

Blocking, pressure reducing & pneumatic sensor fittings

4 to 12 mm O/D metric tube
 1/8" to 1/2" BSPP



- Very compact units
- Easy tube insertion for rapid assembly of pneumatic circuits
- Positive tube anchorage
- Simpler pneumatic systems

Technical data

Medium:
 Compressed air
 Operating pressure:
 Blocking fitting:
 Supply pressure 1 to 10 bar
 Pilot pressure – see table
 Pressure reducing fitting:
 Primary pressure 1 to 10 bar max.
 Secondary pressure 1 to 8 bar max.
 Pneumatic sensor fitting:
 Cylinder pressure (Pc) 10 bar max.
 Sensor supply pressure 3 to 10 bar
 Sensor switch pressure 0,6 bar typ.
 Ambient temperature:
 -20°C to +80°C
 Consult our Technical Service for use below +2°C.

Materials

Nickel plated brass or plastic body.
 Nickel plated brass collet.
 Plastic sealing washer.
 Nitrile and polyurethane elastomeric parts.
 Zinc plated brass banjo bolts.

Alternative models

Alternative range of NPTF are available. Consult our Technical Service for details.

Tube types

Nylon 11 or 12, polyurethane and other plasticised or unplasticised tubing which conforms to the tolerances specified in BS 5409, Part 1, 1976, light and normal duty, DIN 73378, DIN 74234, NFE 49-100.

Blocking fitting

O/D Tube	Male BSPP	Pilot pressure (bar)*	Model
4	1/8	2,5	102GA0418
6	1/8	2,5	102GA0618
6	1/4	2,5	102GA0628
8	1/4	2,5	102GA0828
8	3/8	3	102GA0838
10	3/8	3	102GA1038
12	1/2	2,5	102GA1248

Pressure reducing fitting

O/D Tube	Male BSPP	Model
4	1/8	102GB0418
6	1/4	102GB0628
8	1/4	102GB0828
8	3/8	102GB0838
10	3/8	102GB1038

Pneumatic sensor fitting

O/D Tube	Male BSPP	Model
4	1/8	102GD0418
4	1/4	102GD0428

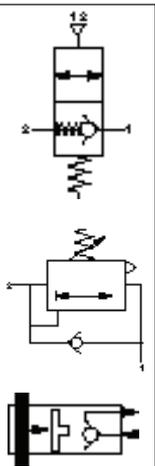
*at 6 bar supply

BLOCKING FITTING: Essentially a pilot operated check valve, a blocking fitting allows air flow in both directions if a pilot pressure is applied to port 12. When pressure to the pilot port is removed, flow occurs in one direction only, due to an integral non-return valve. When used in pairs, blocking fittings can control an actuator to give safe operation in the event of an electrical problem, air failure or tube breakage.

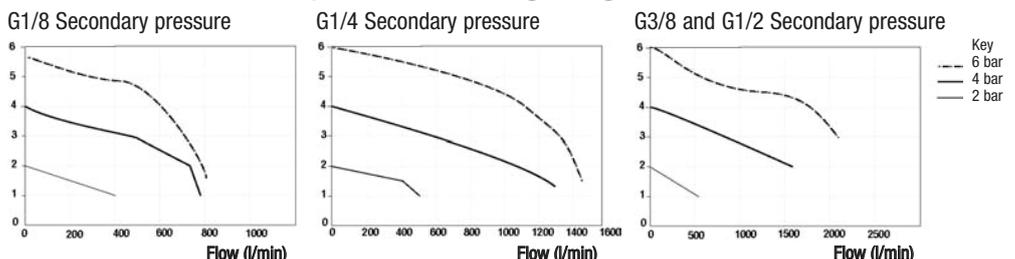
In order to provide a 'safe system', all possible conditions need to be considered in the event of an emergency.

PRESSURE REDUCING FITTING: It is often necessary to provide a secondary reduced pressure to an actuator to control its operating force. A pressure reducing fitting provides this function, which can be manually adjusted to the required pressure level. The relieving function gives a safety feature satisfying EN983 (Safety of Machinery) regarding protection under external loads. This states that a means shall be provided to prevent unacceptable pressure build-up where high external loads are reflected on actuators.

PNEUMATIC SENSOR FITTING: Used to provide an air signal when a cylinder has reached the end of travel, sensor fittings operate by detecting the drop in exhaust pressure at the end of a stroke. They effectively offer an all-pneumatic option to the electrical reed switch, and can be used in 1/8 and 1/4 BSP cylinder ports.



