

Filter pressure regulator, Series AS1-FRE

- G 1/4
- Air supply left
- filter porosity 5 µm



Type	1-part, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Working pressure min./max.	1,5 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Nominal flow Qn	1000 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	16 cm³
Filter element	exchangeable
Weight	See table below

Technical data

Part No.			Port	filter porosity	Flow	Adjustment range min./max.
					Qn	
R412014645			G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014646			G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014647			G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014648			G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014649			G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014650			G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014651			G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014652		—	G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014653		—	G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014654		—	G 1/4	5 µm	1000 l/min	0,5 ... 8 bar
R412014655			G 1/4	5 µm	1000 l/min	0,5 ... 10 bar
R412014656			G 1/4	5 µm	1000 l/min	0,5 ... 10 bar
R412014657			G 1/4	5 µm	1000 l/min	0,5 ... 10 bar
R412014658			G 1/4	5 µm	1000 l/min	0,5 ... 10 bar
R412014659			G 1/4	5 µm	1000 l/min	0,5 ... 10 bar
R412014660			G 1/4	5 µm	1000 l/min	0,5 ... 10 bar
R412014661			G 1/4	5 µm	1000 l/min	0,5 ... 10 bar

Part No.	Condensate drain	Pressure gauge
R412014645	semi-automatic, open without pressure	With integrated pressure gauge
R412014646	fully automatic, open without pressure	With integrated pressure gauge
R412014647	fully automatic, closed without pressure	With integrated pressure gauge

Part No.	Condensate drain	Pressure gauge
R412014648	semi-automatic, open without pressure	With integrated pressure gauge
R412014649	semi-automatic, open without pressure	With integrated pressure gauge
R412014650	fully automatic, open without pressure	With integrated pressure gauge
R412014651	fully automatic, closed without pressure	With integrated pressure gauge
R412014652	semi-automatic, open without pressure	-
R412014653	fully automatic, open without pressure	-
R412014654	fully automatic, closed without pressure	-
R412014655	semi-automatic, open without pressure	With integrated pressure gauge
R412014656	fully automatic, open without pressure	With integrated pressure gauge
R412014657	fully automatic, closed without pressure	With integrated pressure gauge
R412014658	semi-automatic, open without pressure	With integrated pressure gauge
R412014659	semi-automatic, open without pressure	With integrated pressure gauge
R412014660	fully automatic, open without pressure	With integrated pressure gauge
R412014661	fully automatic, closed without pressure	With integrated pressure gauge

Part No.	Max. pressure gauge Ø in blocked state	Reservoir	Protective guard	Weight	Fig.	
R412014645	-	Polycarbonate	-	0,241 kg	Fig. 1	1)
R412014646	-	Polycarbonate	-	0,259 kg	Fig. 1	1)
R412014647	-	Polycarbonate	-	0,259 kg	Fig. 1	1)
R412014648	-	Polycarbonate	metal	0,274 kg	Fig. 1	1)
R412014649	-	Die cast zinc	-	0,318 kg	Fig. 1	1)
R412014650	-	Die cast zinc	-	0,33 kg	Fig. 1	1)
R412014651	-	Die cast zinc	-	0,33 kg	Fig. 1	1)
R412014652	40 mm	Polycarbonate	-	0,238 kg	Fig. 2	2)
R412014653	40 mm	Polycarbonate	-	0,256 kg	Fig. 2	2)
R412014654	40 mm	Polycarbonate	-	0,256 kg	Fig. 2	2)
R412014655	-	Polycarbonate	-	0,241 kg	Fig. 1	1)
R412014656	-	Polycarbonate	-	0,259 kg	Fig. 1	1)
R412014657	-	Polycarbonate	-	0,259 kg	Fig. 1	1)
R412014658	-	Polycarbonate	metal	0,274 kg	Fig. 1	1)
R412014659	-	Die cast zinc	-	0,318 kg	Fig. 1	1)
R412014660	-	Die cast zinc	-	0,33 kg	Fig. 1	1)
R412014661	-	Die cast zinc	-	0,33 kg	Fig. 1	1)

Nominal flow Q_n with secondary pressure p₂ = 6 bar at Δp = 1 bar

1) regulator with pressure gauge

2) Order pressure gauge separately

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".

