

Series AS1

Brochure





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-RGSE11 ► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► lockable ► with E11 locking	20
	Pressure regulator, Series AS1-RGSDS ► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply	22
	Pressure regulator, Series AS1-RGSDS ► 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 regulator	s, 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-FREE11 ► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► lockable ► with E11 locking	34

Series AS1

Filter, air supply or	n 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 sup	pply on the left	
	Micro oil-mist lubricator, Series AS1-LBM ► G 1/4 ► Air supply: left	47
Filling units, air su	pply on the left	
	Filling unit, electrically operated, Series AS1-SSU ■ G 1/4 ■ Air supply: left ■ pipe connection	49
Filling valves, air s	upply 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	59



Series AS1



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

► G 1/4 ► Air supply: left

6

Distributors, air supply on the left



Distributor, Series AS1-DIS

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

63



Distributor, Series AS1-DIN

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

65

Pressure regulators, air supply on the right



Pressure regulator, Series AS1-RGS

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

6



Pressure regulator, Series AS1-RGS

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

70



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

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

7:



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

76

Filter pressure regulators, air supply on the right



Filter pressure regulator, Series AS1-FRE

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

70

Filter, air supply on the right



Standard filter, Series AS1-FLS

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

84



Series AS1

Pre-filter, Series AS1-FLP ► G 1/4 ► Air supply: right ► filter porosity: 0.3 μm	87
Microfilter, Series AS1-FLC ► G 1/4 ► Air supply: right ► filter porosity: 0.01 μm	90
Active carbon filter, Series AS1-FLA ► G 1/4 ► Air supply: right	93

Lubricators, air supply on the right



Micro oil-mist lubricator, Series AS1-LBM

► G 1/4 ► Air supply: right

95

Filling valves, air supply on the right



Filling valve, pneumatically operated, Series AS1-SSV

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

97

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

99

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

104



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

106

Distributor, air supply on the right



Distributor, Series AS1-DIS

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

108



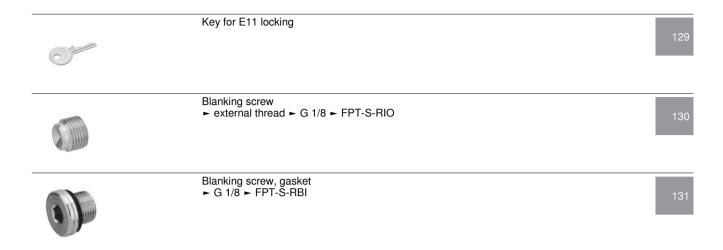
an antitate and	Distributor, Series AS1-DIN ► G 1/4 ► Air supply: right ► Distributor 1x ► Non-return valve	110
Accessories		
	Reservoir, Series AS1-CLS ► Material: Die cast zinc, Polycarbonate	112
	Reservoir, Series NL1/AS1-CBM/-CLA ► for active carbon filter and lubricator ► Material: Polycarbonate, Die cast zinc ► suitable for ATEX	113
SID SID	Protective guard ► suitable for ATEX ► Series NL1 ► Filter, Lubricator	114
	Mounting plate, Series AS1-MBRW01	115
	Mounting bracket, Series AS1-MBRW02	116
	Mounting clip, Series AS1-MBRW03	117
	Block assembly kit, Series AS1-MBRW04	118
	Block assembly kit, Series AS1-MBRW05	119
0	Panel nut ► suitable for ATEX	120

Series AS1

	Block assembly kit, Series AS1/AS2-MBRW07	121
e and a second	Pressure gauge, Series PG1-INT ► flange version ► Background color: White ► Scale color: Black ► Viewing window: Polycarbonate ► Units: bar	122
	Pressure gauge, Series PG1-SAS ► Front port ► Background color: Black ► Scale color: White / Grey ► Viewing window: Polystyrene ► Units: bar / psi	123
	Adapter, Series CN1 ► Form C, ISO 15217/M 12	124
• 0.70 •	Transition plate, Series AS1, AS2, AS3, AS5 ► with CNOMO porting configuration	125
	Transition plate, Series AS1 ► Transition plate for assembling a pressure gauge with connection thread G 1/8	125
	Connecting cable, Series CN2 ► Socket, M12x1, 5-pin, A-coded, angled ► without wire end ferrule, tin-plated, 4-pin ► for CANopen, DeviceNet	126
	Connecting cable, Series CN2 ► Socket, M12x1, 5-pin, A-coded, straight ► without wire end ferrule, tin-plated, 4-pin	127
	Mounting aid ► Assembly aid for permanent actuation of manual override ("press") on pilot valve DO16 with electrical push-in fitting, form C.	128
	Mounting aid ► Assembly aid for permanent actuation of manual override ("press") on pilot valve DO16 with electrical connection M12x1.	129

8 AVENTICS

Preparation of compressed air ► Maintenance units and components **Series AS1**





Maintenance unit, 2-part, Series AS1-ACD

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



00137267

2-in-1, Can be assembled into blocks Version Parts Filter pressure regulator, Lubricator

Mounting orientation vertical Working pressure min./max. 2 bar / 12 bar Compressed air Medium 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

HLP 32 (DIN 51 524 - ISO VG 32) Oil type

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

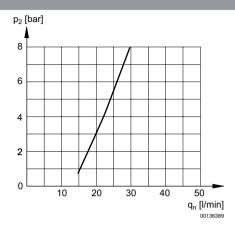
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- Oil dosing at 1000 l/min [drops/min]: 10-20
- solid impurities 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 $\Delta p = 1$ bar								

Maintenance unit, 2-part, Series AS1-ACD

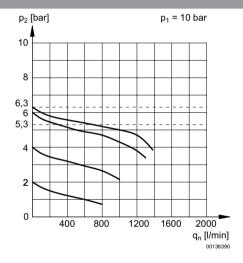
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

Lubricator activation margin



p2 = secondary pressure qn = nominal flow

Flow rate characteristic



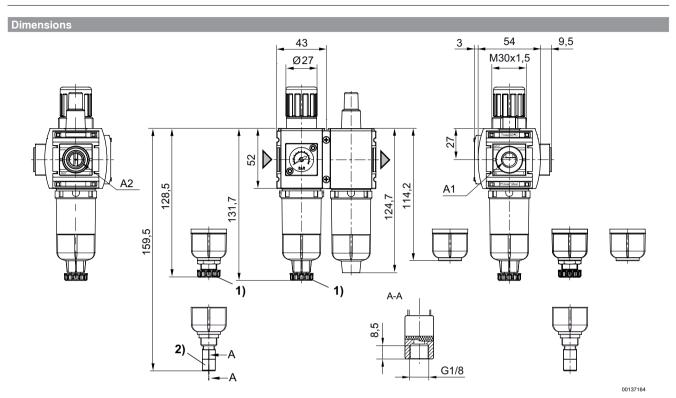
p1 = Working pressure p2 = Secondary pressure

qn = Nominal flow



Maintenance unit, 2-part, Series AS1-ACD

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



A1 = input A2 = output

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain



12

Preparation of compressed air ► Maintenance units and components

Maintenance unit, 3-part, Series AS1-ACT

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



Version

Parts
Mounting orientation

Mounting orientation
Working pressure min./max.
Medium

Medium temperature min./max.

Ambient temperature min./max.

Ambient temperature min./max. $-10\,^{\circ}$ C / $+50\,^{\circ}$ C Regulator type Diaphragm-type pressure regulator

Regulator function with relieving air exhaust

Adjustment range min./max.

Pressure supply

Filter reservoir volume

Filter element

Condensate drain

0.5 bar / 8 bar

single

16 cm³

exchangeable

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)

3-part, Can be assembled into blocks

Filter, Pressure regulator, Lubricator

vertical

2 bar / 12 bar Compressed air

Neutral gases

-10°C / +50°C

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.

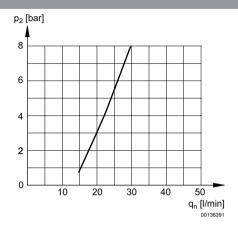
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- Oil dosing at 1000 l/min [drops/min]: 10-20
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

	Port	Qn	Condensate drain	Weight	Part No.		
		[l/min]		[kg]			
			semi-automatic, open without pressure	0.628	R412014675		
	G 1/4	480	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 $\Delta p = 1$ bar							

Maintenance unit, 3-part, Series AS1-ACT

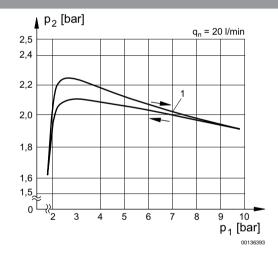
► G 1/4 ► Air supply: left ► filter porosity: 5 µm ► With integrated pressure gauge

Lubricator activation margin



p2 = secondary pressure qn = nominal flow

Pressure characteristics curve



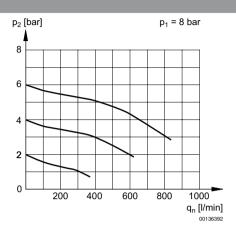
p1 = Working pressure p2 = Secondary pressure qn = Nominal flow 1) = Starting point



Maintenance unit, 3-part, Series AS1-ACT

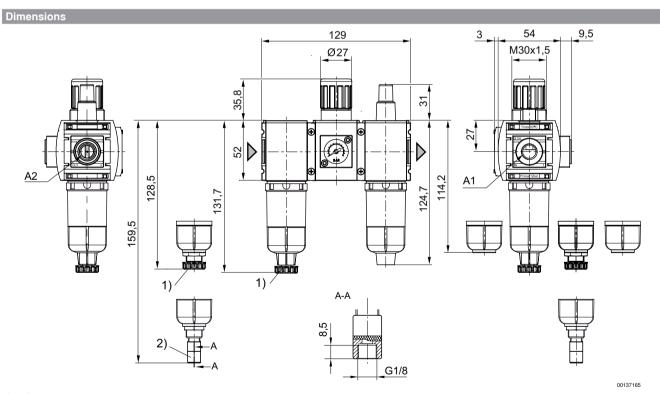
► G 1/4 ► Air supply: left ► filter porosity: 5 μm ► With integrated pressure gauge

Flow rate characteristic



p1 = Working pressure p2 = Secondary pressure

qn = Nominal flow



A1 = input

A2 = output

1) Semi-automatic condensate drain

2) Fully automatic condensate drain



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



00137239

Mounting orientation Any Working pressure min./max. See table below

Medium

Neutral gases -10°C / +50°C Medium temperature min./max. 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

Compressed air

See table below

Adjustment range min./max.

Materials:

Housing Polyamide Front plate

Acrylonitrile butadiene styrene Acrylonitrile butadiene rubber Seals

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 0.5 / 12 0.5 / 12	0.2 - 4 0.5 - 8 0.5 - 10	0.209	Fig. 1	1)	R412014627 R412014628 R412014629
-	G 1/4	1000	0.2 / 12 0.5 / 12 0.5 / 12	0.2 - 4 0.5 - 8 0.5 - 10	0.206	Fig. 2	2)	R412014633 R412014634 R412014635

¹⁾ regulator with pressure gauge

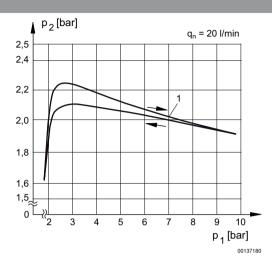
2) Order pressure gauge separately

Max. pressure gauge Ø in blocked state: 40

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

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

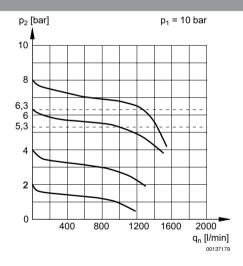
Pressure characteristics curve



p1 = Working pressure p2 = Secondary pressure

qn = Nominal flow 1) = Starting point

Flow rate characteristic



p1 = Working pressure

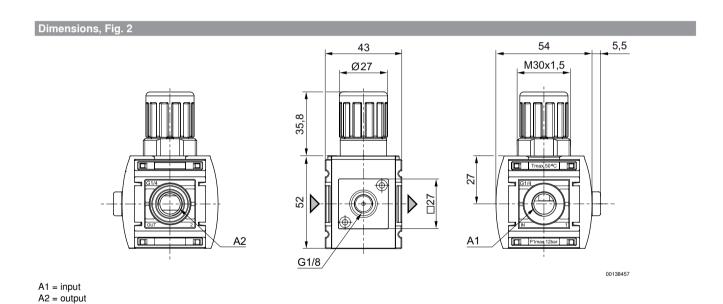
p2 = Secondary pressure

qn = Nominal flow



A2 = output

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



Pressure regulator, Series AS1-RGS

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



Mounting orientation

Working pressure min./max.

Medium

Medium temperature min./max.
Ambient temperature min./max.

Regulator type

Regulator function

Adjustment range min./max.

Materials:

Housing

Front plate Seals Any

See table below

Compressed air

Neutral gases

-10°C/+50°C

-10°C / +50°C

Diaphragm-type pressure regulator, Can be as-

sembled into blocks

with relieving air exhaust

See table below

Polyamide

Acrylonitrile butadiene styrene 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.

