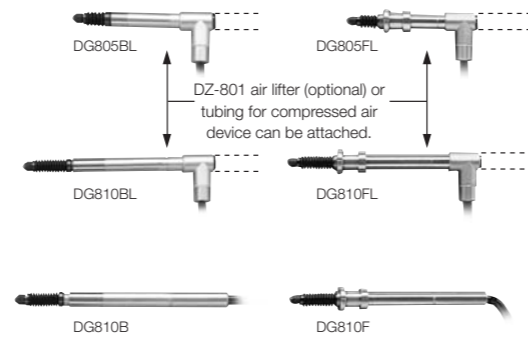
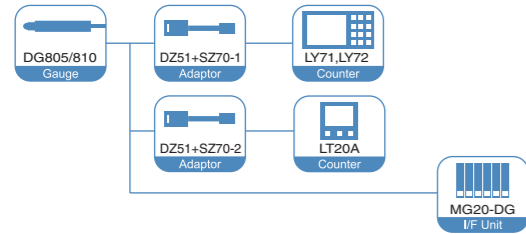


# DG

## DG805 Series, DG810 Series

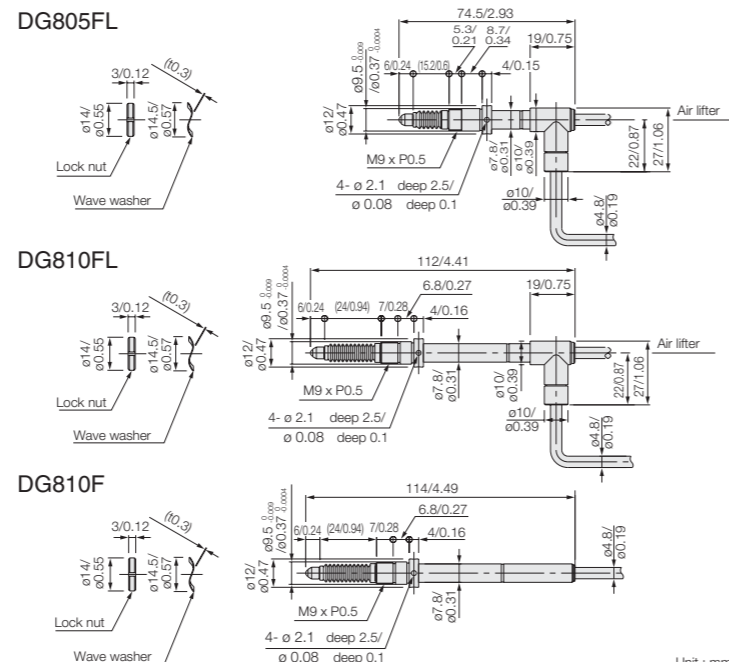
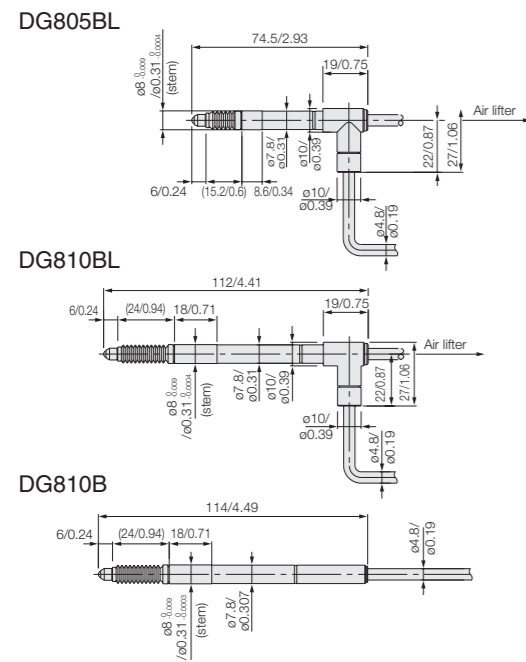
High accuracy, compact, and slim gauges suitable for installation on machines.

- Magnetic principle ● Excellent resistance to workshop conditions. Resistant to oil, water, dust, vibration, and shock. ● Accuracy : 2 μm
- Resolution : 0.5 μm ● Measuring range: 5.2 mm / 0.20" and 10 mm / 0.39"
- Compact and slim: ø8 mm / ø0.31" (outer diameter) 74.5 mm / 2.93" (overall length) (DG805)
- Low measuring force
- Spindle can be moved vertically with an air pressure device (DG805BL/FL, DG810BL/FL).
- Dustproof bellows (standard).
- Easy installation. Flange type gauges also available.



