

Filter pressure regulator, Series AS5-FRE

- G 3/4 G 1
- filter porosity 5 µm
- lockable
- for padlocks
- suitable for ATEX



Type	1-part, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Certificates	suitable for ATEX
Working pressure min./max.	1,5 ... 16 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Nominal flow Qn	14000 l/min
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	single
Filter reservoir volume	87 cm ³
Filter element	exchangeable
Max. Internal air consumption	1,5 l/min
Weight	See table below

Technical data

Part No.			Port	filter porosity	Flow	Adjustment range min./max.
					Qn	
R412009200			G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009201			G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009202			G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009206			G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009207			G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009208			G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009175		—	G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009176		—	G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009177		—	G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009193		—	G 3/4	5 µm	14000 l/min	0,5 ... 10 bar
R412009194		—	G 3/4	5 µm	14000 l/min	0,5 ... 10 bar
R412009195		—	G 3/4	5 µm	14000 l/min	0,5 ... 10 bar
R412009181		—	G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009182		—	G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009183		—	G 3/4	5 µm	14000 l/min	0,5 ... 8 bar
R412009209			G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009210			G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009211			G 1	5 µm	14000 l/min	0,5 ... 8 bar

Part No.			Port	filter porosity	Flow	Adjustment range min./max.
					Qn	
R412009215			G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009216			G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009217			G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009184		—	G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009185		—	G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009186		—	G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009190		—	G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009191		—	G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009192		—	G 1	5 µm	14000 l/min	0,5 ... 8 bar
R412009196		—	G 1	5 µm	14000 l/min	0,5 ... 10 bar
R412009197		—	G 1	5 µm	14000 l/min	0,5 ... 10 bar
R412009198		—	G 1	5 µm	14000 l/min	0,5 ... 10 bar

Part No.	Condensate drain	Pressure gauge	Reservoir
R412009200	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
R412009201	fully automatic, open without pressure	with pressure gauge	Polycarbonate
R412009202	fully automatic, closed without pressure	with pressure gauge	Polycarbonate
R412009206	semi-automatic, open without pressure	with pressure gauge	Die cast zinc
R412009207	fully automatic, open without pressure	with pressure gauge	Die cast zinc
R412009208	fully automatic, closed without pressure	with pressure gauge	Die cast zinc
R412009175	semi-automatic, open without pressure	-	Polycarbonate
R412009176	fully automatic, open without pressure	-	Polycarbonate
R412009177	fully automatic, closed without pressure	-	Polycarbonate
R412009193	semi-automatic, open without pressure	-	Polycarbonate
R412009194	fully automatic, open without pressure	-	Polycarbonate
R412009195	fully automatic, closed without pressure	-	Polycarbonate
R412009181	semi-automatic, open without pressure	-	Die cast zinc
R412009182	fully automatic, open without pressure	-	Die cast zinc
R412009183	fully automatic, closed without pressure	-	Die cast zinc
R412009209	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
R412009210	fully automatic, open without pressure	with pressure gauge	Polycarbonate
R412009211	fully automatic, closed without pressure	with pressure gauge	Polycarbonate
R412009215	semi-automatic, open without pressure	with pressure gauge	Die cast zinc
R412009216	fully automatic, open without pressure	with pressure gauge	Die cast zinc
R412009217	fully automatic, closed without pressure	with pressure gauge	Die cast zinc
R412009184	semi-automatic, open without pressure	-	Polycarbonate
R412009185	fully automatic, open without pressure	-	Polycarbonate
R412009186	fully automatic, closed without pressure	-	Polycarbonate
R412009190	semi-automatic, open without pressure	-	Die cast zinc
R412009191	fully automatic, open without pressure	-	Die cast zinc
R412009192	fully automatic, closed without pressure	-	Die cast zinc
R412009196	semi-automatic, open without pressure	-	Polycarbonate
R412009197	fully automatic, open without pressure	-	Polycarbonate
R412009198	fully automatic, closed without pressure	-	Polycarbonate

