

## Precision Small Dial Indicators 803 / 805 DIN style



803 A



805 A



803 S

SHOCK  
PROOF

### 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 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  |           |
| 803 A  | 3          | 0.01     | 34             | 0.1        | 8h6                 | 0.7 - 1.1       | ●        | 4324050   |
| 805 A  | 5          | 0.01     | 34             | 0.1        | 8h6                 | 0.7 - 1.1       | ●        | 4324060   |
| 803 S  | 3          | 0.01     | 34             | 0.1        | 8h6                 | 0.7 - 1.1       | ●        | 4324000   |
| 803 SW | 3          | 0.01     | 34             | 0.1        | 8h6                 | 0.7 - 1.6       | ●        | 4326000   |
| 803 SB | 0.4 (±0.2) | 0.01     | 34             | 4.5        | 8h6                 | 1               | ●        | 4324250   |
| 803 AZ | .120"      | .0005"   | 1.4"           | .008"      | 8h6                 | 0.7 - 1.1       |          | 4324900   |

## Precision Small Dial Indicators 803 / 805 DIN style



803 SW



803 SB



803 AZ

## 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

**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 (approx. 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:

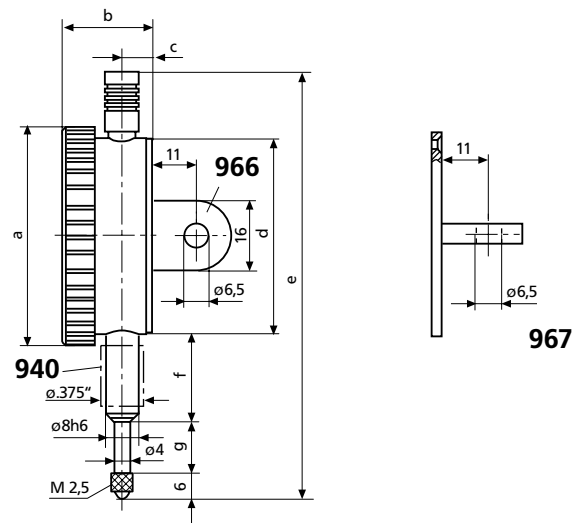
- The scope of supply includes an Adapter Bush 940 for adapting mounting shank 8h6 mm to inch bore .375"

## 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> |



Shown with Mounting Lug

## Contact Points and Accessories for Dial Indicators, Dial Comparators and Probes

### Standard Contact Points 901

Ball dia. 3 mm

| Catalog no. |                   | Order no. |
|-------------|-------------------|-----------|
| 901         | with steel ball   | 4360001   |
| 901 H       | with carbide ball | 4360002   |
| 901 R       | with ruby ball    | 4360003   |

### Spherical Contact Points 902

### Flat Contact Points 903

| 902<br>Steel | 902 H<br>Carbide<br>contact face | 903<br>Steel | 903 H<br>Carbide<br>tipped |
|--------------|----------------------------------|--------------|----------------------------|
| Length<br>mm | Order no.                        | Order no.    | Order no.                  |
| 4            | 4360007                          | —            | —                          |
| 6            | 4360009                          | —            | —                          |
| 8            | 4360010                          | 4360040      | 4360101                    |
| 10           | 4360011                          | 4360041      | 4360102                    |
| 12           | 4360012                          | 4360042      | 4360103                    |
| 15           | 4360013                          | 4360043      | 4360104                    |
| 20           | 4360014                          | 4360044      | 4360105                    |
| 25           | 4360015                          | 4360045      | 4360106                    |
| 30           | 4360016                          | 4360046      | 4360107                    |
| 35           | 4360017                          | 4360047      | 4360110                    |
| 40           | 4360019                          | 4360049      | 4360108                    |
| 45           | 4360026                          | 4360050      | 4360111                    |
| 50           | 4360018                          | 4360048      | —                          |
| 55           | 4360031                          | 4360079      | 4360109                    |
| 65           | 4360035                          |              |                            |
| 75           | 4360020                          |              |                            |
| 85           | 4360036                          |              |                            |
| 95           | 4360029                          |              |                            |

