

MAGNESCALE

digital gauge



Series DS800S

Key-Features:

- Available measurement ranges 5; 12 mm
- Resolution up to 0,1 μm
- Accuracy up to 1,0 μm
- USB (2.0FS) interface - free evaluation software for download
- Protection class up to IP67
- Spring loaded and pneumatic versions available
- Resistant against water and oil
- Life cycle up to 30 million strokes

Content

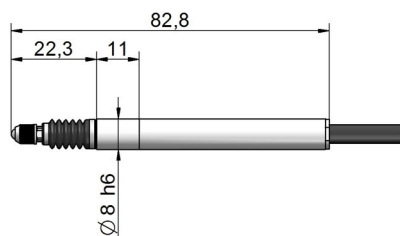
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DIGITAL GAUGE DS805 - Measurement range 5 mm

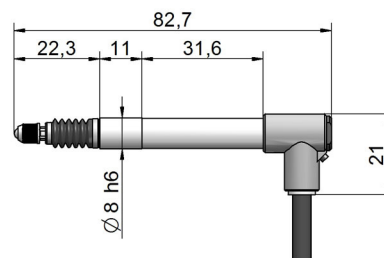
| Model | | DS805SR, DS805SFR, DS805SLR, DS805SFLR | DS805SR5, DS805SFR5, DS805SLR5, DS805SFLR5 |
|----------------------------------|-------------------|---|--|
| Measurement range | [mm] | 5 | |
| Resolution | [μm] | 0,1 | 0,5 |
| Accuracy (20°C) | [μm] | 1 | 1,5 |
| Displacement speed max. | [m/min] | 80* | |
| Rod principle | | spring loaded, pneumatic | |
| Reference point | | position at spindle movement of 1 mm | |
| Vibration | m/s ² | 100 (20Hz to 2kHz) | |
| Impact resistance | m/s ² | 1000 (11 ms) | |
| Operating temperature | [°C] | 0...50 (no condensation) | |
| Storage temperature | [°C] | -20 to 60 (90% RH or less) | |
| Power supply | [VDC] | 5 \pm 5% | |
| Power consumption | [mA] | 120 max. | |
| Measuring force upward | [N] | 0,35 \pm 0,25 | |
| Measuring force horizontal | [N] | 0,40 \pm 0,25 | |
| Measuring force downward | [N] | 0,45 \pm 0,25 | |
| Protection class** | | IP67 | |
| Feeler | | Carbide ball tip, mounting screw M2.5 | |
| Cable length | [m] | Gauge \Leftrightarrow Interpolator: 2, Interpolator \Leftrightarrow USB: 0,5 | |
| Weight | [g] | approx. 30 | |
| Accessory | | Instruction manual, tightening nut, clamp spanner, wave washer, hose elbow, spanner | |
| Communication interface | | USB2.0FS | |
| Recommended system specification | | CPU: Intel Core i3 or higher RAM: 1 GB or more; OS: Windows7, Windows10 (32 bit/64 bit) | |

*Depending on the number of connected devices **not including cable and interpolation box

