

## Indexing plungers

**Stainless Steel, with Sensor for Position Monitoring**

### SPECIFICATION

#### Types

- Type **EB**: with engagement monitoring, without rest position
- Type **EC**: with engagement monitoring, with rest position

#### Connection Type

- Connection type **S**: Plug
- Stainless Steel
- AISI 303
- Plunger pin chemically nickel plated
- Knob, Plastic (Polyamide PA)
- black, matte
- not removable
- Magnet
- Hard ferrite
- Sensor / Sensor clip
- Plastic (Polyamide PA), black, matte
- Hexagon nut ISO 8675
- Stainless Steel A2
- Cable (Outer sheath)
- Polyurethan PUR, black
- Hex nut ISO 8675
- Stainless steel, A2

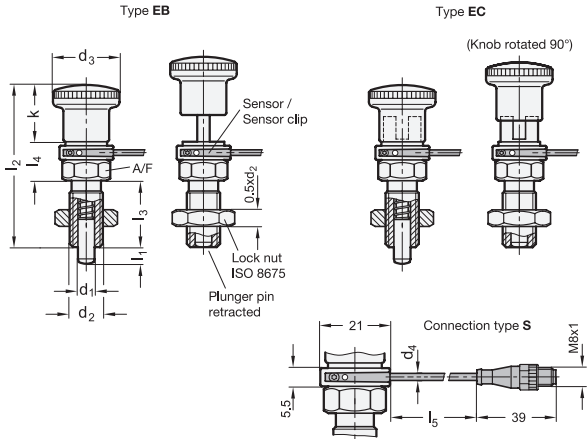


### TECHNICAL INFORMATION

- IP Protection classes (see page A23)
- Load rating information (see page A42)
- Stainless Steel characteristics (see page A26)

### INFORMATION

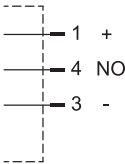
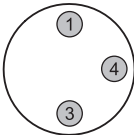
Stainless Steel-Indexing plungers GN 817.6 with sensor for position monitoring allow for electronic monitoring of the plunger pin state. For this purpose, a magnet is integrated into the plunger pin that switches the sensor upon engaging after approx. 2/3 of the engagement distance  $l_1$ . The sensor electronics then outputs a high signal, e.g. to a machine control, and additionally indicates this switch state with an LED on the sensor. To prevent faults, no external magnetic fields should be acting on the indexing plunger. The Stainless Steel-Indexing plungers GN 817.6 are delivered with enclosed sensor, sensor clip, Allen® wrench and a hexagon nut.



