



MICROMETROS INTERIORES 3 PONTOS

Micrometros interiores de 3 contactos em metalduro - Fornecedor em caixa própria com anel de calibração e extensão – certificado de conformidade

| Measuring range (mm) | Max. permissible errors (µm) |
|----------------------|------------------------------|
| 0- 25                | 4                            |
| 25- 50               | 4                            |
| 50- 75               | 5                            |
| 75-100               | 5                            |
| 100-125              | 6                            |
| 125-150              | 6                            |
| 150-175              | 7                            |
| 175-200              | 7                            |
| 200-225              | 8                            |
| 225-250              | 8                            |
| 250-275              | 9                            |
| 275-300              | 9                            |
| 300-325              | 10                           |
| 325-350              | 10                           |
| 350-375              | 11                           |
| 375-400              | 11                           |
| 400-425              | 12                           |
| 425-450              | 12                           |
| 450-475              | 13                           |
| 475-500              | 13                           |

Three-point internal micrometers

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

- Measuring range:  $\phi$  3.5-300 mm.
- Graduation: 0.001 mm ( $\phi$  3.5 - 12 mm), 0.005 mm ( $\phi$  12 - 300 mm).
- Tungsten carbide measuring faces.
- Delivery in a case.
- Sets are delivered incl. setting rings and extension (836.730 without extension).



Schut

| Item No. | Measuring range/mm | Accuracy mm |
|----------|--------------------|-------------|
| 836.700  | $\phi$ 3.5- 4      | $\pm$ 0.005 |
| 836.701  | $\phi$ 4.0- 4.5    | $\pm$ 0.005 |
| 836.702  | $\phi$ 4.5- 5.5    | $\pm$ 0.005 |
| 836.703  | $\phi$ 5.5- 6.5    | $\pm$ 0.005 |
| 836.704  | $\phi$ 6 - 8       | $\pm$ 0.005 |
| 836.705  | $\phi$ 8 - 10      | $\pm$ 0.005 |
| 836.706  | $\phi$ 10 - 12     | $\pm$ 0.005 |
| 836.707  | $\phi$ 12 - 16     | $\pm$ 0.005 |
| 836.708  | $\phi$ 16 - 20     | $\pm$ 0.005 |
| 836.709  | $\phi$ 20 - 25     | $\pm$ 0.005 |
| 836.710  | $\phi$ 25 - 30     | $\pm$ 0.005 |
| 836.711  | $\phi$ 30 - 35     | $\pm$ 0.005 |
| 836.712  | $\phi$ 35 - 40     | $\pm$ 0.005 |
| 836.713  | $\phi$ 40 - 50     | $\pm$ 0.006 |
| 836.714  | $\phi$ 50 - 60     | $\pm$ 0.006 |
| 836.715  | $\phi$ 60 - 70     | $\pm$ 0.006 |
| 836.716  | $\phi$ 70 - 80     | $\pm$ 0.006 |
| 836.717  | $\phi$ 80 - 90     | $\pm$ 0.006 |
| 836.718  | $\phi$ 90 - 100    | $\pm$ 0.006 |
| 836.719  | $\phi$ 100 - 125   | $\pm$ 0.008 |
| 836.720  | $\phi$ 125 - 150   | $\pm$ 0.008 |
| 836.721  | $\phi$ 150 - 175   | $\pm$ 0.008 |
| 836.722  | $\phi$ 175 - 200   | $\pm$ 0.008 |
| 836.723  | $\phi$ 200 - 225   | $\pm$ 0.012 |
| 836.724  | $\phi$ 225 - 250   | $\pm$ 0.012 |
| 836.725  | $\phi$ 250 - 275   | $\pm$ 0.012 |
| 836.726  | $\phi$ 275 - 300   | $\pm$ 0.012 |

Extensions

| Item No. | Extension mm | For measuring range/mm |
|----------|--------------|------------------------|
| 836.780  | 100          | $\phi$ 6 - 12          |
| 836.782  | 150          | $\phi$ 12 - 20         |
| 836.784  | 150          | $\phi$ 20 - 40         |
| 836.786  | 150          | $\phi$ 40 - 100        |



836.745

Setting rings

| Measuring range/mm | Setting rings $\phi$ /mm |
|--------------------|--------------------------|
| $\phi$ 3.5 - 6.5   | 4, 5.5                   |
| $\phi$ 6 - 12      | 8, 10                    |
| $\phi$ 12 - 20     | 16                       |
| $\phi$ 20 - 40     | 25, 35                   |
| $\phi$ 40 - 100    | 50, 70, 90               |

- Sets:
- 836.730\*  $\phi$  3.5 - 6.5  $\pm$ 0.005
  - 836.735  $\phi$  6 - 12  $\pm$ 0.005
  - 836.740  $\phi$  12 - 20  $\pm$ 0.005
  - 836.745  $\phi$  20 - 40  $\pm$ 0.005
  - 836.750  $\phi$  40 - 100  $\pm$ 0.006

\* Without extension.

