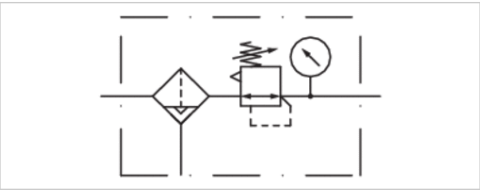
Filter pressure regulator, Series NL2-FRE

- G 1/4 G 3/8
- filter porosity 5 µm
- with pressure gauge
- 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.	2 ... 16 bar
Ambient temperature min./max.	-10 ... 60 °C
Medium temperature min./max.	-10 ... 60 °C
Medium	Compressed air Neutral gases
Nominal flow Qn	1650 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	25 cm³
Filter element	exchangeable
Weight	See table below

Technical data

Part No.		Port	filter porosity	Flow	Adjustment range min./max.
				Qn	
0821300300		G 1/4	5 µm	1650 l/min	0,5 ... 10 bar
0821300301		G 1/4	5 µm	1650 l/min	0,5 ... 10 bar
0821300302		G 1/4	5 µm	1650 l/min	0,5 ... 10 bar
0821300303		G 1/4	5 µm	1650 l/min	0,5 ... 10 bar
0821300304		G 1/4	5 µm	1650 l/min	0,5 ... 10 bar
0821300305		G 1/4	5 µm	1650 l/min	0,5 ... 10 bar
0821300307		G 1/4	5 µm	1650 l/min	0,1 ... 3 bar
0821300308		G 1/4	5 µm	1650 l/min	0,2 ... 6 bar
0821300330		G 3/8	5 µm	1650 l/min	0,5 ... 10 bar
0821300331		G 3/8	5 µm	1650 l/min	0,5 ... 10 bar
0821300332		G 3/8	5 µm	1650 l/min	0,5 ... 10 bar
0821300333		G 3/8	5 µm	1650 l/min	0,5 ... 10 bar
0821300334		G 3/8	5 µm	1650 l/min	0,5 ... 10 bar
0821300335		G 3/8	5 µm	1650 l/min	0,5 ... 10 bar

Part No.	Condensate drain	Pressure gauge	Reservoir
0821300300	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
0821300301	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
0821300302	semi-automatic, open without pressure	with pressure gauge	Die cast zinc

Part No.	Condensate drain	Pressure gauge	Reservoir
0821300303	fully automatic, open without pressure	with pressure gauge	Polycarbonate
0821300304	fully automatic, open without pressure	with pressure gauge	Polycarbonate
0821300305	fully automatic, open without pressure	with pressure gauge	Die cast zinc
0821300307	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
0821300308	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
0821300330	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
0821300331	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
0821300332	semi-automatic, open without pressure	with pressure gauge	Die cast zinc
0821300333	fully automatic, open without pressure	with pressure gauge	Polycarbonate
0821300334	fully automatic, open without pressure	with pressure gauge	Polycarbonate
0821300335	fully automatic, open without pressure	with pressure gauge	Die cast zinc

Part No.	Protective guard	Weight
0821300300	-	0,542 kg
0821300301	Steel	0,542 kg
0821300302	-	0,717 kg
0821300303	-	0,57 kg
0821300304	Steel	0,612 kg
0821300305	-	0,749 kg
0821300307	-	0,542 kg
0821300308	-	0,542 kg
0821300330	-	0,542 kg
0821300331	Steel	0,583 kg
0821300332	-	0,717 kg
0821300333	-	0,57 kg
0821300334	Steel	0,612 kg
0821300335	-	0,749 kg

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

Pressure gauge enclosed separately, Suitable for use in Ex zones 1, 2, 21, 22., Metal protective guard can be retrofitted for all polycarbonate reservoirs

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
Suitable for use in Ex zones 1, 2, 21, 22.
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
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.
The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).

