.190	1.00 - 10.00	0.10	91	







#### Pin gauges accessories

#### Interchangeable handles

■ For pin gauges without handle.



Item No	. For diameter/mm	Price RUB
836.043	0.40-0.80	
834.172	0.80 - 1.30	
836.044	1.30 - 1.80	
836.045	1.80 - 2.30	
837.615	2.30 - 2.80	
837.956	2.80 - 3.30	
837.957	3.30 - 3.80	
837.958	3.80-4.30	
837.959	4.30 - 4.80	
837.960	4.80 - 5.30	

#### Holders for Go/NoGo determination

- For two pin gauges without handle.
- With NoGo indication.



Item No.	For diameter/mm	Price RUB
833.310	1.00 - 2.00	
833.311	2.00 - 4.00	
833.312	4.00 - 6.00	
833.313	6.00 - 8.00	
833.314	8.00 - 10.00	

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<sup>\*</sup> Prices per set, in wooden case.

#### Plug gauges

Ground and lapped, hardened tool steel plug gauges with a high accuracy. Available per piece and in sets. Swiss made.

- Diameter range: Ø 0.06 10.00 mm.
- Increment: 0.01 mm.
- Accuracy: ±0.0005 mm.
- Hardened tool steel (HV 760 ± 50). Ground and lapped.
- Measuring length (and total length):
  - ø0.06 0.30 mm: 2 mm (34 mm),
  - Ø 0.31 0.50 mm: 3.5 mm (35.5 mm),
  - ø0.51 1.50 mm: 5 mm (37 mm),
  - ø1.51 2.00 mm: 6 mm (38 mm),
  - ø 2.01 3.50 mm: 8 mm (43 mm),
  - ø3.51 6.00 mm: 10 mm (55 mm),
  - ø 6.01 8.00 mm: 14 mm (59 mm), ø 8.01 - 10.00 mm: 18 mm (63 mm).
- Size indication on the insulated handle.
- Also available in tungsten carbide and ceramic with an accuracy of ±0.001 mm.





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#### Per piece

Diameter/mm	Price RUB
0.06- 0.09	
0.10- 0.19	
0.20 - 0.29	
0.30 - 0.49	
0.50 - 0.99	
1.00 - 2.99	
3.00 - 5.99	
6.00 - 10.00	

#### Sets

Item No.	Diameter mm	Pieces	Price RUB
833.761	0.06 - 0.50	45	
833.762	0.51 - 1.00	50	
833.763	1.01 - 1.50	50	
833.764	1.51 - 2.00	50	
833.765	2.01 - 2.50	50	
833.766	2.51 - 3.00	50	
833.767	3.01 - 3.50	50	
833.768	3.51 - 4.00	50	
837.311	4.01 - 4.50	50	
837.312	4.51 - 5.00	50	
837.313	5.01 - 5.50	50	
837.314	5.51 - 6.00	50	
837.315	6.01 - 6.50	50	
837.316	6.51 - 7.00	50	
837.317	7.01 - 7.50	50	
837.318	7.51 - 8.00	50	
837.319	8.01 - 8.50	50	
837.320	8.51 - 9.00	50	
837.321	9.01 - 9.50	50	
837.322	9.51 - 10.00	50	

#### Select setting rings

Setting rings, manufactured according DIN 2250 form C, 1 to 4 mm.

The size is indicated on the ring to three decimal places.

For all gauges also measuring reports can be ordered.







Item No.	Size/mm	Price RUB
830.001	1	
830.002	1.2	
830.003	1.5	
830.004	1.8	
830.005	2	
830.006	2.2	
830.007	2.5	
830.008	2.8	
830.009	3	
830.010	4	

Technobearing 202005

#### **Setting rings**

Setting rings, manufactured according DIN 2250 form C, 1 to 315 mm.

- DIN 2250 form C.
- Material: hardened steel.
- The size is indicated on the setting rings to three decimal places to 100 mm. From 100 mm the nominal size is indicated in mm and separately the deviation in μm.
- Price on request up to 3 mm.



#### Also available:

- Higher accuracy,
- in tungsten carbide from 3 to 38 mm,
- form B rings for pneumatic measuring tools,
- intermediate and larger sizes,
- with coating,
- Go and NoGo limit ring gauges.



	6.0			2510					
Size mm	Price RUB	Size mm	Price RUB	Size mm	Price RUB	Size mm	Price RUB	Size mm	Price RUB
1		18		43		80		165	
1.2		19		44		82		170	
1.5		20		45		84		175	
1.8		21		46		85		180	
2		22		47		86		185	
2.2		23		48		88		190	
2.5		24		49		90		195	
2.8		25		50		92		200	
3		26		52		94		210	
3.5		27		54		95		220	
4		28		55		96		230	
4.5		29		56		98		240	
5		30		58		100		250	
5 6 7		31		60		105		260	
7		32		62		110		270	
8 9		33		64		115		280	
9		34		65		120		290	
10		35		66		125		300	
11		36		68		130		310	
12		37		70		135		315	
13		38		72		140			
14		39		74		145		Intern	nediate
15		40		75		150		sizes	over
16		41		76		155			are also
17		42		78		160		avai	lable

#### Measuring reports

For all gauges also measuring reports can be ordered.

- ① Inspection report (German) per gauge. Stating of product specifications, measured values after production, used traceable measuring devices, measuring inaccuracy and measuring date. A favourable choice when your quality system does not require traceable certificates.
- ② Traceable certificate (Dutch) with measuring reports of the ordered gauges. Besides stating of the measured values the extra assurance of an external inspection.

#### Thread gauges

The prices of the thread gauges apply to the following tolerances:

Kind of thread	Tolerances		
	Thread plug gauge	Thread ring gauge	
Metric thread according ISO 1502 (DIN 13) up to and incl. M1.4 larger than M1.4	5H 6H	6h 6g (standard) 4h and 6e	
Fixing pipe thread DIN EN ISO 228	center	A	
Trapezoidal thread DIN 103	7H	7e	

Other tolerances, sizes and kinds of threads are available on request; also available are special screw threads as per your design. Left-hand screw thread: price on request.





#### Measuring reports

For all gauges also measuring reports can be ordered.

- ① Inspection report (German) per gauge. Stating of product specifications, measured values after production, used traceable measuring devices, measuring inaccuracy and measuring date. A favourable choice when your quality system does not require traceable certificates.
- ② Traceable certificate (Dutch) with measuring reports of the ordered gauges. Besides stating of the measured values the extra assurance of an external inspection.

#### Thread plug and ring gauges

Hardened steel thread plug gauges (up to M39: Go + NoGo, from M42: Go and NoGo separate) and thread ring gauges (Go or NoGo) for metric screw thread (ISO) with coarse pitch. Manufactured according ISO 1502 (DIN 13).

Indication M	Price RUB Thread plug	Price RUB Thread ring
1 x 0.25		
$1.2 \times 0.25$		
$1.4 \times 0.3$		
$1.6 \times 0.35$		
$1.8 \times 0.35$		
2 x 0.4		
$2.2 \times 0.45$		
$2.5 \times 0.45$		
3 x 0.5		
$3.5 \times 0.6$		
4 x 0.7		
$4.5 \times 0.75$		
5 x 0.8		
6 x 1		
8 x 1.25		
10 x 1.5		
12 x 1.75		
14 x 2		
16 x 2		
18 x 2.5		
20 x 2.5		
22 x 2.5		
24 x 3		
27 x3		
30 x 3.5		
33 x 3.5		
36 x4		
39 x4		

Indication	Threa	d plug	Thread
M	Go	NoGo	ring
42 x 4.5			
45 x 4.5			
48 x 5			
52 x 5			
56 x 5.5			
60 x 5.5			

Also most common sets available.

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#### Thread plug and ring gauges (continued)

Hardened steel thread plug gauges (Go + NoGo) and thread ring gauges (Go or NoGo) for metric screw thread (ISO) with pitch 0.5, 0.75, 1, 1.5. Manufactured according ISO 1502 (DIN 13).



Hardened steel thread plug gauges (up to G1": Go + NoGo, from G1<sup>1</sup>/<sub>8</sub>": Go and NoGo separate) and thread ring gauges (Go or NoGo) for non-sealing fixing pipe thread. Manufactured according DIN EN ISO 228.



Hardened steel thread plug and thread ring gauges for sealing pipe thread. Manufactured according DIN 2999. DIN 2999 is replaced with DIN EN 10226 (ISO 7).



Hardened steel thread plug gauges (up to 1<sup>1</sup>/<sub>4</sub>: Go + NoGo, from 1<sup>3</sup>/<sub>8</sub>: Go and NoGo separate) and thread ring gauges (Go or NoGo) for American screw thread UNC and UNF manufactured according ANSI B1.2 class 2B (thread plug) and BS 919 2A (thread ring; manufactured according ANSI B1.2 class 2A available on request).





Hardened steel tapered thread plug and thread ring gauges NPT for sealing pipe thread. Manufactured according ANSI/ASME B1.20.1.





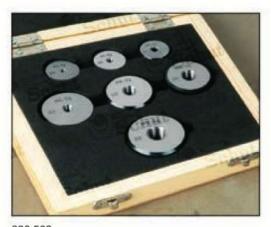
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#### Thread plug and ring gauges in sets

Sets of thread plug gauges or thread ring gauges for inspection of metric ISO threads.

- For threads M3, M4, M5, M6, M8, M10 and M12.
- Tolerance class: thread plug gauges: 6H, thread ring gauges: 6g.

- Hardened steel, thread plug gauges with aluminum grip.
- Manufactured according ISO 1502 (DIN 13).
- Delivery in a wooden case with a traceable measuring report.



836.562



836.561



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-	- Inches	-

Item No.	Thread gauges set	Price RUB
836.561	Plug gauges (Go+NoGo)	
836.562	Ring gauges (Go)	
836.563	Ring gauges (NoGo)	

# Plug gauges and setting rings in sets

- Hardened steel, plug gauges with aluminum
- Set setting rings manufactured according DIN 2250 form C.
- Set plug gauges manufactured according DIN 2248/2249.
- Delivery in a wooden case with a traceable measuring report.

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7	7

Item No.	Description	Price RUB
836.564	Setting rings: Ø4, Ø5, Ø6, Ø8 mm Setting rings: Ø10, Ø12, Ø16, Ø20, Ø25 mm	The Res
836.566	Plug gauges (Go+NoGo) H7: 3, 4, 5, 6, 8, 10, 12 mm	



#### **Drill gauges**

Gauge in the form of a steel plate with bores of increasing diameters for determining drill diameters.

■ Increment: 0.1 mm.



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Item No.	Measuring range/mm	Number of bores	Price RUB
836.640	0.1 - 10	100	
836.641	3 -10	71	
856.545	15.1 - 17.5	25	
856.546	17.6-20	25	

# Twist drill grinding gauges

For checking twist drills for the place and the 118° angle of the twist drill point. The maximum drill diameter is 50 mm.



Universal twist drill grinding gauge, also called *Y-gauge*. Besides the standard angle of 118°, this gauge also has a 90° angle for counter-



Item No.	Description	Price RUB
856.441	Twist drill grindin	g gauge
	Y-gauge	

#### Measuring wedges

Measuring wedges for quick measurements and checks of slits, key-ways, distances, etc.

■ Measuring range: 0.4 - 26 mm.

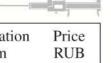
■ Graduation: 0.05, 0.1 or 0.2 mm.



909.537



909.535





Item No.	Measuring range/mm	Graduation mm	Price RUB
909.535	0.4- 6	0.05	
856.331	0.5 - 11	0.1	
909.536	1 -15	0.1	
909.537	2 -26	0.2	

# Flat plug gauges

- Measuring range: 1-60 mm.
- Graduation: 0.1 mm.
- Stainless steel, no-glare chrome finished.
- Graduation on both sides.
- Ground measuring faces.



Item No.	Measuring range/mm	Price RUB
907.876	1-15	
909.516	15-30	
909.517	30-45	
909.534	45 - 60	



# Conical plug gauges

- Measuring range: Ø1-45 mm.
- Graduation: 0.1 mm.
- Hardened, ground and chrome finished.
- With anodized handle.



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Item No.	Measuring range/mm	Price RUB
909.490	ø 1- 6	
909.491	ø 4-15	
909.492	ø 15 - 30	
909.493	ø30-45	

#### Nozzle gauges

Set of pins in holder serving as a gauge to determine jet nozzle sizes.



Item No.	Number of pins	Sizes mm	Price RUB
856.107	20	ø 0.45 - 1.50	
856.108	16	ø 1.50 - 3.00	
856.124	16	ø3.00-4.50	
856.125	16	ø4.50-6.00	

# Nozzle gauges with vernier

Nozzle gauges with a hardened and ground tapered needle.



ĺ	Item No.	Measuring range/mm	Price RUB
Ì	856.109	ø0-3	
	856.110	ø0-5	

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#### Center gauges

For checking thread cutting tools for Whitworth thread 55° or metric thread 60°.

#### TECHNOBEARING

Item No.	Description	Price RUB
856.444	Whitworth 55°	
856.445	Metric 60°	



856.444



856.445

# Thread cutting tool gauges







Item No.	Description	Price RUB
856.446	Universal thread cutting gauge for angular threa	
856.447	Trapezoidal thread cutt tool gauge for trapezoid (30°, 2-12 mm)	
856.449	Combined lathe and thread cutting tool gauge – cutting tool wedge at – trapezoidal thread D (30°, 2-12 mm), and – angular thread (40° -	ngle, IN 103
856.450	Combined lathe and thread cutting tool gaug with additional angle st on the back	

856.451 Thread cutting tool gauge for - rectangular thread,

> - trapezoidal thread DIN 103  $(30^{\circ}, 2-12 \text{ mm})$ , and

- angular thread (55° and 60°)



Trap: Gew. Din. 103 Flye: 30°C Schnittwinkel



856.450

#### Angle gauge set

- Measuring range: 5-90° (supplementary angles: 90-175°).
- Increment: 5° (18 pieces).
- Multiple angles per angle gauge:
  - primary angles  $(1, 2^*, 3, 4)$ ,
  - supplementary angles (5, 6), and
  - $-\frac{1}{2}$  primary angles (7, 8).

■ Delivery in a case.



\* Angle 2: only with the angle gauges from 20°.



Item No. Description	Price RUB
909.410 Angle gauge set	

# Radius gauges

- Measuring range radius: 1 25 mm.
- Increment:

1-3 mm: 0.25 mm, 3.5-20 mm: 0.5 mm

3.5 - 20 mm: 0.5 mm, **TECHNOBEARING** 



Item No.	Radius range/mm	Price RUB
907.766	1 - 7	
907.767	7.5 - 15	
907.768	15.5 - 25	

#### **Angle gauges**

- Measuring range: 1-45°.
- Number of blades: 20.
- Angles:  $1^{\circ} 2^{\circ} 3^{\circ} 4^{\circ} 5^{\circ} 6^{\circ} 7^{\circ} 8^{\circ} 9^{\circ} 10^{\circ} 12^{\circ} 14^{\circ} 16^{\circ} 18^{\circ} 20^{\circ} 25^{\circ} 30^{\circ} 35^{\circ} 40^{\circ} 45^{\circ}$ .



Item No.	Description	Price RUB
908.798	Angle gauges	

#### Shape and radius gauge

This stainless steel gauge can be used to adopt various complex shapes of tools and workpieces. When the gauge is pressed against the part which has to be checked, it takes on the shape of this part. Because of the graduation (mm) on the case, the shape can be checked easily.

Because the tracers were supported under pressure, they don't move on their own.



Item No.	Measuring range/mm	Price RUB
836.319	150 x 40	

#### Set of welding seam gauges

■ For weld thickness: 3-12 mm.

■ Up to 7 mm increasing with 0.5 mm, plus 8, 10 and 12 mm.

Total: 12 pieces.

■ Bright steel.



Item No. Description	Price RUB

856.452 Welding seam gauges

#### Welding seam gauge

For measurement of welding seams.

- Graduation: 0.2 mm.
- Stainless steel.

industributed a

■ Delivery in a case.



Item No.	Description	Price RUB
856.438	Welding seam gauge	

836.423

# Welding seam calipers

For measurement of welding seams.

- Measuring range: 0 20 mm.
- Analog: vernier 0.1 mm, digital: resolution 0.01 mm.
- Delivery in a case.

#### Analog

■ Stainless construction.

#### **Digital**

■ mm/inch conversion.

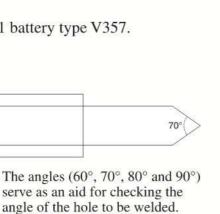
90

60°

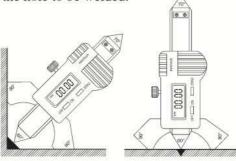
- On/off switch.
- Reset.

900

■ Power supply: 1 battery type V357.