Digital Gauge

### Dimensions



Unit : mm/inch

\*Please refer to p54 for the details of the screw.

### Specifications

| Model                     | DG805BL / FL / BLM / BLE / FLM / FLE   | DG810B / F / BM / BE / FM / FE | DG810BL / FL / BLM / BLE / FLM / FLE |
|---------------------------|--|--------------------------------|--------------------------------------|
| Type                      | For Counter, A/B quadrature signal output type (See Page 26)   |                                |                                      |
| Measuring range           | 5.2 mm / 0.20"   | 10 mm / 0.39"                  |                                      |
| Resolution                | 0.5 μm   |                                |                                      |
| Measuring range force     | Upward   | 0.35 ± 0.25 N                  | 0.4 ± 0.3 N                          |
|                           | Lateral  | 0.4 ± 0.25 N                   | 0.5 ± 0.3 N                          |
|                           | Downward   | 0.45 ± 0.25 N                  | 0.6 ± 0.3 N                          |
| Accuracy (at 20°C / 68°F) | 2 μm   |                                |                                      |
| Maximum Response speed    | 1m/s   |                                |                                      |
| Operating temperature     | 0 °C to 50 °C / 32 °F to 122 °F (gauge)  |                                |                                      |
| Storage temperature       | -20 °C to 60 °C / -4 °F to 140 °F  |                                |                                      |
| Cable length              | 5 m / 16.4'  |                                |                                      |
| Mounting stem diameter    | ø 8 <sup>0.009</sup> mm / ø 0.31 <sup>0.0004</sup> "<br>F type: ø 9.5 <sup>0.009</sup> mm / ø 0.37 <sup>0.0004</sup> " |                                |                                      |
| Feeler                    | Feeler tipped with ø 3 mm / 0.12" dia. Carbide ball with M2.5 x 0.45 screw on fitting end (DZ-123)                     |                                |                                      |
| Mass*1                    | Approx.20 g / 0.71 oz  | Approx.40 g / 1.41 oz          |                                      |
| Air lifter                | Air lifter DZ-801 mountable*2  | —                              | Air lifter DZ-801 mountable*2        |

\*1 excl. cable unit and Interpolator unit.

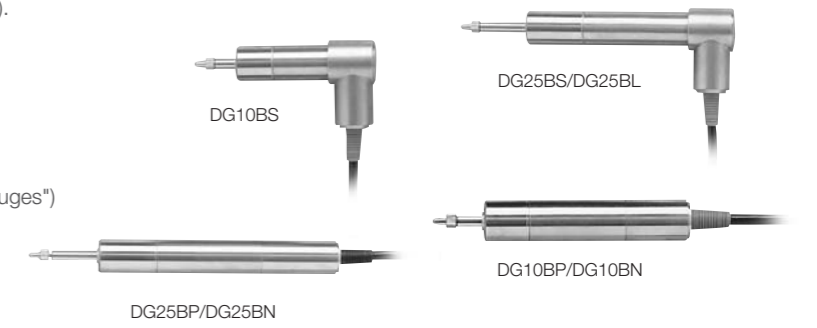
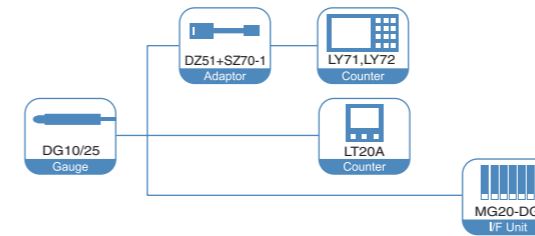
\*2 Tubing for compressed air device can be attached.