Part No.	Protective guard	Weight	
R412009200	Polyamide	1,08 kg	1)

Part No.	Protective guard	Weight	
R412009201	Polyamide	1,13 kg	1)
R412009202	Polyamide	1,13 kg	1)
R412009206	-	1,57 kg	1)
R412009207	-	1,62 kg	1)
R412009208	-	1,62 kg	1)
R412009175	Polyamide	0,99 kg	2)
R412009176	Polyamide	1,04 kg	2)
R412009177	Polyamide	1,04 kg	2)
R412009193	Polyamide	0,99 kg	2)
R412009194	Polyamide	1,04 kg	2)
R412009195	Polyamide	1,04 kg	2)
R412009181	-	1,48 kg	2)
R412009182	-	1,53 kg	2)
R412009183	-	1,53 kg	2)
R412009209	Polyamide	1,08 kg	1)
R412009210	Polyamide	1,13 kg	1)
R412009211	Polyamide	1,13 kg	1)
R412009215	-	1,57 kg	1)
R412009216	-	1,62 kg	1)
R412009217	-	1,62 kg	1)
R412009184	Polyamide	0,99 kg	2)
R412009185	Polyamide	1,04 kg	2)
R412009186	Polyamide	1,04 kg	2)
R412009190	-	1,48 kg	2)
R412009191	-	1,53 kg	2)
R412009192	-	1,53 kg	2)
R412009196	Polyamide	0,99 kg	2)
R412009197	Polyamide	1,04 kg	2)
R412009198	Polyamide	1,04 kg	2)

Nominal flow Q_n with secondary pressure $p_2 = 6$ bar at $\Delta p = 1$ bar

- 1) Pressure gauge enclosed separately, Suitable for use in Ex zones 1, 2, 21, 22.
- 2) Order pressure gauge separately, Suitable for use in Ex zones 1, 2, 21, 22.

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Suitable for use in Ex zones 1, 2, 21, 22.

A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Also suitable for separation of fluid oil or water due to the design.

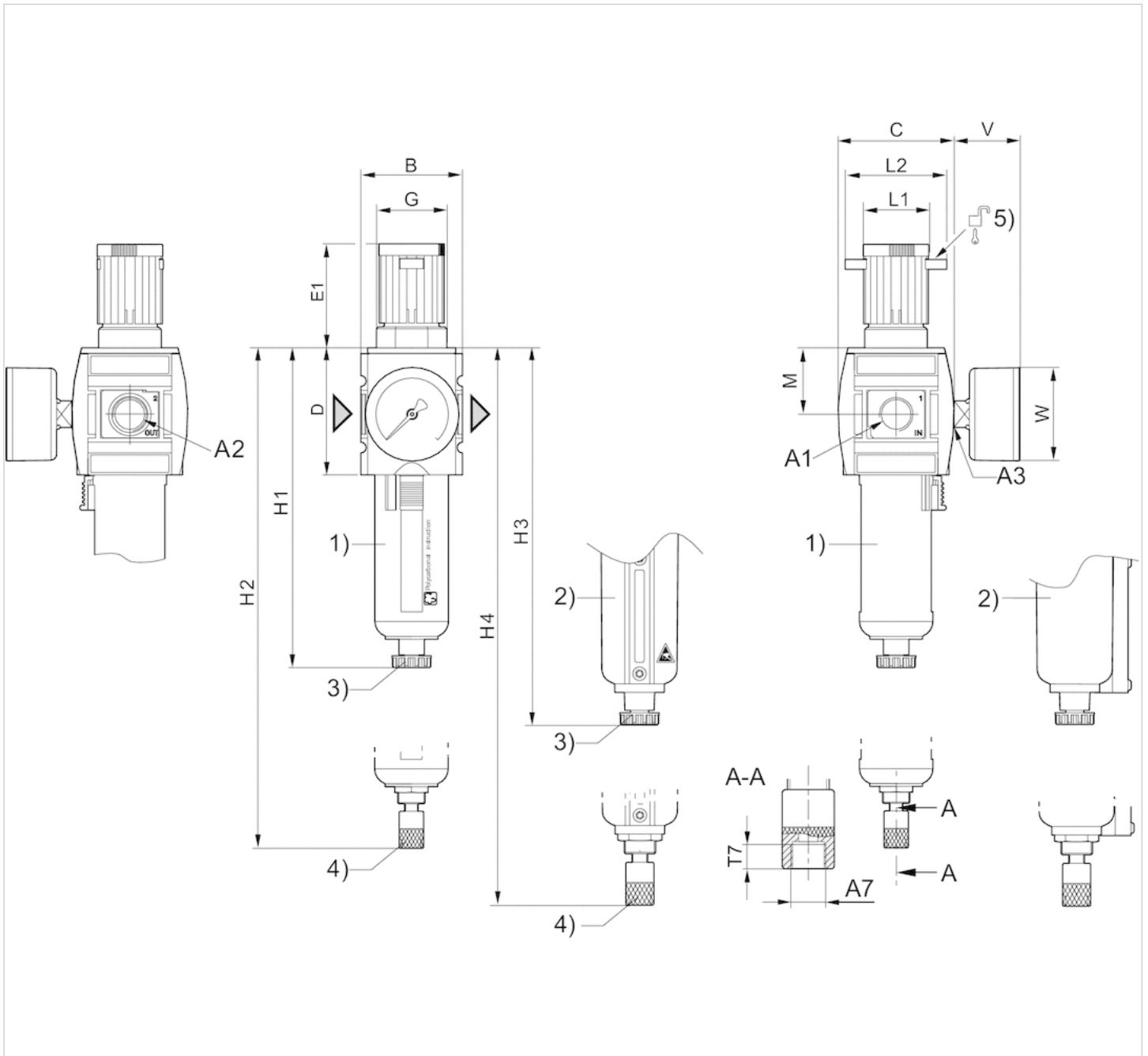
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Filter insert	Polyethylene

