

NEW dial gauge range Introduction

February 10th 2022



Contents

- **Branding**
- Present new range
- **Applications**
- Packaging
- **Accessories**
- Specifications

Branding

Branding

Branding

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Branding

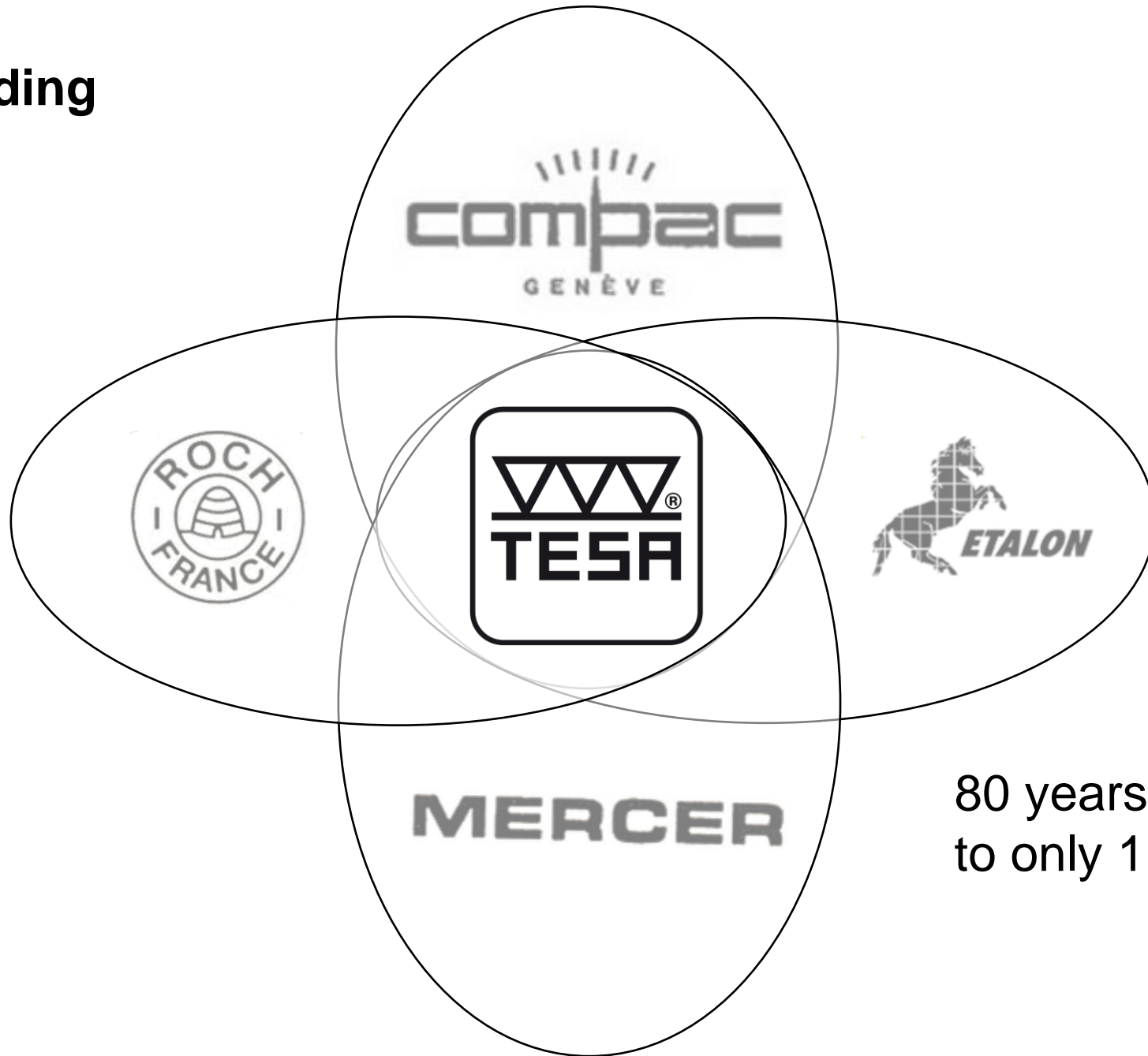
Branding

Branding

Branding

Branding

Branding



80 years history to converge
to only 1 brand: **TESA**

