













# MarCator Dial Indicators (DIN Style)

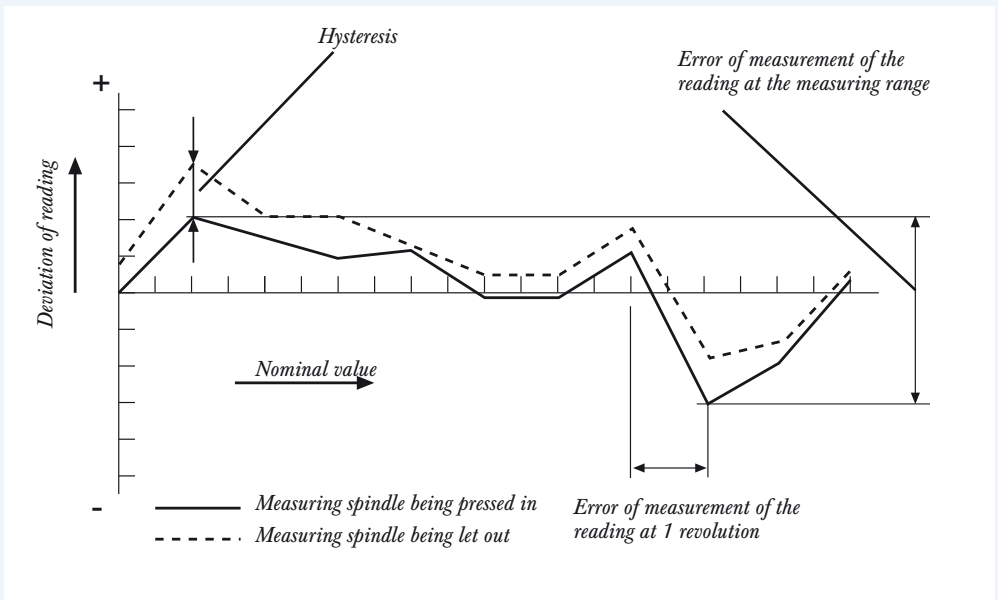
## OVERVIEW









Precision Small Dial Indicators					
Model	803 A	805 A	803 S	803 SW	
					
<b>Range</b>	3 mm	5 mm	3 mm	3 mm	
<b>Readings</b>	0.01 mm	0.01 mm	0.01 mm	0.01 mm	
<b>Dial style</b>	0-50	0-100	0-50	0-50	
<b>Standard for metrological characteristics</b>	DIN 878	DIN 878	DIN 878	DIN 878	
<i>DIN EN ISO 463</i>					
Limit value for measurement error at the reading	{ Meas. range 1 revolution 1/2 revolution 1/10 revolution	10 µm	12 µm	10 µm	10 µm
		9 µm	9 µm	9 µm	9 µm
		8 µm	8 µm	8 µm	8 µm
		5 µm	5 µm	5 µm	5 µm
Limit value for	Repeatability	3 µm	3 µm	3 µm	3 µm
Limit value for	Hysteresis	3 µm	3 µm	3 µm	3 µm
<b>Shockproof</b>			●	●	
<b>Measuring force</b>	0.7 - 1.1 N	0.7 - 1.1 N	0.7 - 1.1 N	0.7 - 1.7 N	
<b>Order no.</b>	<b>4324050</b>	<b>4324060</b>	<b>4324000</b>	<b>4326000</b>	

Precision Dial Indicators					
Model	810 A	810 AT	810 S	810 SW	
					
<b>Range</b>	10 mm	10 mm	10 mm	10 mm	
<b>Readings</b>	0.01	0.01	0.01	0.01	
<b>Dial style</b>	0-100	0-100	0-100	0-100	
<b>Standard for metrological characteristics</b>	DIN 878	DIN 878	DIN 878	DIN 878	
<i>DIN EN ISO 463</i>					
Limit value for measurement error at the reading	{ Meas. range 1 revolution 1/2 revolution 1/10 revolution	15 µm	15 µm	15 µm	15 µm
		10 µm	10 µm	10 µm	10 µm
		9 µm	9 µm	9 µm	9 µm
		5 µm	5 µm	5 µm	5 µm
Limit value for	Repeatability	3 µm	3 µm	3 µm	3 µm
Limit value for	Hysteresis	3 µm	3 µm	3 µm	3 µm
<b>Shockproof</b>			●	●	
<b>Measuring force</b>	0.7 - 1.3 N	0.7 - 1.3 N	0.7 - 1.3 N	0.7 - 1.6 N	
<b>Order no.</b>	<b>4311050</b>	<b>4311060</b>	<b>4311000</b>	<b>4315000</b>	