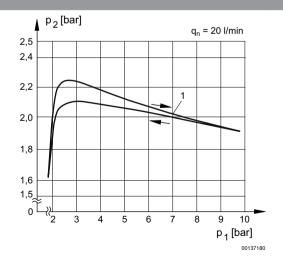
	Port	Qn	Working pres-			Part No.
			sure min./max.	range min max		
		[l/min]	[bar]	[bar]	[kg]	
\bigcirc	0.14	1000	0.2 / 12	0.2 - 4	0.000	R412014639
	G 1/4	1000	0.5 / 12	0.5 - 8	0.239	R412014640
 •			0.5 / 12	0.5 - 10		R412014641

Panel nut included in scope of delivery

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

00137238

Pressure characteristics curve



p1 = Working pressure

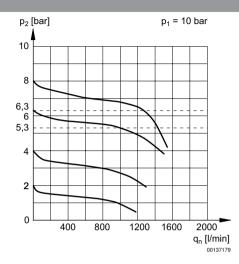
p2 = Secondary pressure

gn = Nominal flow

1) = Starting point

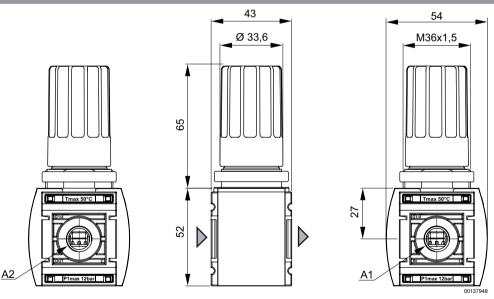
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with pressure gauge in hand wheel

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



Mounting orientation

Working pressure min./max.

Medium

Medium temperature min./max. Ambient temperature min./max.

-10°C / +50°C Regulator type Diaphragm-type pressure regulator, Can be as-

Any

See table below

Compressed air Neutral gases

-10°C / +50°C

sembled 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).

00015786

The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).

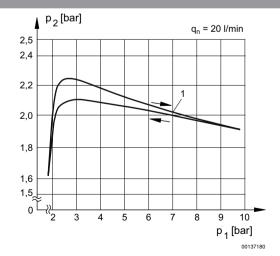
	Port	Qn	Working pressure min./max.	Adjustment range min max		Part No.
		[l/min]	[bar]	[bar]	[kg]	
N			0.5 / 12	0.5 - 10		R412010648
	G 1/4	1000	0.2 / 12	0.2 - 4	0.206	R412010649

Max. pressure gauge Ø in blocked state: 40

Order pressure gauge separately

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

Pressure characteristics curve



p1 = Working pressure

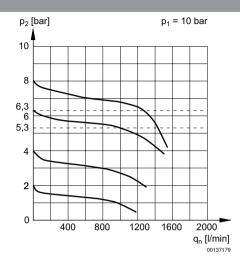
p2 = Secondary pressure

qn = Nominal flow 1) = Starting point



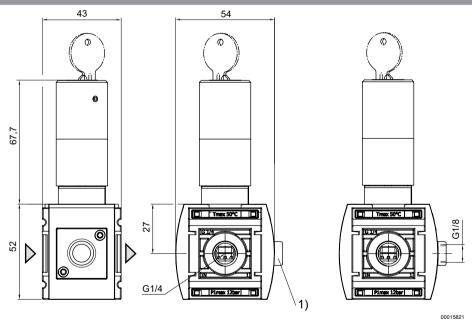
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► lockable ► with E11 locking

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



Mounting orientation

Working pressure min./max.

Medium

Medium temperature min./max. Ambient temperature min./max.

Regulator type

Regulator function

Adjustment range min./max.

Materials:

Housing

Front plate Seals

Any

See table below

Compressed air

Neutral gases

-10°C / +50°C

-10°C / +50°C

Diaphragm-type pressure regulator, Can be as-

sembled into blocks

with relieving air exhaust

See table below

Polyamide

Acrylonitrile butadiene styrene 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.

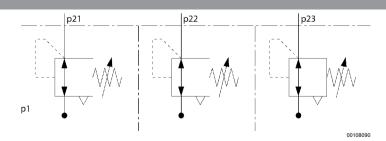
		Port	Qn	Working pressure min./max.	Adjustment range min max	Weight	Fig.	Note	Part No.
			[l/min]	[bar]	[bar]	[kg]			
	\bigcirc	G 1/4	1000	0.2 / 12	0.2 - 4	0.209	Fig. 1	1)	R412014630
1 1777	I			0.5 / 12	0.5 - 8				R412014631
				0.5 / 12	0.5 - 10				R412014632
1				0.1 / 12	0.1 - 1				R412010558
		G 1/4	1000	0.2 / 12	0.2 - 4	0.206	Fig. 2	2/	R412014636
	-	G 1/4	1000	0.5 / 12	0.5 - 8	0.206	rig. z	2)	R412014637
				0.5 / 12	0.5 - 10				R412014638

¹⁾ regulator with pressure gauge

Max. pressure gauge Ø in blocked state: 40

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

Application example



p1 = working pressure

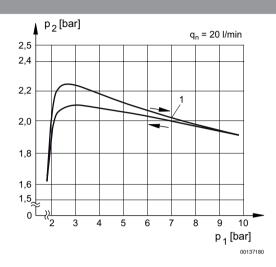
p21; p22; p23 = secondary pressure

²⁾ Order pressure gauge separately



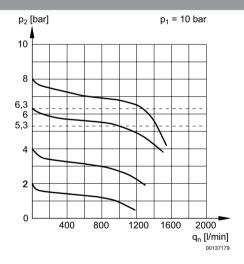
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

Pressure characteristics curve



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

Flow rate characteristic

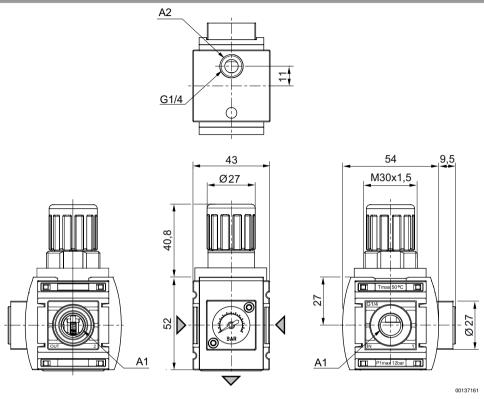


p1 = Working pressure p2 = Secondary pressure qn = Nominal flow

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



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

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

Working pressure min./max.

Medium

Medium temperature min./max.
Ambient temperature min./max.

Regulator type

Regulator function

Adjustment range min./max.

Materials:

Housing

Front plate Seals Any

See table below Compressed air

Neutral gases

-10°C / +50°C

-10°C/+50°C

Diaphragm-type pressure regulator, Can be as-

sembled into blocks

with relieving air exhaust

See table below

Polyamide

Acrylonitrile butadiene styrene Acrylonitrile butadiene rubber

Technical Remarks

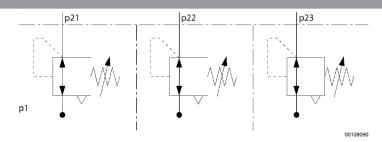
■ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

	Port	Qn	Working pres-		Weight	Part No.
			sure min./max.	range min max		
		[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
LJ			0.5 / 12	0.5 - 10		R412014644

Panel nut included in scope of delivery

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

Application example



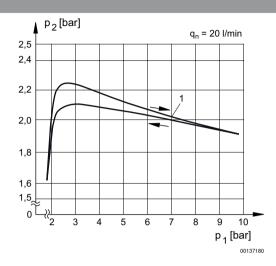
p1 = working pressure

p21; p22; p23 = secondary pressure



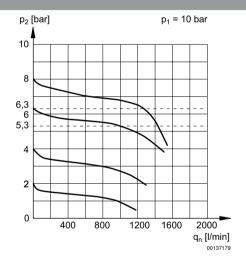
► G 1/4 ► Air supply: left ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

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 43 Ø 33,6 I max 50°C Pimax 50°C A1 Pimax 12001 A2 00137249

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 regulator

Mounting orientation vertical

Working pressure min./max. 2 bar / 12 bar

Medium Compressed air
Neutral gases

Medium temperature min /max -10 °C / +50 °C

 $\label{eq:medium} \begin{tabular}{ll} Medium temperature min./max. & -10 ^ C / +50 ^ C \\ Ambient temperature min./max. & -10 ^ C / +50 ^ C \\ \end{tabular}$

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.
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- 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 1/4 100	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) regulator with pressure gauge
- 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 $\Delta p = 1$ bar

Filter pressure regulator, Series AS1-FRE

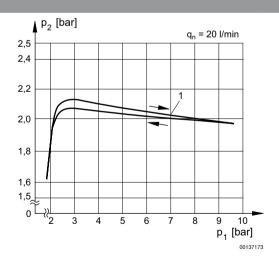
► G 1/4 ► Air supply: left ► filter porosity: 5 μm

		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);	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) regulator with pressure gauge
- 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 $\Delta p = 1$ bar

Pressure characteristics curve



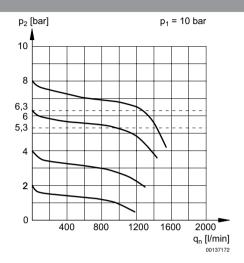
- p1 = Working pressure
- p2 = Secondary pressure
- qn = Nominal flow
- 1) = Starting point



Filter pressure regulator, Series AS1-FRE

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

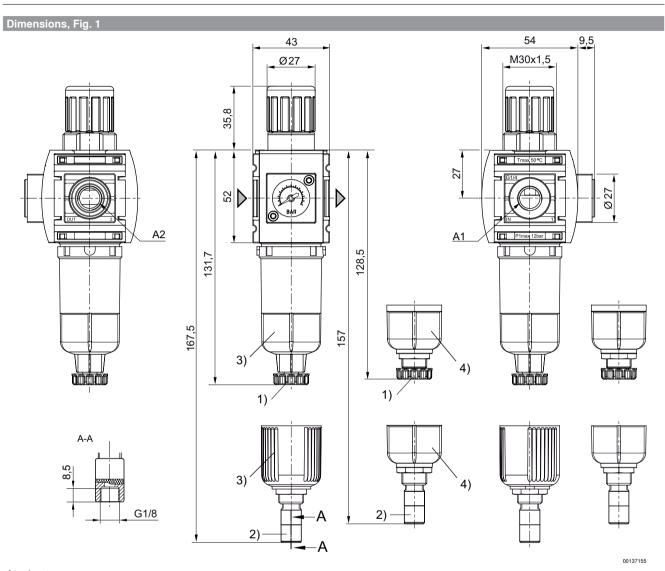
Flow rate characteristic



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



A1 = input

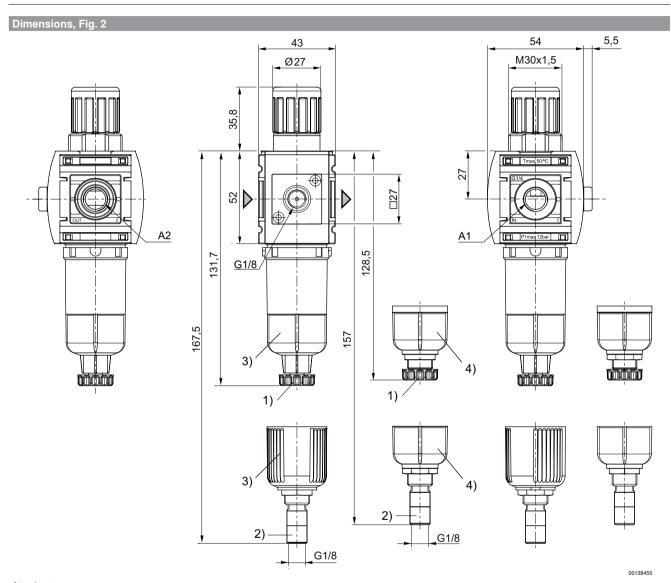
A2 = output

- 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



A1 = input

A2 = output

- 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 regulator

 Mounting orientation
 vertical

 Working pressure min./max.
 2 bar / 12 bar

 Medium
 Compressed air Neutral gases

 Medium temperature min./max.
 -10°C / +50°C

Regulator type Diaphragm-type pressure regulator

-10°C / +50°C

Regulator function with relieving air exhaust

Adjustment range min./max.

0.5 bar / 8 bar
Pressure supply

Filter reservoir volume

Filter element

0.5 bar / 8 bar
single
16 cm³
exchangeable

Materials:

Ambient temperature min./max.

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.
- $\,\blacksquare\,$ The E11 locking is delivered without a key (see accessories for keys).
- The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- 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	1000	fully automatic, closed without pressure	0.256	R412010650

Max. pressure gauge Ø in blocked state: 40

Order pressure gauge separately

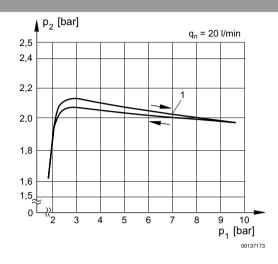
Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar



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

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

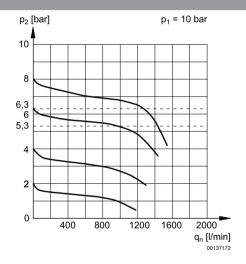
Pressure characteristics curve



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 43 G1/4A G1/4A G1/4A

1) Adapter Order pressure gauge separately 00015828



Standard filter, Can be assembled into blocks

vertical

16 cm³

 $5 \mu m$

2 bar / 12 bar

Compressed air Neutral gases

-10°C / +50°C

-10°C / +50°C

exchangeable

See table below

Standard filter, Series AS1-FLS

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



00137253

Version

Mounting orientation
Working pressure min./max.
Medium

Medium temperature min./max. Ambient temperature min./max.