New range

New range

New range

New range

New range

New range

New range

New range

New range

New range

New range: overview

Resolution 0.1 mm



Resolution 0.01 mm



Resolution 0.002 mm



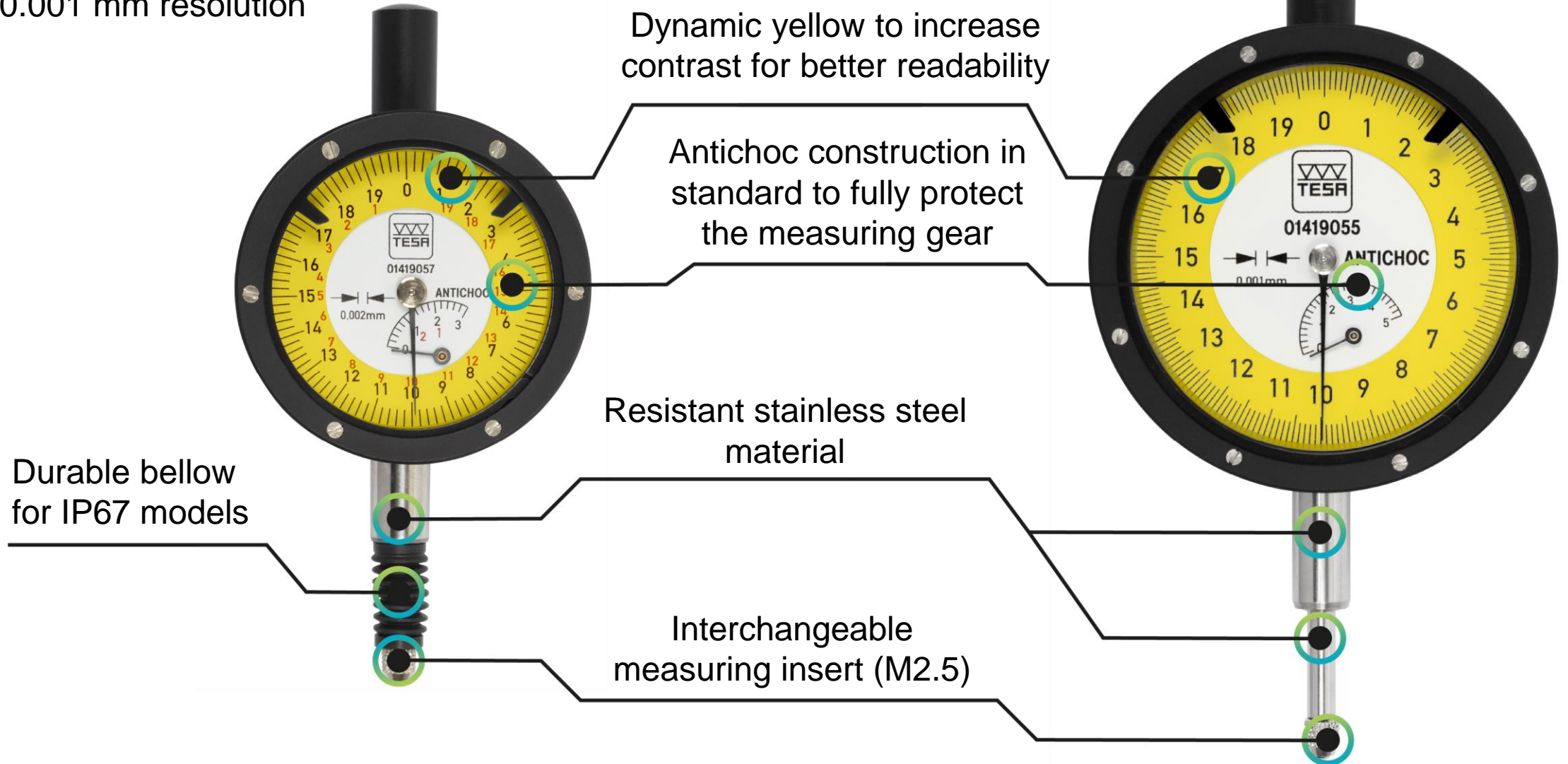
Resolution 0.001 mm



What is new?

NEW

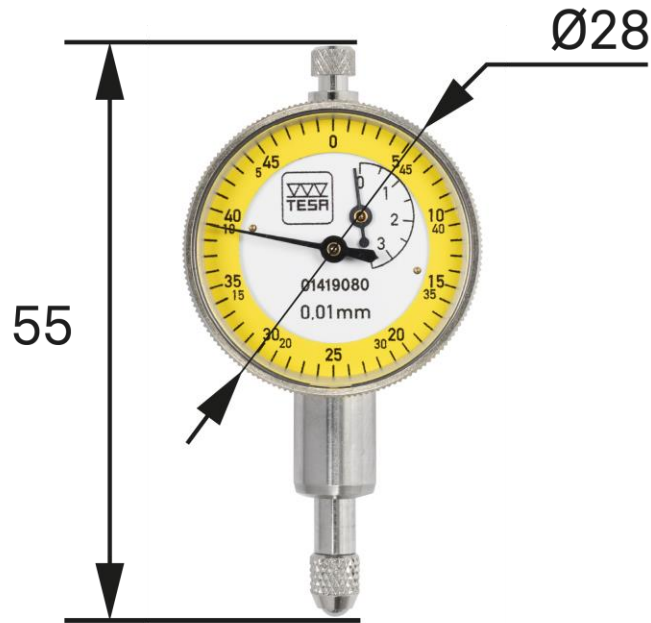
New **premium range** with 0.002 mm & 0.001 mm resolution



What is new?