### Ball Contact Point 906 H

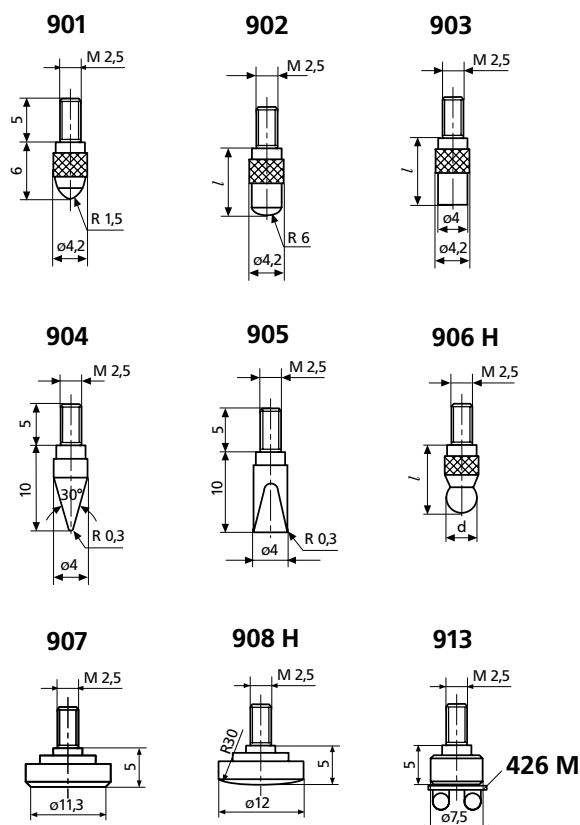
with carbide ball. accuracy ball dia. 0/-6µm

| Ball dia. d<br>mm | l<br>mm | Order<br>no. | Ball dia. d<br>mm | l<br>mm | Order<br>no. |
|-------------------|---------|--------------|-------------------|---------|--------------|
| 1                 | 8.5     | 4360150      | 5.5               | 9       | 4360161      |
| 1.25              | 8.5     | 4360151      | 6                 | 9       | 4360162      |
| 1.5               | 8.5     | 4360152      | 6.35 (1/4")       | 9       | 4360163      |
| 1.75              | 8.5     | 4360153      | 6.5               | 10      | 4360164      |
| 2                 | 8.5     | 4360154      | 7                 | 10      | 4360165      |
| 2.5               | 8.5     | 4360155      | 7.5               | 11      | 4360166      |
| 3                 | 8.5     | 4360156      | 8                 | 11      | 4360167      |
| 3.5               | 8.5     | 4360157      | 8.5               | 12      | 4360168      |
| 4                 | 8.5     | 4360158      | 9                 | 12      | 4360169      |
| 4.5               | 8.5     | 4360159      | 10                | 13      | 4360170      |
| 5                 | 9       | 4360160      |                   |         |              |

### Contact Rollers 909

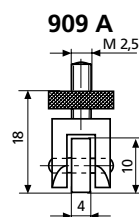
Concentricity error 3 µm

|                           | Order no.     |
|---------------------------|---------------|
| Cylindrical Roller        | 909 A 4360220 |
| Radiused Roller, R = 5 mm | 909 B 4360221 |



### Special Contact Points

|                                                                                                            | Order no.     |
|------------------------------------------------------------------------------------------------------------|---------------|
| Conical Contact Points, Steel                                                                              | 904 4360130   |
| Carbide tipped                                                                                             | 904 H 4360131 |
| Wedge Shaped Contact Points, Steel                                                                         | 905 4360140   |
| Carbide tipped                                                                                             | 905 H 4360141 |
| Flat Contact Points, Steel, A = 1 cm²                                                                      | 907 4360200   |
| Carbide tipped, dia. 7 mm                                                                                  | 907 H 4360201 |
| Spherical Contact Points, Steel                                                                            | 908 4360210   |
| Carbide tipped                                                                                             | 908 H 4360211 |
| Flat Contact Point, for mounting<br>Pin Gage Holder 426 M for measuring<br>threads using three-wire method | 913 4360400   |



## Contact Points and Accessories for Dial Indicators, Dial Comparators and Probes

### Measuring Attachment 910 H

|                                            | Order no.            |
|--------------------------------------------|----------------------|
| with parallel adjustable<br>carbide blades | <b>910 H 4360230</b> |