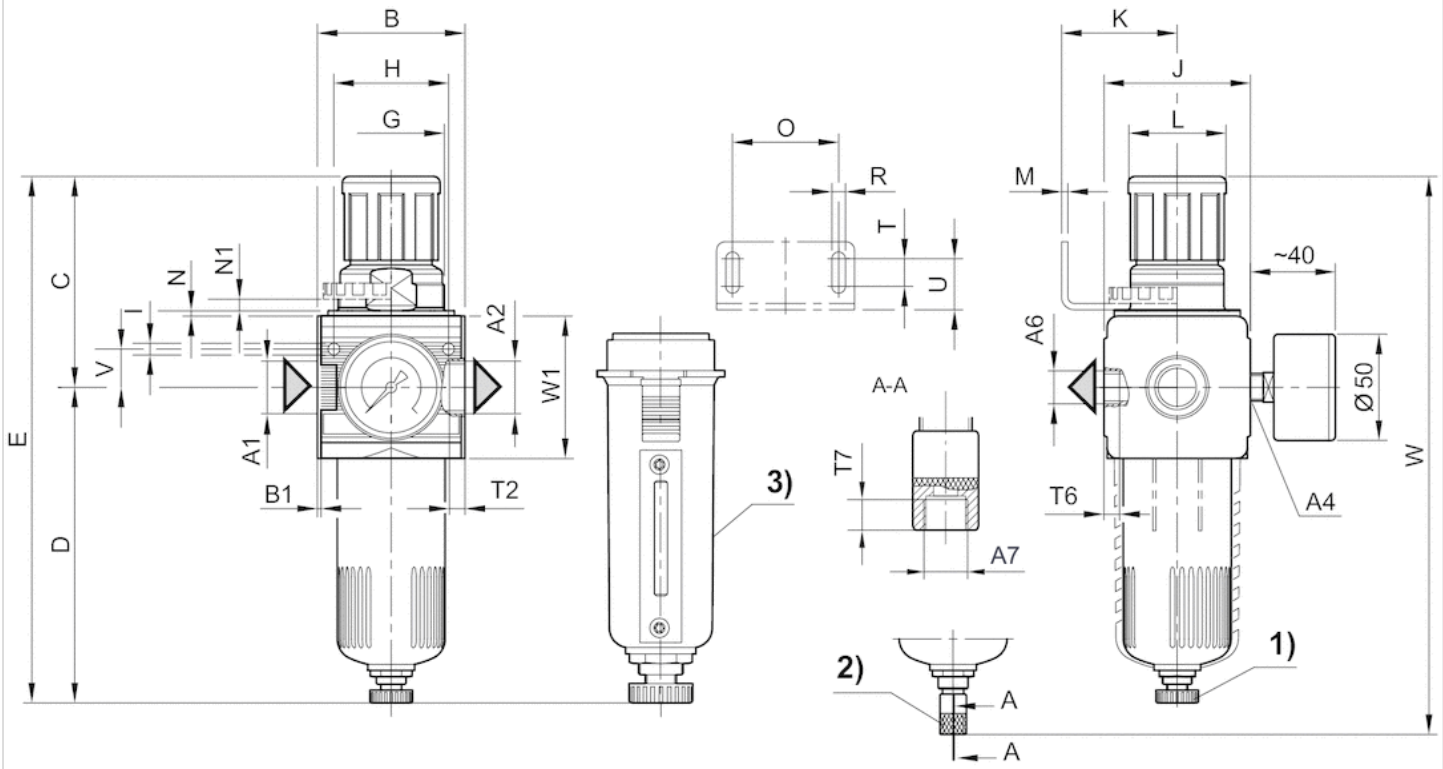
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

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

Dimensions

Dimensions



A1 = input
A2 = output
A6 = output
A7 = condensate drain
1) Semi-automatic condensate drain
2) fully automatic condensate drain
3) Metal reservoir