803 SB	803 AZ
	
0.4 mm (±0.2)	<b>.120"</b>
0.01 mm	<b>.0005"</b>
0-20-0	0-20
DIN 878	Factory standard
9 μm	<b>.0004"</b>
8 μm	
5 μm	<b>.0002"</b>
3 μm	<b>.00012"</b>
3 μm	<b>.00012"</b>
●	
0.9 - 1.1 N	0.7 - 1.1 N
<b>4324250</b>	<b>4324900</b>

### Metrological characteristics



810 SB	810 SM	810 SRM	810 AZ	810 AU	810 AX	810 AG	810 SV
							
0.8 mm (±0.4)	1 mm	5 mm	<b>.400"</b>	10 mm	10 mm	10 mm	40 mm
0.01	0.001	0.001	<b>.0005"</b>	0.01	0.1	0.01	0.01
0-40-0	0-100	0-100	<b>0-45</b>	100-0	0-10	0-100	0-100
DIN 878	Factory standard	Factory standard	Factory standard	Factory standard	Factory standard	Factory standard	Factory standard
7 μm	4 μm	10 μm	<b>.0005"</b>	15 μm	50 μm	17 μm	25 μm
6 μm	3 μm	7 μm		10 μm	50 μm	15 μm	15 μm
6 μm	2 μm	3 μm		9 μm	30 μm	10 μm	10 μm
5 μm	1 μm	2 μm	<b>.0002"</b>	5 μm	15 μm	5 μm	5 μm
3 μm	1.5 μm	3 μm	<b>.00012"</b>	5 μm	15 μm	3 μm	3 μm
3 μm	1.5 μm	3 μm	<b>.00012"</b>	5 μm	15 μm	5 μm	6 μm
●	●	●					●
0.7 - 1.1 N	1.3 - 1.8 N	1.2 - 1.7 N	0.9 - 1.5 N	1.0 - 1.8 N	0.7 - 1.3 N	1.3 - 2.2 N	0.8 - 1.8 N
<b>4317000</b>	<b>4311070</b>	<b>4311080</b>	<b>4311900</b>	<b>4329050</b>	<b>4331000</b>	<b>4322000</b>	<b>4321000</b>

## Precision Small Dial Indicators 803 / 805 DIN style



803 A



805 A



SHOCK  
PROOF

803 S

### Features

#### Small Dial Indicator 803 A

Standard version

- High precision gears and pinions
- Lifter protection cap on the upper end of the measuring spindle
- Adjustable tolerance markers
- Chrome-plated housing

#### Small Dial Indicator 805 A

Standard version

- High precision gears and pinions
- Lifter protection cap on the upper end of the measuring spindle
- Adjustable tolerance markers
- Chrome-plated housing

