AVENTICS

Preparation of compressed air ► Maintenance units and components

Series AS1

Rexroth
Pneumatics

Brochure

Preparation of compressed air ► Maintenance units and components
Series AS1

Maintenance units

Maintenance unit, 2-part, Series AS1-ACD
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

9

Maintenance unit, 3-part, Series AS1-ACT
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

12

Pressure regulators, air supply on the left

Pressure regulator, Series AS1-RGS
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual

15

Pressure regulator, Series AS1-RGS
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with pressure gauge in hand wheel

18

Pressure regulator, Series AS1-RGS-...-E11
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► lockable ► with E11 locking

20

Pressure regulator, Series AS1-RGS-...-DS
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

22

Pressure regulator, Series AS1-RGS-...-DS
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

26

Filter pressure regulators, air supply on the left

Filter pressure regulator, Series AS1-FRE
► G 1/4 ► Air supply: left ► filter porosity: 5 µm

29

Filter pressure regulator, Series AS1-FRE-...-E11
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► lockable ► with E11 locking

34

Preparation of compressed air ► Maintenance units and components

Series AS1

Filter, air supply on the left

Standard filter, Series AS1-FLS
► G 1/4 ► Air supply: left ► filter porosity: 5 µm
37

Pre-filter, Series AS1-FLP
► G 1/4 ► Air supply: left ► filter porosity: 0.3 µm
39

Microfilter, Series AS1-FLC
► G 1/4 ► Air supply: left ► filter porosity: 0.01 µm
42

Active carbon filter, Series AS1-FLA
► G 1/4 ► Air supply: left
45

Lubricators, air supply on the left

Micro oil-mist lubricator, Series AS1-LBM
► G 1/4 ► Air supply: left
47

Filling units, air supply on the left

Filling unit, electrically operated, Series AS1-SSU
► G 1/4 ► Air supply: left ► pipe connection
49

Filling valves, air supply on the left

Filling valve, pneumatically operated, Series AS1-SSV
► G 1/4 ► Air supply: left ► pipe connection
52

Shut-off valves, air supply on the left

3/2-directional valve, electrically operated, Series AS1-SOV
► ATEX optional ► G 1/4 ► Air supply: left ► pipe connection
54

3/2-directional valve, pneumatically operated, Series AS1-SOV
► G 1/4 ► Air supply: left ► pipe connection
58

Preparation of compressed air ► Maintenance units and components
Series AS1

Pre-filter, Series AS1-FLP
► G 1/4 ► Air supply: right ► filter porosity: 0.3 µm

86

Microfilter, Series AS1-FLC
► G 1/4 ► Air supply: right ► filter porosity: 0.01 µm

89

Active carbon filter, Series AS1-FLA
► G 1/4 ► Air supply: right

92

Lubricators, air supply on the right

Micro oil-mist lubricator, Series AS1-LBM
► G 1/4 ► Air supply: right

94

Filling valves, air supply on the right

Filling valve, pneumatically operated, Series AS1-SSV
► G 1/4 ► Air supply: right ► pipe connection

96

Shut-off valves, air supply on the right

3/2-directional valve, electrically operated, Series AS1-SOV
► ATEX optional ► G 1/4 ► Air supply: right ► pipe connection

98

3/2-directional valve, pneumatically operated, Series AS1-SOV
► G 1/4 ► Air supply: right ► pipe connection

102

3/2-shut-off valve, mechanically operated, Series AS1-BAV
► G 1/4 ► Air supply: right

104

Distributor, air supply on the right

Distributor, Series AS1-DIS
► G 1/4 ► Air supply: right ► Distributor 2x ► Distributor

106

Distributor, Series AS1-DIN
► G 1/4 ► Air supply: right ► Distributor 1x ► Non-return valve

108

Accessories

Reservoir, Series AS1-CLS
► Material: Polycarbonate, Die cast zinc

110

Reservoir, Series NL1/AS1-CBM/-CLA
► for active carbon filter and lubricator ► Material: Polycarbonate, Die cast zinc

111

Protective guard
► Series NL1 ► Filter, Lubricator

112

Mounting plate, Series AS1-MBR-...-W01

113

Mounting bracket, Series AS1-MBR-...-W02

114

Mounting clip, Series AS1-MBR-...-W03

115

Block assembly kit, Series AS1-MBR-...-W04

116

Block assembly kit, Series AS1-MBR-...-W05

117

Panel nut

118

Preparation of compressed air ► Maintenance units and components
Series AS1

Block assembly kit, Series AS1/AS2-MBR-...-W07 119

Pressure gauge, Series PG1-INT
► flange version ► Background color: White ► Scale color: Black ► Viewing window: Polycarbonate ► Units: bar 120

Pressure gauge, Series PG1-SAS
► Front port ► Background color: Black ► Scale color: White / Grey ► Viewing window: Polystyrene ► Units: bar / psi ► suitable for ATEX 121

Adapter, Series CN1
► Form C, ISO 15217/M 12 122

Transition plate, Series AS1, AS2, AS3, AS5
► with CNOMO porting configuration 123

Transition plate, Series AS1
► Transition plate for assembling a pressure gauge with connection thread G 1/8 123

Connecting cable, Series CN2
► Socket, M12x1, 5-pin, A-coded, angled ► without wire end ferrule, tin-plated, 4-pin
► for CANopen, DeviceNet 124

Connecting cable, Series CN2
► Socket, M12x1, 5-pin, A-coded, straight ► without wire end ferrule, tin-plated, 4-pin
► for CANopen, DeviceNet 125

Mounting aid
► Assembly aid for permanent actuation of manual override (“press”) on pilot valve DO16 with electrical push-in fitting, form C. 126

Mounting aid
► Assembly aid for permanent actuation of manual override (“press”) on pilot valve DO16 with electrical connection M12x1. 127

Key for E11 locking

Maintenance unit, 2-part, Series AS1-ACD

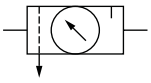
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

00137267

Version	2-in-1, Can be assembled into blocks
Parts	Filter pressure regulator, Lubricator
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
Adjustment range min./max.	0.5 bar / 8 bar
Pressure supply	single
Filter reservoir volume	16 cm³
Filter element	exchangeable
Condensate drain	See table below
Lubricator reservoir volume	35 cm³
Type of filling	Manual oil filling
Oil type	HLP 32 (DIN 51 524 - ISO VG 32) HLP 68 (DIN 51 524 - ISO VG 68)
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Protective guard	Polyamide
Filter insert	Cellpor

Technical Remarks

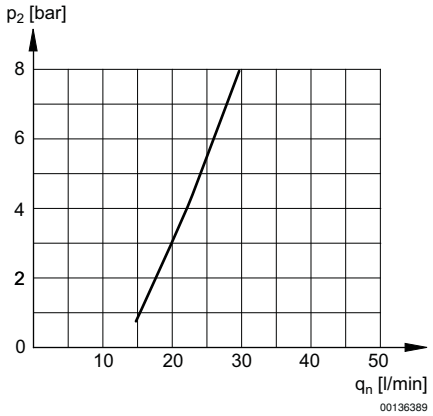
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Oil dosing at 1000 l/min [drops/min]: 10-20
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

	Port	Qn	Condensate drain	Weight	Part No.
		[l/min]		[kg]	
	G 1/4	700	semi-automatic, open without pressure	0.504	**R412014672**
			fully automatic, open without pressure	0.522	**R412014673**
			fully automatic, closed without pressure	0.522	R412014674
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar					

Maintenance unit, 2-part, Series AS1-ACD

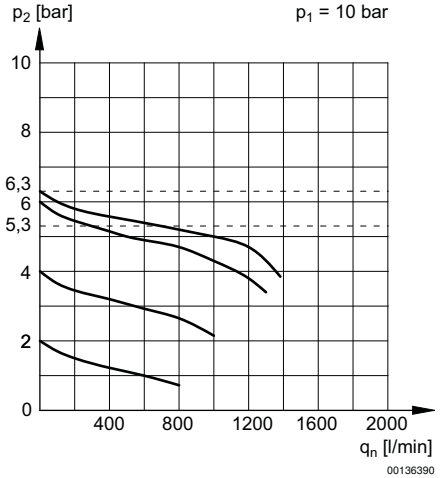
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

Lubricator activation margin



p2 = secondary pressure
qn = nominal flow

Flow rate characteristic

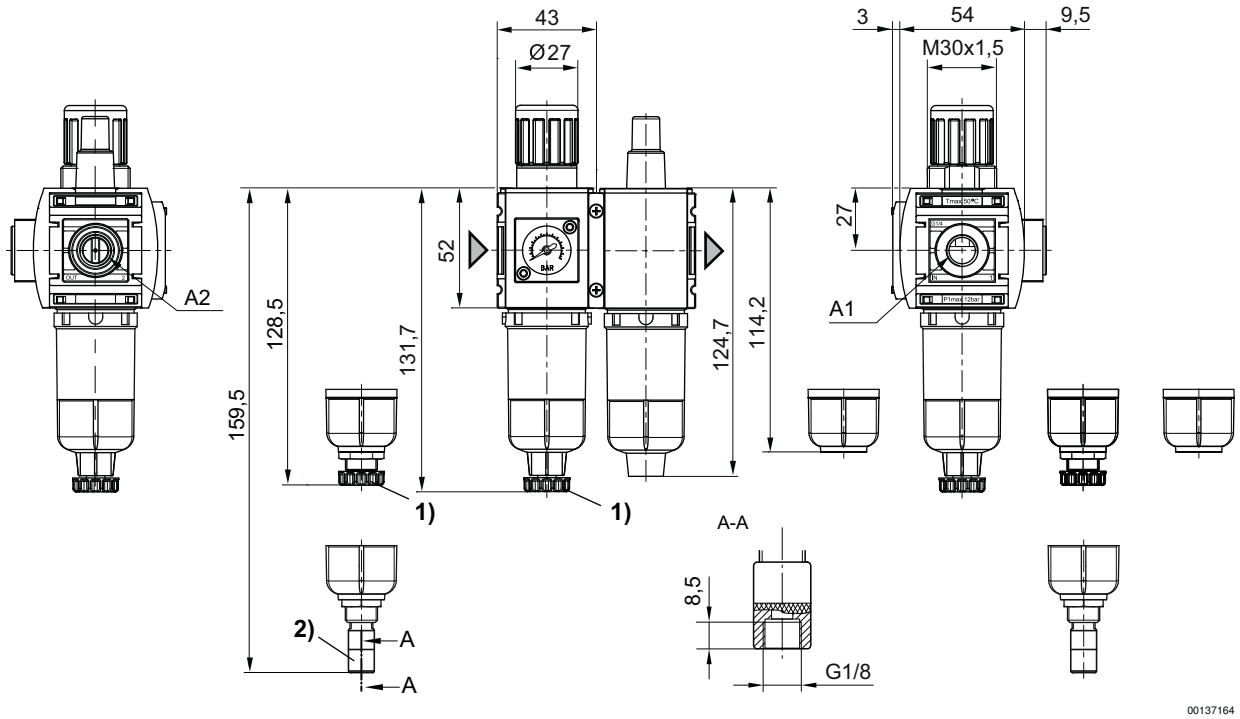


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Maintenance unit, 2-part, Series AS1-ACD

► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

Dimensions



A1 = input
A2 = output
1) Semi-automatic condensate drain
2) Fully automatic condensate drain

Maintenance unit, 3-part, Series AS1-ACT

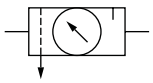
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

00137269

Version	3-part, Can be assembled into blocks
Parts	Filter, Pressure controller, Lubricator
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
Adjustment range min./max.	0.5 bar / 8 bar
Pressure supply	single
Filter reservoir volume	16 cm³
Filter element	exchangeable
Condensate drain	See table below
Lubricator reservoir volume	35 cm³
Type of filling	Manual oil filling
Oil type	HLP 32 (DIN 51 524 - ISO VG 32) HLP 68 (DIN 51 524 - ISO VG 68)
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Reservoir	Polycarbonate
Filter insert	Cellpor

Technical Remarks

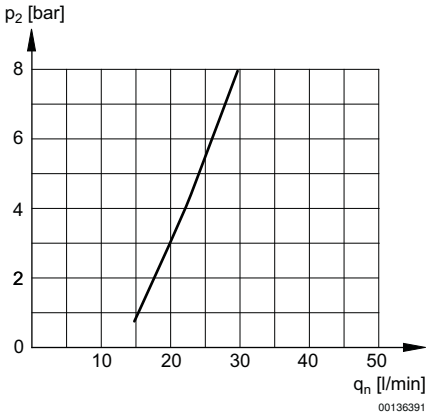
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Oil dosing at 1000 l/min [drops/min]: 10-20
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

	Port	Qn	Condensate drain	Weight	Part No.
		[l/min]		[kg]	
	G 1/4	480	semi-automatic, open without pressure	0.628	**R412014675**
			fully automatic, open without pressure	0.646	R412014676
			fully automatic, closed without pressure	0.646	R412014677
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar					

Maintenance unit, 3-part, Series AS1-ACT

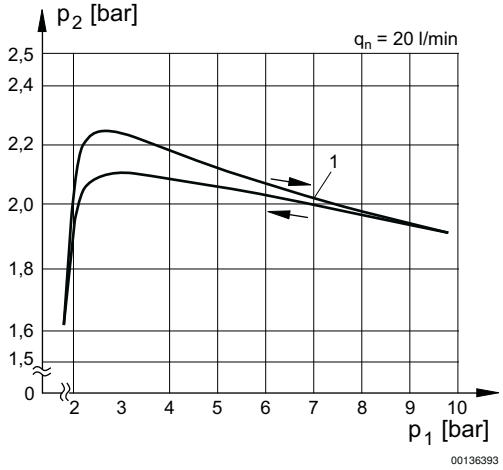
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

Lubricator activation margin



p2 = secondary pressure
qn = nominal flow

Pressure characteristics curve

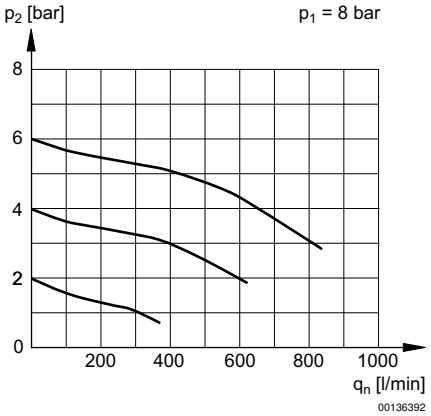


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow
1) = Starting point

Maintenance unit, 3-part, Series AS1-ACT

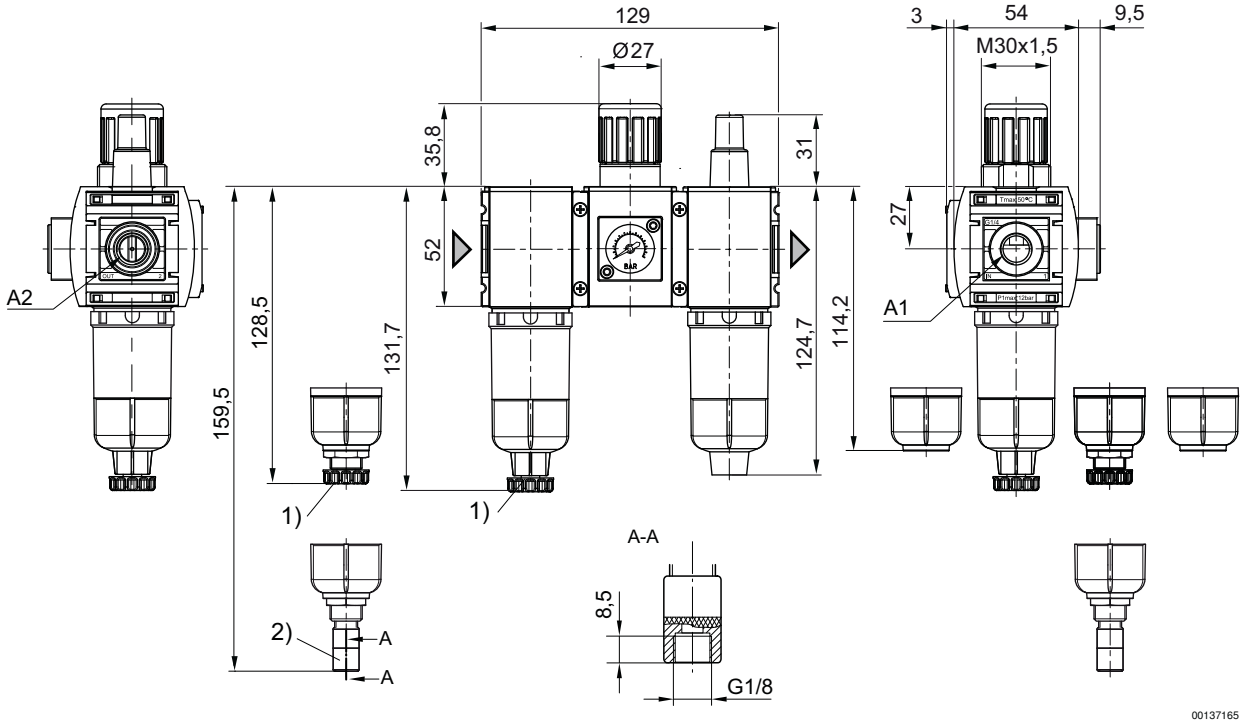
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

Flow rate characteristic



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

Dimensions



A1 = input
A2 = output
1) Semi-automatic condensate drain
2) Fully automatic condensate drain

Pressure regulator, Series AS1-RGS

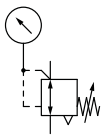
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual

00137239

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

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

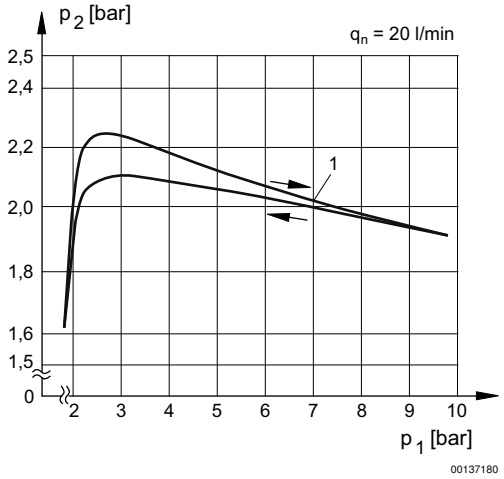
		Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Fig.	Note	Part No.
			[l/min]	[bar]	[bar]	[kg]			
		G 1/4	1000	0.2 / 12	0.2 - 4	0.209	Fig. 1	1)	**R412014627**
				0.5 / 12	0.5 - 8				**R412014628**
				0.5 / 12	0.5 - 10				**R412014629**
	-	G 1/4	1000	0.2 / 12	0.2 - 4	0.206	Fig. 2	2)	**R412014633**
				0.5 / 12	0.5 - 8				**R412014634**
				0.5 / 12	0.5 - 10				**R412014635**

1) Pressure gauge enclosed separately
2) Order pressure gauge separately
Max. pressure gauge Ø in blocked state: 40
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Pressure regulator, Series AS1-RGS

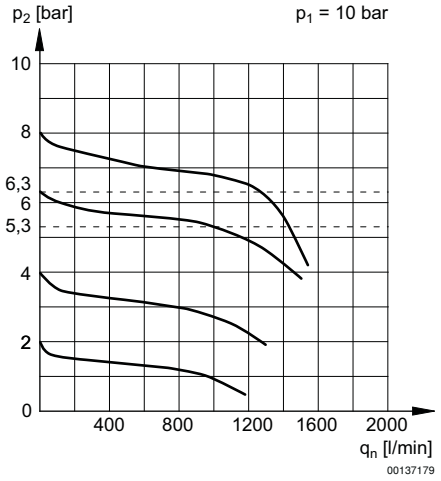
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual

Pressure characteristics curve



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

Flow rate characteristic

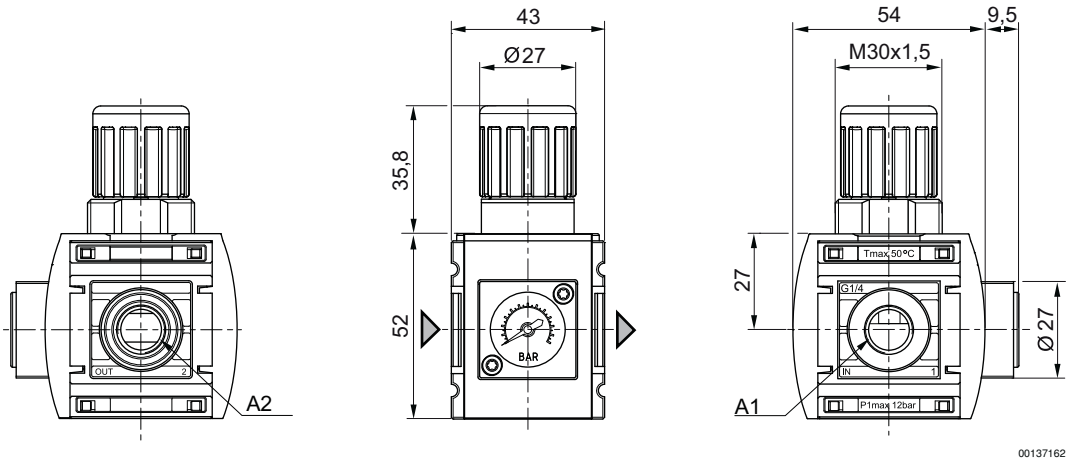


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Pressure regulator, Series AS1-RGS

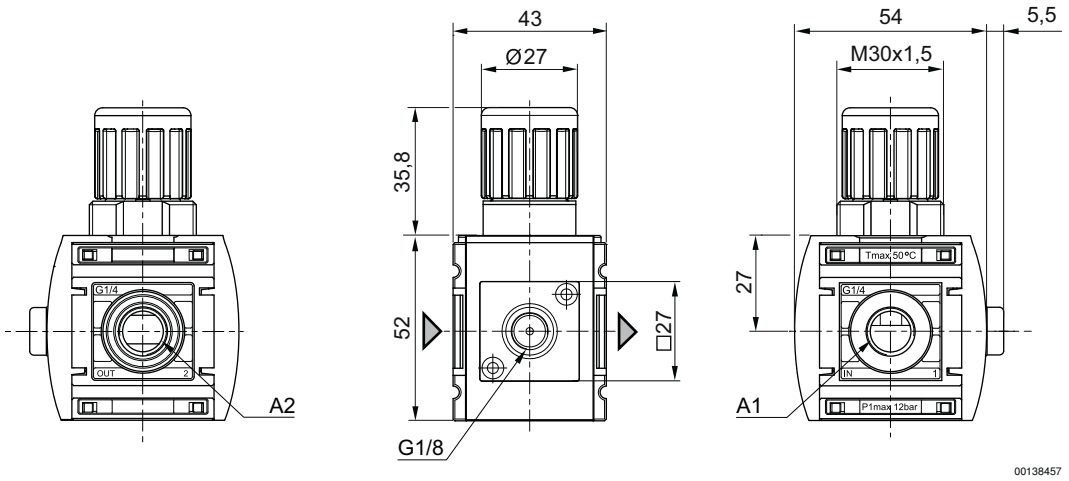
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual

Dimensions, Fig. 1



A1 = input
A2 = output

Dimensions, Fig. 2



A1 = input
A2 = output

Pressure regulator, Series AS1-RGS

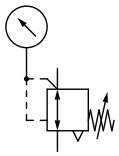
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with pressure gauge in hand wheel

00137238

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

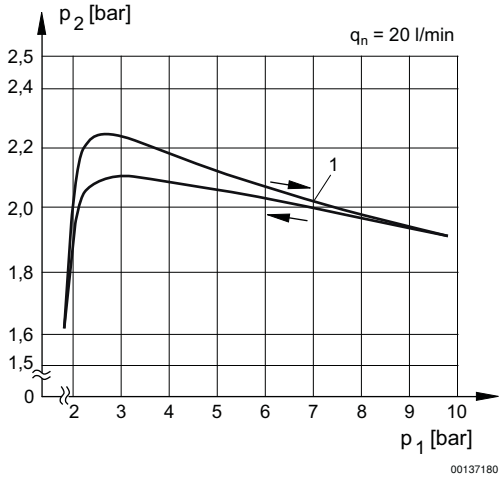
Technical Remarks

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

		Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Part No.
			[l/min]	[bar]	[bar]	[kg]	
		G 1/4	1000	0.2 / 12	0.2 - 4	0.239	R412014639
				0.5 / 12	0.5 - 8		**R412014640**
				0.5 / 12	0.5 - 10		**R412014641**

Panel nut included in scope of delivery
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Pressure characteristics curve



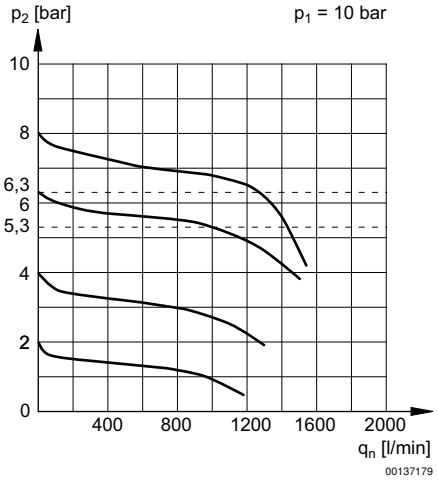
00137180

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

Pressure regulator, Series AS1-RGS

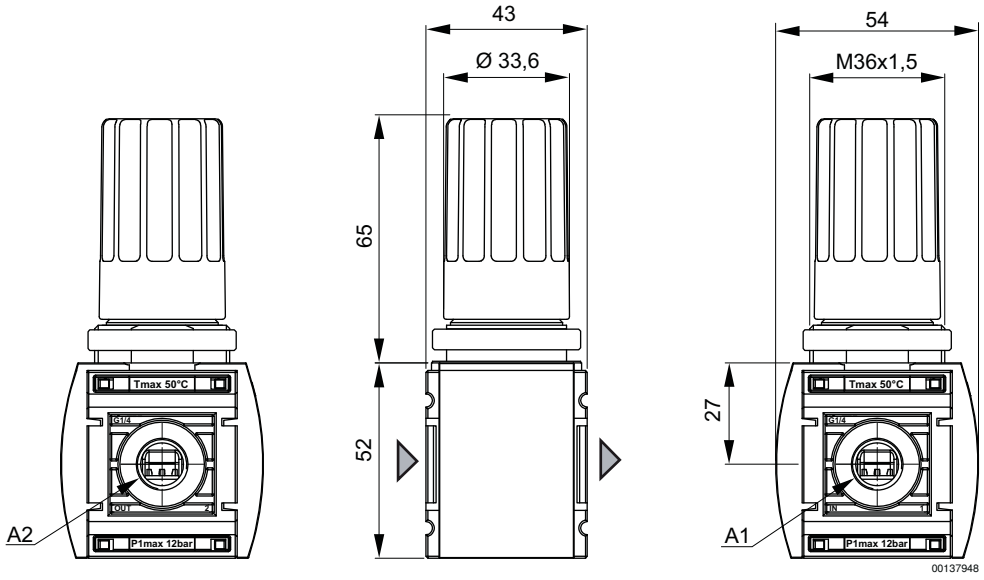
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with pressure gauge in hand wheel

Flow rate characteristic



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

Dimensions



A1 = input
A2 = output
Panel nut included in scope of delivery

Pressure regulator, Series AS1-RGS-...-E11

► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► lockable ► with E11 locking

00015786

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

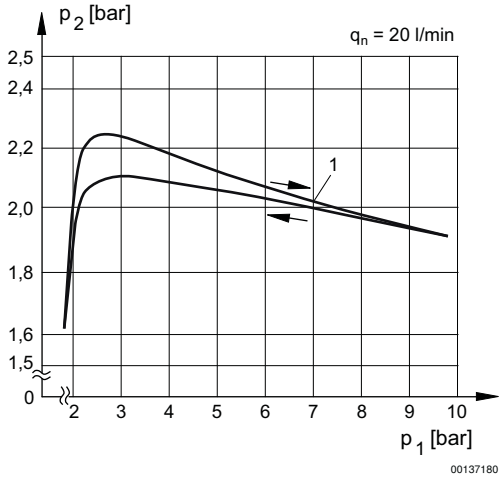
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The E11 locking is delivered without a key (see accessories for keys).

	Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Part No.
		[l/min]	[bar]	[bar]	[kg]	
	G 1/4	1000	0.5 / 12	0.5 - 10	0.206	**R412010648**
			0.2 / 12	0.2 - 4		R412010649

Max. pressure gauge Ø in blocked state: 40
Order pressure gauge separately
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Pressure characteristics curve



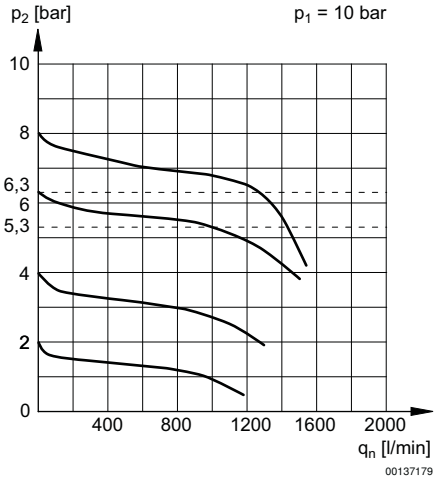
00137180

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

Pressure regulator, Series AS1-RGS-...-E11

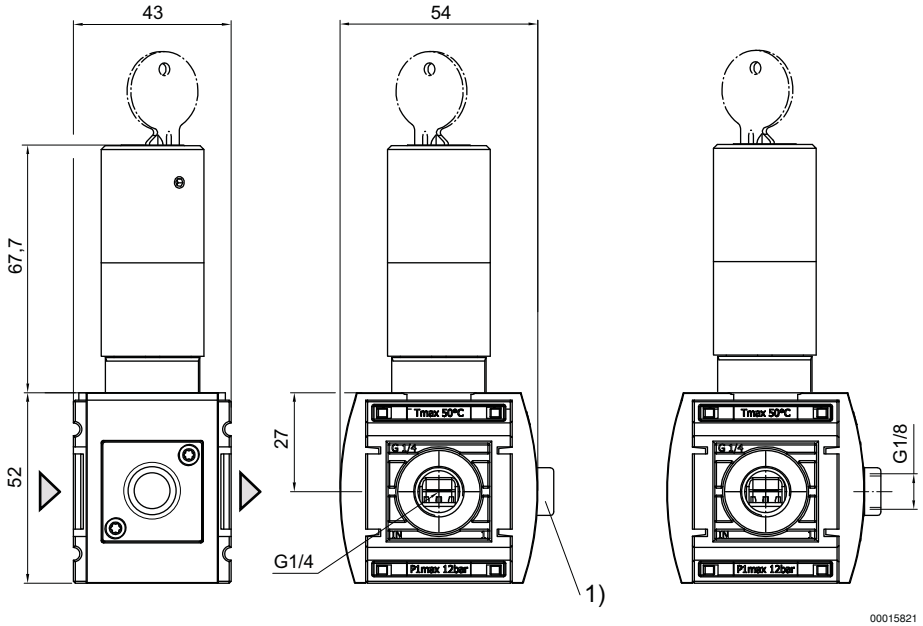
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► lockable ► with E11 locking

Flow rate characteristic



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

Dimensions



1) Adapter
Order pressure gauge separately

Pressure regulator, Series AS1-RGS-...-DS

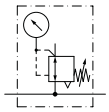
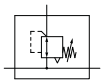
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

00137239

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

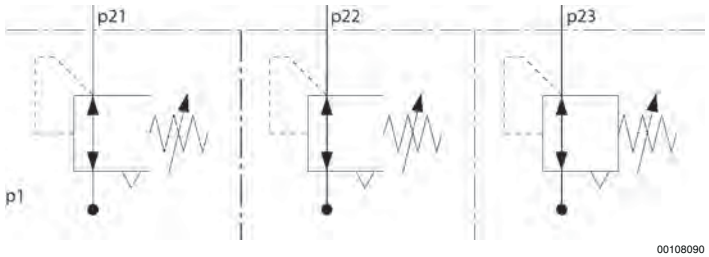
Technical Remarks

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

		Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Fig.	Note	Part No.
			[l/min]	[bar]	[bar]	[kg]			
		G 1/4	1000	0.2 / 12	0.2 - 4	0.209	Fig. 1	1)	R412014630
				0.5 / 12	0.5 - 8				R412014631
				0.5 / 12	0.5 - 10				R412014632
	-	G 1/4	1000	0.1 / 12	0.1 - 1	0.206	Fig. 2	2)	**R412010558**
				0.2 / 12	0.2 - 4				R412014636
				0.5 / 12	0.5 - 8				R412014637
				0.5 / 12	0.5 - 10				R412014638

1) Pressure gauge enclosed separately
2) Order pressure gauge separately
Max. pressure gauge Ø in blocked state: 40
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Application example



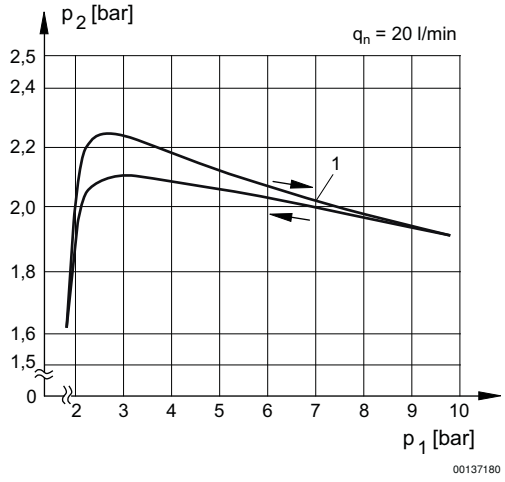
00108090

p1 = working pressure
p21; p22; p23 = secondary pressure

Pressure regulator, Series AS1-RGS-...-DS

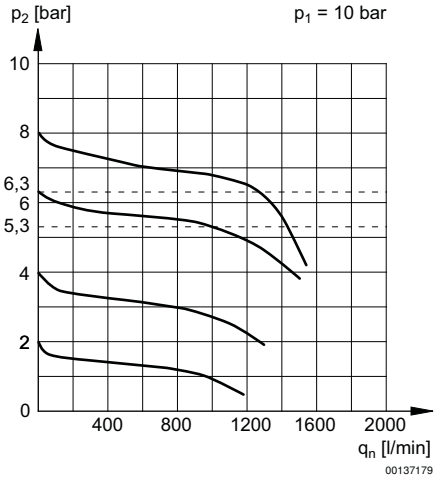
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

Pressure characteristics curve



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

Flow rate characteristic

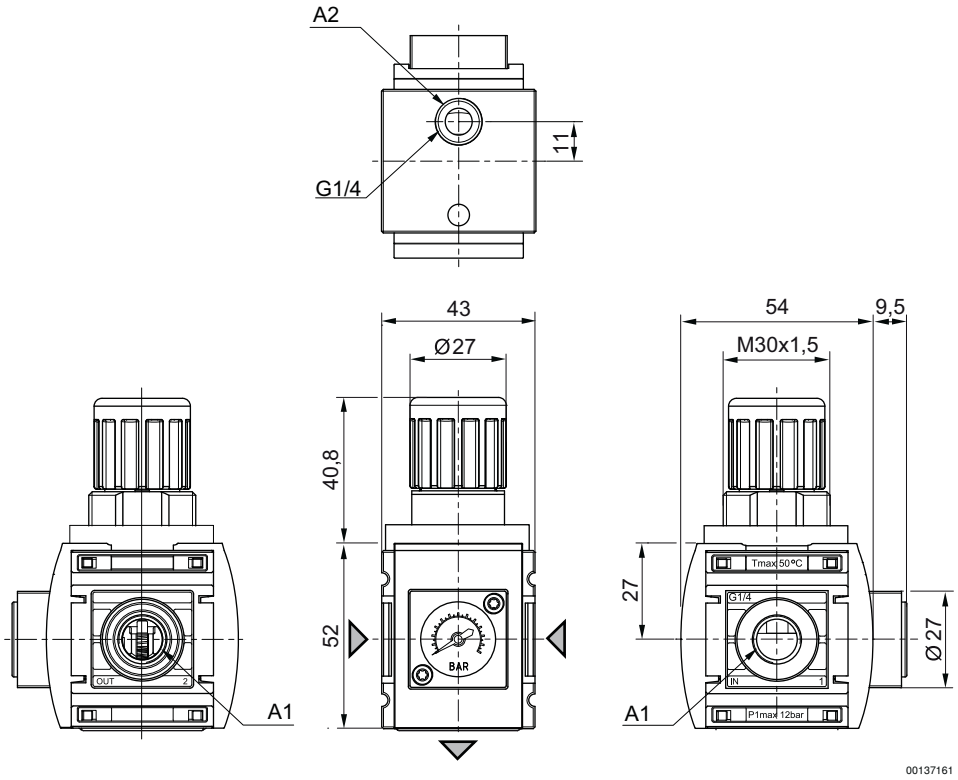


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Pressure regulator, Series AS1-RGS-...-DS

► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

Dimensions, Fig. 1

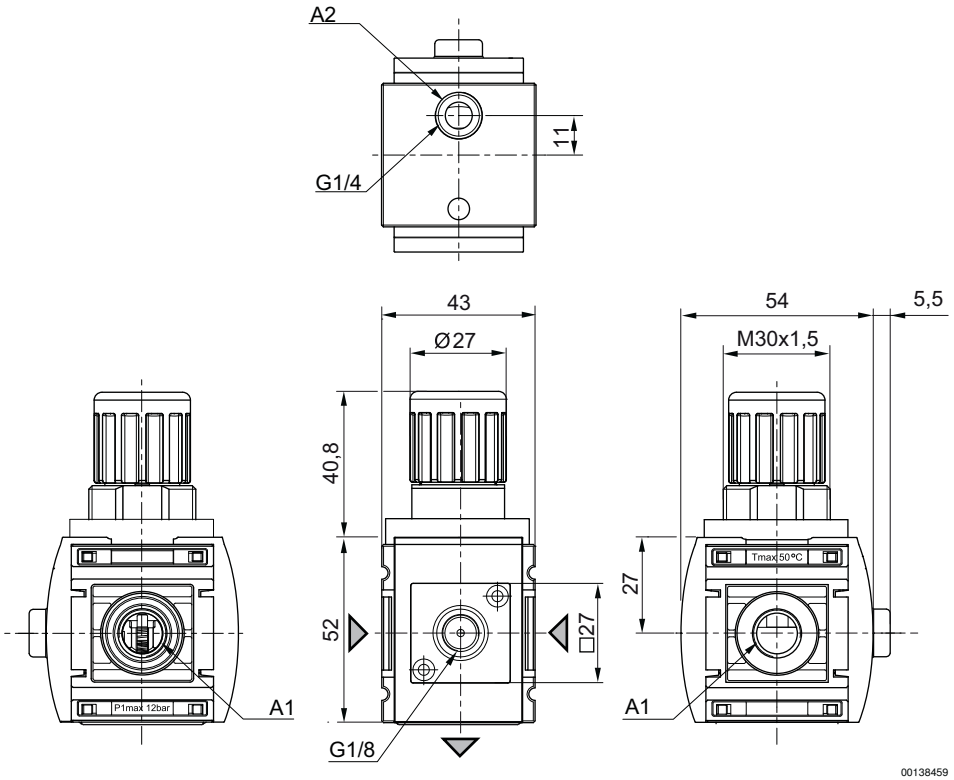


A1 = input
A2 = output

Pressure regulator, Series AS1-RGS-...-DS

► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

Dimensions, Fig. 2



A1 = input
A2 = output

Pressure regulator, Series AS1-RGS-...-DS

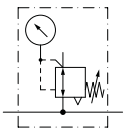
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

00137238

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

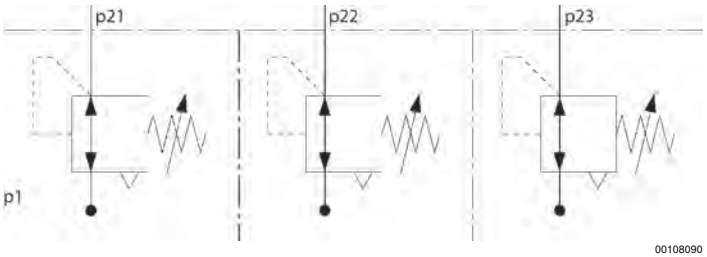
Technical Remarks

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

		Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Part No.
			[l/min]	[bar]	[bar]	[kg]	
		G 1/4	1000	0.2 / 12	0.2 - 4	0.239	R412014642
				0.5 / 12	0.5 - 8		**R412014643**
				0.5 / 12	0.5 - 10		**R412014644**

Panel nut included in scope of delivery
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Application example



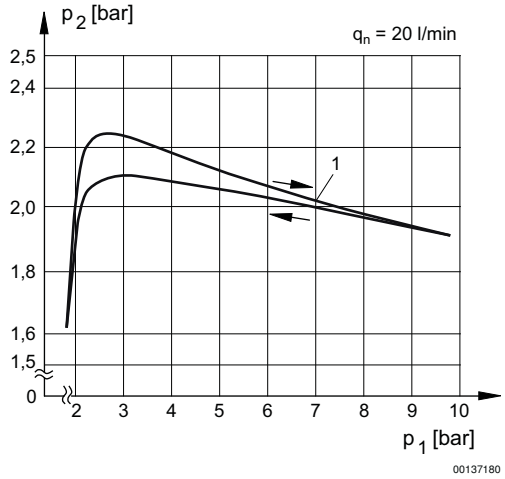
00108090

p1 = working pressure
p21; p22; p23 = secondary pressure

Pressure regulator, Series AS1-RGS-...-DS

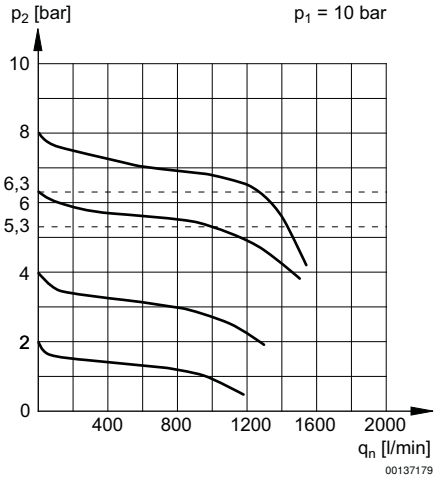
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

Pressure characteristics curve



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

Flow rate characteristic

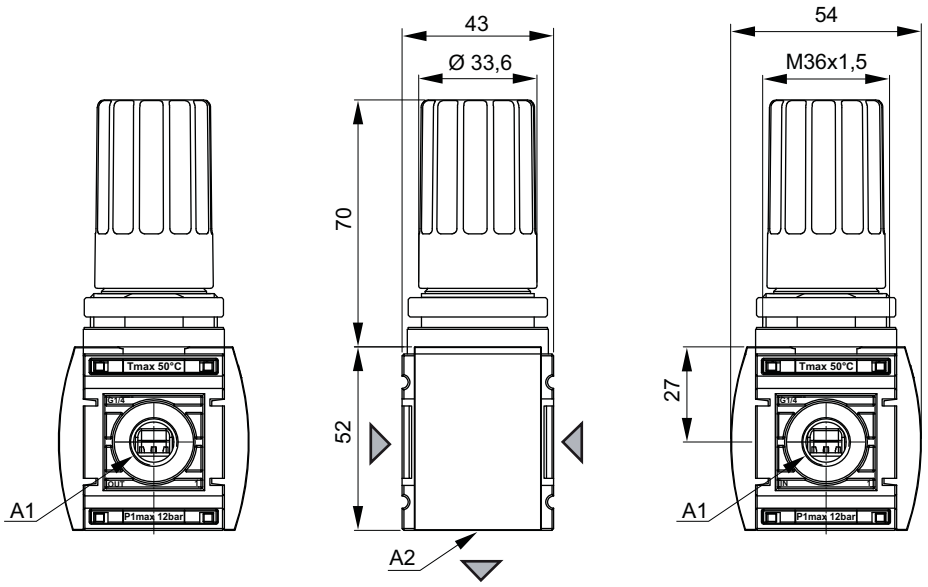


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Pressure regulator, Series AS1-RGS-...-DS

► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

Dimensions



A1 = input
A2 = output
Panel nut included in scope of delivery

Filter pressure regulator, Series AS1-FRE

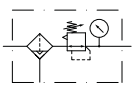
► G 1/4 ► Air supply: left ► filter porosity: 5 µm

00137251

Version	1-in-1, Can be assembled into blocks
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
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

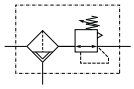
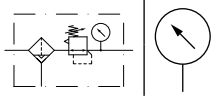
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

		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)	**R412014645**
					fully automatic, open without pressure	0.259		1); 4)	**R412014646**
					fully automatic, closed without pressure	0.259		1); 4)	R412014647
					semi-automatic, open without pressure	0.274		1); 4); 6)	**R412014648**
					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

1) Pressure gauge enclosed separately
2) Order pressure gauge separately
3) Max. pressure gauge Ø in blocked state: 40
4) Reservoir: Polycarbonate
5) Reservoir: Die cast zinc
6) Protective guard: metal
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

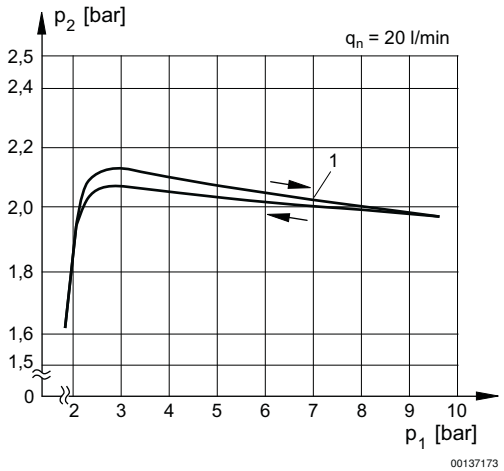
Filter pressure regulator, Series AS1-FRE

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

		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	0.238	Fig. 2	2); 3); 4)	**R412014652**
					fully automatic, open without pressure	0.256			**R412014653**
					fully automatic, closed without pressure	0.256			R412014654
		G 1/4	1000	0.5 / 10	semi-automatic, open without pressure	0.241	Fig. 1	1); 4)	**R412014655**
					fully automatic, open without pressure	0.259		1); 4)	**R412014656**
					fully automatic, closed without pressure	0.259		1); 4)	R412014657
					semi-automatic, open without pressure	0.274		1); 4); 6)	**R412014658**
					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

1) Pressure gauge enclosed separately
2) Order pressure gauge separately
3) Max. pressure gauge Ø in blocked state: 40
4) Reservoir: Polycarbonate
5) Reservoir: Die cast zinc
6) Protective guard: metal
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Pressure characteristics curve

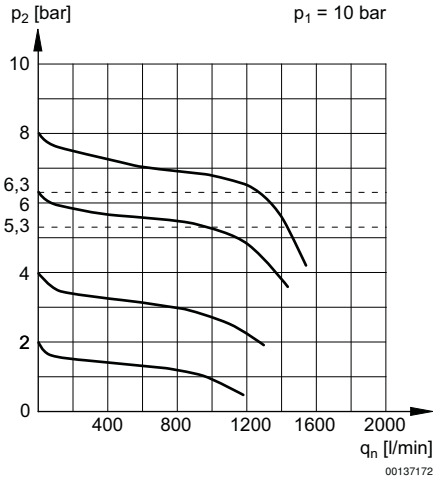


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow
1) = Starting point

Filter pressure regulator, Series AS1-FRE

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

Flow rate characteristic

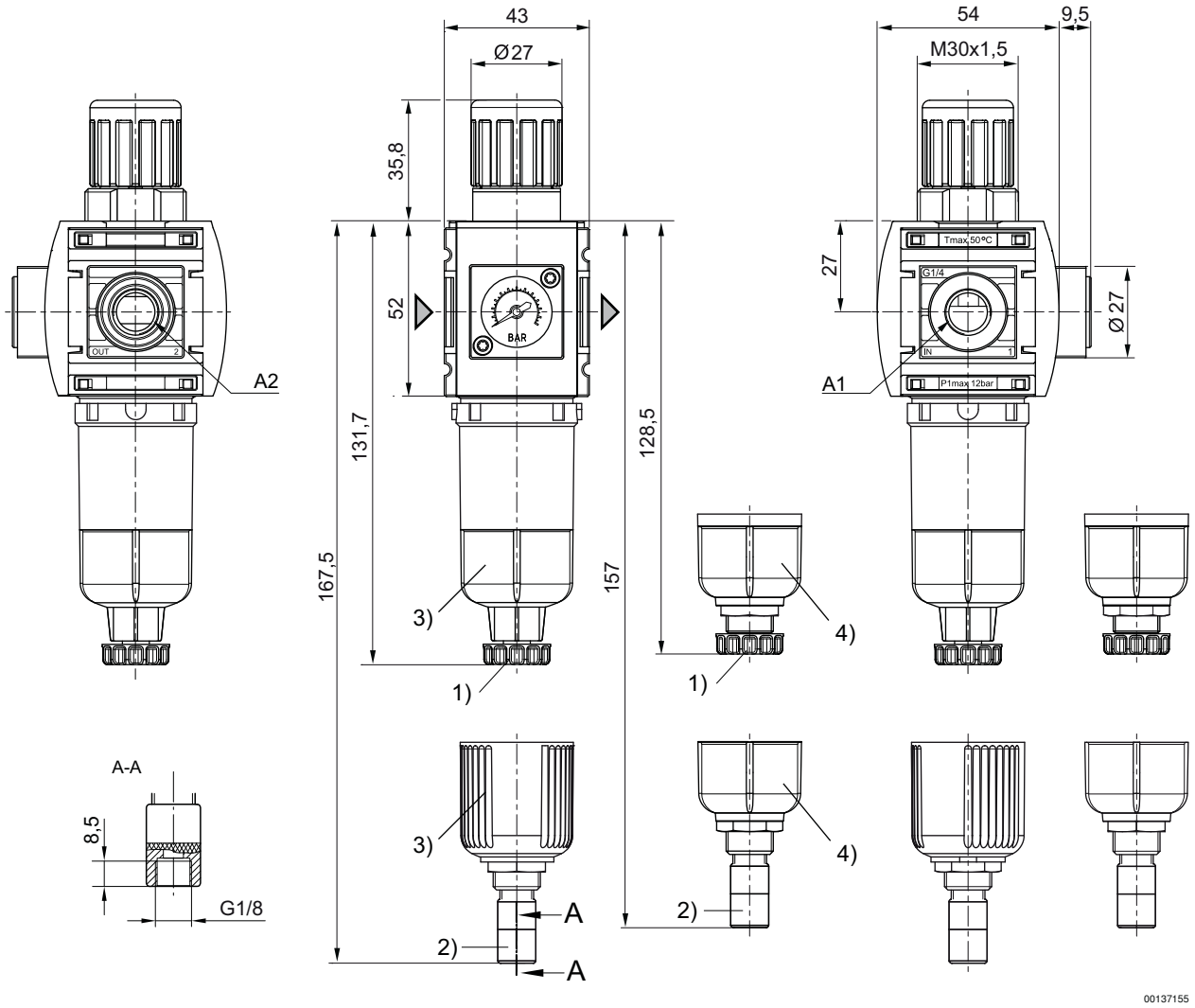


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Filter pressure regulator, Series AS1-FRE

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

Dimensions, Fig. 1

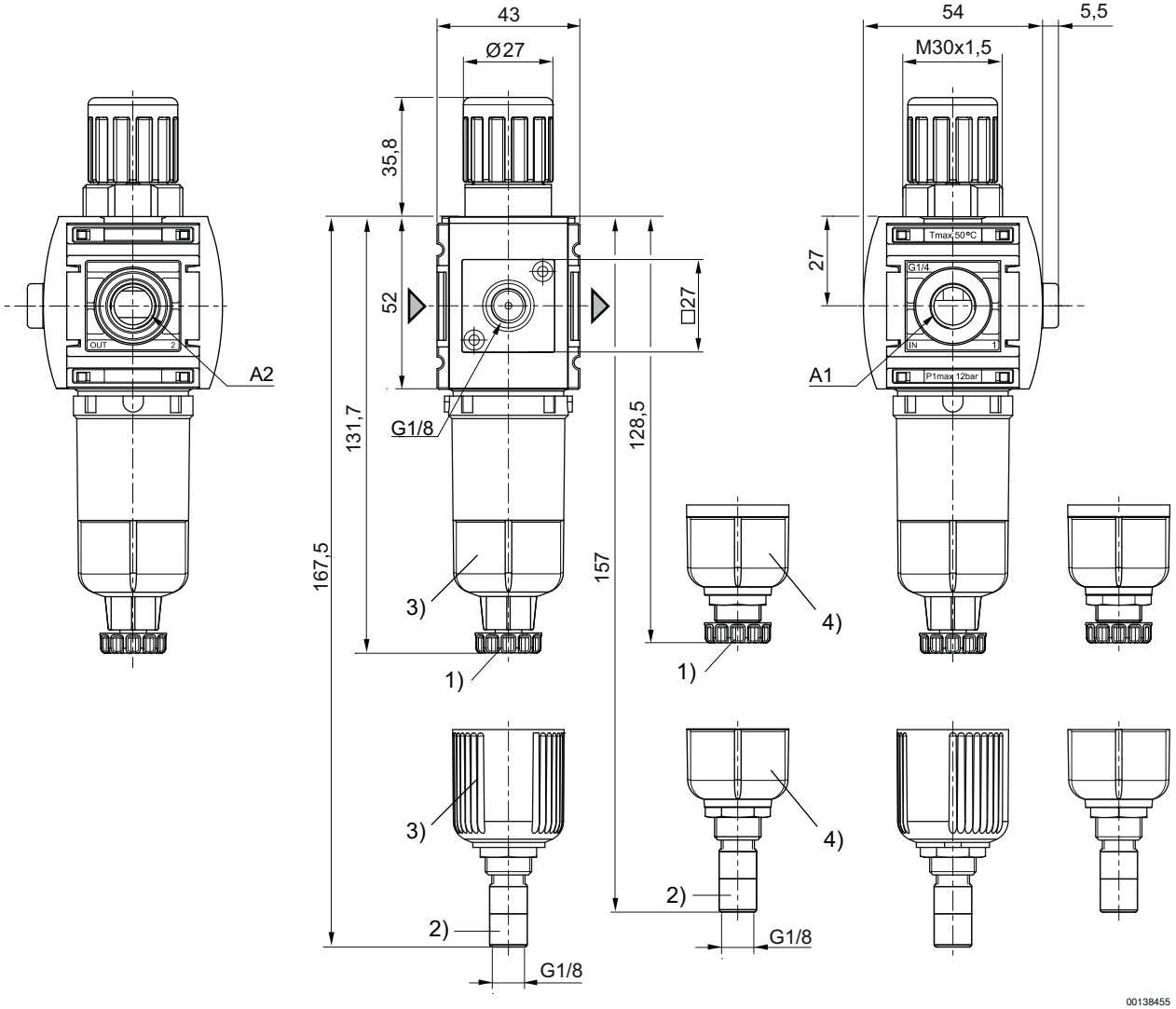


A1 = input
A2 = output
1) Semi-automatic condensate drain
2) Fully automatic condensate drain
3) Reservoir: polycarbonate
4) Reservoir: metal

Filter pressure regulator, Series AS1-FRE

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

Dimensions, Fig. 2



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

Filter pressure regulator, Series AS1-FRE-...-E11

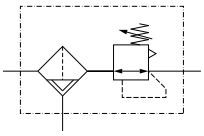
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► lockable ► with E11 locking

00015829

Version	1-in-1, Can be assembled into blocks
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
Adjustment range min./max.	0.5 bar / 8 bar
Pressure supply	single
Filter reservoir volume	16 cm^3
Filter element	exchangeable
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
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.
- The E11 locking is delivered without a key (see accessories for keys).
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

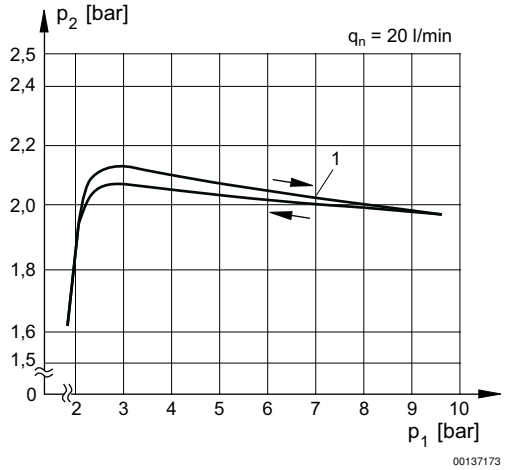
	Port	Qn [l/min]	Condensate drain	Weight [kg]	Part No.
	G 1/4	1000	fully automatic, closed without pressure	0.256	R412010650

Max. pressure gauge Ø in blocked state: 40
Order pressure gauge separately
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Filter pressure regulator, Series AS1-FRE-...-E11

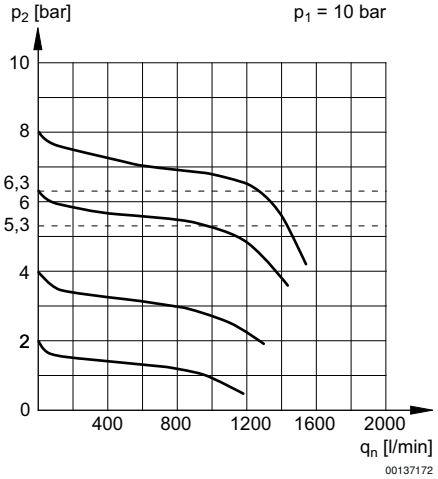
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► lockable ► with E11 locking

Pressure characteristics curve



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

Flow rate characteristic

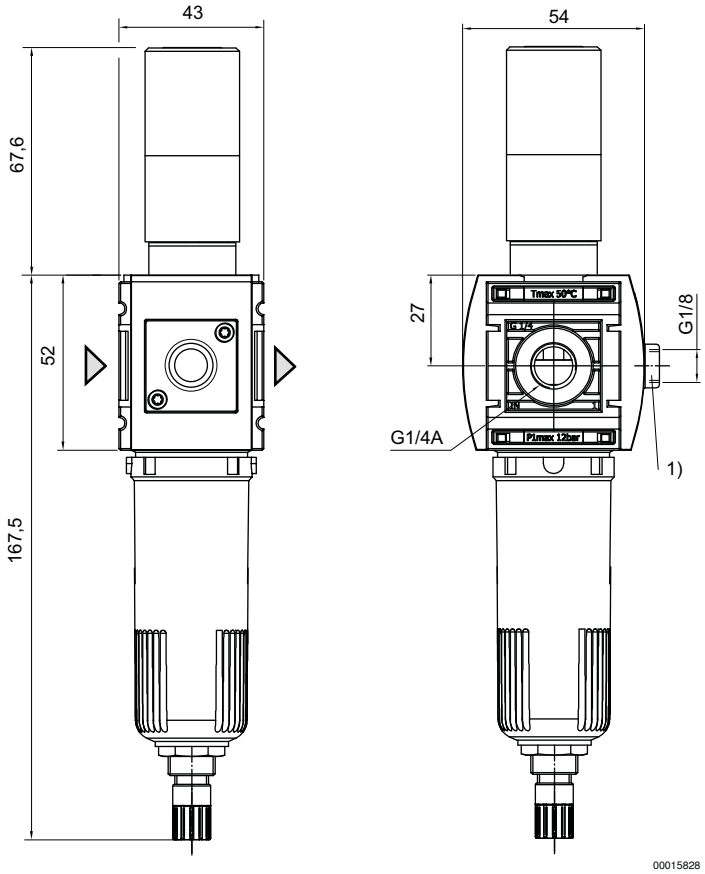


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Filter pressure regulator, Series AS1-FRE-...-E11

► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► lockable ► with E11 locking

Dimensions



1) Adapter
Order pressure gauge separately

Standard filter, Series AS1-FLS

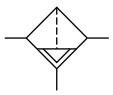
► G 1/4 ► Air supply: left ► filter porosity: 5 µm

00137253

Version	Standard filter, Can be assembled into blocks
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
Filter reservoir volume	16 cm³
Filter element	exchangeable
filter porosity	5 µm
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

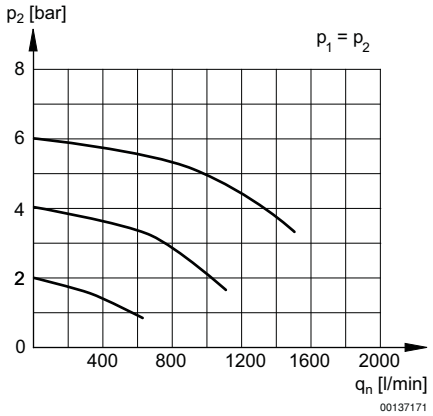
	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
	G 1/4	1000	semi-automatic, open without pressure	Polycarbonate	-	0.166	**R412014600**
			fully automatic, open without pressure	Polycarbonate	-	0.184	R412014601
			fully automatic, closed without pressure	Polycarbonate	-	0.184	R412014602
			semi-automatic, open without pressure	Polycarbonate	metal	0.193	**R412014603**
			semi-automatic, open without pressure	metal	-	0.243	R412014604
			fully automatic, open without pressure	metal	-	0.255	R412014605
			fully automatic, closed without pressure	metal	-	0.255	R412014606