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

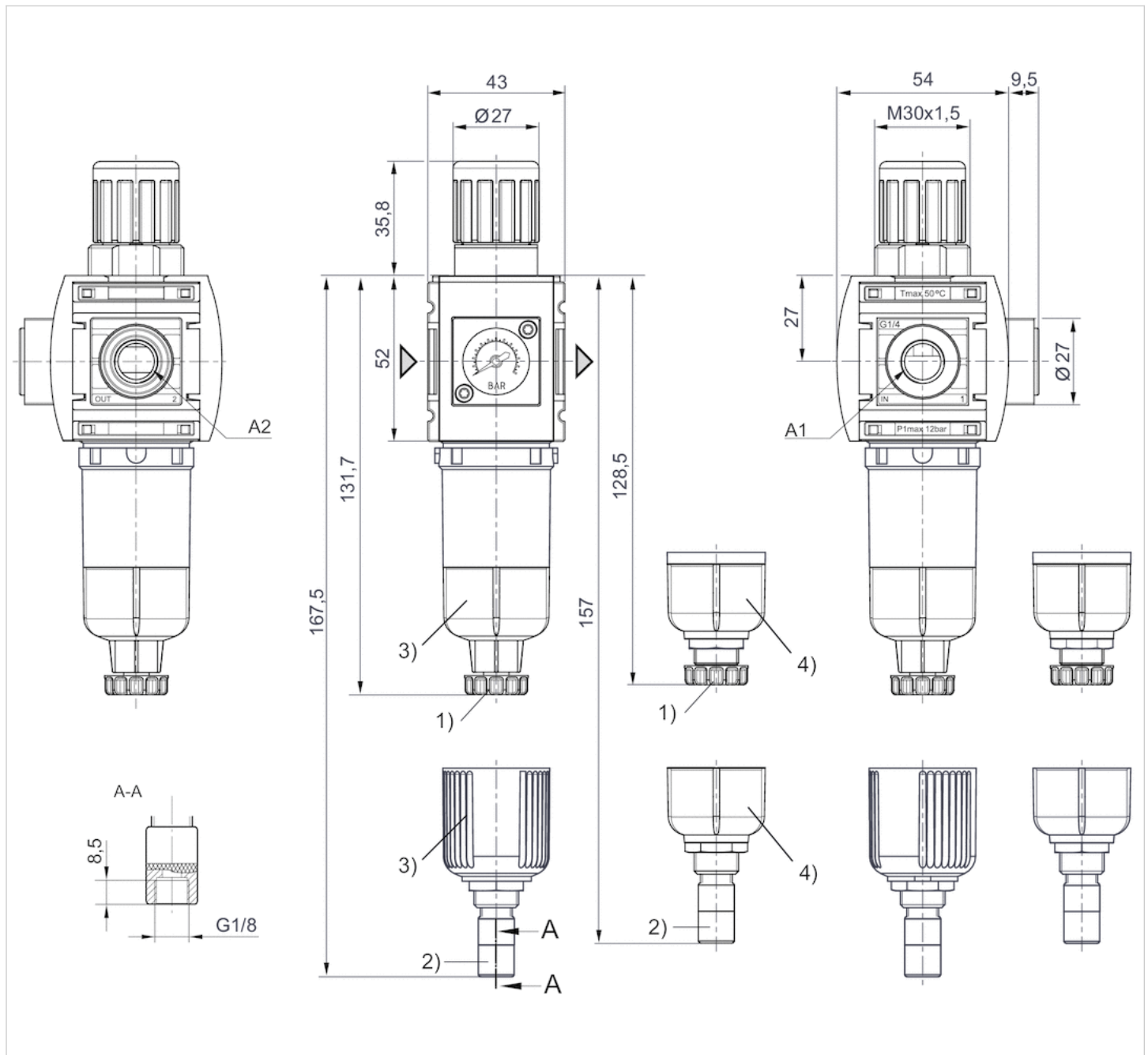
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

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	metal
Filter insert	Cellpor

Dimensions

Dimensions, Fig. 1



A1 = input

A2 = output

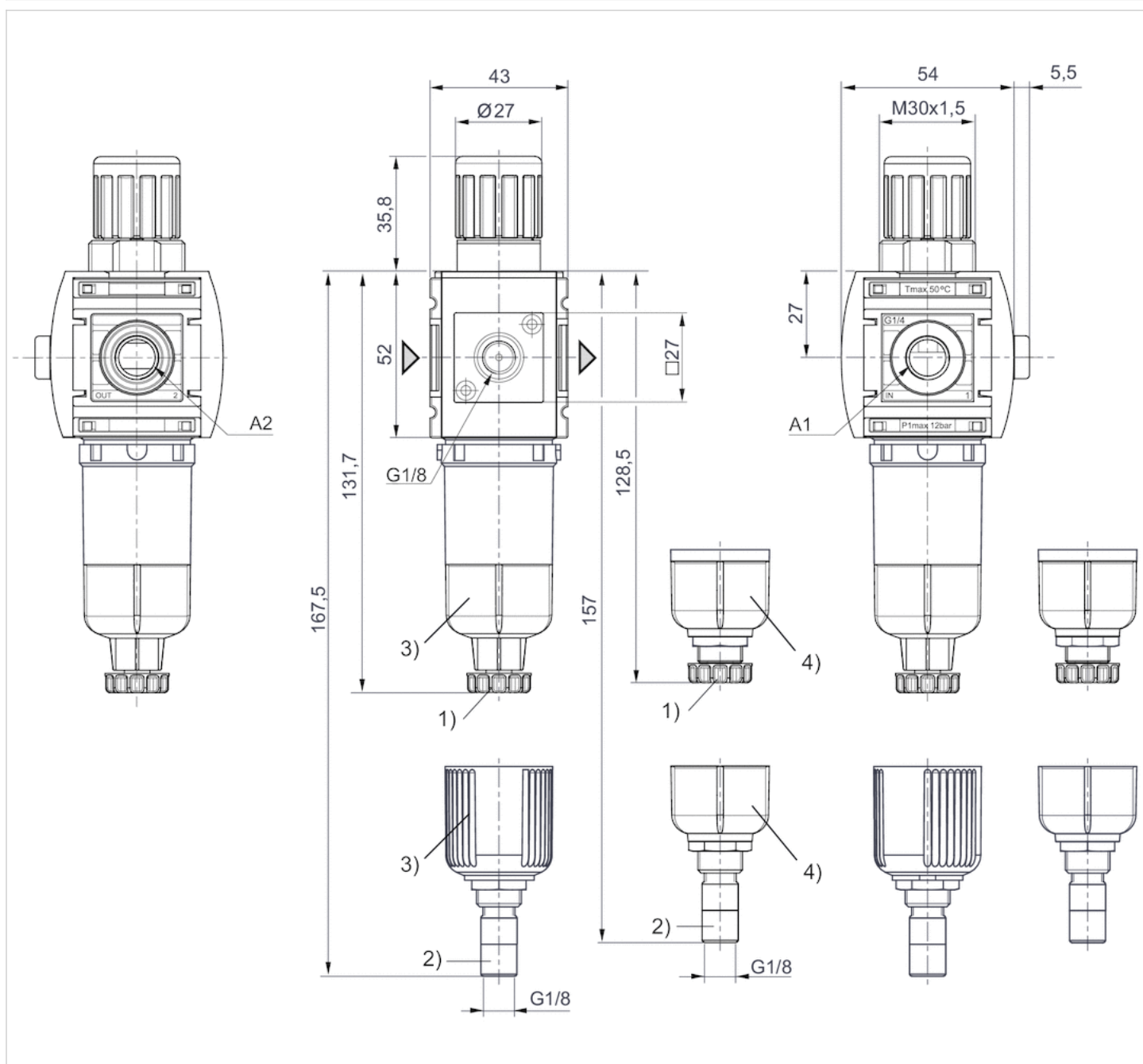
1) Semi-automatic condensate drain

2) Fully automatic condensate drain

3) Reservoir: polycarbonate

4) Reservoir: metal

Dimensions, Fig. 2



A1 = input

1) $A_2 = \text{output}$

2) Semi-automatic condensate drain

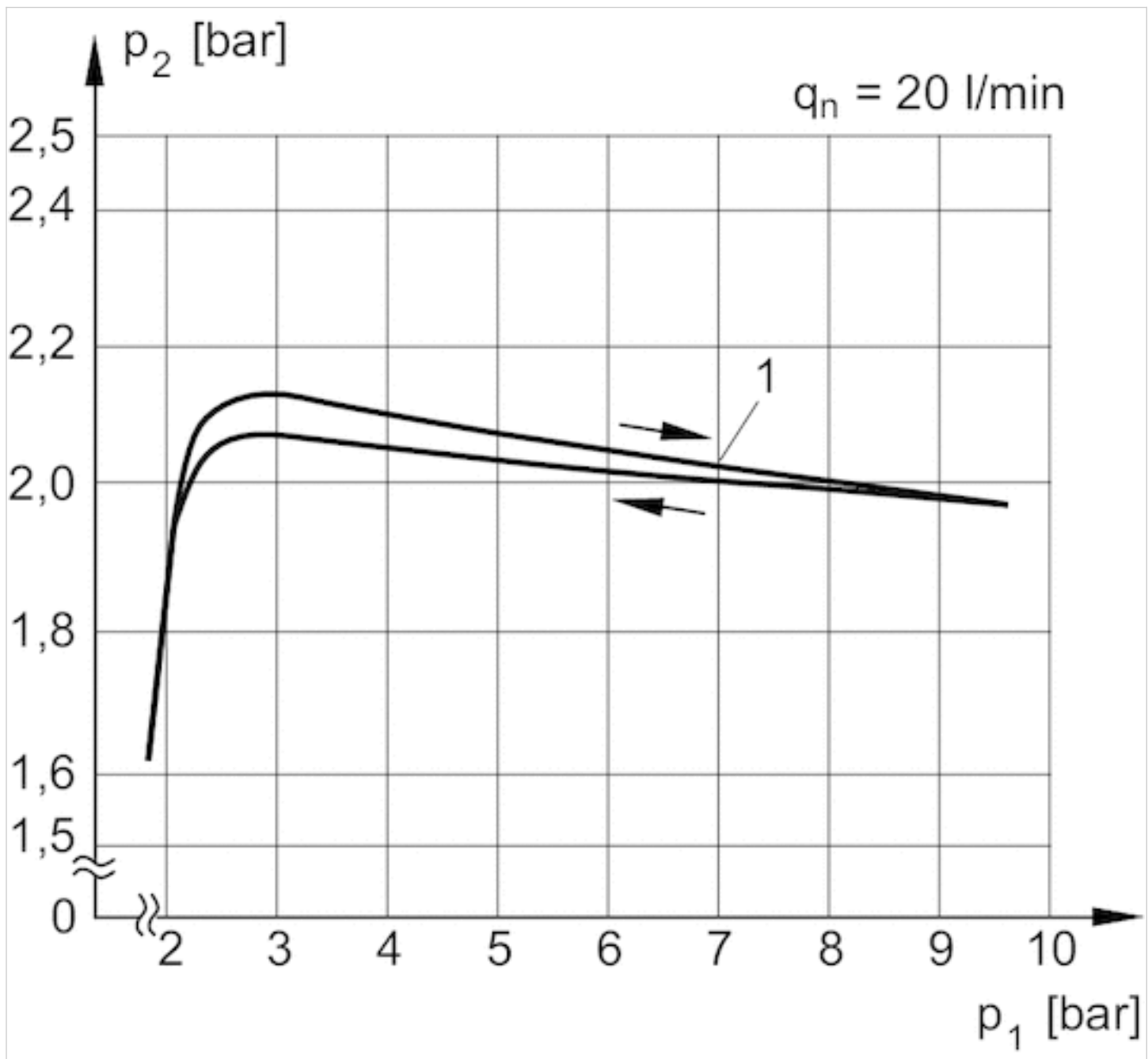
