

## Preparation of compressed air ► Maintenance units and components

### Filter pressure regulator, Series AS1-FRE

► G 1/4 ► Air supply: left ► filter porosity: 5 µm



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Parts	Filter, Pressure controller
Mounting orientation	vertical
Working pressure min./max.	1.5 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 °C / +50 °C
Ambient temperature min./max.	-10 °C / +50 °C
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust (> 3 bar)
Adjustment range min./max.	See table below
Pressure supply	single
Filter reservoir volume	16 cm³
Filter element	exchangeable
Condensate drain	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc
Filter insert	Cellpor

#### Technical Remarks

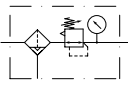

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

		Port	Qn	Adjustment range min./max.	Condensate drain	Weight	Fig.	Note	Part No.
			[l/min]	[bar]		[kg]			
		G 1/4	1000	0.5 / 8	semi-automatic, open without pressure	0.241	Fig. 1	1); 4)	<b>R412014645</b>
					fully automatic, open without pressure	0.259		1); 4)	<b>R412014646</b>
					fully automatic, closed without pressure	0.259		1); 4)	R412014647
					semi-automatic, open without pressure	0.274		1); 4); 6)	<b>R412014648</b>
					semi-automatic, open without pressure	0.318		1); 5)	R412014649
					fully automatic, open without pressure	0.33		1); 5)	R412014650
					fully automatic, closed without pressure	0.33		1); 5)	R412014651
	-	G 1/4	1000	0.5 / 8	semi-automatic, open without pressure	0.238	Fig. 2	2); 3); 4)	<b>R412014652</b>
					fully automatic, open without pressure	0.256			<b>R412014653</b>
					fully automatic, closed without pressure	0.256			R412014654

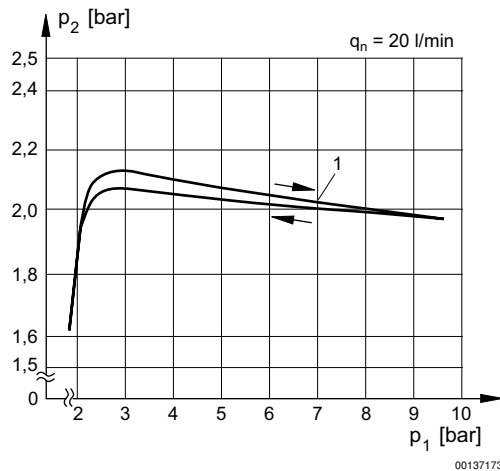
- 1) Pressure gauge enclosed separately
  - 2) Order pressure gauge separately
  - 3) Max. pressure gauge Ø in blocked state [mm]: 40
  - 4) Reservoir: Polycarbonate
  - 5) Reservoir: Die cast zinc
  - 6) Protective guard: metal
- Nominal flow Qn at p1 = 6.3 bar and Δp = 1 bar

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		Port	Qn	Adjustment range min./max.	Condensate drain	Weight	Fig.	Note	Part No.
			[l/min]	[bar]		[kg]			
		G 1/4	1000	0.5 / 10	semi-automatic, open without pressure	0.241	Fig. 1	1); 4)	<b>R412014655</b>
					fully automatic, open without pressure	0.259		1); 4)	<b>R412014656</b>
					fully automatic, closed without pressure	0.259		1); 4)	R412014657
					semi-automatic, open without pressure	0.274		1); 4); 6)	<b>R412014658</b>
					semi-automatic, open without pressure	0.318		1); 5)	R412014659
					fully automatic, open without pressure	0.33		1); 5)	R412014660
					fully automatic, closed without pressure	0.33		1); 5)	R412014661
<div>1) Pressure gauge enclosed separately</div> <div>2) Order pressure gauge separately</div> <div>3) Max. pressure gauge Ø in blocked state [mm]: 40</div> <div>4) Reservoir: Polycarbonate</div> <div>5) Reservoir: Die cast zinc</div> <div>6) Protective guard: metal</div> <div>Nominal flow Qn at p1 = 6.3 bar and Δp = 1 bar</div>									