# DG

## DG10<sub>B</sub>, DG25<sub>B</sub>

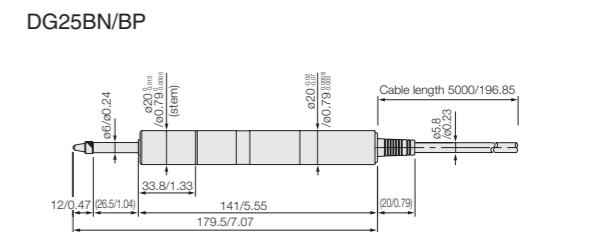
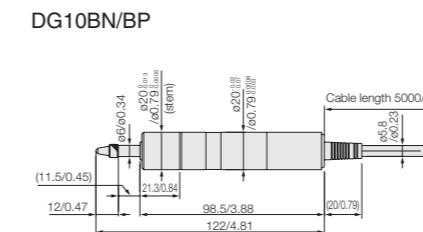
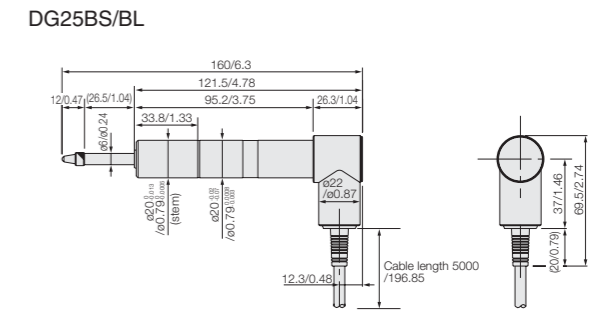
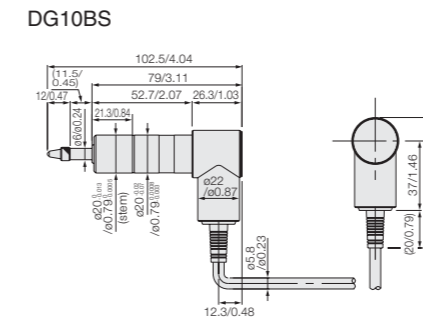
High accuracy, rugged gauges. Suitable for installation on machines.

- Excellent resistance to workshop conditions (BP/BS : IP64). Resistant to oil, water, dust, vibrations, and shocks.
- Accuracy : 2 μm ● Resolution : 0.5 μm
- Measuring range : 10 mm / 0.39" and 25 mm / 0.98"
- High measuring force (BP/BS)
- Low measuring force (BN/BL) ● Easy installation
- A variety of accessories available (See "Accessories for Gauges")



Digital Gauge

### Dimensions



Unit : mm/inch

### Specifications

| Model                      | DG10BP<br>BPM / BPE  | DG10BS<br>BSM / BSE          | DG10BN<br>BNM / BNE | DG25BP<br>BPM / BPE             | DG25BS<br>BSM/BSE | DG25BN<br>BNM/BNE | DG25BL<br>BLM/BLE |
|----------------------------|--|------------------------------|---------------------|---------------------------------|-------------------|-------------------|-------------------|
| Type                       | For Counter, A/B quadrature signal output type (See Page 26)                 |                              |                     |                                 |                   |                   |                   |
| Measuring range            | 10 mm / 0.39"  |                              |                     | 25 mm / 0.98"                   |                   |                   |                   |
| Resolution                 | 0.5 μm   |                              |                     | 0.5 μm                          |                   |                   |                   |
| Measuring range force      | Upward   | All direction: 4.9 N or less | 0.3 ± 0.25 N        | All direction: 4.9 N or less    | 0.7 ± 0.35 N      | 1 ± 0.4 N         | 0.4 ± 0.3 N       |
|                            | Lateral  |                              | 0.6 ± 0.3 N         |                                 |                   |                   |                   |
|                            | Downward   |                              | 0.8 ± 0.35 N        |                                 |                   |                   |                   |
| Accuracy (at 20°C / 68°F)  | 2 μm   |                              |                     |                                 |                   |                   |                   |
| Maximum Response speed     | 1m/s   |                              |                     |                                 |                   |                   |                   |
| Operating temperature      | 0 °C to 50 °C / 32 °F to 122 °F (gauge)                                      |                              |                     |                                 |                   |                   |                   |
| Storage temperature        | -20 °C to 60 °C / -4 °F to 140 °F  |                              |                     |                                 |                   |                   |                   |
| Cable length               | 5 m / 16.4'  |                              |                     |                                 |                   |                   |                   |
| Mounting stem diameter     | ø 20 mm / ø 0.79"  |                              |                     |                                 |                   |                   |                   |
| Feeler                     | Feeler ø 2.5 mm carbide ball with M2.5p x 0.45 screw on fitting end (DZ-122) |                              |                     |                                 |                   |                   |                   |
| Protective design grade    | Equivalent to IP64   |                              | —                   | Equivalent to IP64              |                   | —                 | —                 |
| Sealing (oil, water, dust) | Oil sealing, O-rings, Y-gaskets  |                              | —                   | Oil sealing, O-rings, Y-gaskets |                   | —                 | —                 |
| Mass*1                     | Approx.230 g / 0.507 lbs   |                              |                     | Approx.300 g / 0.661 lbs        |                   |                   |                   |
| Lift lever                 | —  | DZ-161 (option)              |                     | —                               | DZ-161 (option)   |                   |                   |
| Air lifter                 | DZ174-010 (option)*2   |                              | —                   | DZ174-025 (option)*2            |                   |                   |                   |

\*1 excl. cable unit and Interpolator unit.

\*2 Tubing for compressed air device can be attached.