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

Standard filter, Series AS1-FLS

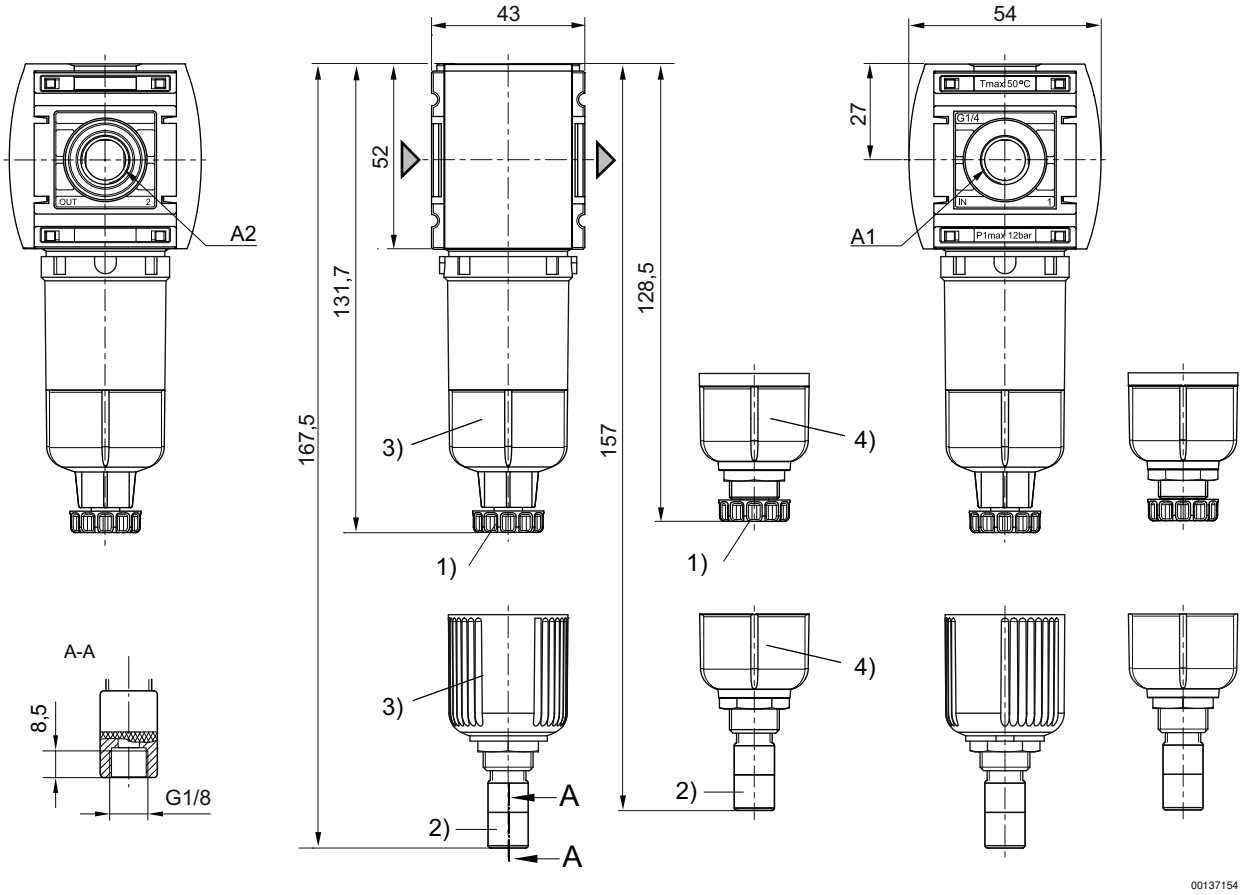
► G 1/4 ► Air supply: left ► filter porosity: 5 µm

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Dimensions



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

Pre-filter, Series AS1-FLP

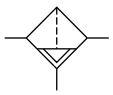
► G 1/4 ► Air supply: left ► filter porosity: 0.3 µm

00137253

Version	Pre-filter, Can be assembled into blocks
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
Filter reservoir volume	12 cm³
Filter element	exchangeable
filter porosity	0.3 µm
Condensate drain	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Filter insert	Paper

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- max. residual oil content at the outlet: 1 mg/m³
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 2

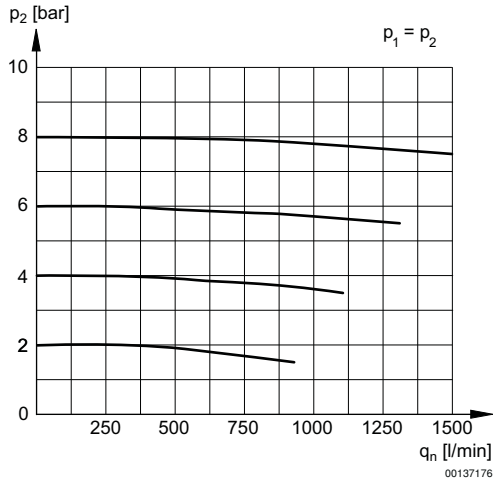
	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
	G 1/4	350	semi-automatic, open without pressure	Polycarbonate	-	0.169	**R412014607**
			fully automatic, open without pressure	Polycarbonate	-	0.187	**R412014608**
			fully automatic, closed without pressure	Polycarbonate	-	0.187	R412014609
			semi-automatic, open without pressure	Polycarbonate	metal	0.202	R412014610
			semi-automatic, open without pressure	metal	-	0.246	R412014611
			fully automatic, open without pressure	metal	-	0.258	R412014612
			fully automatic, closed without pressure	metal	-	0.258	R412014613

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0,1 bar

Pre-filter, Series AS1-FLP

► G 1/4 ► Air supply: left ► filter porosity: 0.3 µm

Flow rate characteristic

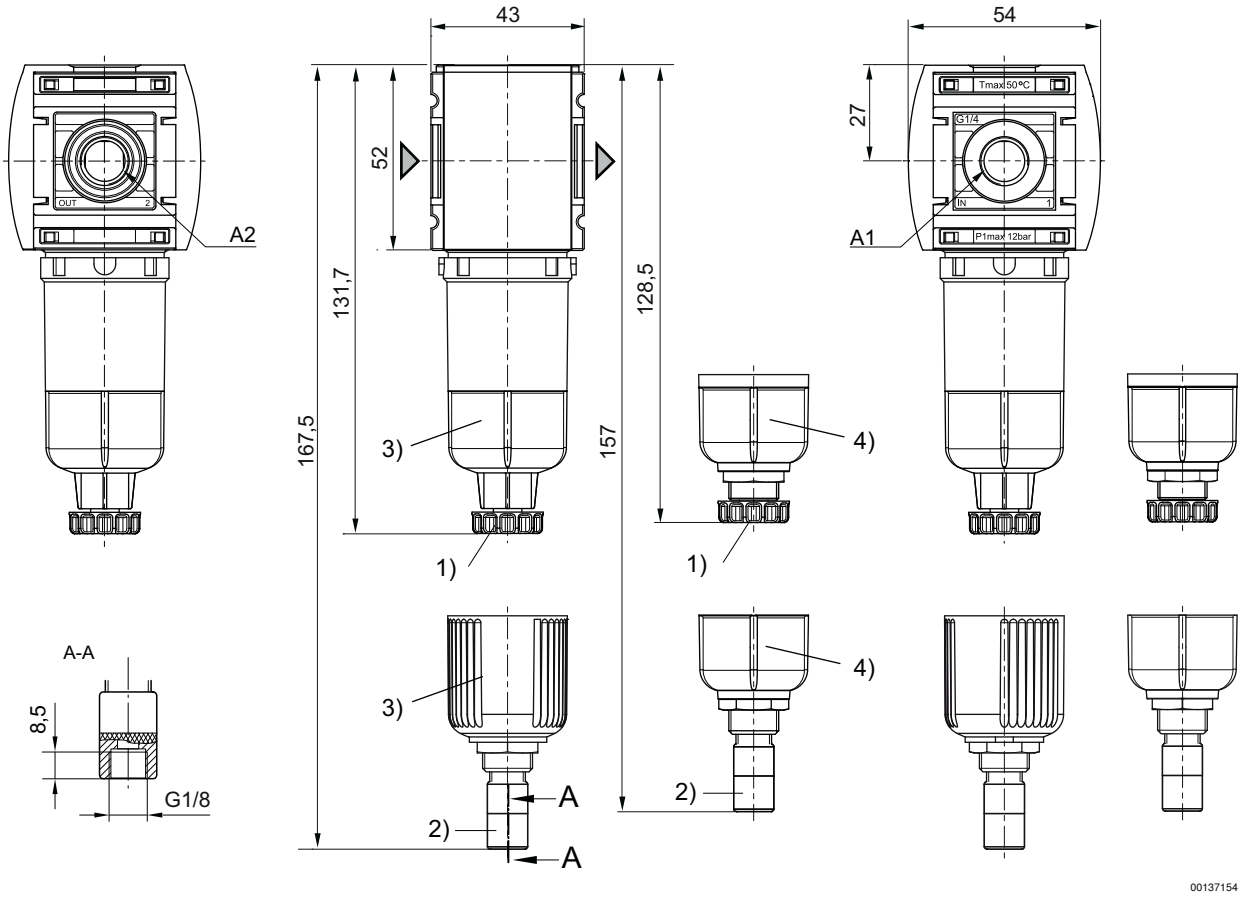


p2 = secondary pressure
qn = nominal flow

Pre-filter, Series AS1-FLP

► G 1/4 ► Air supply: left ► filter porosity: 0.3 µm

Dimensions



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

Microfilter, Series AS1-FLC

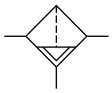
► G 1/4 ► Air supply: left ► filter porosity: 0.01 µm

00137254

Version	Microfilter, Can be assembled into blocks
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
Filter reservoir volume	12 cm³
Filter element	exchangeable
filter porosity	0.01 µm
Condensate drain	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Filter insert	Borosilicate aluminum

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 0.3 µm
- max. residual oil content at the outlet: 0.01 mg/m³
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 1

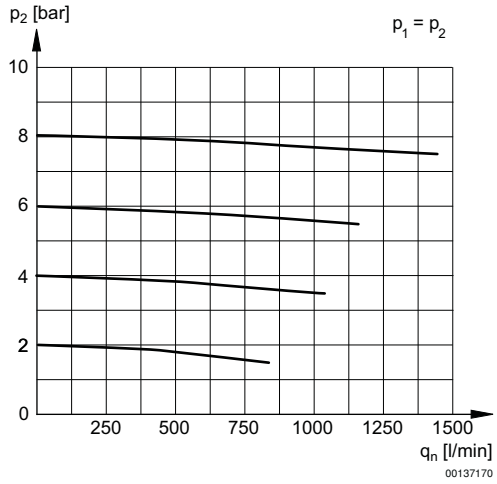
	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
	G 1/4	350	semi-automatic, open without pressure	Polycarbonate	-	0.169	**R412014614**
			fully automatic, open without pressure	Polycarbonate	-	0.187	**R412014615**
			fully automatic, closed without pressure	Polycarbonate	-	0.187	R412014616
			semi-automatic, open without pressure	Polycarbonate	metal	0.202	R412014617
			semi-automatic, open without pressure	metal	-	0.246	R412014618
			fully automatic, open without pressure	metal	-	0.258	R412014619
			fully automatic, closed without pressure	metal	-	0.258	R412014620

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0,1 bar

Microfilter, Series AS1-FLC

► G 1/4 ► Air supply: left ► filter porosity: 0.01 µm

Flow rate characteristic

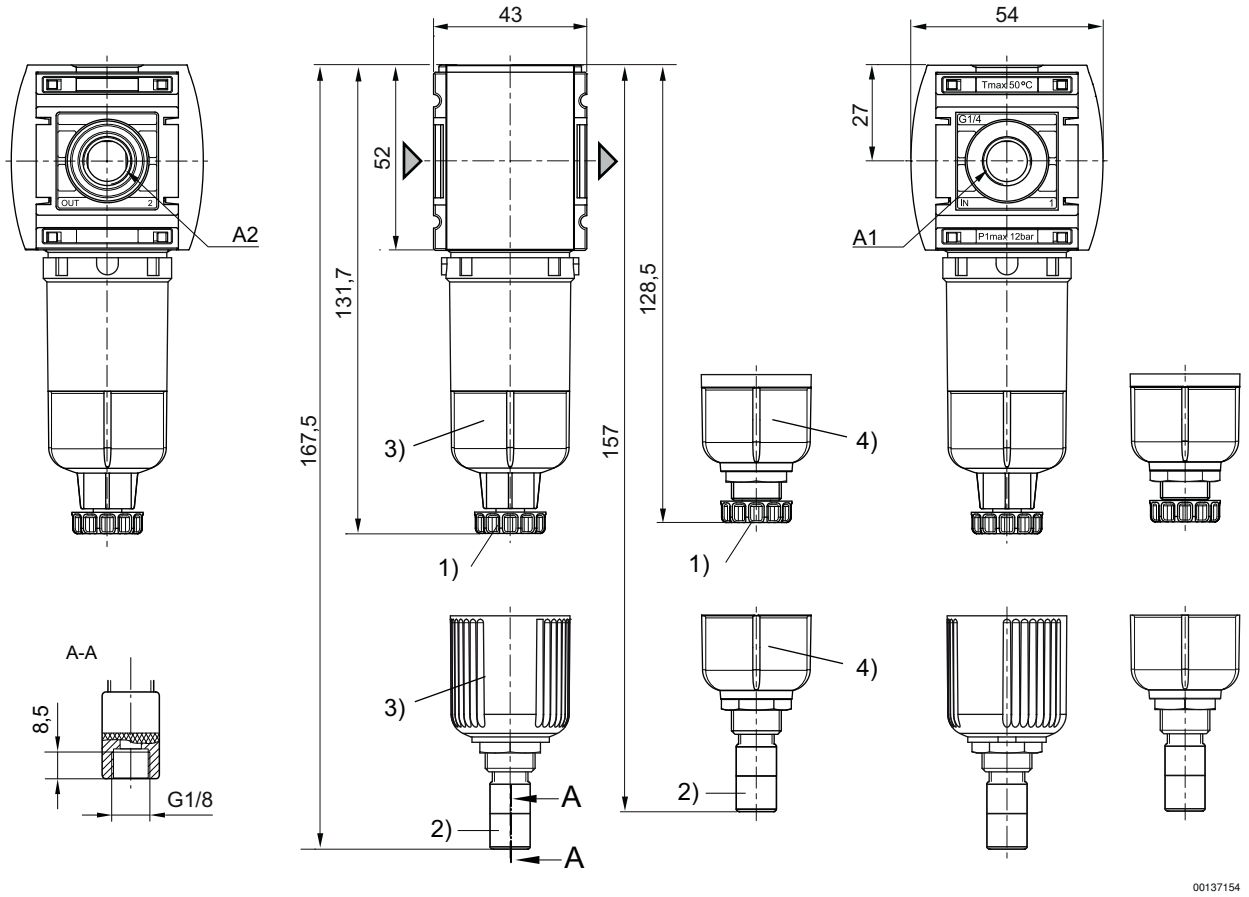


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Microfilter, Series AS1-FLC

► G 1/4 ► Air supply: left ► filter porosity: 0.01 µm

Dimensions



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

Active carbon filter, Series AS1-FLA

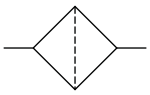
► G 1/4 ► Air supply: left

00137247

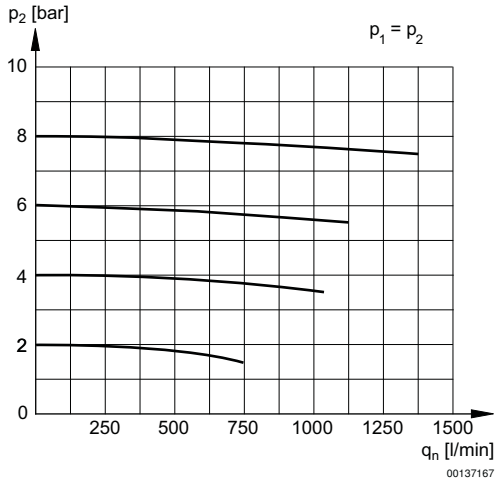
Version	Active carbon filter, Can be assembled into blocks
Mounting orientation	vertical
Working pressure min./max.	0 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Filter reservoir volume	12 cm³
Filter element	exchangeable
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Filter insert	Active carbon

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 0.01 µm
- max. residual oil content at the outlet: 0.005 mg/m³
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 0

	Port	Qn	Reservoir	Protective guard	Weight	Part No.
		[l/min]			[kg]	
	G 1/4	350	Polycarbonate	-	0.171	**R412014621**
			Polycarbonate	metal	0.204	R412014622
			metal	-	0.232	R412014623
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0,1 bar						

Flow rate characteristic



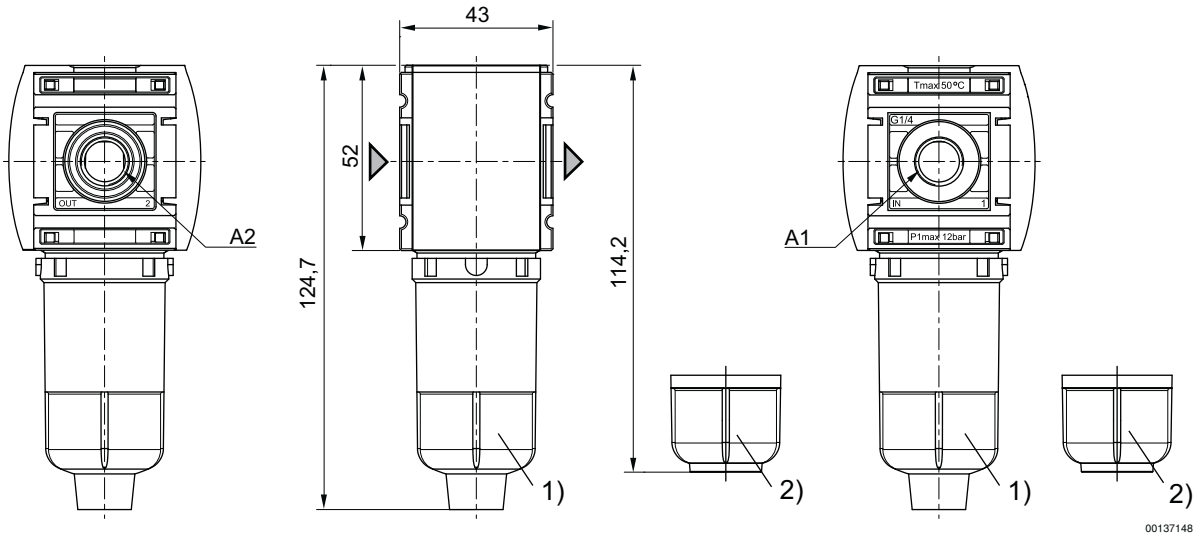
00137167

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

Active carbon filter, Series AS1-FLA

► G 1/4 ► Air supply: left

Dimensions



A1 = input
A2 = output
1) Reservoir: polycarbonate
2) Reservoir: metal

Micro oil-mist lubricator, Series AS1-LBM

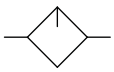
► G 1/4 ► Air supply: left

00137245

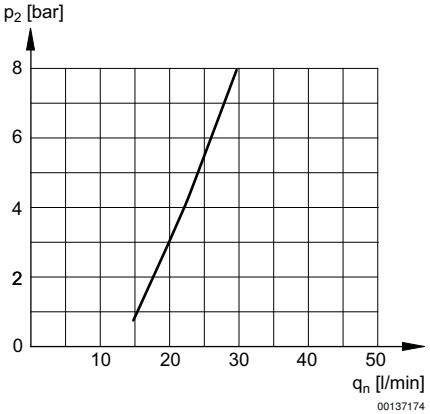
Version	Micro oil-mist lubricator, Can be assembled into blocks
Mounting orientation	vertical
Working pressure min./max.	0.8 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 °C / +50 °C
Ambient temperature min./max.	-10 °C / +50 °C
Lubricator reservoir volume	35 cm³
Type of filling	Manual oil filling
Oil type	HLP 32 (DIN 51 524 - ISO VG 32) HLP 68 (DIN 51 524 - ISO VG 68)
Compressed air connection	G 1/4
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- only approx. 10% of the preset drip quantity enters the compressed air system
- oil filling not possible during operation
- Oil dosing at 1000 l/min [drops/min]: 10-20

	Qn	Reservoir	Protective guard	Weight	Part No.
	[l/min]			[kg]	
	1400	Polycarbonate	-	0.187	**R412014624**
		Polycarbonate	metal	0.22	R412014625
		Die cast zinc	-	0.248	R412014626
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar					

Lubricator activation margin



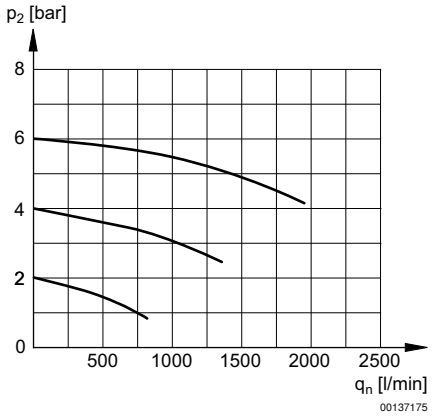
00137174

p2 = secondary pressure
qn = nominal flow

Micro oil-mist lubricator, Series AS1-LBM

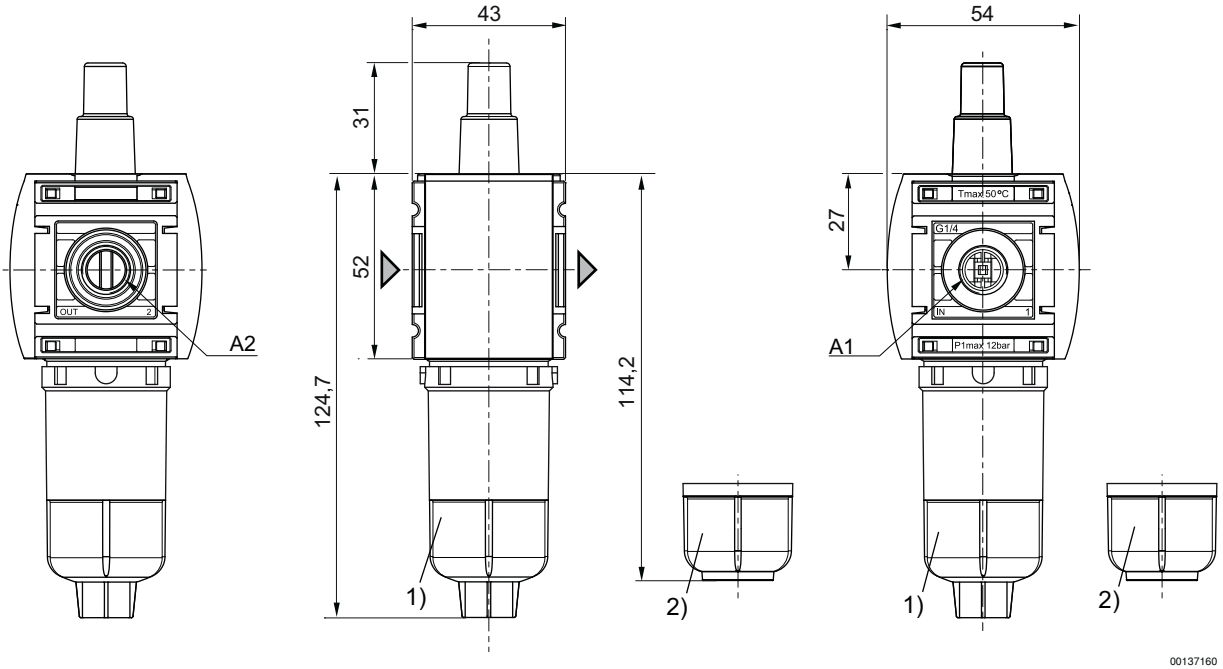
► G 1/4 ► Air supply: left

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Dimensions



A1 = input
A2 = output
1) Reservoir: polycarbonate
2) Reservoir: metal

Filling unit, electrically operated, Series AS1-SSU

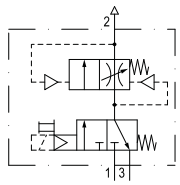
► G 1/4 ► Air supply: left ► pipe connection

00137268

Parts	3/2-directional valve, electrically operated, Filling valve
Version	Poppet valve, Can be assembled into blocks
Nominal flow	1300 l/min
Nominal flow, 1►2	1300 l/min
Nominal flow, 2►3	380 l/min
Working pressure min./max.	2.5 bar / 10 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Pilot	internal
Sealing principle	Soft sealing
Max. particle size	25 µm
Protection class, with Plug Mounted	IP65
Duty cycle	100 %
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc

Technical Remarks
■ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
■ Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.

Operational voltage	Power consumption
DC	DC
	W
24 V	2

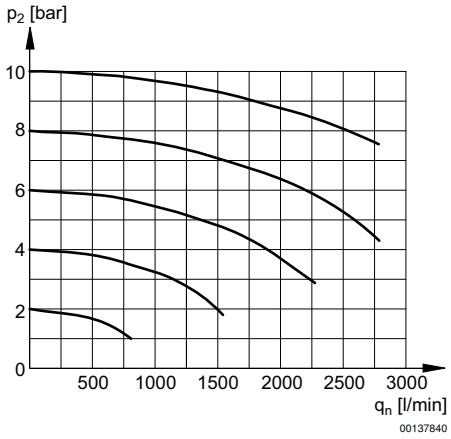
		Port	Exhaust	Operational voltage	Electr. connection	Weight	Fig.	Part No.
				DC				
						[kg]		
		G 1/4	G 1/4	24 V	ISO 15217, form C	0.36	Fig. 1	**R412010484**
					M12	0.377	Fig. 2	R412010682

Basic valve with pilot valve
Manual override: without detent
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Filling unit, electrically operated, Series AS1-SSU

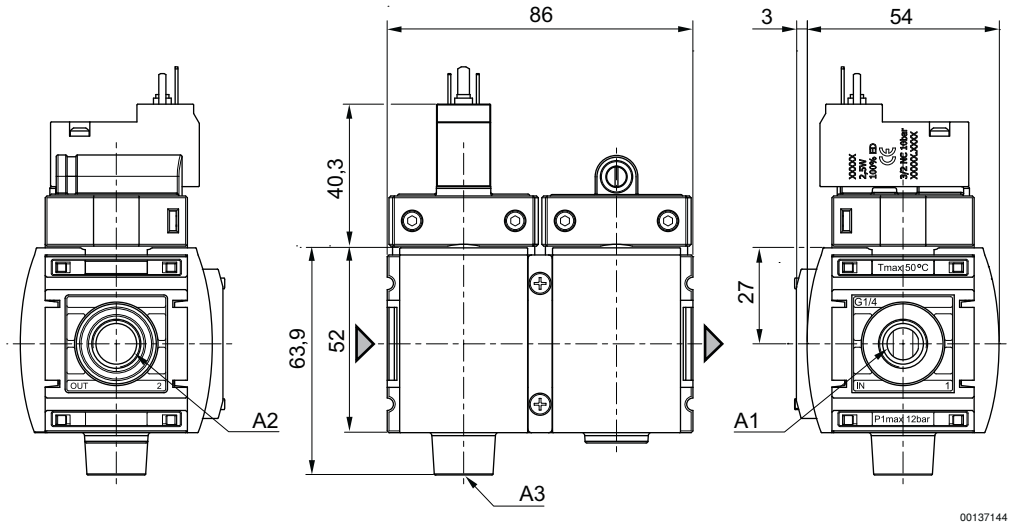
► G 1/4 ► Air supply: left ► pipe connection

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Fig. 1: Filling unit with pilot valve and port for electrical connector form C

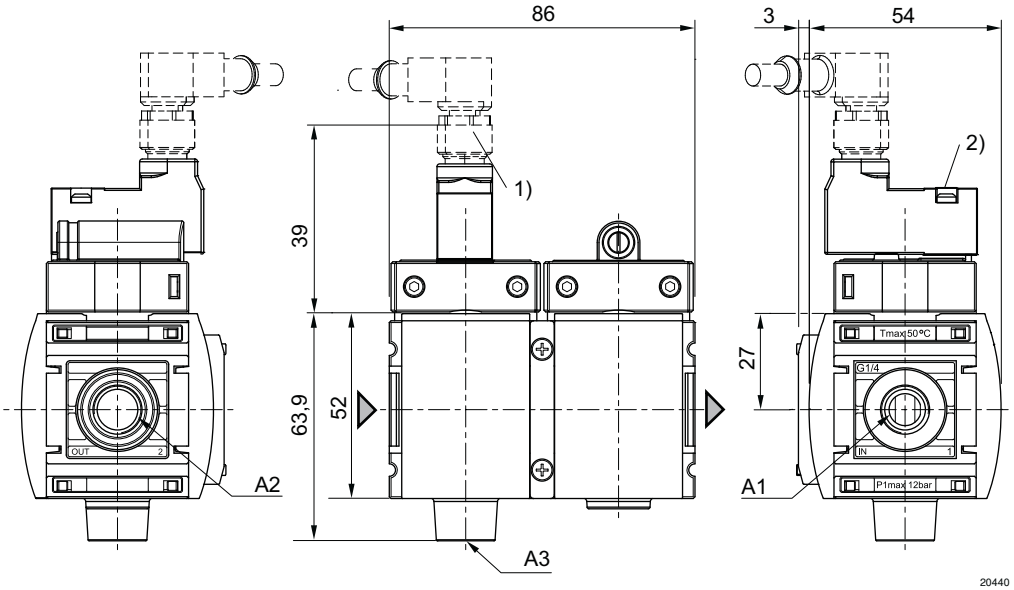


A1 = input
A2 = output
A3 = ventilation port

Filling unit, electrically operated, Series AS1-SSU

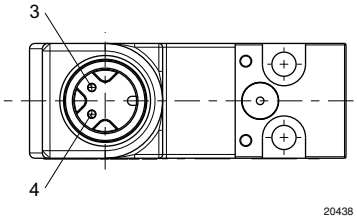
► G 1/4 ► Air supply: left ► pipe connection

Fig. 2: Filling unit with pilot valve and electrical connector for plug M12x1



A1 = input
A2 = output
A3 = ventilation port
1) plug M12
2) Manual override

Pin assignment M12x1



3: +/-
4: +/-

Filling valve, pneumatically operated, Series AS1-SSV

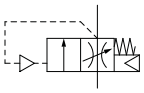
► G 1/4 ► Air supply: left ► pipe connection

00137243

Version	Poppet valve, Can be assembled into blocks
Working pressure min./max.	0 bar / 16 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Sealing principle	Soft sealing
Control pressure min./max.	2.5 bar / 16 bar
Max. particle size	40 µm
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc

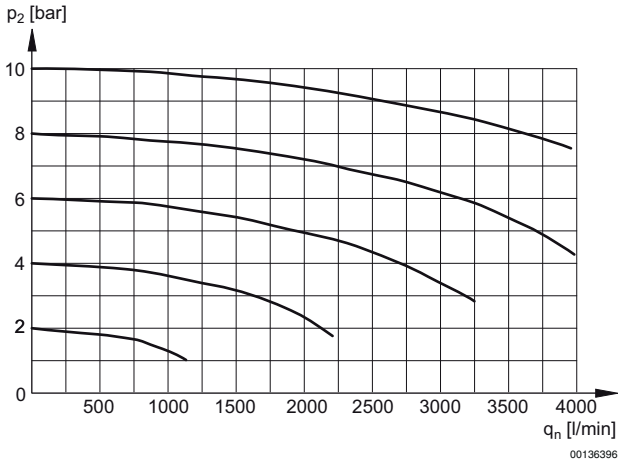
Technical Remarks

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

	Port	Qn		Weight	Part No.
			1►2		
			[l/min]	[kg]	
	G 1/4	2000	2000	0.1336	**R412014671**

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

Flow rate characteristic



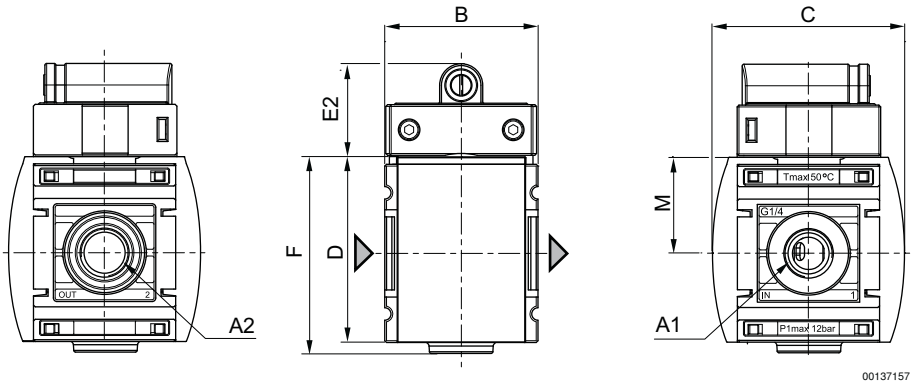
00136396

p2 = secondary pressure
qn = nominal flow

Filling valve, pneumatically operated, Series AS1-SSV

► G 1/4 ► Air supply: left ► pipe connection

Dimensions



A1 = input
A2 = output

Part No.	A1	A2	B	C	D	E2	F	M			
R412014671	G 1/4	G 1/4	43	54	52	26	54.9	27			

3/2-directional valve, electrically operated, Series AS1-SOV

► ATEX optional ► G 1/4 ► Air supply: left ► pipe connection

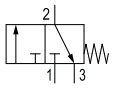
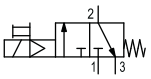
00137241_a

Version	Poppet valve, Can be assembled into blocks
Nominal flow, 1►2	2000 l/min
Nominal flow, 2►3	380 l/min
Working pressure min./max.	2 bar / 10 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Pilot	internal
Sealing principle	Soft sealing
Max. particle size	25 μm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with Plug Mounted	IP65
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- ATEX optional: The ATEX ID depends on the selected pilot valve.