Filter reservoir volume Filter element

filter porosity

Condensate drain

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.
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

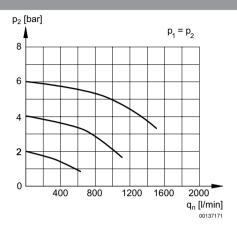
	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
			semi-automatic, open without pressure	Polycarbonate	-	0.166	R412014600
			fully automatic, open without pressure	Polycarbonate	-	0.184	R412014601
\wedge		1000	fully automatic, closed without pressure	Polycarbonate	-	0.184	R412014602
	G 1/4		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

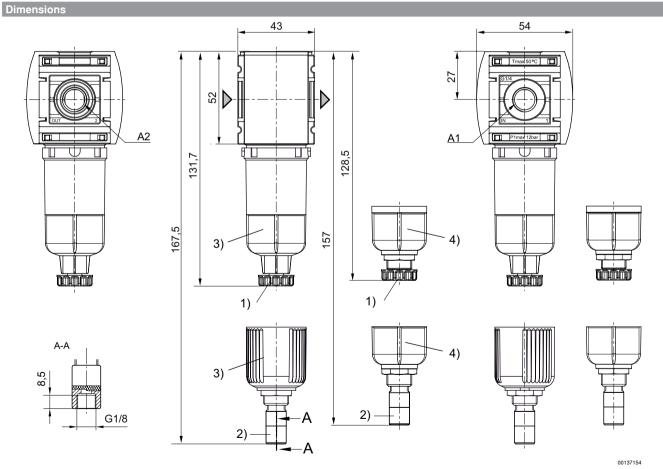
► G 1/4 ► Air supply: left ► filter porosity: 5 µm

Flow rate characteristic



p2 = secondary pressure

qn = nominal flow



A1 = input

A2 = output

1) Semi-automatic condensate drain

2) fully automatic condensate drain

3) Reservoir: polycarbonate

4) Reservoir: metal



Pre-filter, Can be assembled into blocks

vertical

12 cm³

 $0.3~\mu \mathrm{m}$

2 bar / 12 bar

Compressed air Neutral gases

-10°C / +50°C

-10°C / +50°C

exchangeable

See table below

Pre-filter, Series AS1-FLP

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



00137253

Version

Medium

Mounting orientation
Working pressure min./max.

Medium temperature min./max.

Ambient temperature min./max. Filter reservoir volume

Filter element filter porosity

Condensate drain

Materials:

Housing Polyamide

Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

Filter insert Impregnated paper

Technical Remarks

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

■ Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

■ 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

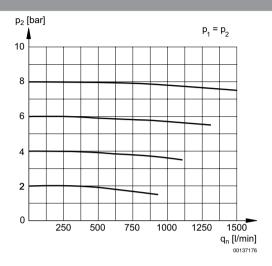
	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
			semi-automatic, open without pressure	Polycarbonate	-	0.169	R412014607
			fully automatic, open without pressure	Polycarbonate	-	0.187	R412014608
\wedge			fully automatic, closed without pressure	Polycarbonate	-	0.187	R412014609
	G 1/4	350	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

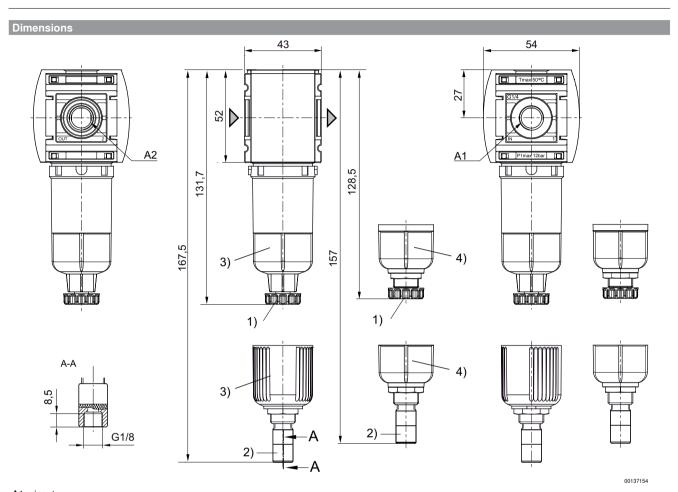


p2 = secondary pressure qn = nominal flow



Pre-filter, Series AS1-FLP

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



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.
 2 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 μ m

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.

■ Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

■ Recommended pre-filtering: 0.3 μ m

■ 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]	
			semi-automatic, open without pressure	Polycarbonate	-	0.169	R412014614
			fully automatic, open without pressure	Polycarbonate	-	0.187	R412014615
\wedge			fully automatic, closed without pressure	Polycarbonate	-	0.187	R412014616
	G 1/4	350	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

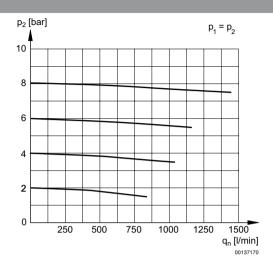
Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 0,1$ bar



Microfilter, Series AS1-FLC

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

Flow rate characteristic

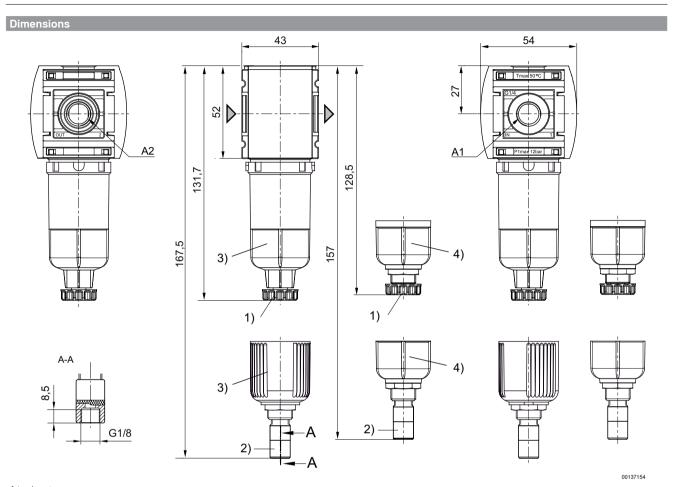


p1 = Working pressure p2 = Secondary pressure qn = Nominal flow



Microfilter, Series AS1-FLC

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



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

Mounting orientation

Working pressure min./max.

Medium

Medium temperature min./max. Ambient temperature min./max.

Filter reservoir volume

Filter element

Materials:

Housing

Front plate Seals

Threaded bushing Reservoir Filter insert

Active carbon filter, Can be assembled into blocks

vertical

0 bar / 12 bar Compressed air Neutral gases

-10°C / +50°C -10°C / +50°C

12 cm³ exchangeable

Polyamide

Acrylonitrile butadiene styrene

Acrylonitrile butadiene rubber

Die cast zinc

Polycarbonate Active carbon

Technical Remarks

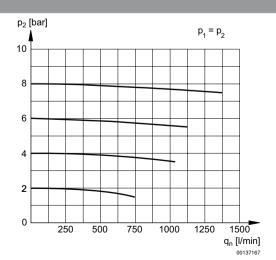
■ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- Recommended pre-filtering: 0.01 μ m
- 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]	
\wedge			Polycarbonate	-	0.171	R412014621
	G 1/4	350	Polycarbonate	metal	0.204	R412014622
			metal	-	0.232	R412014623
				-		

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 0.1$ bar

Flow rate characteristic



p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

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

Active carbon filter, Series AS1-FLA

► G 1/4 ► Air supply: left

Dimensions 43 52 A2 124,7 T

00137148

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



Micro oil-mist lubricator, Series AS1-LBM

► G 1/4 ► Air supply: left



Version

Micro oil-mist lubricator, Can be assembled into

blocks vertical

Mounting orientation

Working pressure min /max

Working pressure min./max. 0.8 bar / 12 bar
Medium Compressed air

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

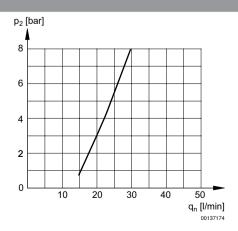
00137245

- oil filling not possible during operation
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- Oil dosing at 1000 l/min [drops/min]: 10-20

	Qn	Reservoir	Protective guard	Weight	Part No.				
	[l/min]			[kg]					
\wedge		Polycarbonate	-	0.187	R412014624				
<u> </u>	1400	Polycarbonate	metal	0.22	R412014625				
		Die cast zinc	-	0.248	R412014626				
Naminal flow On with accordant program of 2. Shar et Ap. 1 har									

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

Lubricator activation margin



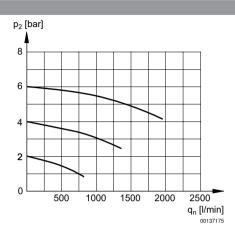
p2 = secondary pressure qn = nominal flow

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

Micro oil-mist lubricator, Series AS1-LBM

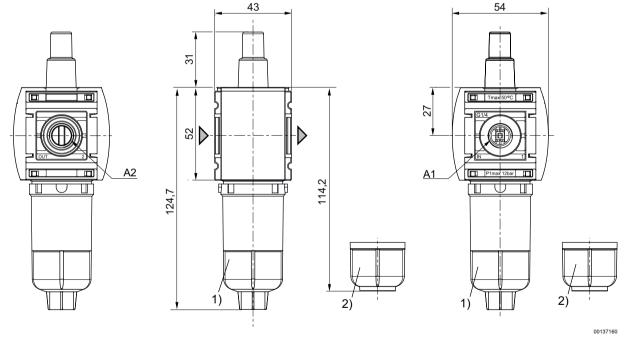
► G 1/4 ► Air supply: left

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



Parts 3/2-directional valve, electrically operated, Filling

valve

Poppet valve, Can be assembled into blocks Version

Nominal flow 1300 l/min Nominal flow, 1▶2 1300 l/min 380 l/min Nominal flow, 2▶3 Working pressure min./max. 3 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

100 % Duty cycle

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.
- Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.

Power consumption	Operating voltage
DC	DC
W	
2	24 V

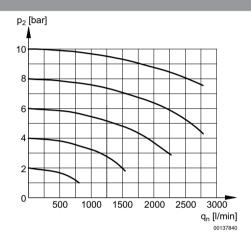
	МО	Compressed air connection			Oper- ating volt- age	Power consumption	Electr. con- nection		Part No.
		Input	Output	Exhaust	DC	DC	Pilot valve		
						[W]		[kg]	
2 2							ISO 15217, form C	0.36	R412010484
		G 1/4	G 1/4	G 1/4	24 V	2	M12	0.377	R412010682

Filling unit, electrically operated, Series AS1-SSU

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

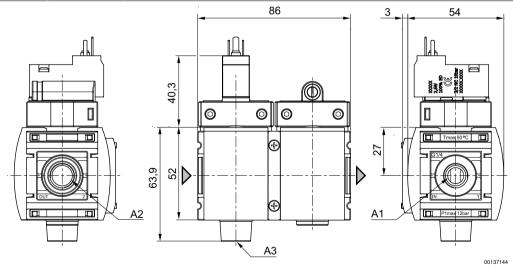
Part No.		Fig.				
R412010484		Fig. 1				
R412010682		Fig. 2				
without electrical con-	nector					
Basic valve with pilot valve						
Nominal flow Qn with	h secondary pressure p2 = 6 bar at Δp = 1 bar					

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

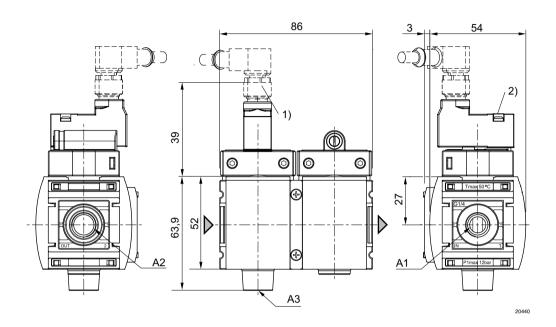
Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed informa-



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

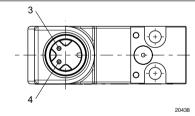
A2 = output

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



Version

Working pressure min./max.

Medium

Medium temperature min./max. Ambient temperature min./max. Sealing principle Control pressure min./max. Max. particle size

Materials:

Housing

Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

Poppet valve, Can be assembled into blocks

0 bar / 16 bar

Compressed air Neutral gases -10°C / +50°C

-10°C / +50°C

Soft sealing

Polyamide

40 $\mu \mathrm{m}$

3 bar / 16 bar

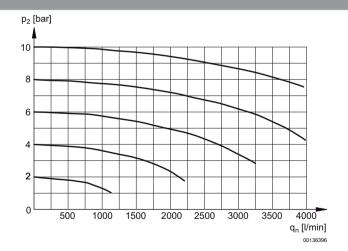
Threaded bushing Die cast zinc

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.

	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

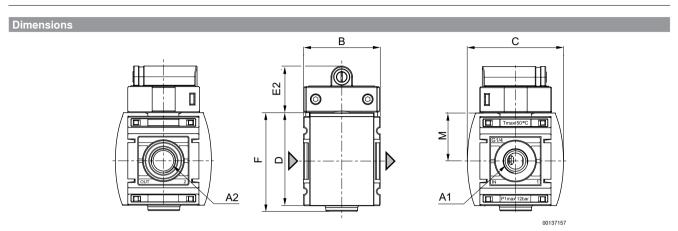


p2 = secondary pressure qn = nominal flow



Filling valve, pneumatically operated, Series AS1-SSV

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



A1 = input A2 = output

	A1	A2	В	С	D	E2	F	М			
[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



Version

Medium

Nominal flow, 1▶2

Nominal flow, 2▶3

Poppet valve, Can be assembled into blocks

2000 l/min 380 l/min 2 bar / 10 bar Compressed air Neutral gases -10°C / +50°C

internal

-10°C / +50°C

Medium temperature min./max. Ambient temperature min./max. Pilot

Working pressure min./max.