### Pin Contact Point 911

dia. 1 mm, flat

| Length $l$<br>mm | Order no.      | Length $l$<br>mm | Order no.      |
|------------------|----------------|------------------|----------------|
| 15               | <b>4360280</b> | 35               | <b>4360284</b> |
| 20               | <b>4360281</b> | 40               | <b>4360285</b> |
| 25               | <b>4360282</b> | 50               | <b>4360286</b> |
| 30               | <b>4360283</b> |                  |                |

### Pin Contact Point 911 H

|                                  | Order no.             |
|----------------------------------|-----------------------|
| Carbide tipped, dia 1 mm, flat   | <b>911 H1 4360240</b> |
| Carbide tipped, dia 1.5 mm, flat | <b>911 H2 4360241</b> |

### Measuring Spindle Extensions 912

| Length $l$<br>mm | Order no.      | Length $l$<br>mm | Order no.      |
|------------------|----------------|------------------|----------------|
| 10               | <b>4360250</b> | 35               | <b>4360254</b> |
| 15               | <b>4360251</b> | 50               | <b>4360255</b> |
| 20               | <b>4360252</b> | 75               | <b>4360256</b> |
| 25               | <b>4360253</b> | 100              | <b>4360257</b> |

### Special Holder 941

For all types of measuring equipment  
For placing a dial indicator at a certain distance or angle  
Travel of the measuring spindle 3 mm  
Contact Point 901 (interchangeable)

#### Straight Holder 941 G

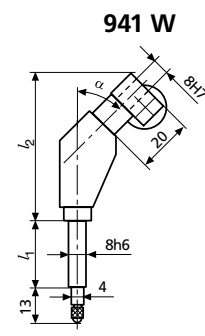
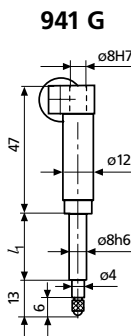
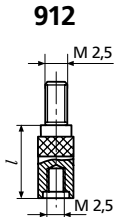
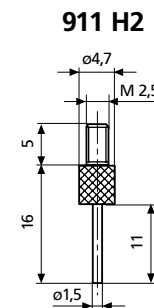
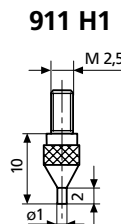
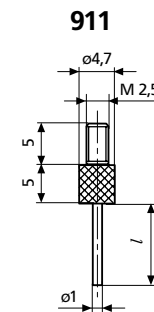
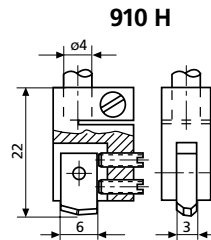
| Mounting shank<br>length $l_1$<br>mm | Order no.      |
|--------------------------------------|----------------|
| 25                                   | <b>4365000</b> |
| 50                                   | <b>4365001</b> |
| 75                                   | <b>4365002</b> |

#### Angular Holder 941 W

| Order no.               | $l_2$<br>mm | Order no.               | $l_2$<br>mm | Order no.               | $l_2$<br>mm |
|-------------------------|-------------|-------------------------|-------------|-------------------------|-------------|
| Angle $\alpha=45^\circ$ |             | Angle $\alpha=60^\circ$ |             | Angle $\alpha=90^\circ$ |             |
| <b>4365010</b>          | 53.7        | <b>4365020</b>          | 49.3        | <b>4365030</b>          | 34.5        |
| <b>4365011</b>          |             | <b>4365021</b>          |             | <b>4365031</b>          |             |
| <b>4365012</b>          |             | <b>4365022</b>          |             | <b>4365032</b>          |             |

### Sensor Level 943

| Order no.                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For testing concentricity in bore holes as<br>well as difficult to reach outside diameters<br>To be inserted in a measuring stand<br>with a lifting device<br>Contact Point 901 interchangeable<br>Travel $\pm 1$ mm |
| <b>4367000</b>                                                                                                                                                                                                       |



Transmission error with the 941 W  
max. 1%;  
for travel 3 mm = 0.03 mm