Operational voltage			Power consumption	Switch-on power		Holding power
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
			W	VA	VA	VA
24 V	-	-	2	-	-	-
-	230 V	230 V	-	3	3	1.6

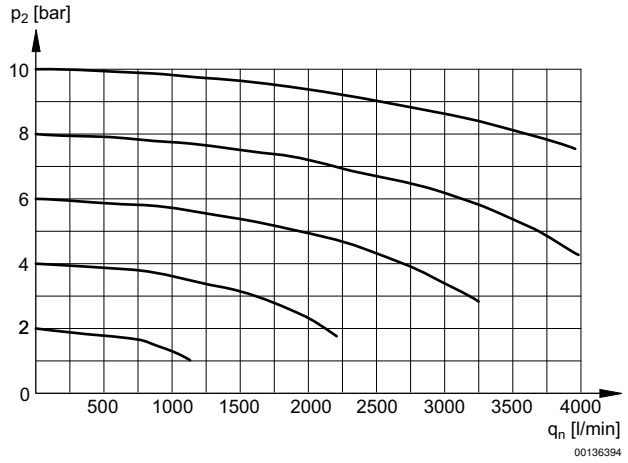
		Port	Exhaust	Operational voltage DC	AC 50 Hz	AC 60 Hz	Electr. connection	Weight	Fig.	Note	Part No.
								[kg]			
	-	G 1/4	G 1/4	-	-	-	-	0.1964	Fig. 1	1); 4)	R412014669
								0.2096		2); 4)	R412014670
		G 1/4	G 1/4	24 V	-	-	Plug, ISO 15217, form C	0.2154	Fig. 2	3)	**R412014666**
				-	230 V	230 V	Plug, ISO 15217, form C	0.2143	Fig. 2		**R412014668**
				24 V	-	-	Plug, M12	0.2321	Fig. 3		**R412010680**

1) Basic valve without pilot valve
2) Basic valve without pilot valve, with CNOMO subbase
3) Basic valve with pilot valve
4) ATEX optional
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

3/2-directional valve, electrically operated, Series AS1-SOV

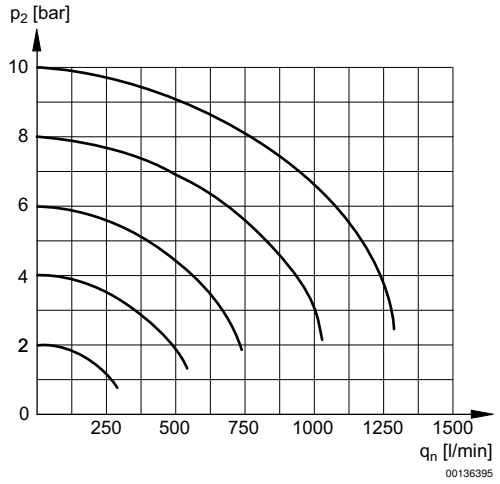
► ATEX optional ► G 1/4 ► Air supply: left ► pipe connection

Flow rate characteristic



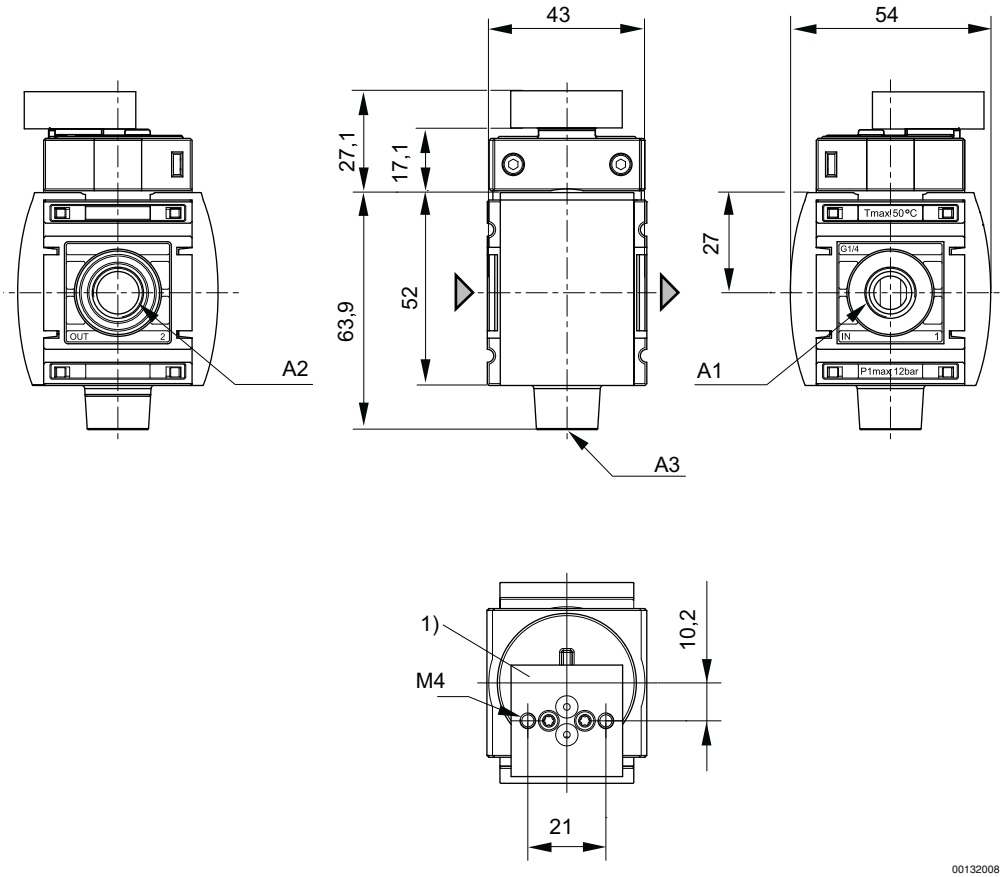
p2 = secondary pressure
qn = nominal flow

Rear exhaust



p2 = secondary pressure
qn = nominal flow

Fig. 1: 3/2-directional valve with transition plate for pilot valve series DO30

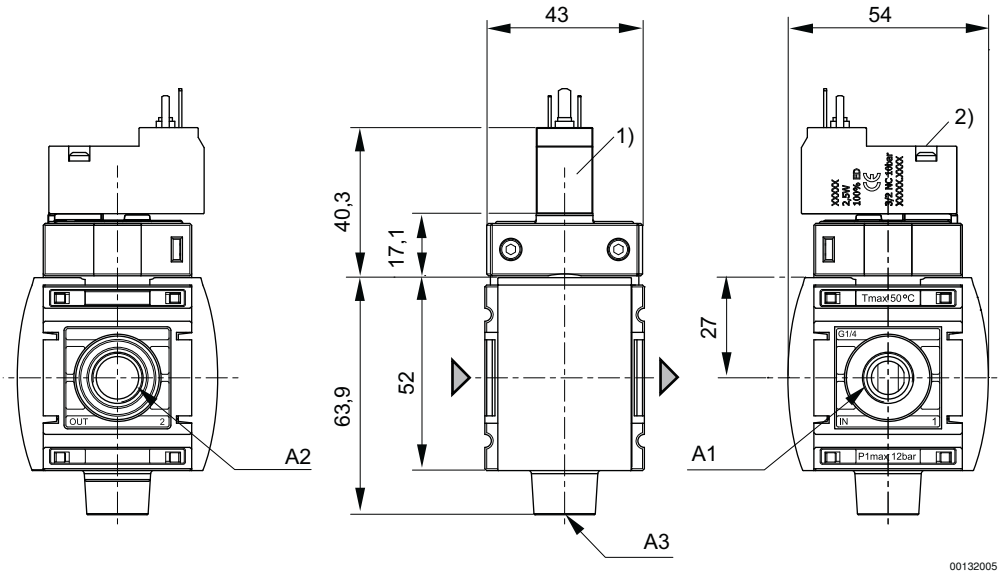


A1 = input
A2 = output
A3 = ventilation port
1) Transition plate with CNOMO porting configuration for pilot valve DO30

3/2-directional valve, electrically operated, Series AS1-SOV

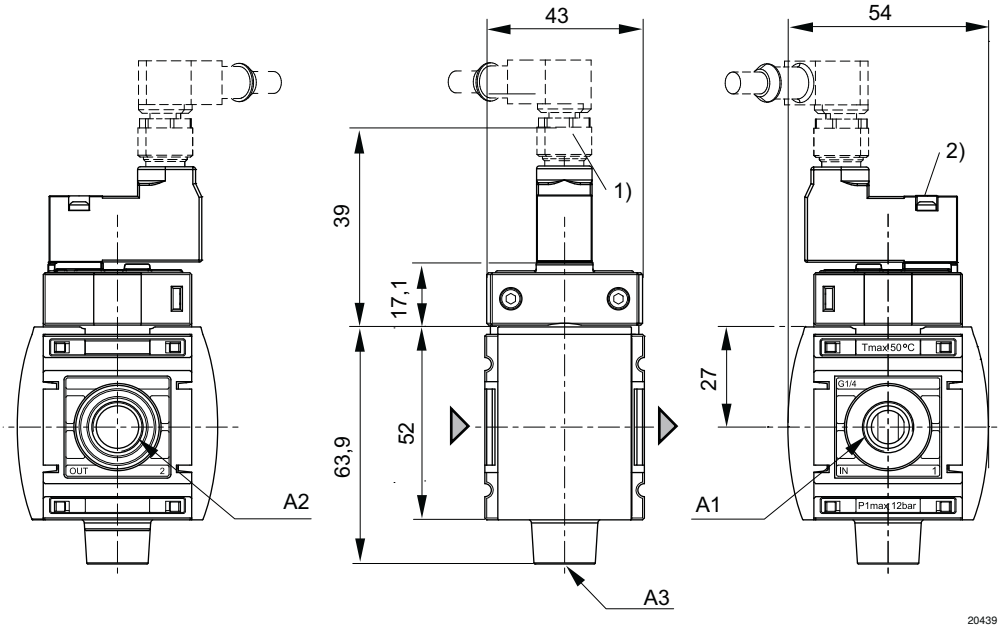
► ATEX optional ► G 1/4 ► Air supply: left ► pipe connection

Fig. 2: 3/2-directional valve with pilot valve and port for electrical connector form C



A1 = input
A2 = output
A3 = ventilation port
1) For electrical connector according to ISO 15217 (form C)
2) Manual override

Fig. 3: 3/2-directional valve with pilot valve, push-in fitting M12x1

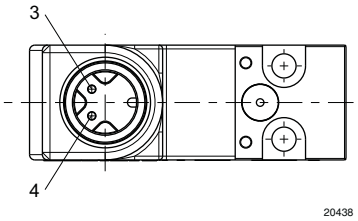


A1 = input
A2 = output
A3 = ventilation port
1) plug M12
2) Manual override

3/2-directional valve, electrically operated, Series AS1-SOV

► ATEX optional ► G 1/4 ► Air supply: left ► pipe connection

Pin assignment M12x1



3: +/-
4: +/-

3/2-directional valve, pneumatically operated, Series AS1-SOV

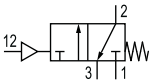
► G 1/4 ► Air supply: left ► pipe connection

00137817

Version	Poppet valve, Can be assembled into blocks
Working pressure min./max.	0 bar / 16 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Sealing principle	Soft sealing
Control pressure min./max.	2.5 bar / 16 bar
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

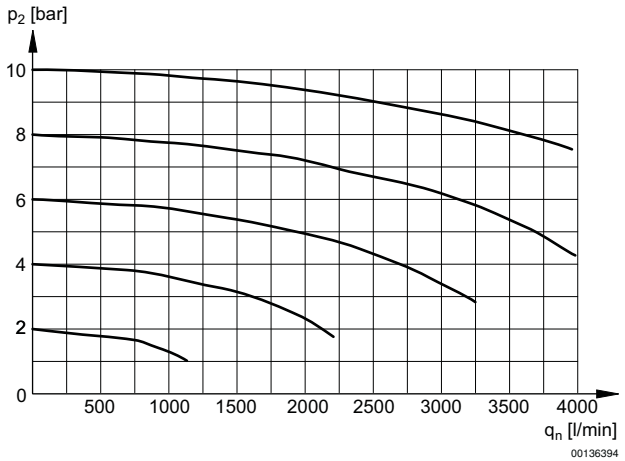
Technical Remarks

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

	Port	Exhaust	Qn			Weight	Part No.
				1►2	2►3		
					[l/min]	[kg]	
	G 1/4	G 1/4	2000	2000	380	0.09	**R412014665**

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

Flow rate characteristic

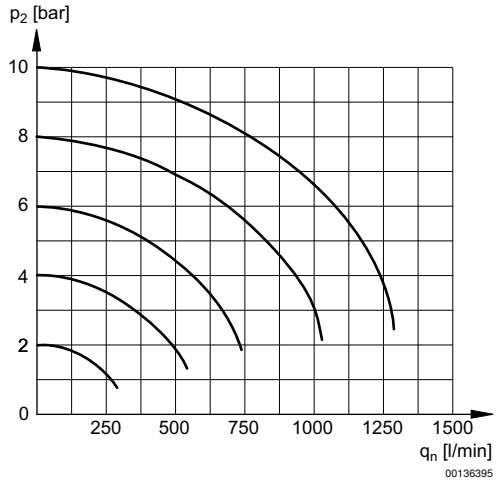


p2 = secondary pressure
qn = nominal flow

3/2-directional valve, pneumatically operated, Series AS1-SOV

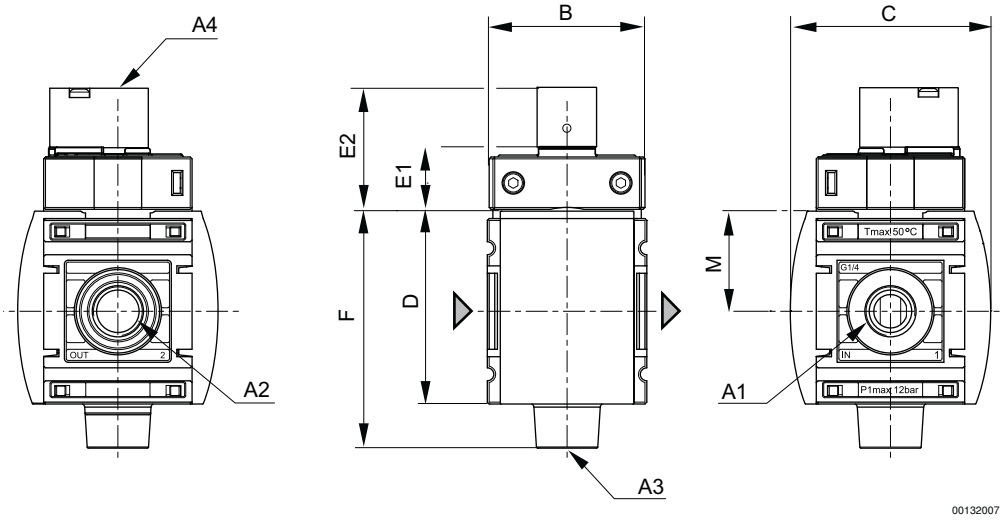
► G 1/4 ► Air supply: left ► pipe connection

Rear exhaust



p2 = secondary pressure
qn = nominal flow

Dimensions



A1 = input
A2 = output
A3 = ventilation port
A4 = control pressure connection

Part No.	A1	A2	A3	A4	B	C	D	E1	E2	F	M	
R412014665	G 1/4	G 1/4	G 1/4	G 1/8	43	54	52	17.1	33.1	63.9	27	

3/2-shut-off valve, mechanically operated, Series AS1-BAV

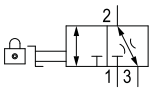
► G 1/4 ► Air supply: left

00137244

Version	Ball valve, Can be assembled into blocks for padlocks lockable
Working pressure min./max.	0 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 °C / +50 °C
Ambient temperature min./max.	-10 °C / +50 °C
Actuating element	rotary switch
Max. particle size	25 µm
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Actuating element	Polyoxymethylene

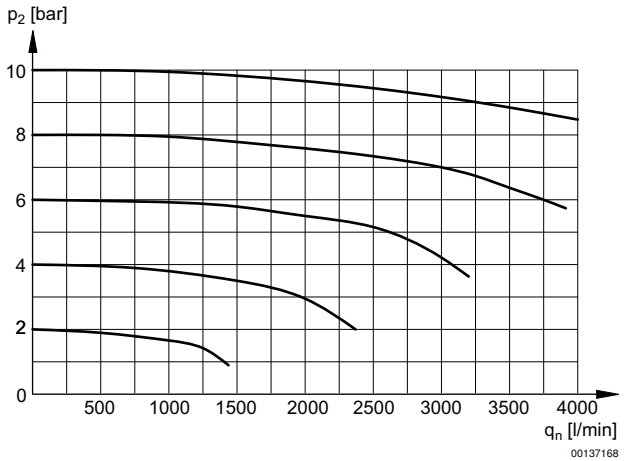
Technical Remarks

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

	Port	Exhaust	Qn		Weight	Part No.
			1►2	2►3		
				[l/min]	[kg]	
	G 1/4	G 1/4	2600	380	0.15	**R412014664**

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

Flow rate characteristic



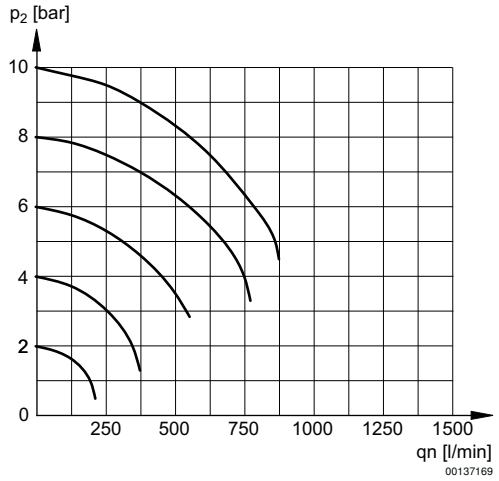
00137168

p2 = secondary pressure
qn = nominal flow

3/2-shut-off valve, mechanically operated, Series AS1-BAV

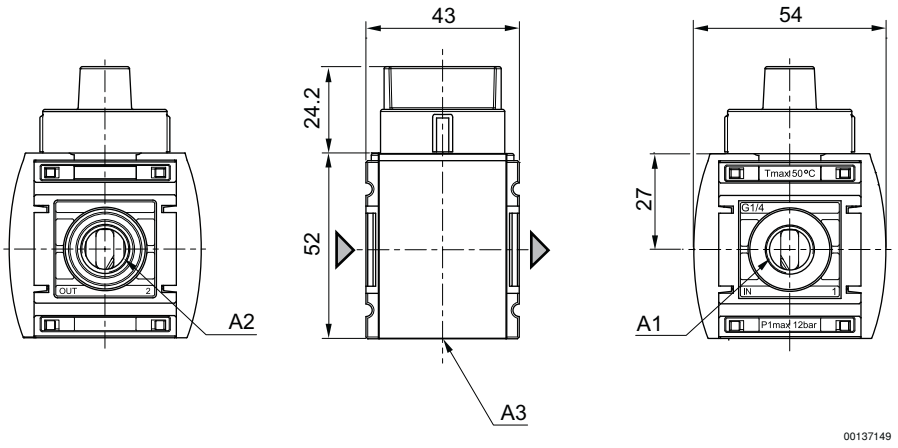
► G 1/4 ► Air supply: left

Rear exhaust



p2 = secondary pressure
qn = nominal flow

Dimensions



A1 = input
A2 = output
A3 = ventilation port

Distributor, Series AS1-DIS

► G 1/4 ► Air supply: left ► Distributor 2x ► Distributor

00137242

Version	Distributor, Can be assembled into blocks
Mounting orientation	Any
Working pressure min./max.	0 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

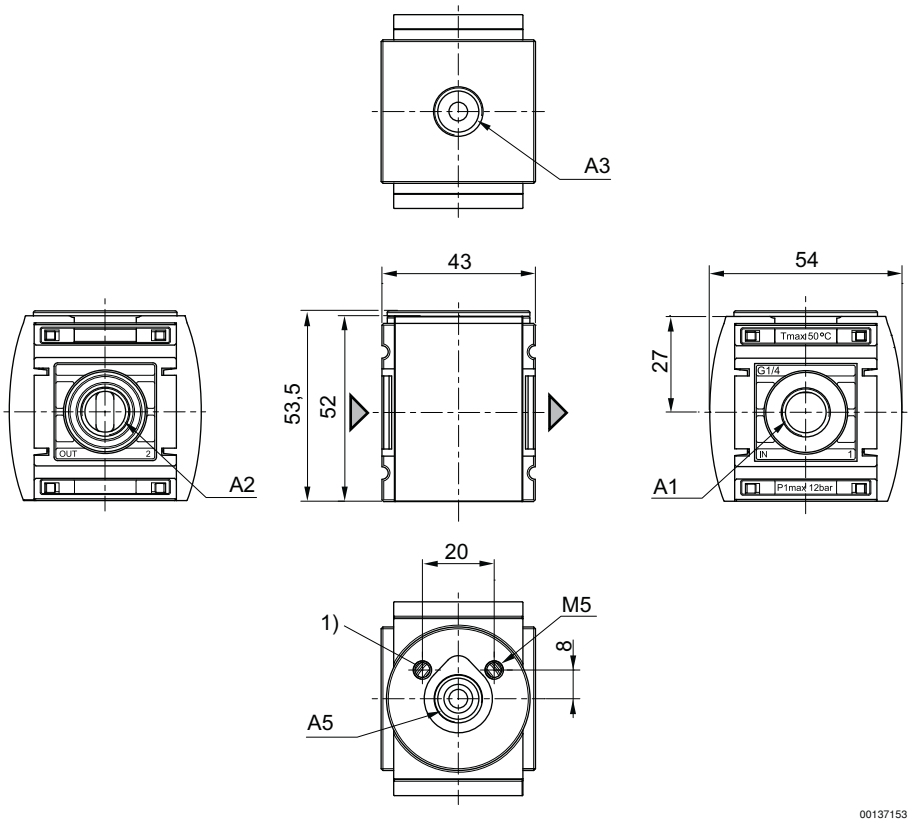
	Port	Qn			Weight	Part No.
		1►2	1►3	1►5		
		[l/min]			[kg]	
	G 1/4	2700	950	2000	0.148	**R412014662**

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

Distributor, Series AS1-DIS

► G 1/4 ► Air supply: left ► Distributor 2x ► Distributor

Dimensions



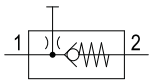
A1 = input
A2 = output
A3 = output
A5 = output
1) Mounting thread for pressure sensor

Distributor, Series AS1-DIN

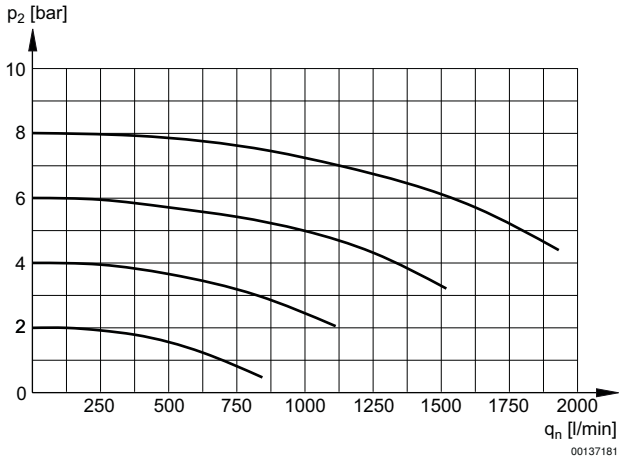
► G 1/4 ► Air supply: left ► Distributor 1x ► Non-return valve

00137240

Version	Non-return valve, Can be assembled into blocks
Mounting orientation	Any
Working pressure min./max.	0 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

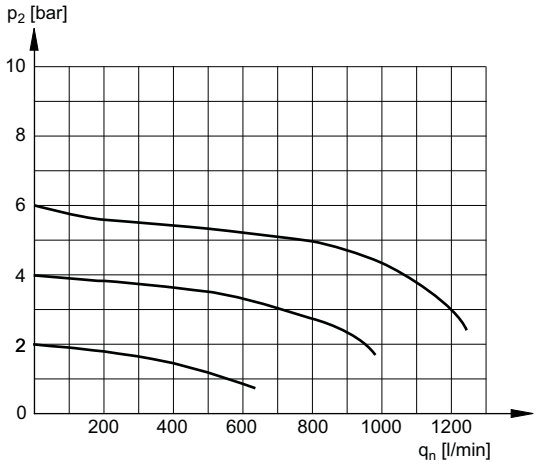
	Port	Qn		Weight	Part No.
		1►2	1►3		
		[l/min]		[kg]	
	G 1/4	800	1000	0.178	R412014663
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar					

Flow rate characteristic



00137181

Nominal flow 1 ► 2
p2 = secondary pressure
qn = nominal flow



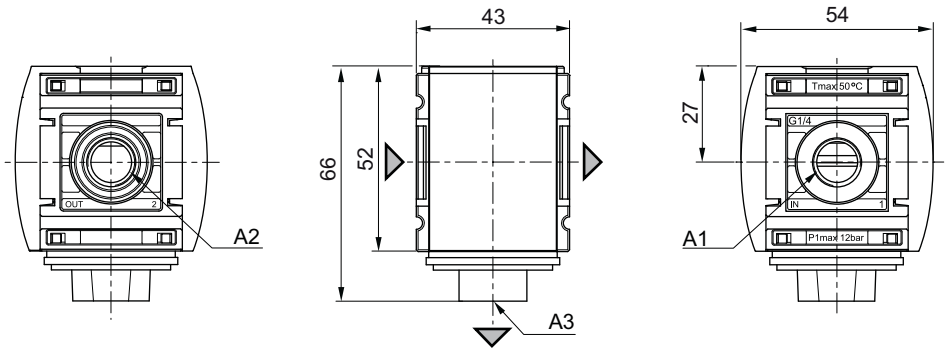
00137182

Nominal flow 1 -> 3
p2 = secondary pressure
qn = nominal flow

Distributor, Series AS1-DIN

► G 1/4 ► Air supply: left ► Distributor 1x ► Non-return valve

Dimensions



A1 = input
A2 = output
A3 = output

Pressure regulator, Series AS1-RGS

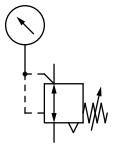
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual

00137239

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

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

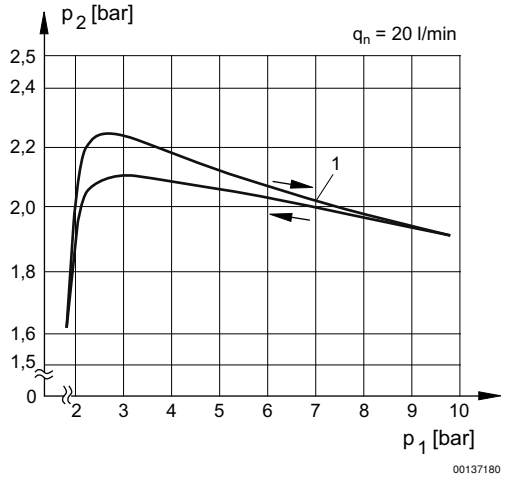
		Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Fig.	Part No.
			[l/min]	[bar]	[bar]	[kg]		
		G 1/4	1000	0.2 / 12	0.2 - 4	0.209	Fig. 1	R412014705
				0.5 / 12	0.5 - 8			R412014706
				0.5 / 12	0.5 - 10			R412014707
	-	G 1/4	1000	0.2 / 12	0.2 - 4	0.206	Fig. 2	R412014711
				0.5 / 12	0.5 - 8			R412014712
				0.5 / 12	0.5 - 10			**R412014713**

Max. pressure gauge Ø in blocked state: 40
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Pressure regulator, Series AS1-RGS

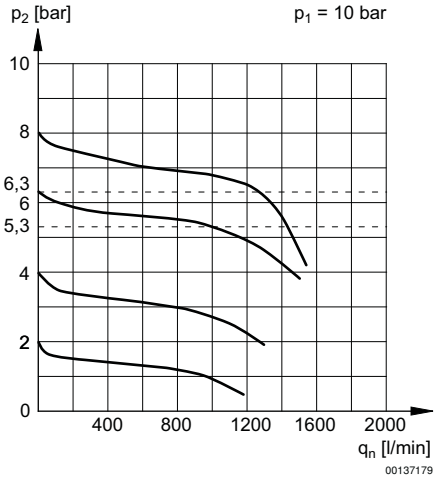
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual

Pressure characteristics curve



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

Flow rate characteristic

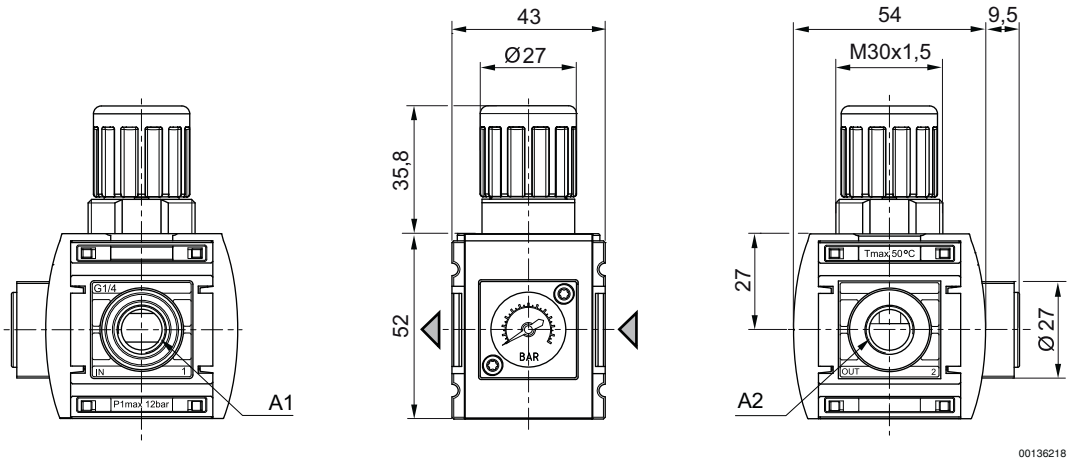


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Pressure regulator, Series AS1-RGS

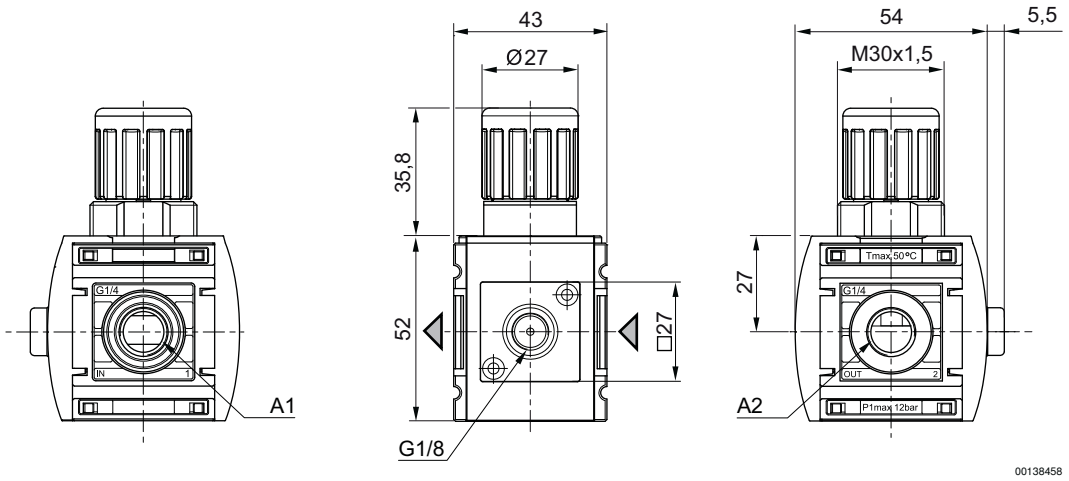
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual

Dimensions, Fig. 1



A1 = input
A2 = output

Dimensions, Fig. 2



A1 = input
A2 = output

Pressure regulator, Series AS1-RGS

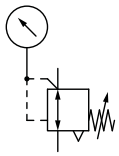
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with pressure gauge in hand wheel

00137238

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

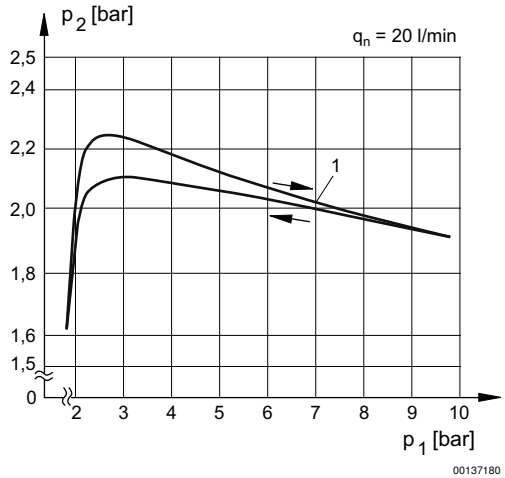
Technical Remarks

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

		Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Part No.
			[l/min]	[bar]	[bar]	[kg]	
		G 1/4	1000	0.2 / 12	0.2 - 4	0.239	R412014717
				0.5 / 12	0.5 - 8		R412014718
				0.5 / 12	0.5 - 10		R412014719

Panel nut included in scope of delivery
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Pressure characteristics curve



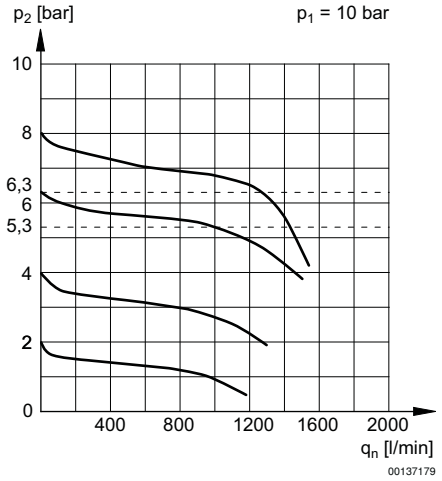
00137180

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

Pressure regulator, Series AS1-RGS

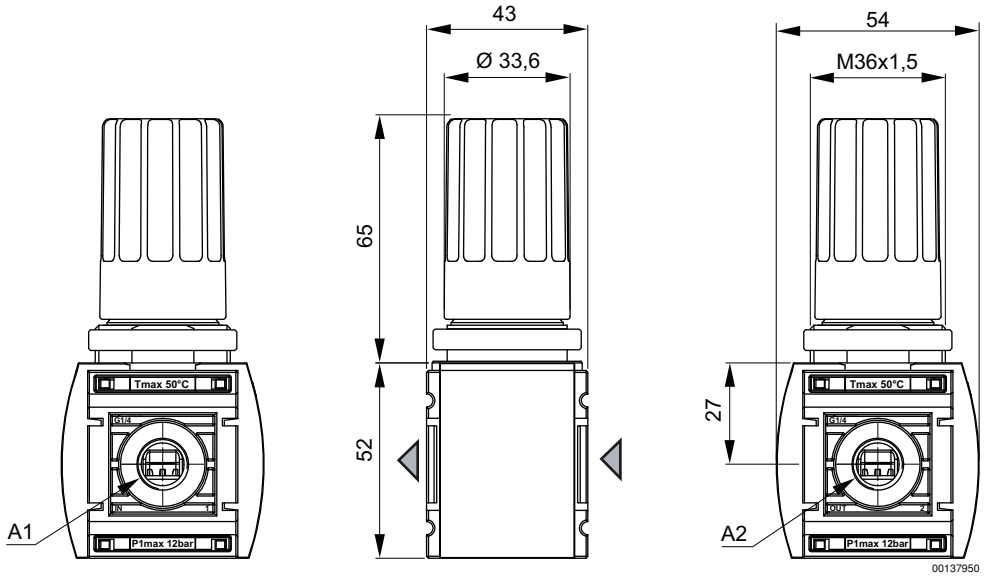
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with pressure gauge in hand wheel

Flow rate characteristic



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

Dimensions



A1 = input
A2 = output

Pressure regulator, Series AS1-RGS-...-DS

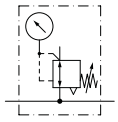
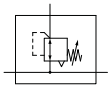
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

00137239

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

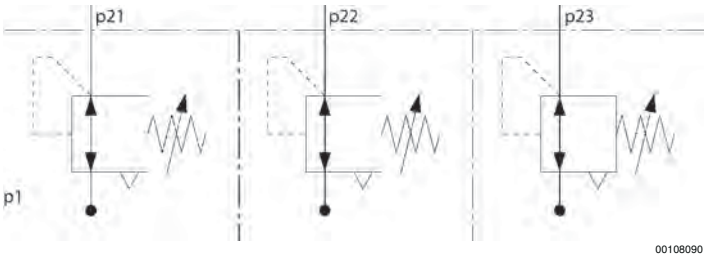
Technical Remarks

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

		Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Fig.	Part No.
			[l/min]	[bar]	[bar]	[kg]		
		G 1/4	1000	0.2 / 12	0.2 - 4	0.209	Fig. 1	R412014708
				0.5 / 12	0.5 - 8			R412014709
				0.5 / 12	0.5 - 10			R412014710
	-	G 1/4	1000	0.1 / 12	0.1 - 1	0.206	Fig. 2	R412010559
				0.2 / 12	0.2 - 4			R412014714
				0.5 / 12	0.5 - 8			R412014715
				0.5 / 12	0.5 - 10			R412014716

Max. pressure gauge Ø in blocked state: 40
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Application example



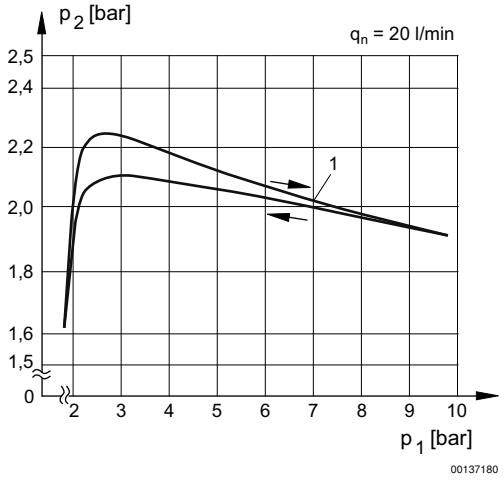
00108090

p1 = working pressure
p21; p22; p23 = secondary pressure

Pressure regulator, Series AS1-RGS-...-DS

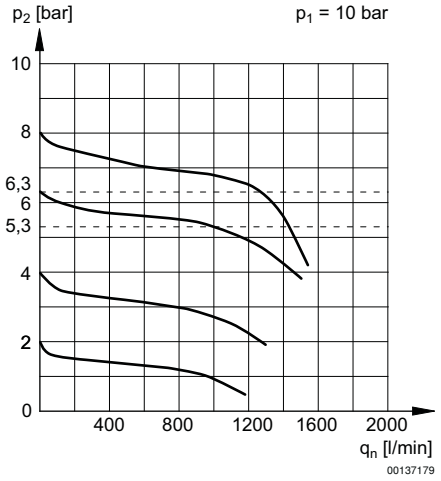
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

Pressure characteristics curve



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

Flow rate characteristic

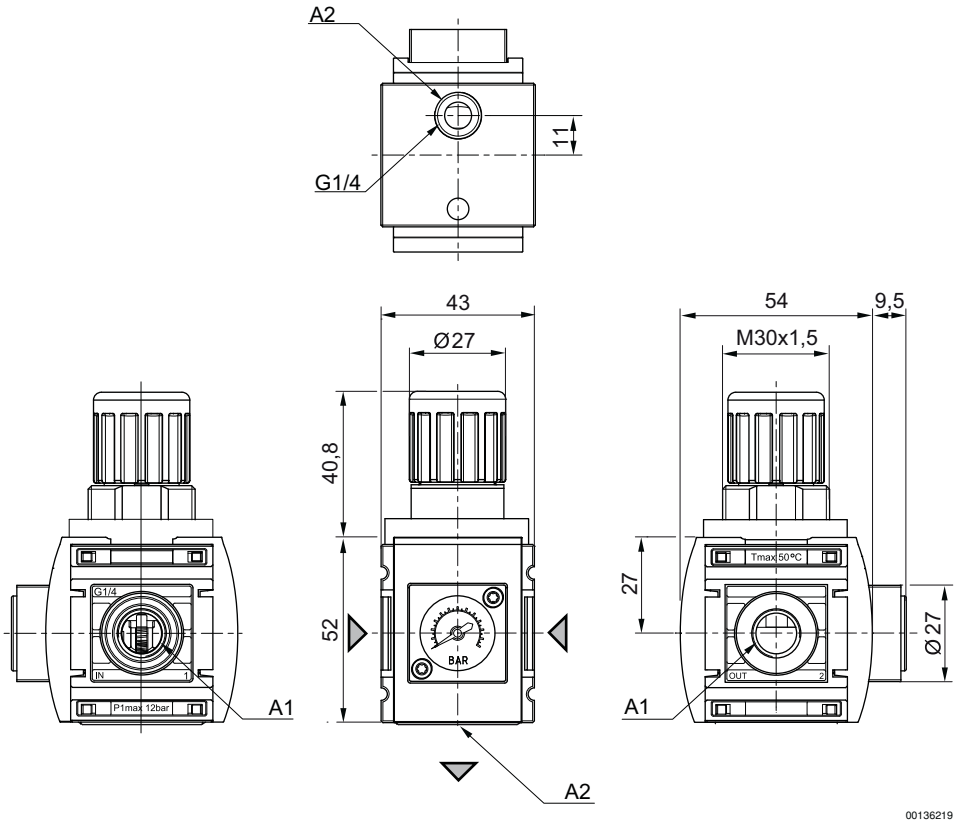


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Pressure regulator, Series AS1-RGS-...-DS

► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

Dimensions, Fig. 1

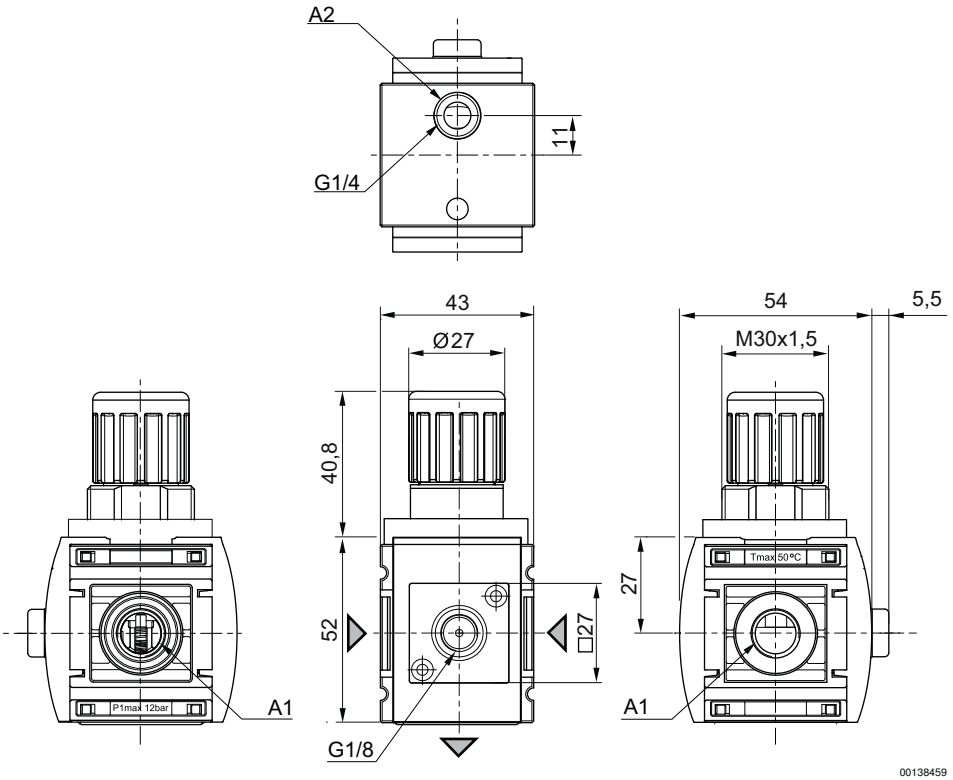


A1 = input
A2 = output

Pressure regulator, Series AS1-RGS-...-DS

► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

Dimensions, Fig. 2



A1 = input
A2 = output

Pressure regulator, Series AS1-RGS-...-DS

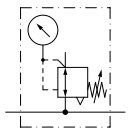
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

00137238

Mounting orientation	Any
Working pressure min./max.	See table below
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, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

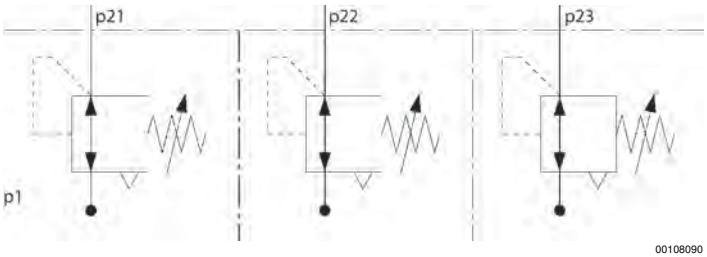
Technical Remarks

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

		Port	Qn	Working pressure min./max.	Adjustment range min. - max..	Weight	Part No.
			[l/min]	[bar]	[bar]	[kg]	
		G 1/4	1000	0.2 / 12	0.2 - 4	0.239	R412014720
				0.5 / 12	0.5 - 8		R412014721
				0.5 / 12	0.5 - 10		R412014722

Panel nut included in scope of delivery
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Application example



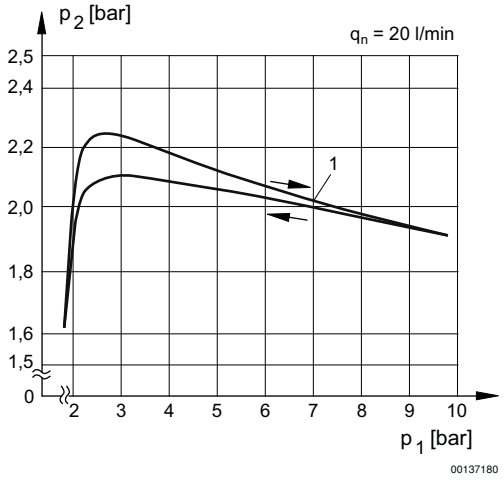
00108090

p1 = working pressure
p21; p22; p23 = secondary pressure

Pressure regulator, Series AS1-RGS-...-DS

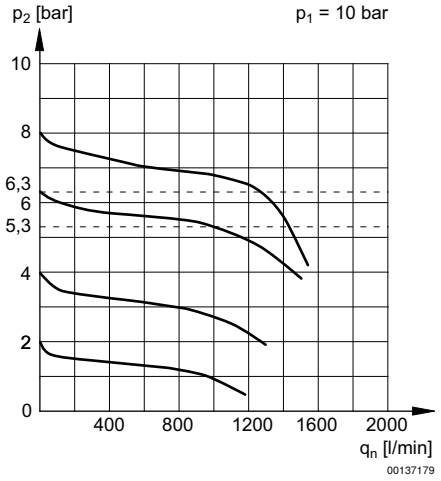
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

Pressure characteristics curve



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

Flow rate characteristic

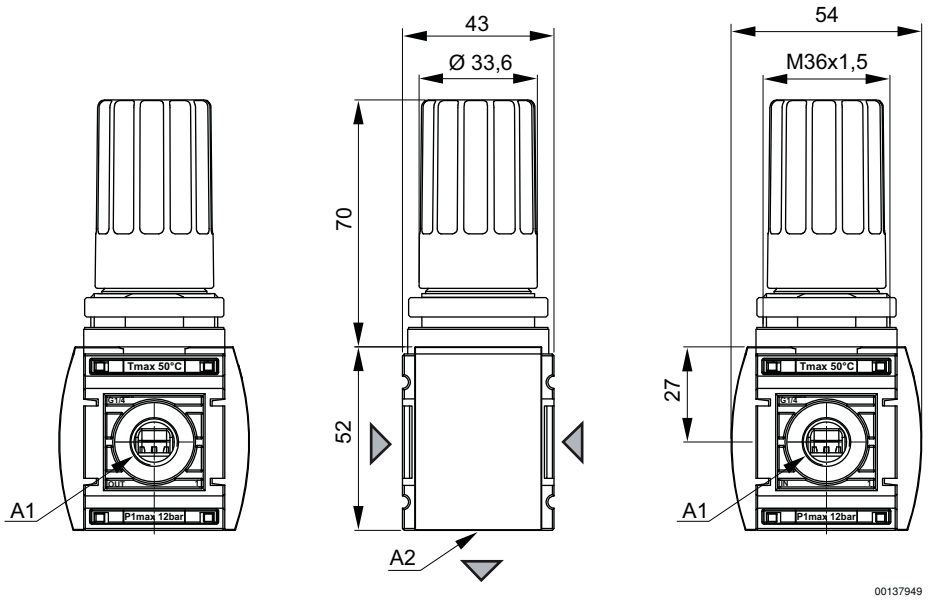


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Pressure regulator, Series AS1-RGS-...-DS

► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

Dimensions



A1 = input
A2 = output

Filter pressure regulator, Series AS1-FRE

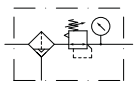
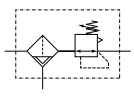
► G 1/4 ► Air supply: right ► filter porosity: 5 µm

00137251

Version	1-in-1, Can be assembled into blocks
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
Adjustment range min./max.	See table below
Pressure supply	single
Filter reservoir volume	16 cm^3
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

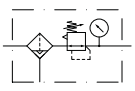
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

		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	2)	**R412014723**
					fully automatic, open without pressure	0.259		2)	R412014724
					fully automatic, closed without pressure	0.259		2)	R412014725
					semi-automatic, open without pressure	0.274		2); 4)	R412014726
					semi-automatic, open without pressure	0.318		3)	R412014727
					fully automatic, open without pressure	0.33		3)	R412014728
					fully automatic, closed without pressure	0.33		3)	R412014729
	-	G 1/4	1000	0.5 / 8	semi-automatic, open without pressure	0.238	Fig. 2	1); 2)	R412014730
					fully automatic, open without pressure	0.256			R412014731
					fully automatic, closed without pressure	0.256			R412014732

1) Max. pressure gauge Ø in blocked state: 40
2) Reservoir: Polycarbonate
3) Reservoir: Die cast zinc
4) Protective guard: metal
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

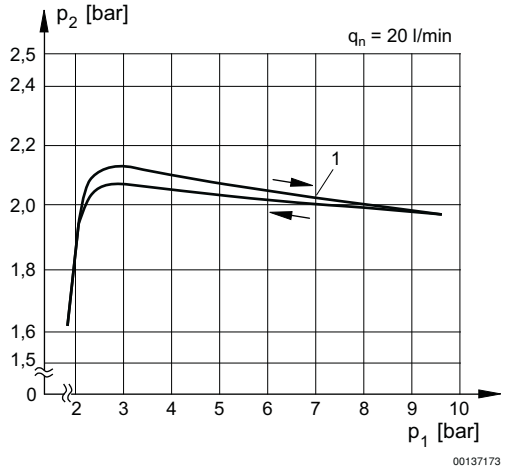
Filter pressure regulator, Series AS1-FRE

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

		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	2)	**R412014733**
					fully automatic, open without pressure	0.259		2)	R412014734
					fully automatic, closed without pressure	0.259		2)	R412014735
					semi-automatic, open without pressure	0.274		2); 4)	R412014736
					semi-automatic, open without pressure	0.318		3)	R412014737
					fully automatic, open without pressure	0.33		3)	R412014738
					fully automatic, closed without pressure	0.33		3)	R412014739

1) Max. pressure gauge Ø in blocked state: 40
2) Reservoir: Polycarbonate
3) Reservoir: Die cast zinc
4) Protective guard: metal
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Pressure characteristics curve

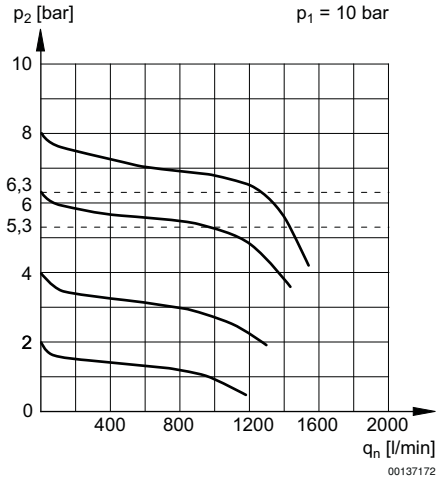


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow
1) = Starting point

Filter pressure regulator, Series AS1-FRE

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

Flow rate characteristic

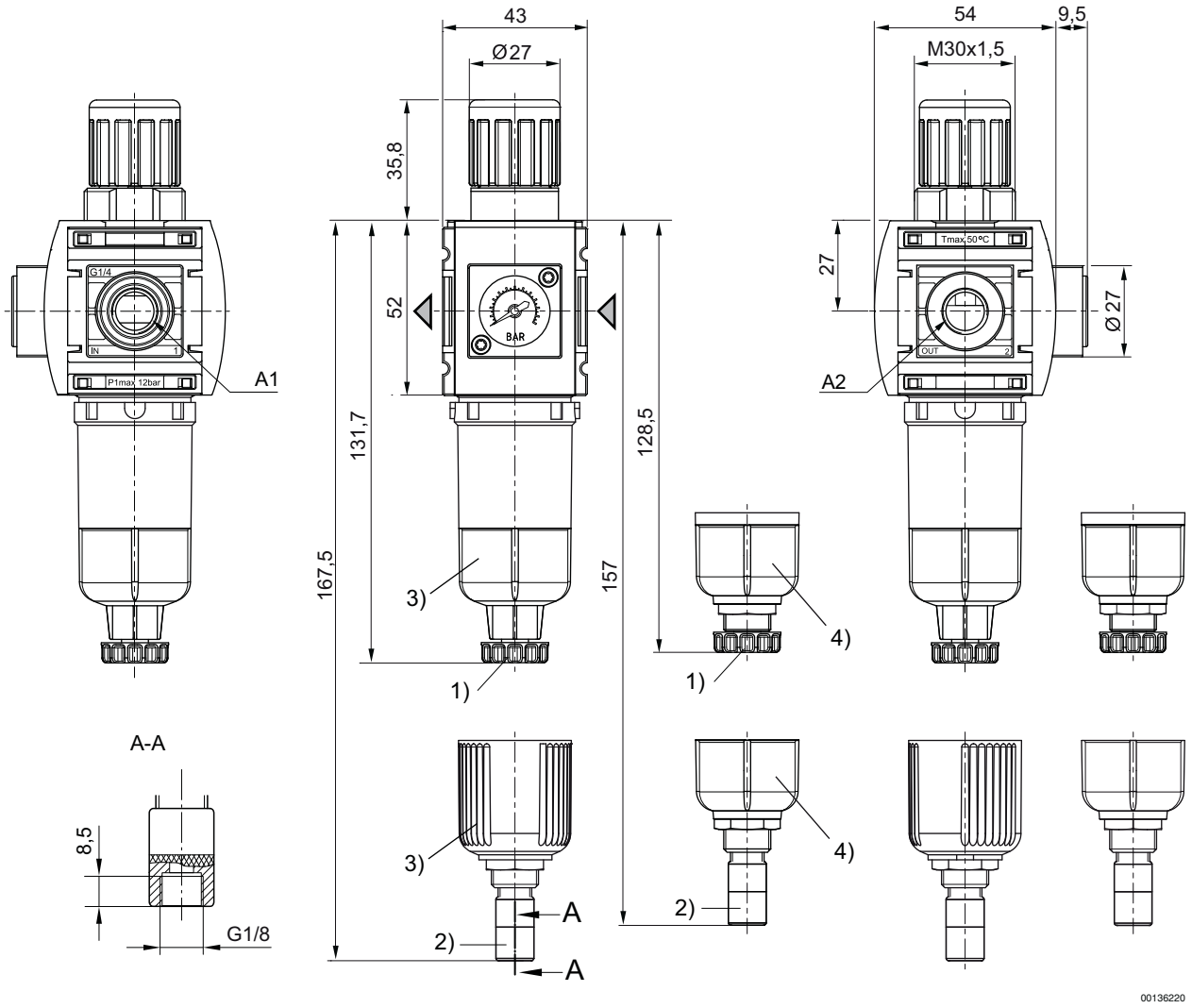


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Filter pressure regulator, Series AS1-FRE

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

Dimensions, Fig. 1

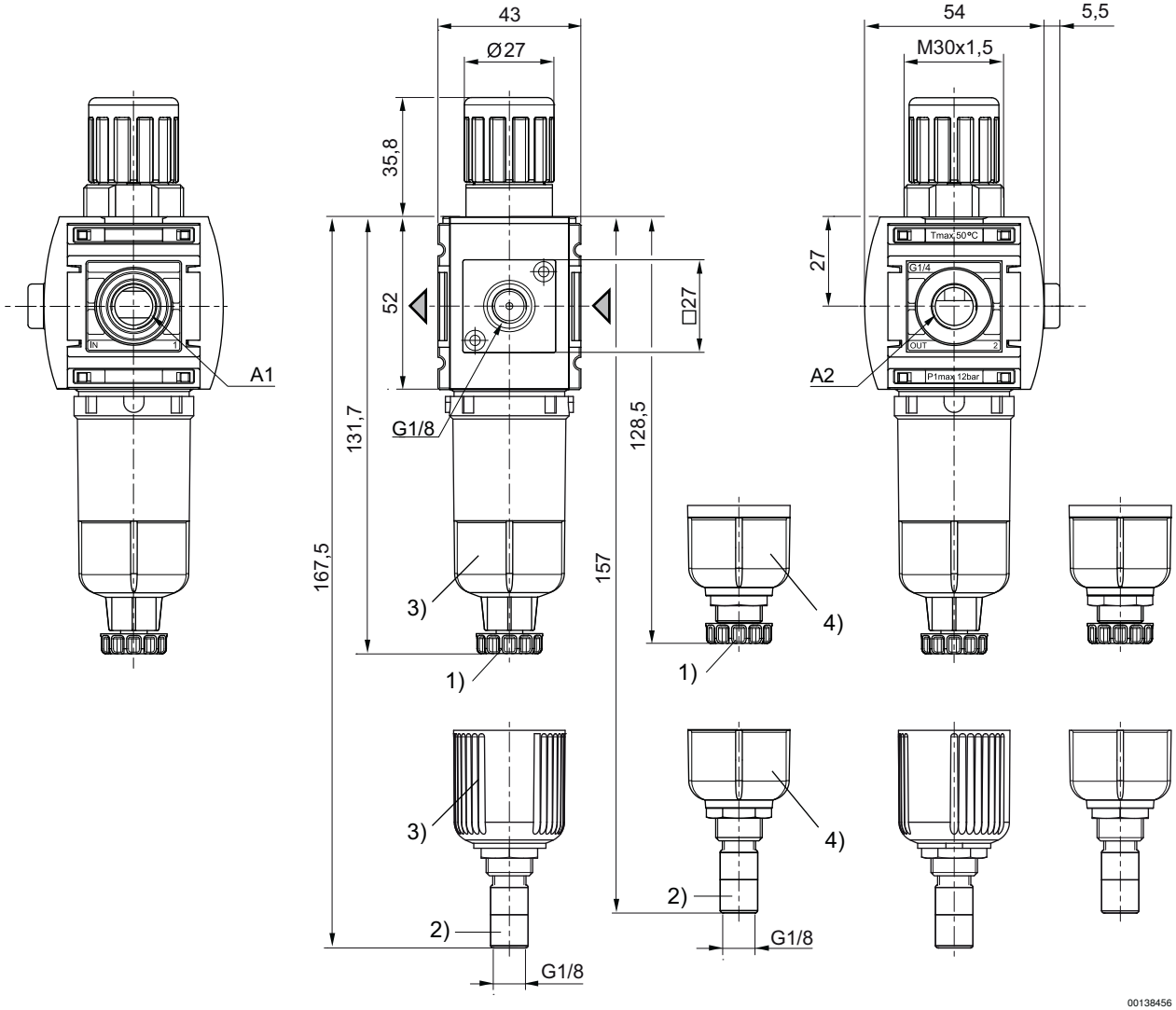


A1 = input
A2 = output
1) Semi-automatic condensate drain
2) Fully automatic condensate drain
3) Reservoir: polycarbonate
4) Reservoir: metal