#### Small Dial Indicator 803 S

Shockproof version

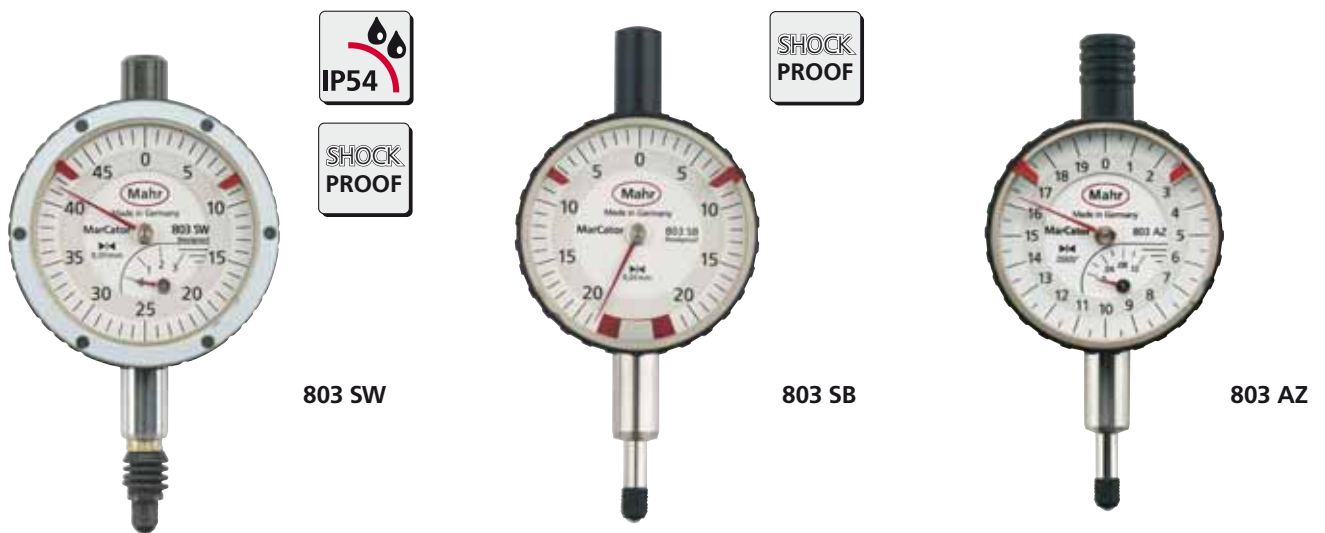
- High precision gears and pinions
- Lifter protection cap on the upper end of the measuring spindle
- Adjustable tolerance markers
- Chrome-plated housing

All indicators are delivered in plastic case

### Technical Data

	Range	Readings	Dial face dia. mm	Overtravel	Mounting shank dia. mm	Measuring force N	Accuracy	Order no.
	mm	mm	mm	mm	mm	N	DIN 878	
<b>803 A</b>	3	0.01	34	0.1	8h6	0.7 - 1.1	●	<b>4324050</b>
<b>805 A</b>	5	0.01	34	0.1	8h6	0.7 - 1.1	●	<b>4324060</b>
<b>803 S</b>	3	0.01	34	0.1	8h6	0.7 - 1.1	●	<b>4324000</b>
<b>803 SW</b>	3	0.01	34	0.1	8h6	0.7 - 1.7	●	<b>4326000</b>
<b>803 SB</b>	0.4 (±0.2)	0.01	34	4.5	8h6	0.9 - 1.1	●	<b>4324250</b>
<b>803 AZ</b>	.120"	.0005"	1.4"	.008"	8h6	0.7 - 1.1		<b>4324900</b>

## Precision Small Dial Indicators 803 / 805 DIN style



### Features

#### Small Dial Indicator 803 SW

Waterproof and oil proof

Design features identical to 803 S, with the following exceptions:

- Hermetically sealed upper protective measuring spindle cap as well as bezel and transparent dial cover; sealed with O-rings
- Measuring spindle sealed with rubber sleeve, thus preventing contamination by liquids and impurities

#### Small Dial Indicator 803 SB

with limited measuring range

Design features identical to 803 S, with the following exceptions:

- Limited measuring range (0.4 mm) for error-free readings
- Large overtravel (ca. 4.5 mm), for easier insertion of test items in measuring devices
- Hermetically sealed upper protective measuring spindle cap

#### Small Dial Indicator 803 AZ

Inch version

Design features identical to 803 A, with the following exception:

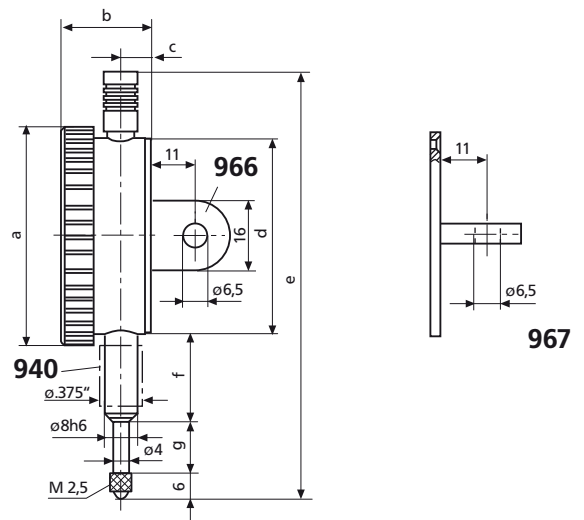
- The scope of supply includes an Adapter Bush 940 for adapting mounting shank 8h6 mm to inch bore .375"