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Item No.	Measuring range/mm	Price RUB
Analog:		
836.423	0 - 20	
Digital:		
906.429	0-20	
Option:		
	Spare battery	

906.429

#### Thread and tolerance tables

#### Thread table

Table with all standard international thread indications: metric, Ww, Gas, BSF, Pg, BA, UNC, UNF and UNEF.

#### Tolerance table

Table compromising all tolerances and fits according ISO R286, up to 500 mm (table with over 6400 pairs of tolerance values for internal and external measurements).

#### Conversion table mm/inch

For converting from mm to inch and from inch to mm.

Item No.	Description	Price RUB
835.162	Thread table	
835.163	Tolerance table	
835.164	Conversion table mm/	inch

#### Flat thickness gauge

Gauge to e.g. measure the thickness of steel plating.

■ Measuring range: 1-13 mm.

■ Graduation: 0.5 mm.

Stainless steel.



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	Item No.	Measuring range/mm	Price RUB			
ľ	907.899	1-13		Ī		



# Screw pitch gauges



Item No.	Type of thread	Price RUB
856.456	Metric	
856.457	Whitworth	
856.458	BSP	
856.459	Metric/Whitworth	
856.460	Metric/Whitworth	
	BSP	
856.461	UNC/UNF	

#### Universal meter for bevels

Universal instrument for measurement of bevels from 0.5 to 10 mm. Direct reading of the measured bevel  $(30^{\circ}, 45^{\circ}, 60^{\circ})$ .

■ Measuring range: 30°: 15 mm,

45°: 10 mm,

60°: 5 mm.

■ Hardened stainless steel construction.

0 5050

■ Delivery in a case.

Item No. Description	Price RUB
838.727 Universal meter for bevels	



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# Magnifiers / Microscopes / Glass rulers / Stereo microscopes Endoscopes



#### Peak stand magnifier 5x

Standard, all-purpose magnifier.

■ Dimensions: ø35 x 55 mm.



# Peak stand magnifier 10x



Standard, all-purpose magnifier. Very suitable for inspection of tissues, structures and photographic negatives.

■ Dimensions: ø34 x 41 mm.

Item No.	Price RUB
905.112	

# Item No. Price RUB 905.110

# Peak stand magnifier 10x

A simple, all-purpose magnifier.

■ Dimensions: ø41/ø45 x 40 mm.



TECHNOBEARING

Item No.	Price RUB
905.316	

#### Peak stand magnifier 15x

Price RUB

Bright images with high contrast due to a coated achromatic lens. With wide acrylic tube.

■ Dimensions: ø27/ø36 x 33 mm.

Item No.

905.114





# Peak stand magnifier 22x

Bright images with high contrast due to a coated achromatic lens. Suitable for inspection of high precision work.

■ Dimensions: ø 28 x 30 mm.

Item No.	Price RUB
905.116	

echnobearing 202

#### Peak magnetic magnifier 5x

This magnifier has two small magnets which make sure that the magnifier can be put on a fixed position without moving. By placing this magnifier on hard to read scale divisions of, for example, graduated rulers, height gauges or micrometers, the possibility of reading errors substantially reduces.

■ Field of view: Ø30 mm.

■ Dimensions: Ø44 x 20 x 30 mm.

■ Weight: 15 g.

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Itama No. Doggariation	Dui on DIJD	PEAK
Item No. Description	Price RUB	=char
905.210 Magnetic magnifier 5x	t .	

# Peak eye magnifiers 3.3x ... 20x

Eye magnifiers can be placed in front of the eye easily, which makes them ideal tools for working on small products like watches, clocks and jewelry.

■ Made of aluminum.

■ Weight: 10-16 g.

■ A small hole in the tube prevents the lens from becoming blurred.



905.390



905.394



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	PEAK ABOD	
100		

905.301

Item No. Type	Magnifi- cation	Lenses	Price RUB
905.390 A13D	3.3x	1	
905.391 A16D	4.0x	1	
905.392 A20D	5.0x	1	
905.393 A26D	6.7x	1	
905.394 A40D	10.0x	2	
905.299 A48D	12.0x	1	
905.300 A60D	15.0x	1	
905.301 A80D	20.0x	1	

TECHNOBEARING

#### Peak zoom magnifiers 8-16x and 10-20x

Unique stepless zoom lens with sufficient brightness in each stage of magnification and a minimum of optical aberration. With click-stop on magnifications 8/10/12/14/16x and 10/15/20x, respectively. Equipped with scale.

- Field of view: Ø20-10 mm or Ø13-7 mm.
- Graduation: 0.1 mm.





TECHNOBEARING

198 905.197

Item No.	Magnification	Field of view ø/mm	Adjustment range eye correction	Measuring range/mm	Dimensions mm	Price RUB
905.197	8 - 16x	20 - 10	+2.5D to -5D	16	ø45 x 65	
905.198	10-20x	13 - 7	+5D to $-3.5D$	12	ø42 x 52	

#### Peak telecentric magnifier 7x

A telecentric magnifier shows objects, which are at different distances, with the same magnification. In this way 3D objects, or e.g. a needle above a scale, can be shown and measured accurately without parallax error.

- Field of view: ø24 mm.
- Measuring range scale: 20 mm.
- Graduation: 0.1 mm.
- Adjustable diaphragm with apertures Ø 0.5, 1 and 3 mm.
- Dimensions: ø 38 x 74 mm.



Item No.	Description	Price RUB
905.136	Telecentric magnification including case and (for scales of \$\phi\$26	standard scale

#### Peak stand magnifier 4x

This practical and convenient magnifier can be used for many purposes, like inspecting films. The magnifier is delivered with a clear and a black base, which allows you, depending on the amount of light, to choose the base which is most suitable for your application.

- Field of view: ø45 mm.
- Dimensions: 51 x 51 x 65 mm.
- Weight: 80 g.



Item No.	Description	Price RUB
905.399	Stand magnifier 4x	

Technobearing 20200

#### Peak stand magnifier 8x

Convenient and smartly designed magnifier with achromatic lens. A scale is engraved at the bottom of the transparent acrylic base. Photographic negatives can be inspected using the base with opal glass.

■ Field of view: 24 x 36 mm.

■ Dimensions without base: 46 x 49 x 39 mm.

■ Weight: 52 g.

#### Peak light magnifier 3.5x

Large square lens (52 x 52 mm) of plastic with illumination, e.g. for reading maps and indicators, and for inspection of production processes.

■ Dimensions:  $60 \times 75 \times 190$  mm.

■ Weight (without batteries): 120 g.

■ Power supply: 2 batteries type C.





Item No.	Description	Price RUB
905.290	Magnifier w/o base	
Option:		
905.291	Base	

Item No.	Description	Price RUB
905.212	Magnifier (w/o ba	tteries)
Option:		
495.153	Battery (2 needed)	)

#### Peak monocular telescopes

Lightweight pocket-size telescopes with erect image.

■ Dimensions 905.207: Ø22.5 x 50 mm, 905.208: Ø22.5 x 53 mm.

Weight: 32 g.Delivery in a case.



TECHNOBEARING

Item No.	Magnifi- cation	Lens aperture ø/mm	Close focus distance/mm	Field of view (angle)	Field o ø/mm	f view* ø/m	Price RUB
905.207	2x	8	100	11°	12	192	
905.208	4x	10	220	10°	29	175	

<sup>\*</sup> Field of view respectively at close focus distance and at 1000 m.

#### Peak head magnifiers 2.2x ... 5.2x

Because of the velcro strip, the head magnifier can be used easily. The great advantage of a head magnifier is that the user has both hands free for e.g. production and assembly of precision instruments. The head magnifier is designed in such a way that people who wear glasses can use it as well. With the extra

pair of lenses inside the head magnifier, the magnification can be enhanced from 2.2x to 3.3x.

■ Clear, broad and 3-dimensional view.

■ Weight 905.318: 100 g, 905.317: 118 g.

905.318

Item No.	Magnification	Price RUB
905.318	2.2x / 3.3x	
905.317	2.2x / 3.3x / 4.1x / 5.2x	



# Peak pen microscopes with EIM 25x ... 100x

These pen microscopes have a fixed scale and EIM system. With standard microscopes, the magnification is upside down, but because of the EIM system, this is not the case with these pen microscopes.

■ Dimensions: Ø20.7 x 111 mm.

■ Weight: 25-28 g.

Item No.	Magnifi- cation	Field of view ø/mm	Measuring range/mm	Graduation mm	Price RUB
905.404	25x	3.50	3.0	0.05	
905.405	50x	1.70	1.6	0.02	
905.406	75x	1.10	1.0	0.01	
905.407	100x	0.86	0.8	0.005	

TECHNOBEARING

#### Peak pen microscopes 25x ... 100x

- Dimensions: ø12.4x127 mm.
- Weight: 13-16 g.
- With a fixed scale (only 905.263/264).





905 26

905.404

Item No.	Magnifi- cation	Field of view ø/mm	Measuring range/mm	Graduation mm	Price RUB
905.267	25x	3.30	/ <u>  </u>  ()	×==	
905.268	50x	2.00	9.500	_	
905.269	75x	1.09	12 <del></del> 12	· —	
905.266	100x	0.84		_	
With fixe	d scale:				
905.263	25x	3.30	3.00	0.05	
905.264	50x	2.00	1.60	0.02	

# Peak light magnifiers 10x and 15x

Magnifier with illumination.

- Field of view: Ø25 mm.
- Dimensions and weight (without batteries): 905.118: 175 x 35 x 41 mm, 81 g, 905.119: 180 x 36 x 42 mm, 90 g.
- Power supply: 2 batteries type C, not included.



Item No.	Magnification	Price RUB
905.118	10x	
905.119	15x	
Option:		
	attery (2 needed)	

#### Peak folding magnifiers 7x ... 20x

Steinheil magnifiers with an excellent chromatic correction and a large field of view.

- Dimensions: 39 x 24 x 22 mm.
- Weight: 18-22 g.



Item No.	Magni- fication	Field of view ø/mm	Price RUB
905.200	7x	16	
905.202	10x	15.5	
905.204	14x	12	
905.206	20x	7	

# Peak folding magnifiers 3x ... 9x

Because of their small size, these folding magnifiers are easy to use. Available in several magnifications, with one or two lenses. The advantage of two lenses is that it gives a very sharp image, because the image error of the first lens is being corrected by the second one.

A mm scale is engraved at each of the four sides of the base. The scale length is equal to the width of the field of view (see table).





Item No.	Magni- fication	Field of view/mm	Number of lenses	Material/ color	Price RUB
905.230	9x	10 x 10	1	Al/clear	
905.375	7x	15 x 15	1	Al/clear	
905.376	6x	25 x 25	1	Al/clear	
905.377	9x	$10 \times 10$	1	Al/black	
905.378	7x	15 x 15	1	Al/black	
905.379	6x	$25 \times 25$	1	Al/black	
905.383	4x	30 x 30	2	Al/black	
905.384	3x	$50 \times 50$	2	Al/black	
905.380	9x	$10 \times 10$	2	Zn/black	
905.381	8x	15 x 15	2	Zn/black	
905.382	6x	$25 \times 25$	2	Zn/black	

echnobearing 20200

#### Peak scale magnifier 7x

All-purpose scale magnifier. Aberrations are avoided by the excellent achromatic lenses.

- Field of view: Ø26 mm.
- Measuring range standard scale: 20 mm.
- Graduation: 0.1 mm.
- Dimensions: ø36 x 62 mm.
- Weight: 56 g.



#### TECHNOBEARING

Item No.	Description	Price RUB
905.140	Magnifier with	
	standard scale in a	case
905.155	Set of magnifier 90	05.140
	and five scales in a	case
905.138	Magnifier 905.140	
	with illumination (	

#### Option:

495.153 Battery (2 needed)

#### Peak scales ø 26 mm

Aside from the standard scale, various other scales are available, each one with its own specific application. These scales are interchangeable in scale magnifiers like the one above.

Item No.	Scale	Price RUB
905.141	no. 1	
905.142	no. 2	
905.143	no. 3	
905.144	no. 4	
905.145	no. 5	
905.146	no. 6	
905.147	no. 7	
905.148	no. 8	
905.149	no. 9	
905.150	no. 10	
905.151	no. 11	
905.152	no. 12	
905.153	standard	



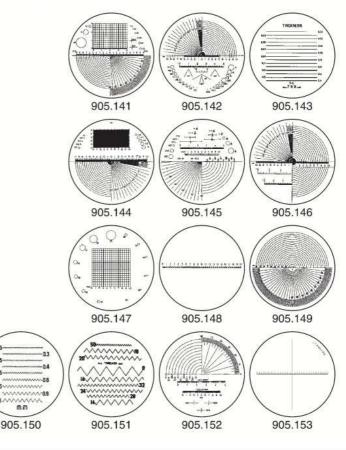
#### Scale magnifier with illumination 905.138

- Field of view: Ø22 mm.
- Dimensions: ø36 x 58 x 175 mm.
- Weight (without batteries): 118 g.
- Power supply: 2 batteries type C.



#### Set 905.155

Scale magnifier 905.140 in a set with the five most frequently used scales (2, 3, 7, 8 and 10).



#### Peak scale magnifier 10x

All-purpose scale magnifier. Aberrations are avoided by the excellent achromatic lenses. High resolution and large field of view.

- Field of view: ø35 mm.
- Measuring range standard scale: 30 mm.
- Graduation: 0.1 mm.
- Dimensions: ø46 x 44 mm.
- Weight: 74 g.



#### TECHNOBEARING

Item No.	Description	Price RUB
905.180	Magnifier with standard scale in a	ı case
905.195	Set of magnifier 9 and five scales in	05.180
905.178	Magnifier 905.180 with illumination	)
<b>Option:</b> 495, 153	Battery (2 needed)	)

#### Peak scales ø35 mm

Aside from the standard scale, various other scales are available, each one with its own specific application. These scales are interchangeable in scale magnifiers like the one above.

Item No.	Scale	Price RUB	
905.181	standard		
905.182	no. 1		
905.183	no. 2		
905.184	no. 3		
905.185	no. 4		
905.186	no. 5		
905.187	no. 6		
905.188	no. 7		
905.189	no. 8		
905.190	no. 9		
905.191	no. 10		
905.192	no. 11		
905.193	no. 12		



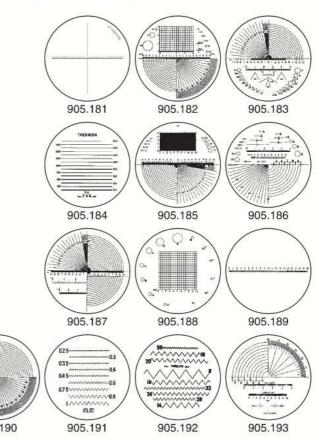
#### Scale magnifier with illumination 905.178

- Field of view: ø32 mm.
- Dimensions: Ø47 x 45 x 185 mm.
- Weight (without batteries): 134 g.
- Power supply: 2 batteries type C.



#### Set 905.195

Scale magnifier 905.180 in a set with the five most frequently used scales (2, 3, 7, 8 and 10).



#### Peak long-distance microscope

The long-distance microscope consists of a stand microscope 40x (905.330) and an objective unit. The objects being inspected can be enlarged sharply at a short distance of 200 mm as well as at long distances. The microscope has a large field of view, and comes with a Huygens eyepiece (magnification 10x) and a detachable soft rubber eye adapter.

■ Focusing with helicoid ring.

■ Dimensions at working distance 200 mm: ø46 x 316 mm,

■ Weight: 414 g.

■ Delivery in a case incl. standard scale.



Item No. Description	Price RUB
905.435 Long-distance micro	oscope

Working distance/mm	Magnifi- cation	view ø/mm
200	27x	5.5
300	15x	10
400	10x	15
500	8x	19

# Peak scale magnifier 3x

Scale magnifier with a lens system separated from the scale by a stand, hereby creating a larger working distance, field of view and luminous intensity. The scale is placed in a rotatable ring in the base of the stand.

■ Field of view: ø58 mm.

■ Measuring range scale: 54 mm.

■ Graduation: 0.1 mm.

■ Dimensions: 76 x 105 x 96 mm.

■ Weight: 378 g.

TECHNOBEARING



Item N	lo. Description	Price RUB
905.32	28 Magnifier with scale and	d stand

Technobearing 2020

#### Peak scale magnifier 30x

■ Field of view: Ø7 mm.

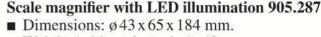
■ Measuring range standard scale: 5 mm.

■ Graduation: 0.05 mm.

■ Dimensions: ø30 x 19 mm.

■ Weight: 16 g.





■ Weight (without batteries): 48 g.

■ Power supply: 2 batteries type AAA.