NEW

Compact version

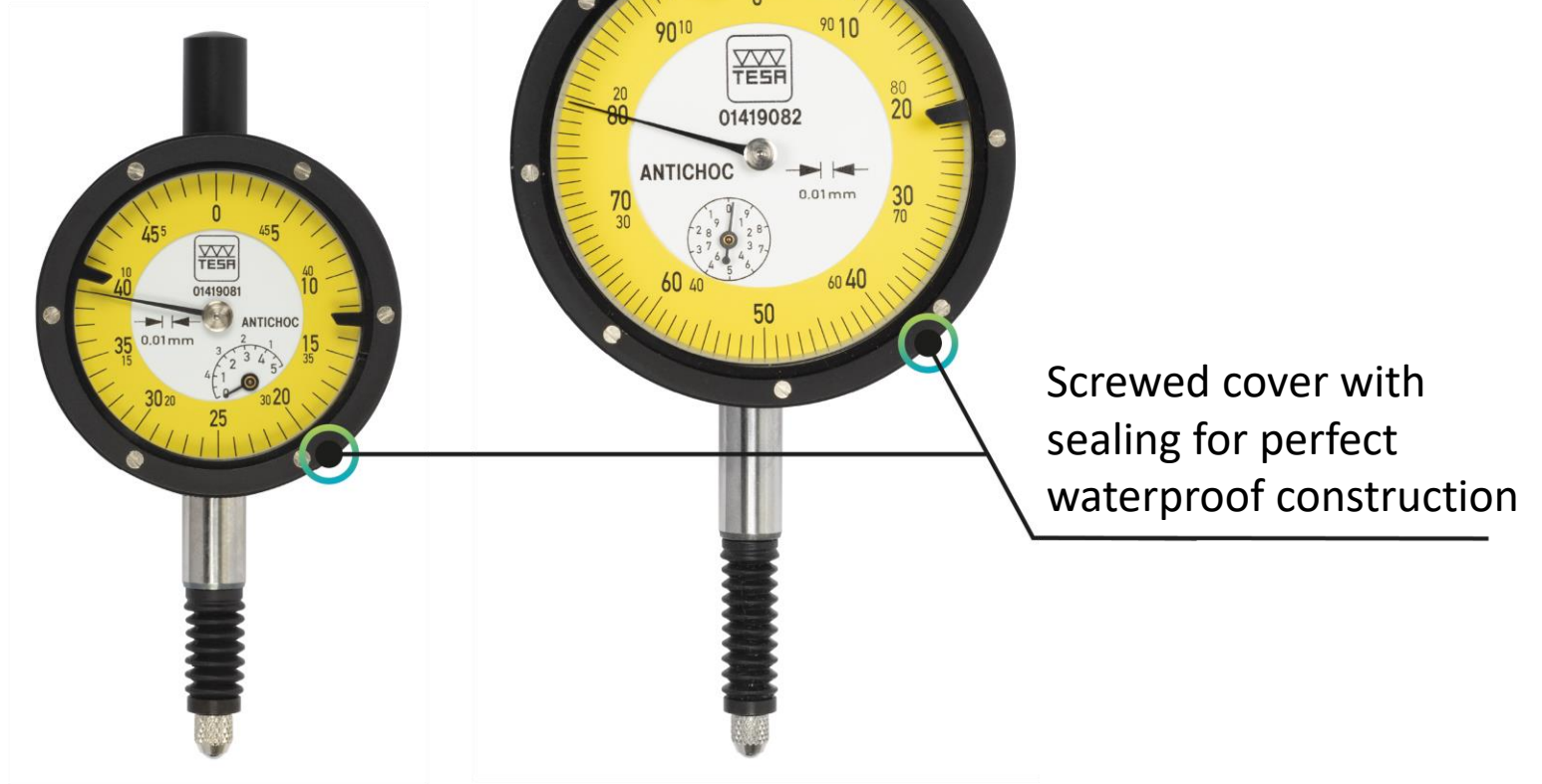


Small size, essential for limited access applications

What is new?

IP67 protection, now also available for
0.01mm resolution

NEW



IP67 protection level is ideal for environments with humidity, dust or oil.

The range at a glance

Ø Dial (mm)	Model	Resolution / characteristics																		
		0.1mm characteristics				0.01mm characteristics					0.002mm characteristics					0.001mm characteristics				
		0.1mm	Course (mm)	Dial	IP level	0.01mm	Course (mm)	Dial	Antichoc	IP level	0.002mm	Course (mm)	Dial	Antichoc	IP level	0.001mm	Course (mm)	Dial	Antichoc	IP level
Ø28	Compact		/			01419080	3,5	0 ÷ 25 ÷ 50	-	40		/					/			
Ø40	Standard	0141760500	10	0 ÷ 5 ÷ 10	40	01419047	5	0 ÷ 25 ÷ 50	●	40	01419056	3	0 ÷ 10 ÷ 20	●	40	01419053	1	0 ÷ 5 ÷ 10	●	40
						01419081	5	0 ÷ 25 ÷ 50	●	67	01419057	3	0 ÷ 10 ÷ 20	●	67					
	back plunger		/			0141760566	3	0 ÷ 25 ÷ 50	-	40		/					/			
Ø58	Standard	0141760501	10	0 ÷ 5 ÷ 10	40	01419048	10	0 ÷ 50 ÷ 100	●	40	01419058	5	0 ÷ 10 ÷ 20	●	40	01419054	1	0 ÷ 5 ÷ 10	●	40
						01419082	10	0 ÷ 50 ÷ 100	●	67						01419055	5	0 ÷ 10 ÷ 20	●	40
	Long strokes	0141760503	30	0 ÷ 5 ÷ 10	40	0141760651	30	0 ÷ 50 ÷ 100	-	40		/					/			
						0141760661	50	0 ÷ 25 ÷ 50	-	40		/								
Ø62	High P		/				/					/				01419051	0.1	50 ÷ 0 ÷ 50	-	40
			/				/					/				01419052	0.1	0 ÷ 10 ÷ 20	-	54