### Pressure characteristics curve



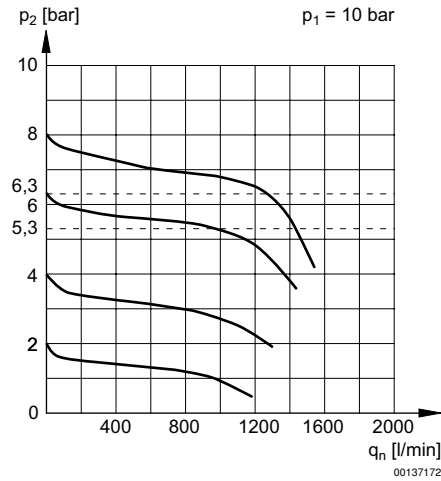
p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow  
 1) = Starting point

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#### Flow rate characteristic

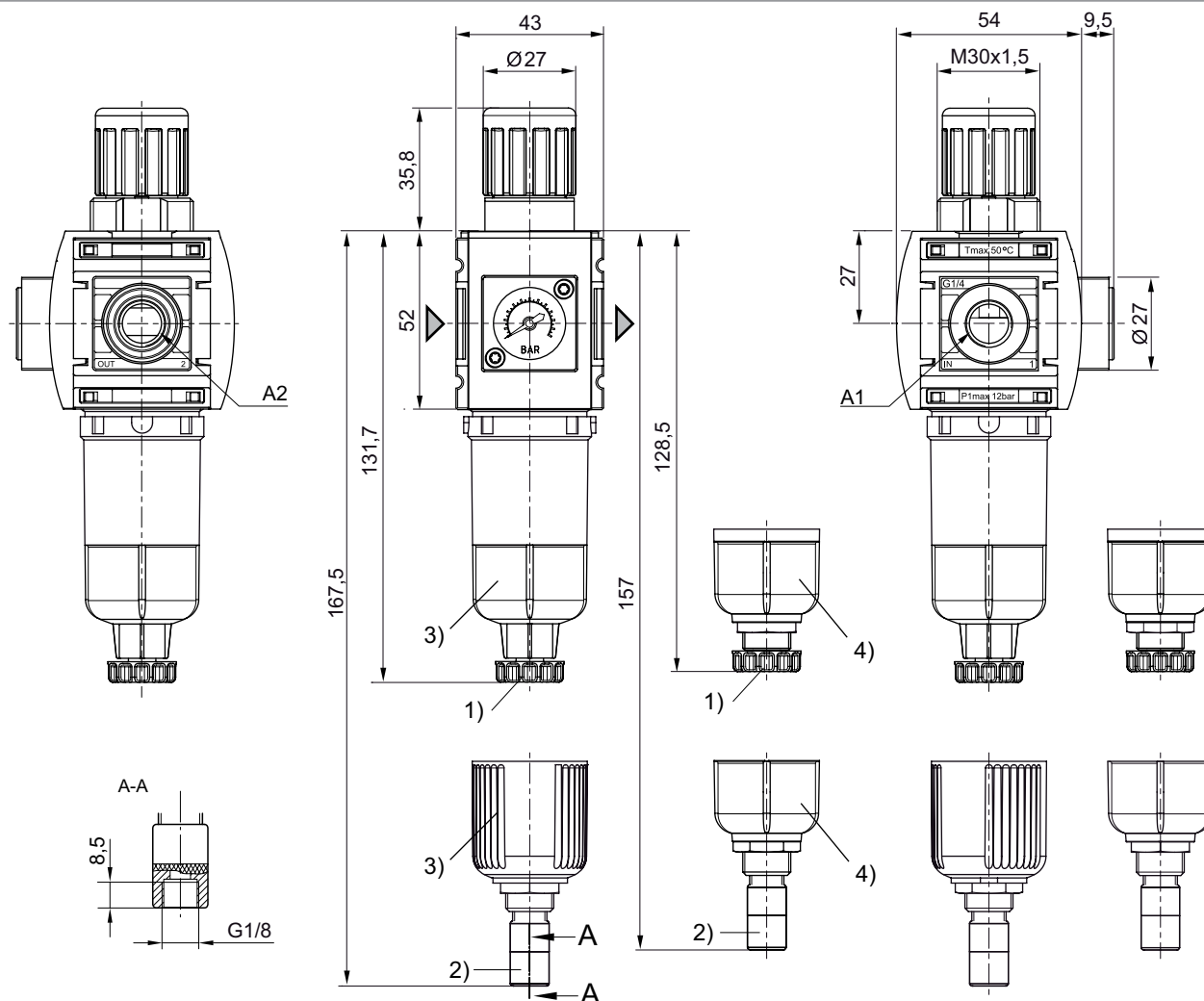


p1 = Working pressure  
p2 = Secondary pressure  
qn = Nominal flow

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Dimensions, Fig. 1



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A1 = input