	Item No.	Description	Price RUB
Ī	905.285	Scale magnifier in	case
	905.287	Magnifier 905.285	5
		with illumination (	(without batteries)

#### **Options:**

497.914 Battery (2 needed) 905.286 Separate standard scale 905.179 LED penlight

# Peak anastigmatic scale magnifiers 4x and 7x

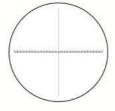
Magnifier with anastigmatic lens. This is a combined objective which reflects a large, undistorted image with sharp features, very suitable for inspection of (photographic) films.

- Large field of view, 905.216: ø58 mm, 905.400: ø41 mm.
- Removable scale with mm graduation.
- Measuring range scale 905.217: 54 mm, 905.401: 36 mm.
- Graduation scale: 0.1 mm.
- Dimensions and weight: 905.216: ø73 x 77 mm, 272 g,

905.400: ø55 x 53 mm, 103 g.

TECHNOBEARING







905.216

Item No.	Description	Price RUB
905.216	Scale magnifier 4x	
905.400	Scale magnifier 7x	
Options	:	
905.217	Standard scale	
	for magnifier 905.216	
905.401	Standard scale	
	for magnifier 905.400	

## Peak scale magnifier 15x

Field of view: Ø 20 mm.Measuring range standard

scale: 14 mm.

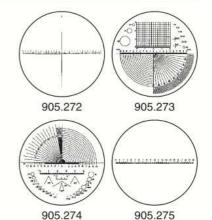
■ Graduation: 0.1 mm.

■ Dimensions: Ø35 x 33 mm.

■ Weight: 40 g.







Item No.	Description Price RUI	3
905.270	Magnifier with	
	standard scale in a case	
905.278	Magnifier 905.270	
	with illumination (without batteries	;)
993 7534		

### **Options:**

497.914 Battery (2 needed)

905.272 Separate standard scale

905.273 Scale no. 1

905.274 Scale no. 2

905.275 Scale no. 8

905.179 LED penlight

## Scale magnifier with LED illumination 905.278

■ Dimensions: Ø43 x 65 x 184 mm.

■ Weight (without batteries): 72 g.

■ Power supply: 2 batteries type AAA.



## Peak stand magnifier 30x

This *microscopic* magnifier has a very high magnification despite its small size. In this way, the magnifier can be held with one hand, while you can hold the product to be inspected in the other. Because of the sophisticated optic design, this magnifier is almost comparable to a microscope of the same size, while the field of view is larger. This magnifier is often used in photo technique, for the production of precision instruments and for inspection of precision work.

■ Lens aperture: ø7 mm.

■ Dimensions: ø37 x 20 mm.

■ Weight: 10 g.



TECHNOREARING



### Stand magnifier with LED illumination 905.402

- Dimensions: Ø43 x 65 x 184 mm.
- Weight (without batteries): 40 g.
- Power supply: 2 batteries type AAA.

Item No. Description  905.222 Stand magnifier M 905.402 Stand magnifier 9	Price RUB	
905.222	Stand magnifier M	<i>I</i> =30x
905.402		
	with illumination	(without batteries)

#### **Options:**

497.914 Battery (2 needed)

905.179 LED penlight

## Peak ABC magnifier 3-18x

The ABC magnifier consists of three lenses. Combining the three lenses, seven different magnifications are possible.

- Magnification: 3x, 6x, 9x, 12x, 14x, 16x and 18x.
- Magnification and diameter of the lenses:

lens A: 12x, Ø 14 mm, lens B: 3x, Ø 28 mm, lens C: 6x, Ø 20 mm.

- Dimensions: 60 x 39 x 24 mm.
- Weight: 76 g.



Item No. Description	Price RUB	
905.196 ABC magnifier 3-18x		Ī

## Peak magnifying glass 2.5-5x

This model of the classical magnifying glass has a lens-in-lens construction. In the big ø75 mm lens a smaller ø20 mm lens has been integrated which offers extra strong magnification. The big lens has a 2.5x magnification, the small lens 5x.

- Dimensions: Ø80 x 170 mm.
- Weight: 111 g.



Item No.	Description	Price RUB
905.214	Magnifying glass	2.5 - 5x

## Magnifier on magnetic stand

- Magnification: 2x (ø90 mm).
- Total length: 280 mm.
- Magnetic force: 600 N.



Item No.	Description	Price RUB
909.609	Magnifier on	
	magnetic stand	

## Peak flexible stand magnifier

This magnifier has a flexible arm which can be adjusted freely from a solid and stabilized stand. The lens can be put in many positions for the most ergonomic use thus leaving both hands of the user free.

- Dimensions: 145 x 120 x 485 mm (maximum height).
- Weight: 1.5 kg.



Item No.	Magnification	Lens ø/mm	Price RUB
905.279	1.7x	115	
905.427	2.0x	100	
905.428	2.2x	90	

13.212. schooboaring 20900

## Peak stand microscopes 20x ... 300x

These stand microscopes are available in five versions. All five are compact and lightweight, but are especially characterized by their large field of view. Delivery in a case, including LED illumination, matching standard scale and objective. The microscopes come with a Huygens eyepiece (magnification 10x) and with a detachable soft rubber eye adapter. All-purpose use with high precision.

### **Type 2034**

A scale graduation (with a 10 mm scale range) has been engraved on the focusing ring which allows height measurements at a resolution of 0.1 mm.

■ Focusing with helicoid ring.

■ Dimensions: ø63 x 172 mm.

■ Weight (without batteries): 237 - 241 g.

■ Power supply: 2 batteries type AAA.



Item No.	Magnification	Field of view ø/mm	Working distance/mm	Measuring range/mm	Graduation mm	Price RUB
905.320	20x	7.2	36	6	0.1	
905.330	40x	3.6	18.7	3	0.05	
905.340	60x	2.4	10.8	2	0.02	
905.350	100x	1.45	5.7	1.2	0.01	
905.355	150x	0.96	9.2	0.9	0.005	
905.370	200x	0.72	6.7	0.6	0.002	
905.374	300x	0.48	4	0.4	0.001	

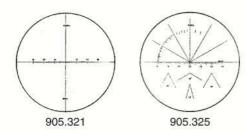
**Options:** 

497.914 Spare battery (2 needed)

905.179 LED penlight

## Peak individual scales

The in the eyepiece integrated scale can be changed, for example when the magnification of the microscope changes (see "Individual objectives"). Additionally, an extra eyepiece (without scale and soft rubber eye adapter) is available, so the eyepiece doesn't need to be disassembled each time the scale is being changed.



Item No.	Magnification microscope	Scale	Price RUB
Standard	scales:		
905.321	20x	no. 54	
905.331	40x	no. 64	
905.341	60x	no. 74	
905.351	100x	no. 84	
905.356	150x	no. 94	
905.337	200x	no. 104	
905.388	300x	no. 114	
For inspe	ection of printed	matter and	d tools:
905.325	20x	no. 55	
905.335	40x	no. 65	
904.042	Individual eyepid	ece 10x	

## Peak stand microscopes 20x ... 300x (continued)

### Types 2054/2054-EIM/2064-CIL

These types primarily differ from the type 2034 in the focusing mechanism and the sturdy die-cast aluminum base.

- Focusing with rack-and-pinion.
- Dimensions: Ø63 x 172 mm.
- Weight (without batteries): 2054/2054-EIM: 263-267 g, 2064-CIL: 393-394 g.
- Power supply:

2054/2054-EIM: 2 batteries type AAA, 2064-CIL: 2 batteries type AAA and 2 batteries type AA.



### Erected Image with Measure (EIM)

With standard microscopes, the magnification is upside down, but this is not the case with the microscopes of type 2054-EIM.

## Peak individual objectives

The objectives are also separately available. This gives you the great advantage that you can get all magnifications with one scale microscope. The magnification of the eyepiece is 10x.

Item No.	Magnification objective	Magnification microscope	Price RUB
905.322	2x	20x	
905.332	4x	40x	
905.342	6x	60x	
905.352	10x	100x	
905.357	15x	150x	
905.372	20x	200x	
905.387	30x	300x	



### Coaxial Incident Light (CIL)

The microscope of the type 2064-CIL are besides the standard LED illumination also provided with a coaxial light source, which is especially suitable for the inspection of objects with deep structures as well as chromed, high reflective surfaces.

Item No.	Magnification	Price RUB
Type 2054	l:	
905.410	20x	
905.411	40x	
905.412	60x	
905.413	100x	
905.414	150x	
905.415	200x	
905.416	300x	
Type 2054	4-EIM:	
905.417	20x	
905.418	40x	
905.419	60x	
905.420	100x	
Type 2064	I-CIL:	
905.293	40x	
905.294	60x	
905.295	100x	
905.296	150x	
905.297	200x	
905.298	300x	
Options:		
497.914	Spare battery	
	ype AAA (2 needed)	
495.111	Spare battery	
t	ype AA (2 needed)	
905.179	LED penlight	

For other specifications: see table of type 2034.

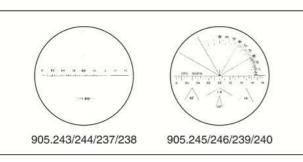
## Peak stand microscopes 25x ... 100x

Compact and light-weight stand microscope with scale. The high resolution and bright images as well as its easy focusing make this instrument a practical measuring aid. A scale graduation (scale range 8 mm) has been engraved on the focusing ring which allows height measurements at a resolution of 0.1 mm. With detachable soft rubber eye adapter. Delivery in a case, with matching standard scale.

■ Dimensions: Ø41.5 x 122 mm.

■ Weight: 83 g.

#### TECHNOBEARING



Item No.	Type	Magnification Price RUB
Standard	scales:	
905.243	24	25x
905.244	13	50x
905.237	34	75x
905.238	44	100x
		ion of printed matter
and tools:		
	25	25x
and tools: 905.245 905.246		25x 50x
905.245	25	



Item No.	Magnification	Field of view ø/mm	Working distance/mm	Measuring range/mm	Graduation mm	Price RUB
905.249	25x	3.3	17.0	3.0	0.05	
905.250	50x	2.0	11.7	1.6	0.02	
905.251	75x	1.1	11.7	1.0	0.01	
905.258	100x	0.84	11.6	0.8	0.005	

## Peak glass rulers

■ Graduation: 0.1 mm.
 ■ Accuracy: ±0.02 mm.
 ■ Thickness: 10 mm.

■ Width: 50 mm.

■ Delivery incl. 2 magnifiers M = 10x.

■ Delivery in a case.



Item No.	Measuring range/mm	Length mm	Price RUB
905.422	0- 300	360	
905.423	0 - 500	560	
905.424	0 - 700	760	
905.425	0 - 1000	1060	

## Special cleaner

Special cleaner (120 ml) for objectives, glass plates and other optical components.



Item No.	Description	Price RUB
111.534	Special cleaner	

## Field of view qualifier

Glass reference standard with a pattern consisting of wide variety of very accurate optical characteristics, produced with a coating (chrome). Very suitable for use with optical instruments as geometric accuracy standard or as a test and training object.

■ Accuracy: ±0.002 mm.

 Delivery including drawing with size indication.





Item No.	Description	Price RUB
635.222	Field of view qualifier	

## Optical cleaning kit

This cleaning kit is ideal to clean optics, microscopes and magnifying glasses, and can also be used on other products.

### The set consists of:

- a bottle of cleaning solution (15 ml),
- a micro fiber cleaning cloth,
- a soft brush.
- an air blower.



Item No.	Description	Price RUB
909.432	Optical cleaning kit	

## Light magnifiers with fluorescent or LED illumination

Large lens with a large field of view. Very suitable for production and assembly of precision instruments.



909.651

#### With circular fluorescent tube

909.650

Item No. Description	Price RUB
909.650 With table clamp	
909.651 With base	
909.654 Spare bulb 22 W	

## With LED ring light

Item No.	Description	Price RUB
909.648	90 LEDs, with table	e clamp
909.649	60 LEDs, with base	

909.649

## Stereo microscope SSM

- Magnification: 20x.
- Field of view: Ø9.5 mm.
- Viewing angle: 90°.
- Interpupillary distance: adjustable (55-75 mm).
- Working distance: 70 mm.
- Max. object height: 30 mm.
- Incident light (LED).

TECHNOBEARING



- Stage plate: white plastic, ø 50 mm.
- Dimensions lxwxh: 135 x 120 x 230 mm.
- Power supply: 2 batteries type AA.

	552 1	
Item No. Type	Magnification Price RUB	
909.012 SSM	20x	

Option:

495.111 Spare battery (2 needed)

## Stereo microscopes SSM-2

Stereo microscopes on a column stand, with a sharp erect image and a large field of view. The magnification is 20x (eyepiece: 10x, objective: 2x); eyepieces 5x, 15x and 20x are optionally available. See for all accessories the pages "SSM stereo microscope accessories".

- Viewing angle: 45°.
- Interpupillary distance: adjustable (55-75 mm).
- Left eyepiece with diopter adjustment: ±5 dpt.
- Objective: with dovetail mounting.
- Stage plate: black/white (two-sided).
- Delivery incl. dust cover and soft rubber eye adapters.

Item No.	Type	Magnification	Price RUB
909.000	SSM-2A	20x	
909.001	SSM-2C	20x	

See for accessories the pages "SSM stereo microscope accessories".







Туре	SSM-2A	SSM-2C	
Eyepiece M	10x	10x	
Objective M	2x	2x	
Total range* M	10-40x	10-40x	
Illumination	no	yes	
Working distance mm	70	70	
Max. object height mm	60	70	
Travel of rack mm	40	40	
Stage plate ø/mm	60	95	
Dimensions lxwxh/mm	220x115x250	220x115x290	
Weight kg	1.6	2.6	

<sup>&</sup>quot;The magnification range of the microscope in combination with the optional eyepieces 5-20x.

## Illumination: incident light and backlight

Model SSM-2C is equipped with incident light and backlight (switchable incident light or backlight).

- Stage plate: opal glass. Delivery incl. black/ white stage plate. Dark field condenser optional.
- Power supply: 230 Vac (50 Hz).

TECHNOBEARING

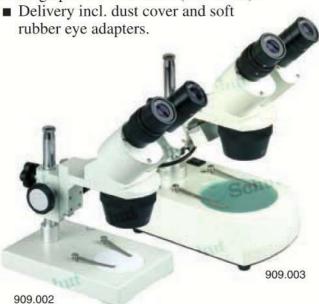
Magnification Price RUB

## Stereo zoom microscopes SSM-3/5

Stereo zoom microscopes with a sharp erect image and a large field of view. Equipped with a double objective (2x/4x) is used most; also available 1x/2x and 1x/3x), so that the magnification can be changed with a simple rotary motion. The magnification of the eyepieces is 10x (optionally 5x, 15x and 20x). See for all accessories the pages "SSM stereo microscope accessories".

Item No. Type

- SSM-3: stand with round column. SSM-5: fixed stand.
- Microscope head: 360° rotatable (only SSM-5).
- Viewing angle: 45°.
- Interpupillary distance: adjustable (55-75 mm).
- Left eyepiece with diopter adjustment: ±5 dpt.
- Stage plate: black/white (two-sided).



#### 909.002 SSM-3A 20x/40x 909.042 SSM-3A 10x/20x909.032 SSM-3A 10x/30x909.003 SSM-3C 20x/40x909.043 SSM-3C 10x/20x909.033 SSM-3C 10x/30x909.034 SSM-5AW 20x/40x 909.044 SSM-5AW 10x/20x 909.004 SSM-5AW 10x/30x 909.045 SSM-5CW 10x/20x 909.035 SSM-5CW 10x/30x See for accessories the pages "SSM stereo

microscope accessories".



## Illumination: incident light and backlight

Models SSM-3C/5CW are equipped with incident light and backlight (switchable incident light or backlight).

■ Stage plate: opal glass. Delivery incl. black/ white stage plate. Dark field condenser optional.

SSM-3A

60

220x115x250

1.7

■ Power supply: 230 Vac (50 Hz).

ø/mm

lxwxh/mm

Type

Stage plate

Dimensions

V I					
Eyepiece	M	10x	10x	10x	10x
Objective	M		2x/4x, 1x	/2x or 1x/3x	
Total range*	М		10-80x, 5-4	40x <i>or</i> 5-60x	V):
Illumination		no	yes	no	yes
Working distance	mm	57	57	70	70
Max. object height	mm	60	70	20	20
Travel of rack	mm	40	40	30	20

SSM-3C

95

220x115x290

2.6

The magnification range of the microscope in combination with the optional eyepieces 5-20x.

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SSM-5AW

60

220x115x280 | 220x115x320

95

## Stereo zoom microscopes with auxiliary lenses SSM-10/20

Stereo zoom microscopes with a sharp erect image and a large field of view. Equipped with a double objective (2x/4x) is used most; also available 1x/2x and 1x/3x, so that the magnification can be changed with a simple rotary motion. The magnification of the eyepieces is 10x (optionally 5x, 15x and 20x). The magnification can be adjusted to your application even more with an optional auxiliary lens (0.5x, 0.75x, 1.5x) or 2x). See for all accessories the pages "SSM stereo microscope accessories".