Three-point internal micrometers

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

- Measuring range:  $\phi$  6-300 mm.
- Self-centering.
- Tungsten carbide measuring faces (measuring range  $\phi$  6-12 mm: hardened steel).
- Separate instruments within measuring range  $\phi$  6-100 mm and the sets are delivered incl. setting ring(s) and extension.
- Setting rings are conform to factory standard.
- To  $\phi$  100 mm: implementation for blind bores. From  $\phi$  100 mm: implementation for through holes or blind bores.
- DIN 863: to  $\phi$  100 mm.
- Delivered in an aluminum case ( $\phi$  6-40 mm) or an aluminum carrying case ( $\phi$  40-300 mm and sets) with a manufacturer measuring report.

- Analog
- Graduation: 0.001 mm ( $\phi$  6 - 12 mm), 0.005 mm ( $\phi$  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.                       | Item No.                        | Measuring range/mm           | Accuracy mm | L/mm                | Length L/mm          | A/mm |
|--------------------------------|---------------------------------|------------------------------|-------------|---------------------|----------------------|------|
| <b>Analog (blind bores):</b>   | <b>Digital (blind bores):</b>   |                              |             | <b>Analog: L1 L</b> | <b>Digital: L1 L</b> |      |
| 909.807                        | 909.828                         | $\phi$ 6 - 8 $\pm$ 0.004     |             | 27 -                | 43 -                 | 1    |
| 909.808                        | 909.829                         | $\phi$ 8 - 10 $\pm$ 0.004    |             | 50 -                | 43 -                 | 1    |
| 909.809                        | 909.830                         | $\phi$ 10 - 12 $\pm$ 0.004   |             | 50 -                | 43 -                 | 1    |
| 909.810                        | 909.831                         | $\phi$ 12 - 16 $\pm$ 0.004   |             | 50 -                | 45 -                 | 0.4  |
| 909.811                        | 909.832                         | $\phi$ 16 - 20 $\pm$ 0.004   |             | 50 -                | 45 -                 | 0.4  |
| 909.812                        | 909.833                         | $\phi$ 20 - 25 $\pm$ 0.004   |             | -                   | 80 -                 | 0.4  |
| 909.813                        | 909.834                         | $\phi$ 25 - 30 $\pm$ 0.004   |             | -                   | 80 -                 | 0.4  |
| 909.814                        | 909.835                         | $\phi$ 30 - 40 $\pm$ 0.004   |             | -                   | 90 -                 | 0.4  |
| 909.815                        | 909.836                         | $\phi$ 40 - 50 $\pm$ 0.005   |             | -                   | 90 -                 | 0.4  |
| 909.816                        | 909.837                         | $\phi$ 50 - 63 $\pm$ 0.005   |             | -                   | 100 -                | 0.5  |
| 909.817                        | 909.838                         | $\phi$ 62 - 75 $\pm$ 0.005   |             | -                   | 100 -                | 0.5  |
| 909.818                        | 909.839                         | $\phi$ 75 - 88 $\pm$ 0.005   |             | -                   | 100 -                | 0.5  |
| 909.819                        | 909.840                         | $\phi$ 87 - 100 $\pm$ 0.005  |             | -                   | 100 -                | 0.5  |
| 910.150                        | 910.158                         | $\phi$ 100 - 125 $\pm$ 0.008 |             | -                   | 140 -                | 0.5  |
| 910.151                        | 910.159                         | $\phi$ 125 - 150 $\pm$ 0.008 |             | -                   | 140 -                | 0.4  |
| 910.152                        | 910.160                         | $\phi$ 150 - 175 $\pm$ 0.008 |             | -                   | 140 -                | 0.5  |
| 910.153                        | 910.161                         | $\phi$ 175 - 200 $\pm$ 0.008 |             | -                   | 140 -                | 0.5  |
| 910.154                        | 910.162                         | $\phi$ 200 - 225 $\pm$ 0.008 |             | -                   | 140 -                | 0.5  |
| 910.155                        | 910.163                         | $\phi$ 225 - 250 $\pm$ 0.008 |             | -                   | 140 -                | 0.5  |
| 910.156                        | 910.164                         | $\phi$ 250 - 275 $\pm$ 0.008 |             | -                   | 140 -                | 0.5  |
| 910.157                        | 910.165                         | $\phi$ 275 - 300 $\pm$ 0.008 |             | -                   | 140 -                | 0.5  |
| <b>Analog (through holes):</b> | <b>Digital (through holes):</b> |                              |             | <b>Analog: L1 L</b> | <b>Digital: L1 L</b> |      |
| 909.820                        | 909.841                         | $\phi$ 100 - 125 $\pm$ 0.008 |             | -                   | 140 -                | 20   |
| 909.821                        | 909.842                         | $\phi$ 125 - 150 $\pm$ 0.008 |             | -                   | 140 -                | 20   |
| 909.822                        | 909.843                         | $\phi$ 150 - 175 $\pm$ 0.008 |             | -                   | 140 -                | 20   |
| 909.823                        | 909.844                         | $\phi$ 175 - 200 $\pm$ 0.008 |             | -                   | 140 -                | 20   |
| 909.824                        | 909.845                         | $\phi$ 200 - 225 $\pm$ 0.008 |             | -                   | 140 -                | 20   |
| 909.825                        | 909.846                         | $\phi$ 225 - 250 $\pm$ 0.008 |             | -                   | 140 -                | 20   |
| 909.826                        | 909.847                         | $\phi$ 250 - 275 $\pm$ 0.008 |             | -                   | 140 -                | 20   |
| 909.827                        | 909.848                         | $\phi$ 275 - 300 $\pm$ 0.008 |             | -                   | 140 -                | 20   |