Dimensions

Dimensions



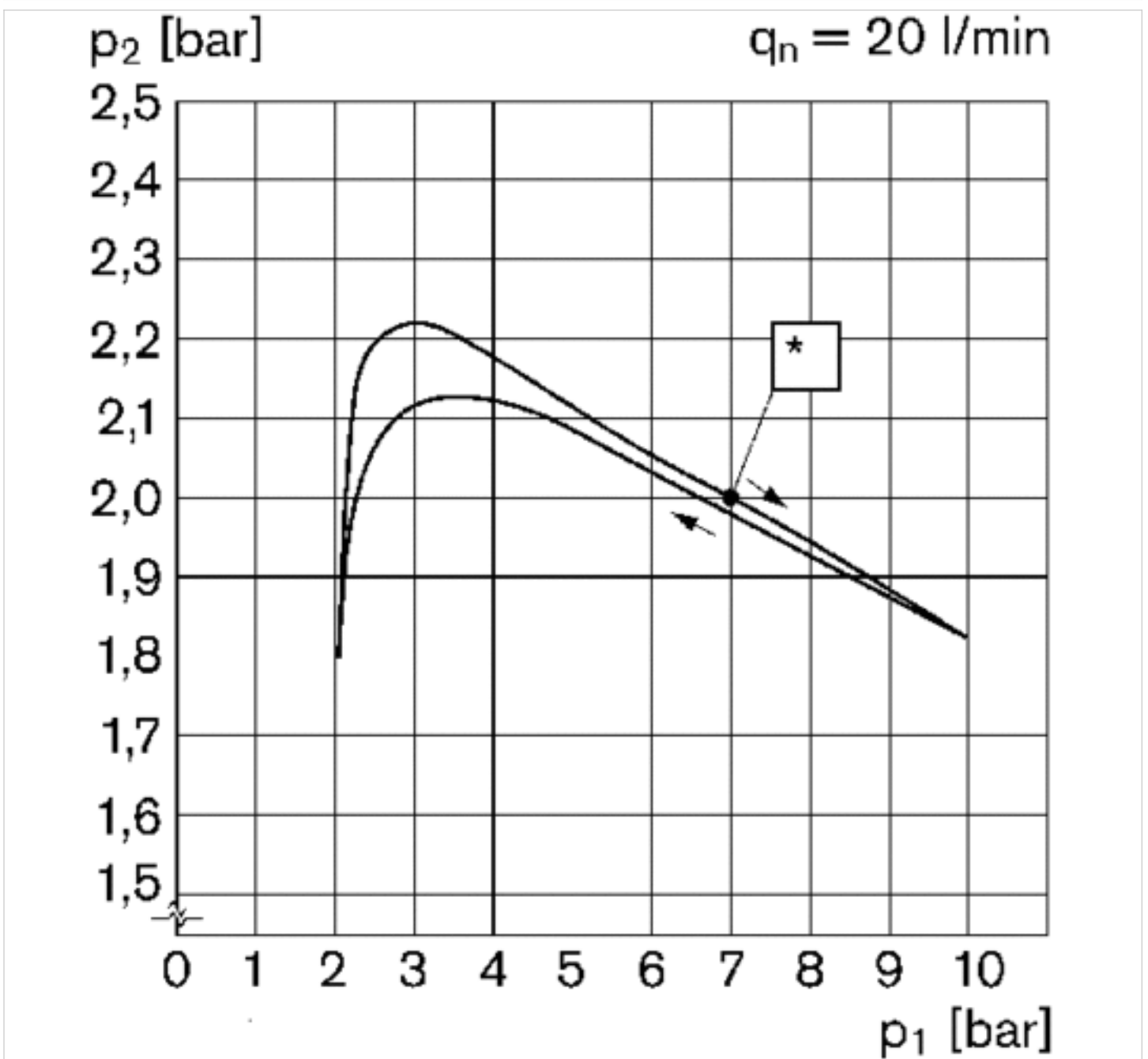
- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A7 = condensate drain
- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with level indicator
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain
- 5) Mounting option for padlocks, max. shackle Ø 8