- Stand with round (flattened) column and anti drop facility.
- Microscope head: 360° rotatable.
- Viewing angle: 45°.
- Interpupillary distance: adjustable (55 75 mm).
- Left eyepiece with diopter adjustment: ±5 dpt.
- Working distance (without aux. lens): 72 mm.

Stage plate: black/w	hite (two-sided	).
Delivery incl. dust		
cover and soft rubbe	er	-
eve adapters.	THE STATE OF	



Item No.	Type	Magnification Price RUB
909.006	SSM-10	20x/40x
909.046	SSM-10	10x/20x
909.036	SSM-10	10x/30x
909.0071	SSM-20C	C2 20x/40x
909.0471	SSM-20C	C2 10x/20x
909.0371	SSM-20C	C2 10x/30x

<sup>1</sup> With LED illumination.
See for accessories the pages "SSM stereo microscope accessories".



TECHNOBEARING

# Illumination: LED incident light and LED backlight

Model SSM-20C2 is equipped with LED incident light and LED backlight, and the luminous intensity is adjustable.

- Stage plate: opal glass. Delivery incl. black/ white stage plate.
- Power supply: 230 Vac (50 Hz).

Туре	SSM-10	SSM-20C2
Eyepiece M	10x	10x
Objective M	2x/4x, 1x/2	2x or 1x/3x
Total range* M	5-160x, 2½-80	0x or 2½-120x
Illumination	no	yes
Max. object height mm	100	100
Travel of rack mm	60	60
Stage plate ø/mm	75	95
Dimensions lxwxh/mm	260x170x290	270x235x330
Weight kg	3.0	4.3

<sup>\*</sup>The magnification range of the microscope in combination with the optional eyepieces 5-20x and auxiliary lenses 0.5-2x.





713.306. Sechnohearing 2021

## Stereo microscopes with stepless zoom SSM-E

Stereo zoom microscopes with a sharp erect image and a large field of view. The special microscope head is equipped with stepless zoom; in combination with the standard 10x eyepieces (optionally 20x) you can smoothly zoom in from 10x to 40x magnification. The magnification can be adjusted to your application even more with an optional auxiliary lens (0.5x, 0.75x, 1.5x or 2x). See for all accessories the pages "SSM stereo microscope accessories".

- Stand with round (flattened) column and anti drop facility.
- Microscope head: 360° rotatable.
- Viewing angle: 45°.
- Interpupillary distance: adjustable (55 75 mm).
- Both eyepieces with diopter adjustment:  $\pm 5$  dpt.
- Working distance (without aux. lens): 85 mm.
- Equipped with LED incident light and LED backlight, and the luminous intensity is adjustable.
- Stage plate: opal glass.

- Delivery incl. dust cover, soft rubber eye adapters and black/white stage plate.
- Power supply: 230 Vac (50 Hz).

Item No.	Type M	lagnification	Price RUB
909.010	SSM-EC2	10-40x	
908.998	SSM-3EC2	10-40x	

See for accessories the pages "SSM stereo microscope accessories".





Type	SSM-EC2	SSM-3EC2
Eyepiece M	10x	10x
Objective M	1-4x	1-4x
Total range* M	5-160x	5-160x
Illumination	yes	yes
Max. object height mm	110	110
Travel of rack mm	60	60
Stage plate ø/mm	95	95
Dimensions lxwxh/mm	330x235x360	330x235x395
Weight kg	4.8	5.4

<sup>&</sup>quot;The magnification range of the microscope in combination with the 10x eyepieces, the optional 20x eyepieces and the optional auxiliary lenses 0.5-2x.





#### Camera connection

Model 3EC2 is equipped with camera connection. See the accessories page for the total magnification range with camera.

## SSM stereo microscope accessories

#### **USB** microscope cameras

For viewing and saving images. They fit in the ocular (Ø30 mm) of an SSM microscope and/or the adapter bushing (Ø23 mm) of the models SSM-3E/3EC2.

- Field of view: see table.
- Resolution: 1.3 Mpx or 5 Mpx.
- Suitable for Windows and Mac OS X.
- Measuring of distances, radii and angles.

### **Auxiliary lenses**

The magnification can be adjusted to your application even more with an optional auxiliary lens. Note concerning stereo microscopes with a fixed stand: auxiliary lens 0.5x is not suitable,

and with auxiliary lenses 1.5x and 2x focusing on the stage plate is not possible (the product needs to be positioned higher).



Item No. Description Price RUB

#### Pairs of eyepieces for SSM-2/3/5/10/20:

909.050 M = 5x

909.051 M = 10x

909.052 M = 15x

909.053 M = 20x

### Pairs of eyepieces for SSM-E:

909.055 M = 10x909.057 M = 20x

### Eyepieces with crosshair for SSM-E:

909.095 M = 10x (per piece) 909.096 M = 20x (per piece)

### Auxiliary lenses (for SSM-10/20/E):

909.018 M = 0.5x

909.019 M = 0.75x

909.020 M = 1.5x

909.021 M = 2x

#### **USB** microscope cameras:

774.145 1.3 Mpx, ø 23 mm

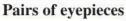
774.296 1.3 Mpx, ø23/30/30.5 mm

774.243\* 5 Mpx, ø23/30/30.5 mm

\* For displaying the 5 Mpx resolution a Motion JPEG codec is required.









### Soft rubber eye adapters

Item No.	Description	Price RUB
909.089	Per pair	



TECHNOBEARING

Magnification	Micr	oscope magnificat	ion / Field of viev	v/mm
objective	Eyepiece 5x	Eyepiece 10x	Eyepiece 15x	Eyepiece 20x
Stereo microsc	ope SSM-2:			
2x	10x / ø 10.0	20x / ø 10.0	30x / ø7.0	40x / ø5.0
Stereo zoom m	icroscope SSM-3	3/5:		72
1x	5x / ø 20.0	10x / ø 20.0	15x / ø 15.0	20x / ø10.0
2x	10x / ø 10.0	20x/ø10.0	30x / ø7.0	40x / ø5.0
3x	15x/ ø7.0	30x / ø7.0	45x / ø 5.0	60x / ø3.5
4x	20x / ø5.0	40x / ø5.0	60x / ø3.5	80x / ø2.5
Stereo zoom m	icroscope SSM-1	10/20 (without au	xiliary lens):	
1x	5x / ø 20.0	10x/ø20.0	15x/ø15.0	20x / ø 10.0
2x	10x / ø 10.0	20x/ø10.0	30x / ø7.0	40x / ø5.0
3x	15x/ ø7.0	30x / ø7.0	45x / ø5.0	60x / ø3.5
4x	20x / ø5.0	40x / ø5.0	60x / ø3.5	80x / ø2.5

Magnification	Magnification / I	Field of view camera/mm			
objective	Eyepiece 10x	Eyepiece 20x	774.145	774.146	774.243
Stereo microso	cope with stepless	s zoom SSM-E (w	ithout aux	iliary lens)	:
from 1x to 4x	10x / ø20.0 40x / ø5.0			6.8 x 5.0 <sup>1</sup> 1.4 x 1.0 <sup>1</sup>	19.0 x 14.0 <sup>1</sup> 2.7 x 2.0 <sup>1</sup>
from 1x to 4x					18.0 x 12.0 <sup>2</sup> 2.4 x 1.8 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Camera intake in adapter bushing.

<sup>&</sup>lt;sup>2</sup> Camera intake in ocular.

## SSM stereo microscope accessories (continued)

### LED optical fiber illumination



### LED optical fiber ring light 1,2

Suitable for stereo microscopes SSM-10/20/E. Note: not for use in combination with auxiliary lenses.







Ring lights 1,2

Suitable for SSM-10/20/E (909.085) or SSM-3/5/10/20/E (909.024).

#### Dark field condenser

The contrast of transparent objects is enhanced.

Suitable for all SSM stereo microscopes with backlight.

- Diameter: 94 mm.
- Stage: ø 27 mm.



### XY measuring table

- Range: X, Y: 25 mm.
- Intake microscope: ø 94 mm.
- Turnable object plate with degree indication.
- 908.999 ■ Excl. two analog micrometer heads (intake ø 12 mm; 906.072 measuring range 25 mm).

### Item No. Description

Price RUB

### LED optical fiber illumination:

- 910.107 Light source LED, 20 W
- 909.030 Single flexible arm
- 909.028 Dual flexible arm
- 909.029 Optical fiber ring light 1.2

### Ring lights 1,2:

- 909.024 Circular fluoresc. tube 10 W
- 909.059 Spare bulb for 909.024
- 909.085 Ring light 60 LEDs

### Spare bulbs (standard illumination):

- 499.377 For SSM-2/3/5
- 498.157 For SSM-20W/EW and for transmitted light SSM-3E
- 499.379 For incident light SSM-3E
- 438.211 Fuse F 0.5 A, 250 V for SSM-2/3/5/20W/EW/3E

### Other options:

- 909.022 Dark field condenser
- 908.999 XY measuring table
- 960.255 Dial indicator holder
- 635.222 Field of view qualifier
- Delivery incl. adapter ring.
- PRICE <sup>2</sup> Note: microscopes with standard provided incident light, this incident light must be removed before installing the ring light.



### Dial indicator holder

Suitable for stereo microscopes with round column from the series SSM-10/20/E, for height measurements. The accuracy increases with higher magnification.

- Excl. dial indicator.
- The travel of the microscopes is 60 mm; see the dial indicators category for a suitable dial indicator with measuring range 50 or 60 mm.

### Field of view qualifier

■ Accuracy:  $\pm 0.002$  mm.

635.222





## SSM stereo microscope accessories (continued)

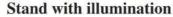
#### Large stand

■ Base: 255 x 255 mm.

Column height: 390 mm.Arm length: 490 mm.

■ Height adjustment: 60 mm.

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Equipped with LED incident light and backlight. The luminous intensity is adjustable.

■ Column height: 185 mm.



### LCD microscope head

- Screen: 8" color.
- CCD: 1/3" color.
- Zoom lens: 0.65 5.5.
- Magnification: 10-85x.
- Working distance: 10.5 cm.
- Crosshair can be toggled on/off.
- Field of view: from  $1.3 \times 1.8 \text{ mm } (M=85 \times 1.8 \times 1.8$



### Microscope heads

■ With or without camera connection.







#### Item No. Description

Price RUB

#### Microscope stands:

908.997 Large stand

909.405 Stand with illumination

870.0061 Column 400 mm

### Microscope heads:

909.092 Microscope head

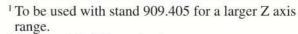
909.093 Microscope head with

camera connection

909.4062 LCD microscope head

334.695 Mini AC adapter

12 Vdc, 1 A



<sup>2</sup> Adapter 334.695 required.



## **Endoscopes**

Endoscopes for inspecting hard-to-reach places by means of a flexible cable. Equipped with builtin illumination.

With the industrial endoscope images can be watched on the integrated LCD color display. When a Micro SD card is installed photos and videos can be made and saved.

The WiFi endoscope is connected with an Apple or Android telephone for displaying and storage of photos and videos. The needed software can be downloaded at no additional cost.

- Bendable camera cable: ø 5.5 mm.
- Cable length: 1 m.
- Camera resolution: 1.0 Mpx HD.
- Camera IP67.
- Video resolution: 1280 x 720 px.
- Rotatable image.
- Illumination: 6 LEDs, intensity adjustable.
- Flashlight in the handle.
- Delivery with 45° mirror, magnet and hook (excl. Micro SD card).

### Industrial endoscope

- Field of view: 70°.
- Focus distance: 30-60 mm.
- 4.3" LCD color display 720P HD.
- Photo resolution: 1280 x 720, 1920 x 1080.
- 2x digital zoom.
- USB cable included.
- Delivery in a case.
- Power supply: 1 rechargeable lithium battery 3.7 V, 2600 mAh.

### WiFi endoscope

- Field of view: 60°.
- Focus distance: 60-100 mm.
- Photo resolution: 1280 x 720.
- USB cable with adjustable illumination included for wired connection with PC.
- Resolution with USB cable: 640 x 480 px.
- Delivery with carrying case.
- Power supply: 4 batteries type AA.



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Item No.	Camera ø/mm	Cable ø/mm	Cable length/m	Price RUB
Industria	l endoscop	e:		
910.170	5.5	5	1	
WiFi end	oscope:			
910.171	5.5	5	1	

#### **Options:**

910.172\* Cable length 1 m (for 910.170)

910.173 Cable length 3 m (for 910.170)

910.174\* Cable length 1 m (for 910.171)

910.175 Cable length 3 m (for 910.171)

910.176\* Mirror, magnet and hook

495.111 Spare battery (4 needed)



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910 170

<sup>\*</sup> Standard included.

# Graduated rulers / Scale units / Circumference tapes Precision tapes / Distance meters



0.15

0.15

0.20

0.25

0.30

0 - 1500

0-2000

0 - 3000

0-4000

0 - 5000

0.06

0.06

0.08

0.10

0.12

## **Precision rulers**

- Measuring range: 0-3000 mm.
- Graduation: 1 mm.
- Material: bright steel or stainless steel.
- No graduation on first 5 mm at both ends.
- Accuracy and construction according DIN 866 form A.
- Available on request up to 5000 mm.
- Available on request with an inspection report.



#### TECHNOBEARING

Dimensions	Brig	tht steel Stainless steel		ess steel	Wooden case	
$l \times w \times t/mm$	Item No.	Price RUB	Item No.	Price RUB	Item No.	Price RUE
500 x 30 x 6	771.000		771.005		776.568	
$1000 \times 40 \times 8$	771.001		771.006		776.468	
1500 x 40 x 8	771.002		771.007		776.561	
$2000 \times 50 \times 10$	771.003		771.008		776.562	
$3000 \times 50 \times 10$	771.004		771.009		776.563	

## **Precision rulers**

- Measuring range: 0-3000 mm.
- Graduation: 1 mm.
- Material: bright steel or stainless steel.
- Zero coincides with left end.
- Accuracy and construction according DIN 866 form B.
- Available on request up to 5000 mm.
- Available on request with an inspection report.





Dimensions	sions Bright steel		isions Bright steel Stainless steel		Wooden case	
$l \times w \times t/mm$	Item No.	Price RUB	Item No.	Price RUB	Item No.	Price RUB
500 x 25 x 5	771.010		771.015		776.568	
1000 x 30 x 6	771.011		771.016		776.468	
1500 x 30 x 6	771.012		771.017		776.561	
2000 x 40 x 8	771.013		771.018		776.562	
3000 x 40 x 8	771.014		771.019		776.563	

## Rulers

Rulers with beveled edge for parallax-free reading.

■ Measuring range: 0-2000 mm.

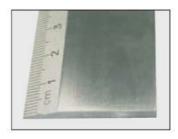
Graduation: 1 mm.Material: bright steel.

■ Zero coincides with left end.

■ With hanger hole.



Item No.	Dimensions lxwxt/mm	Price RUB
910.216	300 x 40 x 5	
910.217	500 x 40 x 5	
910.218	$1000 \times 40 \times 5$	
910.219	1500 x 40 x 5	
910.220	2000 x 50 x 5	





910.217

## **Aluminum rulers**

■ Measuring range: 0 - 1000 mm.

■ Graduation: 1 mm.

■ Anodized.

■ Zero coincides with left end.

■ With hanger hole.





906.615

Item No.	Dimensions lxwxt/mm	Price RUB
906.615	300 x 50 x 5	
906.616	600 x 50 x 5	
906.617	$1000 \times 50 \times 5$	

## **Aluminum rulers**

- Measuring range: 0-1000 mm.
- Graduation: 1 mm.
- Anodized.
- With hanger hole.



775.590



775.600

TECHNOBEARING

Item No.	Dimensions $l \times w \times t/mm$	Price RUB
775.590	300 x 35 x 5	
775.592	600 x 35 x 5	
775.593	$1000 \times 35 \times 5$	
\$2005459000000000000000000000000000000000	lle and magnet:	
775.600	450 x 50 x 5	

1000 x 50 x 5

C14,202.

775.602

## Stainless steel rulers

■ Measuring range: 0-3000 mm.

■ Graduation: 1 mm.

■ No-glare finished stainless steel surface.

■ With mm graduation on the upper edge.

■ With 0.5 mm graduation on the lower

edge.



Item No.	Dimensions lx wxt/mm	Price RUB	
With mm/0.5	5 mm graduation:		
775.584	$1000 \times 35 \times 1.2$		
775.585	1500 x 40 x 2		
775.586	$2000 \times 40 \times 2$		
And the terrophysics of the state	H10.1 1		

### With mm/mm graduation:

The first 100 mm on the lower edge have a 0.5 mm graduation.