Sets

| Item No.       | Item No.        | Measuring range/mm | Setting rings $\phi$ /mm | Extension mm | Number of instruments |
|----------------|-----------------|--------------------|--------------------------|--------------|-----------------------|
| <b>Analog:</b> | <b>Digital:</b> |                    |                          |              |                       |
| 909.849        | 909.853         | $\phi$ 6 - 12      | 8, 10                    | 50           | 3                     |
| 909.850        | 909.854         | $\phi$ 12 - 20     | 16                       | 100          | 2                     |
| 909.851        | 909.855         | $\phi$ 20 - 50     | 25, 40                   | 150          | 4                     |
| 909.852        | 909.856         | $\phi$ 50 - 100    | 62, 87                   | 150          | 4                     |

Options

| Item No.   | Description                  | Price EUR |
|--|------------------------------|-----------|
| 836.535  | Spare battery                |           |
| <b>For measuring range <math>\phi</math> 100 - 300 mm:</b> |                              |           |
| 909.857  | Extension with length 150 mm |           |

909.850



### Three-point internal micrometers

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

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



Measuring head (measuring range)  $\phi$  6 - 50 mm

$\phi$  50 - 100 mm

$\phi$  100 - 300 mm

For blind bores

### 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:  $\phi$  6 - 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  $\phi$  6 - 12 mm: 100 mm).
- Separate instruments within measuring range  $\phi$  6 - 100 mm and the sets are delivered incl. setting ring(s) (conforms to factory standard).
- Power supply: 1 battery type V357.

