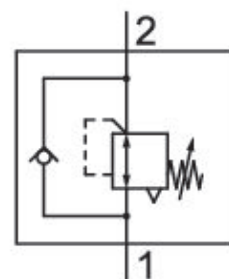


# Pressure regulator

0821302083

Screw-in pressure regulators

- Qn max. [[750] l/min]
- Width: [[11] mm] ... [[25] mm]
- Energy-saving valves for direct fitting on the cylinder



## Technical data

Industry  
Industrial

Type  
Poppet valve

Compressed air connection input  
G 1/8

Compressed air connection type input  
External thread

Compressed air connection output  
Ø 4

Compressed air connection type output  
push-in fitting

Working pressure min.  
1 bar

Working pressure max  
16 bar

Regulation range min.  
1 bar

Regulation range max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
70 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
70 °C

Medium  
Compressed air  
Qn 1 > 2  
400 l/min  
Weight  
0.075 kg  
Housing material  
Brass

Polyamide  
Surface housing  
galvanized  
Seal material  
Acrylonitrile butadiene rubber  
Part No.  
0821302083

### Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

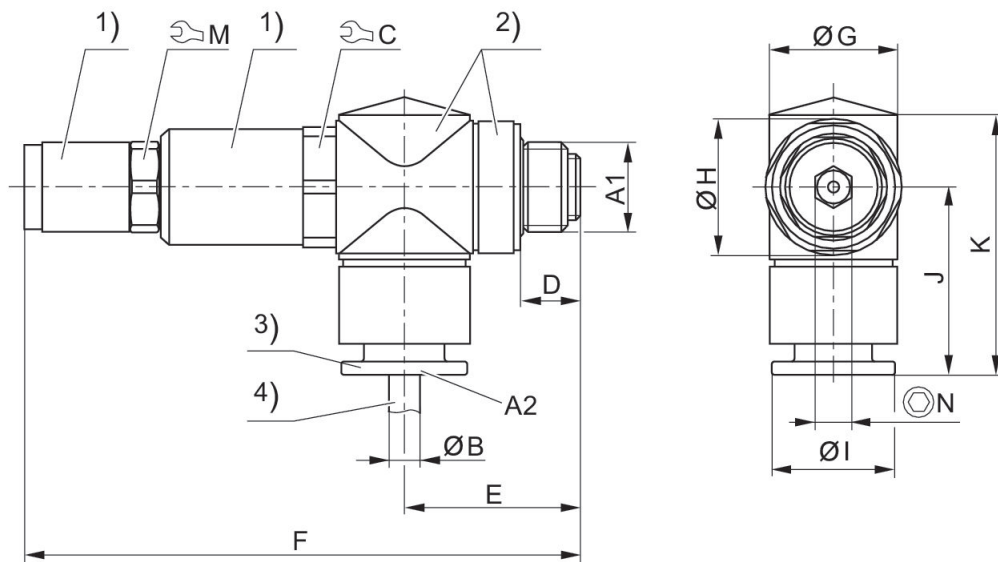
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in <https://www.emerson.com/en-us/support>).

Fig. 1



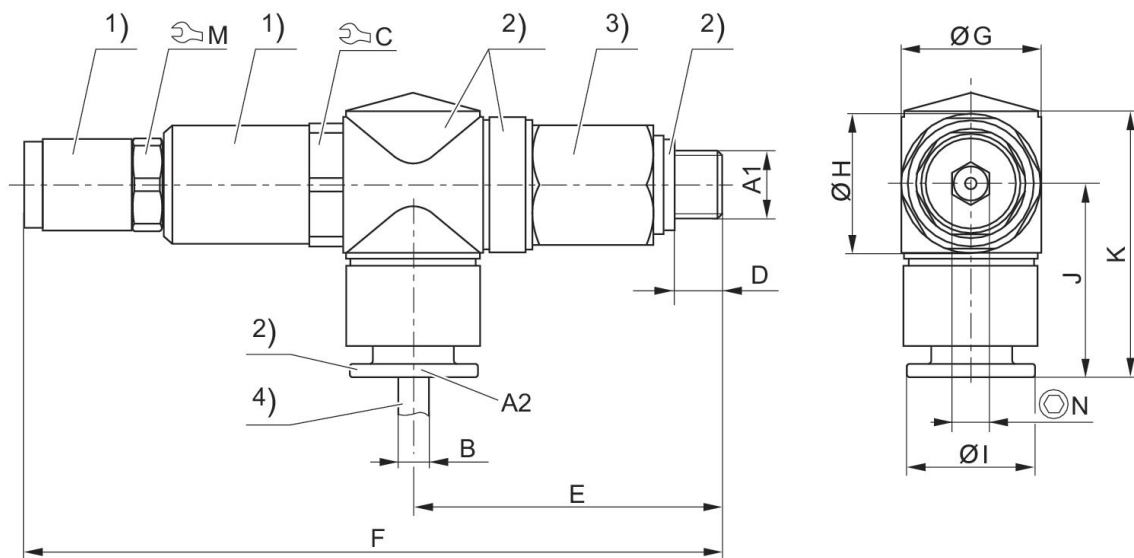
1) galvanized brass 2) polyamide 3) polyamide 4) tubing  
A1 = input A2 = output

Part No.	A1	A2	C	D	E	F	G	H	I
0821302083	G 1/8	4	17	6.3	19.8	70.8	11	15	9,4

Part No.	A1	A2	C	D	E	F	G	H	I
0821302084	G 1/8	6	17	6.3	19.8	70.8	13	15	11,4
0821302085	G 1/8	8	17	6.3	19.8	70.8	14	15	13,8
0821302088	G 1/4	6	17	9.5	25.8	78.8	13	19	11,4
0821302089	G 1/4	8	17	9.5	25.8	78.8	18	19	13,8
0821302090	G 1/4	10	17	9.5	25.8	78.8	18	19	16,4

Part No.	J	K	M	N
0821302083	22,3	32	13	5
0821302084	25	35	13	5
0821302085	26.4	36.5	13	5
0821302088	26.8	38.9	13	5
0821302089	28.2	41	13	5
0821302090	28.9	41.7	13	5

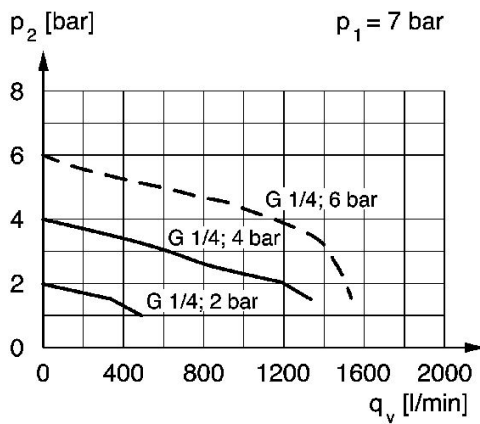
Fig. 2



1) galvanized brass 2) polyamide 3) galvanized brass 4) tubing  
A1 = input A2 = output

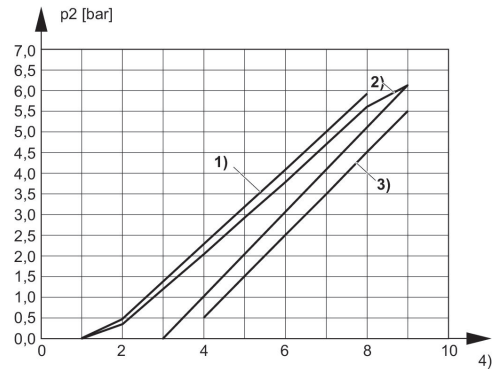
Part No.	A1	A2	C	D	E	F	M	I	J
0821302086	G 1/8	6	17	6.5	42.3	95.3	13	11.4	27
0821302087	G 1/8	8	17	6.2	42.3	95.3	13	13.8	28.2

Part No.	K
0821302086	39
0821302087	41



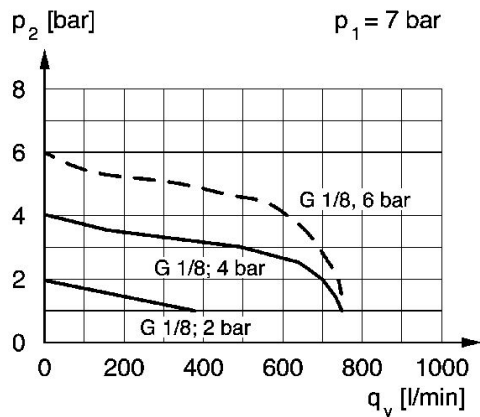
$p_1$  = working pressure,  $p_2$  = secondary pressure,  $q_v$  = nominal flow

## Hysteresis

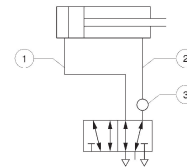


- 1) Overfill hysteresis
- 2) Control hysteresis
- 3) Refill hysteresis
- 4) Adjustment screw rotations

## Pressure characteristics curve (flow rate from 1 to 2)



## Application example



- 1) e.g. forward stroke with max. pressure
  - 2) return stroke with reduced pressure
  - 3) installation point on directional control valve
- At low tightening torque, the sealing ring enables the banjo union to swivel through 360°. Further tightening locks the banjo union into position. Adjust pressure via adjustment screw with hexagon socket. Lock using counter nuts.