775.303	$1000 \times 35 \times 1.5$
775.304	2000 x 41 x 2
775.305	3000 x 39 x 3

## Self-adhesive rulers

■ Measuring range: 0-400 mm.

■ Graduation: 1 mm, vernier: 0.1 mm.

- Blue anodized aluminum.
- With self-adhesive back.
- Suitable for positioning on measuring devices and machine elements.

### Vernier 0.1 mm

- 10 scale devisions on 9 mm.
- Non-adhesive, furnished with two fixing holes Ø 2.5 mm.

TECHNOBEARING





Item No.	Measuring range/mm	Dimensions $l \times w \times t/mm$	Price RUB
775.901	0-200	208 x 16 x 0.5	
775.902	0-300	$308 \times 16 \times 0.5$	
775.903	0-400	$408 \times 16 \times 0.5$	
775.900	Vernier 0.1 mm	40 x 10 x 0.5	

Technobearing 2020

# Stainless steel rulers with $L \rightarrow R$ or $R \rightarrow L$ numbering

- Measuring range: 0-12000 mm.
- Graduation: 1 mm (type B: 0.5 mm).
- No-glare finished stainless steel surface.
- EC class II.
- Etched graduation.
- The rulers up to 4000 mm are conform EC class II

### Available on request:

- with graduation from top to bottom or from bottom to top,
- with different combinations (mm/mm, mm/inch, mm/blanc, etc.),
- with 0-point in the middle.
- Thickness: from 300 mm: 1 mm, from 500 mm: 2 mm.



Item No.	Price RUB	Dimensions lxwxt/mm						
L→R typ	e A:	R→L type	e A:	L→R typ	e B:	R→L typ	e B:	
835.120		835.121		835.421		835.422		150 x 13 x 0.5
835.122		835.123		835.298		835.440		200 x 13 x 0.5
835.124		835.125		835.427		835.441		250 x 13 x 0.5
835.126		835.127		835.129		835.442		300 x 13 x 0.5
835.130		835.131		835.354		835.443		500 x 18 x 0.5
835.132		835.133		835.252		835.444		1000 x 18 x 0.5
835.134		835.135		835.428		835.445		1500 x 18 x 0.5
835.136		835.137		835.429		835.446		2000 x 18 x 0.5
835.138		835.139		835.430		835.447		2500 x 18 x 0.5
835.140		835.141		835.431		835.448		3000 x 18 x 0.5
835.142		835.143		835.432		835.449		3500 x 18 x 0.5
835.144		835.145		835.433		835.450		4000 x 18 x 0.5
835.146		835.147		835.413		835.451		5000 x 18 x 0.5
835.148		835.149		835.434		835.452		6000 x 18 x 0.5
835.150		835.151		835.035		835.453		7000 x 30 x 1
835.152		835.153		835.435		835.454		8000 x 30 x 1
835.154		835.155		835.436		835.455		9000 x 30 x 1
835.156		835.157		835.437		835.456		10000 x 30 x 1
835.158		835.159		835.438		835.457		11000 x 30 x 1
835.160		835.161		835.439		835.458		12000 x 30 x 1



Type A: mm/mm (bottom and top side 1 mm graduation).

Type B: 0.5 mm/1 mm (top side 0.5 mm, bottom side 1 mm graduation).

### Rulers with a self-adhesive back

Item No.	Additional costs	Price RUB
835.165	For rulers	
	up to 1000 mm (price per piece)	
	For rulers	
	from 1000 mm (pric	e per meter)

The self-adhesive back is *not* separately available.

### TECHNOBEARING

## With 0-point in the middle

Item No.	Dimensions lxwxt/mm	Price RUB
835.266	200 x 13 x 0.5	

Other sizes are also available.

### Rulers

### Stainless steel rulers with laser engraving

- With mm/mm graduation from left to right.
- Graduation: 1 mm.
- With identification number.
- EC class I.



### Stainless steel rulers with magnet inserts

- Graduation from left to right.
- Laser engraving.
- With 2 flat edges without hanger hole.
- Graduation on front and back side.
- Graduation: front side: 1 mm, 0.5 mm, back side: 1/32", 1/64".
- With removeable magnet inserts.
- EC class II.

III ICIZ PREZE

835.473

### Rulers (black) with laser engraving

- Graduation on front and back side.
- Graduation:

front side: 1 mm, 0.5 mm,

back side: 1/10", 1/16", 1/20", 1/32",

1/64", 1/50", 1/100".

■ EC class II.

835.478

500 x 18 x 0.5

### Stainless steel rulers with 90° anvil hook

- Graduation from left to right.
- Etched gradudation.
- Graduation: front side: 1 mm, back side: 0.5 mm.
- EC class II.



TECHNOBEARING



Item No.	Dimensions $l \times w \times t / mm$	Material	Class	Price RUB
Stainless s	teel rulers with lase	r engraving:	I,	L).
835.096	150 x 13 x 0.5	No-glare finished stainless steel surface	EC class I	
835.459	300 x 13 x 0.5	No-glare finished stainless steel surface	EC class I	
835.460	500 x 20 x 0.5	No-glare finished stainless steel surface	EC class I	
835.461	$1000 \times 20 \times 0.5$	No-glare finished stainless steel surface	EC class I	
835.462	300 x 30 x 1.0	No-glare finished stainless steel surface	EC class I	
835.463	500 x 30 x 1.0	No-glare finished stainless steel surface	EC class I	
835.464	1000 x 30 x 1.0	No-glare finished stainless steel surface	EC class I	
835.465	2000 x 30 x 1.0	No-glare finished stainless steel surface	EC class I	
Rulers (bla	ack) with laser engr	aving:	₩ ₩	
835.466	150 x 18 x 0.5	Steel, black surface	EC class II	
835.467	$300 \times 30 \times 1.0$	Steel, black surface	EC class II	
835.468	450 x 30 x 1.0	Steel, black surface	EC class II	
835.469	600 x 30 x 1.0	Steel, black surface	EC class II	
835.470	1000 x 30 x 1.0	Steel, black surface	EC class II	
Stainless s	teel rulers with mag	net inserts:	10	103
835.471	150 x 20 x 1.0	No-glare finished stainless steel surface	EC class II	
835.472	$300 \times 30 \times 1.0$	No-glare finished stainless steel surface	EC class II	
835.473	600 x 30 x 1.0	No-glare finished stainless steel surface	EC class II	
835.474	900 x 30 x 1.0	No-glare finished stainless steel surface	EC class II	
835.475	1200 x 30 x 1.0	No-glare finished stainless steel surface	EC class II	
Stainless s	teel rulers with 90°	anvil hook:	'	
835.476	200 x 13 x 0.5	No-glare finished stainless steel surface	EC class II	
835.477	$300 \times 13 \times 0.5$	No-glare finished stainless steel surface	EC class II	

Technobearing 2020051

No-glare finished stainless steel surface

EC class II

## Digital horizontal scale units

These scale units are available in two different models. Up to 300 mm the model matches the photo of the 906.403, from 450 mm the photo of the 906.406.

■ Measuring range: 0 - 1000 mm.

■ Resolution: 0.01 mm.

■ Repeatability: 0.01 mm.

■ mm/inch conversion.

■ ABS/INC switchable (from 450 mm).

On/off switch.

Reset.

■ Preset (from 450 mm).

■ Max. measuring speed: <500 mm: 1.5 m/s,

 $\geq$ 500 mm: 1 m/s.

■ Power supply:

906.400 - 403: 1 battery type V357, 906.404 - 409: 1 battery type CR2032.

Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.400	0- 100	±0.03	
906.401	0 - 150	$\pm 0.03$	
906.402	0 - 200	$\pm 0.03$	
906.403	0 - 300	$\pm 0.04$	
906.404	0- 450	±0.05	
906.405	0 - 500	$\pm 0.05$	
906.406	0- 600	$\pm 0.05$	
906.408	0-800	$\pm 0.06$	
906.409	0 - 1000	$\pm 0.07$	

### **Options:**

836.535 Spare battery type V357 495.157 Spare battery type CR2032



■ Measuring range: 0 - 1000 mm.

■ Resolution: 0.01 mm.

■ Repeatability: 0.01 mm.

mm/inch conversion.

ABS/INC switchable.

On/off switch.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.415	0- 100	±0.03	
906.416	0 - 150	$\pm 0.03$	
906.417	0 - 200	$\pm 0.03$	
906.418	0 - 300	$\pm 0.04$	
906.419	0-450	$\pm 0.05$	
906.420	0 - 500	$\pm 0.05$	
906.421	0- 600	$\pm 0.05$	
906.423	0-800	$\pm 0.06$	
906.424	0 - 1000	$\pm 0.07$	

### **Options:**

836.535 Spare battery type V357 495.157 Spare battery type CR2032

- Reset.
- Preset (from 500 mm).

■ Max. measuring speed: 1 m/s.

■ Power supply: 1 battery type V357 (except 906.416-419).





906.417

## Circumference tapes

- Separate graduations for circumference and diameter in mm.
- Vernier: 0.1 mm.
- Bright steel or stainless steel.
- Accuracy according EC class II.
- With measuring report on request.

#### TECHNOBEARING



### **Bright steel**

Item No.	Diameter mm	Circumference mm	Price RUB
835.111	20- 300	60- 950	
835.112	300 - 700	940 - 2200	
835.113	700 - 1100	2190 - 3460	
835.114	1100 - 1500	3450 - 4720	
835.115	1500 - 1900	4710 - 5980	
835.116	1900 - 2300	5960 - 7230	
835.117	2300 - 2700	7220 - 8500	
835.118	2700-3100	8480 - 9760	
835.119	3100-3500	9730-11010	

#### Stainless steel

Item No.	Diameter mm	Circumference mm	Price RUB
835.101	20- 300	60- 950	
835.102	300 - 700	940 - 2200	
835.103	700 - 1100	2190 - 3460	
835.104	1100 - 1500	3450 - 4720	
835.105	1500 - 1900	4710 - 5980	
835.106	1900 - 2300	5960 - 7230	
835.107	2300 - 2700	7220 - 8500	
835.108	2700 - 3100	8480 - 9760	
835.109	3100-3500	9730-11010	

## Circumference tapes for diameters

Circumference tapes for measuring of diameters.

- Graduation in mm.
- Vernier: 0.02 mm.
- Total tape width: 13 mm.
- Bright steel.
- Accuracy according DIN 866/B.





Item No.	Diameter mm	Price RUB
910.181	15- 50	
910.182	50 - 300	
910.183	300 - 600	
910.184	600 - 900	
910.185	900 - 1200	
910.186	1200 - 1500	
910.187	1500 - 1800	
910.188	1800 - 2100	
910.189	2100 - 2400	
910.190	2400 - 2700	
910.191	2700 - 3000	



## Laser distance meters

With these compact hand laser distance meters you aim a visual laser spot at the object for quick and accurate measurements of the distance without contact.

- Measuring range: 0-80 m.
- Resolution: 0.001 m/0.01 m.
- Accuracy: ±2 mm.
- Distance, surface and volume measurements, continuous measurements, addition and subtraction, min/max function and Pythagoras function.
- mm/inch/ft conversion.
- Illuminated LCD display.
- On/off switch, automatic switch-off.
- Measurement reference: front or rear.
- Storage for 99 measuring values.
- With thread for tripod.



Item No.	Measuring range/m	Price RUB
909.453	0-40	
909.454	0 - 80	
Option:		
	Spare battery	

- Laser: 635 nm, class II according IEC 60825-1.
- Dimensions: 120 x 55 x 30 mm.
- Weight: 909.453: 180 g, 909.454: 128 g.
- Power supply: 2 batteries type AAA.



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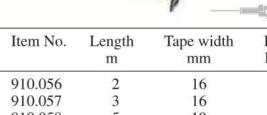
909.454

## **Precision tapes**

Cost effective rubberized precision tapes.

- Yellow varnished steel strip with mm
  - graduation.
- One-sided printed blade.
- Matt finished steel blade.
- EC class II.
- Standard EC-type hook.





Price **RUB** 5 19 910.058 8 25 910.059 910.060 10 25

## **Precision tapes**

Precision tapes for professional use with double-sided printed blade and double hook with magnet.

8 (800) 700-72-07

- EC class II (except 910.064).
- EC class I (only 910.064).



- Shockproof til 2 m.
- Matt finished steel blade.
- Double-sided printed blade (except 910.064).
- Blade horizontal stand-out: 19 mm: 1.7 m, 27 mm: 2.8 m.
- EC-type magnet dual hook (except 910.064).
- Double lock (except 910.064).
- Delivery with a EC class I declaration of conformity (only 910.064).



Item No.	Length m	Tape width mm	Price RUB
910.061	3	19	
910.062	5	27	
910.063	10	27	

## Long stroke precision tape

Long stroke precision tape with blade from fiberglass and with high speed retracting gear.



- Double-sided printed blade.
- Graduation: 2 mm.
- EC class II.



Item No.	Length m	Tape width mm	Price RUB
910.065	30	15	

## Long stroke precision tapes

■ Black plastic housing with wristlet.



- White varnished steel strip with mm graduation.
- Winding-on handle.
- EC class II.

Item No.	Length m	Tape width mm	Price RUB
775.540	10	9.5	
775.541	15	9.5	
775.542	20	9.5	
775.543	30	9.5	

## Digital measuring tape

Digital measuring tape equipped with a 19 mm wide tape, which is provided with a clear graduation. The digital indication is convertible from external to internal measurements and can be reset to zero at any point on the tape.

- Measuring range: 0-5 m.
- Resolution: 1 mm.
- Accuracy:  $\pm (0.3+0.2L)$  mm (L in m).
- mm/inch conversion.



- Hold function.
- Reversal of display value.
- Automatic stop.
- Convertible for internal/external measurements.
- Storage for 8 measuring values.
- Dimensions: 75 x 70 mm.
- Power supply: 1 battery type CR2032.



Item No.	Length m	Tape width mm	Price RUB
909.341	5	19	

Option:

495.157 Spare battery

## Digital measuring wheel

With this measuring wheel long distance measurements can be done quickly and easily.

- Measuring range: 0-10000 m.
- Resolution: 0.1 m.
- Accuracy: <0.5%.
- m/ft conversion.
- Wheel size: Ø 160 mm.
- Display located near handle.
- Adjustable in height.
- Reset.
- Storage for 5 values.
- Weight: 0.8 kg.
- Delivery incl. pouch.
- Power supply: 2 batteries type AAA.







# Item No. Description Price RUB

### **Option:**

497.914 Spare battery (2 needed)

909.518 Digital measuring wheel

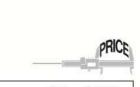
## Telescopic scale

- Measuring range: 103.5 500 cm.
- With mm graduation.
- Aluminum model with steel measuring faces.
- With circular spirit level (for vertical use) and horizontal spirit level.
- Delivery in a case.









Item No.	Description	Price RUB
909.519	Telescopic scale	



# **Marking gauges**

- Measuring range: 0-400 mm.
- Vernier: 0.1 mm.

- No-glare chrome finished beam.
- Roll stop.



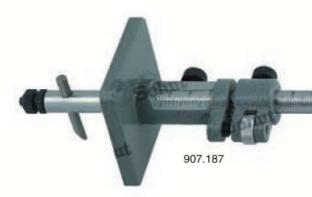


TECHNOBEARING

Item No.	Measuring range/mm	Price RUB
836.602	0-200	
836.604	0-400	
836.603	Spare scriber point	

# **Marking gauges**

- Measuring range: 0-500 mm.
- Vernier: 0.1 mm.
- With round rod and mm graduation.



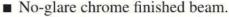


Item No.	Measuring range/mm	Price RUB
Without	fine adjustment:	
907.183	0-200	
907.184	0-300	
907.185	0-400	
907.186	0-500	
With fine	adjustment:	
907.187	0-200	
907.188	0-300	
907.189	0-400	
907.190	0-500	
907.191	Spare scriber point (TC)	)

## **Marking calipers**

T-shaped stainless steel marking caliper with a large marking face/cross scale. The marking face is sunk into the U-shaped base face.

- Measuring range: 0-300 mm.
- Locking screw.
- Vernier: 0.05 mm.
- With or without fine adjustment.



■ Marking face/cross scale with mm graduation (50-0-50 mm).





Item No.	Measuring range/mm	Base length/mm	Price RUB
337:414			ROD
	ine adjustme		
907.575	0-160	140	
907.576	0-250	140	
907.577	0-300	160	
With fine	adjustment:		
907.196	0-160	140	
907.197	0-250	140	
907.198	0-300	160	

## **Marking gauges**

■ Measuring range: 0-300 mm.

■ Vernier: 0.1 mm.

■ No-glare chrome finished beam.





Item No.	Measuring range/mm	Price RUB
907.180	0-200	
907.181	0-250	
907.182	0-300	

## Digital marking gauge and protractor

■ Measuring range: 0-300 mm.