Filter pressure regulator, Series AS1-FRE

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

Dimensions, Fig. 2



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

Standard filter, Series AS1-FLS

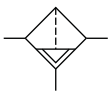
► G 1/4 ► Air supply: right ► filter porosity: 5 µm

00137253

Version	Standard filter, Can be assembled into blocks
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
Filter reservoir volume	16 cm³
Filter element	exchangeable
filter porosity	5 µm
Condensate drain	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
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

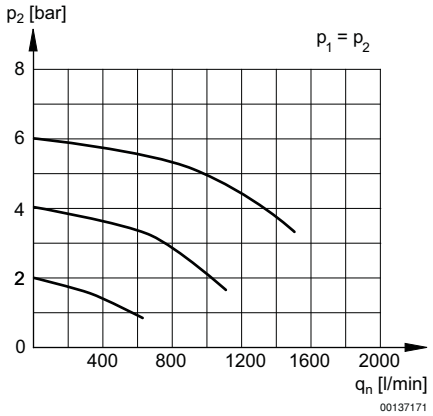
	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
	G 1/4	1000	semi-automatic, open without pressure	Polycarbonate	-	0.166	R412014678
			fully automatic, open without pressure	Polycarbonate	-	0.184	R412014679
			fully automatic, closed without pressure	Polycarbonate	-	0.184	R412014680
			semi-automatic, open without pressure	Polycarbonate	metal	0.193	R412014681
			semi-automatic, open without pressure	metal	-	0.243	R412014682
			fully automatic, open without pressure	metal	-	0.255	R412014683
			fully automatic, closed without pressure	metal	-	0.255	R412014684

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

Standard filter, Series AS1-FLS

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

Flow rate characteristic

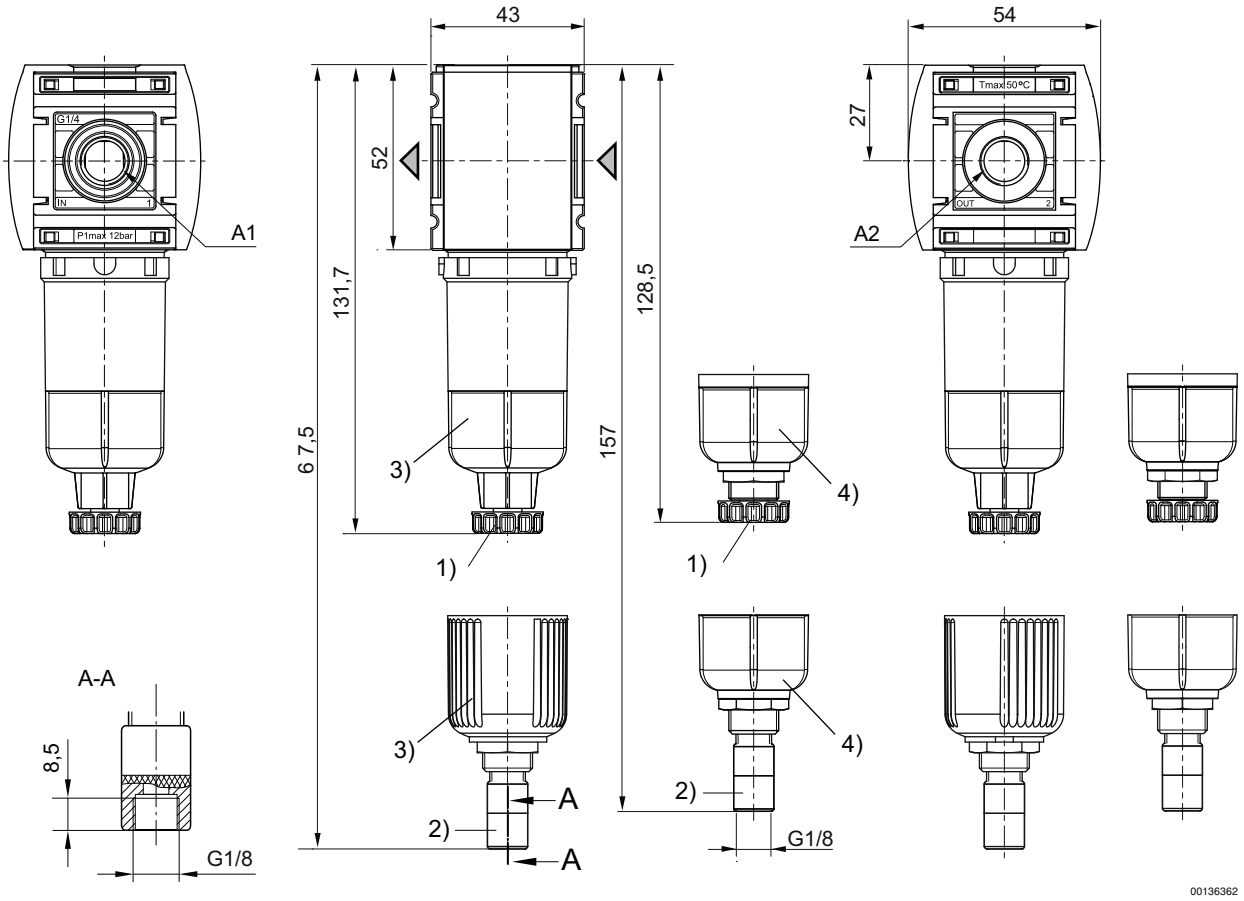


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Standard filter, Series AS1-FLS

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

Dimensions



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

Pre-filter, Series AS1-FLP

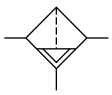
► G 1/4 ► Air supply: right ► filter porosity: 0.3 µm

00137253

Version	Pre-filter, Can be assembled into blocks
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
Filter reservoir volume	12 cm³
Filter element	exchangeable
filter porosity	0.3 µm
Condensate drain	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Filter insert	Paper

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- max. residual oil content at the outlet: 1 mg/m³
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 2

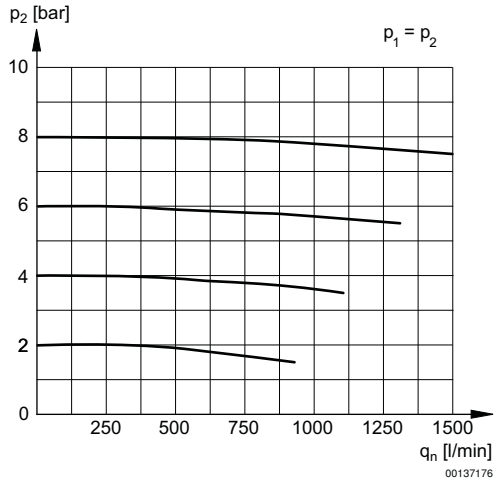
	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
	G 1/4	350	semi-automatic, open without pressure	Polycarbonate	-	0.169	R412014685
			fully automatic, open without pressure	Polycarbonate	-	0.187	R412014686
			fully automatic, closed without pressure	Polycarbonate	-	0.187	R412014687
			semi-automatic, open without pressure	Polycarbonate	metal	0.202	R412014688
			semi-automatic, open without pressure	metal	-	0.246	R412014689
			fully automatic, open without pressure	metal	-	0.258	R412014690
			fully automatic, closed without pressure	metal	-	0.258	R412014691

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0,1 bar

Pre-filter, Series AS1-FLP

► G 1/4 ► Air supply: right ► filter porosity: 0.3 µm

Flow rate characteristic

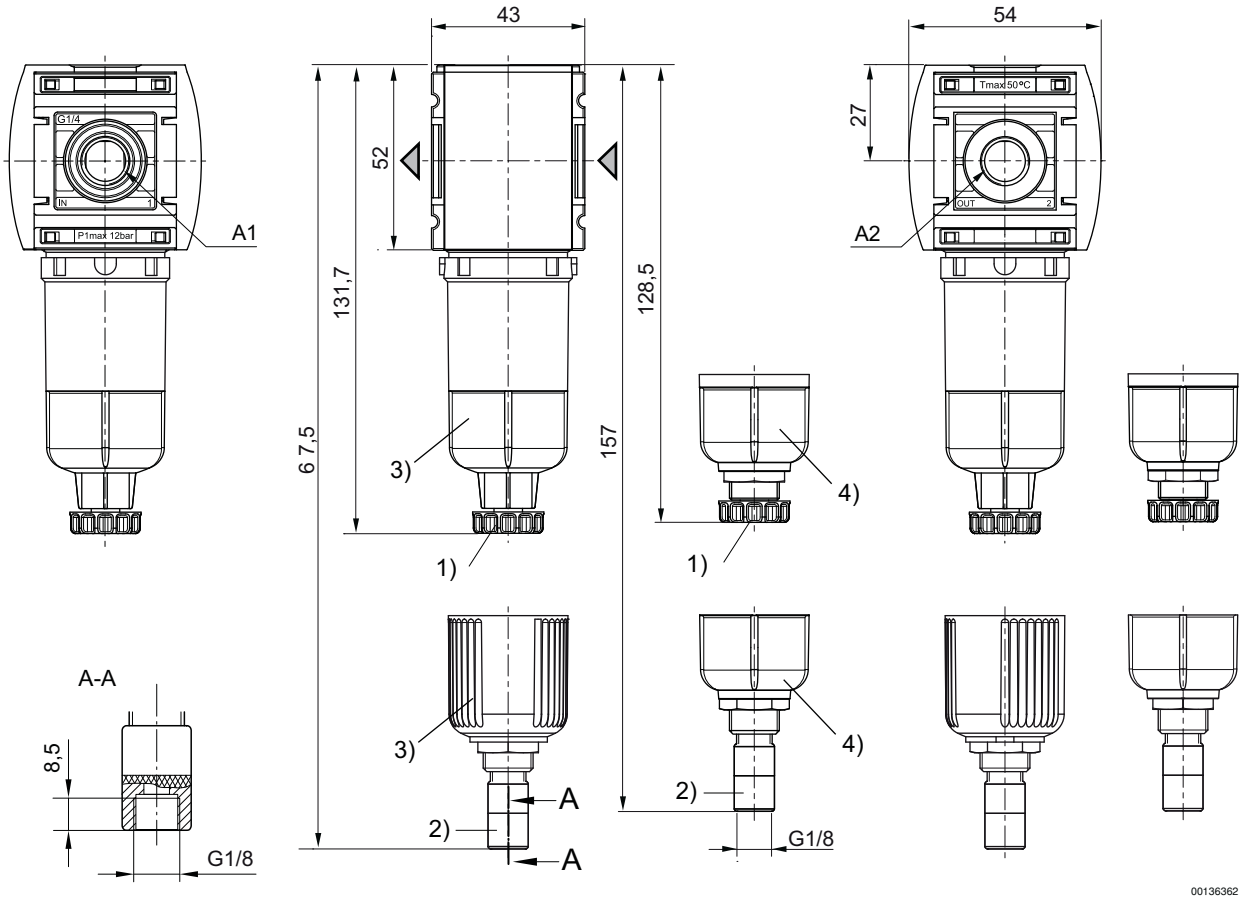


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Pre-filter, Series AS1-FLP

► G 1/4 ► Air supply: right ► filter porosity: 0.3 µm

Dimensions



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

Microfilter, Series AS1-FLC

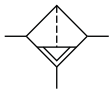
► G 1/4 ► Air supply: right ► filter porosity: 0.01 µm

00137254

Version	Microfilter, Can be assembled into blocks
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
Filter reservoir volume	12 cm³
Filter element	exchangeable
filter porosity	0.01 µm
Condensate drain	See table below
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Filter insert	Borosilicate aluminum

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 0.3 µm
- max. residual oil content at the outlet: 0.01 mg/m³
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 1

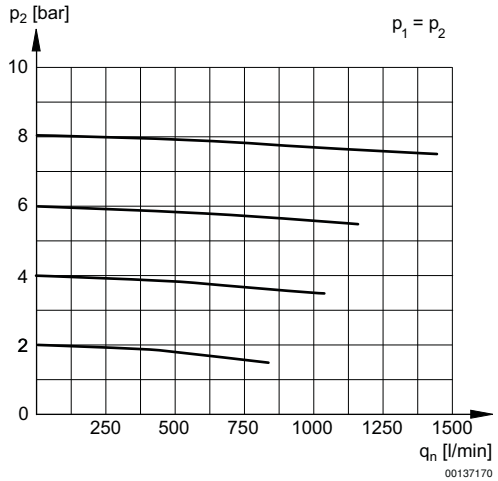
	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
	G 1/4	350	semi-automatic, open without pressure	Polycarbonate	-	0.169	R412014692
			fully automatic, open without pressure	Polycarbonate	-	0.187	R412014693
			fully automatic, closed without pressure	Polycarbonate	-	0.187	R412014694
			semi-automatic, open without pressure	Polycarbonate	metal	0.202	R412014695
			semi-automatic, open without pressure	metal	-	0.246	R412014696
			fully automatic, open without pressure	metal	-	0.258	R412014697
			fully automatic, closed without pressure	metal	-	0.258	R412014698

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0,1 bar

Microfilter, Series AS1-FLC

► G 1/4 ► Air supply: right ► filter porosity: 0.01 µm

Flow rate characteristic

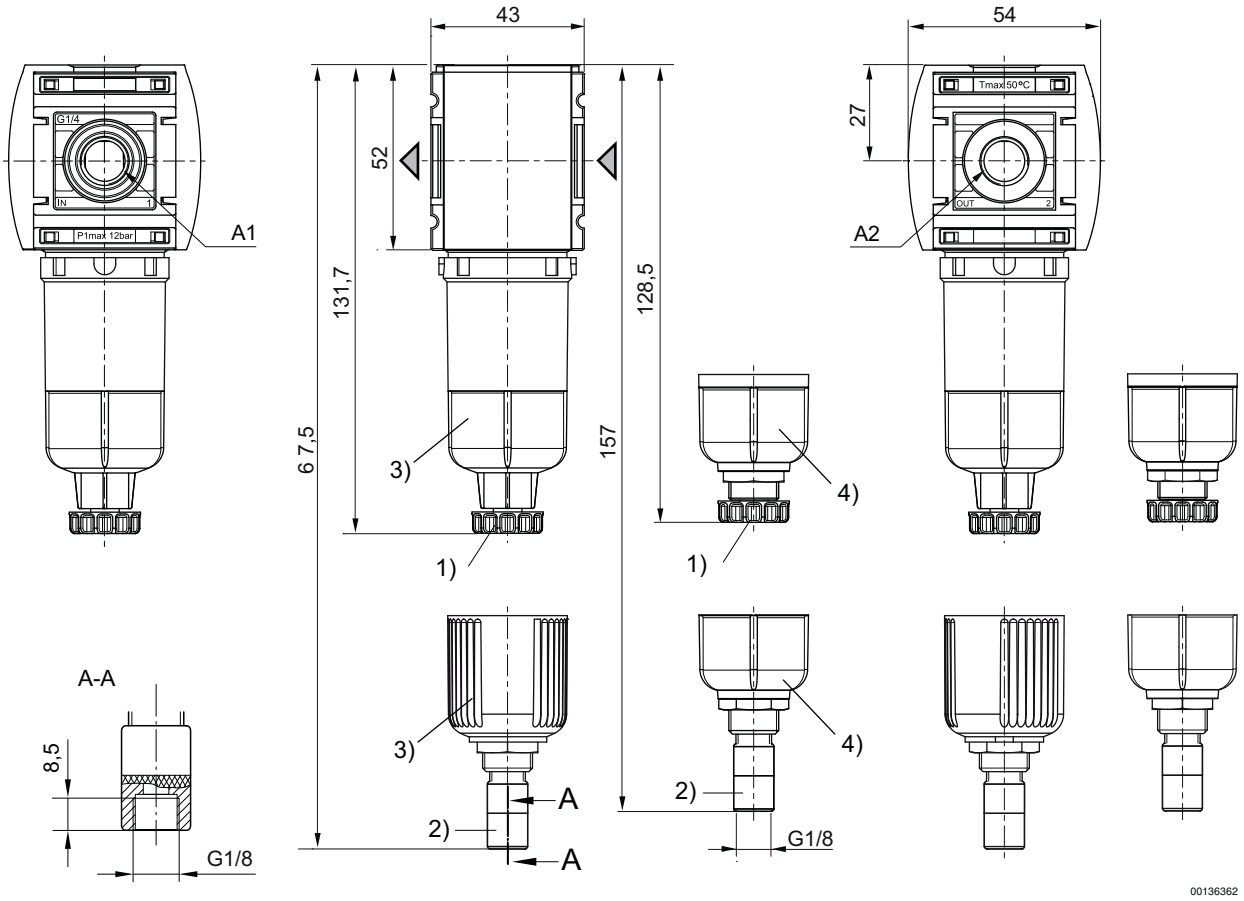


p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Microfilter, Series AS1-FLC

► G 1/4 ► Air supply: right ► filter porosity: 0.01 µm

Dimensions



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

Active carbon filter, Series AS1-FLA

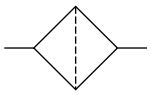
► G 1/4 ► Air supply: right

00137247

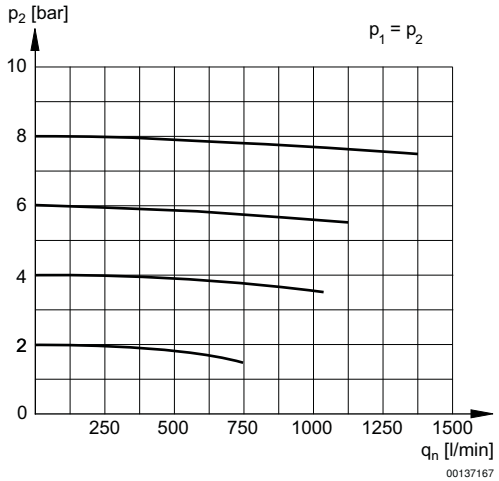
Version	Active carbon filter, Can be assembled into blocks
Mounting orientation	vertical
Working pressure min./max.	0 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 °C / +50 °C
Ambient temperature min./max.	-10 °C / +50 °C
Filter reservoir volume	12 cm³
Filter element	exchangeable
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Filter insert	Active carbon

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Recommended pre-filtering: 0.01 µm
- max. residual oil content at the outlet: 0.005 mg/m³
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 0

	Port	Qn	Reservoir	Protective guard	Weight	Part No.
		[l/min]			[kg]	
	G 1/4	350	Polycarbonate	-	0.171	R412014699
			Polycarbonate	metal	0.204	R412014700
			metal	-	0.232	R412014701
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0,1 bar						

Flow rate characteristic



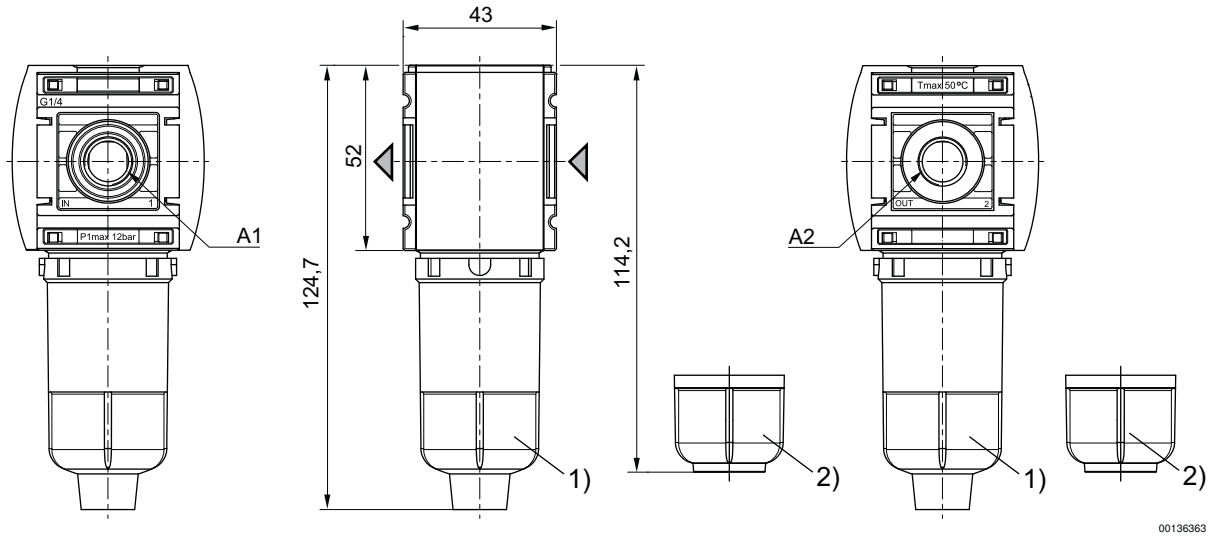
00137167

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

Active carbon filter, Series AS1-FLA

► G 1/4 ► Air supply: right

Dimensions



A1 = input
A2 = output
1) Reservoir: polycarbonate
2) Reservoir: metal

Micro oil-mist lubricator, Series AS1-LBM

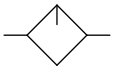
► G 1/4 ► Air supply: right

00137245

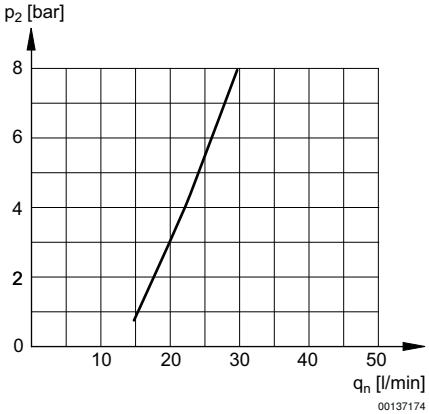
Version	Micro oil-mist lubricator, Can be assembled into blocks
Mounting orientation	vertical
Working pressure min./max.	0.8 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 °C / +50 °C
Ambient temperature min./max.	-10 °C / +50 °C
Lubricator reservoir volume	35 cm³
Type of filling	Manual oil filling
Oil type	HLP 32 (DIN 51 524 - ISO VG 32) HLP 68 (DIN 51 524 - ISO VG 68)
Compressed air connection	G 1/4
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- only approx. 10% of the preset drip quantity enters the compressed air system
- oil filling not possible during operation
- Oil dosing at 1000 l/min [drops/min]: 10-20

	Qn	Reservoir	Protective guard	Weight	Part No.
	[l/min]			[kg]	
	1400	Polycarbonate	-	0.187	R412014702
		Polycarbonate	metal	0.22	R412014703
		Die cast zinc	-	0.248	R412014704
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar					

Lubricator activation margin



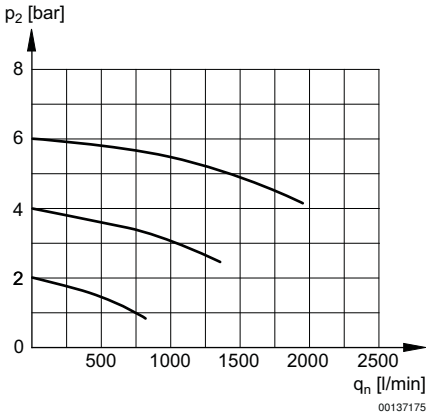
00137174

p2 = secondary pressure
qn = nominal flow

Micro oil-mist lubricator, Series AS1-LBM

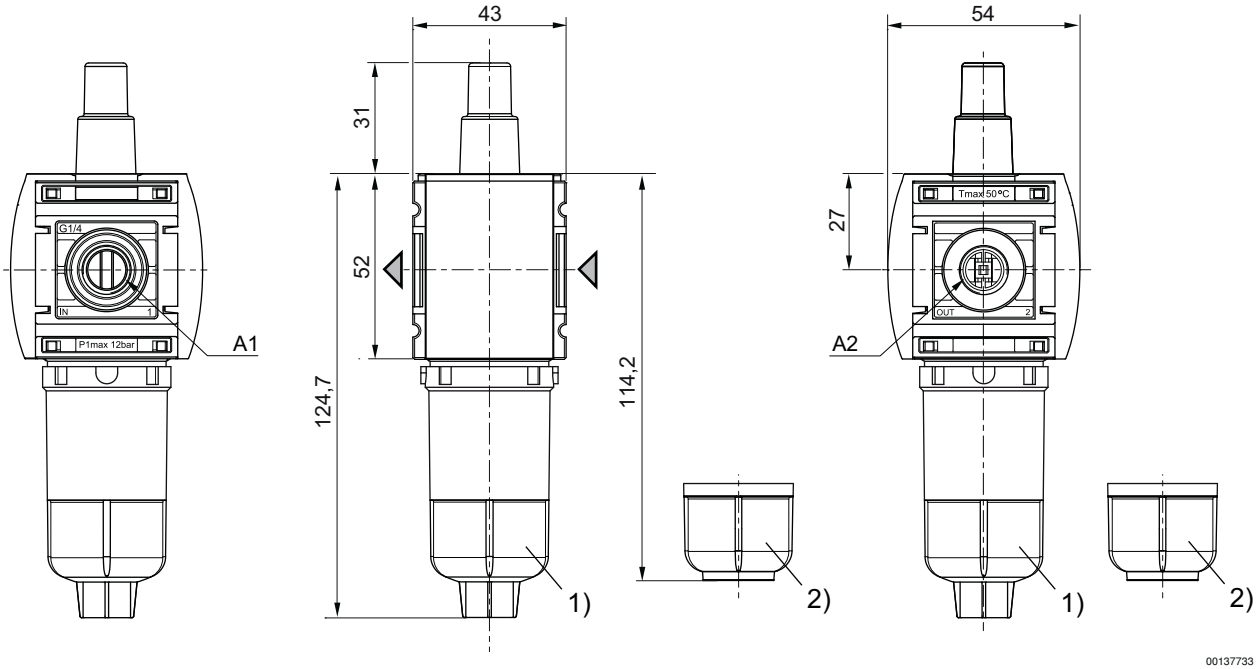
► G 1/4 ► Air supply: right

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Dimensions



A1 = input
A2 = output
1) Reservoir: polycarbonate
2) Reservoir: metal

Filling valve, pneumatically operated, Series AS1-SSV

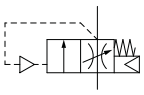
► G 1/4 ► Air supply: right ► pipe connection

00137243

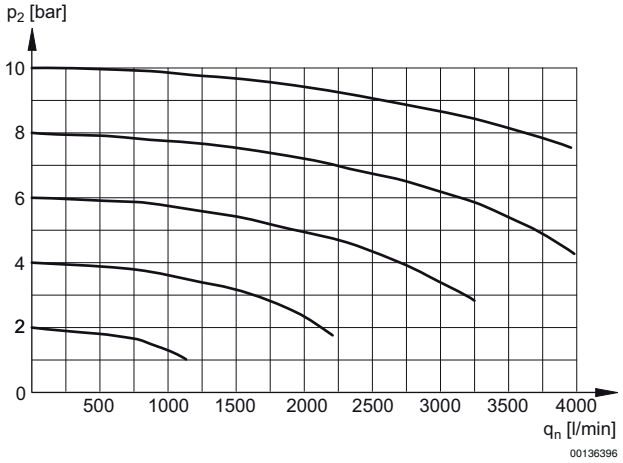
Version	Poppet valve, Can be assembled into blocks
Working pressure min./max.	0 bar / 16 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 °C / +50 °C
Ambient temperature min./max.	-10 °C / +50 °C
Sealing principle	Soft sealing
Control pressure min./max.	2.5 bar / 16 bar
Max. particle size	40 µm
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	Die cast zinc

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.

	Port	Qn		Weight	Part No.
			1►2		
			[l/min]	[kg]	
	G 1/4	2000	2000	0.1336	R412014749
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar					

Flow rate characteristic



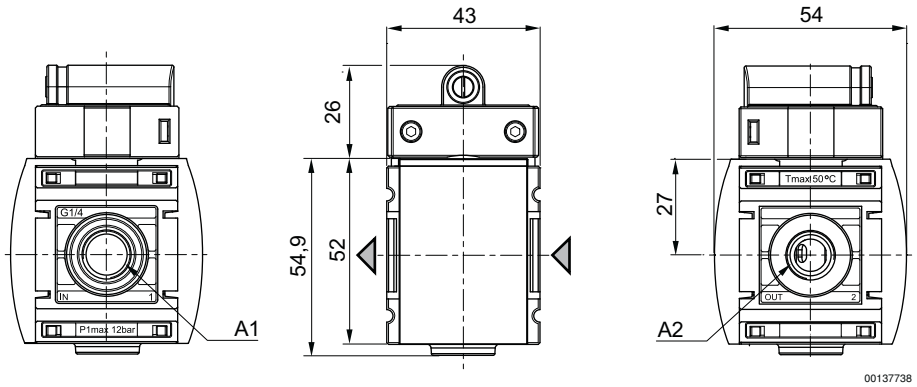
00136396

p2 = secondary pressure
qn = nominal flow

Filling valve, pneumatically operated, Series AS1-SSV

► G 1/4 ► Air supply: right ► pipe connection

Dimensions



A1 = input
A2 = output

3/2-directional valve, electrically operated, Series AS1-SOV

► ATEX optional ► G 1/4 ► Air supply: right ► pipe connection

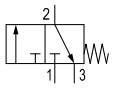
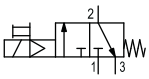
00137241_a

Version	Poppet valve, Can be assembled into blocks
Nominal flow, 1►2	2000 l/min
Nominal flow, 2►3	380 l/min
Working pressure min./max.	2 bar / 10 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Pilot	internal
Sealing principle	Soft sealing
Max. particle size	25 μm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Protection class, with Plug Mounted	IP65
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- ATEX optional: The ATEX ID depends on the selected pilot valve.

