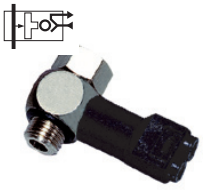
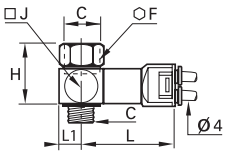
Pneumatic Sensor Fittings

7818 Pneumatic Sensor Fitting, Male BSPP and Metric Thread



Technical polymer, zamak, brass, NBR



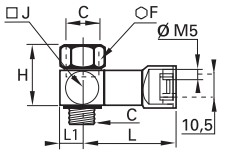
ØD	C		F	H	J	L	L1	kg
4	M5x0.8	7818 04 19*	8	16	11	43.5	5.5	0.025
	G1/8	7818 04 10	14	23	16	44.5	8	0.043
	G1/4	7818 04 13	17	28	19.5	46.5	10	0.061
	G3/8	7818 04 17	22	29	23.5	49	12	0.083
	G1/2	7818 04 21	27	30	31.5	52.5	16	0.125

* Bolt zinc passivated steel

7818 Pneumatic Sensor, Male/Female BSPP Thread



Technical polymer, zamak, brass, NBR

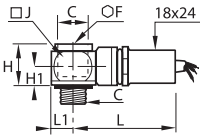


C		F	H	J	L	L1	kg
G1/8	7818 19 10	14	23	16	40.5	8	0.047
G1/4	7818 19 13	17	28	19.5	42.5	10	0.065

7828 Pneumatic/Electric Sensor, Male/Female BSPP and Metric Thread

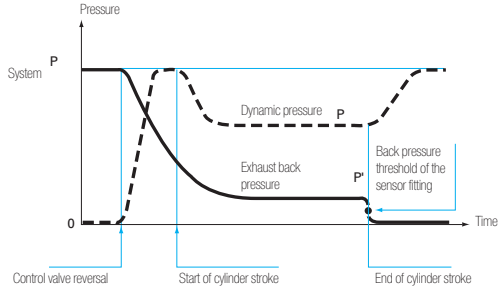


Technical polymer, brass, NBR



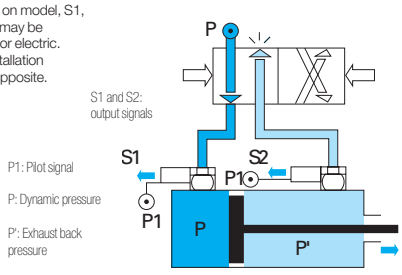
C		F	H	H1	J	L	L1	kg
M5x0.8	7828 00 19	8	20	10	11	49	5.5	0.120
G1/8	7828 00 10	6	20	10	16	52	8	0.131
G1/4	7828 00 13	8	20	10	21	54	10.5	0.145
G3/8	7828 00 17	10	22	12	28	57	14	0.182
G1/2	7828 00 21	12	26	14	33	58	16.5	0.206

Cylinder Pressure Cycle



Installation Diagram

Depending on model, S1, S2 and P1 may be pneumatic or electric. See the installation diagrams opposite.



Pneumatic Sensor Fittings

The sensor detects the pressure drop when a cylinder reaches the end of its stroke. They produce a **pneumatic or electric output signal** when the pressure drop in the exhaust chamber of the cylinder goes below their back pressure threshold.

Product Advantages

Easy-to-Use

Suited to changes of series: no adjustment to position detectors is necessary

With Pneumatic Output

Totally pneumatic installation

2 possible installations:

- Supplied with permanent pressure (P1): produces a pneumatic signal when the back pressure threshold is reached
- Supplied from the control valve-cylinder circuit on the opposite side: no unexpected pneumatic signal (S) can appear during pressurisation due to the actuating pressure which supplies the sensor fitting (P1)



With Electrical Output

Combined electrical and pneumatic installation

Installation with continuous electrical supply only (BU)

Guarantees an electrical signal when the back pressure threshold is reached

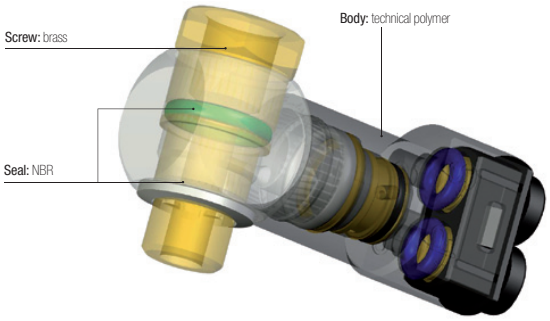
Applications

Robotics
Textile
Semi-Conductors
Packaging
Pneumatics

Technical Characteristics

Compatible Fluids	Compressed air
Working Pressure	3 to 8 bar
Working Temperature	-15°C to +60°C
Back Pressure	0.85 to 1 bar
Switching Time	Model 7818: 3 ms
Open/Closed Contact	Model 7828: 2A / 0-48 V 2A / 250 V 50 Hz

Component Materials



Silicone-free

Regulations

DI: 2002/95/EC (RoHS)
RG: 1907/2006 (REACH)
DI: 97/23/EC (PED)

Operation

Pneumatic Installation Diagram



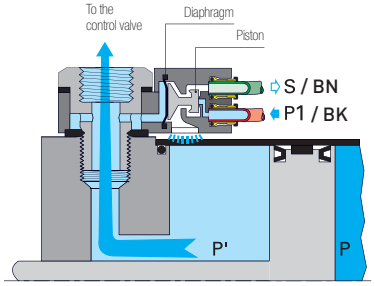
P': Exhaust back pressure
P: Dynamic pressure
P1: Sensor supply pressure
S: Output signal

Electrical Installation Diagram



Connection via 3 core 0.5 mm² cable, 2 meters long.
Contactor: 5A / 250 V ~ or 5W / 48V ⎓

Cylinder in Operation



Cylinder in Final Position