■ Resolution: protractor: 0.05°,

scale: 0.01 mm.

- mm/inch conversion.
- On/off switch.
- Automatic switch-off.
- Reset.
- Hold function.
- Locking screw.
- Protection: IP40.
- Power supply: 1 battery type CR2032.





Item No.	Measuring range/mm	Price RUB
906.669	0-300	
Option:		
495.157	Spare battery	

215.271. Achnohearing 202005

## Scriber



#### TECHNOBEARING



T	-	
Item No.	Descr	ption
Itelli I to.	D C G C I	Pulon

Price RUB

909.388 Scriber with clip, with tungsten carbide exchangeable point and magnetic upper part

### Replacement point:

909.389 1 tungsten carbide scriber point for 909.388

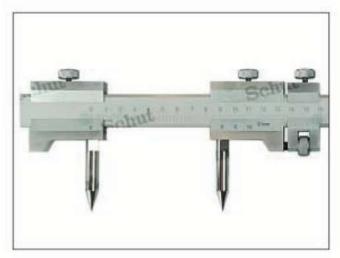
## **Trammels**

- Round rod with graduation.
- Milled key groove.
- Vernier: 0.1 mm.
- Fine adjustment. (Also available without fine adjustment.)



## **Trammels**

- Flat beam with graduation.
- Vernier: 0.1 mm.
- Fine adjustment.



Item No.	Length/mm	Price RUB
671.275	500	
671.276	1000	
671.277	1500	
671.278	2000	

### Needles per pair:

671.234 Hardened steel

671.239 Tungsten carbide

Item No.	Length/mm	Price RUB
671.261	500	
671.262	1000	
671.263	1500	
671.264	2000	

### Needles per pair:

671.230 Hardened steel

671.235 Tungsten carbide

# **Spring joint dividers**

- Stainless steel construction.
- With adjustment screw.
- With interchangeable points (910.012-018, 907.447-448).
- With pencil holder (907.447 448).



Item No.	Description	Price RUB
907.446	Spare divider point ø2 x 30 mm	



Length/mm	Item No. Price RUB	Item No. Price RUB	Item No. Price RUB
100	(24)	910.012	12 <u>—1</u> 1
125	=	910.013	_
150	907.827	910.014	907.447
175	_	910.015	
200	907.828	910.016	907.448
250	907.829	910.017	1-1
300	907.830	910.018	102-m3
400	907.831	_	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
500	907.832	_	_
600	907.833	_	07 <u></u> 30

# Firm joint compasses

- Stainless steel construction.
- With adjustment arch and locking screw (907.818-826, 909.461-469).
- With pencil holder (909.461 469).







TECHNOBEARING



Length/mm	Item No. Price RUB	Item No. Price RUB	Item No. Price RUB
150	907.809	907.818	909.461
200	907.810	907.819	909.462
250	907.811	907.820	909.463
300	907.812	907.821	909.464
400	907.813	907.822	909.465
500	907.814	907.823	909.466
600	907.815	907.824	909.467
800	907.816	907.825	909.468
1000	907.817	907.826	909.469

# Internal spring joint compasses

- Stainless steel construction.
- With adjustment screw.



TECHN	ORE	MINIS



Item No.	Length/mm	Price RUB
907.793	100	
907.794	125	
907.795	150	
907.796	200	
907.797	250	
907.798	300	
907.799	400	
907.800	500	

# **External spring joint compasses**

- Stainless steel construction.
- With adjustment screw.





Item No.	Length/mm	Price RUB
907.801	100	
907.802	125	
907.803	150	
907.804	200	
907.805	250	
907.806	300	
907.807	400	
907.808	500	

# Firm joint compasses

■ Stainless steel construction.





Item No.	Length/mm	Price RUB
907.836	100	
907.837	125	
907.838	150	
907.839	200	
907.840	250	
907.841	300	
907.842	400	
907.843	500	
907.844	600	
907.845	800	
907.846	1000	

# Firm joint compasses

■ Stainless steel construction.



PRICE	1
7 (	
Item No.	Length/mn

Item No.	Length/mm	Price RUB
907.847	100	
907.848	125	
907.849	150	
907.850	200	
907.851	250	
907.852	300	
907.853	400	
907.854	500	
907.855	600	
907.856	800	
907.857	1000	

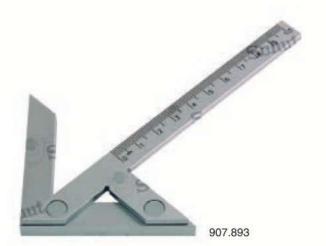
## Center squares

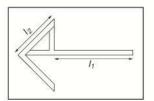
Center squares with mm graduation on the blade, to mark the center on round discs or axes.

- Stainless steel construction, no-glare chrome finished.
- Graduation placed by laser.



Item No.	No. Length/mm		Max. ø	Price
	$l_1$	$l_2$	mm	RUB
907.893	100	70	90	
907.894	150	130	190	
907.895	200	150	220	
907.896	250	160	230	
907.897	300	180	280	
909.972	400	250	380	
909.973	500	330	530	





## Caliper compasses

- For scribing of diameters of 0-600 mm.
- Vernier: 0.1 mm.
- Stainless steel construction, no-glare chrome finished.
- Fixed jaw and beam made out of one piece.
- Hardened, ground and lapped measuring faces.



Item No.	For scribing up to ø/mm	Meas. range mm	Jaw length mm	Price RUB
909.424	300	150	40	
909.425	400	200	40	
909.426	500	250	40	
909.427	600	300	40	

TECHNOBEARING

## Universal setting instrument

This multilateral instrument is specially designed for manufacturers of very accurate products, such as gauges and toolmakers. The guide is installed under an angle of 20° and the components can be moved very accurately. The movable component has several threaded bores M4, by which the setting instrument also can be used as a scriber or height gauge.

- Max. height range incl. extensions: 270 mm.
- Dimensions: 133 x 64 x 18.5 mm.
- Delivery with extensions 25 mm and 75 mm (equipped with thread M4/thread hole M4).
- Base with vial.





Item No. Description

Price RUB

906.455 Universal setting instrument



## Surface gauge

Stable foot with V-slot at the ground surface, grips at the side and is also equipped with two bores (\$\0.5\$.5 mm).

- Foot ground all around (except for the V-slot).
- Fine adjustment.
- Dimensions:

scriber: ø4 x 200 mm,

arm: ø 10 x 300 mm, ø 10 x 450 mm,

foot: 85 x 65 x 25 mm.





Item No. Description	Price RUB
906 220 Surface gauge	





## Digital height and scribing gauges

- Measuring range: 0 1000 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Reset.
- Hold function.
- Fine adjustment.

- Delivery incl. scriber.
- Power supply:

909.244/245/246: 1 battery type V357, 906.267/268: 1 battery type CR2032.

### From measuring range 500 mm:

- Tolerance function.
- Preset.





Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.267	0- 200	±0.03	
906.268	0 - 300	$-300 \pm 0.04$	
909.244	0- 500	±0.05	
909.245	0- 600	$\pm 0.07$	
909.246	0 - 1000	$\pm 0.07$	

### **Options:**

836.535	Spare battery type V357
495.157	Spare battery type CR2032

906.029 Scriber for 906.267

906.049 Scriber for 906.268

906.054 Scriber for 909.244

906.075 Scriber for 909.245 906.077 Scriber for 909.246



# Absolute digital height and scribing gauges

Digital height and scribing gauges with an absolute measuring system.

- Measuring range: 0-600 mm.
- Resolution: 0.01 mm.
- Handwheel drive for easy head displacement.
- Interchangeable scriber, intake 9 x 9 mm.
- ABS/INC switchable.
- Digimatic data output.
- On/off switch.
- Reset.
- Hold function.
- Locking screw.

- Delivery incl. scriber, dial indicator holder and Digimatic data cable.
- Power supply: 1 battery type CR2032.



- For data transfer to PC (e.g. Excel, Word).
- Operating system:
   Windows and other.
- PC connection: USB.
- No software or driver to install.
- Foot switch (optional).











Item No.	Measuring range/mm	Accuracy mm	Price RUB
910.096	0-300	0.03	
910.097	0-600	0.05	
With Bluet	ooth:		
910.098	0-300	0.03	

### **Options:**

495.157 Spare battery

909.686 USB interface

909.687 Footswitch for USB interface

910.038 Wireless USB receiver

910.039 Wireless transmitter

906.256 Scriber

# Special digital height and scribing gauges

The dual display model shows the measuring value on the displays on both sides of the instrument, ideal for left handed use. The magnetic base model is made primarily of plastic, which makes it very light and easy to handle. Due to the magnets in the flat plastic base the instrument can also be placed on magnetic surfaces at an angle.

- Measuring range: 0-150 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- On/off switch.
- Delivery incl. scriber.
- Double display (906.225).
- Magnetic base (906.226).

PRICE	
44	7

Item No.	Accuracy/mm	Price RUB	
906.225	±0.03		
906.226	$\pm 0.4$		
Options:			
	Spare battery type V3:	57	
	Spare battery type CR		
	Scriber for 906.225		
906.354	Scriber for 906.226		

■ Power supply:

906.225: 1 battery type V357, 906.226: 1 battery type CR2032.



# Digital height and scribing gauge with dial indicator holder

Solid and stable instrument with integrated dial indicator holder and stainless measuring table.

- Measuring range: 0-500 mm.
- Resolution: 0.01 mm.
- mm/inch conversion.
- ABS/INC switchable.
- On/off switch.
- Preset.
- Reset.
- Hold function.
- Tolerance function.
- Fine adjustment.
- Intake scriber: 8 x 6 mm.
- Delivery incl. scriber.



TECHNOBEARING

Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.115	0-200	±0.04	
906.116	0-300	$\pm 0.04$	
906.117	0-500	$\pm 0.06$	

### **Options:**

836.535 Spare battery

906.343 Scriber

- Dial gauge clamping shaft 8 mm.
- Measuring table: 906.115/116: 80 x 80 mm, 906.117: 110 x 100 mm.
- Power supply: 1 battery type V357.





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# Digital double columns height and scribing gauges

This is a very stable digital height gauge because of its twin guide system. The measuring unit moves over two independent columns with high precision toothed racks, which generates an accurate measurement.

■ Measuring range: 0-600 mm.

Resolution: 0.01 mm.

■ Repeatability: 0.01 mm.

■ Handwheel drive for easy head displacement.

■ mm/inch conversion.

■ ABS/INC switchable.

■ On/off switch.

■ Reset/preset.

■ Intake scriber: 9 x 9 mm.

■ Delivery incl. scriber.

■ Power supply: 1 battery type V357.

TECHNOBEARING



Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.263	0-300	±0.04	
906.264	0-500	$\pm 0.05$	
906.265	0-600	$\pm 0.05$	

### Option:

836.535 Spare battery

906.118 Scriber 9 x 9 mm



# Height and scribing gauges with dial and counter

■ Measuring range: 0-1000 mm.

■ Graduation dial indicator: 0.01 mm.

■ Resolution counter: 1 mm.

■ 1 pointer revolution = 1 mm.

■ Rotatable dial.

■ Double counter, one indicator in plus direction and one in minus direction.

■ Zero setting possible at any height.

■ Intake scriber: 9 x 9 mm.

■ Delivery incl. scriber.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.250	0- 300	±0.04	
906.251	0 - 450	$\pm 0.05$	
906.252	0- 600	$\pm 0.05$	
906.253	0 - 800	$\pm 0.06$	
906.254	0 - 1000	$\pm 0.07$	

906.174 Scriber 9 x 9 mm



# Height and scribing gauges with dial

These height gauges are equipped with a rack, as used for dial calipers.

■ Measuring range: 0-300 mm.

■ Graduation: 0.02 mm.

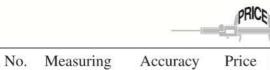
■ 1 pointer revolution = 2 mm.

■ Rotatable dial.

■ Fine adjustment.

■ Delivery in a case with a scriber.





Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.260	0-150	±0.03	
906.261	0-200	$\pm 0.03$	
906.262	0-300	$\pm 0.04$	



# Height and scribing gauges

■ Measuring range: 0 - 1000 mm.

■ Vernier: 0.02 mm.

■ Fine adjustment.

■ Delivery incl. scriber.

From 500 mm with fixed scriber.

■ No-glare chrome finished scale and vernier.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.325	0 - 200	±0.03	
906.326	0 - 300	$\pm 0.04$	
906.327	0 - 500	$\pm 0.05$	
906.328	0 - 1000	$\pm 0.07$	



906.324 Scriber for 906.325/326

906.329 Scriber for 906.327/328



# Height and scribing gauges with magnifier

To minimize the possibility of reading errors these height gauges are equipped with a magnifier. The magnifier can be adjusted in height, so that it can always be positioned correctly with regard to the vernier.

■ Measuring range: 0-500 mm.

■ Vernier: 0.02 mm.

■ Ruler adjustable in height.

■ Fine adjustment.

■ Intake scriber: 9 x 9 mm.

■ Delivery incl. scriber.



Item No.	Measuring range/mm	Accuracy mm	Price RUB
906.255	0-300	±0.04	
906.257	0-500	$\pm 0.05$	

### **Options:**

906.269 Scriber for 906.255 906.323 Scriber for 906.257



# Hardness testers / Thickness gauges / Thermometers Tachometers / Dynamometers / Inspection instruments



# Portable Shore hardness testers

Portable hardness testers to measure Shore hardness A or D, according DIN ISO 7619-1, ISO 868 and ASTM D 2240.

- Measuring range: 0 100 Shore.
- Analog: graduation 1 Shore, digital: resolution 0.1 Shore.
- Measuring length: 2.5 mm.

■ Material thickness: ≥6 mm.

■ Delivery in a case.



### TECHNOBEARING

### Analog

- Dial diameter: 57 mm.
- Dimensions: 110 x 58 x 30 mm.
- Weight: 230 g.

# **Digital**

Integrated sensor and equipped with comfortable buttons. Possibility for display of current, average and maximum measuring value.

- Accuracy: ±1 Shore.
- RS232C data output.
- On/off switch.
- Automatic switch-off.
- Max function.
- Calculation of the average of at most 9 measurements in "max mode".
- Dimensions: 161 x 65 x 28 mm.
- Power supply: 4 batteries type AAA.



Item No.	Type	Meas. range/Shore	Price RUB
Analog:			
907.882	Shore A	20 - 90	
907.889	Shore D	20 - 90	
Digital:			
909.066	Shore A	0 - 100	
909.068	Shore D	0 - 100	
Options:			
497.914	Spare batt	ery (4 needed)	
	RS232C cable and software		
909.430	Shore A (30 x 90)		
	The state of the s	set 50 x 50 x 7 mm	
909.431	Shore D (	$30 \times 90$ )	

Type	Shore A	Shore D
Max. spring force	8.065 N	44.50 N
Impact module	\sqrt{35°}	V <sub>30°</sub>
Applications	Soft rubber, elastomers, nature rubber, etc.	Hard rubber, thermoplastics, etc.

test block set  $50 \times 50 \times 7.5$  mm

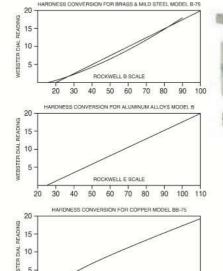




# Portable hardness testers

For measuring the hardness of various materials like aluminum, copper, brass and soft steel. Fit for various forms like extrusion profiles, tubes and flat materials.

- Measuring range: 0-20 Webster. Values to convert by means of graph (Rockwell B or E Scale).
- Material thickness: 0.4-6 mm.
- Round anvil:  $\emptyset^3/_8$ ".
- Delivery in a case incl. spare penetrator, screwdriver, adjusting wrench, standard test strip and manual.





Item No. Rockwell	Material 1	Price RUB
909.455 E25-E110	aluminum	
909.456 B25-B100	brass, hard	
	aluminum, soft s	teel
909.457 E20-E100	copper	

# Portable digital hardness tester

This Swiss made quality product allows one to determine HRC hardness in the most simple way. Modern technology resulted in an extremely compact and easy to use tool. No switches, buttons or cables, simply pull up the ring, measure and immediately read out the value. The measurement causes hardly any damage to the product. Especially suitable for larger objects, installed machines and use in hard-to-reach places.

■ Measuring range: 20-70 HRC.

50 60

- Resolution: 0.1 HRC.
- Accuracy: ±1.0 HRC.
- Automatic switch-off.
- Operating temperature: 5 to 50°C.
- Dimensions: Ø12 x 140 mm.
- Weight: 36 g.
- Power supply: 2 batteries type V394.

### Requirements

- Solid base (at least 5 kg) for objects < 5 kg.
- Minimum thickness of objects: 3 mm.
- Minimum thickness of a hardened top layer, if any: 0.7 mm.
- Minimum diameter of workpiece: 10 mm.
- Minimum radius of spherical measuring surface: 30 mm.