### Dimensions according to DIN EN ISO 463

mm	a	b	c	d	e	f	g
<b>803 A</b>	ø 40	20.6	6.8	ø 37	83	15.5	8
<b>805 A</b>	ø 40	20.6	6.8	ø 37	83	15.5	8
<b>803 S</b>	ø 40	20.6	6.8	ø 37	80	15	5.5
<b>803 SW</b>	ø 44	21.6	7.1	ø 37	86	15	11
<b>803 SB</b>	ø 40	20.6	6.8	ø 37	83	15.5	8
<b>803 AZ</b>	ø 40	20.6	6.8	ø 37	83	15.5	8

### Accessories

	Order no.	
<b>Adapter Bush</b> for adapting mounting shank 8h6 mm to inch bore .375"	<b>940</b>	<b>4310103</b>
<b>Splash Guard Cover</b> for bezel dia. 40 mm	<b>956</b>	<b>4373021</b>
<b>Mounting Lugs</b> Bore perpendicular to mounting shank	<b>966</b>	<b>4375020</b>
Bore parallel to mounting shank	<b>967</b>	<b>4375021</b>



## Precision Dial Indicators 810 DIN style



810 A



810 AT



810 S



810 SW

### Features

#### Dial Indicator 810 A

Standard version

- High precision gears and pinions
- Lifter protection cap on the upper end of the measuring spindle
- Adjustable tolerance markers
- Chrome-plated housing

#### Dial Indicator 810 AT

for depth measurement

- Design features identical to 810 A, with the following exception:
- Scale of the dial face is counter-clockwise

#### Dial Indicator 810 S

Shockproof

- High precision gears and pinions
- Lifter protection cap on the upper end of the measuring spindle
- Adjustable tolerance markers
- Chrome-plated housing

#### Dial Indicator 810 SW

Waterproof and oil proof

- Design features identical to 810 S, with the following exceptions:
- Measuring spindle sealed with rubber sleeve, thus preventing contamination by liquids and impurities
  - Hermetically sealed protective measuring spindle cap