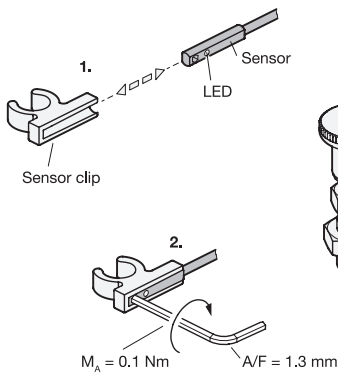
### GN 817.6

### STAINLESS STEEL

| Description             | d1 Pin<br>-0.02/-0.05<br>Bore H7 | l1 | Cable<br>length l5<br>in meter | d2         | d3 | d4 | k    | l2   | l3 | l4   | A/F | Spring load<br>in N ≈ initial | Spring load<br>in N ≈ end | ⚖   |
|-------------------------|----------------------------------|----|--------------------------------|------------|----|----|------|------|----|------|-----|-------------------------------|---------------------------|-----|
| GN 817.6-4-6-EB-S-0.5   | 4                                | 6  | 0.5                            | M 8 x 1    | 16 | 2  | 14   | 41.5 | 16 | 11.5 | 10  | 4                             | 12.5                      | 27  |
| GN 817.6-4-6-EC-S-0.5   | 4                                | 6  | 0.5                            | M 8 x 1    | 16 | 2  | 14   | 41.5 | 16 | 11.5 | 10  | 4                             | 12.5                      | 29  |
| GN 817.6-5-8-EB-S-0.5   | 5                                | 8  | 0.5                            | M 10 x 1   | 19 | 2  | 16   | 46.5 | 18 | 12.5 | 12  | 5                             | 18                        | 39  |
| GN 817.6-5-8-EC-S-0.5   | 5                                | 8  | 0.5                            | M 10 x 1   | 19 | 2  | 16   | 46.5 | 18 | 12.5 | 12  | 5                             | 18                        | 42  |
| GN 817.6-6-9-EB-S-0.5   | 6                                | 9  | 0.5                            | M 12 x 1.5 | 23 | 2  | 20   | 54.5 | 22 | 12.5 | 14  | 6                             | 25                        | 56  |
| GN 817.6-6-9-EC-S-0.5   | 6                                | 9  | 0.5                            | M 12 x 1.5 | 23 | 2  | 20   | 54.5 | 22 | 12.5 | 14  | 6                             | 25                        | 60  |
| GN 817.6-8-12-EB-S-0.5  | 8                                | 12 | 0.5                            | M 16 x 1.5 | 28 | 2  | 24   | 64.5 | 26 | 14.5 | 17  | 8.5                           | 28                        | 105 |
| GN 817.6-8-12-EC-S-0.5  | 8                                | 12 | 0.5                            | M 16 x 1.5 | 28 | 2  | 24   | 64.5 | 26 | 14.5 | 17  | 8.5                           | 28                        | 111 |
| GN 817.6-10-12-EB-S-0.5 | 10                               | 12 | 0.5                            | M 16 x 1.5 | 28 | 2  | 24   | 64.5 | 26 | 14.5 | 17  | 9.5                           | 38                        | 106 |
| GN 817.6-10-12-EC-S-0.5 | 10                               | 12 | 0.5                            | M 16 x 1.5 | 28 | 2  | 24   | 64.5 | 26 | 14.5 | 17  | 9.5                           | 38                        | 112 |
| GN 817.6-12-15-EB-S-0.5 | 12                               | 15 | 0.5                            | M 20 x 1.5 | 33 | 2  | 28.5 | 78   | 33 | 16.5 | 22  | 11.5                          | 40                        | 200 |
| GN 817.6-12-15-EC-S-0.5 | 12                               | 15 | 0.5                            | M 20 x 1.5 | 33 | 2  | 28.5 | 78   | 33 | 16.5 | 22  | 11.5                          | 40                        | 212 |
| GN 817.6-16-20-EB-S-0.5 | 16                               | 20 | 0.5                            | M 24 x 2   | 33 | 2  | 28.5 | 85   | 38 | 18.5 | 27  | 13                            | 54                        | 313 |
| GN 817.6-16-20-EC-S-0.5 | 16                               | 20 | 0.5                            | M 24 x 2   | 33 | 2  | 28.5 | 85   | 38 | 18.5 | 27  | 13                            | 54                        | 329 |

| Electrical properties of the sensor    |                                                                                       |                                                                                     |
|----------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Output function                        | Normally open (NO)                                                                    |  |
| Switch output                          | PNP                                                                                   |                                                                                     |
| Supply voltage                         | 10 - 30 V DC                                                                          |                                                                                     |
| Continuous current I <sub>a</sub>      | ≤ 100 mA                                                                              |                                                                                     |
| Connection type Plug (S)               | 3-pole plug M8x1, freely rotating with knurled screw connection, with PUR cable 0.5 m |   |
| Protection class                       | IP 67                                                                                 |                                                                                     |
| Switching frequency                    | 1,000 Hz                                                                              |                                                                                     |
| Power consumption                      | ≤ 8 mA                                                                                |                                                                                     |
| Voltage drop                           | ≤ 2.5 V                                                                               |                                                                                     |
| Protection class                       | III                                                                                   |                                                                                     |
| Response sensitivity                   | 2.8 mT                                                                                |                                                                                     |
| Temperature range                      | -25 °C ... +75 °C                                                                     |                                                                                     |
| Shock and vibration resistance         | 30 g, 11 ms / 10 ... 55 Hz, 1 mm                                                      |                                                                                     |
| Reverse polarity protection            | Yes                                                                                   |                                                                                     |
| Short-circuit protection               | Yes                                                                                   |                                                                                     |
| Activation impulse suppression         | Yes                                                                                   |                                                                                     |
| Approvals, conformities CE declaration |    |                                                                                     |

ASSEMBLY INSTRUCTION



The position of the sensor cable can be chosen freely during installation of the sensor clip.  
Installation steps:

1. Insert the sensor into the sensor clip from the side.
2. Tighten the hexagon socket screw of the sensor.
3. Clip the sensor clip into the ring groove of the indexing plunger in any orientation and then adjust the direction by turning, if necessary.