Pilot Sealing principle

Sealing principle Soft sealing Max. particle size 25 $\mu \mathrm{m}$

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.

		Operating voltage	Power		Switch-on	Holding
			consumption		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

		МО	Cor	Compressed air connection			perating	voltage	Power consumption	Part No.
			Input	Output	Exhaust	DC	AC 50 Hz		DC	
									[W]	
2										R412014669
	NC	-	G 1/4	G 1/4	G 1/4	-	-	-	-	R412014670
2						24 V	-	-	2	R412014666
	NC	=	G 1/4	G 1/4	G 1/4	-	230 V	230 V	-	R412014668
1 3						24 V	-	-	2	R412010680



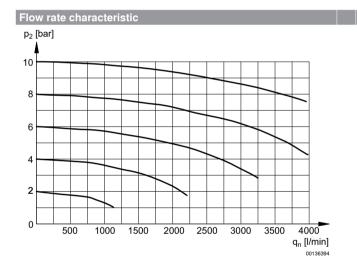
3/2-directional valve, electrically operated, Series AS1-SOV

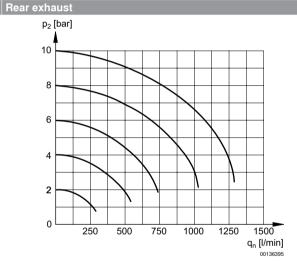
► ATEX optional ► G 1/4 ► Air supply: left ► pipe connection

Part No.	Holding power	Switch-on power	Switch-on power	Electr. connection	Weight	Fig.	Note
	AC 50 Hz			Pilot valve			
	[VA]	[VA]	[VA]		[kg]		
R412014669				_	0.1964	Fig. 1	1); 5)
R412014670	-	-	-	-	0.2096	Fig. i	2); 5)
R412014666	-		-	Plug ISO 15217, form C	0.2154	Fig. 2	3); 4)
R412014668	1.6	3	3	Plug ISO 15217, form C	0.2143	Fig. 2	3); 4)
R412010680	-	-	-	Plug M12	0.2321	Fig. 3	3)

- 1) Basic valve without pilot valve
- 2) Basic valve without pilot valve, with CNOMO subbase
- 3) Basic valve with pilot valve
- 4) Connector standard: EN 175301-803, form C
- 5) ATEX optional
- without electrical connector

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar





p2 = secondary pressure qn = nominal flow p2 = secondary pressure

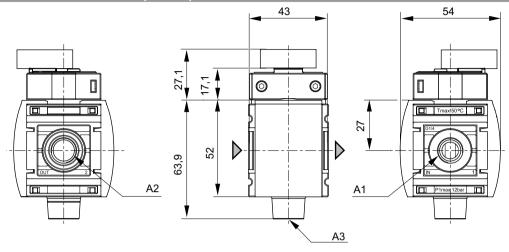
qn = nominal flow

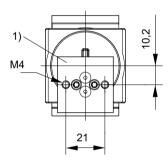


3/2-directional valve, electrically operated, Series AS1-SOV

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

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





00132008

A1 = input

A2 = output

A3 = ventilation port

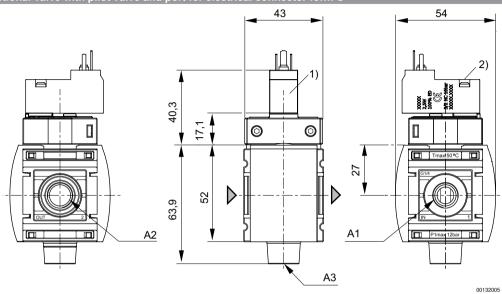
1) Transition plate with CNOMO porting configuration for pilot valve DO30



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

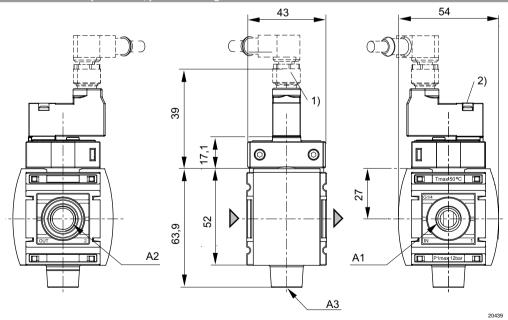
A2 = output

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

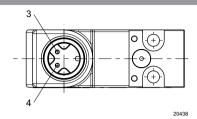
A3 = ventilation port 1) plug M12

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



Version

Medium

Working pressure min./max.

Poppet valve, Can be assembled into blocks

0 bar / 16 bar 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. 3 bar / 16 bar

Materials:

Housing Polyamide

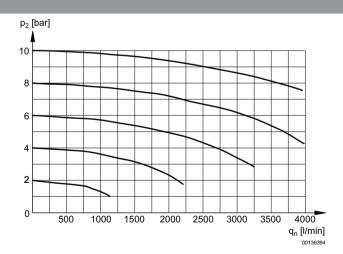
Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

Technical Remarks

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

	Pilot connec- tion		Exhaust	Qn			Weight	Part No.	
					1▶2	2▶3			
						[l/min]	[kg]		
12 T N N	G 1/8	G 1/4	G 1/4	2000	2000	380	0.09	R412014665	
Nominal flow Qn with secondary pressure $p2 = 6$ bar at $\Delta p = 1$ bar									

Flow rate characteristic

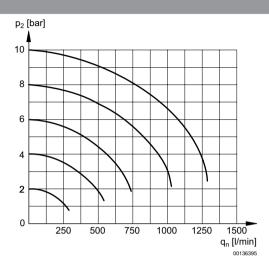


p2 = secondary pressure qn = nominal flow

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

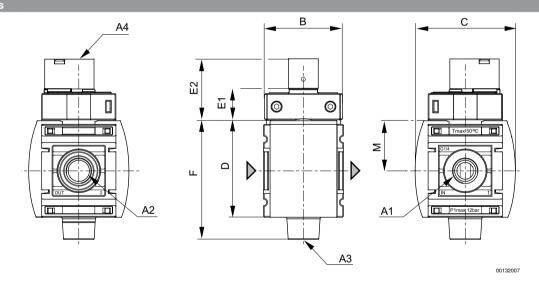
► G 1/4 ► Air supply: left ► pipe connection

Rear exhaust



p2 = secondary pressure qn = nominal flow

Dimensions



A1 = input

A2 = output

A3 = ventilation port

A4 = control pressure connection

A1	A2	А3	A4	В	O	D	E1	E2	F	М		
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



Version

Ball valve, Can be assembled into blocks

for padlocks lockable

Working pressure min./max. 0 bar / 12 bar

Medium Compressed air
Neutral gases

Materials:

Housing Polyamide

Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

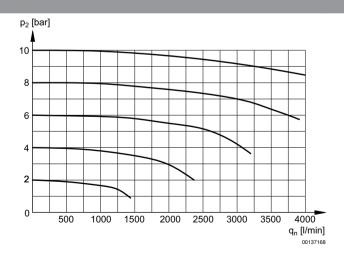
Actuating element+ Polyoxymethylene

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]			
2 1 3	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

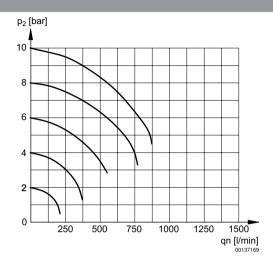


p2 = secondary pressure qn = nominal flow

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

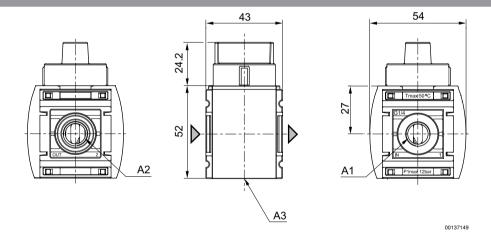
► G 1/4 ► Air supply: left

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



Version

Distributor, Can be assembled into blocks

Any

0 bar / 12 bar

Mounting orientation
Working pressure min./max.

Medium Compressed air Neutral gases

Medium temperature min./max. -10°C / +50°C

Medium temperature min./max. $-10 \,^{\circ}\text{C} / +50 \,^{\circ}\text{C}$ Ambient temperature min./max. $-10 \,^{\circ}\text{C} / +50 \,^{\circ}\text{C}$

Materials:

Housing Polyamide

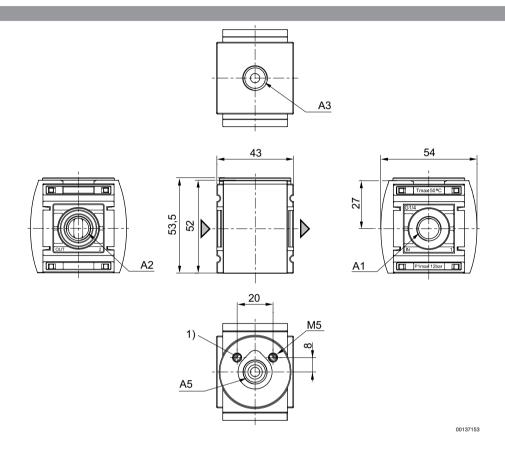
Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

	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 $\Delta p = 1$ 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



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

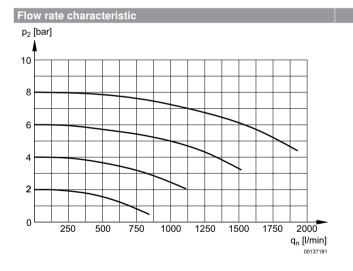
Medium temperature min./max. -10°C / +50°C

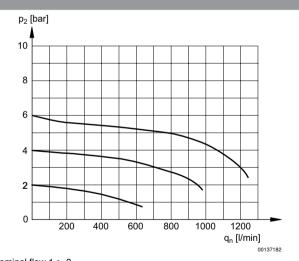
 $\label{eq:medium} \begin{tabular}{ll} Medium temperature min./max. & -10 \ ^C / +50 \ ^C \\ Ambient temperature min./max. & -10 \ ^C / +50 \ ^C \\ \end{tabular}$

Materials:
Housing Polyamide

Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

	Port		Qn	Weight	Part No.
		1▶2	1▶3		
		[l/m	nin]	[kg]	
1) () 2	G 1/4	800	1000	0.178	R412014663
Nominal flow Qn with secondary pr	ressure $p2 = 6$ bar at $\Delta p = 1$	bar			





Nominal flow 1 ► 2 p2 = secondary pressure qn = nominal flow 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 43 54 A1 = input A2 = output A3 = output



Pressure regulator, Series AS1-RGS

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



Mounting orientation

Working pressure min./max.

Medium

Neutral gases -10°C / +50°C Medium temperature min./max. Ambient temperature min./max. -10°C / +50°C

Regulator type Diaphragm-type pressure regulator, Can be as-

sembled into blocks Regulator function with relieving air exhaust Adjustment range min./max. See table below

Any

See table below

Compressed air

Polyamide

Materials:

Housing

Front plate Acrylonitrile butadiene styrene Acrylonitrile butadiene rubber Seals

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

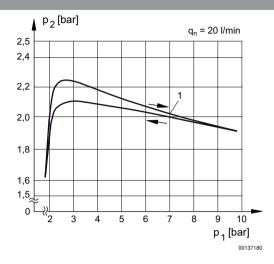
Max. pressure gauge Ø in blocked state: 40 Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar



Pressure regulator, Series AS1-RGS

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

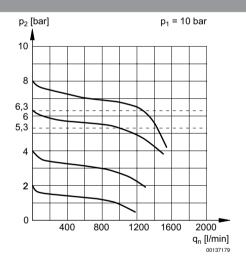
Pressure characteristics curve



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

1) = Starting point

Flow rate characteristic



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



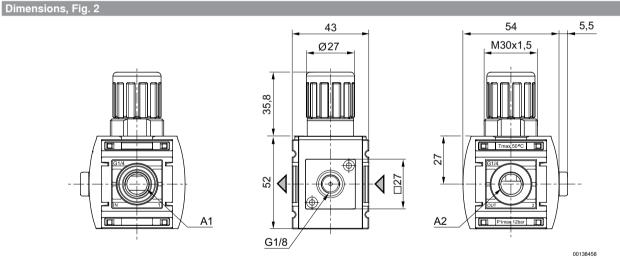
Pressure regulator, Series AS1-RGS

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

Dimensions, Fig. 1 43 927 43 027 43 027 00196218



A1 = input A2 = output



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



Mounting orientation

Working pressure min./max.

Medium

Medium temperature min./max. Ambient temperature min./max.

Regulator type

Diaphragm-type pressure regulator, Can be assembled into blocks

Any

See table below

Compressed air Neutral gases -10°C / +50°C

-10°C / +50°C

See table below

with relieving air exhaust

Regulator function Adjustment range min./max.

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.

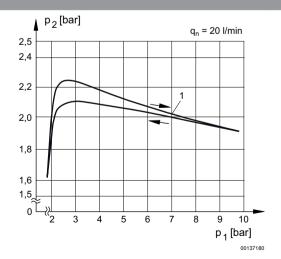
		Port	Qn	Working pres- sure			Part No.
				min./max.	range min max		
			[l/min]	[bar]	[bar]	[kg]	
		0.1/4	1000	0.2 / 12	0.2 - 4	0.000	R412014717
		G 1/4	1000	0.5 / 12	0.5 - 8	0.239	R412014718
	•			0.5 / 12	0.5 - 10		R412014719

Panel nut included in scope of delivery

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

00137238

Pressure characteristics curve



p1 = Working pressure

p2 = Secondary pressure

gn = Nominal flow

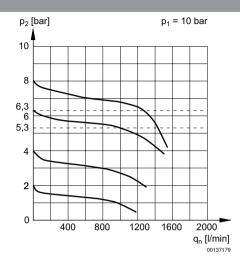
1) = Starting point



Pressure regulator, Series AS1-RGS

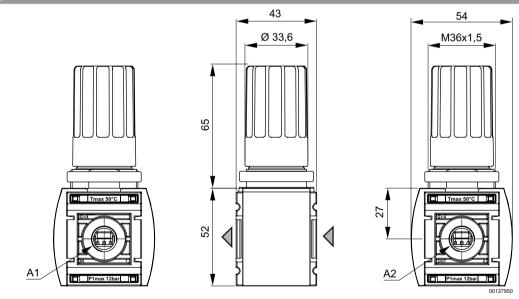
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with pressure gauge in hand wheel

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



Mounting orientation

Working pressure min./max.

Medium

Medium temperature min./max. Ambient temperature min./max.

Regulator type

Regulator function

Adjustment range min./max.

Materials:

Housing

Front plate Seals

Any

See table below

Compressed air

Neutral gases

-10°C / +50°C

-10°C / +50°C

Diaphragm-type pressure regulator, Can be as-

sembled into blocks

with relieving air exhaust

See table below

Polyamide

Acrylonitrile butadiene styrene Acrylonitrile butadiene rubber

Technical Remarks

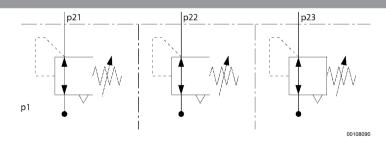
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

		Port	Qn	Working pres-	Adjustment	Weight	Fig.	Part No.
				sure min./max.	range min max			
			[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 / 12	0.5 - 8 0.5 - 10			R412014709 R412014710
				0.1 / 12	0.1 - 1			R412010559
[7]		G 1/4	0.1/4	0.2 / 12	0.2 - 4	0.000	F:- 0	R412014714
	-	G 1/4	1000	0.5 / 12	0.5 - 8	0.206	Fig. 2	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 $\Delta p = 1$ bar

Application example



p1 = working pressure

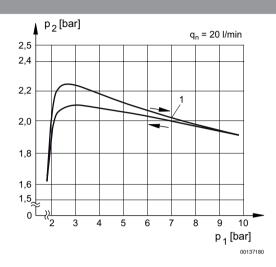
p21; p22; p23 = secondary pressure



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

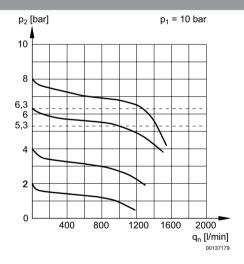
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply

Pressure characteristics curve



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

Flow rate characteristic

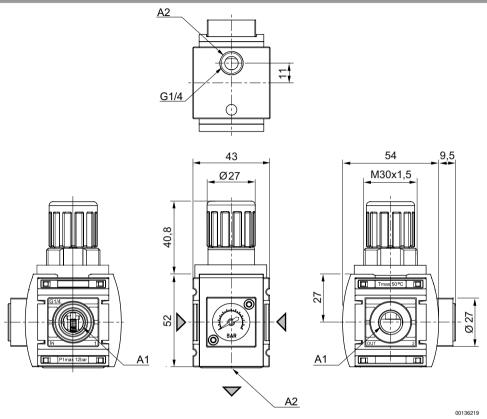


p1 = Working pressure p2 = Secondary pressure qn = Nominal flow

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

A2 G1/4 43 54 55,5 M30x1,5 G1/8

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

Working pressure min./max.

Medium

Medium temperature min./max. Ambient temperature min./max.

Regulator type

Regulator function Adjustment range min./max.

Materials:

Housing

Front plate Seals

Any

See table below Compressed air Neutral gases

-10°C / +50°C -10°C / +50°C

Diaphragm-type pressure regulator, Can be as-

sembled into blocks with relieving air exhaust

See table below

Polyamide

Acrylonitrile butadiene styrene Acrylonitrile butadiene rubber

Technical Remarks

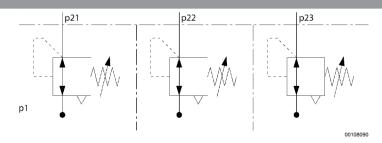
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

	Port	Qn	Working pres-	Adjustment	Weight	Part No.
			sure	range		
			min./max.	min max		
		[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
L J			0.5 / 12	0.5 - 10		R412014722

Panel nut included in scope of delivery

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

Application example



p1 = working pressure

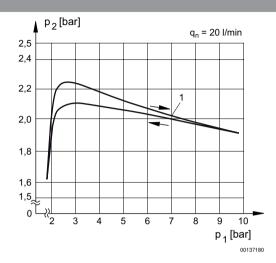
p21; p22; p23 = secondary pressure



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

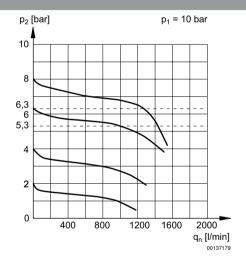
► G 1/4 ► Air supply: right ► Qn= 1000 l/min ► Activation: manual ► with continuous pressure supply ► with pressure gauge in hand wheel

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 A2 = output

Preparation of compressed air ► Maintenance units and components

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

A1 = input



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 regulator

Mounting orientation vertical
Working pressure min./max. 2 bar / 12 bar
Medium Compressed air

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
Filter element
Condensate drain
Filter stupply
Single
active
single
exchangeable
exchangeable
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.
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- 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]			
				semi-automatic, open without pressure	0.241		2)	R412014723
				fully automatic, open without pressure	0.259		2)	R412014724
				fully automatic, closed without pressure	0.259		2)	R412014725
	G 1/4	1000	0.5 / 8	semi-automatic, open without pressure	0.274	Fig. 1	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

- 1) Max. pressure gauge \varnothing 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 $\Delta p = 1$ bar

Filter pressure regulator, Series AS1-FRE

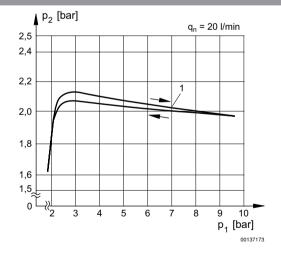
► G 1/4 ► Air supply: right ► filter porosity: 5 µm

		Port	Qn	Adjustment range min./max.	Condensate drain	Weight	Fig.	Note	Part No.
			[l/min]	[bar]		[kg]			
					semi-automatic, open without pressure	0.238			R412014730
	-	G 1/4	1000	0.5 / 8	fully automatic, open without pressure	0.256	Fig. 2	1); 2)	R412014731
1			fully automatic, closed without pressure	0.256			R412014732		
					semi-automatic, open without pressure	0.241		2)	R412014733
					fully automatic, open without pressure	0.259		2)	R412014734
					fully automatic, closed without pressure	0.259		2)	R412014735
		G 1/4	1000	0.5 / 10	semi-automatic, open without pressure	0.274	Fig. 1	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

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

Pressure characteristics curve



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

1) = Starting point

²⁾ Reservoir: Polycarbonate

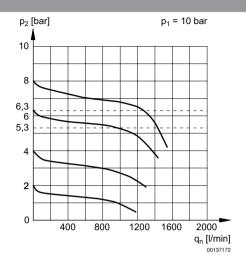
³⁾ Reservoir: Die cast zinc
4) Protective guard: metal



Filter pressure regulator, Series AS1-FRE

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

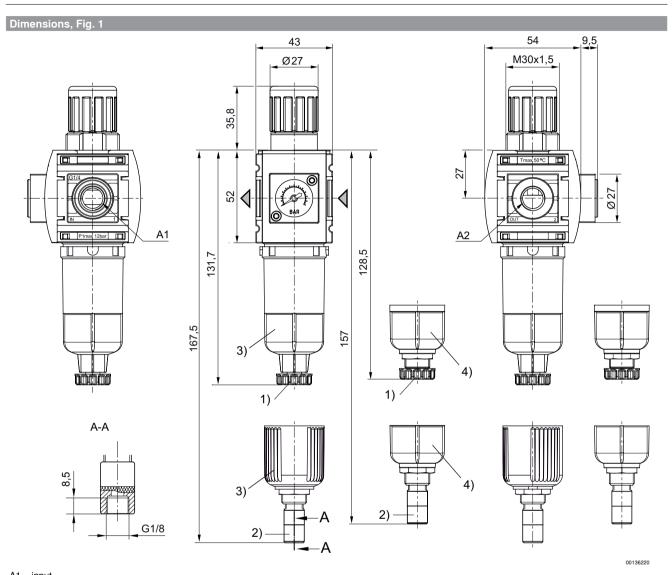
Flow rate characteristic



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



A1 = input

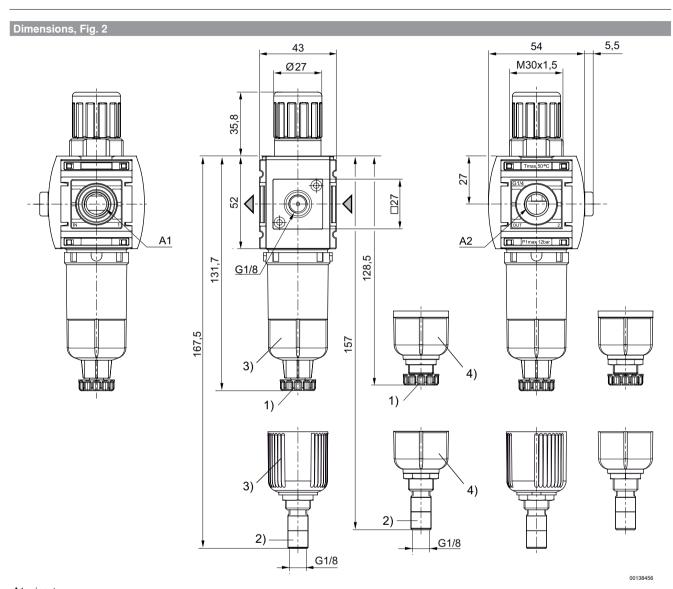
A2 = output

- 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



A1 = input

A2 = output

- 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



Version

Medium

Mounting orientation

Working pressure min./max.

Standard filter, Can be assembled into blocks

vertical

2 bar / 12 bar Compressed air

 $\begin{tabular}{lll} Neutral gases \\ Medium temperature min./max. & -10 ^ C / +50 ^ C \\ Ambient temperature min./max. & -10 ^ C / +50 ^ C \\ Filter reservoir volume & 16 cm ^ 3 \\ \end{tabular}$

Filter reservoir volume \$16 cm^3\$ Filter element exchangeable filter porosity $5 \, \mu \mathrm{m}$

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.

■ Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

■ solid impurities in the compressed air at the outlet as per ISO 8573-1: class 6

00137253

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

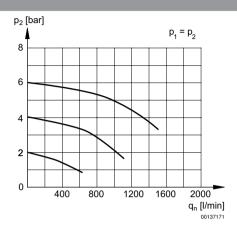
Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar



Standard filter, Series AS1-FLS

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

Flow rate characteristic

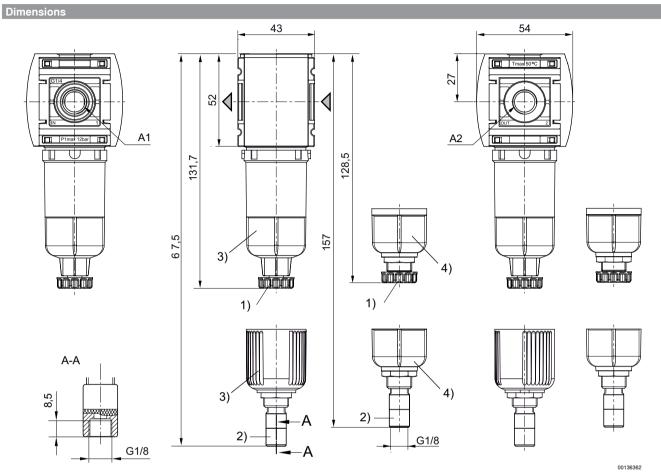


p1 = Working pressure p2 = Secondary pressure qn = Nominal flow



Standard filter, Series AS1-FLS

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



A1 = input

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



Pre-filter, Can be assembled into blocks

vertical

12 cm³

 $0.3~\mu \mathrm{m}$

2 bar / 12 bar

Compressed air Neutral gases

-10°C / +50°C

-10°C / +50°C

exchangeable

See table below

Pre-filter, Series AS1-FLP

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



Version

Mounting orientation
Working pressure min./max.
Medium

Medium temperature min./max. Ambient temperature min./max. Filter reservoir volume

Filter element filter porosity

Condensate drain

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.

■ Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

■ 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

00137253

	Port	Qn	Condensate drain	Reservoir	Protective guard	Weight	Part No.
		[l/min]				[kg]	
			semi-automatic, open without pressure	Polycarbonate	-	0.169	R412014685
			fully automatic, open without pressure	Polycarbonate	-	0.187	R412014686
\wedge		fully automatic, closed without pressure	Polycarbonate	-	0.187	R412014687	
	G 1/4	350	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

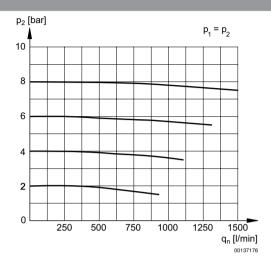
Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0,1 bar



Pre-filter, Series AS1-FLP

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

Flow rate characteristic

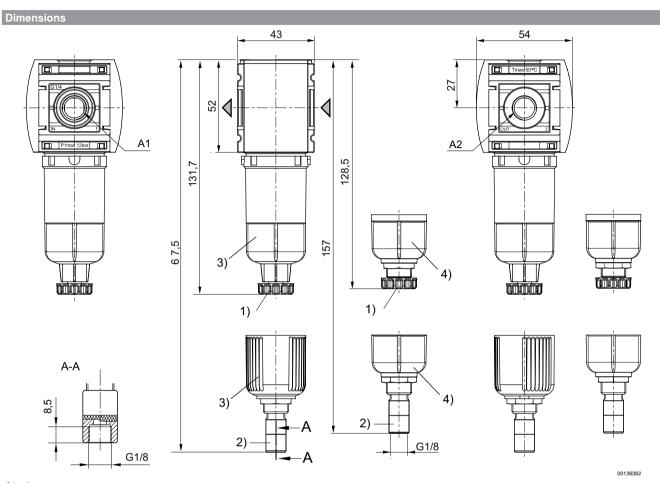


p1 = Working pressure p2 = Secondary pressure qn = Nominal flow



Pre-filter, Series AS1-FLP

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



A1 = input A2 = output

- 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

Mounting orientation Working pressure min./max.

Medium

Medium temperature min./max. Ambient temperature min./max. Filter reservoir volume

Filter element filter porosity Condensate drain

Materials:

Housing Front plate

Seals Threaded bushing

Reservoir Filter insert Microfilter, Can be assembled into blocks

vertical

2 bar / 12 bar Compressed air Neutral gases -10°C/+50°C -10°C / +50°C

12 cm³ exchangeable 0.01 μ m

See table below

Polyamide

Acrylonitrile butadiene styrene

Acrylonitrile butadiene rubber

Die cast zinc Polycarbonate 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.
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- 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]	
			semi-automatic, open without pressure	Polycarbonate	-	0.169	R412014692
			fully automatic, open without pressure	Polycarbonate	-	0.187	R412014693
\wedge			fully automatic, closed without pressure	Polycarbonate	-	0.187	R412014694
	G 1/4	350	semi-automatic, open without pressure	Polycarbonate	metal	0.202	R412014695
I			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

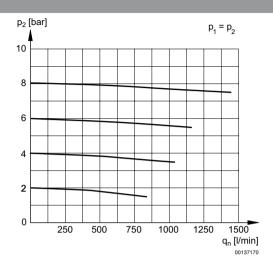
Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 0.1$ bar



Microfilter, Series AS1-FLC

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

Flow rate characteristic

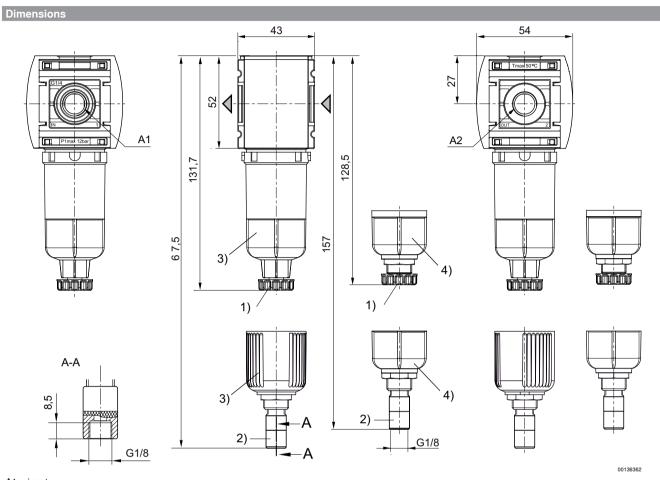


p1 = Working pressure p2 = Secondary pressure qn = Nominal flow



Microfilter, Series AS1-FLC

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



A1 = input

- A2 = output Semi-automatic condensate drain
 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

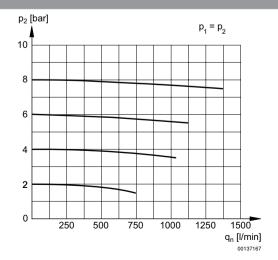
Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- Recommended pre-filtering: 0.01 μ m
- 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]	
\wedge			Polycarbonate	-	0.171	R412014699
	G 1/4	350	Polycarbonate	metal	0.204	R412014700
			metal	-	0.232	R412014701

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 0.1$ bar

Flow rate characteristic



p1 = Working pressure

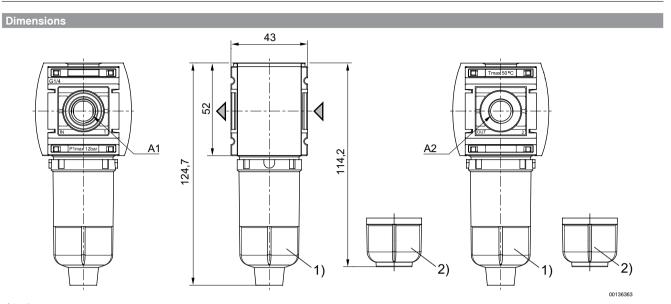
p2 = Secondary pressure

qn = Nominal flow

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

Active carbon filter, Series AS1-FLA

► G 1/4 ► Air supply: right



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



Micro oil-mist lubricator, Series AS1-LBM

► G 1/4 ► Air supply: right



Version

Micro oil-mist lubricator, Can be assembled into

blocks vertical

Mounting orientation
Working pressure min./max.

Working pressure min./max.

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.

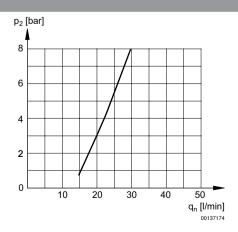
■ only approx. 10% of the preset drip quantity enters the compressed air system

00137245

- oil filling not possible during operation
- Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
- Oil dosing at 1000 l/min [drops/min]: 10-20

	Qn	Reservoir	Protective guard	Weight	Part No.				
	[l/min]			[kg]					
\wedge		Polycarbonate		0.187	R412014702				
	1400	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



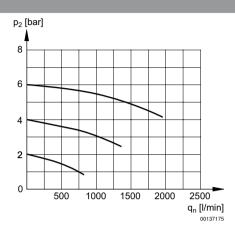
p2 = secondary pressure qn = nominal flow

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

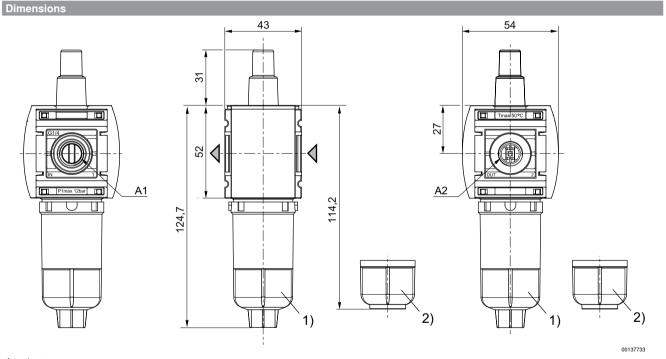
Micro oil-mist lubricator, Series AS1-LBM

► G 1/4 ► Air supply: right

Flow rate characteristic



p2 = secondary pressure qn = nominal flow



A1 = input A2 = output

Reservoir: polycarbonate

2) Reservoir: metal



Filling valve, pneumatically operated, Series AS1-SSV

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



Version

Medium

Working pressure min./max.

Poppet valve, Can be assembled into blocks

0 bar / 16 bar Compressed air

Neutral gases Medium temperature min./max. -10°C / +50°C -10°C / +50°C Ambient temperature min./max. Sealing principle Soft sealing Control pressure min./max. 3 bar / 16 bar Max. particle size $40~\mu m$

Materials:

Housing Polyamide

Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

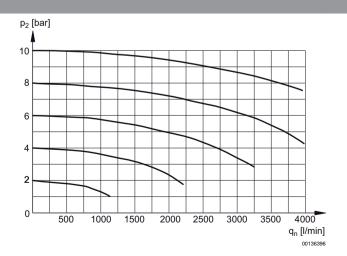
Threaded bushing Die cast zinc

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.
- Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.

	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



p2 = secondary pressure qn = nominal flow

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



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

Dimensions 54 43 26 0 0 27 54,9 52 00137738 A1 = input A2 = output



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

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



Version

Medium

Nominal flow, 1▶2

Nominal flow, 2▶3

Working pressure min./max.

Poppet valve, Can be assembled into blocks

2000 l/min 380 l/min 2 bar / 10 bar 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 $25 \mu m$ 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.

		Operating voltage	Power consumption		Switch-on power	<u> </u>
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

		МО	Cor	npressed air co	nnection	0	perating voltage		Power consumption	Part No.
			Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	DC	
									[W]	
2										R412014747
1 3 W	NC	-	G 1/4	G 1/4	G 1/4	-	-	-	-	R412014748
2						24 V	-	-	2	R412014744
	NC		G 1/4	G 1/4	G 1/4	-	230 V	230 V	-	R412014746
1 3						24 V	-	-	2	R412010681

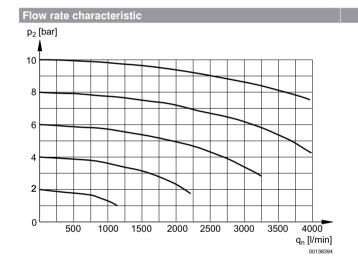
3/2-directional valve, electrically operated, Series AS1-SOV

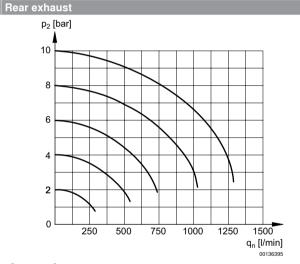
► ATEX optional ► G 1/4 ► Air supply: right ► pipe connection

Part No.	Holding	Switch-on	Switch-on	Electr. connection	Weight	Fig.	Note
	power	power	power				
	AC 50 Hz	AC 50 Hz	AC 60 Hz	Pilot valve			
	[VA]	[VA]	[VA]		[kg]		
R412014747					0.1964	Fig. 1	1); 5)
R412014748	-	_	-	-	0.2096	1 19. 1	2); 5)
R412014744	-	-	-	Plug ISO 15217, form C	0.2154	Fig. 2	3); 4)
R412014746	1.6	3	3	Plug ISO 15217, form C	0.2143	Fig. 2	3); 4)
R412010681	-	-	-	Plug M12	0.2321	Fig. 3	3)

- 1) Basic valve without pilot valve
- 2) Basic valve without pilot valve, with CNOMO subbase
- 3) Basic valve with pilot valve
- 4) Connector standard: EN 175301-803, form C
- 5) ATEX optional
- without electrical connector

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar





p2 = secondary pressure

qn = nominal flow

p2 = secondary pressure

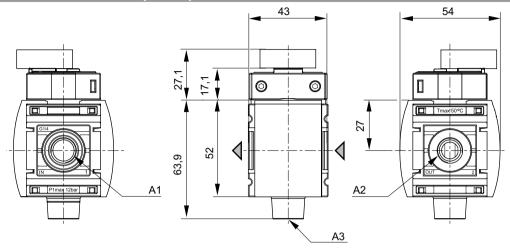
qn = nominal flow

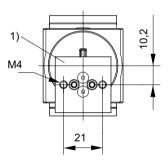


3/2-directional valve, electrically operated, Series AS1-SOV

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

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





00137734

A1 = input

A2 = output

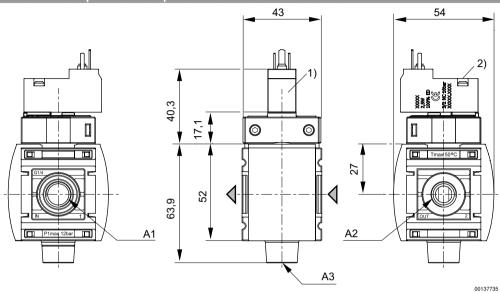
A3 = ventilation port

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: right ► pipe connection

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



A1 = input

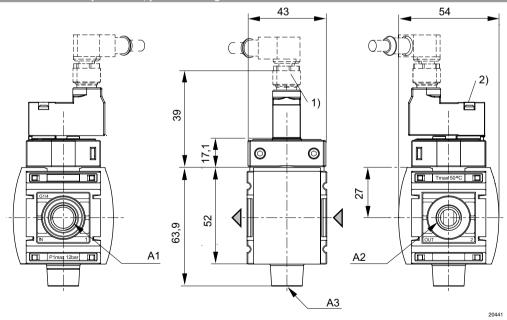
A2 = output

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

plug M12
 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 20438

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

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



Version

Medium

Working pressure min./max.

Poppet valve, Can be assembled into blocks

0 bar / 16 bar Compressed air

Medium temperature min./max. -10°C / +50°C
Ambient temperature min./max. -10°C / +50°C
Sealing principle Soft sealing
Control pressure min./max. 3 bar / 16 bar

Materials:

Housing Polyamide

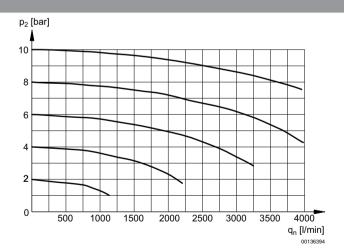
Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

Technical Remarks

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

	Pilot connec- tion		Exhaust	Qn			Weight	Part No.	
					1▶2	2▶3			
						[l/min]	[kg]		
12 T 3 T W	G 1/8	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

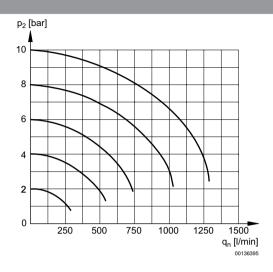


p2 = secondary pressure qn = nominal flow

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

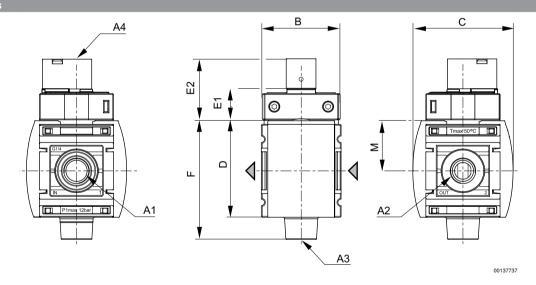
► G 1/4 ► Air supply: right ► pipe connection

Rear exhaust



p2 = secondary pressure qn = nominal flow

Dimensions



A1 = input

A2 = output

A3 = ventilation port

A4 = control pressure connection

A1	A2	A3	A4	В	O	D	E1	E2	F	M		
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



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 $25 \mu m$

Materials:

Housing Polyamide

Front plate Acrylonitrile butadiene styrene Seals Acrylonitrile butadiene rubber

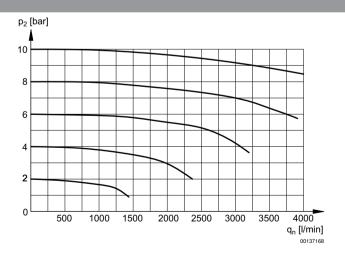
Polyoxymethylene Actuating element+

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]				
2 13	G 1/4	G 1/4	2600	380	0.15	R412014742			
Nominal flow Qn with secondary pressure $p2 = 6$ bar at $\Delta p = 1$ bar									

Flow rate characteristic

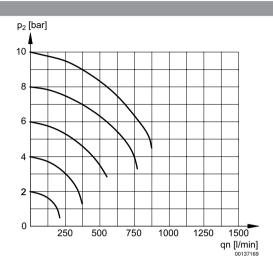


p2 = secondary pressure qn = nominal flow

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

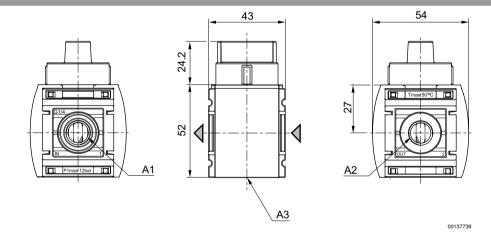
► G 1/4 ► Air supply: right

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



Version

Distributor, Can be assembled into blocks

Any

Mounting orientation

0 bar / 12 bar

Working pressure min./max. Medium

Compressed air Neutral gases

Medium temperature min./max. Ambient temperature min./max. -10°C / +50°C -10°C / +50°C

Materials:

Housing

Polyamide

Front plate Seals Acrylonitrile butadiene styrene Acrylonitrile butadiene rubber

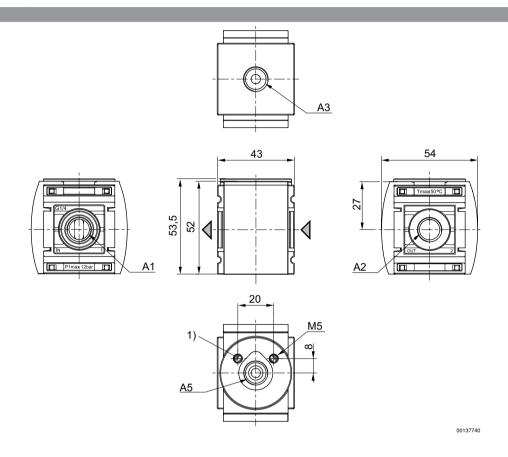
	Port	Qn			Weight	Part No.			
		1▶2	1▶3	1▶5					
			[l/min]		[kg]				
	G 1/4	2700	950	2000	0.148	R412014740			
Nominal flow Qn with secondary pressure $p2 = 6$ bar at $\Delta p = 1$ bar									



Distributor, Series AS1-DIS

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

Dimensions



A1 = input A2 = output

A3 = output A5 = output

Mounting thread for pressure sensor

Distributor, Series AS1-DIN

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



Version

Non-return valve, Can be assembled into blocks

Any

Mounting orientation
Working pressure min./max.
Medium

0 bar / 12 bar Compressed air Neutral gases -10°C / +50°C

Medium temperature min./max. Ambient temperature min./max.

-10°C/+50°C

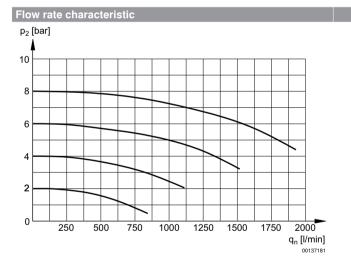
Materials:

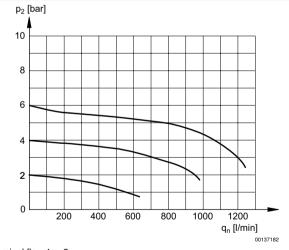
Housing

Polyamide

Front plate Seals Acrylonitrile butadiene styrene Acrylonitrile butadiene rubber

	Port		Qn	Weight	Part No.					
		1▶2	1▶3							
		[l/m	nin]	[kg]						
1) () 2	G 1/4	800	1000	0.178	R412014741					
Nominal flow Qn with secondary pressure $p2 = 6$ bar at $\Delta p = 1$ bar										





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

A1 = input A2 = output A3 = output A3 = output

Series AS1 Accessories

Reservoir, Series AS1-CLS

► Material: Die cast zinc, Polycarbonate



 $\begin{tabular}{lll} Version & Reservoir \\ Ambient temperature min./max. & $-10\,^{\circ}$C $/ +50\,^{\circ}$C \\ Medium temperature min./max. & $-10\,^{\circ}$C $/ +50\,^{\circ}$C \\ Medium & Compressed air \\ \end{tabular}$

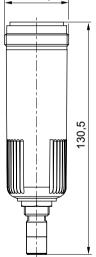
Filter reservoir volume 16 cm³

Materials:

Seal Acrylonitrile butadiene rubber

Condensate drain	Reservoir	Weight	Fig.	Part No.
		[kg]		
fully automatic, open without pressure	Die cast zinc	0.125	Fig. 2	R412014751
comi cutomotic anon without procesure	Die cast zinc	0.153	Fig. 3	1827009640
semi-automatic, open without pressure	Polycarbonate	0.085	Fig. 4	1827009639

Fig. 1 Fig. 2



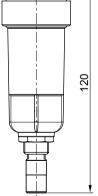
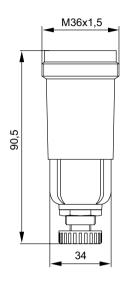
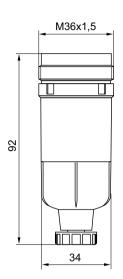




Fig. 3 Fig. 4





00112013_1 00112013_2

Reservoir, Series NL1/AS1-CBM/-CLA

► for active carbon filter and lubricator ► Material: Polycarbonate, Die cast zinc ► suitable for ATEX



Version Ambient temperature min./max. Medium temperature min./max. Working pressure min./max. Medium

Working pressure min./max.

Medium

Compressed air
Oil

Filter reservoir volume

16 cm³

Materials:

Seal

Acrylonitrile butadiene rubber

Reservoir -10°C / +50°C

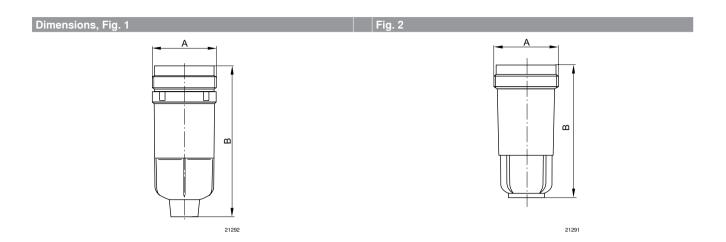
-10°C / +50°C

Reservoir	Weight	Fig.	Part No.
	[kg]		
Polycarbonate	0.06	Fig. 1	1827009637
Die cast zinc	0.125	Fig. 2	1827009638
Suitable for use in Ex zones 1, 2, 21, 22			

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



Series AS1 Accessories



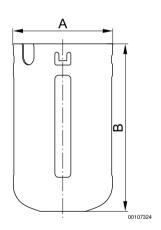
Part No.	Α	В					
1827009637	M36x1,5	85					
1827009638	M36x1,5	74.5					

Protective guard

► suitable for ATEX ► Series NL1 ► Filter, Lubricator



00106886



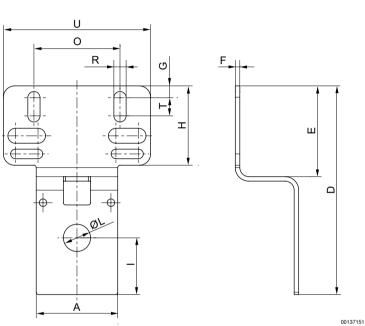
Part No.	Α	В	Material	Surface	Weight		
					[kg]		
1820507004	37	63	Steel	galvanized	0.03		

Can be retrofitted for PC reservoir Suitable for use in Ex zones 1, 2, 21, 22



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





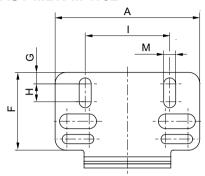
Part No.	Α	В	С	D	Е	F	G	Н	- 1	ØL	0	R
R412014755	36	10	28	92	40	2	5.2	35	25	12	38	5.4
Part No.	Т	U		Material		Surfa	ice	Weight [kg]		Ambient tem- perature min./ max. [°C]		
R412014755	8	65		Steel		galvani	zed	0.07		-10 / +50		
Scope of delivery incl. 2 mounting screws 3x10 (Torx 10 IP) DIN EN ISO 10664												

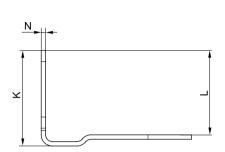
116

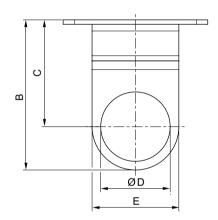
Series AS1 Accessories

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







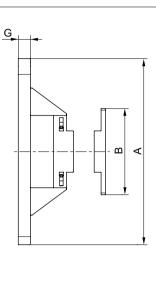


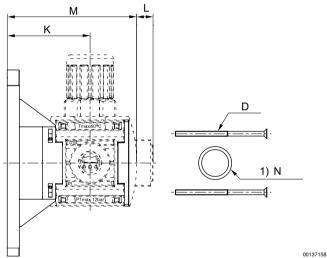
Part No.	Α	В	С	ØD	E	F	G	Н		K	L	М
R412014756	65	67.5	48	31.2	39	35	5.2	8	38	43	38	5.4
Part No.	N		Material		Surfa	ice	Weight [kg]		ent tem- ure min./ max. [°C]			
R412014756	2		Steel		galvani	zed	0.059		-10 / +50			



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







Part No.	А	В	С	D	Е	F	G	Н	1	K	L	М
R412014757	108	50	95	7.3	34	5.4	7	9.4	5.6	48	9.5	75

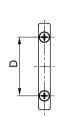
Part No.	N	0	Material	Material Seal	Weight [kg]	Ambient tem- perature min./ max.	
						[°C]	
R412014757	17,17x1,78	M3x53	Polyamide	Acrylonitrile butadiene rubber		-10 / +50	
	1.0	140 50 4	0.400 " : 51	1100 7040 4 4 4 4 4			

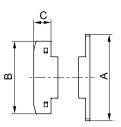
1) Scope of delivery incl. 2 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x O-ring