All indicators are delivered in plastic case

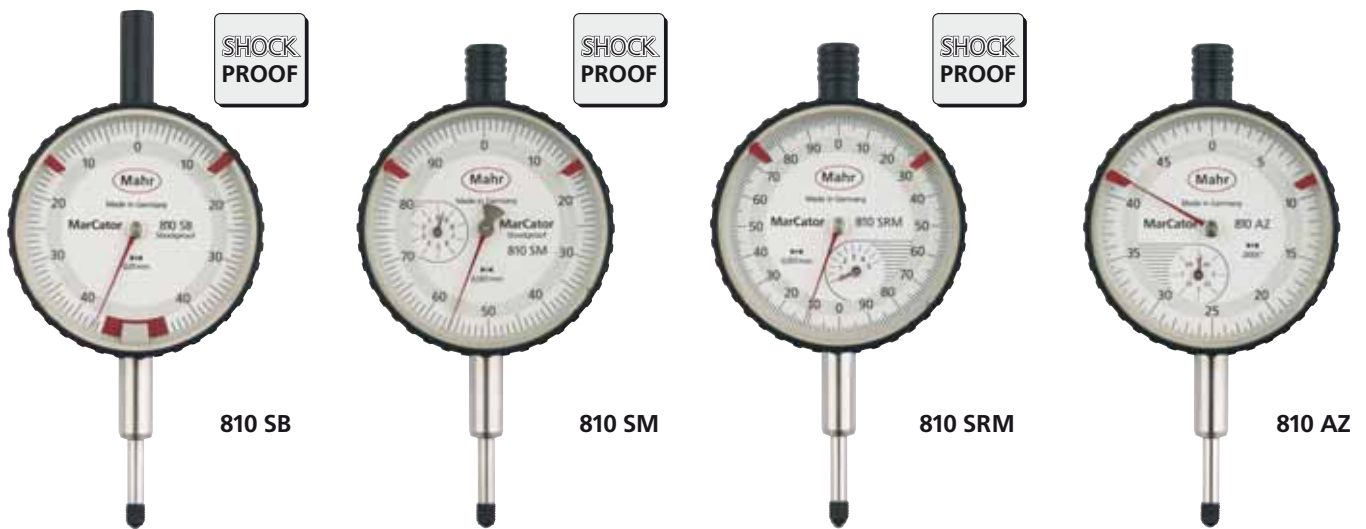
### Technical Data

	Range	Readings	Dial face dia.	Overtravel	Mounting shank dia.	Measuring force	Accuracy	Order no.
	mm	mm	mm	mm	mm	N	DIN 878	
<b>810 A</b>	10	0.01	50	0.1	8h6	0.7 - 1.3	●	<b>4311050</b>
<b>810 AT</b>	10	0.01	50	0.1	8h6	0.7 - 1.3	●	<b>4311060</b>
<b>810 S</b>	10	0.01	50	0.1	8h6	0.7 - 1.3	●	<b>4311000</b>
<b>810 SW</b>	10	0.01	50	0.1	8h6	0.7 - 1.6	●	<b>4315000</b>
<b>810 SB</b>	0.8 (±0.4)	0.01	50	9	8h6	0.7 - 1.1	●	<b>4317000</b>
<b>810 SM</b>	1	0.001	50	4	8h6	1.3 - 1.8		<b>4311070</b>
<b>810 SRM</b>	5	0.001	50	0.1	8h6	1.2 - 1.7		<b>4311080</b>
<b>810 AZ</b>	.400"	.0005"	2"	.004"	8h6	0.9 - 1.5		<b>4311900</b>

### Accessories

	Order no.		Order no.
<b>Adapter Bush</b> for adapting mounting shank 8h6 mm to inch bore .375"	<b>940</b>	<b>Mounting Lug</b>	
<b>Splash Guard Cover</b> for bezel dia. 58 mm	<b>955</b>	Bore perpendicular to mounting shank	<b>961</b>
	<b>4310103</b>	Bore parallel to mounting shank	<b>962</b>
	<b>4373020</b>		<b>4375010</b>
			<b>4375011</b>

## Precision Dial Indicators 810 DIN style



### Features

#### Dial Indicator 810 SB

with limited measuring range

Design features identical to 810 S, with the following exceptions:

- Limited measuring range (0.8 mm) for error-free readings
- Large overtravel (ca. 9 mm) for easier insertion of test items in measuring devices
- Hermetically sealed protective measuring spindle cap

#### Dial Indicator 810 SM

Shockproof with reading 0.001 mm

- Precise mechanism with a combined gear lever transmission
- High accuracy with a minimum span of error
- Lifter protection cap on the upper end of the measuring spindle
- Adjustable tolerance markers
- Chrome-plated housing

#### Dial Indicator 810 SRM

Shockproof with reading 0.001 mm

- High precision gears and pinions
- Lifter protection cap on the upper end of the measuring spindle
- Adjustable tolerance markers
- Chrome-plated housing

#### Dial Indicator 810 AZ

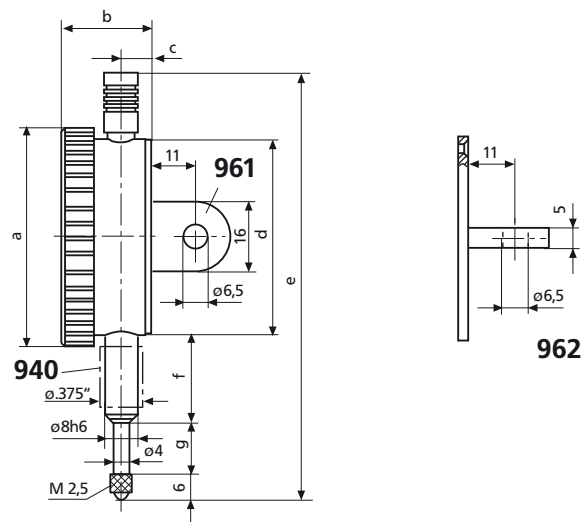
Inch version

Design features are identical to 810 A, with the following exception:

