

Series SR1



AVENTICS™

**AVENTICS Series SR1, Screw-in
pressure regulators**


EMERSON™

screw-pressure control valve



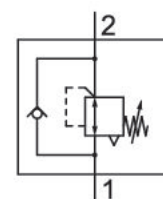
Product overview

Pressure regulator

	Page
Screw-in pressure regulators..... Internal thread	4
Screw-in pressure regulators..... Push-in fitting	8
Screw-in pressure regulators..... plug-in with tube nut	12

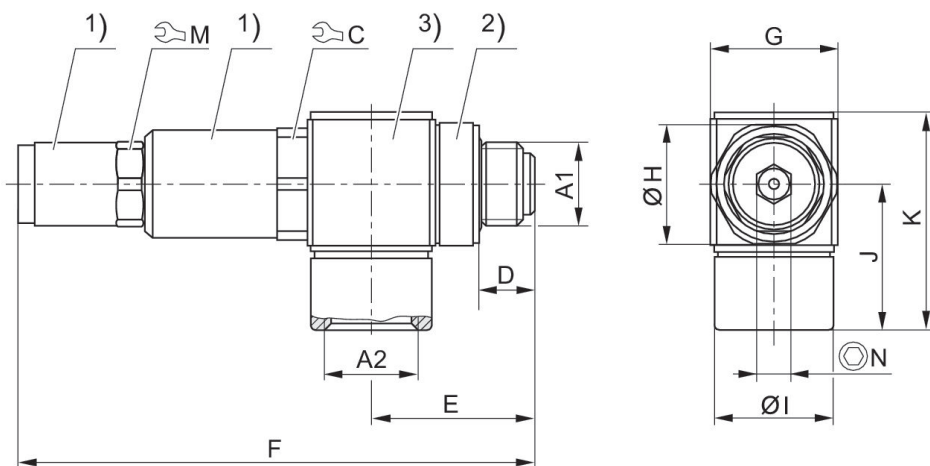
Screw-in pressure regulators

Ambient temperature min./max.: -10 °C ... 70 °C
 Medium temperature min./max.: -10 °C ... 70 °C
 Working pressure min./max.: 1 bar ... 16 bar



Compressed air connection output	Min. regulation range [bar]	Max. regulation range [bar]	Flow Qn [l/min]	Fig.	Part No.
G 1/8	1	8	400	Fig. 1	0821302078
G 1/4	1	8	400	Fig. 2	0821302079
G 1/4	1	8	600	Fig. 1	0821302080
G 3/8	1	8	750	Fig. 1	0821302081
G 1/2	1	8	750	Fig. 1	0821302082

Fig. 1

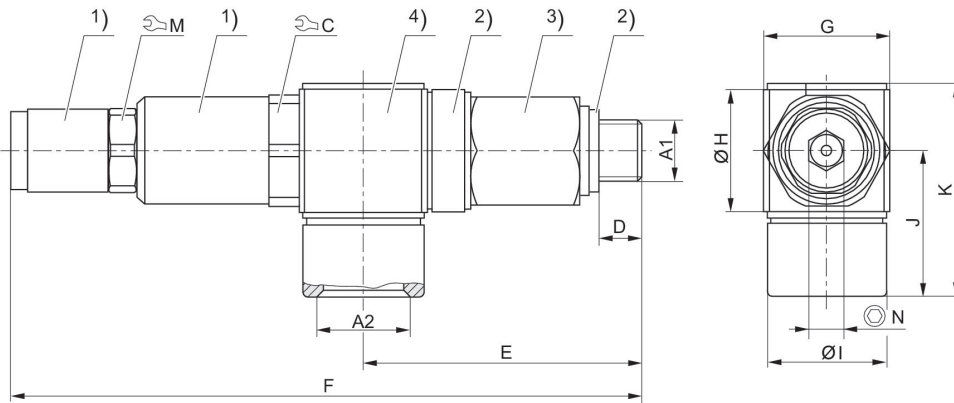


1) galvanized brass 2) polyamide 3) anodized black aluminum
A1 = input A2 = output

Part No.	A1	A2	C	D	E	F	G	H	I
0821302078	G 1/8	G 1/8	17	6.3	19.8	70.8	15	15	13
0821302080	G 1/4	G 1/4	17	9.5	25.8	78.8	19	19	18
0821302081	G 3/8	G 3/8	22	9.5	29	85.2	23	23	23
0821302082	G 1/2	G 1/2	27	11.5	34	86.2	28	28	25