Item No.	Description	Price RUB
774.075	Digital hardness tes	ster
Option:		
420.248	Spare battery (2 nee	eded)





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# Portable digital hardness testers

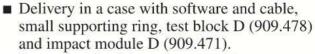
■ Measuring range:

HL 174 -900, HB 20 -655, HRC 19.6-68, HV 80 -940, HRB 13.5-101.7, HS 32.5-99.5.

- Accuracy: ±0.5% (at HL 800).
- On/off switch, automatic switch-off.
- Min. radius: 30 mm.
- Tungsten carbide stylus tip.
- USB data output.
- ASTM A956.
- Delivery with an inspection report.

### Digital hardness tester (909.470)

- Storage for 10 000 measuring values.
- Operating temperature: -20 to 50°C.
- Dimensions basic instrument: 133 x 75 x 29 mm.
- Weight basic instrument: 260 g.



■ Power supply: 2 batteries type AA.







PRICE

Item No.	Description	Price RUB	
909.470	Digital hardness tester		
909.485	Digital hardness tester		
Options:			
909.477	Set special support rings		
$909.478^{1}$	Testblock D, 2.5 kg (HLD 790±40)		
909.4791,2	Testblock G, 5.5 kg (HLD 590±40)		
Options (c	only for 909.470):		
495.111	Spare battery (2 needed)		
909.480	Printer		
270.732	Printing paper (5 rolls)		
909.471	Ext. impact module D		
909.472	Ext. impact module G		
909.473	Ext. impact module C		
909.474	Ext. impact module DL		
909.481	Cable for ext. impact module		

<sup>&</sup>lt;sup>1</sup>Delivery with an inspection report.

### Digital hardness tester (909.485)

- Storage for 1250 measuring values.
- With integrated impact module D.
- Operating temperature: -20 to 40°C.
- Dimensions basic instrument: 158 x 41 x 26 mm.
- Weight basic instrument: 120 g.
- Delivery in a case with AC adapter/charger, software and cable, small supporting ring, test block D (909.478) and integrated impact module D.
- Power supply: 1 rechargeable battery 3.7 V.
- AC adapter/charger.



TECHNOBEARING

# Selection table materials for impact module D

Material	HLD	HRC	HRB	HB	HS	HV
bright steel	300-900	20.0-68.0	38.4- 99.5	80-647	32.5-99.5	80-940
tool steel	300-840	20.4-67.1				80-898
stainless steel	300-800	19.6-62.4	46.5 - 101.7	85-655		85-802
gray cast iron	360-650			93-334 (	(30D <sup>2</sup> )	
cast iron	400-660			131-387 (	(30D <sup>2</sup> )	
cast aluminum	174-560			20-159 (	10D <sup>2</sup> )	
brass	200-550		13.5-95.3	40-173 (	$(10D^2)$	
bronze	300 - 700			60-290 (	$10D^{2}$ )	
copper	200-690			45-315 (	CONTROL OF THE PARTY OF THE PAR	



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<sup>&</sup>lt;sup>2</sup> For use in combination with impact module G.

# Portable digital hardness testers (continued)

# Optional impact devices

### External impact module D

External module, instead of standard module.

### External impact module DL

With thin, long probe on the impact module for measuring in grooves, blind bores etc.

# External impact module C

4x reduced impact energy for hardened components, thin-walled materials and coatings.

# External impact module G

9x higher impact energy for rough casting pieces etc.

Impact devices	D	DL	C	G
Max. roughness (Ra)	2	2	0.4	7
Impacting energy (Nmm)	11	11	3	90
Mass of impact body (g)	5.5	7.8	3.0	20
Impact body length (mm)	147	250	141	254
Max. hardness of workpiece (HV) Max. hardness of workpiece (HB)	940	940	1000	650
Min. weight of sample: of compact shape (kg) on solid support (kg) coupled on plate (kg)	5 2 0.1	5 2 0.1	1.5 0.5 0.02	15 5 0.5
Min. thickness of sample: coupled (mm) min. thickness of hardened layers (mm)	3 0.8	3 0.8	1 0.2	10









# **Impact bodies**

Item No.	Description	Price RUB
909.482	Impact body D	
909.483	Impact body G	
909.564	Impact body C	
909.484	Impact body DL	

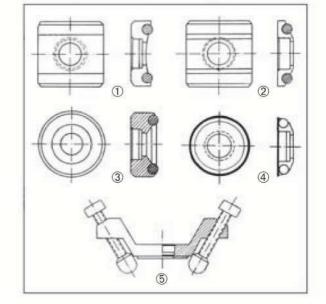


909.477



### Set special support rings The set consists of

Type	Description
①	Cylindrical outside surface R10-R15
①	Cylindrical outside surface R14.5-R30
①	Cylindrical outside surface R25-R50
②	Cylindrical inside surface R11-R13
②	Cylindrical inside surface R12.5-R17
②	Cylindrical inside surface R16.5-R30
3	Spherical outside surface SR10-SR15
3	Spherical outside surface SR14.5-SR30
3	Spherical outside surface SR11-SR13
<ul><li>4</li><li>4</li></ul>	Spherical inside surface SR12.5-SR17 Spherical inside surface SR16.5-SR30
(5)	Cylindrical outside surface, radius adjustable ≥R10



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# Digital thickness gauge

This thickness gauge measures non-destructively the thickness and speed of sound from several materials according to the ultrasonic measuring principle (as illustrated).

- Measuring principle: ultrasonic.
- Measuring range for steel: 1.2-200 mm.
- Resolution: 0.1 mm.
- Accuracy:  $\pm (0.5\%H + 0.1 \text{ mm})$ (H = measured value).
- Measuring frequency: 5 MHz.
- Speed of sound: 1000-9000 m/s.
- mm/inch conversion.
- RS232C data output.
- On/off switch.
- Automatic switch-off.
- 11 presets for the speed of sound of various materials (cd01-cd11) and one configurable speed of sound (cd12).

- Calibration standard on side of basic instrument.
- Operating temperature: 0 to 50°C.
- Admissible relative humidity: <80%.
- Dimensions: 120 x 60 x 30 mm.
- Weight basic instrument: 260 g.
- Power supply: 4 batteries type AAA.

### Test block for calibration (909.398)

For the inspection and calibration of digital thickness gauges.

- Heights: 2.5 25 mm, incr. 2.5 mm.
- Tolerance: 0.1 mm (flatness:  $\pm 0.05$  mm).
- Material: steel.





# measuring principle measuring surface contact fluid measuring object transmitter (probe) A: transmitter T: top echo L: lower echo

Preset code	Material
cd01	steel
cd02	cast iron
cd03	aluminum
cd04	copper (red copper)
cd05	brass
cd06	zinc
cd07	quartz glass
cd08	polyethylene
cd09	PVC
cd10	gray cast iron
cd11	nodular/ductile cast iron

# **Delivery including:**

- small, rectangular probe (measuring face Ø 10 mm),
- contact fluid,
- manual,
- 4 batteries.

PRICE

Item No.	Description	Price RUB
909.139	Thickness gauge	
Options		
497.914	Spare battery (4 needed	)
	RS232C cable and software	2
909.576	Contact fluid (approx. 7	75 ml)
	Test block for calibration	ACTION CONTRACTOR AND ACTION AND ACTION ACTION AND ACTION ACTION ACTION ACTION ACTION ACTION AND ACTION

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# Digital thickness gauges

This thickness gauge measures non-destructively the thickness and speed of sound from several materials according to the ultrasonic measuring principle. The Echo-Echo model is capable of measuring the material thickness even through coatings.

- Resolution: 0.1 mm or 0.01 mm.
- Accuracy (H = measured value): 0.65 - 9.99 mm: ±0.04 mm, 10.00 - 99.99 mm: ±(0.1%H+0.04 mm), 100.0 -400.0 mm: ±0.3%H.
- Measuring frequency: 5 MHz (standard probe).
- 9 preset materials (aluminum, titanium, steel, stainless steel, glass, copper, cast iron, brass and polystyrene) and one configurable speed of sound.
- mm/inch conversion.
- LCD display with backlight.
- On/off/reset switch.
- Automatic switch-off.
- Calibration standard on side of basic instrument.
- Operating temperature: -20 to 50°C.
- Dimensions: 116 x 64 x 27 mm.
- Weight basic instrument: 220 g.
- Delivery including inspection report (standard probe).
- Delivery including contact fluid.
- Power supply: 2 batteries type AAA.

909.398 Test block for calibration



Item No.	Description	Price RUB
Thickne	ss gauges:	
909.566	Without USB data output	
909.567	With USB data output	
Echo-Ec	ho model:	
909.568	Without USB data output	
909.569	With USB data output	
Options	IB	
497.914	Spare battery (2 needed)	
	Contact fluid (approx. 75 n	nl)

### **Optional probes**

Item No.	Mode	Measuring range/mm	Measuring frequency MHz	Minimum tube diameter/mm	Price RUB
909.570		0.8 -300	5	ø20 x 1.2	
909.572		0.65 - 20	10	ø 10 x 4.0	
For Echo	-Echo model	only:			
909.575	Normal	3.0 - 25	5	ø25 x 3	
	Echo-Echo	1.44-200			

### Standard model

- Measuring range: 0.8 300 mm (standard probe).
- Delivery including standard probe (909.570).

### **Echo-Echo model**

Echo-Echo mode is only available with the standard probe, 909.575.

- Measuring range: normal mode: 1.44-200 mm (standard probe), Echo-Echo mode: 3-25 mm (standard probe).
- Maximum coating thickness: 2 mm.



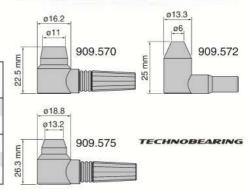
### Test block for calibration (909.398)

For the inspection and calibration of digital thickness gauges.

■ Heights: 2.5 - 25 mm, incr. 2.5 mm.

909.398

- Tolerance: 0.1 mm (flatness:  $\pm 0.05$  mm).
- Material: steel.



# Digital coating thickness gauges

Measurements of coating thickness of paint, coating, foil etc. (non-magnetic layers) on a magnetic (ferro) and/or non-magnetic (non-ferro) metal substrate. Available with integrated or external sensor, in single or combined (automatically selecting magnetic/non-magnetic) model. Furthermore there is a one-button model, specifically designed for the automobile industry.

 Measuring principles: magnetic induction (ferro) and eddy current (non-ferro).

■ Measuring range: 0-1250 µm.

■ Resolution: 0.1 μm (<100 μm), 1 μm (≥100 μm).

Accuracy: ±3%H or 3 μm
 (H = measured value).

- µm/mil conversion.
- RS232C data output.
- Automatic switch-off.
- Minimum measuring area: 6 x 6 mm.
- Minimum substrate thickness: 0.3 mm.

■ Minimum object radius:

ferro: 1.5 mm (convex), 25 mm (concave), non-ferro: 3 mm (convex), 50 mm (concave).

■ Dimensions: 131 x 65 x 28 mm.

Delivery in a case with ferro and non-ferro base plate and reference standards.

■ Power supply: 4 batteries type AAA.



909.072



909.070



Item No. Type/description

Price RUB

### With integrated sensor:

909.060 Ferro

909.069 Non-ferro

909.070 Non-ferro and ferro

### With external sensor:

909.061 Ferro

909.071 Non-ferro

909.072 Non-ferro and ferro

### One-button model:

909.062 Non-ferro and ferro

### **Options:**

497.914 Spare battery (4 needed)

909.073 RS232C cable and software



C18.303.

# Digital coating thickness gauge

Measurements of coating thickness of paint, coating, foil etc. (non-magnetic layers) on a magnetic (ferro) and non-magnetic (non-ferro) metal substrate.

- Measuring principles: magnetic induction (ferro) and eddy current (non-ferro).
- Measuring range: 0-1300 µm.
- Resolution: 1 μm ( 0 999 μm), 10 μm (1000 - 1300 μm).
- Accuracy:  $\pm (3\% + 2 \mu m)$ .
- Statistics: number of measurements, mean, minimum, maximum and standard deviation.
- µm/mil/mm conversion.
- USB data output.
- Illuminated LED display.
- On/off switch.
- Automatic switch-off.
- Minimum measuring area: ø6 mm.
- Minimum substrate thickness: ferro: 0.5 mm, non-ferro: 0.3 mm.

- Minimum object radius: 1.5 mm (convex), 25 mm (concave).
- Maximum measuring frequency: 2 times per second.
- Adjustable tolerance limits (alarm signal on display and acoustic).
- Operating temperature: 0 to 40°C.
- Admissible relative humidity: 20-90%.
- Dimensions: 110 x 53 x 24 mm.
- Weight: 92 g.
- Delivery in a case with USB cable, software, ferro and non-ferro base plate, reference standards and an inspection report.
- Power supply: 2 batteries type AAA.

TECHNOBEARING







Item No. Description Price RUB

Option:

497.914 Spare battery (2 needed)

909.116 Coating thickness gauge

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# **Digital thermometer**

■ Measuring range: -50 to 750°C.

■ Resolution: 1°C.

■ Accuracy (H = measured value):

-50 to  $-20^{\circ}\text{C}$ :  $\pm 4^{\circ}\text{C}$ ,

-20 to  $0^{\circ}\text{C}$ :  $\pm 3^{\circ}\text{C}$ ,

0 to  $750^{\circ}$ C:  $\pm (0.75\%\text{H} + 1^{\circ}\text{C})$ .

■ On/off switch.

■ Hold function.

■ Delivery incl. TP01 probe (909.076).

■ Weight (incl. battery): approx. 150 g.

■ Power supply: 1 battery type PP3 (9 V).





Item No.	Measuring range/°C	Price RUB
909.145	-50 to 750	
Option:		
495.161	Spare battery	



909.077: measuring pin ø3 mm, length 76 mm, with insulating grip.

Item No. Type	Measuring range/°	C Applications	Material probe	Price RUB
909.076 TP01	-50 to 204	air	steel	
909.077 TP02	-50 to 700	air, steam, liquids	stainless steel	

# **Digital thermometer**

■ Measuring range: -40 to 200°C.

■ Resolution: 0.1°C.

■ Accuracy:

0 to 100°C: ±1°C, 100 to 200°C: ±2°C.

- Stainless steel measuring pin.
- °C/°F conversion.
- On/off switch.
- Power supply: 1 battery type V357.





TECHNOBEARING

Item No.	Measuring range/°C	Price RUB
909.421	-40 to 200	
<b>Option:</b> 836.535	Spare battery	

# Infrared thermometers

These hand-held infrared thermometers are extremely suitable for fast non-contact temperature measurements. Equipped with laser for easy aiming at the object. With adjustable emissivity for different surfaces. Applications: for example in the food, automotive and chemical industries, in the process technology and for research purposes.

- Measuring range: -60 to 760°C.
- Resolution: 0.1 or 0.2°C.
- Accuracy:  $\pm 2^{\circ}$ C or  $\pm 2\%$ .
- °C/°F conversion.
- Emissivity preset (standard 0.95).

908.800



- Hold function.
- Min/max function.
- Operating temperature: 0 to 50°C.
- Measuring time: 1000 ms.
- Laser: 635 660 nm, class 2.

### Models

The infrared thermometers have different optics ratios, which makes them applicable for different working distances:

- 908.800: for measurements at small distances,
- 909.413: with a fixed small working distance and a dual laser pointer for targetting,
- 909.412: for measurements at large distances or with a large temperature range.



Material	T/°C	Emissivity
Cement	0-200	0.96
Cloth	93	0.90
Paper	38-371	0.93
Granite	21	0.45
Steel	25	0.65
Cast iron	100	0.21
Cold milled steel	93	0.75 - 0.85
Stainless steel	24	0.28
White alumina ceramics	93	0.90
Hard rubber	23	0.94
Soft rubber	24	0.86

Item No.	908.800	909.413	909.412
Price RUB			
Measuring range °C	-55 to 250	-55 to 220	-60 to 760
Working distance d Optics ratio d:s	small 6:1	18 mm (s=2.5 mm)	large 30:1
Resolution °C	0.1	0.2	0.1
Wave length μm	5-14	5-14	8-14
Laser pointer	1	<b>√</b> (dual)	1
Emissivity	0.05 - 1 (incr. 0.01)	0.05 - 1 (incr. 0.01)	0.10-1 (incr. 0.01)
Emissivity preset	0.95	0.95	0.95
Illuminated LCD display		-	1
Dimensions mm	103 x 50 x 23	171 x 41 x 27	146 x 133 x 49
Weight (incl. batteries) g	65	125	222
Power supply (batteries)	2x CR2032	2x AAA	2x AAA

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### Spare batteries

909.412

Item No. Type	Price RUB
495.157 CR2032	
497.914 AAA	

# Digital thermal imager

With this thermal imager one can easily measure and display (2.8" LCD color display) the thermal image and temperature.