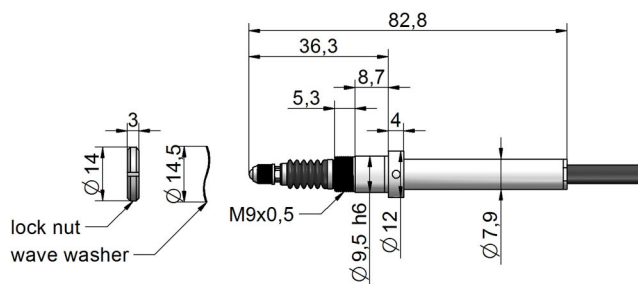
DS805SR / DS805SR5



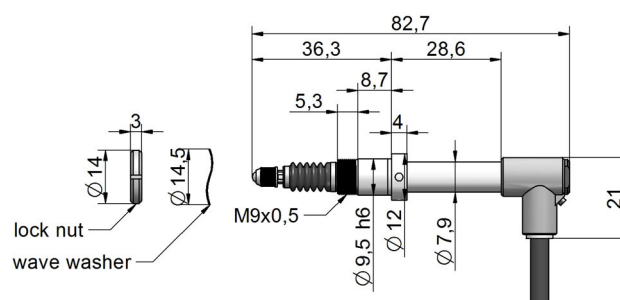
DS805SLR / DS805SLR5



DS805SFR/DS805SFR5



DS805SFLR / DS805SFLR5



DIGITAL GAUGE DS812S - Measurement range 12 mm

| Model | | DS812SR, DS812SFR, DS812SLR, DS812SFLR, DS812SVR | DS812SR5, DS812SFR5, DS812SLR5, DS812FLR5, DS812SVR5 |
|----------------------------------|------------------|---|--|
| Measurement range | [mm] | 12 | |
| Resolution | [µm] | 0,1 | 0,5 |
| Accuracy (20°C) | [µm] | 1 | 1,5 |
| Displacement speed max. | [m/] | 80* | |
| Rod principle | | spring loaded, pneumatic | |
| Reference point | | position at spindle movement of 1 mm | |
| Vibration | m/s ² | 100 (20Hz to 2kHz) | |
| Impact resistance | m/s ² | 1000 (11 ms) | |
| Operating temperature | [°C] | 0...50 (no condensation) | |
| Storage temperature | [°C] | -20 to60 (90% RH or less) | |
| Power supply | [VDC] | 5 ± 5% | |
| Power consumption | [mA] | 120 max. | |
| Measuring force upward | [N] | 0,4 ± 0,3** (DS812SVR / DS812SVR5: 0,6 ± 0,5***) | |
| Measuring force horizontal | [N] | 0,5 ± 0,3** (DS812SVR / DS812SVR5: 0,7 ± 0,5***) | |
| Measuring force downward | [N] | 0,6 ± 0,3** (DS812SVR / DS812SVR5: 0,8 ± 0,5***) | |
| Protection class**** | | IP67 | |
| Mass | [g] | 30 | |
| Feeler | | Carbide ball tip, mounting screw M2.5 | |
| Weight | [m] | Gauge <=> Interpolator: 2, Interpolator <=> USB: 0,5 | |
| Accessories | | Instruction manual, tightening nut, clamp spanner, wave washer, hose elbow, spanner | |
| Communication interface | | USB2.0FS | |
| Recommended system specification | | CPU: Intel Core i3 or higher; RAM: 1 GB or more OS: Windows7, Windows10 (32 bit/64 bit) | |

*Depending on the number of connected devices

**Except SVR/SVR5

*** When air pressure is 0,555 Mpa

****not including cable and interpolation box

| | |
|--|-------------------------------|
| <p>DS812SR / DS812SR5</p> | <p>DS812SFR / DS812SFR5</p> |
| <p>DS812SLR / DS812SLR5 / DS812SVR / DS812SVR5</p> | <p>DS812SFLR / DS812SFLR5</p> |
| <p>Flange adapter DZ812F</p> | |

USB SOFTWARE

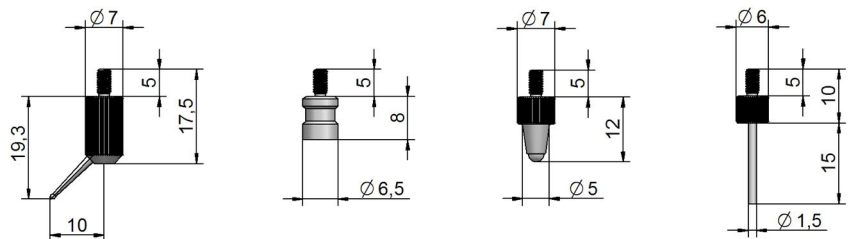
With a free basic software tool measuring values can be read out and saved in an excel or csv file.