Part No.	J	K	M	N
0821302078	18.5	26.7	13	5
0821302080	22.5	32.9	13	5
0821302081	28.5	41	17	6
0821302082	31	46.3	17	6

Fig. 2

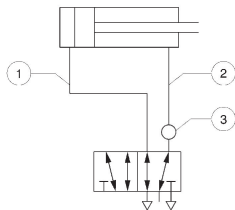


1) galvanized brass 2) polyamide 3) galvanized brass 4) anodized black aluminum
A1 = input A2 = output

Part No.	A1	A2	C	D	E	F	G	H	I
0821302079	G 1/8	G 1/4	17	6.5	42.3	95.3	19	19	18
tablefooter									

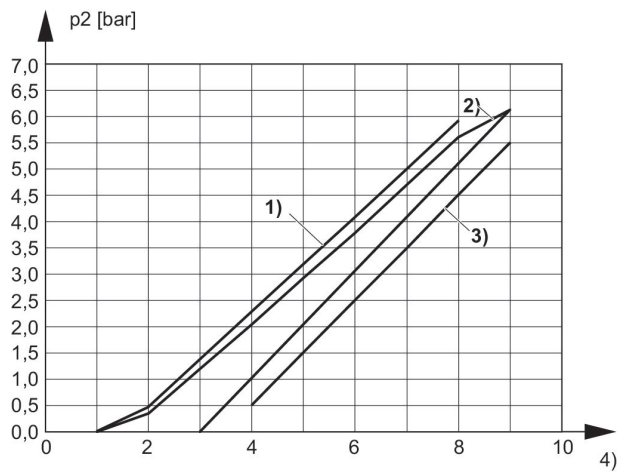
Part No.	J	K	M	N
0821302079	22.5	32.9	13	6
tablefooter				

Application example



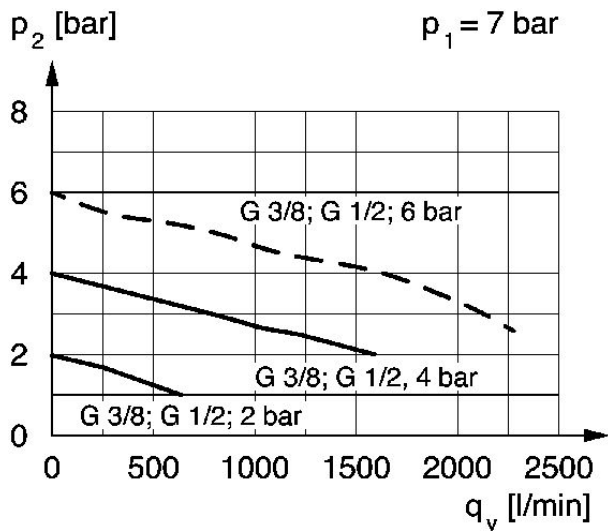
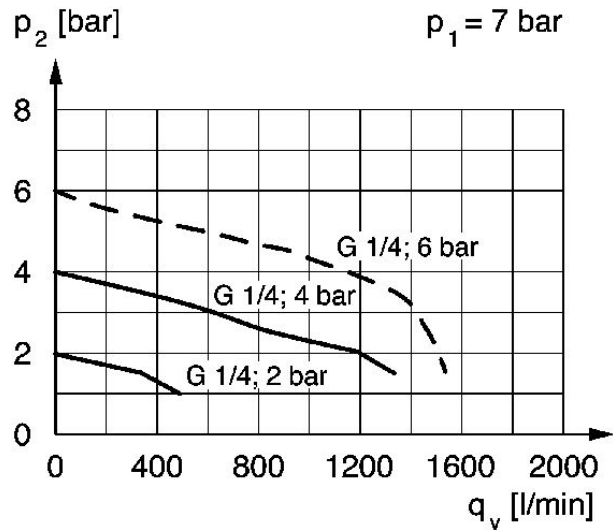
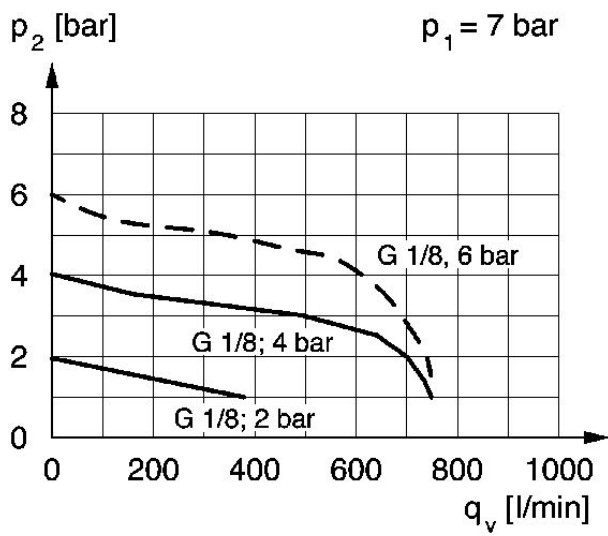
1) e.g. forward stroke with max. pressure 2) return stroke with reduced pressure 3) installation point on directional control valve
At low tightening torque, the sealing ring enables the banjo union to swivel through 360°. Further tightening locks the banjo union into position.
Adjust pressure via adjustment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