**NEW**



Measuring head (measuring range)  $\phi$  6 - 50 mm

$\phi$  50 - 100 mm

$\phi$  100 - 300 mm

For blind bores

### Three-point internal micrometers (continued)



Per piece

| Item No. | Measuring range/mm | Setting ring $\phi$ /mm | Accuracy mm | Length L/mm | Length A/mm |
|----------|--------------------|-------------------------|-------------|-------------|-------------|
| 908.650  | $\phi$ 6 - 8       | 6                       | $\pm 0.004$ | 54.5        | 0.7         |
| 908.651  | $\phi$ 8 - 10      | 8                       | $\pm 0.004$ | 54.5        | 0.7         |
| 908.652  | $\phi$ 10 - 12     | 10                      | $\pm 0.004$ | 54.5        | 0.7         |
| 908.653  | $\phi$ 12 - 16     | 16                      | $\pm 0.004$ | 80          | 0.7         |
| 908.654  | $\phi$ 16 - 20     | 16                      | $\pm 0.004$ | 80          | 0.7         |
| 908.655  | $\phi$ 20 - 25     | 25                      | $\pm 0.004$ | 90          | 0.7         |
| 908.656  | $\phi$ 25 - 30     | 25                      | $\pm 0.004$ | 90          | 0.7         |
| 908.657  | $\phi$ 30 - 40     | 40                      | $\pm 0.004$ | 97          | 0.7         |
| 908.658  | $\phi$ 40 - 50     | 40                      | $\pm 0.005$ | 97          | 0.7         |
| 908.659  | $\phi$ 50 - 63     | 62                      | $\pm 0.005$ | 114         | 0.7         |
| 908.660  | $\phi$ 62 - 75     | 62                      | $\pm 0.005$ | 114         | 0.7         |
| 908.661  | $\phi$ 75 - 88     | 87                      | $\pm 0.005$ | 114         | 0.7         |
| 908.662  | $\phi$ 87 - 100    | 87                      | $\pm 0.005$ | 114         | 0.7         |
| 908.663  | $\phi$ 100 - 125   | -                       | $\pm 0.005$ | 145         | 0.7         |
| 908.664  | $\phi$ 125 - 150   | -                       | $\pm 0.005$ | 145         | 0.7         |
| 908.665  | $\phi$ 150 - 175   | -                       | $\pm 0.005$ | 145         | 0.7         |
| 908.666  | $\phi$ 175 - 200   | -                       | $\pm 0.005$ | 145         | 0.7         |
| 908.667  | $\phi$ 200 - 225   | -                       | $\pm 0.007$ | 145         | 0.7         |
| 908.668  | $\phi$ 225 - 250   | -                       | $\pm 0.007$ | 145         | 0.7         |
| 908.669  | $\phi$ 250 - 275   | -                       | $\pm 0.007$ | 145         | 0.7         |
| 908.670  | $\phi$ 275 - 300   | -                       | $\pm 0.007$ | 145         | 0.7         |

Sets

| Item No. | Measuring range/mm | Setting rings $\phi$ /mm | Extension mm | Number of instruments |
|----------|--------------------|--------------------------|--------------|-----------------------|
| 908.671  | $\phi$ 6 - 12      | 6, 8, 10                 | 100          | 3                     |
| 908.672  | $\phi$ 12 - 20     | 16                       | 150          | 2                     |
| 908.673  | $\phi$ 20 - 50     | 25, 40                   | 150          | 4                     |
| 908.674  | $\phi$ 50 - 100    | 62, 87                   | 150          | 4                     |

### Digital three-point internal micrometers IP65 (continued)

**NEW**



Per piece

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

Option:  
836.535 Spare battery

Sets

| Item No. | Measuring range/mm | Setting rings $\phi$ /mm | Extension mm | Number of instruments |
|----------|--------------------|--------------------------|--------------|-----------------------|
| 910.134  | $\phi$ 6 - 12      | 6, 8, 10                 | 100          | 3                     |
| 910.135  | $\phi$ 12 - 20     | 16                       | 150          | 2                     |
| 910.136  | $\phi$ 20 - 50     | 25, 40                   | 150          | 4                     |
| 910.137  | $\phi$ 50 - 100    | 62, 87                   | 150          | 4                     |

## Mitutoyo Holtest digital three-point internal micrometers

Digital three-point internal micrometers for quick and accurate measurement of internal dimensions, within a large measuring range. These instruments have an improved ratchet mechanism and the application of high-quality materials ensures a long life span.

- Measuring range:  $\phi 6 - 300$  mm.
- Resolution: 0.001 mm.
- Measuring faces with titanium nitride (TiN) coating.
- Tungsten carbide cone and contact point of the spindle.
- Matt chrome-plated thimble.
- Digimatic data output.
- Automatic switch-off.
- Reset/preset.
- Hold function.
- Delivered in a plastic case or wooden case with a manufacturer measuring report. Sets are delivered with setting rings and extension.
- Protection: IP65.
- DIN 863 T4.
- Power supply: 1 battery type V357.