- Up to 8 gauges can be connected
- Easy to operate and setup
- Comparator function
- Calibration (Reset) function
- Scaling function
- Various languages available
- Compatible with Windows 7/8/10 (XP possible)

ACCESSORIES

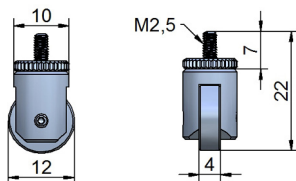
Feeler Set DZ5100:

1. Off-center contact point: $\varnothing 1,0$ mm steel ball
2. Flat carbide contact point $\varnothing 6,5$ mm
3. Plastic ball contact point $\varnothing 3,0$ mm, nylon ball
4. Pin contact point $\varnothing 1,5$ mm



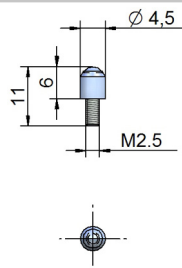
Roller DZ100:

Tolerance $< 3 \mu\text{m/turn}$



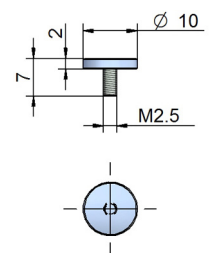
Tastkopf-01*

Tastkopf-01: steel (standard)
 Tastkopf-01-HM: cemented carbide
 Tastkopf-01-R: ruby
 Tastkopf-01-K: ceramics



Tastkopf-02

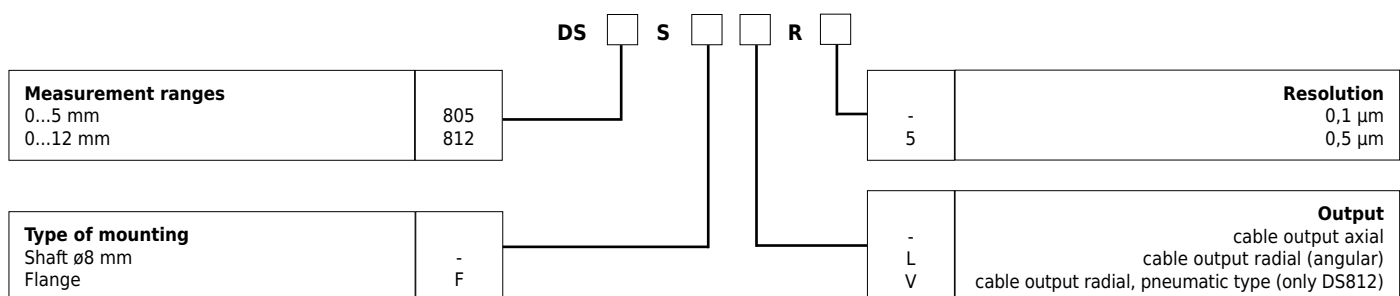
Tastkopf-02: steel
 Tastkopf-02-HM: cemented carbide



* Material of the feeler balls:

steel: for standard applications
 ruby: much harder and wear resistant than steel, non-conductive, for all applications except for measuring on aluminium and cast iron
 ceramics: comparable to ruby, best choice for measuring on aluminium and cast iron

ORDER CODE



ACCESSORIES

Accessories

| | |
|--------|------------------------------|
| DZ100 | Roller |
| DZ5100 | Feeler set |
| DZ812F | Flange adapter (only DS812S) |

USB-extension cable

| | |
|---------|----------|
| CE38-01 | 1 m, USB |
| CE38-02 | 2 m, USB |
| CE38-04 | 4 m, USB |

| | |
|----------------|---------------------------------|
| Tastkopf-01 | Standard (included in delivery) |
| Tastkopf-01-HM | Cemented carbide ball |
| Tastkopf-01-R | Ruby ball |
| Tastkopf-01-K | Ceramics ball |
| Tastkopf-02 | Steel plate |
| Tastkopf-02-HM | Cemented carbide plate |

SENSEL MEASUREMENT

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