

TYPES

- Type **D**: Pneumatically double-acting, protrude / retract
- Type **A**: Pneumatically single-acting, retract by spring force
- Type **E**: Pneumatically single-acting, protrude by spring force

Coding

- **OP**: Without position query
- **BS0,4**: Position query on both sides, with plug, cable 0.4 m

AISI 303 stainless steel
Plunger pin surface hardened

Rod seal
Polyurethane PUR

Piston seal and O-ring
Acrylonitrile butadiene rubber (NBR)

Magnet
Neodymium, iron, boron (NdFeB)

Sensor
- Housing
Polyamide (PA), black
- Cable and plug
Outer sheath polyurethane (PUR), black

Sensor clip
Polyacetal (POM), black

Hexagon nut ISO 8675
Stainless Steel AISI 304

FEATURES AND APPLICATIONS

Stainless steel indexing plungers GN 817.7 with pneumatic operation can be easily and securely integrated into automated processes and can be positioned at locations where hand operation of the indexing plunger is not possible. Thanks to the material used, the indexing plungers are also suitable for more aggressive environments.

An integrated magnet allows the plunger pin position to be queried electronically by a sensor. The end limits (protruding and retracted position) are taught-in via the operating element on the sensor cable. They each send a high signal, which is indicated by the respective LED and can be processed by a machine control, for example.

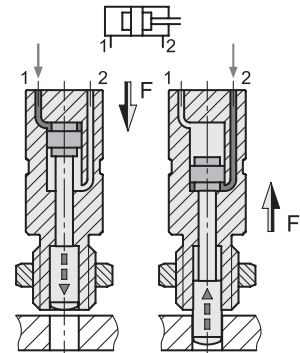
The sensor electronics can also be accessed via IO-Link and offer the ability to set and read out the switching points and to block the teach button on the operating element. To avoid interference, no external magnetic fields should act on the indexing plunger. The pneumatic indexing plungers are supplied with a lock nut. With coding BS0,4, the sensor, sensor clip and an allen wrench are also supplied loose.

ACCESSORY

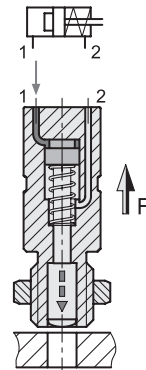
Cable with Connector FC-M12x1



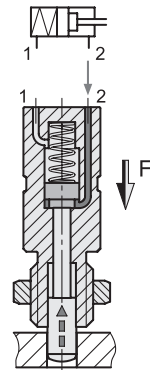
GN 817.7-D



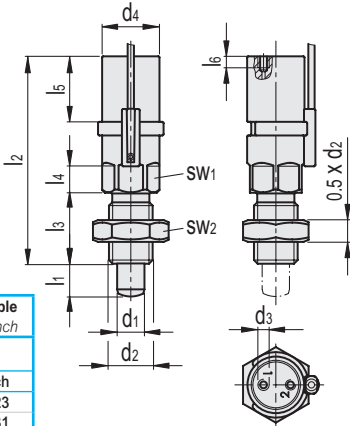
GN 817.7-A



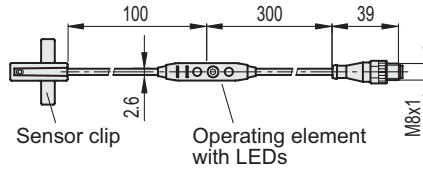
GN 817.7-E



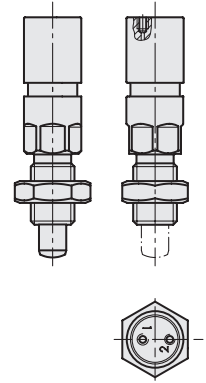
GN 817.7-BS0,4



GN 817.7-BS0,4



GN 817.7-OP



Conversion Table 1 mm = 0.039 inch	
d1	
mm	inch
6	0.23
8	0.31
10	0.39
12	0.47

GN 817.7-D-OP

Code	Description	d1											Force F at 6 bar# [N]	Force F at 6 bar* [N]	⚖	
		Plunger -0.02 -0.05 Hole H7	d2	d3	d4	l1	l2	l3	l4	l5	l6 min	sw1				sw2
GN.81513	GN 817.7-6-9-D-OP	6	M 12 x 1.5	M 3	21	9	73	22	10	24	4	19	18	65	50	176
GN.81543	GN 817.7-8-12-D-OP	8	M 16 x 1.5	M 3	21	12	73	26	10	24	4	19	24	65	50	202
GN.81573	GN 817.7-10-12-D-OP	10	M 16 x 1.5	M 3	21	12	76	26	10	24	4	19	24	65	50	205
GN.81603	GN 817.7-12-15-D-OP	12	M 20 x 1.5	M 3	21	15	76	34	10	24	4	19	30	65	50	246

GN 817.7-D-BS0,4

Code	Description	d1											Force F at 6 bar# [N]	Force F at 6 bar* [N]	⚖	
		Plunger -0.02 -0.05 Hole H7	d2	d3	d4	l1	l2	l3	l4	l5	l6 min	sw1				sw2
GN.81511	GN 817.7-6-9-D-BS0,4	6	M 12 x 1.5	M 3	21	9	73	22	10	24	4	19	18	65	50	178
GN.81541	GN 817.7-8-12-D-BS0,4	8	M 16 x 1.5	M 3	21	12	73	26	10	24	4	19	24	65	50	205
GN.81571	GN 817.7-10-12-D-BS0,4	10	M 16 x 1.5	M 3	21	12	76	26	10	24	4	19	24	65	50	207
GN.81601	GN 817.7-12-15-D-BS0,4	12	M 20 x 1.5	M 3	21	15	76	34	10	24	4	19	30	65	50	248