Operational voltage			Power consumption	Switch-on power		Holding power
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
			W	VA	VA	VA
24 V	-	-	2	-	-	-
-	230 V	230 V	-	3	3	1.6

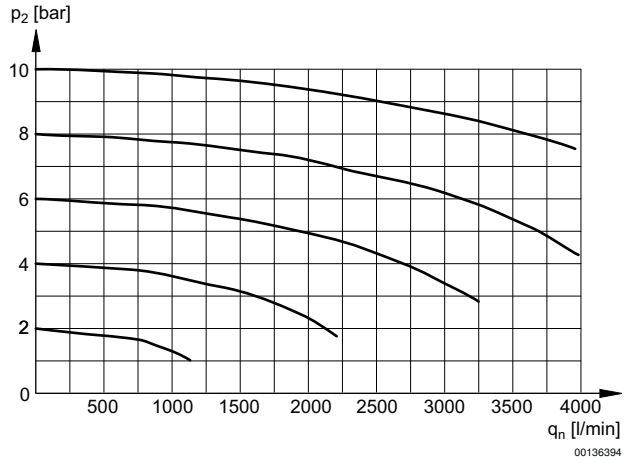
		Port	Exhaust	Operational voltage DC	AC 50 Hz	AC 60 Hz	Electr. connection	Weight	Fig.	Note	Part No.
								[kg]			
	-	G 1/4	G 1/4	-	-	-	-	0.1964 0.2096	Fig. 1	1); 4) 2); 4)	R412014747 R412014748
		G 1/4	G 1/4	24 V - 24 V	- 230 V -	- 230 V -	Plug, ISO 15217, form C Plug, ISO 15217, form C Plug, M12	0.2154 0.2143 0.2321	Fig. 2 Fig. 2 Fig. 3	3)	R412014744 R412014746 **R412010681**

1) Basic valve without pilot valve
2) Basic valve without pilot valve, with CNOMO subbase
3) Basic valve with pilot valve
4) ATEX optional
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

3/2-directional valve, electrically operated, Series AS1-SOV

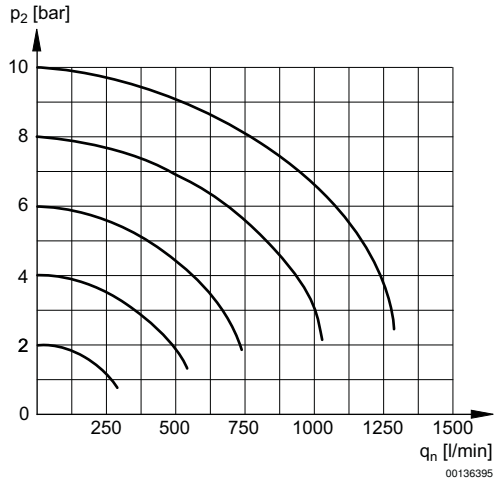
► ATEX optional ► G 1/4 ► Air supply: right ► pipe connection

Flow rate characteristic



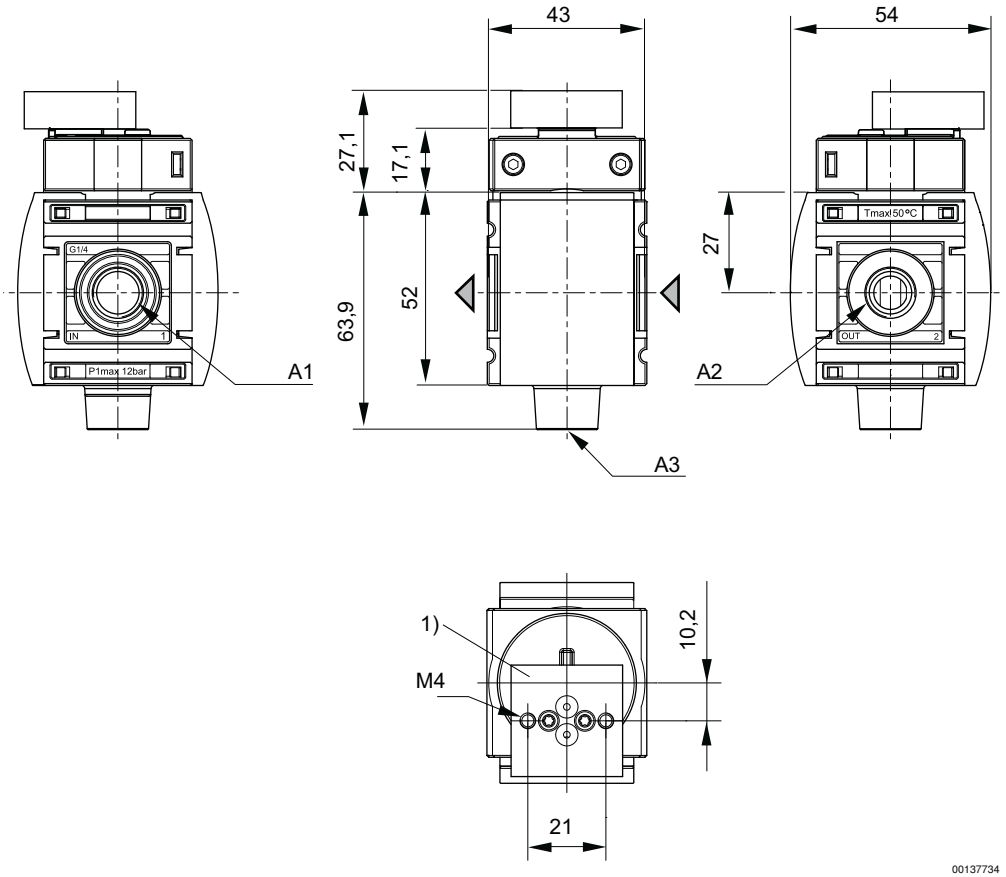
p2 = secondary pressure
qn = nominal flow

Rear exhaust



p2 = secondary pressure
qn = nominal flow

Fig. 1: 3/2-directional valve with transition plate for pilot valve series DO30



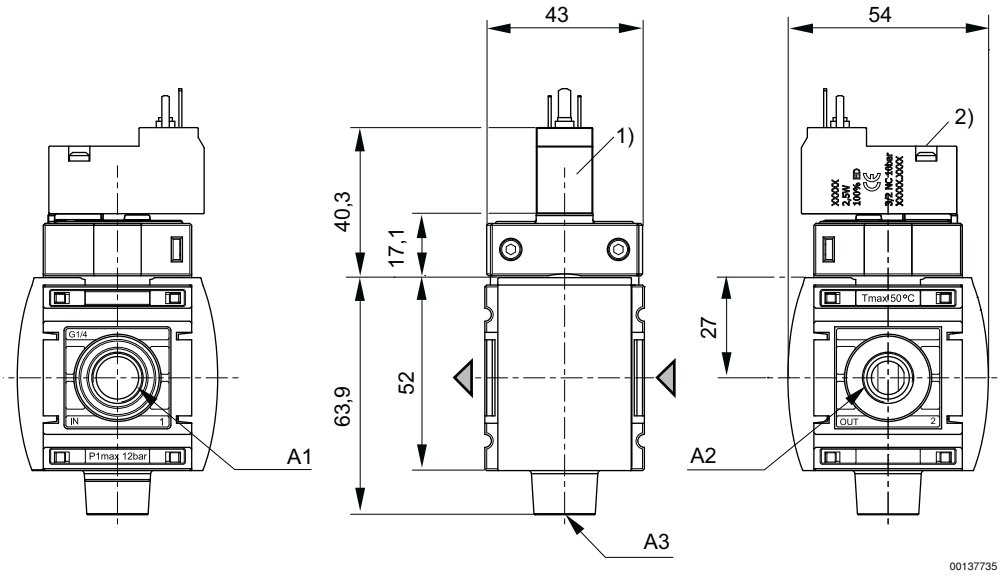
A1 = input
A2 = output
A3 = ventilation port
1) Transition plate with CNOMO porting configuration for pilot valve DO30

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

3/2-directional valve, electrically operated, Series AS1-SOV

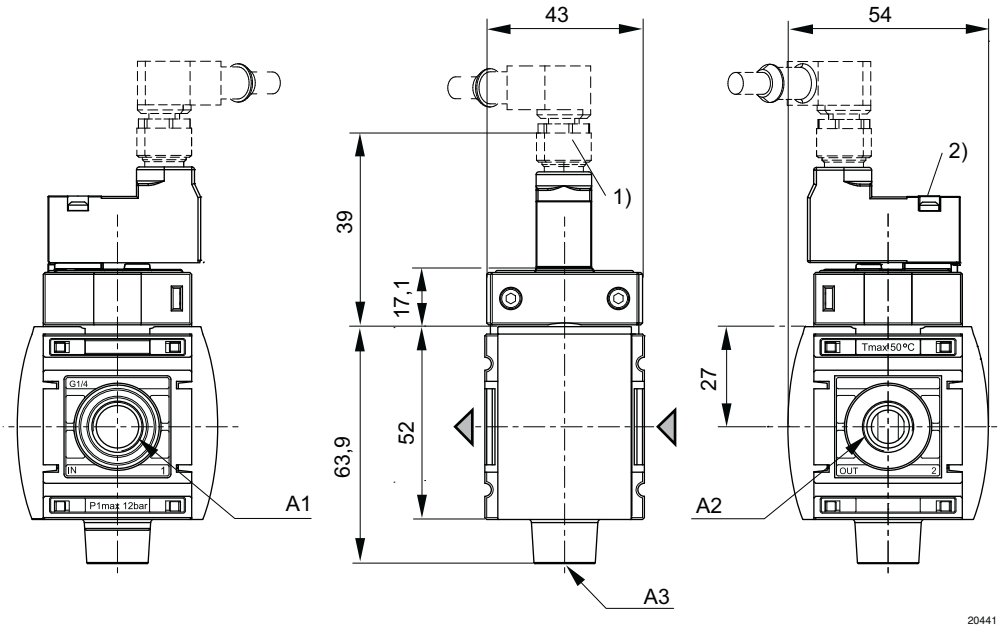
► ATEX optional ► G 1/4 ► Air supply: right ► pipe connection

Fig. 2: 3/2-directional valve with pilot valve and port for electrical connector form C



A1 = input
A2 = output
A3 = ventilation port
1) For electrical connector according to ISO 15217 (form C)
2) Manual override

Fig. 3: 3/2-directional valve with pilot valve, push-in fitting M12x1

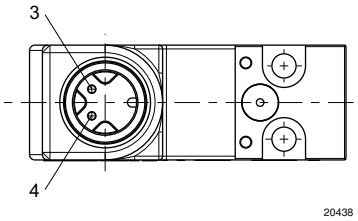


A1 = input
A2 = output
A3 = ventilation port
1) plug M12
2) Manual override

3/2-directional valve, electrically operated, Series AS1-SOV

► ATEX optional ► G 1/4 ► Air supply: right ► pipe connection

Pin assignment M12x1



3: +/-
4: +/-

3/2-directional valve, pneumatically operated, Series AS1-SOV

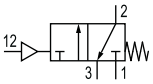
► G 1/4 ► Air supply: right ► pipe connection

00137817

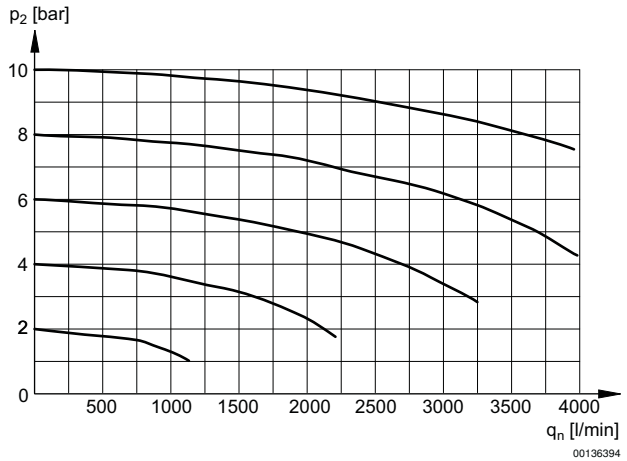
Version	Poppet valve, Can be assembled into blocks
Working pressure min./max.	0 bar / 16 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Sealing principle	Soft sealing
Control pressure min./max.	2.5 bar / 16 bar
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

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

	Port	Exhaust	Qn			Weight	Part No.
				1►2	2►3		
					[l/min]	[kg]	
	G 1/4	G 1/4	2000	2000	380	0.09	R412014743
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar							

Flow rate characteristic



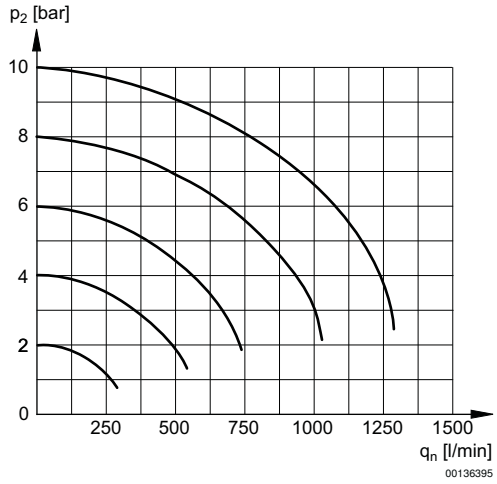
00136394

p2 = secondary pressure
qn = nominal flow

3/2-directional valve, pneumatically operated, Series AS1-SOV

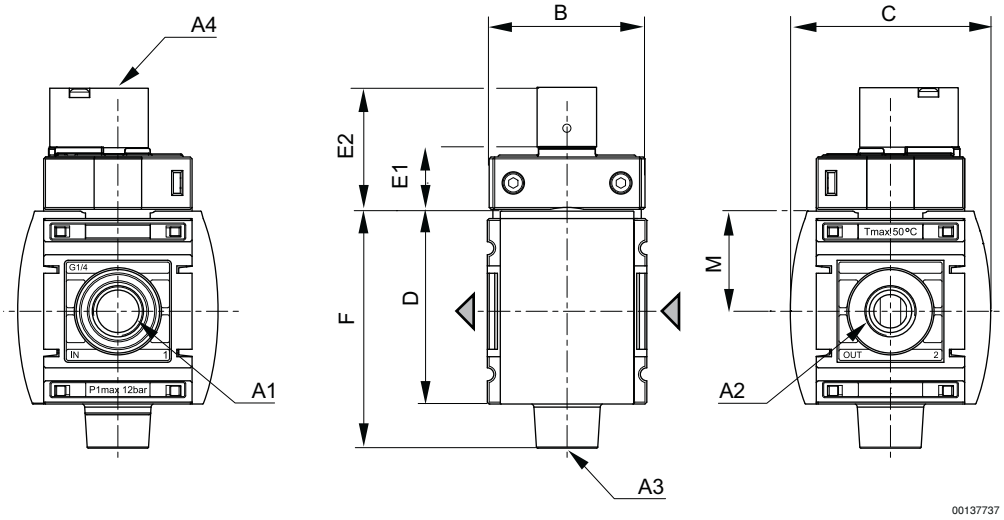
► G 1/4 ► Air supply: right ► pipe connection

Rear exhaust



p2 = secondary pressure
qn = nominal flow

Dimensions



A1 = input
A2 = output
A3 = ventilation port
A4 = control pressure connection

Part No.	A1	A2	A3	A4	B	C	D	E1	E2	F	M	
R412014743	G 1/4	G 1/4	G 1/4	G 1/8	43	54	52	17.1	33.1	63.9	27	

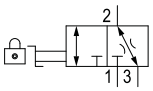
3/2-shut-off valve, mechanically operated, Series AS1-BAV
► G 1/4 ► Air supply: right


00137244

Version	Ball valve, Can be assembled into blocks for padlocks lockable
Working pressure min./max.	0 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 °C / +50 °C
Ambient temperature min./max.	-10 °C / +50 °C
Actuating element	rotary switch
Max. particle size	25 µm
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber
Actuating element	Polyoxymethylene

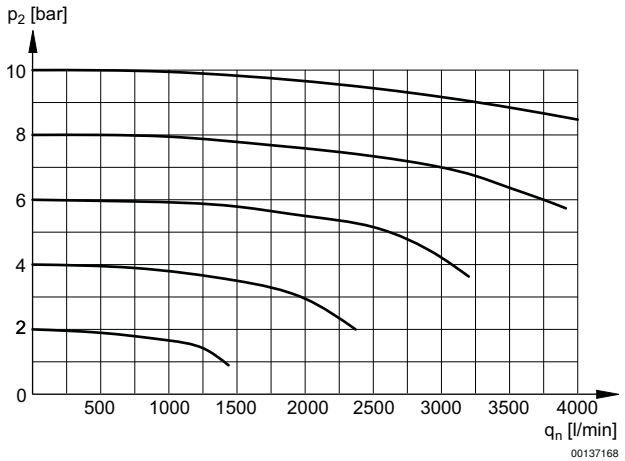
Technical Remarks

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

	Port	Exhaust	Qn		Weight	Part No.
			1►2	2►3		
				[l/min]	[kg]	
	G 1/4	G 1/4	2600	380	0.15	**R412014742**

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

Flow rate characteristic



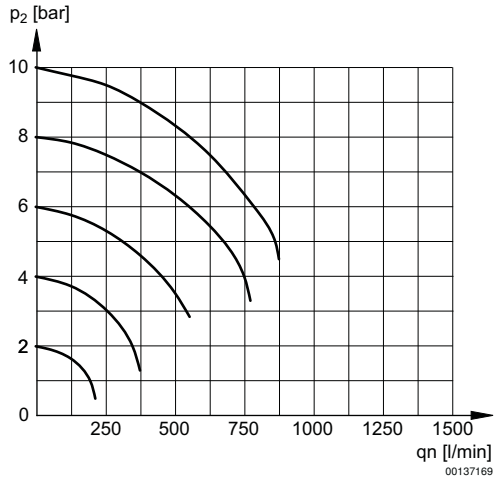
00137168

p2 = secondary pressure
qn = nominal flow

3/2-shut-off valve, mechanically operated, Series AS1-BAV

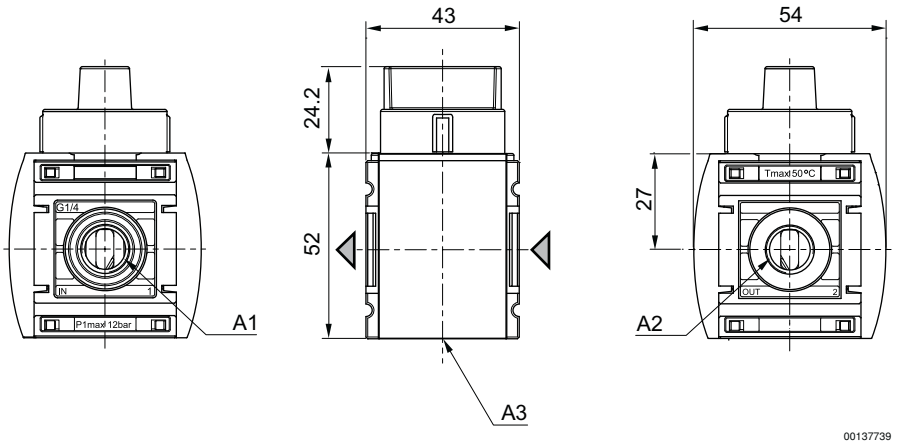
► G 1/4 ► Air supply: right

Rear exhaust



p2 = secondary pressure
qn = nominal flow

Dimensions



A1 = input
A2 = output
A3 = ventilation port

Distributor, Series AS1-DIS

► G 1/4 ► Air supply: right ► Distributor 2x ► Distributor

00137242

Version	Distributor, Can be assembled into blocks
Mounting orientation	Any
Working pressure min./max.	0 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

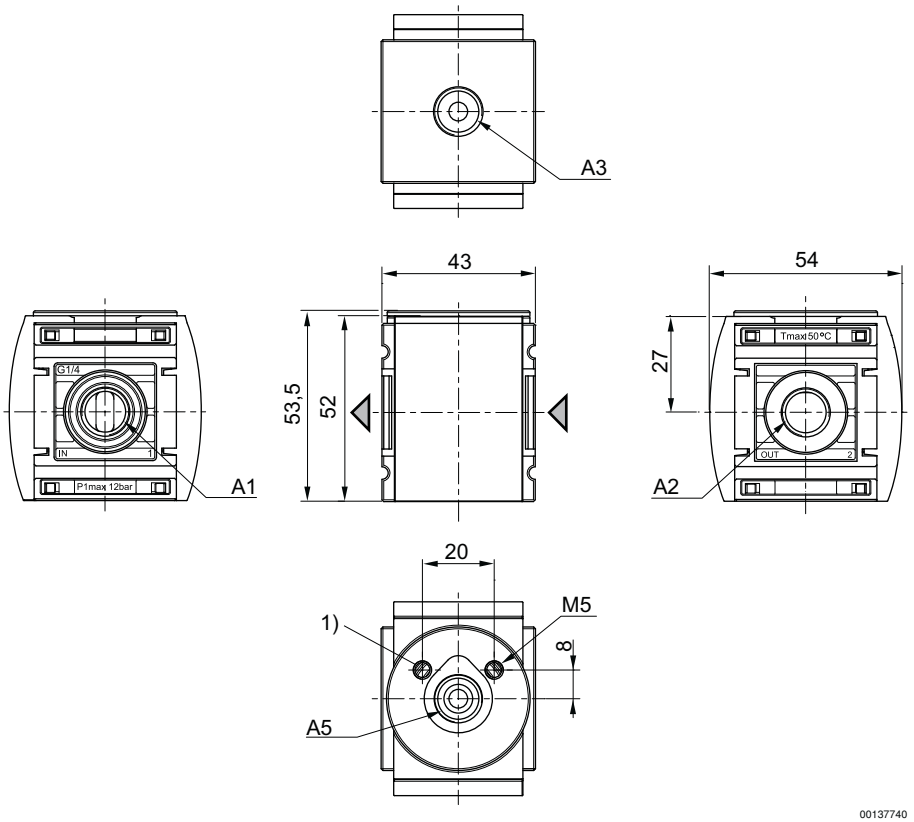
	Port	Qn			Weight	Part No.
		1►2	1►3	1►5		
		[l/min]			[kg]	
	G 1/4	2700	950	2000	0.148	R412014740

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

Distributor, Series AS1-DIS

► G 1/4 ► Air supply: right ► Distributor 2x ► Distributor

Dimensions



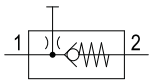
A1 = input
A2 = output
A3 = output
A5 = output
1) Mounting thread for pressure sensor

Distributor, Series AS1-DIN

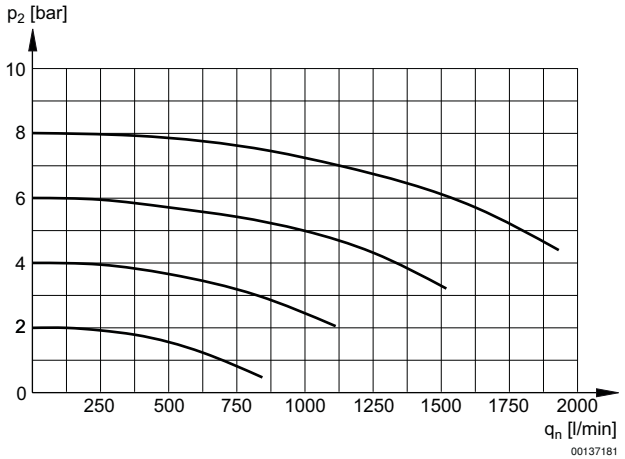
► G 1/4 ► Air supply: right ► Distributor 1x ► Non-return valve

00137240

Version	Non-return valve, Can be assembled into blocks
Mounting orientation	Any
Working pressure min./max.	0 bar / 12 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10°C / +50°C
Ambient temperature min./max.	-10°C / +50°C
Materials:	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile Butadiene Rubber

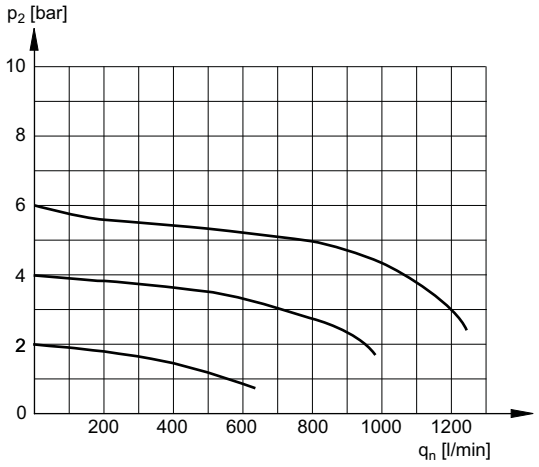
	Port	Qn		Weight	Part No.
		1►2	1►3		
		[l/min]		[kg]	
	G 1/4	800	1000	0.178	R412014741
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar					

Flow rate characteristic



00137181

Nominal flow 1 ► 2
p2 = secondary pressure
qn = nominal flow



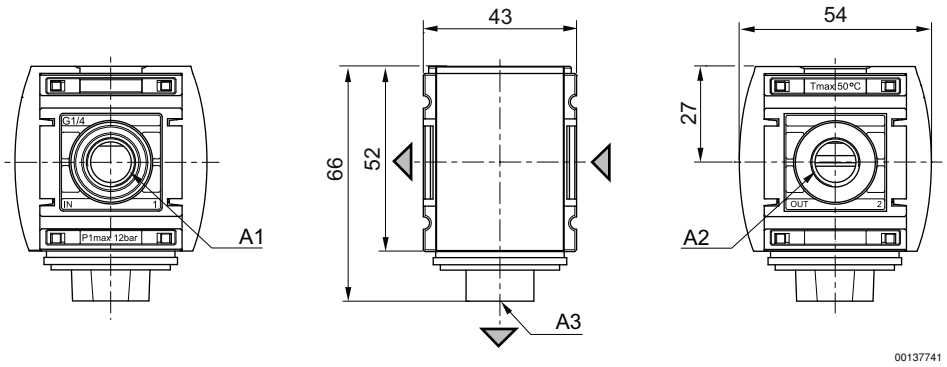
00137182

Nominal flow 1 -> 3
p2 = secondary pressure
qn = nominal flow

Distributor, Series AS1-DIN

► G 1/4 ► Air supply: right ► Distributor 1x ► Non-return valve

Dimensions



A1 = input
A2 = output
A3 = output

Series AS1
Accessories

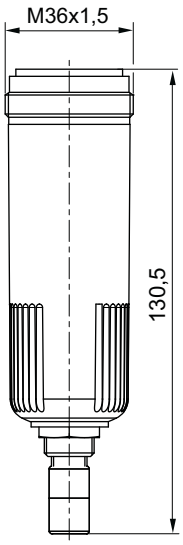
Reservoir, Series AS1-CLS
► Material: Polycarbonate, Die cast zinc

22703

Version	Reservoir
Ambient temperature min./max.	-10°C / +50°C
Medium temperature min./max.	-10°C / +50°C
Medium	Compressed air
Filter reservoir volume	16 cm³
Materials:	
Seal	Acrylonitrile Butadiene Rubber

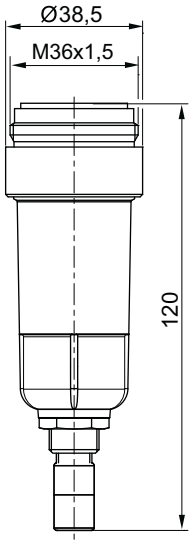
Condensate drain	Reservoir	Weight	Fig.	Part No.
		[kg]		
fully automatic, closed without pressure	Polycarbonate	0.053	Fig. 1	R412014750
fully automatic, open without pressure	Die cast zinc	0.125	Fig. 2	R412014751
fully automatic, closed without pressure	Die cast zinc	0.125	Fig. 2	R412014752
semi-automatic, open without pressure	Die cast zinc	0.153	Fig. 3	**1827009640**
	Polycarbonate	0.085	Fig. 4	**1827009639**

Fig. 1



00137150

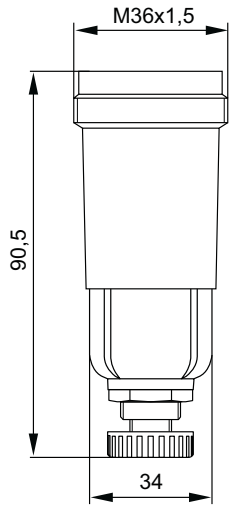
Fig. 2



00138450

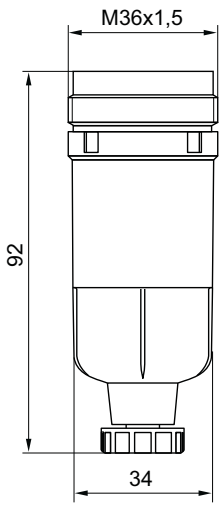
Series AS1
Accessories

Fig. 3



00112013_1

Fig. 4



00112013_2

Reservoir, Series NL1/AS1-CBM/-CLA
► for active carbon filter and lubricator ► Material: Polycarbonate, Die cast zinc

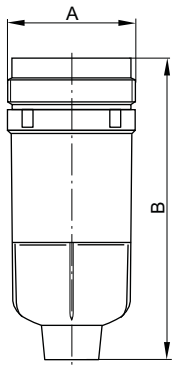
Version	Reservoir
Ambient temperature min./max.	-10°C / +50°C
Medium temperature min./max.	-10°C / +50°C
Working pressure min./max.	16 bar
Medium	Compressed air Oil
Filter reservoir volume	16 cm³
Materials:	
Seal	Acrylonitrile Butadiene Rubber

00107352_1

Reservoir	Weight [kg]	Fig.	Part No.
Polycarbonate	0.06	Fig. 1	**1827009637**
Die cast zinc	0.125	Fig. 2	1827009638

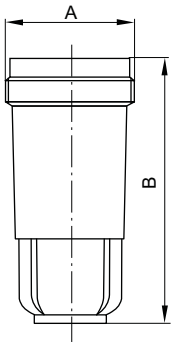
Series AS1
Accessories

Dimensions, Fig. 1



21292

Fig. 2

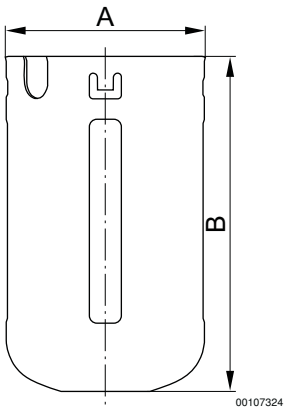


21291

Part No.	A	B										
1827009637	M36x1,5	85										
1827009638	M36x1,5	74.5										

Protective guard
► Series NL1 ► Filter, Lubricator


00106886



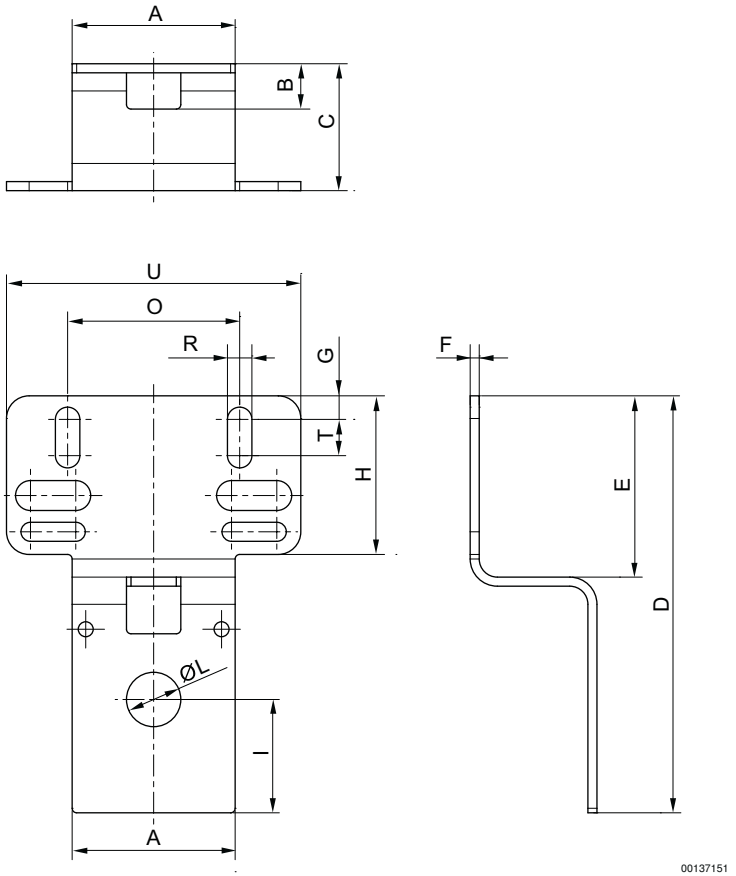
00107324

Part No.	A	B	Material	Surface	Weight [kg]				
1820507004	37	63	Steel	galvanized	0.03				
Can be retrofitted for PC reservoir									