### Extensions

| Item No. | Extension mm | For measuring range/mm |
|----------|--------------|------------------------|
| 952.322  | 100          | $\phi 6 - 12$          |
| 952.621  | 150          | $\phi 12 - 20$         |
| 952.622  | 150          | $\phi 20 - 50$         |
| 952.623  | 150          | $\phi 50 - 300$        |

### Options

| Item No. | Description                           |
|----------|---------------------------------------|
| 836.535  | Spare battery                         |
| 104.157  | Mounting bracket for micrometer stand |
| 105.662  | Digimatic data cable, 1 m             |
| 105.663  | Digimatic data cable, 2 m             |
| 106.380  | USB Input Tool Direct cable, 2 m      |
| 102.791  | U-WAVE data cable                     |
| 102.730  | U-WAVE transmitter IP67               |



| Item No. | Measuring range/mm | Accuracy mm |
|----------|--------------------|-------------|
| 468.161  | $\phi 6 - 8$       | $\pm 0.002$ |
| 468.162  | $\phi 8 - 10$      | $\pm 0.002$ |
| 468.163  | $\phi 10 - 12$     | $\pm 0.002$ |
| 468.164  | $\phi 12 - 16$     | $\pm 0.002$ |
| 468.165  | $\phi 16 - 20$     | $\pm 0.002$ |
| 468.166  | $\phi 20 - 25$     | $\pm 0.003$ |
| 468.167  | $\phi 25 - 30$     | $\pm 0.003$ |
| 468.168  | $\phi 30 - 40$     | $\pm 0.003$ |
| 468.169  | $\phi 40 - 50$     | $\pm 0.003$ |
| 468.170  | $\phi 50 - 63$     | $\pm 0.003$ |
| 468.171  | $\phi 62 - 75$     | $\pm 0.003$ |
| 468.172  | $\phi 75 - 88$     | $\pm 0.003$ |
| 468.173  | $\phi 87 - 100$    | $\pm 0.003$ |
| 468.174  | $\phi 100 - 125$   | $\pm 0.005$ |
| 468.175  | $\phi 125 - 150$   | $\pm 0.005$ |
| 468.176  | $\phi 150 - 175$   | $\pm 0.005$ |
| 468.177  | $\phi 175 - 200$   | $\pm 0.005$ |
| 468.178  | $\phi 200 - 225$   | $\pm 0.005$ |
| 468.179  | $\phi 225 - 250$   | $\pm 0.005$ |
| 468.180  | $\phi 250 - 275$   | $\pm 0.005$ |
| 468.181  | $\phi 275 - 300$   | $\pm 0.005$ |

### Sets

| Item No.  | Measuring range/mm | Extension mm |
|---|--------------------|--------------|
| <b>One instrument with multiple measuring heads and extension</b> |                    |              |
| 468.971   | $\phi 6 - 12$      | 100          |
| 468.972   | $\phi 12 - 20$     | 150          |
| 468.973   | $\phi 20 - 50$     | 150          |
| 468.974   | $\phi 50 - 100$    | 150          |
| 468.975   | $\phi 100 - 200$   | 150          |
| <b>Multiple instruments</b>                                       |                    |              |
| 468.981   | $\phi 6 - 12$      |              |
| 468.982   | $\phi 12 - 25$     |              |
| 468.983   | $\phi 25 - 50$     |              |
| 468.984   | $\phi 50 - 75$     |              |
| 468.985   | $\phi 75 - 100$    |              |

## Mitutoyo Holtest three-point internal micrometers

Three-point internal micrometers for quick and accurate measurement of internal dimensions, within a large measuring range. These instruments have an improved ratchet mechanism and the application of high-quality materials ensures a long life span.

- Measuring range:  $\phi 6 - 300$  mm.
- Graduation: 0.001 mm ( $\phi 6 - 12$  mm), 0.005 mm ( $\phi 12 - 300$  mm).
- Tungsten carbide cone and contact point of the spindle.
- Matt chrome-plated thimble.
- DIN 863 T4.
- Delivered in a plastic case or wooden case with a manufacturer measuring report. Sets delivered in a wooden carrying case with a manufacturer measuring report.