GN 817.7-A-OP

Code	Description	d1											Spring force F# [N]	Spring force F* [N]	⚖	
		Plunger -0.02 -0.05 Hole H7	d2	d3	d4	l1	l2	l3	l4	l5	l6 min	sw1				sw2
GN.81503	GN 817.7-6-9-A-OP	6	M 12 x 1.5	M 3	21	9	73	22	10	24	4	19	18	26	12	179
GN.81533	GN 817.7-8-12-A-OP	8	M 16 x 1.5	M 3	21	12	73	26	10	24	4	19	24	26	12	205
GN.81563	GN 817.7-10-12-A-OP	10	M 16 x 1.5	M 3	21	12	76	26	10	24	4	19	24	26	12	207
GN.81593	GN 817.7-12-15-A-OP	12	M 20 x 1.5	M 3	21	15	76	34	10	24	4	19	30	26	12	248

GN 817.7-A-BS0,4

Code	Description	d1											Spring force F# [N]	Spring force F* [N]	⚖	
		Plunger -0.02 -0.05 Hole H7	d2	d3	d4	l1	l2	l3	l4	l5	l6 min	sw1				sw2
GN.81501	GN 817.7-6-9-A-BS0,4	6	M 12 x 1.5	M 3	21	9	73	22	10	24	4	19	18	26	12	181
GN.81531	GN 817.7-8-12-A-BS0,4	8	M 16 x 1.5	M 3	21	12	73	26	10	24	4	19	24	26	12	207
GN.81561	GN 817.7-10-12-A-BS0,4	10	M 16 x 1.5	M 3	21	12	76	26	10	24	4	19	24	26	12	209
GN.81591	GN 817.7-12-15-A-BS0,4	12	M 20 x 1.5	M 3	21	15	76	34	10	24	4	19	30	26	12	250

GN 817.7-E-OP

Code	Description	d1											Spring force F# [N]	Spring force F* [N]	⚖	
		Plunger -0.02 -0.05 Hole H7	d2	d3	d4	l1	l2	l3	l4	l5	l6 min	sw1				sw2
GN.81523	GN 817.7-6-9-E-OP	6	M 12 x 1.5	M 3	21	9	73	22	10	24	4	19	18	12	26	177
GN.81553	GN 817.7-8-12-E-OP	8	M 16 x 1.5	M 3	21	12	73	26	10	24	4	19	24	12	26	203
GN.81583	GN 817.7-10-12-E-OP	10	M 16 x 1.5	M 3	21	12	76	26	10	24	4	19	24	12	26	215
GN.81613	GN 817.7-12-15-E-OP	21	M 20 x 1.5	M 3	21	15	76	34	10	24	4	19	30	12	26	246

GN 817.7-E-BS0,4

Code	Description	d1											Spring force F# [N]	Spring force F* [N]	⚖	
		Plunger -0.02 -0.05 Hole H7	d2	d3	d4	l1	l2	l3	l4	l5	l6 min	sw1				sw2
GN.81521	GN 817.7-6-9-E-BS0,4	6	M 12 x 1.5	M 3	21	9	73	22	10	24	4	19	18	12	26	179
GN.81551	GN 817.7-8-12-E-BS0,4	8	M 16 x 1.5	M 3	21	12	73	26	10	24	4	19	24	12	26	205
GN.81581	GN 817.7-10-12-E-BS0,4	10	M 16 x 1.5	M 3	21	12	76	26	10	24	4	19	24	12	26	217
GN.81611	GN 817.7-12-15-E-BS0,4	12	M 20 x 1.5	M 3	21	15	76	34	10	24	4	19	30	12	26	248

When protruding
* When retracting



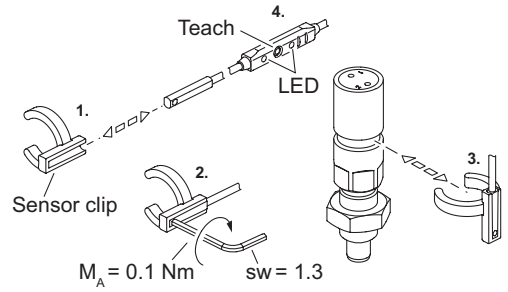
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- 18

ASSEMBLY INSTRUCTIONS

The radial position of the sensor cable can be freely determined when installing 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 and then adjust the position by turning, if necessary.
4. During commissioning, teach the sensor to the end positions via the operating element or IO-Link in accordance with the operating instructions supplied with the sensor.



Pneumatic Properties	
Operating pressure	4 - 6 bar
Operating medium	Filtered, dried air, unoled or oiled
Temperature range	-20 °C ... +80 °C

Electrical properties of the sensor		
Output function	2x normally open (NO)	
Output type	2x PNP	
Supply voltage	12 - 30 V DC	
Continuous current I _a	≤ 100 mA	
Connection type	4-pole connector M8x1, Plug (S)	
Protection type	IP 67	-
Power consumption	≤ 15 mA	-
Voltage drop	≤ 2.2 V	-
Protection class	III	-
Temperature range	-20 °C ... +75 °C	-
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm	-
EMV	According to EN 60947-5-2	-
Reverse polarity protection	Yes	-
Short-circuit protection	Yes	-
Activation impulse suppression	Yes	-
Communication interface	IO-Link (V1.0)	-
	Cycle time 2.3 ms	-
	Process data length 2 bits	-
	Process data structure:	-
	Bit 0 = Switching signal Q1	-
	Bit 1 = Switching signal Q2	-
Bit 2...7 = Empty	-	-
Approvals, conformity declarations		

Indexing and positioning elements