3) Fully automatic condensate drain

4) Reservoir: polycarbonate

Reservoir: metal

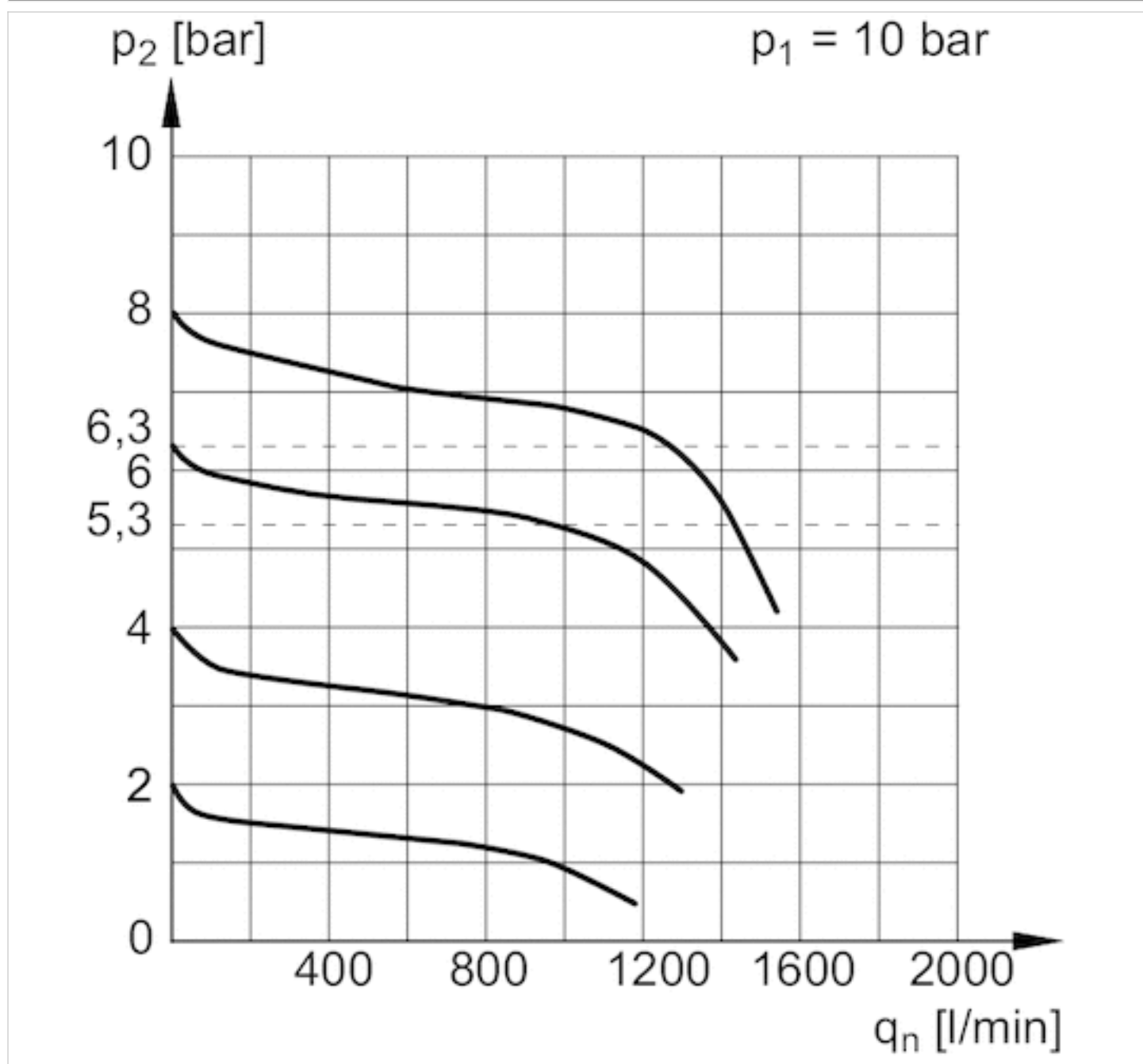
Diagrams

Pressure characteristics curve



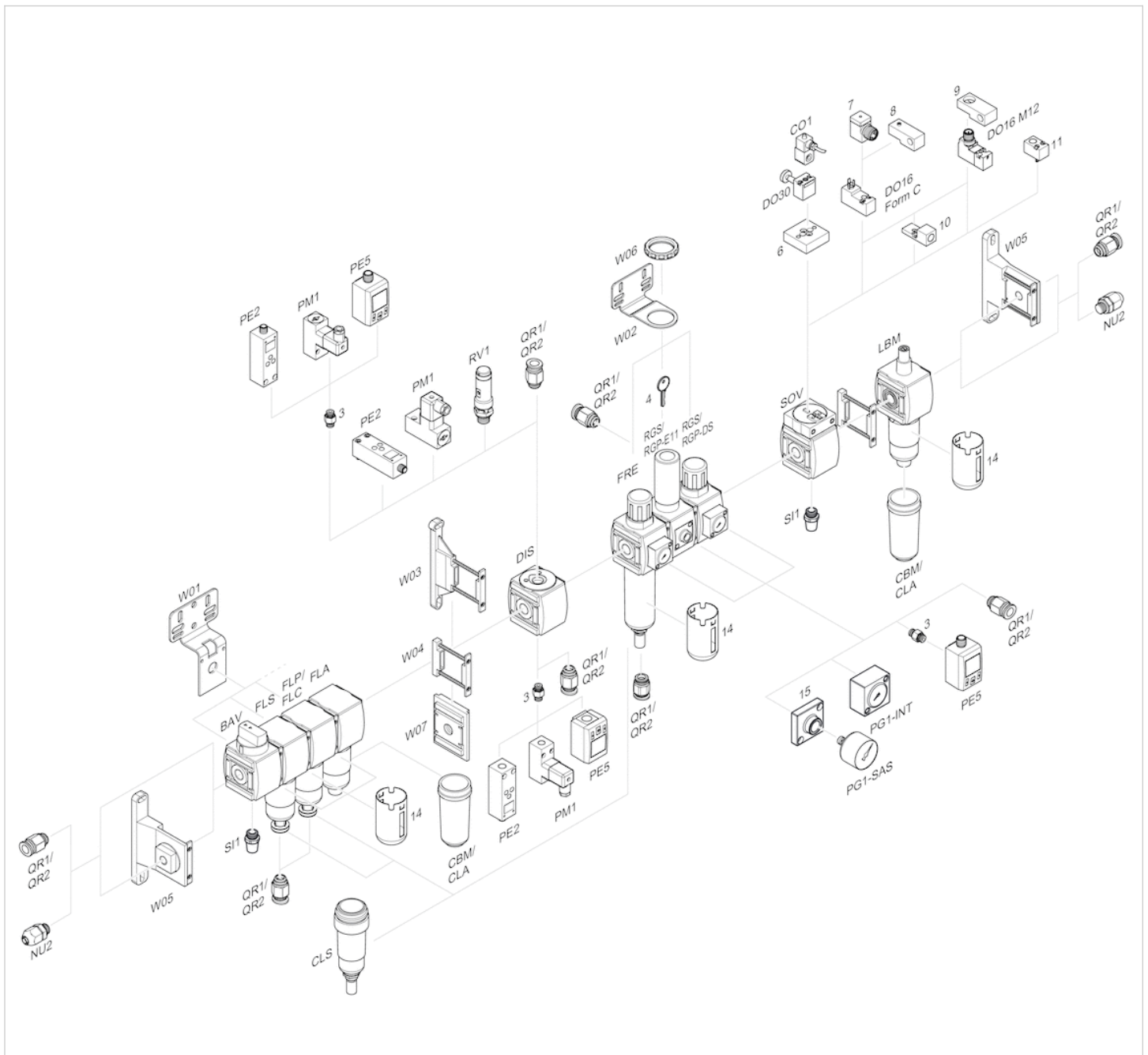
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
1) = Starting point

Flow rate characteristic



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

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

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