Flow characteristics for pressure reducing fitting



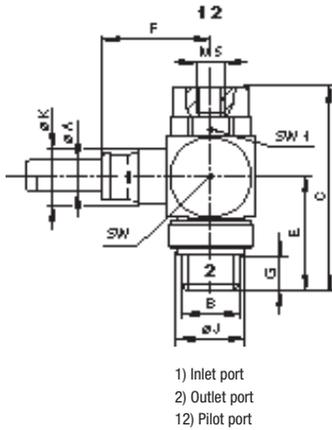


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4 to 12 mm O/D metric tube

1/8" to 1/2" BSPP

Pilot operated check valve (blocking fitting) - 102GA



Model	A O/D Tube	B BSPP Thread	C	E	F	G	J	K	SW	SW1
102GA0418	4	1/8	41,0	19,8	22,2	6,3	12,0	10	16	13
102GA0618	6	1/8	41,0	19,8	23,2	6,3	12,0	12,5	16	13
102GA0628	6	1/4	48,0	25,8	25,2	10,5	15,5	13	20	17
102GA0828	8	1/4	48,0	25,8	26,2	10,5	15,5	14	20	17
102GA0838	8	3/8	55,0	29,0	28,2	10,8	19,5	14	24	22
102GA1038	10	3/8	55,0	29,0	32,7	10,8	19,5	17	24	22
102GA1248	12	1/2	65,5	36,0	39,7	12,8	24	20,5	30	27

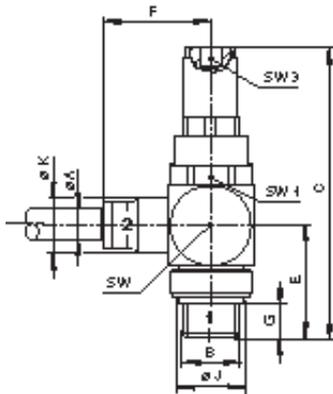
Note: For mounting in pairs on a cylinder

Pilot operated check valve (blocking fitting) - 102GA

Model	A Thread	B Thread	C	E	F	G	SW	SW1
102GA1818	1/8 BSPP	1/8	41,0	19,8	17,5	6,3	16	13
102GA1828	1/8 BSPP	1/4	48,0	25,8	17,5	10,5	20	17
102GA2828	1/4 BSPP	1/4	48,0	25,8	17,5	10,5	20	17
102GA3838	3/8 BSPP	3/8	55,0	29,0	17,5	10,8	24	22
102GA4848	1/2 BSPP	1/2	65,5	36,0	17,5	12,8	30	27

Note: For mounting in pairs on a cylinder

Pressure reducing fitting - 102GB



Model	A O/D Tube	B BSPP Thread	C	E	F	G	J	K	SW	SW1	SW3
102GB0418	4	1/8	73,0	19,8	22,5	6,5	12,0	10	16	17	5
102GB0628	6	1/4	81	25,8	25,2	10,5	15,5	13	20	17	5
102GB0828	8	1/4	81	25,8	26,2	10,5	15,5	14	20	17	5
102GB0838	8	3/8	88	29,0	28,2	10,8	19,5	14	24	22	6
102GB1038	10	3/8	88	29,0	32,7	10,8	19,5	17	24	22	6

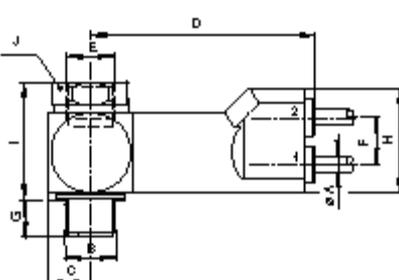
Note: For mounting in ports 2 & 4 of a control valve

Pressure reducing fitting - 102GB

Model	A Thread	B Thread	C	E	F	G	SW a/f	SW1 a/f	SW3 a/f
102GB1818	1/8 BSPP	1/8	73,0	19,8	17,5	6,3	16	17	5
102GB2828	1/4 BSPP	1/4	81,0	25,8	24,5	10,5	20	17	5
102GB3838	3/8 BSPP	3/8	88,0	29,0	27,0	10,8	24	22	6
102GB4848	1/2 BSPP	1/2	89,0	36,0	34,0	9,5	30	27	6

Note: For mounting in ports 2 & 4 of a control valve.

Pressure sensor fitting- 102GD



Model	A O/D Tube	B Thread	C	D	E Thread	F	G	H	I	J a/f
102GD0418	4	1/8	8,5	45,2	1/8	9,5	5,6	21,0	24,9	15
102GD0428	4	1/4	10,5	47,2	1/4	9,5	6,5	21,0	29,0	19

This sensor fitting produces an end of stroke signal when exhaust back pressure in a cylinder decays below a set value. It should be mounted directly on the cylinder and can be used with a flow control device mounted into the top port. It is recommended that the sensor supply pressure to port 1 be the same as the nominal working pressure of the cylinder.