A2 = output

1) Semi-automatic condensate drain

2) Fully automatic condensate drain

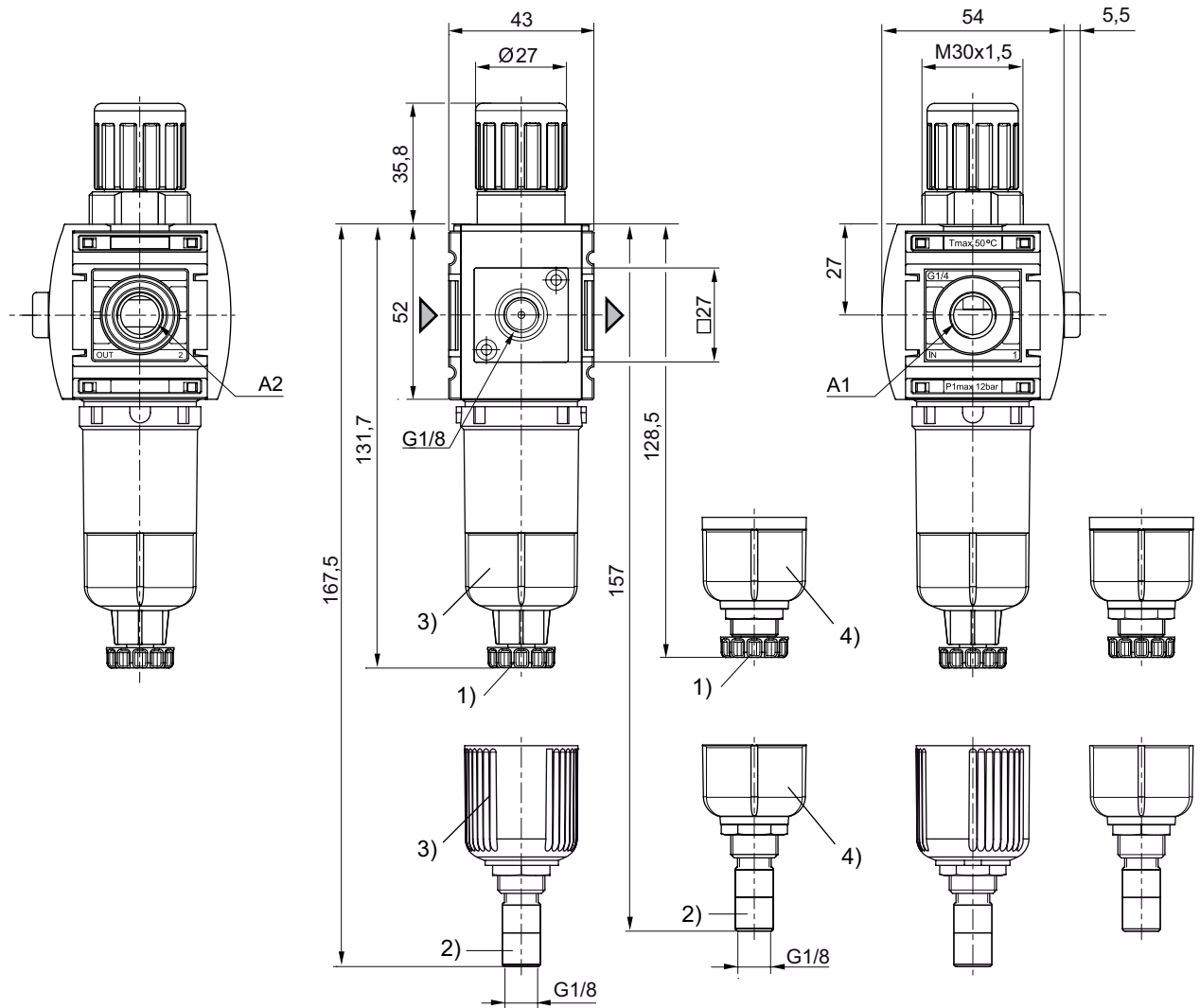
3) Reservoir: polycarbonate

4) Reservoir: metal

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Dimensions, Fig. 2



- A1 = input  
A2 = output  
1) Semi-automatic condensate drain  
2) Fully automatic condensate drain  
3) Reservoir: polycarbonate  
4) Reservoir: metal

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