Application

Application

Application

Application

Application

Application

Application

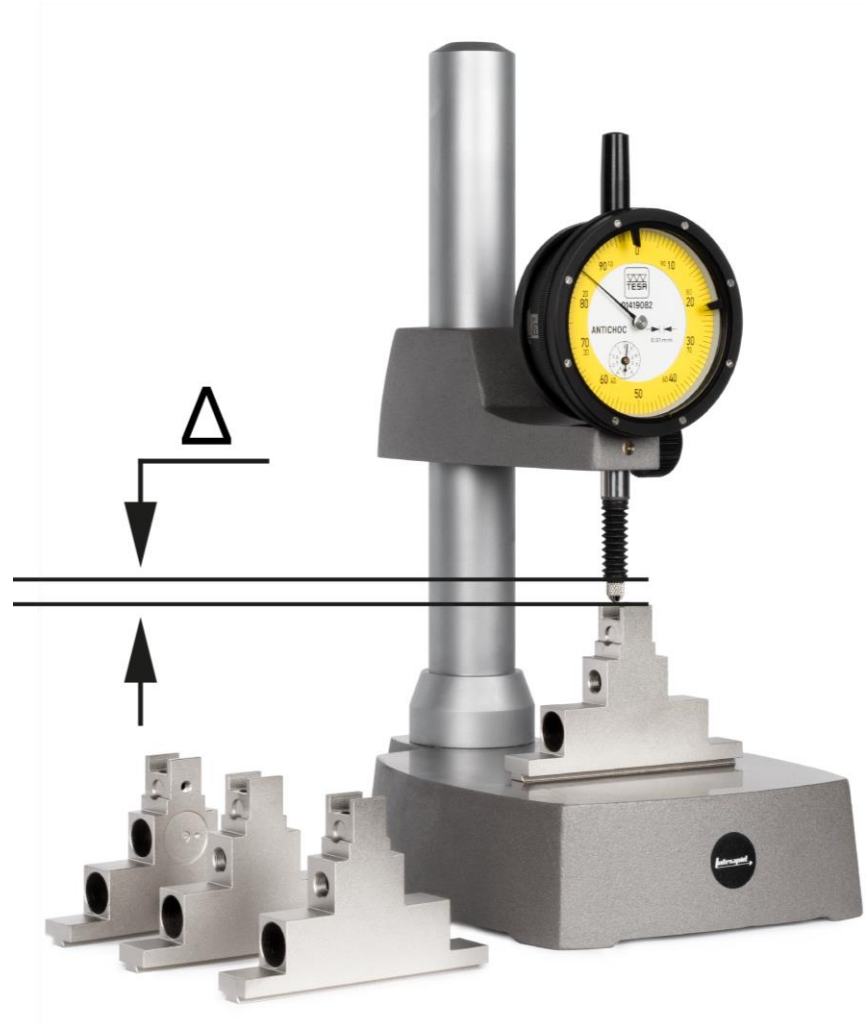
Application

Application

Application

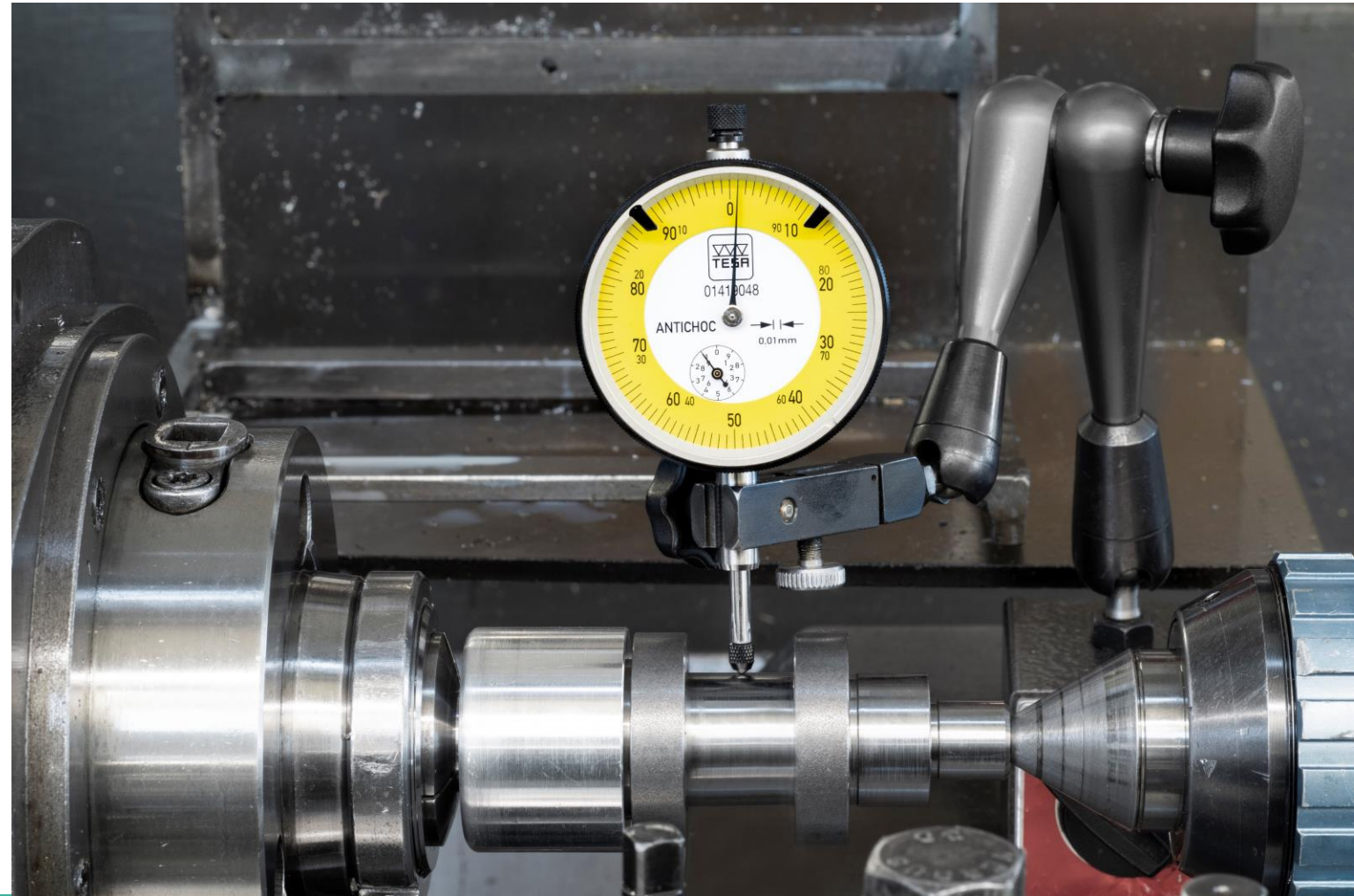
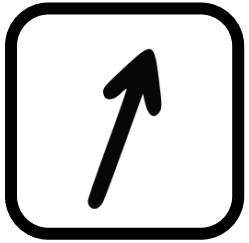
Applications

Parts measurements comparing to a reference



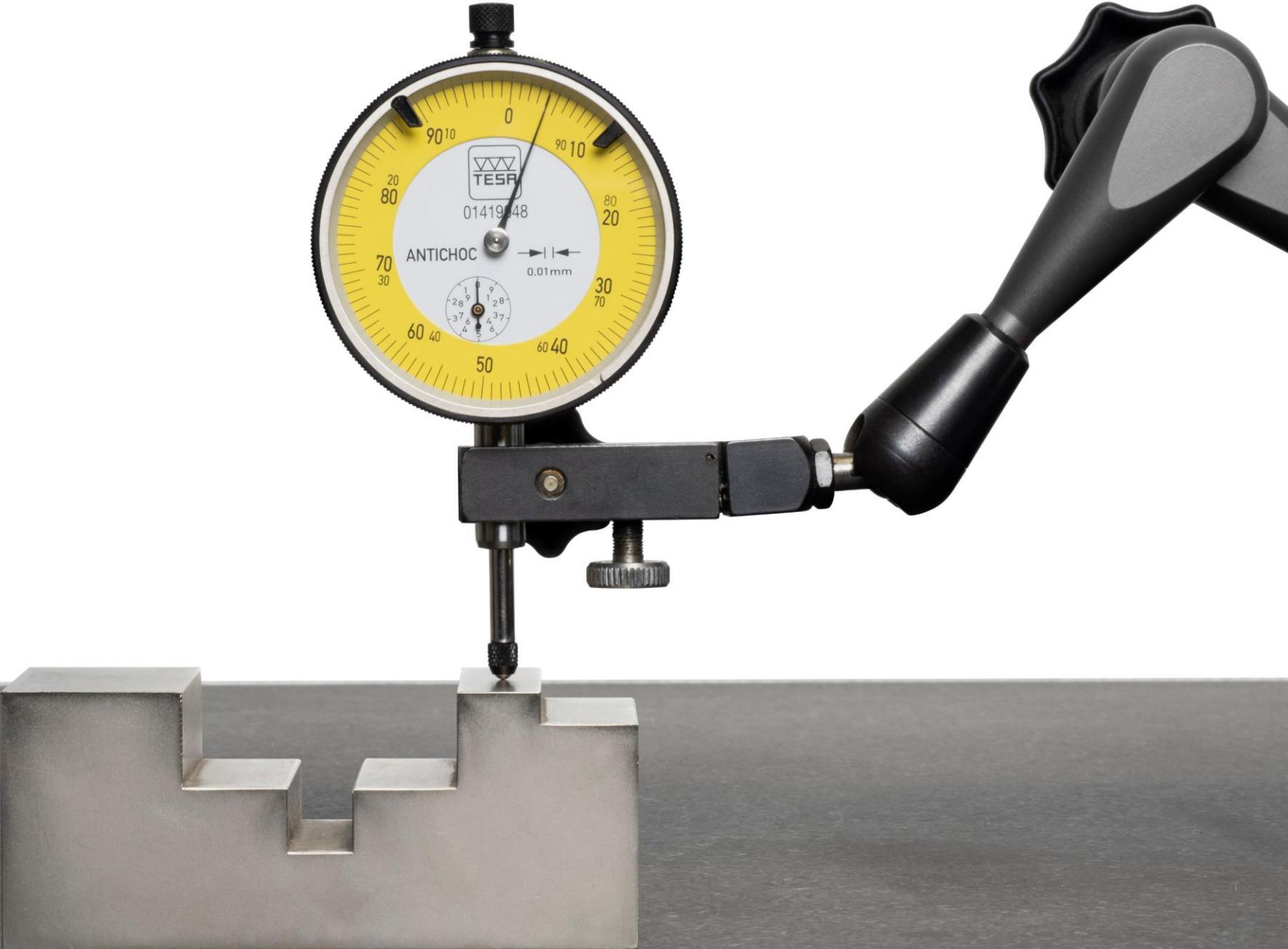
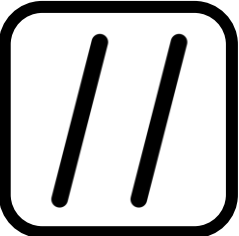
Applications

Run-out measurement



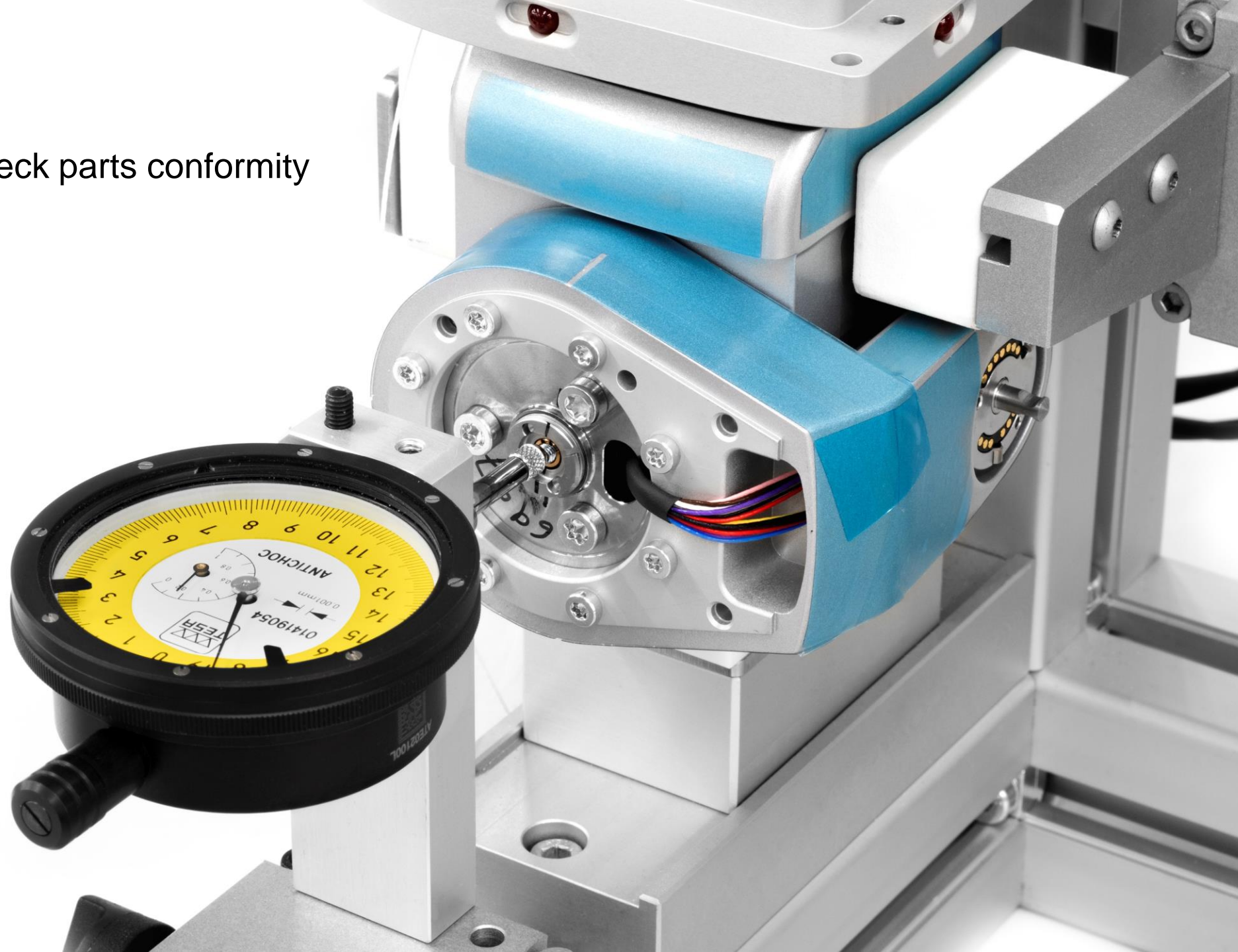
Applications

Parrallelism control



Applications

Specific mounting to check parts conformity



Applications

Bores measurement



Packaging

Packaging

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Packaging

Packaging

Packaging

Packaging

Packaging

Packaging

Packaging

Packaging



Paper sleeve and box

Nota: TESA case available as accessories

Accessories Accessories

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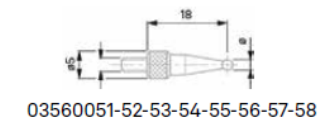
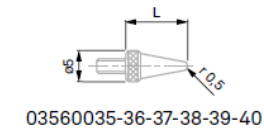
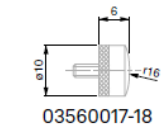
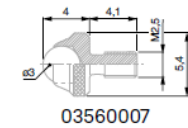
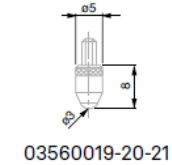
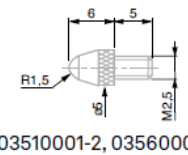
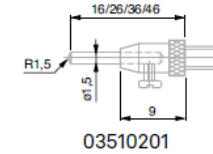
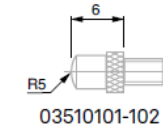
Accessories Accessories

Accessories Accessories

Hemispherical inserts



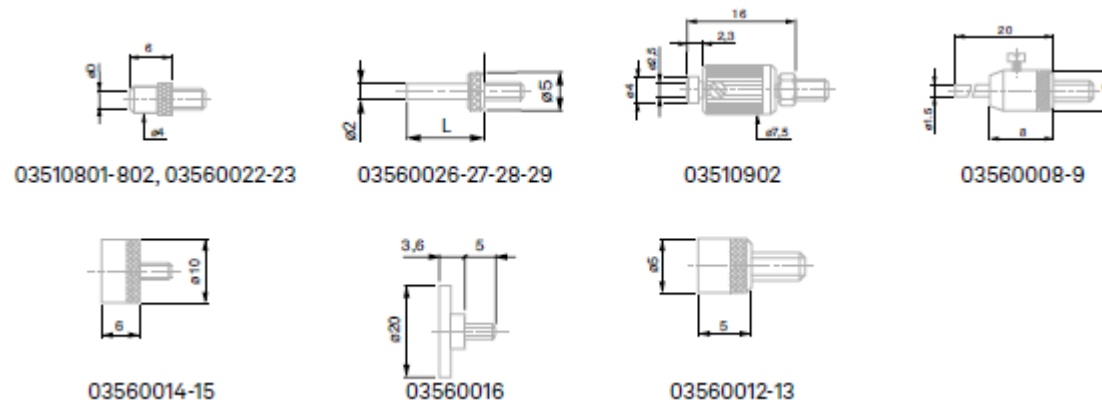
Item no.	Measuring face [mm]	Key length [mm]	Material
03510001	R 1,5	5	Steel
03510002	R 1,5	5	Hard metal
03510101	R 5	6	Steel
03510102	R 5	6	Hard metal
03510201	R 1,5	16/26/36/46 (interchangeable)	Steel
03560001	R 1,5	5	Sapphire
03560007	R 1,5	4	Hard metal
03560017	R 16	6	Steel
03560018	R 16	6	Hard metal
03560019	R 1,5	8	Steel
03560020	R 1,5	8	Hard metal
03560021	R 1,5	8	Ruby
03560035	R 0,5	5	Steel
03560036	R 0,5	10	Steel
03560037	R 0,5	15	Steel
03560038	R 0,5	20	Steel
03560039	R 0,5	30	Steel
03560040	R 0,5	40	Steel
03560051	D 1	18	Hard metal
03560052	D 2	18	Hard metal
03560053	D 3	18	Hard metal
03560054	D 4	18	Hard metal
03560055	D 5	18	Hard metal
03560056	D 6	18	Hard metal
03560057	D 7	18	Hard metal
03560058	D 8	18	Hard metal



Inserts with a flat measuring face



Part number	Diameter mm	Probe length mm	Fixing mm	Material	Particular characteristics
03510902	4	16	M2,5	Carbide	Adjustable parallelism
03560008	1,5	20	M2,5	Steel	Interchangeable pin
03560009	1,5	20	M2,5	Carbide	Interchangeable pin
03510801	2,5	6		Steel	
03510802	2,5	6		Carbide	
03560022	3,4	6		Steel	
03560023	3,4	6		Carbide	
03560026		2,8		Steel	
03560027		7,8		Steel	
03560028		12,8		Steel	
03560029		17,8		Steel	
03560012	5	5		Steel	
03560013	5	5		Carbide	
03560014	10	6		Steel	
03560015	10	6		Carbide	
03560016	20	3,6		Steel	



Magnetic supports



Small support



High precision articulated arms



Inclinable supports



Flexible arm



More details on [website](#)

Measuring supports + table



Compact version



Ground table surface



Ground table surface + fine adjustment



Granite grade 00 table



More details on [website](#)

TESA case

Ø	TESA Article	Compatible case	
		063154	064300
40	01419047		●
58	01419048	●	
44.5	01419053		●
61.5	01419054	●	
61.5	01419055	●	
44.5	01419056		●
44.5	01419057		●
61.5	01419058	●	
44.5	01419081		●
61.5	01419082	●	
40	0141760500		●
58	0141760501	●	
58	0141760503	●	
58	0141760651	●	