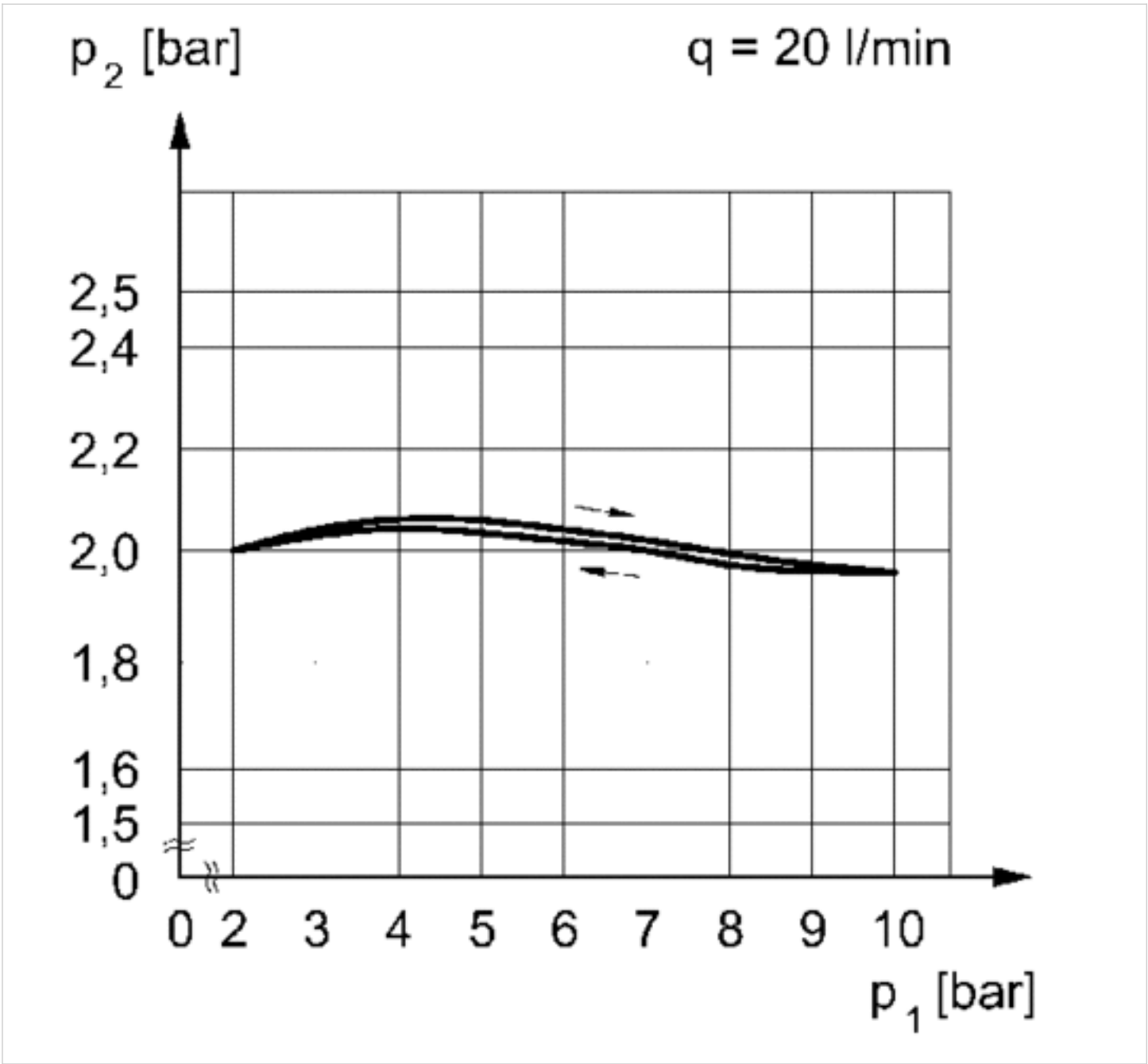
Dimensions in mm

A1	A2	A4	A6	A7	B	B1	C	D	E	G	H	I	J	K	L	M	N	N1	O	R
G 1/4	G 1/4	G 1/4	G 1/4	G 1/8	48	1.5	71	124.5	191	M30x1,5	36	4.4	47	43.5	28	3	3.5	3	38	5.4
G 3/8	G 3/8	G 1/4	G 1/4	G 1/8	48	1.5	71	124.5	191	M30x1,5	36	4.4	47	43.5	28	3	3.5	3	38	5.4