| Measuring range/mm | Accuracy mm | Item No.  | Price EUR | Item No.                                 | Price EUR |
|--------------------|-------------|---|-----------|--|-----------|
|                    |             | <b>Measuring faces with titanium nitride (TiN) coating:</b> |           | <b>Tungsten carbide measuring faces:</b> |           |
| $\phi 2 - 2.5$     | $\pm 0.002$ |   |           | 368.001                                  | 969.00    |
| $\phi 2.5 - 3$     | $\pm 0.002$ |   |           | 368.002                                  | 969.00    |
| $\phi 3 - 4$       | $\pm 0.002$ |   |           | 368.003                                  | 774.00    |
| $\phi 4 - 5$       | $\pm 0.002$ |   |           | 368.004                                  | 774.00    |
| $\phi 5 - 6$       | $\pm 0.002$ |   |           | 368.005                                  | 774.00    |
| $\phi 6 - 8$       | $\pm 0.002$ | 368.161   | 361.00    |  |           |
| $\phi 8 - 10$      | $\pm 0.002$ | 368.162   | 358.00    |  |           |
| $\phi 10 - 12$     | $\pm 0.002$ | 368.163   | 358.00    |  |           |
| $\phi 12 - 16$     | $\pm 0.002$ | 368.164   | 427.00    | 368.764                                  | 346.00    |
| $\phi 16 - 20$     | $\pm 0.002$ | 368.165   | 438.00    | 368.765                                  | 351.00    |
| $\phi 20 - 25$     | $\pm 0.003$ | 368.166   | 449.00    | 368.766                                  | 354.00    |
| $\phi 25 - 30$     | $\pm 0.003$ | 368.167   | 459.00    | 368.767                                  | 378.00    |
| $\phi 30 - 40$     | $\pm 0.003$ | 368.168   | 476.00    | 368.768                                  | 417.00    |
| $\phi 40 - 50$     | $\pm 0.003$ | 368.169   | 484.00    | 368.769                                  | 426.00    |
| $\phi 50 - 63$     | $\pm 0.003$ | 368.170   | 544.00    | 368.770                                  | 471.00    |
| $\phi 62 - 75$     | $\pm 0.003$ | 368.171   | 568.00    | 368.771                                  | 483.00    |
| $\phi 75 - 88$     | $\pm 0.003$ | 368.172   | 580.00    | 368.772                                  | 495.00    |
| $\phi 87 - 100$    | $\pm 0.003$ | 368.173   | 591.00    | 368.773                                  | 523.00    |
| $\phi 100 - 125$   | $\pm 0.005$ | 368.174   | 877.00    | 368.774                                  | 810.00    |
| $\phi 125 - 150$   | $\pm 0.005$ | 368.175   | 934.00    | 368.775                                  | 871.00    |
| $\phi 150 - 175$   | $\pm 0.005$ | 368.176   | 995.00    | 368.776                                  | 957.00    |
| $\phi 175 - 200$   | $\pm 0.005$ | 368.177   | 1,030.00  | 368.777                                  | 968.00    |
| $\phi 200 - 225$   | $\pm 0.005$ | 368.178   | 1,084.00  | 368.778                                  | 1,018.00  |
| $\phi 225 - 250$   | $\pm 0.005$ | 368.179   | 1,112.00  | 368.779                                  | 1,031.00  |
| $\phi 250 - 275$   | $\pm 0.005$ | 368.180   | 1,158.00  | 368.780                                  | 1,084.00  |
| $\phi 275 - 300$   | $\pm 0.005$ | 368.181   | 1,277.00  | 368.781                                  | 1,220.00  |



### Extensions

| Item No. | Extension mm | For measuring range/mm | Price EUR |
|----------|--------------|------------------------|-----------|
| 952.322  | 100          | $\phi 6 - 12$          | 105.00    |
| 952.621  | 150          | $\phi 12 - 20$         | 105.00    |
| 952.622  | 150          | $\phi 20 - 50$         | 115.00    |
| 952.623  | 150          | $\phi 50 - 300$        | 199.00    |

### Sets

| Measuring range/mm | Extension mm | Item No.  | Price EUR | Item No.                                 | Price EUR |
|--------------------|--------------|---|-----------|--|-----------|
|                    |              | <b>Measuring faces with titanium nitride (TiN) coating:</b> |           | <b>Tungsten carbide measuring faces:</b> |           |
| $\phi 2 - 3$       | -            | -   | -         | 368.906                                  | 2,020.00  |
| $\phi 3 - 6$       | -            | -   | -         | 368.907                                  | 2,207.00  |
| $\phi 6 - 12$      | 100          | 368.911   | 971.00    | -  | -         |
| $\phi 12 - 20$     | 150          | 368.912   | 839.00    | 368.991                                  | 764.00    |
| $\phi 20 - 50$     | 150          | 368.913   | 1,924.00  | 368.992                                  | 1,766.00  |
| $\phi 50 - 100$    | 150          | 368.914   | 2,229.00  | 368.993                                  | 2,145.00  |
| $\phi 100 - 200$   | 150          | 368.915   | 5,223.00  | 368.994                                  | 4,299.00  |