- The scope of supply includes an Adapter Bush 940 for adapting mounting shank 8h6 mm to inch bore .375"

### Dimensions according to DIN EN ISO 463

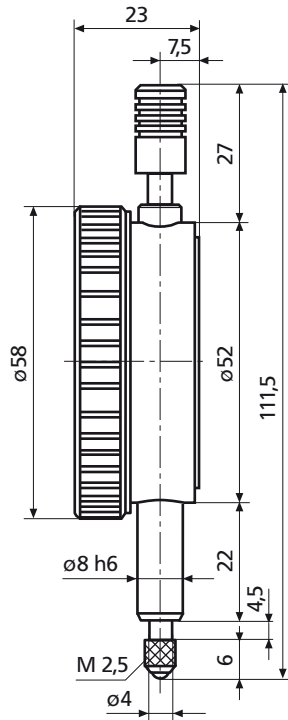
mm	a	b	c	d	e	f	g
<b>810 A/AT</b>	∅ 58	23	7.5	52	112	21	16
<b>810 S</b>	∅ 58	23	7.5	52	111.5	22	15
<b>810 SW</b>	∅ 61	24.15	7.9	52	127.6	22	22.1
<b>810 SB</b>	∅ 58	23	7.5	52	120	22	15
<b>810 SM</b>	∅ 58	25	8.5	52	111.5	22	15
<b>810 SRM</b>	∅ 58	23	7.5	52	111.5	22	15
<b>810 AZ</b>	∅ 58	23	7.5	52	111.5	22	15



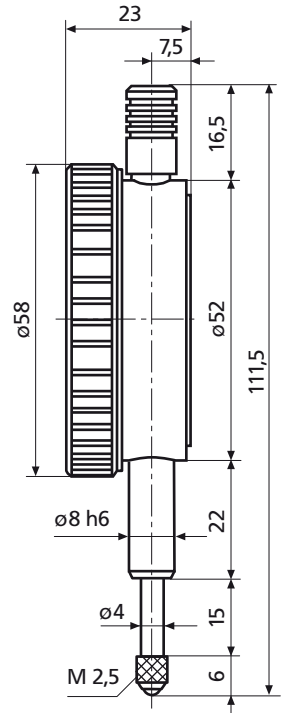
## Precision Dial Indicators 810



810 AU



810 AX



### Features

#### Dial Indicator 810 AU

with a reversed measuring force direction

- Chrome-plated housing
- Adjustable tolerance markers
- Scale on the dial increases counter clockwise (+ on left)
- Measuring force acting towards the top
- Delivered in plastic case