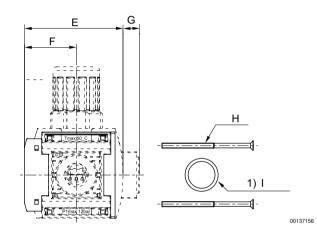


Block assembly kit, Series AS1-MBR-...-W04





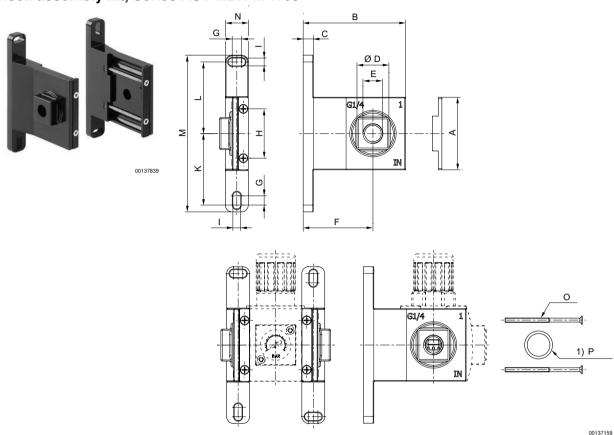




Part No.	Α	В	С	D	Е		F		à	Н	ı		Material
R412014758	50	42	10	34	57	3	30	9.	5 N	//3x53	17,17x1,78		Polyamide
Part No.	Material Seal			Weight [kg]	Ambien perature								
R412014758	Acryloni	trile butadie rubb		0.014	-1	0 / +50							
Scope of delivery incl	Scope of delivery incl. 2 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x O-ring												



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



Part No.	А	В	С	ØD	Е	F	G	Н	- 1	K	٦	М
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	0	Р	Material	Surface	Material Seal	Weight [kg]
R412014753	15.8	M3x53	17,17x1,78	Die cast zinc	black painted	Acrylonitrile butadiene rubber	0.403
R412014754	15.8	M3x53	17,17x1,78	Die cast zinc	black painted	Acrylonitrile butadiene rubber	0.403

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

1) 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

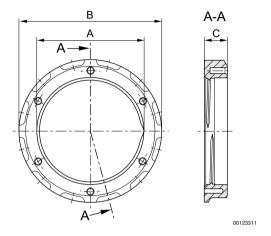


Series AS1 Accessories

Panel nut

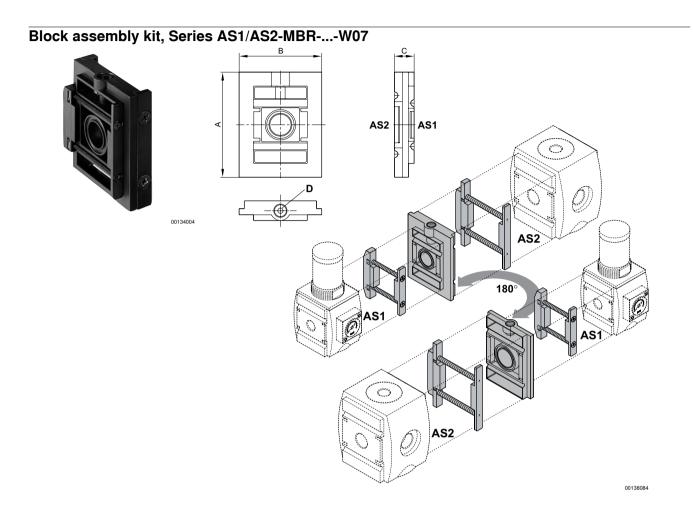
► suitable for ATEX





Part No.	usage Series	А	В	С	Material	Weight [kg]	Note	Delivery quan- tity [Piece]
1829234070	AS1 MU1 NL1 NL2 NL4	M30x1,5	35	5.5	Brass	0.013	1)	5
1829234073	AS1 NL1 NL2 NL4	M30x1,5	37.5	7.5	Plastic	0.006	-	5





Part No.	А	В	С	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 Main scale unit (outside)

Ambient temperature min./max. Medium

Pointer color Main scale color (outside)

Materials: Housing Viewing window

Seal

Polyamide Polycarbonate

Compressed air

bar +0°C / +60°C

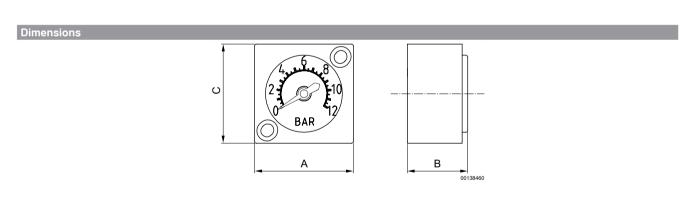
Black

Black

Nitrile butadiene rubber

Diaphragm pressure gauge

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



Α	В	С						
27	16.5	27						



Pressure gauge, Series PG1-SAS

► Front port ► Background color: Black ► Scale color: White / Grey ► Viewing window: Polystyrene ► Units: bar / psi



00123444

Version Bourdon tube pressure gauge

Standardization EN 837-1
Main scale unit (outside) bar
Secondary scale unit (inside) psi

Ambient temperature min./max. $-40\,^{\circ}\text{C}$ / $+60\,^{\circ}\text{C}$ Medium Compressed air

Pointer color White
Main scale color (outside) White
Secondary scale color (inside) Grey
Class 2,5

Materials:

Housing Acrylonitrile butadiene styrene

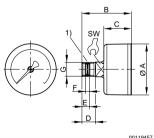
Thread Brass
Viewing window Polystyrene

Seal Polytetrafluorethylene

	Compressed air connection				Operating pressure	Scale value	Weight	Part No.		
		[mm]	[bar]	[bar]	[bar]		[kg]			
			0 - 1.2	0 - 1.6	0 / 1.6	0.05		R412003853		
			0 - 2	0 - 2.5	0 / 2.5	0.1		R412003854		
(🔪)	G 1/8	40	40	40	0 - 3.2	0 - 4	0 / 4	0.1	0.08	R412003855
\bigvee	G 1/8				40	0 - 4	0 - 6	0/6	0.2	0.08
l			0 - 8	0 - 10	0 / 10	0.2		R412003857		
			0 - 12	0 - 16	0 / 16	0.5		R412003858		

1) Suitable for use in Ex zones 1, 2, 21, 22

Dimensions



001	1340

Com- pressed air con- nection G	diameter	ØA	В	С	D	E	F 1)	SW		
G 1/8	40	39	44.5	26.5	10	5.6	2.1	14		
1) Gasket thre	ead									



Series AS1 Accessories

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

Ambient temperature min./max.

-10°C/+100°C

Protection class

IP65

Operating voltage DC, max. Mounting screw tightening torque 24 V DC 0.6 Nm



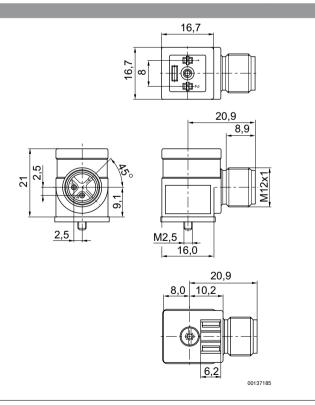
Housing

Polyurethane

00137187

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

Dimensions

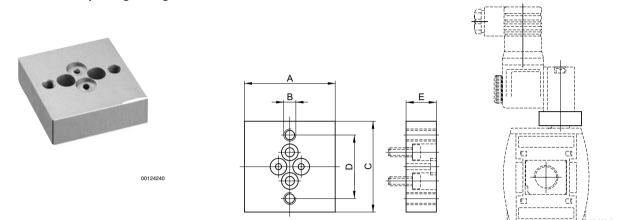


Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information



Transition plate, Series AS1, AS2, AS3, AS5

► with CNOMO porting configuration



	Part No.	Α	В	С	D	E	Material	Weight		
								[kg]		
ſ	R412006360	30	M4	30	21	10	Aluminum	0.025		

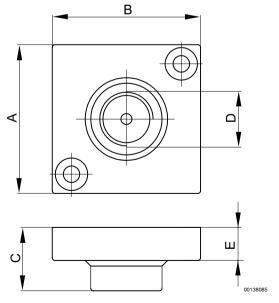
Scope of delivery incl. 4 mounting screws, 2 O-rings

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





Part No.	А	В	С	D	Е				
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

Ambient temperature min./max. $-40\,^{\circ}$ C / $+85\,^{\circ}$ C Protection class IP65

Materials:

Cable sheath Polyurethane

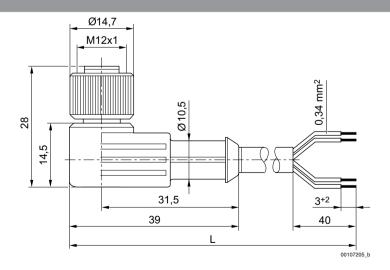
00107009_c

Technical Remarks

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

	Opera- tional voltage max.	Max. current	Number of wires		Cable length L		Part No.
	[V AC]	[A]		[mm ²]	[m]	[kg]	
1) BN					3	0.13	1834484259
2 >					5	0.202	1834484260
3) BU 4) BK 5)	48	4	4	0.34	10	0.387	1834484261

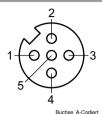
Dimensions



L = length



Pin assignment



- (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



Ambient temperature min./max.
Protection class

-25°C / +70°C IP67

i rotootion olaco

Materials: Cable sheath Cable color

Polyurethane Black

00107009_b

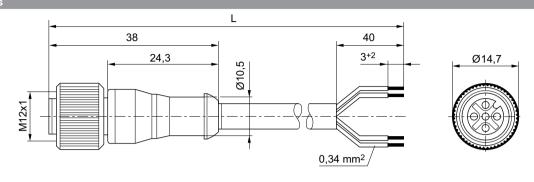
Technical Remarks

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

	Opera- tional voltage max.		Number of wires		Cable length L		Part No.
	[V AC]	[A]		[mm ²]	[m]	[kg]	
1 > BN					3	0.131	1834484256
2 >					10	0.398	1834484258
3 > BU	48	4	4	0.34			
4) BK					5	0.201	1834484257

Series AS1 Accessories

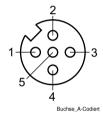
Dimensions



00127651

L = length

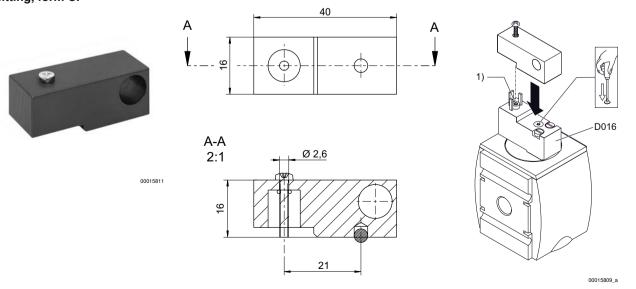
Pin assignment



- (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

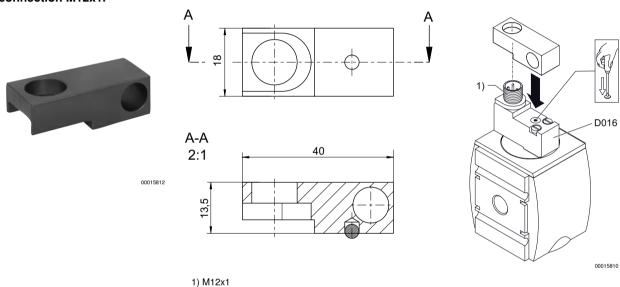
Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed informa-



Part No.	Material						
R412019278	Aluminum						
Scope of delivery inc	I. 1 mounting screv	w, 1 O-ring					

Mounting aid

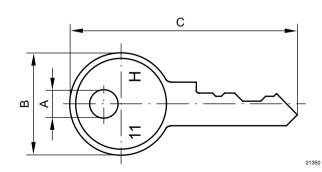
► Assembly aid for permanent actuation of manual override ("press") on pilot valve DO16 with electrical connection M12x1.



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







Series AS1 Accessories

Part No.	А	В	С	Delivery quantity [Piece]				
R961403407	4.5	20.5	45	1				

Blanking screw ► external thread ► G 1/8 ► FPT-S-RIO



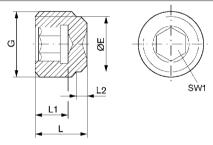
Ambient temperature min./max. -20°C / +80°C Working pressure min./max. 0 bar / 16 bar

Materials:

Screw Brass Housing Brass Thread Brass

00110667

Dimensions



001	079

Part No.	Port G	ØE	L	L1	L2	SW1	Delivery quantity [Piece]			
1823462004	G 1/8	8	8	5	2	5	10			



Blanking screw, gasket ► G 1/8 ► FPT-S-RBI



00110668

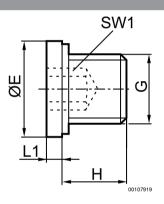
Ambient temperature min./max. -20 °C / +80 °C Working pressure min./max. 0 bar / 16 bar

Materials: Screw

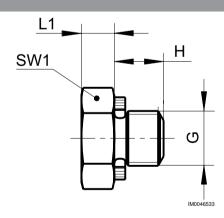
Screw Steel, galvanized
Housing Steel, galvanized
Seal Polyvinyl chloride, hard
Thread Steel, galvanized

The delivered product may vary from that in the illustration.

Dimensions, Fig. 1



Dimensions, Fig. 2



Part No.	Port G	ØE	H	L1	SW1	Delivery quantity [Piece]	Fig.		
1823462028	G 1/8	14	8	3	5	25	Fig. 1		

AVENTICS GmbH Ulmer Straße 4 30880 Laatzen, GERMANY Phone +49 511 2136-0 Fax +49 511 2136-269 www.aventics.com info@aventics.com



Find more contact information at www.aventics.com/contact

Only use the AVENTICS products shown in industrial applications.
Read the product documentation completely and carefully before using the product.

Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product.

The data specified only serve to describe the product.

No statements concerning a certain condition or suitability for a certain application can be derived from our information.

The information given does not release the user from the obligation of own judgment and verification. It must be remembered that the products are subject to a natural process of wear and aging.

31-03-2017