- Measuring range: -20 to 250°C.
- Field of view: 40 x 40°.
- Accuracy:  $\pm 2^{\circ}$ C or  $\pm 2\%$ .
- Thermal sensitivity: 0.1°C.
- Thermal image resolution: 32 x 31 px.
- Emissivity preset: 0.95, selectable 0.10-1.00 per 0.01.
- USB data output.
- On/off switch.
- Automatic switch-off.
- Adjustable tolerance limits.
- Backlight with 3 selectable levels of brightness.
- °C/°F/°K conversion.
- 4 selectable color palettes.
- Alarm for adjustable upper und lower limit of the temperature.
- Frame rate: 9 Hz.
- Spectral range: 8 14 μm.
- Time stamp for images.

Item No.	Description	Price RUB
909.429	Thermal imager	
Option:		
495.111	Spare battery (4 need	ded)

- Storage for 25000 images.
- Memory card: micro SDHC 8 GB, including adapter for SD card reader.
- Dimensions: 95 x 75 x 233 mm.
- Weight (incl. batteries): 390 g.
- Protection: IP54.
  - (When using data output: IP40.)
- Delivery in a case with USB cable and software.
- Power supply: 4 batteries type AA.



# Digital thermohygrometer

- Measuring range: -10 to 50°C, 5-98%RH (with no condensation).
- Resolution: 0.1°C, 0.1%RH.
- Accuracy temperature: ±1°C.
- Accuracy relative humidity at 25°C: ≤30%RH: ±5%RH, >30%RH: ±3%RH.
- °C/°F conversion.
- Measuring frequency: 2.5 times per second.
- Illuminated LCD display.

Item No.	Measuring range/°C	Measuring range/%RH	Price RUB
909.130	-10 to 50	5-98	
<b>Option:</b> 495,161	Spare battery	r	

- On/off switch.
- Automatic switchoff.
- Hold and min/max functions.
- Dimensions: 151 x 83 x 26.5 mm.
- Weight: 251 g.
- Delivery in a case.
- Power supply: 1 battery type PP3 (9 V).





# Digital tachometers - contact, laser, laser/contact

With these digital laser tachometers very accurate non-contact and/or contact measurements can be done easily.

■ Measuring range contact: 0.5 - 19 999 rpm,

0.05 - 1999.9 m/min.

Measuring range laser: 2.5-99 999 rpm.

■ Resolution:

<1000 rpm: 0.1 rpm,

≥1000 rpm: 1 rpm,

<100 m/min: 0.01 m/min,

≥100 m/min: 0.1 m/min.

■ Range: 5 - 50 cm (laser).

■ Accuracy:  $\pm (0.05\% + 1 \text{ digit})$ .

■ Laser/contact switchable (909.146).

Automatic switch-off.

■ Functions: max., min. and last measured value.

■ Dimensions and weight:

909.148: 174 x 72 x 38 mm, 240 g,

909.152: 182 x 70 x 34 mm, 170 g,

909.146: 198 x 70 x 34 mm, 225 g.

■ Laser class 2 according IEC825-1 and EN60825-1.

■ Power supply:

909.148: 4 batteries type AA,

909.152: 3 batteries type AAA,

909.146: 4 batteries type AAA.



909.148



909.152



909.146





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909.148 Digital contact tachometer

909.152 Digital laser tachometer

Dagarintian

909.146 Digital laser/contact tachometer

### **Options:**

497.914 Spare battery type AAA

495.111 Spare battery type AA

906.811 Reflective tape per meter

(width 25 mm, for laser tachometers)

909.348 Set contact points for

tachometers 909.146/148

Price RUB

# **Digital torquemeters**

Instrument for the testing and measuring of torque.

- Measuring range: 0-500 N·m.
- N·m/kgf·cm/lbf·inch conversion.
- RS232C data output.
- Automatic switch-off.
- Peak hold function.
- Go/NoGo tolerance evaluation.
- Memory for 10 values.

- Average value calculation.
- Weight: 2.4 kg (model I) or 22 kg (model II).
- With built-in printer (only model II).
- Delivery with an RS232C cable.
- Power supply: AC adapter 220 V, 300 mA (model I) or 220<sup>±10%</sup> V, 100 W (model II).



TECHNOBEARING

Item No.	Measuring range/N·m	Measuring Resolution range/N·m N·m		Price RUB
With inte	grated senso	r (model I):		
909.370	0- 1	0.0005	$\pm 0.5\%$	
909.371	0- 5	0.002	$\pm 0.5\%$	
909.372	0- 10	0.005	$\pm 0.5\%$	
With exte	ernal sensor (	model II):		
909.373	0- 50	0.02	±1%	
909.374	0 - 100	0.05	±1%	
909.375	0-500	0.2	±1%	
Option:				
900.825	Printing paper	(5 rolls)		

Technobearing 202005

# Strain gauges

Handy measuring instruments suitable for measurements in two directions. Used to check the measuring force of dial indicators, lever type indicators, CMM probes etc. Small model with flat touch surface has a ø 1 mm bore. Large model with curved touch surface of ø 3.5 mm.

- Measuring range: 0.01 20 N or 1 2000 g.
- Indication accuracy: ±2% of the entire scale except 910.143 and 910.149: ±2.5%.
- With peak pointer.
- Metal housing.
- Delivery in a case.



### **Newton model**

Item No.	Measuring range/N			Graduation N	Price RUB
Small me	odel:				
910.138	0.01	<u></u>	0.05	0.001	
910.139	0.025	5 -	0.15	0.005	
910.140	0.1	-	0.5	0.01	
910.141	0.25	40	1.5	0.05	
910.142	1	2	5	0.1	
Large m	odel:				
910.143	4	-	20	0.5	

### Gram model

Item No.	Measuring range/g			Graduation g	Price RUB
Small mo	del:				
910.144	1	_	5	0.1	
910.145	2.5	5 -	15	0.5	
910.146	10	-	50	1	
910.147	25	-	150	5	
910.148	100	-	500	10	
Large me	odel:				
910.149	500	- '	2000	50	

# Strain gauges

Handy strain gauges suitable for measurements in two directions.

- Measuring range: 0.005 100 N.
- Indication accuracy: ±2% of the entire scale.
- With peak pointer.



TECHNOBEARING



### Small model

Item No.	Measuring range/N	Graduation N	Price RUB
857.702	0.015-0.15	0.005	
857.703	0.03 - 0.3	0.01	
857.704	0.05 - 0.5	0.01	
857.705	0.1 -1	0.02	
857.706	0.15 - 1.5	0.05	
857.707	0.25 - 2.5	0.05	

Large model

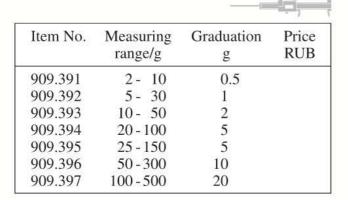
Item No.		asu inge		Graduation N	Length mm	Price RUB
857.721	0.2	25 -	2.5	0.05	153.5	
857.722	1	+	5	0.1	153.5	
857.725	3	_	30	0.5	153.5	
857.726	4	_	40	1	153.5	
857.727	5	-50	50	1	127.5	
857.728	10	- ]	100	2	127.5	

# Strain gauges

Handy measuring instruments suitable for measurements in two directions. Used to check the measuring force of dial indicators, lever type indicators, CMM probes etc. The flat touch surface has a ø 1 mm bore.

- Measuring range: 2-500 gram.
- Indication accuracy: ±4% of the entire scale.

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909.395

Technobearing 2020

# Digital spring scales

- Measuring range: 0-25 kg.
- Resolution: 0.005, 0.01 or 0.02 kg.
- Kg/lbs conversion.
- Automatic switch-off.
- Reset at weight empty box possible.
- Automatic hold function.
- Memory for maximum weight.

Measuring

range/kg

0-5

0 - 10

0 - 25

Resolution

kg

0.005

0.01

0.02

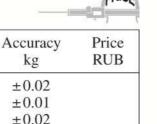
■ Dimensions and weight:

100 x 58 x 22 mm, approx. 100 g, 909.126: 909.123/124: 149 x 100 x 35 mm, approx. 200 g.

■ Power supply:

909.126: 3 batteries type AAA,

909.123/124: 1 battery type PP3 (9 V).





Item No.

909.126

909.123

909.124

497.914 Spare battery type AAA 495.161 Spare battery type PP3



# **Dynamometers**

Robust dynamometers in analog and digital model with several set-up pieces.

- Measuring range: 0-500 N.
- Push and pull.
- Max/peak function.

### Analog

- Accuracy: ±1%.
- Graduation: N and kg.
- With 4 tapped holes M3 (for mounting).

■ Dimensions: 225 x 60 x 51 mm.



### **Digital**

- Accuracy: ±0.2%.
- Kg/lb/N conversion.
- On/off switch.
- Automatic switch-off.
- Reversible display value.
- With 4 tapped holes M4 (for mounting).
- Dimensions: 147 x 75 x 38 mm.
- Weight: approx. 400 g.
- Power supply: AC adapter (12 Vdc, 1 A)

and rechargeable battery.

Item No.	Measuring range/N	Reading N	Price RUB
Analog:			
909.175	0- 10	0.05	
909.178	0- 50	0.2	
909.180	0-200	1	
909.182	0-500	2	
Digital:			
909.168	0- 5	0.001	
909.169	0 - 10	0.01	
909.171	0- 50	0.01	
909.173	0-200	0.1	
909.174	0-500	0.1	

TECHNOBEARING

# Digital vibration tester

Instrument with external sensor for quick checking of unbalance, misalignment, bearings and gears. For measuring velocity, acceleration, displacement and frequency.

### Measuring range

- Velocity: 0.01 99.99 mm/s, 100.0 - 400.0 mm/s (RMS, at frequency 10 Hz - 1 kHz).
- Acceleration: 0.1-400 m/s² (peak value, at frequency 10 Hz-1 kHz or 10 Hz-10 kHz).
- Displacement: 0.001 4.0 mm (P-P, at frequency 10 Hz 1 kHz).
- Frequency: 0.1 20 kHz.

### **Further specifications**

- Accuracy:  $\pm 5\% + 2$  digits.
- mm/inch conversion.
- RS232C data output.
- Operating temperature: 0 to 50°C.
- Dimensions: 125 x 62 x 31 mm.
- Weight: 255 g.
- Delivery in a case, incl. magnet and 2 attachments.
- Delivery with an inspection report.
- Power supply: 4 batteries type AAA.



Item No. Description

Price RUB

909.065 Vibration tester

### **Options:**

497.914 Spare battery (4 needed) 909.074 RS232C cable and software

# Digital sound level meter

Instrument for measuring the sound level.

- Measuring range: 30-130 dB.
- Resolution: 0.1 dB.
- Accuracy: ±1.5 dB.
- Frequency weighting: A and C.
- Frequency range: 31.5 Hz-8.5 kHz.
- Measuring frequency: 2 times per second.
- Time weighting: fast/slow.
- The current measured value within the range of 50 dB is graphically displayed (adjustable).
- Over range indication.
- Automatic switch-off.
- Max function.
- Dimensions: 207 x 70 x 29 mm.
- Weight: 178 g.
- Delivery in a case.
- Power supply: 1 battery type PP3 (9 V).

495.161 Spare battery



Item No.	Measuring range/dB	Price RUB
909.131	30-130	
Option:		

TECHNOBEARING



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# Refractometers

Refractometers for regular checking the correct mixing ratio of coolants. A correct proportion is very important.

■ Measuring range: 0-32% Brix.

■ Graduation: 0.1 or 0.2% Brix.

■ Accuracy: ±0.2%.

■ Adjustable eyepiece.

 Adjustment screw for zero setting (protected by rubber cap).

■ Rubber eye adapter.

■ Ergonomic design.

■ Weight: 200 g.

■ Delivery in a case incl. cleaning cloth, screwdriver, pipette.



Item No.	Meas. range % Brix	Graduation % Brix	Price RUB
909.090	0-10	0.1	
909.079	0-32	0.2	

**TECHNOBEARING** 

# Telescopic mirror/magnet

Adhesive force magnet: 5 N.

■ Max. length (extended length): 480 mm.



Item No.	Description	Price RUB
909.343	Telescopic mirror	
	Telescopic magnet lifter	

# Sonarscope

For tracing mechanical problems by means of sound.



Item No.	Description	Price RUB
909.418	Sonarscope	

# DeMeet 3D CNC coordinate measuring machines DF fixture system

# DeMeet coordinate measuring machines

The DeMeet 3D CNC coordinate measuring machines provide automatic, user-independent quality control with measuring results traceable to the international length standard. The DeMeet measuring machines are available in Video (optical) and Combo model (multisensor for combined video and touch probe measurements).

The application of quality components made by Schut and by well-known, specialized manufacturers ensures excellent performance and high accurate measurements.



TECHNOREARING

### DeMeet video measuring machines

Optical measurements are performed using the camera system, optics and adjustable illumination. Due to the non-contact nature of the measurements there is no risk of product deformation. Optical measuring is very suitable for products with fine structures and contact sensitive products.

### **Optical system**

A combination of high quality telecentric optics and DeMeet Sony sensor camera is integrated for a clear image with an excellent contrast and a high resolution. In combination with the image processing functionality of the DeMeet, this results in highly accurate measurements.

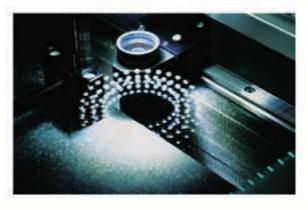






### Illumination

Illumination is essential for accurate measurements. The DeMeet is standard equipped with LED based illumination (backlight, coaxial light and segmented ring light). A ring light consisting of a 3 rings, 16 segments and 48 cells LED pattern, that can be controlled per individual ring, segment and cell, is standard supplied for optimal light configuration.



C23.301.

# DeMeet video and multi-sensor measuring machines





### **DeMeet multi-sensor measuring machines**

The increasing miniaturization and complexity of product features results in more difficult measuring and inspection procedures. Measuring systems equipped for only optical or contact measurements are often no longer sufficient, in which case multi-sensor measuring machines are required for optimal geometrical quality control.

With the DeMeet Combo model both optical and contact measuring principles are seamlessly integrated and measurements can be performed by the optical and the probing system within one measuring run and even within one feature.

# TECHNOBEARING

# PTB software evaluation

Evaluation software for coordinate measuring machines. The accuracy of the *Approve for DeMeet* software was verified by comparing the results obtained from the software with

reference results supplied by the PTB (Physikalisch-Technische Bundesanstalt, Braunschweig, Germany). The *Approve for DeMeet* software has been placed in the class of the smallest deviations.



# Approve for DeMeet multi-sensor measuring software

Approve for DeMeet is a true multi-sensor software package, where the difference in sensor origin of the measuring input is limited to only the necessary. All the measuring results of video and touch probe can be displayed, reported, exported and used in constructs together, and are dynamically updated. The measuring results can also be displayed together in a 3D view. Approve for DeMeet is designed to be a user-friendly software package, but is flexible and very elaborate to measure many products.



C23.302. Technobearing 2020

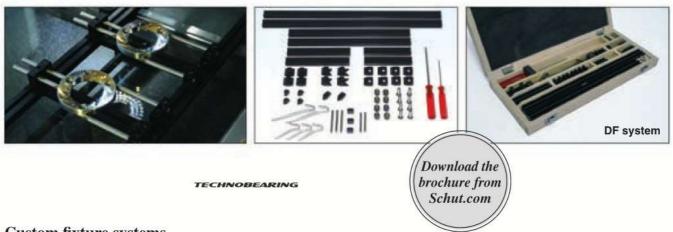
# **Fixture systems**

Solid positioning of a measuring object with a fixture system is essential for accurate measurements.

### DF product fixture system

DF-System is a fixture system developed and produced by Schut and designed for constructing 3D product fixtures, particularly for optical measurements, and is fully compatible with the measuring table of the DeMeet measuring machines. The DF-system is an easy to mount measurement fixture system and especially developed to use the most of the illumination possibilities for optical measurements. Easy to mount with single-screw couplings to build fixtures with a high repeatability and to realize a short set-up time for measuring tasks.

DF is available in separate components and in three basic sets.



### Custom fixture systems

When products need to be measured in a batch and a standard fixture system does not provide the right solution for example caused by the extraordinary shape or small dimensions of the product, a custom made fixture can provide the solution. This is especially the case for products that need to be measured optically.

A certain repeatability of product positioning in the fixture is important for a quick set-up time in for example the production environment. We can assist you in the development and manufacturing of a custom fixture. There is a range of possibilities, from machined fixturing positions in acryl glass to magnet and vacuum fixture systems.







Technobearing 20200

Absolute	A	Center gauges	238
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