Hysteresis



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

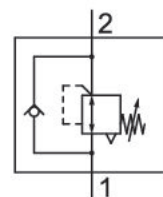
Pressure characteristics curve (flow rate from 1 to 2)



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

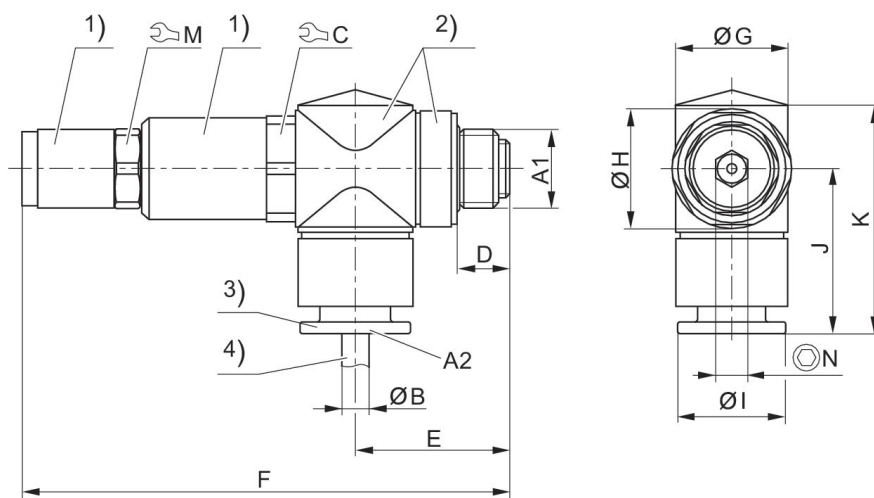
Screw-in pressure regulators

Ambient temperature min./max.: -10 °C ... 70 °C
 Medium temperature min./max.: -10 °C ... 70 °C
 Working pressure min./max.: 1 bar ... 16 bar



Compressed air connection output	Min. regulation range [bar]	Max. regulation range [bar]	Flow Qn [l/min]	Fig.	Part No.
Ø 4	1	8	400	Fig. 1	0821302083
Ø 6	1	8	400	Fig. 1	0821302084
Ø 6	1	8	600	Fig. 2	0821302086
Ø 8	1	8	400	Fig. 1	0821302085
Ø 8	1	8	600	Fig. 2	0821302087
Ø 6	1	8	600	Fig. 1	0821302088
Ø 8	1	8	600	Fig. 1	0821302089
Ø 10	1	8	600	Fig. 1	0821302090

Fig. 1

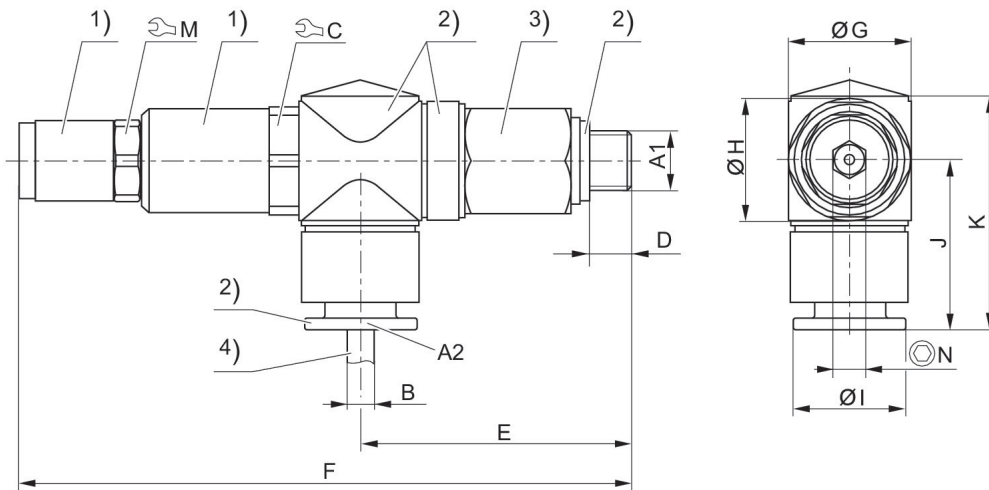


1) galvanized brass 2) polyamide 3) polyamide 4) tubing
A1 = input A2 = output

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
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

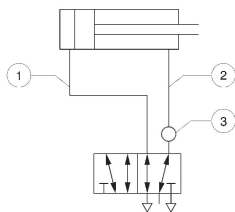


1) galvanized brass 2) polyamide 3) galvanized brass 4) tubing
A1 = input A2 = output

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

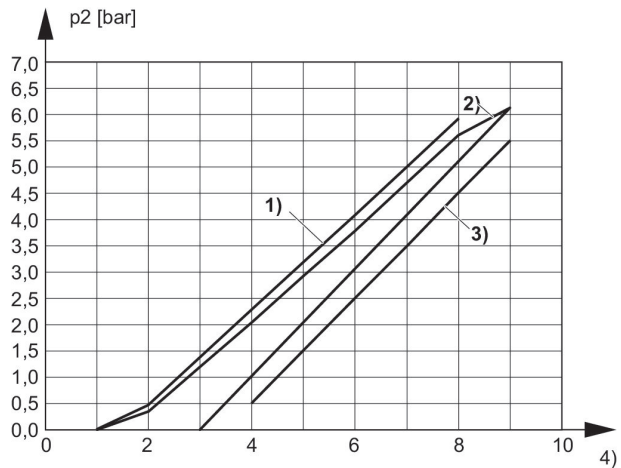
Part No.	K
0821302086	39
0821302087	41

Application example



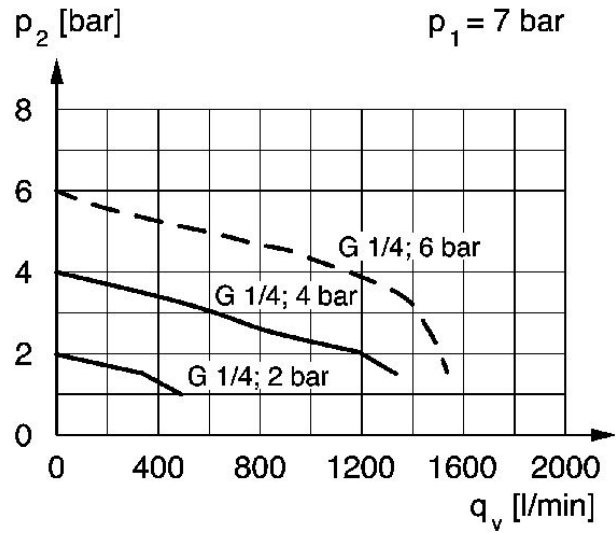
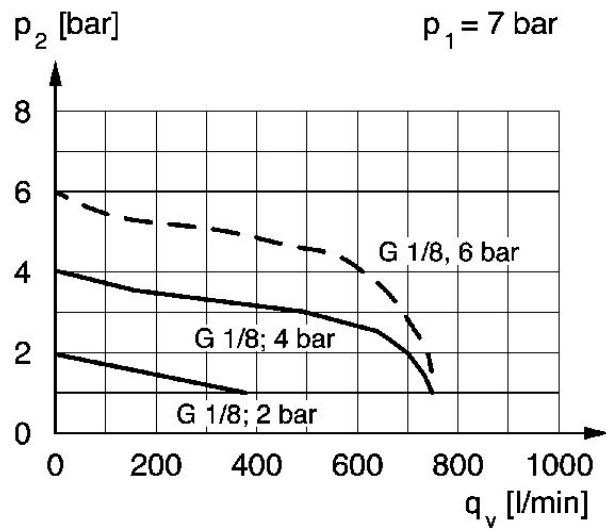
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At low tightening torque, the sealing ring enables the banjo union to swivel through 360°. Further tightening locks the banjo union into position.
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Hysteresis



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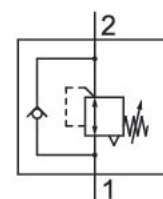
Pressure characteristics curve (flow rate from 1 to 2)



p1 = working pressure, p2 = secondary pressure, qv = nominal flow

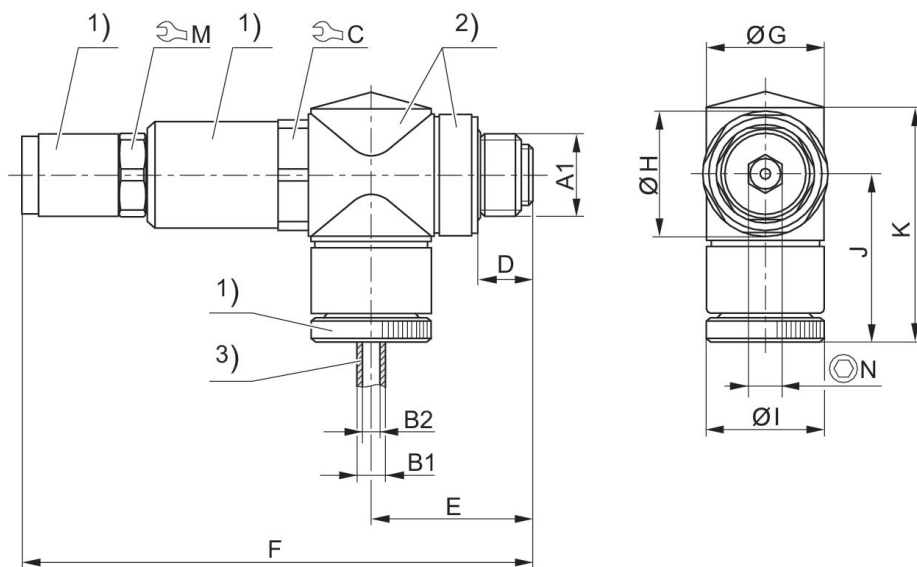
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 Working pressure min./max.: 1 bar ... 16 bar



Compressed air connection output	Min. regulation range [bar]	Max. regulation range [bar]	Flow Qn [l/min]	Fig.	Part No.
Ø 4	1	8	600	Fig. 1	0821302074
Ø 4	1	8	600	Fig. 2	0821302072

0821302074
0821302075

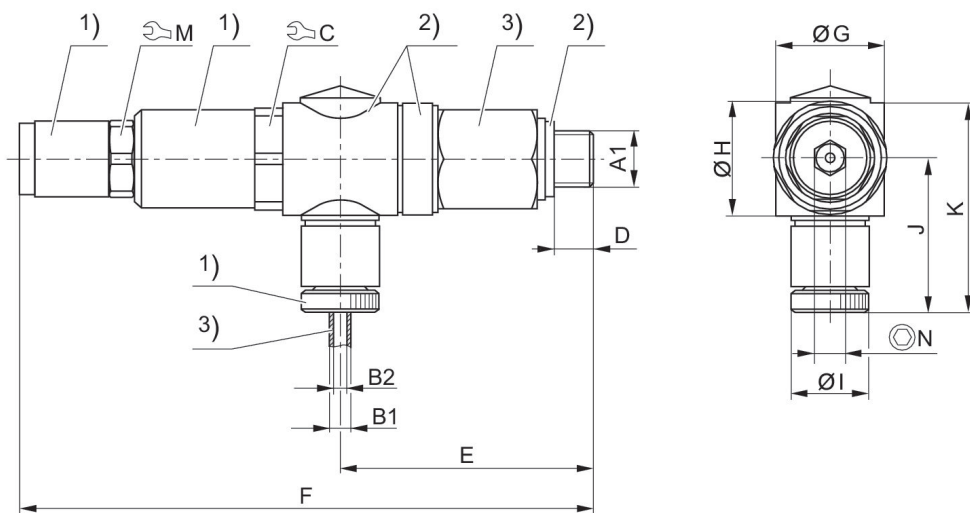


1) galvanized brass 2) polyamide 3) tubing
A1 = input B1 = output

Part No.	A1	B1	B2	C	D	E	F	G	H
0821302074	G 1/4	6	4	17	9.5	25.8	78.8	13	19

Part No.	I	J	K	M	N
0821302074	13	25.5	37.6	13	5

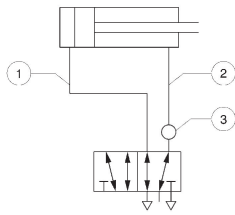
0821302072
0821302073



1) galvanized brass 2) polyamide 3) galvanized brass 4) hose
A1 = input B1 = output

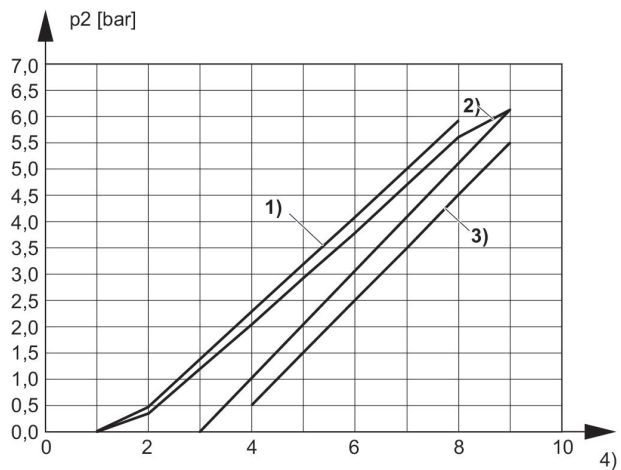
Part No.	A1	B1	B2	C	D	E	F	M
0821302072	G 1/8	6	4	17	6.5	42.3	95.3	13

Application example



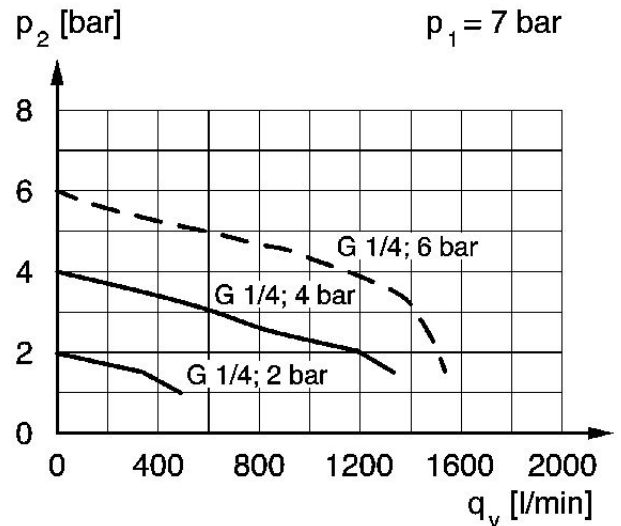
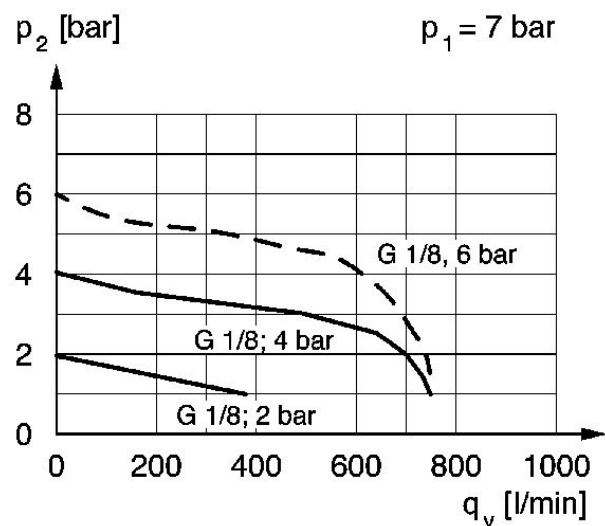
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Pressure characteristics curve (flow rate from 1 to 2)







p1 = working pressure, p2 = secondary pressure, qv = nominal flow

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air supply management, proportional pressure
control valves



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