Series AS1
Accessories

Mounting plate, Series AS1-MBR-...-W01

00137836



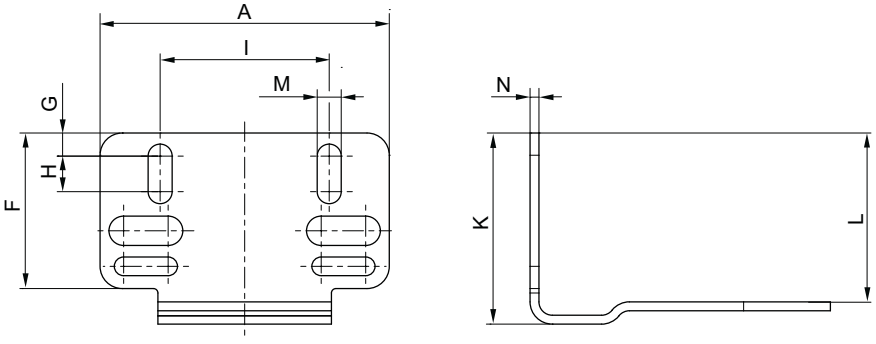
00137151

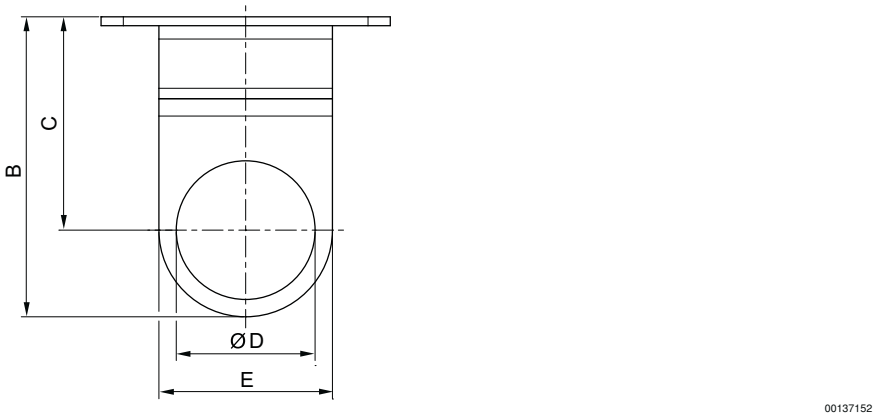
Part No.	A	B	C	D	E	F	G	H	I	Ø L	O	R
R412014755	36	10	28	92	40	2	5.2	35	25	12	38	5.4

Part No.	T	U	Material	Surface	Weight [kg]	Ambient temperature min./ max. [C°]		
R412014755	8	65	Steel	galvanized	0.07	-10 / +50		
Scope of delivery incl. 2 mounting screws 3x10 (Torx 10 IP) DIN EN ISO 10664								

Series AS1
Accessories

Mounting bracket, Series AS1-MBR-...-W02





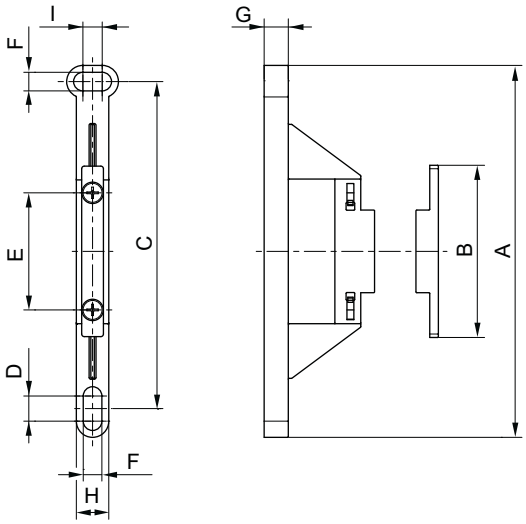
Part No.	A	B	C	Ø D	E	F	G	H	I	K	L	M
R412014756	65	67.5	48	31.2	39	35	5.2	8	38	43	38	5.4

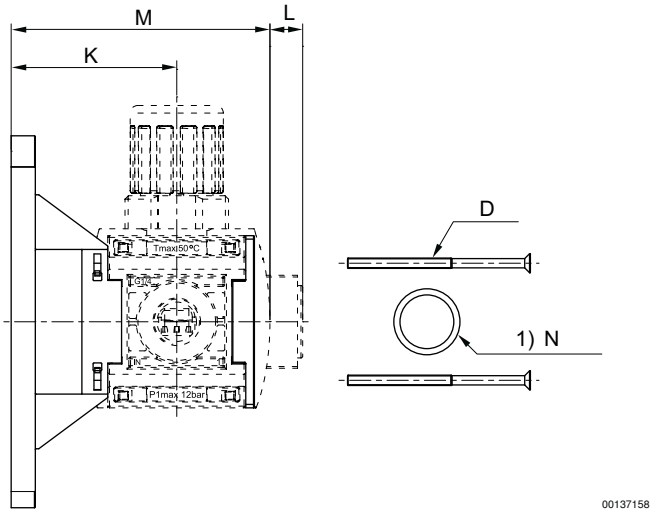
Part No.	N	Material	Surface	Weight [kg]	Ambient temperature min./ max. [C°]			
R412014756	2	Steel	galvanized	0.059	-10 / +50			
Scope of delivery incl. 2 mounting screws 3x10 (Torx 10 IP) DIN EN ISO 10664								

Series AS1
Accessories

Mounting clip, Series AS1-MBR-...-W03

00119388





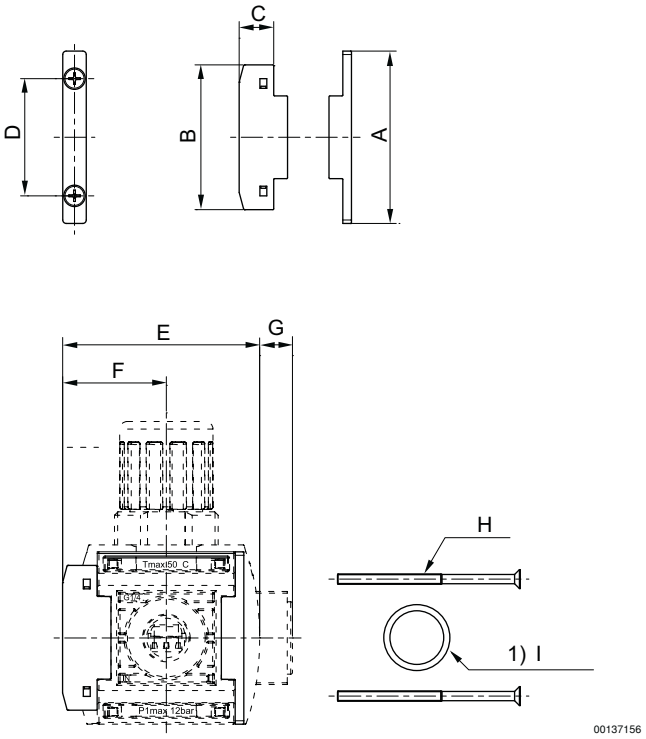
00137158

Part No.	A	B	C	D	E	F	G	H	I	K	L	M
R412014757	108	50	95	7.3	34	5.4	7	9.4	5.6	48	9.5	75

Part No.	N	O	Material	Material Seal	Weight [kg]	Ambient temperature min./ max. [C °]	
R412014757	15,6x1,78	M3x53	Polyamide	Acrylonitrile Butadiene Rubber	0.025	-10 / +50	
Scope of delivery incl. 2 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x O-ring							

Series AS1
Accessories

Block assembly kit, Series AS1-MBR-...-W04

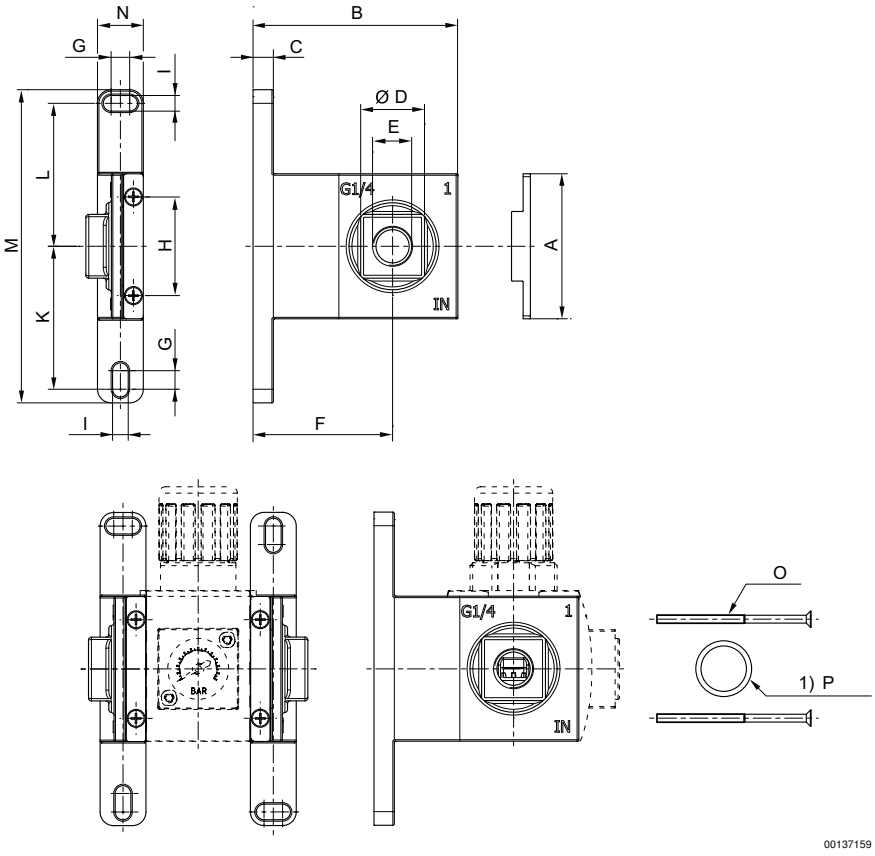


Part No.	A	B	C	D	E	F	G	H	I	Material
R412014758	50	42	10	34	57	30	9.5	M3x53	15,6x1,78	Polyamide

Part No.	Material Seal	Weight [kg]	Ambient temperature min./ max. [C °]						
R412014758	Acrylonitrile Butadiene Rubber	0.014	-10 / +50						
Scope of delivery incl. 2 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x O-ring									

Series AS1
Accessories

Block assembly kit, Series AS1-MBR-...-W05



Part No.	A	B	C	Ø D	E	F	G	H	I	K	L	M
R412014753	50	70.5	7	22	G 1/8	48.1	6.4	34	5.4	49.3	49.3	108
R412014754	50	70.5	7	22	G 1/4	48.1	6.4	34	5.4	49.3	49.3	108

Part No.	N	O	P	Material	Surface	Material Seal	Weight [kg]
R412014753	15.8	M3x53	15,6x1,78	Die cast zinc	black painted	Acrylonitrile Butadiene Rubber	0.403
R412014754	15.8	M3x53	15,6x1,78	Die cast zinc	black painted	Acrylonitrile Butadiene Rubber	0.403

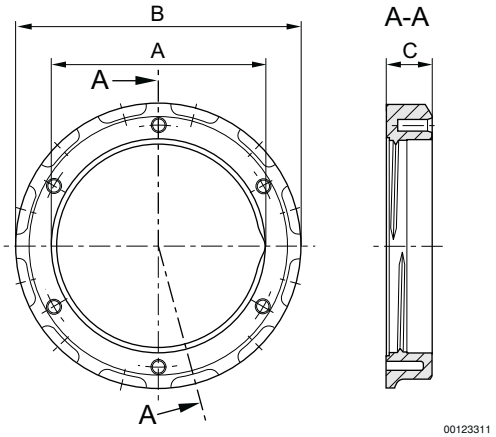
Part No.	Ambient temperature min./ max. [C°]										
R412014753	-10 / +50										
R412014754	-10 / +50										

Scope of delivery incl. 4 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 2x O-ring

Series AS1
Accessories

Panel nut

00124065

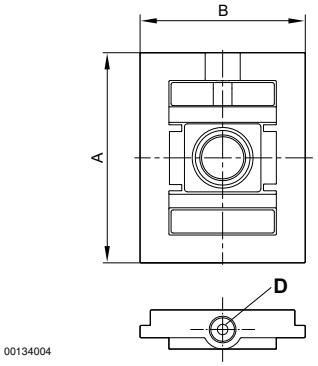


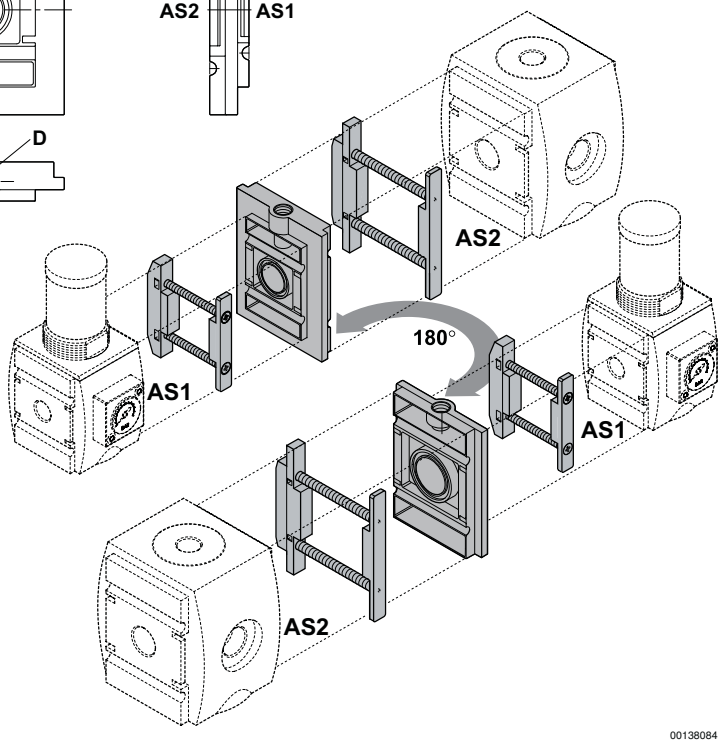
00123311

Part No.	usage Series	A	B	C	Material	Weight [kg]	Delivery quantity [Piece]	
1829234070	AS1 MU1 NL1 NL2 NL4	M30x1,5	35	5.5	Brass	0.013	5	
1829234073	AS1 NL1 NL2 NL4	M30x1,5	37.5	7.5	Plastic	0.006	5	

Series AS1
Accessories

Block assembly kit, Series AS1/AS2-MBR-...-W07





Part No.	A	B	C	D	Material	Weight [kg]					
R412014759	62	47.5	14	G 1/8	Polyamide	0.055					
Scope of delivery incl. 1 blanking screw and 2 mounting strap kits											

Series AS1
Accessories

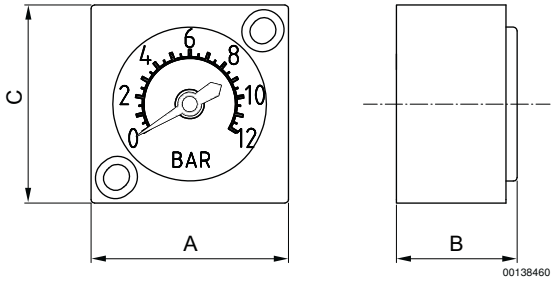
Pressure gauge, Series PG1-INT
► flange version ► Background color: White ► Scale color: Black ► Viewing window: Polycarbonate ► Units: bar

Version	Diaphragm pressure gauge
Main scale unit (outside)	bar
Ambient temperature min./max.	+0°C / +60°C
Medium	Compressed air
Pointer color	Black
Main scale color (outside)	Black
Materials:	
Housing	Polyamide
Viewing window	Polycarbonate
Seal	Nitrile butadiene rubber

13802

	Range of application	Display range	Operating pressure	Scale value	Weight	Part No.
	[bar]	[bar]	[bar]		[kg]	
	0 - 6	0 - 6	0 / 6	0.25	0.024	R412014760
	0 - 12	0 - 12	0 / 12			R412014761

Dimensions



A	B	C												
27	16.5	27												

Series AS1
Accessories

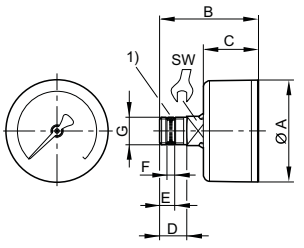
Pressure gauge, Series PG1-SAS
► Front port ► Background color: Black ► Scale color: White / Grey ► Viewing window: Polystyrene ► Units: bar / psi ► suitable for ATEX

00123444

Version	Bourdon tube pressure gauge
Standardization	EN 837-1
Main scale unit (outside)	bar
Secondary scale unit (inside)	psi
Ambient temperature min./max.	-40°C / +60°C
Medium	Compressed air
Pointer color	White
Main scale color (outside)	White
Secondary scale color (inside)	Grey
Class	2,5
Materials:	
Housing	Acrylonitrile butadiene styrene
Thread	Brass
Viewing window	Polystyrene
Seal	Polytetrafluorethylene

	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value	Weight	Part No.
		[mm]	[bar]	[bar]	[bar]		[kg]	
	G 1/8	40	0 - 1.2	0 - 1.6	0 / 1.6	0.05	0.08	**R412003853**
			0 - 2	0 - 2.5	0 / 2.5	0.1		**R412003854**
			0 - 3.2	0 - 4	0 / 4	0.1		**R412003855**
			0 - 4	0 - 6	0 / 6	0.2		**R412003856**
			0 - 8	0 - 10	0 / 10	0.2		**R412003857**
			0 - 12	0 - 16	0 / 16	0.5		**R412003858**

Dimensions



00119457

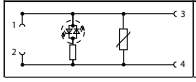
Compressed air connection G	Nominal diameter	Ø A	B	C	D	E	F 1)	SW				
G 1/8	40	39	44.5	26.5	10	5.6	2.1	14				
1) Gasket thread												

Series AS1
Accessories

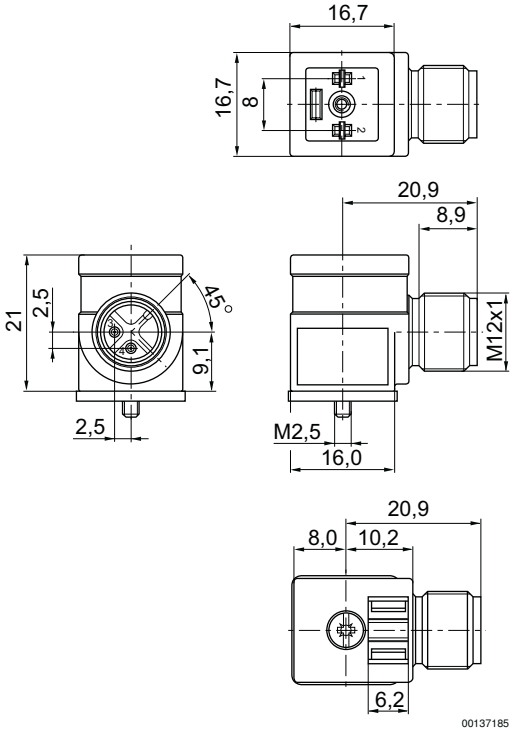
Adapter, Series CN1
► Form C, ISO 15217/M 12

00137187

Ambient temperature min./max.	-10°C / +100°C
Protection class	IP65
Operational voltage DC, max.	24 V DC
Mounting screw tightening torque	0.6 Nm
Materials:	
Housing	Polyurethane

	Max. current	Contact assignment	Protective circuit	LED status display	Housing color	Part No.
	[A]					
	1	2+E	Varistor	Yellow	Transparent	**R412009553**

Dimensions

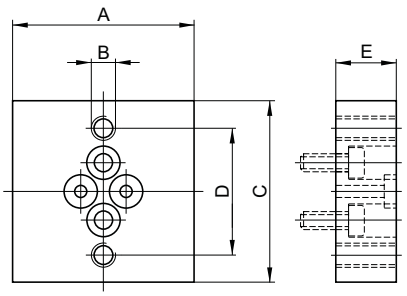


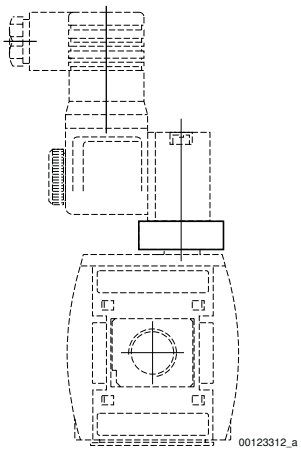
00137185

Series AS1
Accessories

Transition plate, Series AS1, AS2, AS3, AS5
► with CNOMO porting configuration

00124240



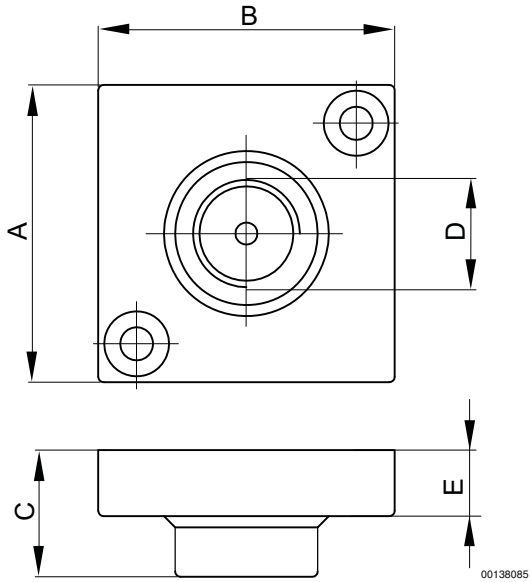


00123312_a

Part No.	A	B	C	D	E	Material	Weight [kg]				
R412006360	30	M4	30	21	10	Aluminum	0.025				
Scope of delivery incl. 4 mounting screws, 2 O-rings Adapter plate for assembling a series DO30 pilot valve with CNOMO porting configuration on a 3/2-way shut-off valve without pilot											

Transition plate, Series AS1
► Transition plate for assembling a pressure gauge with connection thread G 1/8

00138422



00138085

Part No.	A	B	C	D	E							
R412010538	27	27	11.5	G 1/8	6							

Series AS1
Accessories

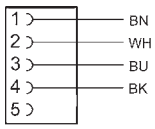
Connecting cable, Series CN2
► Socket, M12x1, 5-pin, A-coded, angled ► without wire end ferrule, tin-plated, 4-pin ► for CANopen, DeviceNet

00107009_c

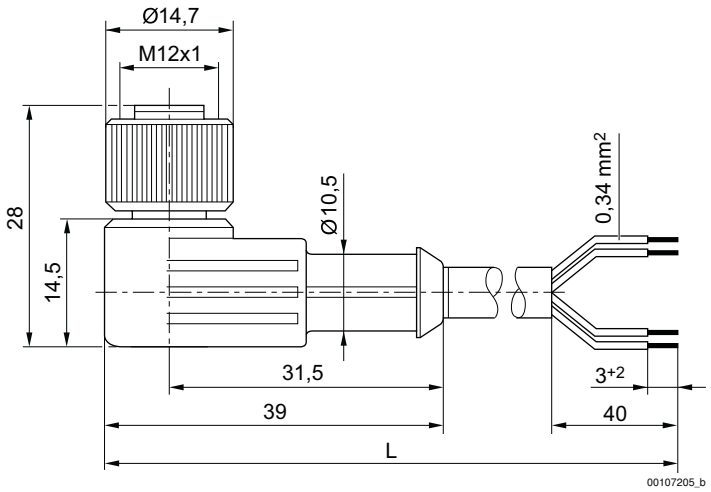
Ambient temperature min./max.	-40°C / +85°C
Protection class	IP65
Materials:	
Cable sheath	Polyurethane

Technical Remarks

- The specified protection class is only valid in assembled and tested state.

	Operational voltage max.		Max. current	Number of poles	Wire cross-section	Cable length L	Weight	Part No.
	[V AC]	[V DC]	[A]		[mm²]	[m]	[kg]	
	48	48	4	4	0.34	3	0.13	**1834484259**
						5	0.202	**1834484260**
						10	0.387	**1834484261**

Dimensions

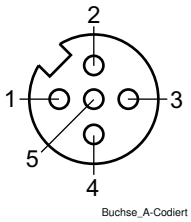


00107205_b

L = length

Series AS1
Accessories

Pin assignment



Buchse_A-Codiert

(1) BN=brown
(2) WH=white
(3) BU=blue
(4) BK=black
(5) not assigned

Connecting cable, Series CN2
► Socket, M12x1, 5-pin, A-coded, straight ► without wire end ferrule, tin-plated, 4-pin ► for CANopen, DeviceNet


00107009_b

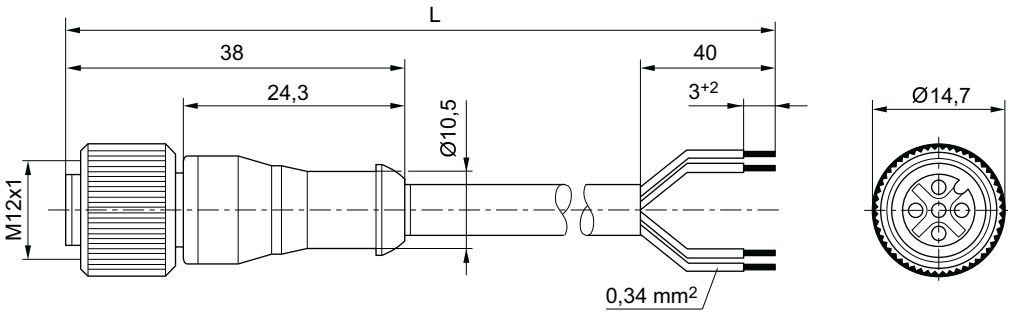
Ambient temperature min./max.	-25°C / +70°C
Protection class	IP67
Materials:	
Cable sheath	Polyurethane
Cable color	Black

Technical Remarks
- The specified protection class is only valid in assembled and tested state.

	Operational voltage max.		Max. current	Number of poles	Wire cross-section	Cable length L	Weight	Part No.
	[V AC]	[V DC]	[A]		[mm²]	[m]	[kg]	
1 ○ BN 2 ○ WH 3 ○ BU 4 ○ BK 5 ○	48	48	4	4	0.34	3	0.131	**1834484256**
						10	0.398	**1834484258**
						5	0.201	**1834484257**

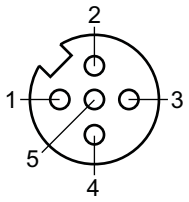
Series AS1
Accessories

Dimensions



L = length

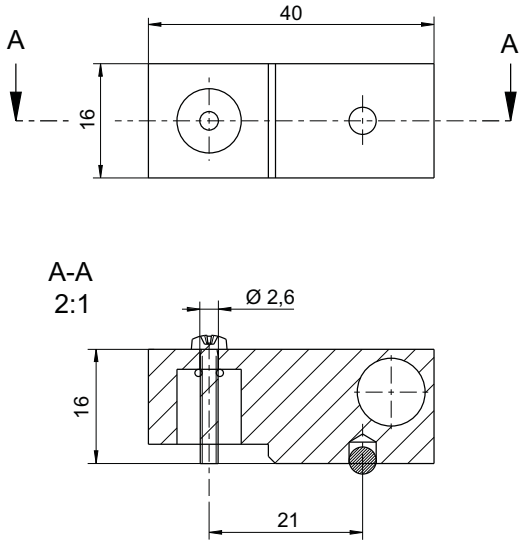
Pin assignment

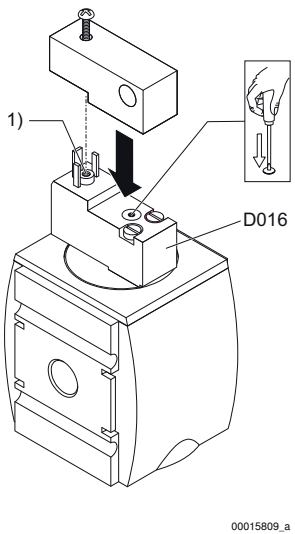


(1) BN=brown
(2) WH=white
(3) BU=blue
(4) BK=black
(5) not assigned

Mounting aid

► Assembly aid for permanent actuation of manual override (“press”) on pilot valve DO16 with electrical push-in fitting, form C.





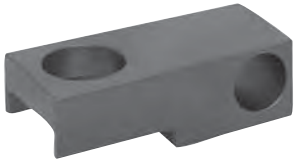
1) ISO 15217, form C

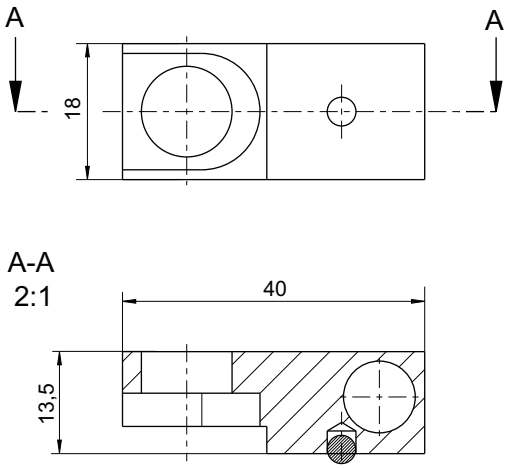
Series AS1
Accessories

Part No.	Material											
R412019278	Aluminum											
Scope of delivery incl. 1 mounting screw, 1 O-ring												

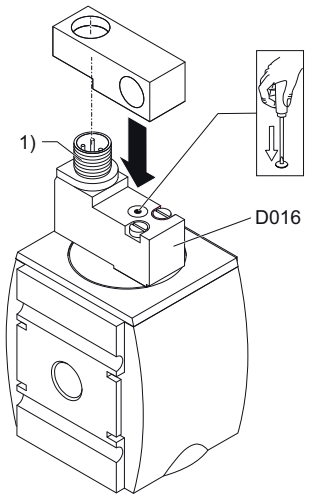
Mounting aid

► Assembly aid for permanent actuation of manual override (“press”) on pilot valve DO16 with electrical connection M12x1.





00015812



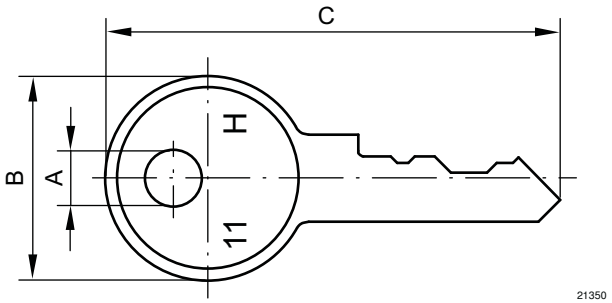
00015810

1) M12x1

Part No.	Material	Weight [kg]									
R412015193	Aluminum	0.023									
Mounting the assembly aid to the pilot valve using electrical connector M12x1											

Key for E11 locking

22691



21350

Series AS1
Accessories

Part No.	A	B	C	Delivery quantity [Piece]								
R961403407	4.5	20.5	45	1								

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29-04-2016