Dimensions in mm

A1	A2	A3	A7	B	C	D	E1	G	H1	H2	H3	H4	L1	L2	M	T7	V	W
G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5	250	206	193.5	210.5	41	60	58	8.5	38	63
G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5	250	206	193.5	210.5	41	60	58	8.5	38	63

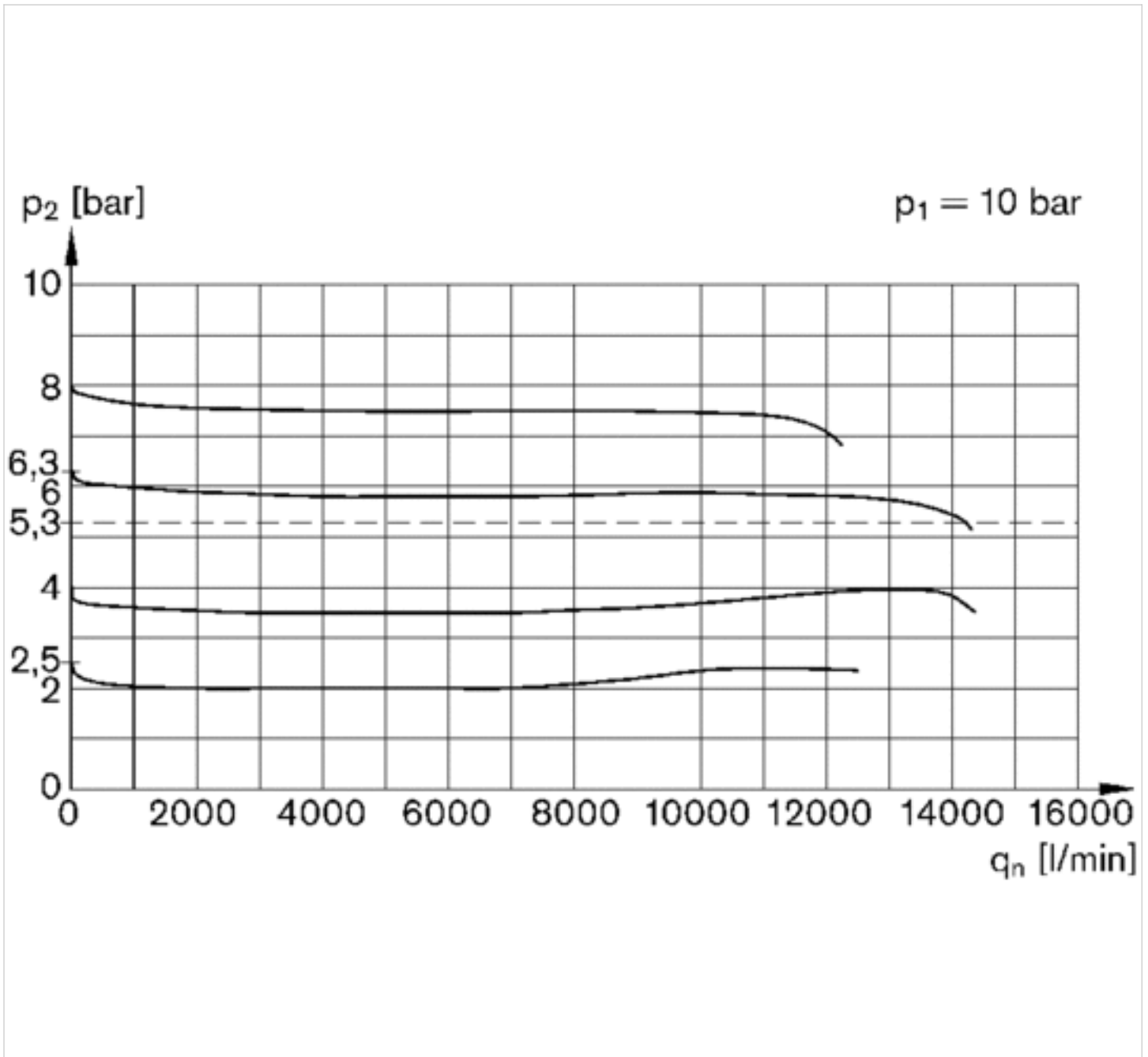
Diagrams

Pressure characteristics curve



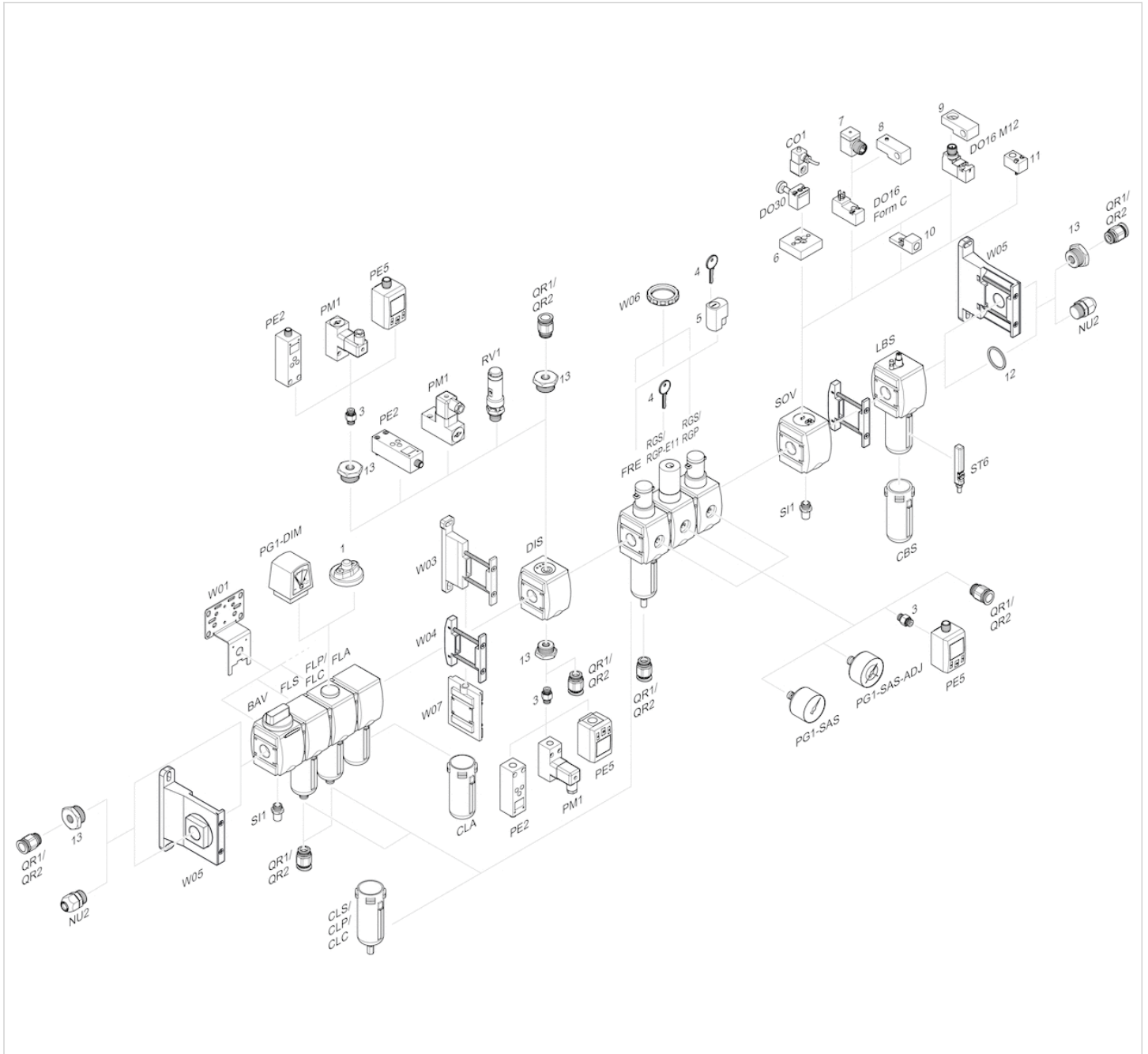
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 * starting point

Flow rate characteristic (setting range p2: 0.5 - 8 bar)