## Micrometros interiores de 3 contactos em metalduro, tipo pistola

### 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:  $\phi 6 - 100$  mm.
- Measuring depth: 0 - 270 mm.
- Read-out depends on the type of dial indicator or measuring probe.
- Clamping shaft:  $\phi 8$  mm.
- Self-centering.
- Excl. dial indicator or measuring probe.
- Tungsten carbide measuring faces.
- Conforms to factory standard.
- Delivery in a case.

### Separate instruments

| Item No. | Measuring range/mm | Accuracy mm | Setting ring $\phi$ /mm | Extension mm | Length/mm L A | Price |
|----------|--------------------|-------------|-------------------------|--------------|---------------|-------|
| 907.770  | $\phi 6 - 8$       | $\pm 0.004$ | 8                       | 100          | 50 2          |       |
| 907.771  | $\phi 8 - 10$      | $\pm 0.004$ | 8                       | 100          | 50 2          |       |
| 907.772  | $\phi 10 - 12$     | $\pm 0.004$ | 10                      | 100          | 50 2          |       |
| 907.773  | $\phi 12 - 16$     | $\pm 0.004$ | 16                      | 150          | 65 0.5        |       |
| 907.774  | $\phi 16 - 20$     | $\pm 0.004$ | 16                      | 150          | 65 0.5        |       |
| 907.775  | $\phi 20 - 25$     | $\pm 0.004$ | 25                      | 150          | 91 0.5        |       |
| 907.776  | $\phi 25 - 30$     | $\pm 0.004$ | 25                      | 150          | 91 0.5        |       |
| 907.777  | $\phi 30 - 40$     | $\pm 0.004$ | 40                      | 150          | 97 0.5        |       |
| 907.778  | $\phi 40 - 50$     | $\pm 0.005$ | 40                      | 150          | 97 0.5        |       |
| 907.779  | $\phi 50 - 63$     | $\pm 0.005$ | 62                      | 150          | 112 0.5       |       |
| 907.780  | $\phi 63 - 75$     | $\pm 0.005$ | 62                      | 150          | 112 0.5       |       |
| 907.781  | $\phi 75 - 88$     | $\pm 0.005$ | 87                      | 150          | 112 0.5       |       |
| 907.782  | $\phi 87 - 100$    | $\pm 0.005$ | 87                      | 150          | 112 0.5       |       |

### Sets

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



## HELIOS · PREISSER

### 1924 DIGI-MET® Set of 3 point internal measuring pistols



#### Model

- For through holes
- From measuring range 12 mm for through and blind holes
- From measuring range 12 mm with carbide tipped measuring faces
- Digital indicator recommended as display device

#### Delivery

- Plastic case
- Incl. setting ring
- Without display device
- Calibration certificate for setting ring included

| M | % | Measuring range mm | Number of devices | Order no. |
|---|---|--------------------|-------------------|-----------|
| * |   | 6 - 12             | 3                 | 1824 574  |
| * |   | 12 - 20            | 2                 | 1824 578  |
| * |   | 20 - 50            | 4                 | 1824 578  |
| * |   | 50 - 100           | 4                 | 1824 580  |

Calibration certificate for pistol and head on request, only possible in combination with an indicator

### 1924 DIGI-MET® Basic unit for 3 point internal measuring pistols



#### Model

- Mounting thread for changing of measuring heads
- Support for indicators with shaft  $\phi 8$  mm
- Measuring range 6-100 mm incl. adapter for 6-20 mm

#### Delivery

- Plastic case

| M | % | Measuring range mm | Order no. |
|---|---|--------------------|-----------|
|   |   | 6 - 100            | 1824 100  |
|   |   | 20 - 100           | 1824 200  |
|   |   | 100 - 200          | 1824 300  |

#### Accessories

- Replacement adapter 6-20 mm for measuring pistol 1924 100

Order no. 1824 100