#### Dial Indicator 810 AX

with reading 0.1 mm

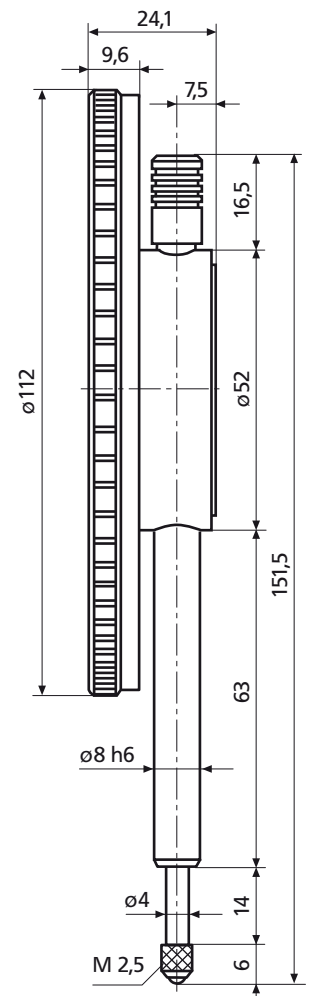
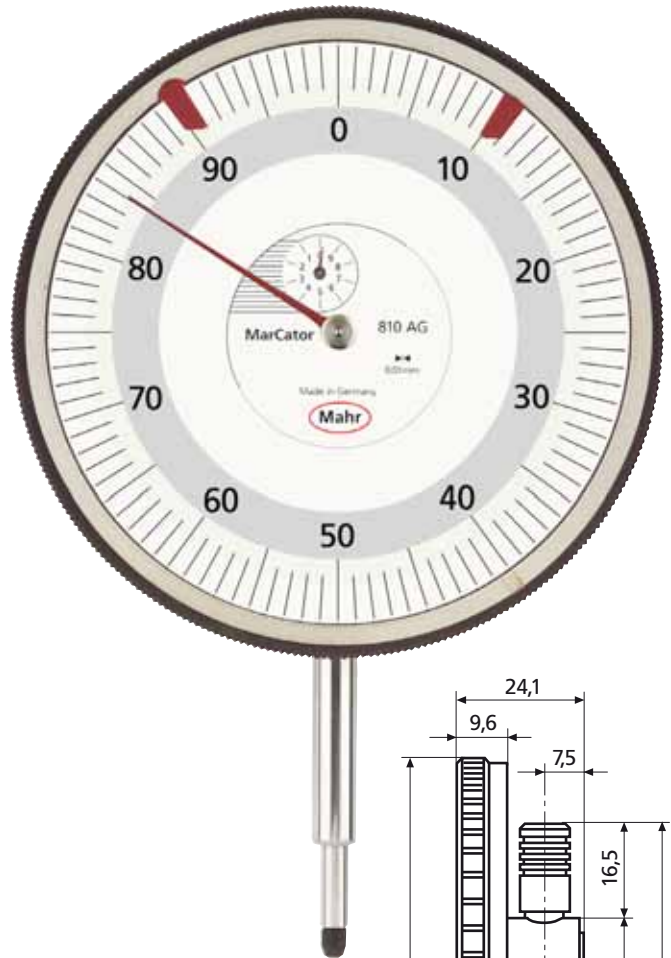
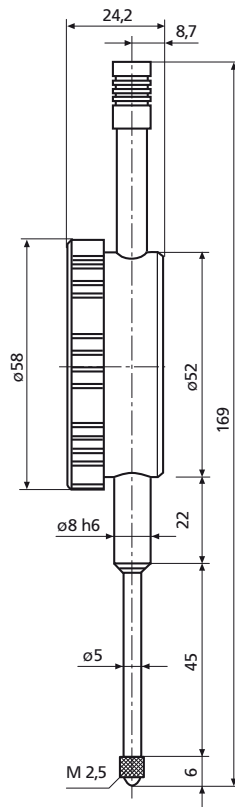
- Constant measuring force
- Chrome-plated housing
- Adjustable tolerance markers
- 1 pointer movement on 10 mm
- Delivered in plastic case

### Technical Data

	Range	Readings	Dial face	Overtravel	Mounting	Measuring	Order no.
	mm	mm	dia.	mm	shank	force	
			mm		dia.	N	
<b>810 AU</b>	10	0.01	50	0.1	8h6	1 - 1.8	<b>4329050</b>
<b>810 AX</b>	10	0.1	50	0.5	8h6	0.7 - 1.3	<b>4331000</b>
<b>810 SV</b>	40	0.01	50	0.1	8h6	0.8 - 1.8	<b>4321000</b>
<b>810 AG</b>	10	0.01	108	0.1	8h6	1.3 - 2.2	<b>4322000</b>



## Precision Dial Indicators 810



### Features

#### Long Range Dial Indicator 810 SV

with larger measuring range

- Range 40 mm
- Strengthened measuring spindle (5 mm)
- Raising of measuring spindle via lifting cap
- Adjustable tolerance markers
- Shockproof movement
- Delivered in folded box

#### Extra large Dial Indicator 810 AG

with dial face dia. 108 mm

- Ideal for long reading distance and in bad light conditions
- Plastic outer ring
- Delivered in folded box

### Accessories

**Adapter Bush** for adapting mounting shank 8h6 mm to inch bore .375"

940 4310103

**Splash Guard Cover** for dia. 58 mm

955 4373020

**Mounting Lug** to mount on mounting shank of all versions

963 4375002

#### Order no.