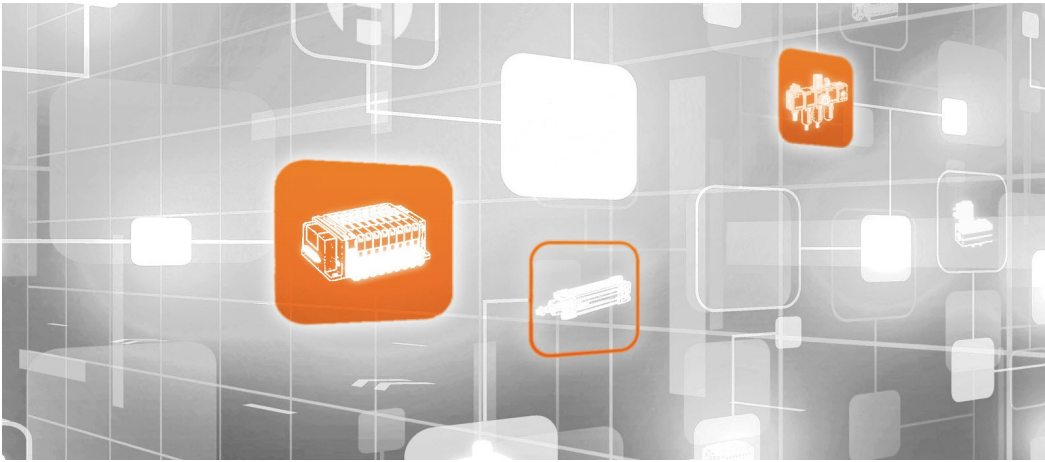
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring
- 13 = Reducing nipple

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2021-08



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