Specifications Specifications

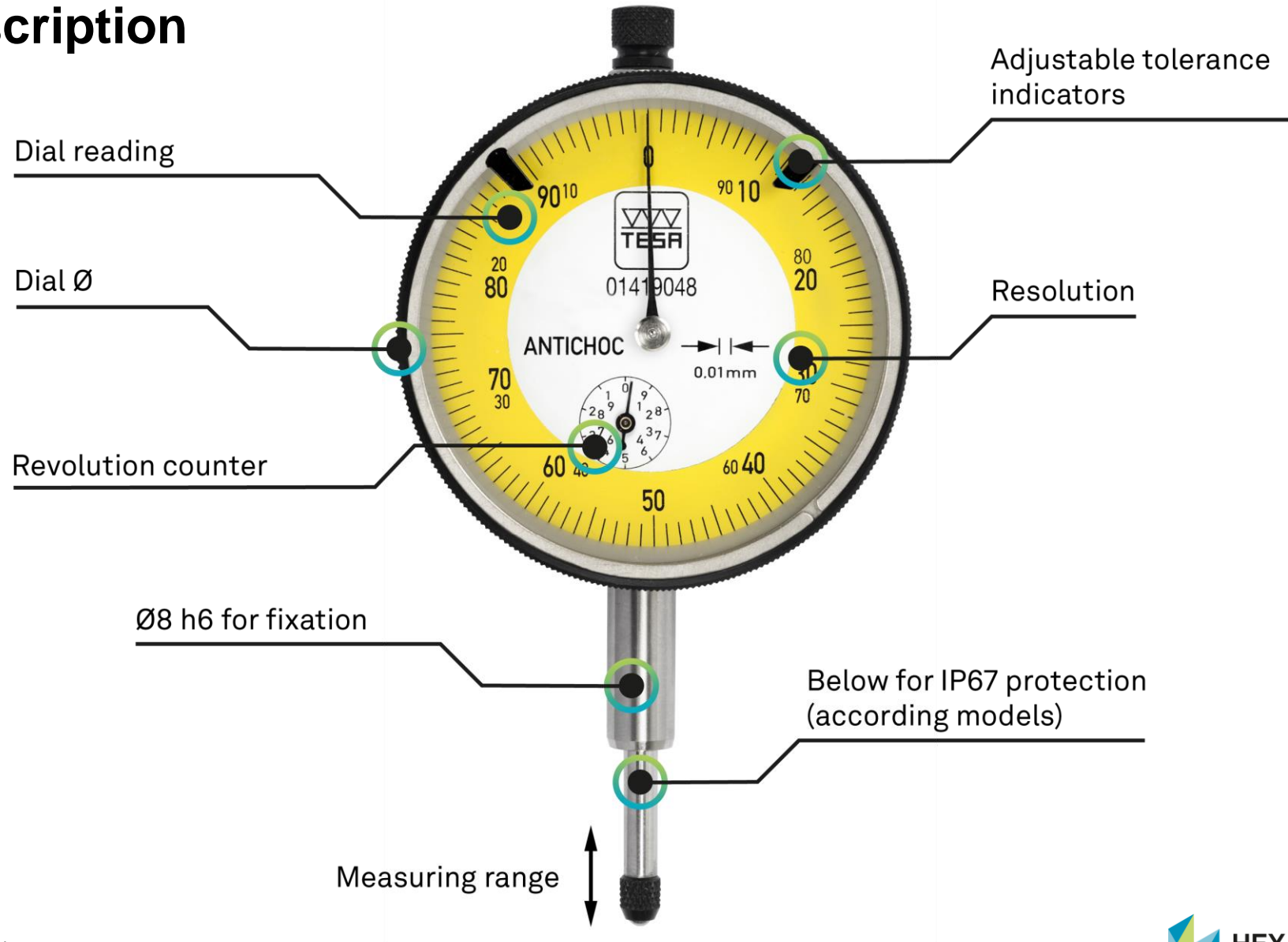
Specifications Specifications

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General description



New range: resolution 0.1mm



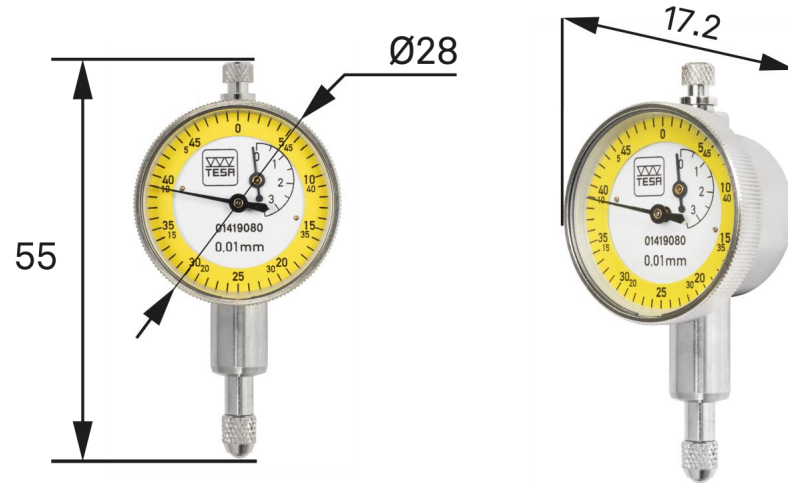
\varnothing (mm)	Tesa Article	Measuring range	Dial reading	Stroke per revolution	IP	Antichoc	Measuring strength (N)
40	0141760500	10mm	0-5-10	10 mm	40	No	1.0 +/- 20%
58	0141760501	10mm	0-5-10	10 mm	40	No	0.7 +/- 20%
58	0141760503	30mm	0-5-10	10 mm	40	No	0.8 +/- 20%

PERFORMANCES

Indication error for the measuring range	Indication error for 1/10 revolution	Indication error for 1/2 revolution	Indication error for 1 revolution-when applicable	Repeatability of the indication error	Hysteresis of the indication error
MPE tot (μm)	MPE 1/10 (μm)	MPE 1/2 (μm)	MPE 1 (μm)	MPE _R (μm)	MPE _H (μm)
50	30	40	45	15	15

New range: resolution 0.01mm, new compact version

NEW



Ø (mm)	Tesa Article	Measuring range	Dial reading	Stroke per revolution	IP	Antichoc	Measuring strength (N)
28	01419080	3.5 mm	0-25-50	0.5 mm	40	No	0.8 +/- 20%

Indication error for the measuring range MPE tot (µm)	Indication error for 1/10 revolution MPE 1/10 (µm)	Indication error for 1/2 revolution MPE 1/2 (µm)	Indication error for 1 revolution- when applicable MPE 1 (µm)	Repeatability of the indication error MPE _R (µm)	Hysteresis of the indication error MPE _H (µm)
17	5	9	10	3	3

New range: resolution 0.01mm, stroke 5mm & 10mm



Favorite choice !



∅ (mm)	Tesa Article	Measuring range	Dial reading	Stroke per revolution	IP	Antichoc	Measuring strength (N)
40	01419047	5 mm	0-25-50	0.5 mm	40	Yes	0.7 +/- 10%
44.5	01419081	5 mm	0-25-50	0.5 mm	67	Yes	0.9 +/- 20%
58	01419048	10 mm	0-50-100	1 mm	40	Yes NEW	0.7 +/- 20%
61.5	01419082	10 mm	0-50-100	1 mm	67	Yes	1.3 +/- 20%

PERFORMANCES

Indication error for the measuring range	Indication error for 1/10 revolution	Indication error for 1/2 revolution	Indication error for 1 revolution-when applicable	Repeatability of the indication error	Hysteresis of the indication error
MPE tot (μm)	MPE 1/10 (μm)	MPE 1/2 (μm)	MPE 1 (μm)	MPE _R (μm)	MPE _H (μm)
12 (5mm) / 15 (10mm)	5	9	10	3	3

New range: resolution 0.01mm, long stroke 30mm & 50mm

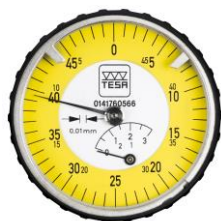


∅ (mm)	Tesa Article	Measuring range	Dial reading	Stroke per revolution	IP	Antichoc	Measuring strength (N)
58	0141760651	30 mm	0-50-100	1 mm	40	Yes	0.8 +/- 20%
58	0141760661	50 mm	0-50-100	1 mm	40	Yes	1 +/- 20%

PERFORMANCES

	Indication error for the measuring range	Indication error for 1/10 revolution	Indication error for 1/2 revolution	Indication error for 1 revolution- when applicable	Repeatability of the indication error	Hysteresis of the indication error
	MPE tot (μm)	MPE 1/10 (μm)	MPE 1/2 (μm)	MPE 1 (μm)	MPE _R (μm)	MPE _H (μm)
141760651	20	5	10	15	3	5
141760661	25	5	10	15	3	-

New range: resolution 0.01mm, back plunger construction



Ø (mm)	Tesa Article	Measuring range	Dial reading	Stroke per revolution	IP	Antichoc	Measuring strength (N)
40	0141760566	3 mm	0-25-50	0.5 mm	40	Yes	1.5 +/- 20%

PERFORMANCES

Indication error for the measuring range	Indication error for 1/10 revolution	Indication error for 1/2 revolution	Indication error for 1 revolution-when applicable	Repeatability of the indication error	Hysteresis of the indication error
MPE tot (µm)	MPE 1/10 (µm)	MPE 1/2 (µm)	MPE 1 (µm)	MPE _R (µm)	MPE _H (µm)
12	5	8	9	3	5

New range: resolution 0.002mm



∅ (mm)	Tesa Article	Measuring range	Dial reading	Stroke per revolution	IP	Antichoc	Measuring strength (N)
44.5	01419056	3mm	0-10-20	0.2 mm	40	Yes	1,1 +/- 20%
44.5	01419057	3mm	0-10-20	0.2 mm	67	Yes	1,3 +/- 20%
61.5	01419058	5mm	0-10-20	0.2 mm	40	Yes	1,4 +/- 20%

PERFORMANCES

Indication error for the measuring range	Indication error for 1/10 revolution	Indication error for 1/2 revolution	Indication error for 1 revolution-when applicable	Repeatability of the indication error	Hysteresis of the indication error
MPE tot (μm)	MPE 1/10 (μm)	MPE 1/2 (μm)	MPE 1 (μm)	MPE _R (μm)	MPE _H (μm)
7 (3mm) / 10 (5mm)	3	4	5	0.5	3

New range: resolution 0.001 mm



∅ (mm)	Tesa Article	Measuring range	Dial reading	Stroke per revolution	IP	Antichoc	Measuring strength (N)
44.5	01419053	1mm	0-5-10	0.2 mm	40	Yes	1 +/- 20%
61.5	01419054	1mm	0-10-20	0.2 mm	40	Yes	1.4 +/- 20%
61.5	01419055	5mm	0-10-20	0.2 mm	40	Yes	1.4 +/- 20%

PERFORMANCES

Indication error for the measuring range	Indication error for 1/10 revolution	Indication error for 1/2 revolution	Indication error for 1 revolution-when applicable	Repeatability of the indication error	Hysteresis of the indication error
MPE tot (μm)	MPE 1/10 (μm)	MPE 1/2 (μm)	MPE 1 (μm)	MPE _R (μm)	MPE _H (μm)
5 (1mm) / 10 (5mm)	2	3	4	0.5	3

New range: resolution 0.001mm, High Precision



∅ (mm)	Tesa Article	Measuring range	Dial reading	Stroke per revolution	IP	Antichoc	Measuring strength (N)
62	01419051	0.1mm	50-0-50	-	40	Yes	1 +/- 20%
62	01419052	0.1mm	50-0-50	-	54	Yes	1.4 +/- 20%

PERFORMANCES

Indication error for the measuring range	Indication error for 1/10 revolution	Indication error for 1/2 revolution	Indication error for 1 revolution-when applicable	Repeatability of the indication error	Hysteresis of the indication error
MPE tot (μm)	MPE 1/10 (μm)	MPE 1/2 (μm)	MPE 1 (μm)	MPE _R (μm)	MPE _H (μm)
1	1.2	0.5	0.7	0.5	-

THANK YOU