T	T2	T6	T7	U	V	W	W1
8	9.5	7	8.5	18.5	12.3	217.5	52
8	9.5	7	8.5	18.5	12.3	217.5	52

Diagrams

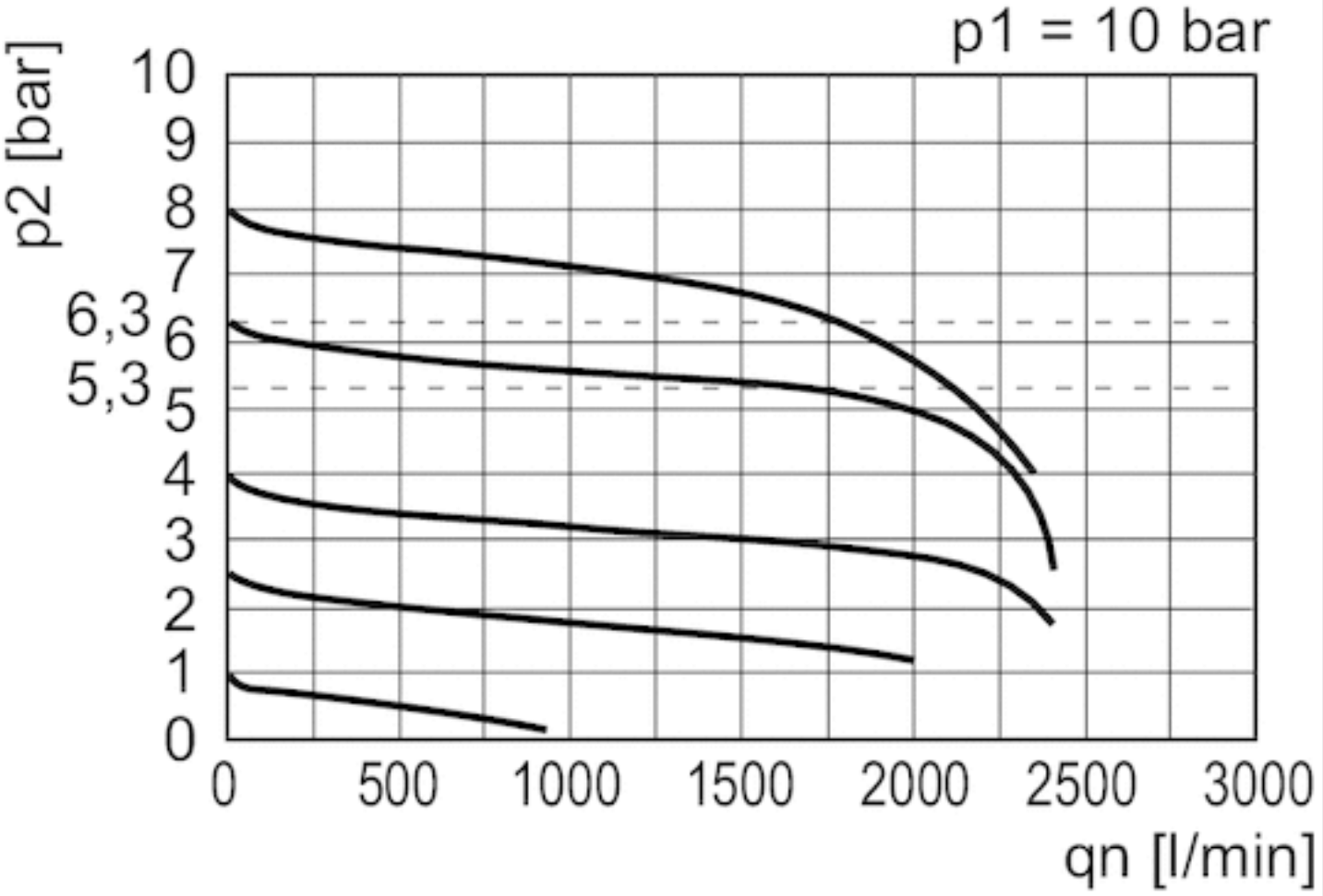
Pressure characteristics curve



p1 = working pressure
p2 = secondary pressure

q = flow rate

Flow rate characteristic



p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow