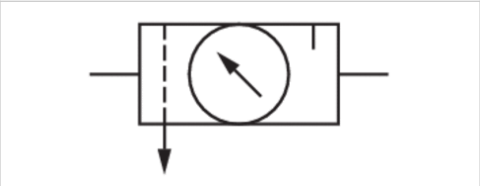
Maintenance unit, 2-part, Series AS1-ACD

- G 1/4
- Air supply left
- With integrated pressure gauge



Version	2-in-1, Can be assembled into blocks
Parts	Filter pressure regulator, Lubricator
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	0.711 Cv
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	8 ... 116 psi
Pressure supply	single
Filter reservoir volume	0.54 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Lubricator reservoir volume	1.18 fl.oz.
Type of filling	Manual oil filling
Weight	See table below

Technical data

Part No.	Port	Flow Qn	Condensate drain	Weight
R412014672	G 1/4	0.711 Cv	semi-automatic, open without pressure	1.11 lbs
R412014673	G 1/4	0.711 Cv	fully automatic, open without pressure	1.15 lbs
R412014674	G 1/4	0.711 Cv	fully automatic, closed without pressure	1.15 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

Compressed air class 6 : 7 : -

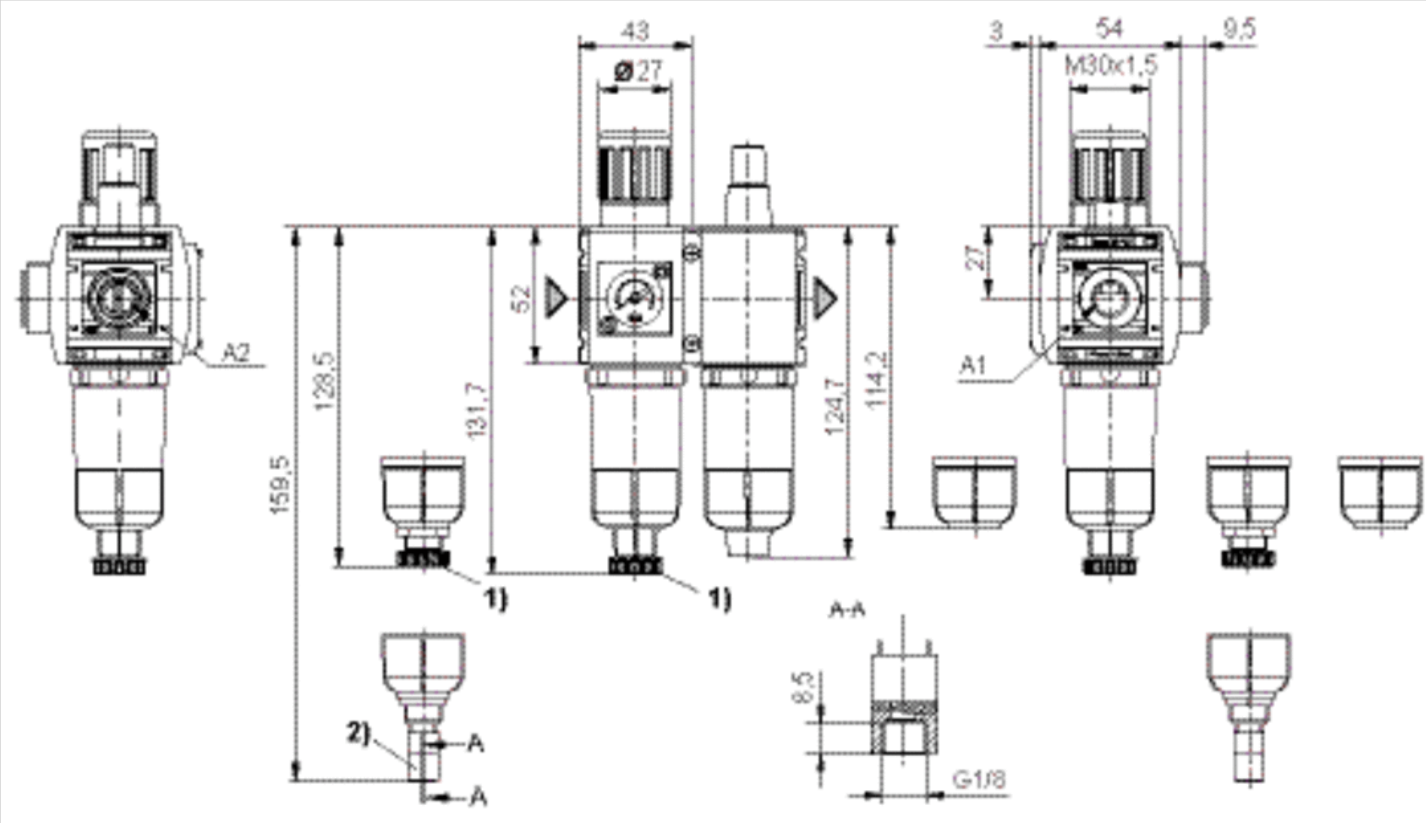
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene

Material	
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Protective guard	Polyamide
Filter insert	Cellpor

Dimensions

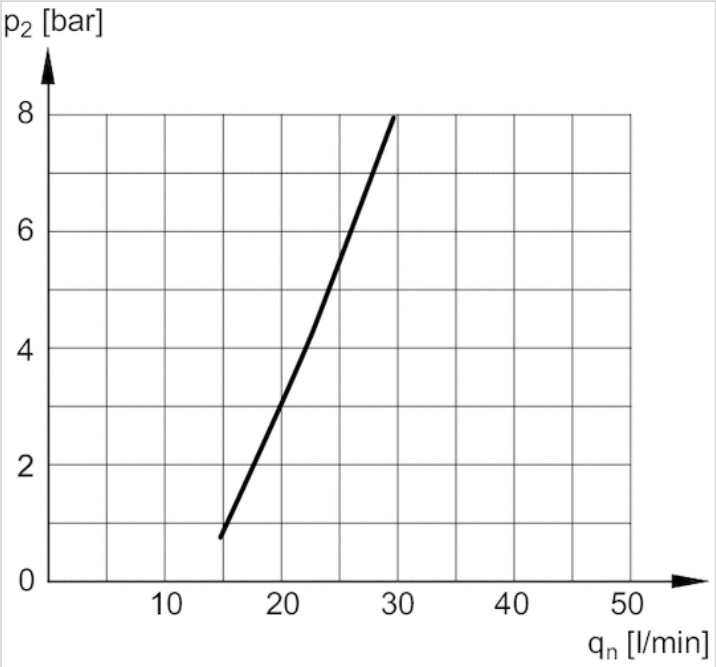
Dimensions



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

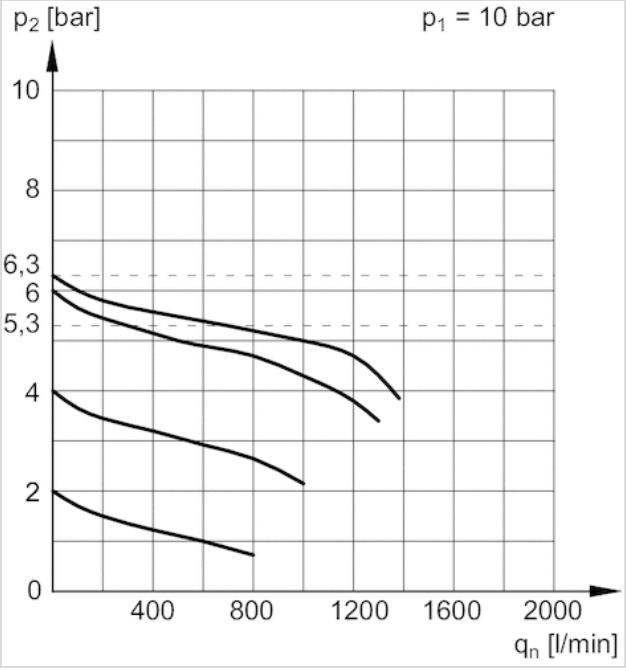
Diagrams

Lubricator activation margin



p2 = secondary pressure
qn = nominal flow

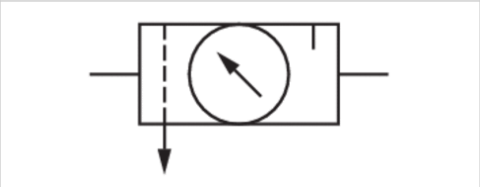
Flow rate characteristic



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

Maintenance unit, 3-part, Series AS1-ACT

- G 1/4
- Air supply left
- With integrated pressure gauge



Version	3-part, Can be assembled into blocks
Parts	Pressure regulator, Filter, Lubricator
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	0.488 Cv
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	8 ... 116 psi
Pressure supply	single
Filter reservoir volume	0.54 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Lubricator reservoir volume	1.18 fl.oz.
Type of filling	Manual oil filling
Weight	See table below

Technical data

Part No.	Port	Flow	Condensate drain	Weight
		Qn		
R412014675	G 1/4	0.488 Cv	semi-automatic, open without pressure	1.38 lbs
R412014676	G 1/4	0.488 Cv	fully automatic, open without pressure	1.42 lbs
R412014677	G 1/4	0.488 Cv	fully automatic, closed without pressure	1.42 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

Compressed air class 6 : 7 : -

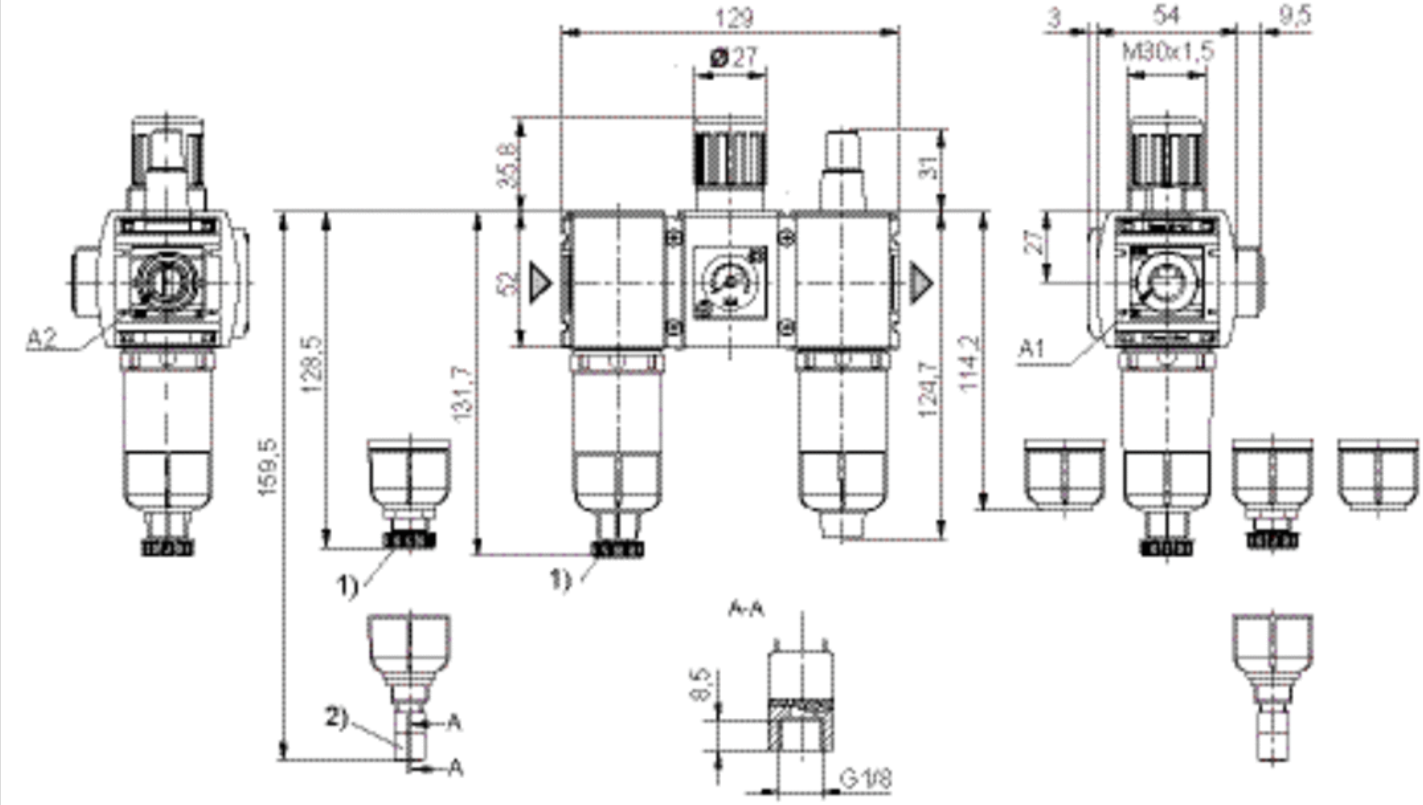
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene

Material	
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate
Filter insert	Cellpor

Dimensions

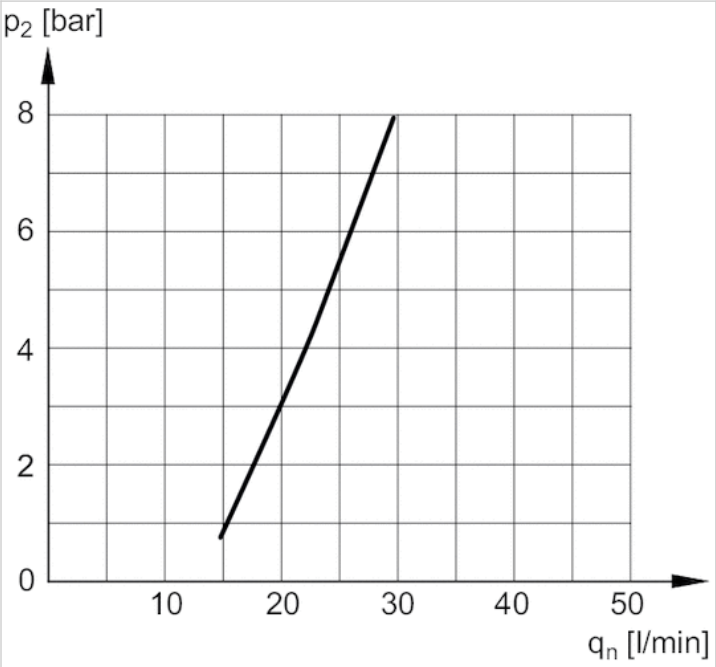
Dimensions



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

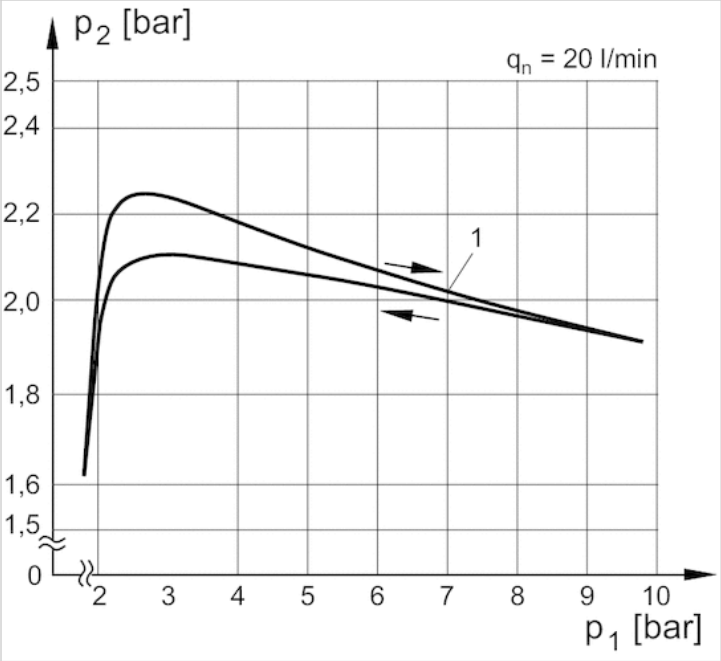
Diagrams

Lubricator activation margin



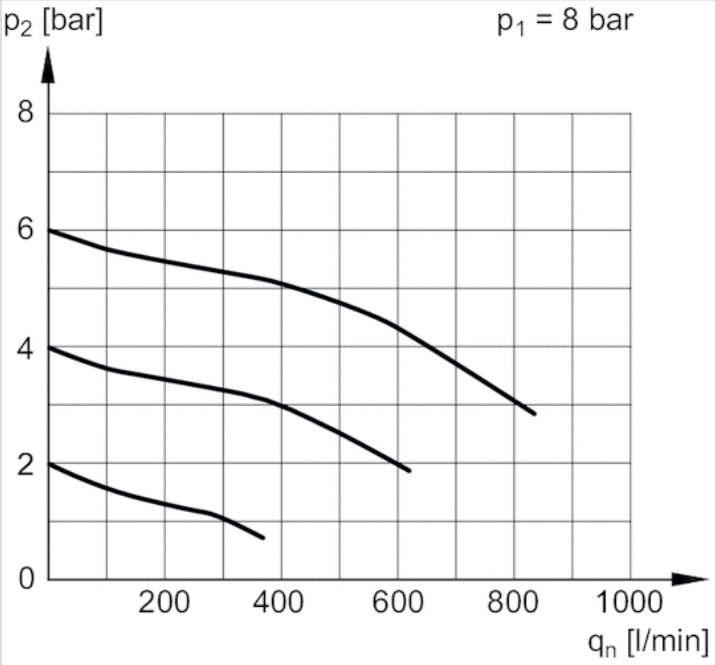
p2 = secondary pressure
qn = nominal flow

Pressure characteristics curve



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

Flow rate characteristic



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

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply left
- Qn = 1.02 Cv
- Standard pressure regulator
- Activation Manual

Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Activation	Manual
Weight	See table below

Technical data

Part No.			Port	Flow Qn	Working pressure min./max.	Adjustment range min./max.
R412014627			G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014628			G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014629			G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi
R412014633		–	G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014634		–	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014635		–	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight
R412014627	40 mm	With integrated pressure gauge	0.461 lbs
R412014628	40 mm	With integrated pressure gauge	0.461 lbs
R412014629	40 mm	With integrated pressure gauge	0.461 lbs
R412014633	40 mm	-	0.454 lbs
R412014634	40 mm	-	0.454 lbs
R412014635	40 mm	-	0.454 lbs

Part No.	Fig.	
R412014627	Fig. 1	-
R412014628	Fig. 1	-
R412014629	Fig. 1	-
R412014633	Fig. 2	1)
R412014634	Fig. 2	1)
R412014635	Fig. 2	1)

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

1) Order pressure gauge separately

Technical information

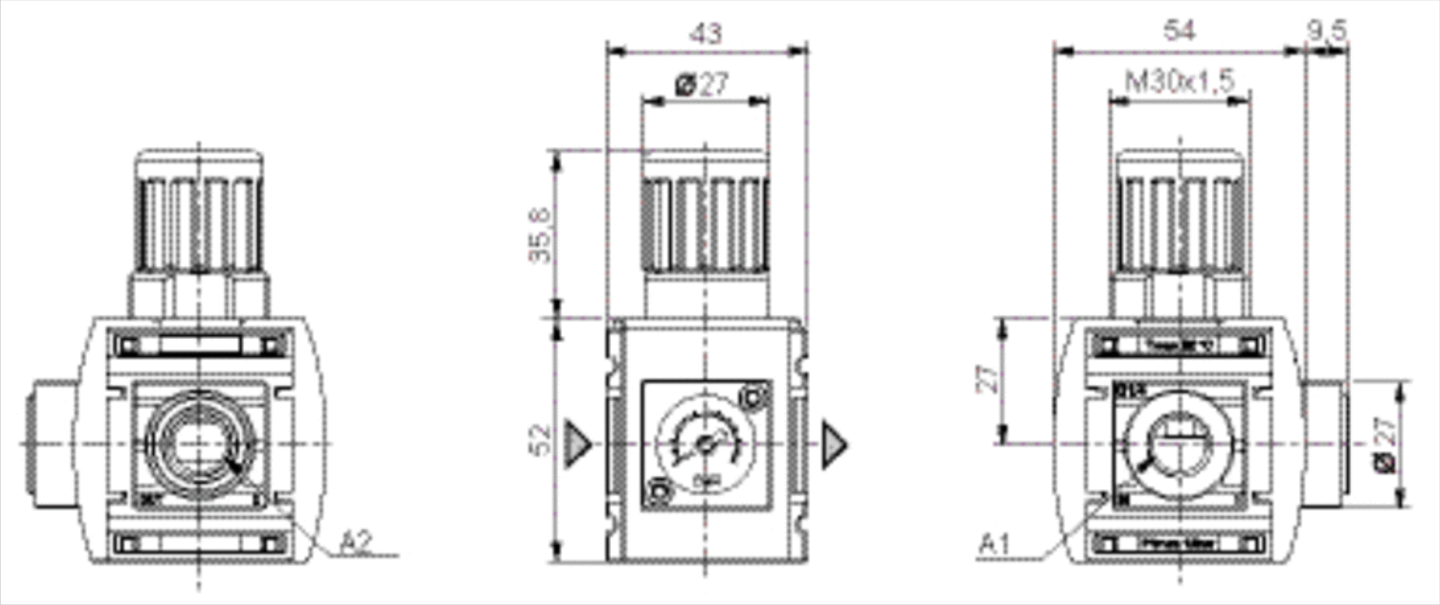
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

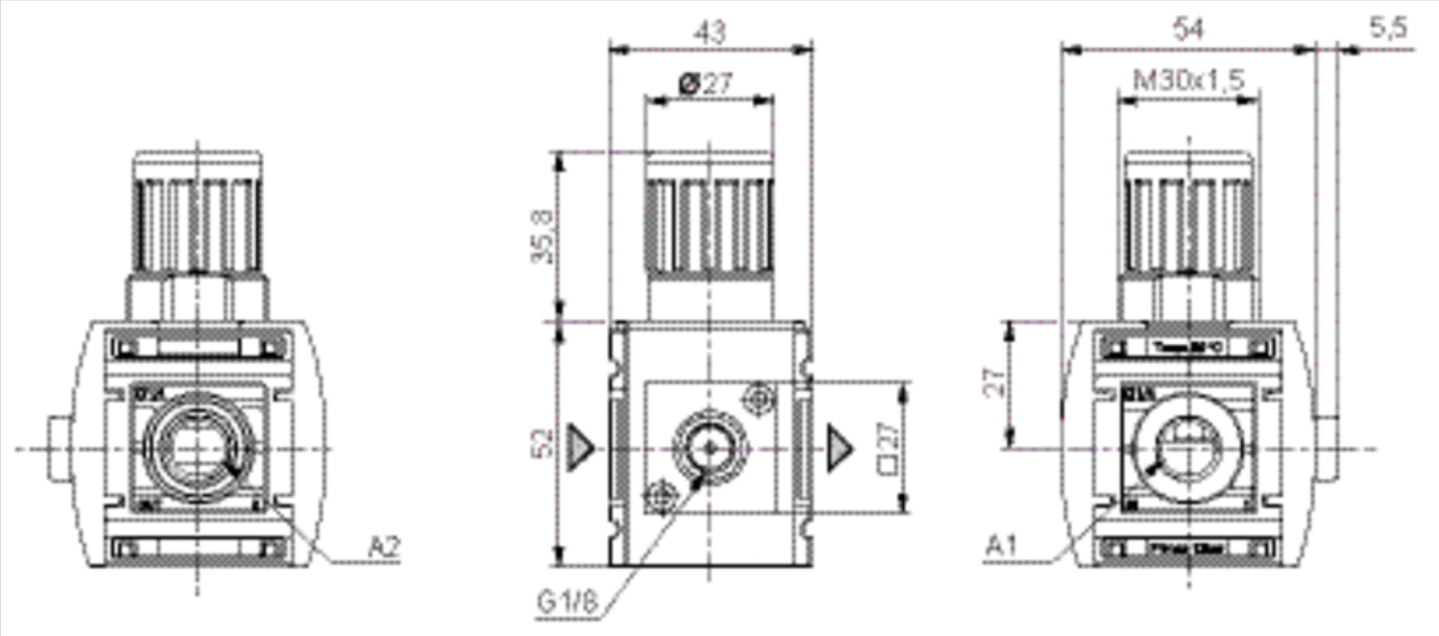
Dimensions

Dimensions Fig. 1



A1 = input
A2 = output

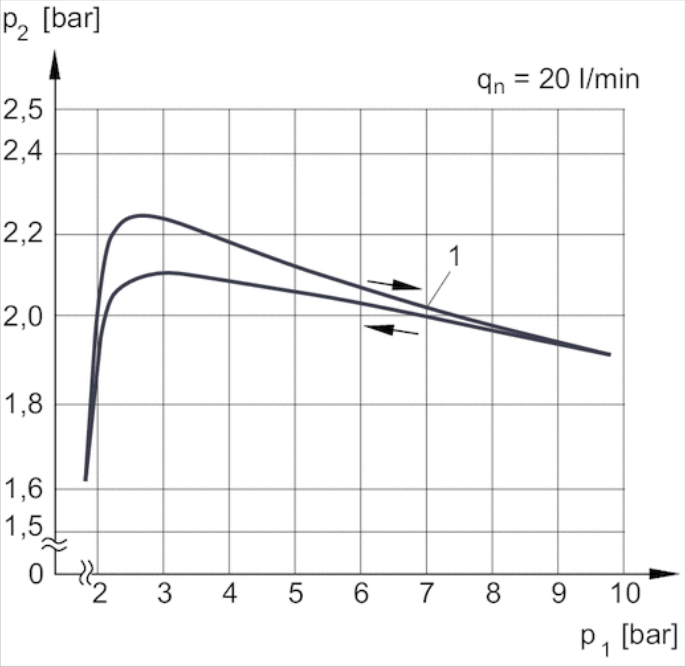
Dimensions Fig. 2



A1 = input
A2 = output

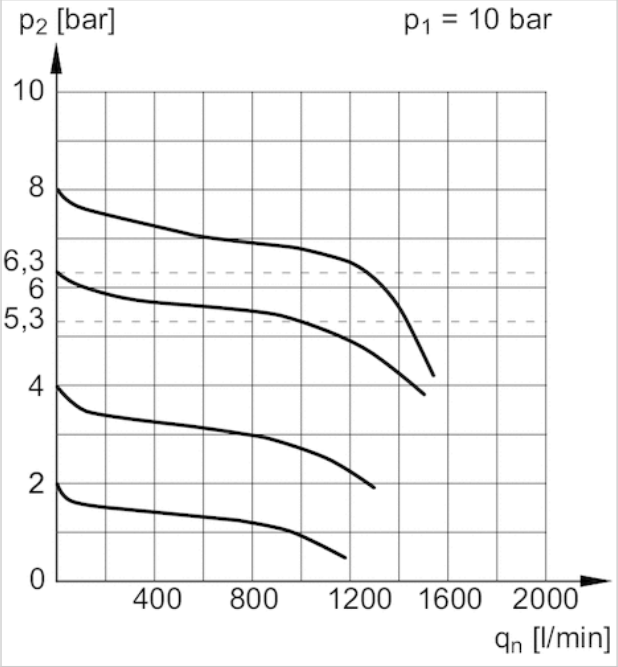
Diagrams

Pressure characteristics curve



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

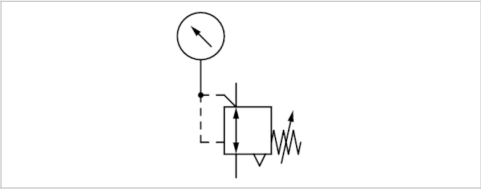
Flow rate characteristic



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

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply left
- Qn = 1.02 Cv
- Standard pressure regulator
- Activation Manual
- with pressure gauge in hand wheel



Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Activation	Manual
Weight	0.527 lbs

Technical data

Part No.		Port	Flow	Working pressure min./max.	Adjustment range min./max.
			Qn		
R412014639		G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014640		G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014641		G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi

Part No.	Pressure gauge
R412014639	with pressure gauge in hand wheel
R412014640	with pressure gauge in hand wheel
R412014641	with pressure gauge in hand wheel

Panel nut included in scope of delivery, Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

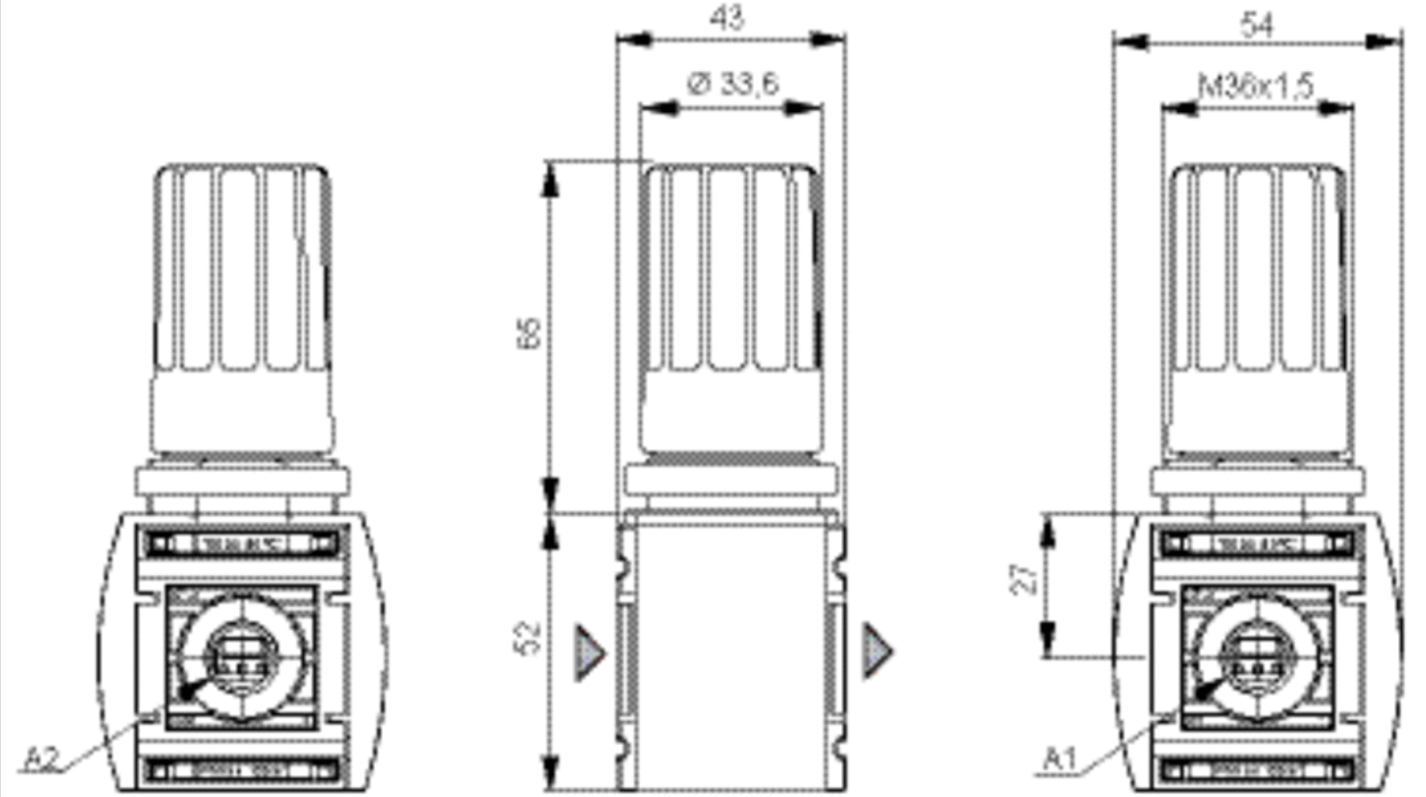
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

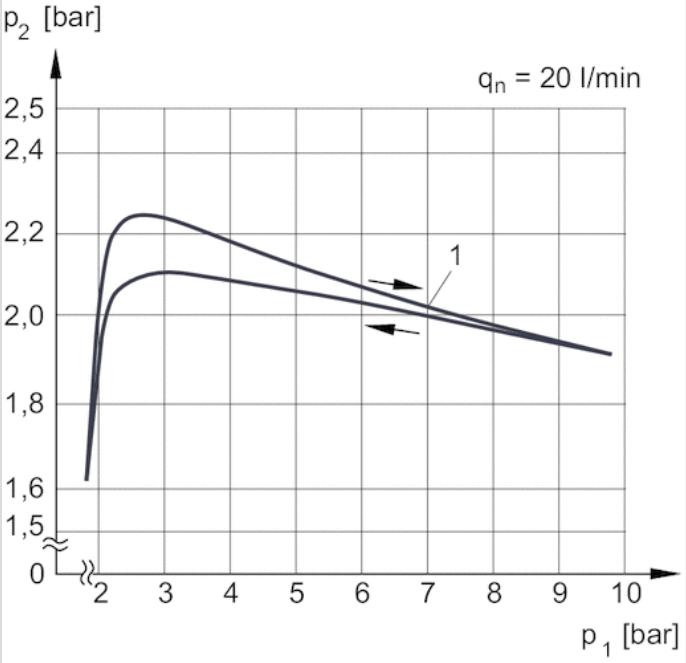
Dimensions



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

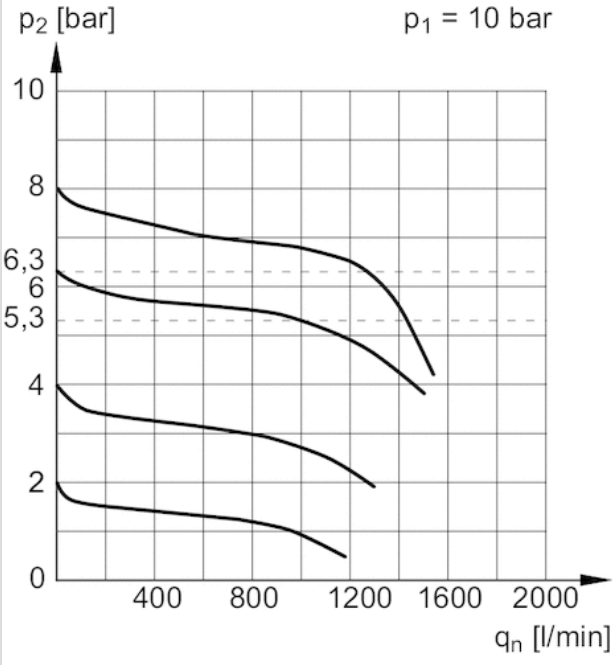
Diagrams

Pressure characteristics curve



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

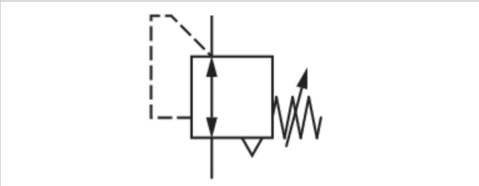
Flow rate characteristic



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

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

- G 1/4
- Air supply left
- Qn = 1.02 Cv
- Standard pressure regulator
- Activation Manual
- lockable
- with E11 locking



Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Lock type	with E11 locking
Activation	Manual
Weight	0.454 lbs

Technical data

Part No.	Port	Flow	Working pressure min./max.	Adjustment range min./max.
		Qn		
R412010648	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi
R412010649	G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi

Part No.	Max. pressure gauge Ø in blocked state
R412010648	40 mm
R412010649	40 mm

Order pressure gauge separately, Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

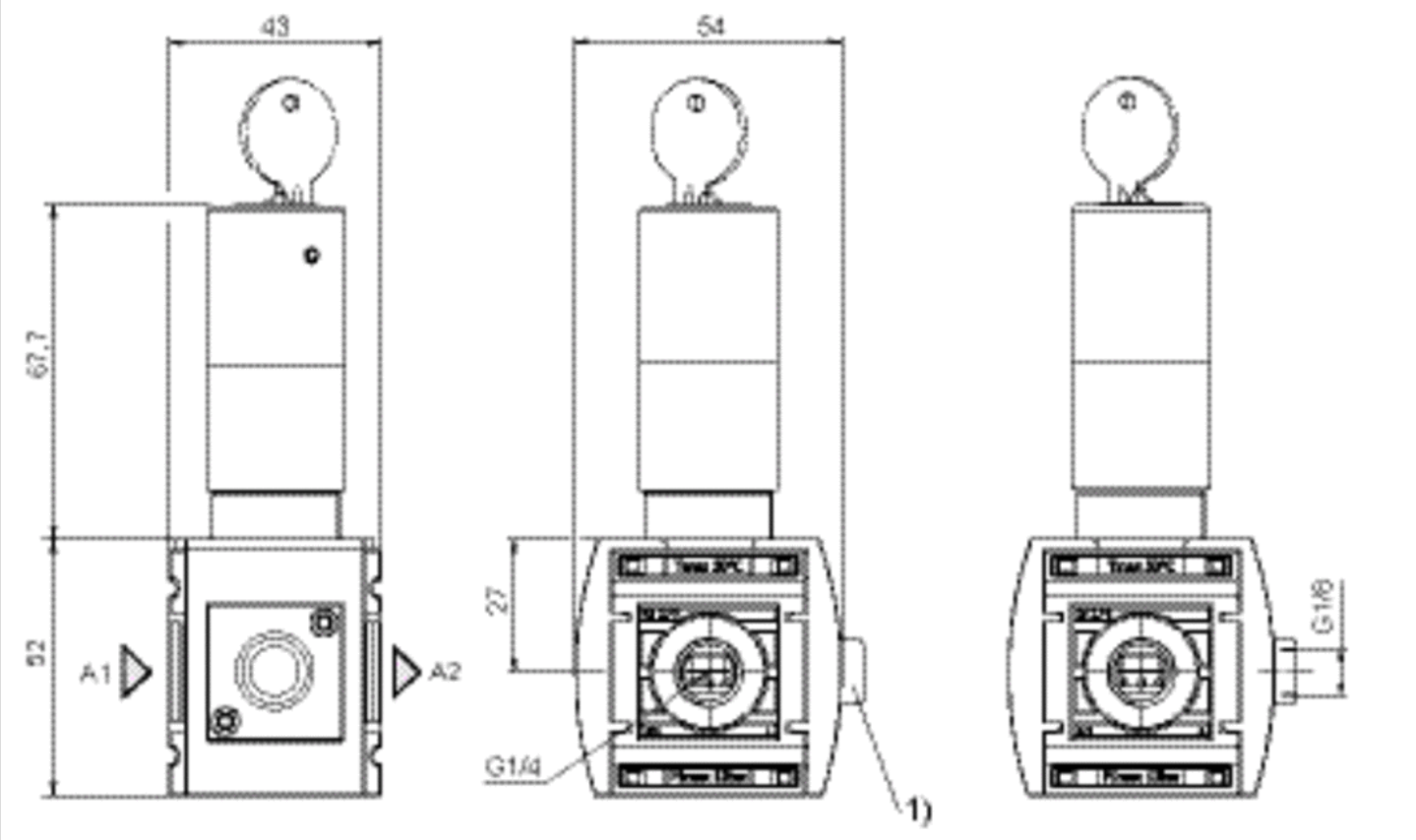
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The E11 locking is delivered without a key (see accessories for keys).
The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

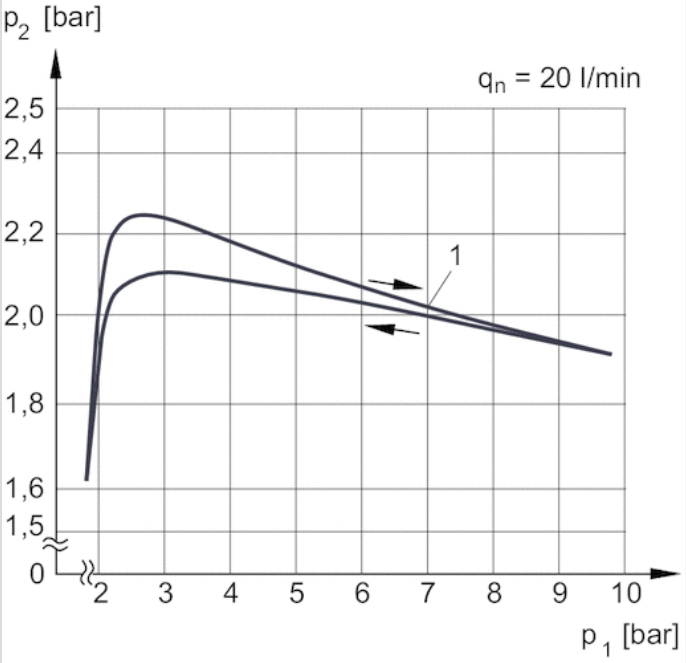
Dimensions



A1 = input
A2 = output
1) Adapter
Order pressure gauge separately

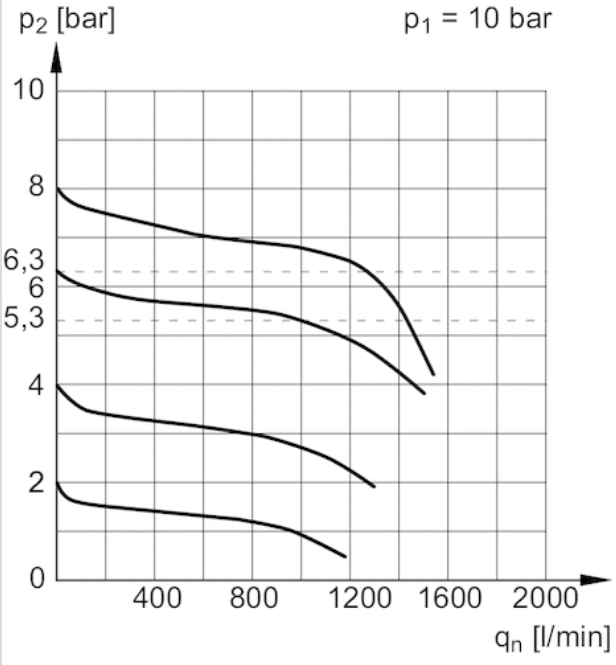
Diagrams

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 = 1.02 Cv
- Standard pressure regulator
- Activation Manual
- with continuous pressure supply

Parts	Pressure regulator with continuous pressure supply
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	double
Activation	Manual
Weight	See table below

Technical data

Part No.			Port	Flow Qn	Working pressure min./max.	Adjustment range min./max.
R412014630			G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014631			G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014632			G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi
R412010558		–	G 1/4	1.02 Cv	2 ... 174 psi	2 ... 14 psi
R412014636		–	G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014637		–	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014638		–	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight
R412014630	40 mm	With integrated pressure gauge	0.461 lbs
R412014631	40 mm	With integrated pressure gauge	0.461 lbs
R412014632	40 mm	With integrated pressure gauge	0.461 lbs
R412010558	40 mm	-	0.454 lbs
R412014636	40 mm	-	0.454 lbs
R412014637	40 mm	-	0.454 lbs
R412014638	40 mm	-	0.454 lbs

Part No.	Fig.	
R412014630	Fig. 1	1)
R412014631	Fig. 1	1)

Part No.	Fig.	
R412014632	Fig. 1	1)
R412010558	Fig. 2	2)
R412014636	Fig. 2	2)
R412014637	Fig. 2	2)
R412014638	Fig. 2	2)

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

1) regulator with pressure gauge

2) Order pressure gauge separately

Technical information

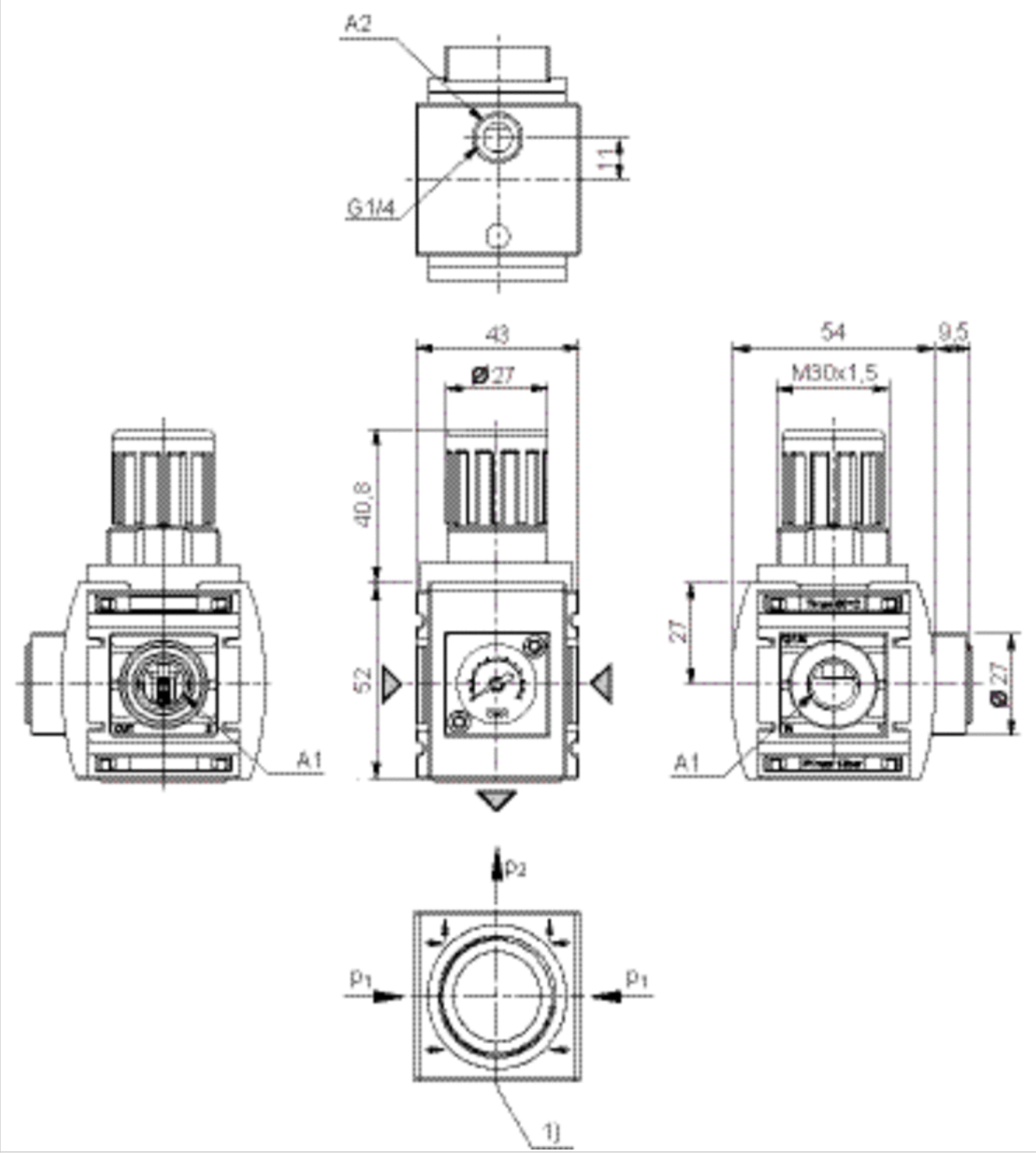
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

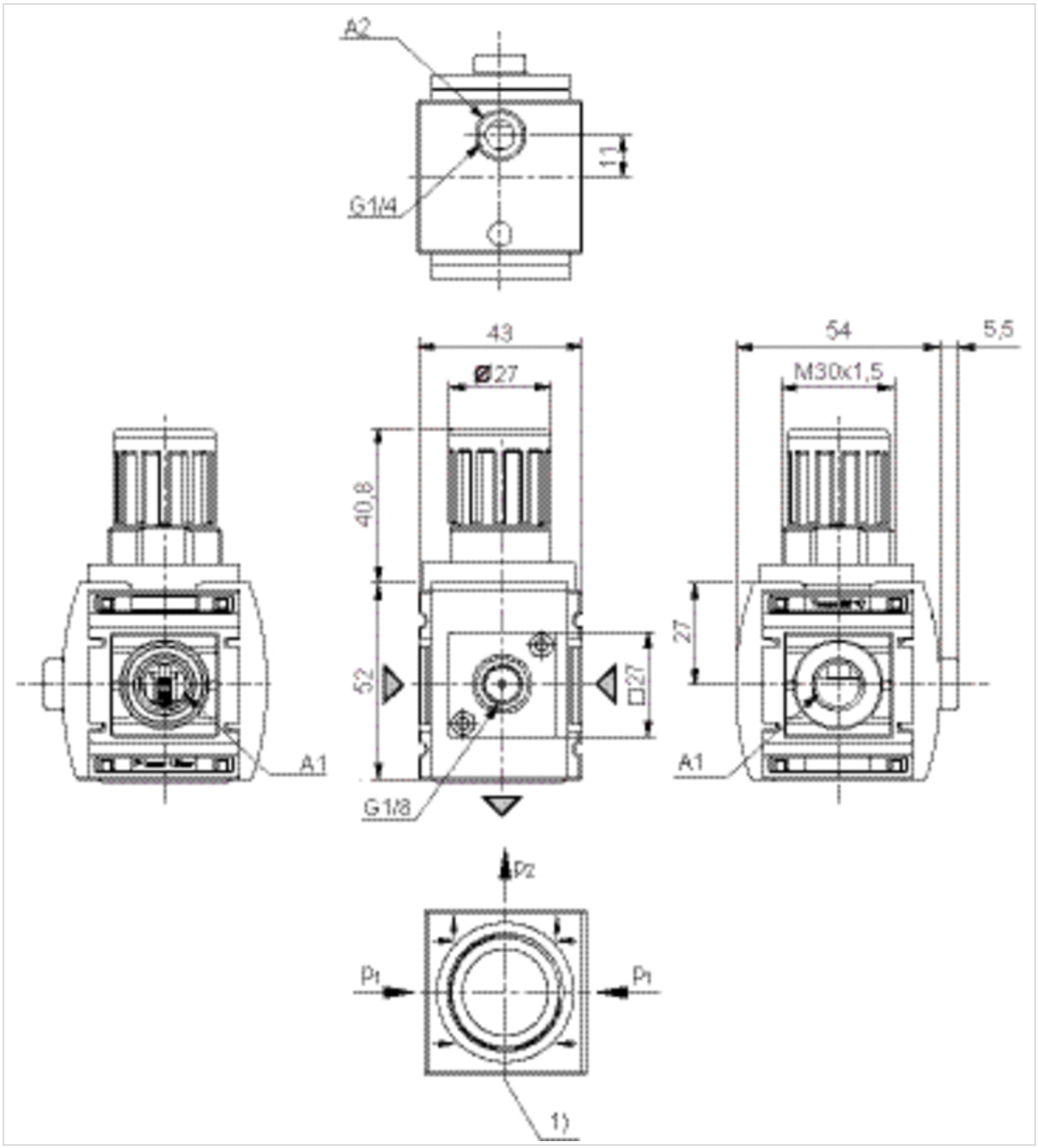
Dimensions

Dimensions Fig. 1



A1 = input
A2 = output
1) Pressure gauge connection

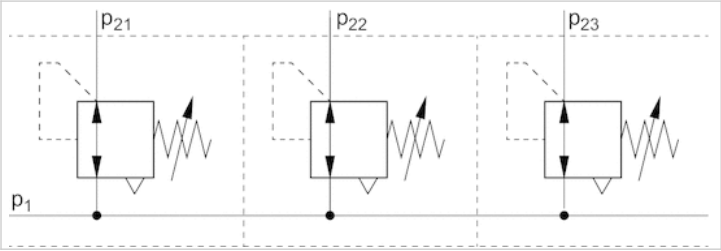
Dimensions Fig. 2



A1 = input
A2 = output

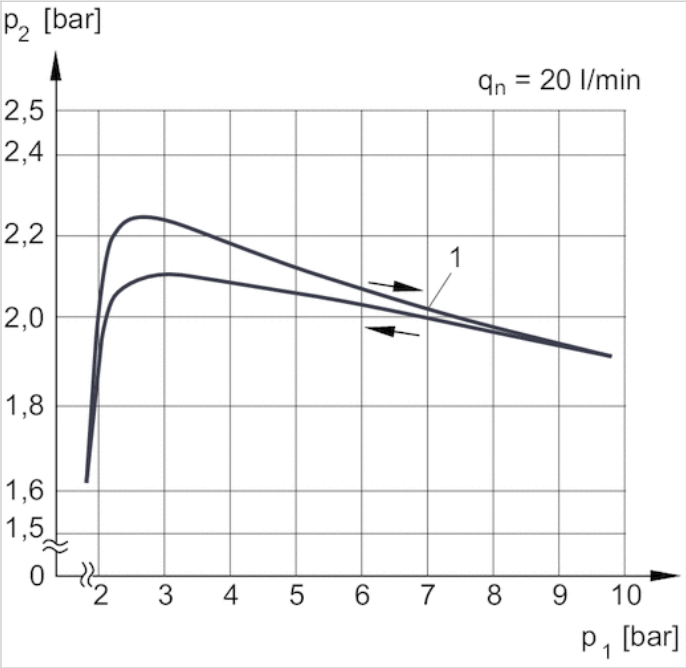
Diagrams

Application example



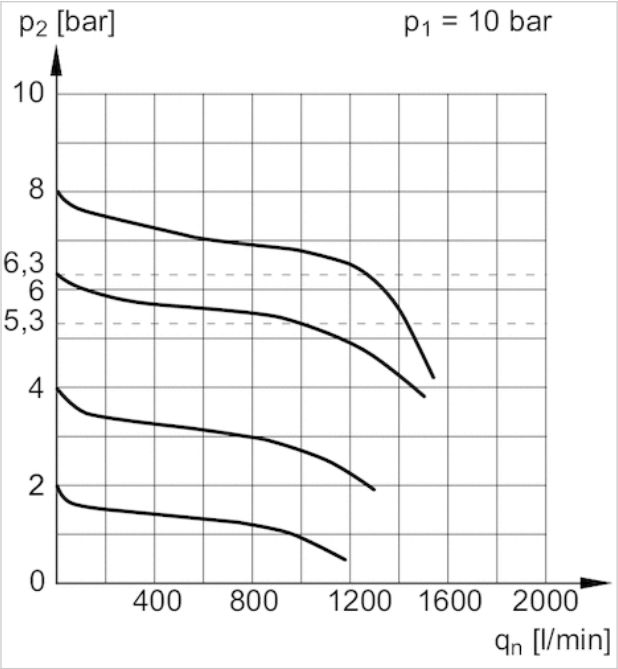
p1 = working pressure

Pressure characteristics curve



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

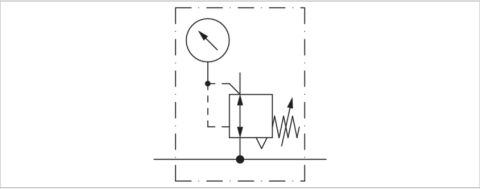
Flow rate characteristic



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

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

- G 1/4
- Air supply left
- Qn = 1.02 Cv
- Standard pressure regulator
- Activation Manual
- with continuous pressure supply
- with pressure gauge in hand wheel



Parts	Pressure regulator with continuous pressure supply
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	double
Activation	Manual
Weight	0.527 lbs

Technical data

Part No.		Port	Flow Qn	Working pressure min./max.	Adjustment range min./max.
R412014642		G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014643		G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014644		G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi

Part No.	Pressure gauge
R412014642	with pressure gauge in hand wheel
R412014643	with pressure gauge in hand wheel
R412014644	with pressure gauge in hand wheel

Panel nut included in scope of delivery, Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

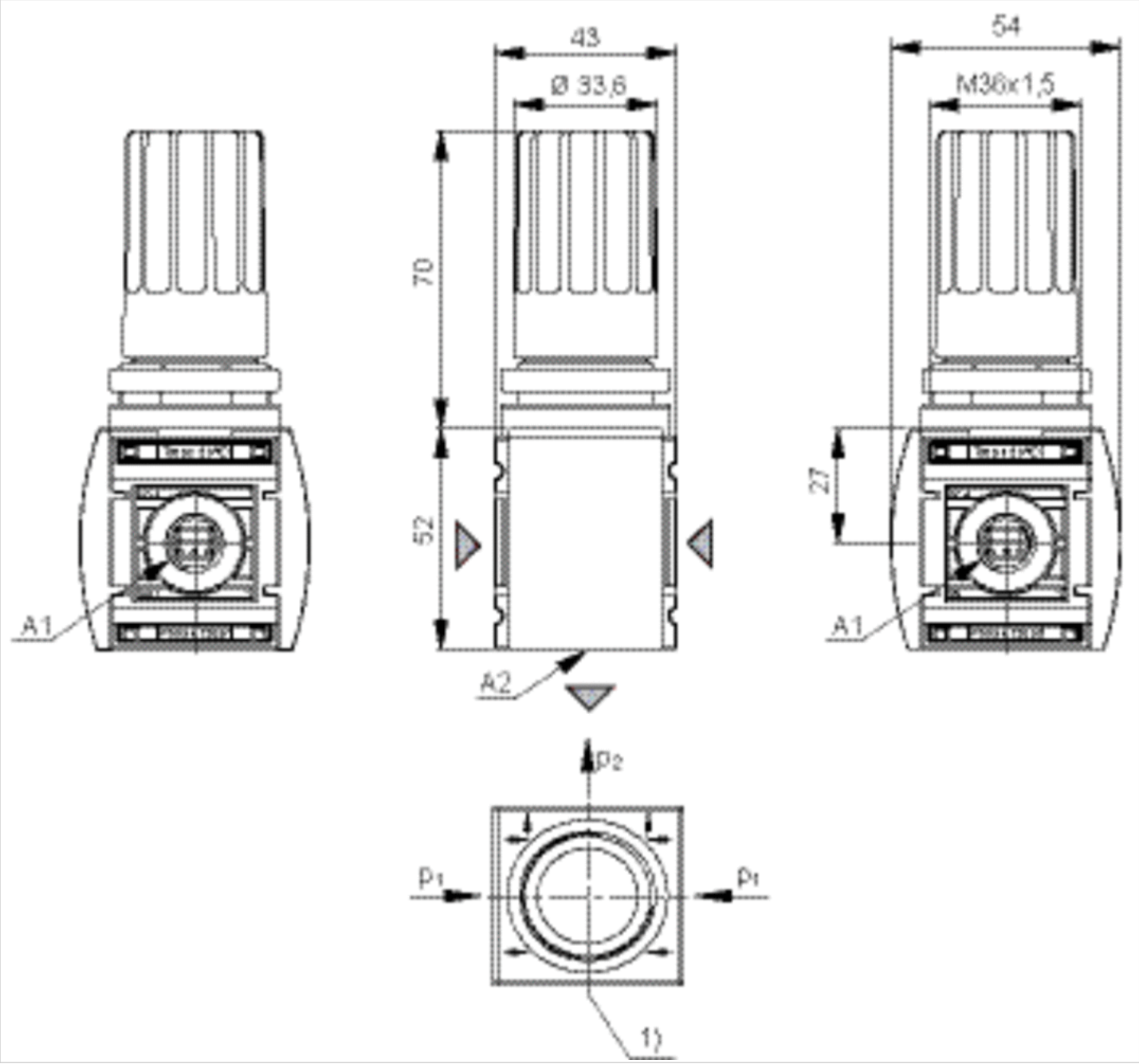
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

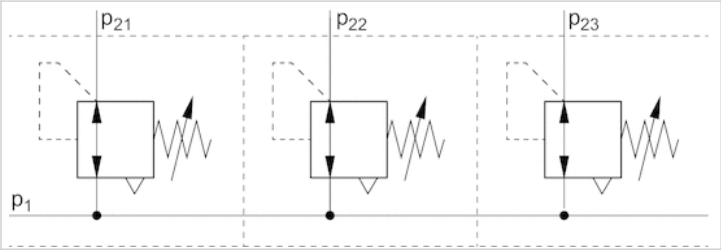
Dimensions



A1 = input
A2 = output

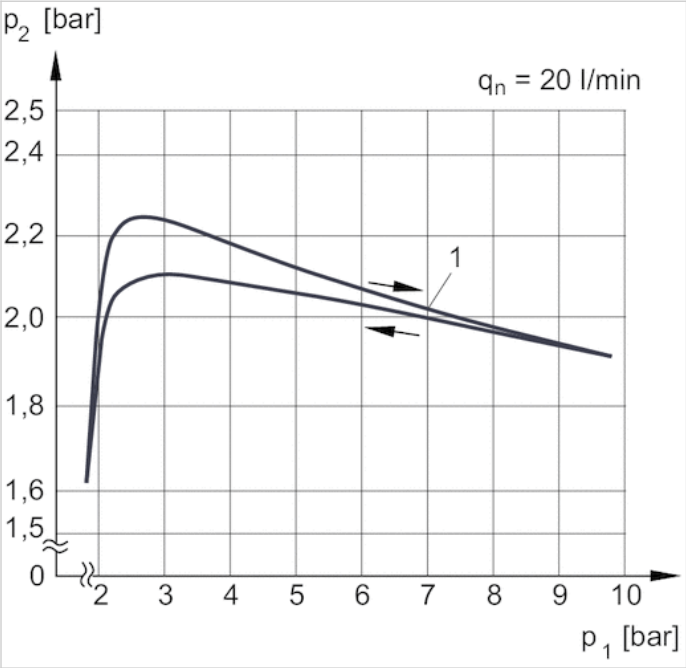
Diagrams

Application example



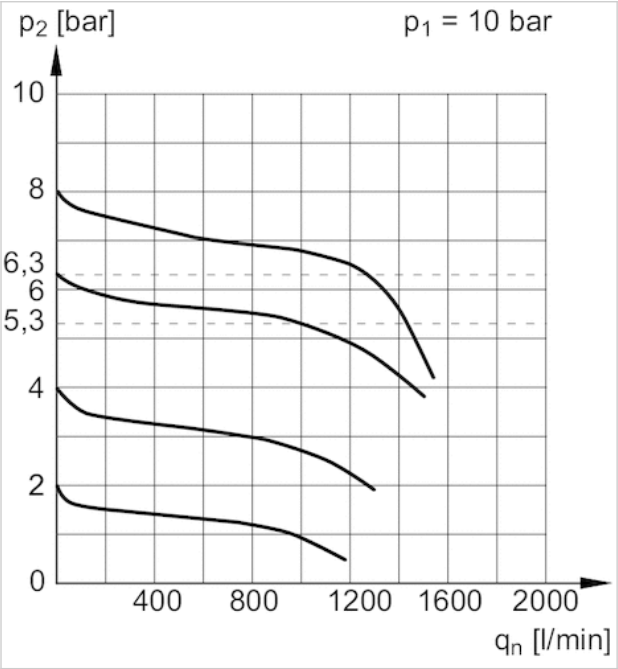
p1 = working pressure

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

- G 1/4
- Air supply left

Version	1-in-1, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	1.02 Cv
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	0.54 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

Technical data

Part No.			Port	Flow	Adjustment range min./max.
				Qn	
R412014645			G 1/4	1.02 Cv	8 ... 116 psi
R412014646			G 1/4	1.02 Cv	8 ... 116 psi
R412014647			G 1/4	1.02 Cv	8 ... 116 psi
R412014648			G 1/4	1.02 Cv	8 ... 116 psi
R412014649			G 1/4	1.02 Cv	8 ... 116 psi
R412014650			G 1/4	1.02 Cv	8 ... 116 psi
R412014651			G 1/4	1.02 Cv	8 ... 116 psi
R412014652		–	G 1/4	1.02 Cv	8 ... 116 psi
R412014653		–	G 1/4	1.02 Cv	8 ... 116 psi
R412014654		–	G 1/4	1.02 Cv	8 ... 116 psi
R412014655			G 1/4	1.02 Cv	8 ... 145 psi
R412014656			G 1/4	1.02 Cv	8 ... 145 psi
R412014657			G 1/4	1.02 Cv	8 ... 145 psi
R412014658			G 1/4	1.02 Cv	8 ... 145 psi
R412014659			G 1/4	1.02 Cv	8 ... 145 psi
R412014660			G 1/4	1.02 Cv	8 ... 145 psi
R412014661			G 1/4	1.02 Cv	8 ... 145 psi

Part No.	Condensate drain	Max. pressure gauge Ø in blocked state
R412014645	semi-automatic, open without pressure	-
R412014646	fully automatic, open without pressure	-
R412014647	fully automatic, closed without pressure	-

Part No.	Condensate drain	Max. pressure gauge Ø in blocked state
R412014648	semi-automatic, open without pressure	-
R412014649	semi-automatic, open without pressure	-
R412014650	fully automatic, open without pressure	-
R412014651	fully automatic, closed without pressure	-
R412014652	semi-automatic, open without pressure	40 mm
R412014653	fully automatic, open without pressure	40 mm
R412014654	fully automatic, closed without pressure	40 mm
R412014655	semi-automatic, open without pressure	-
R412014656	fully automatic, open without pressure	-
R412014657	fully automatic, closed without pressure	-
R412014658	semi-automatic, open without pressure	-
R412014659	semi-automatic, open without pressure	-
R412014660	fully automatic, open without pressure	-
R412014661	fully automatic, closed without pressure	-

Part No.	Reservoir	Protective guard	Weight	Fig.	
R412014645	Polycarbonate	-	0.531 lbs	Fig. 1	1)
R412014646	Polycarbonate	-	0.571 lbs	Fig. 1	1)
R412014647	Polycarbonate	-	0.571 lbs	Fig. 1	1)
R412014648	Polycarbonate	metal	0.604 lbs	Fig. 1	1)
R412014649	Die cast zinc	-	0.701 lbs	Fig. 1	1)
R412014650	Die cast zinc	-	0.728 lbs	Fig. 1	1)
R412014651	Die cast zinc	-	0.728 lbs	Fig. 1	1)
R412014652	Polycarbonate	-	0.525 lbs	Fig. 2	2)
R412014653	Polycarbonate	-	0.564 lbs	Fig. 2	2)
R412014654	Polycarbonate	-	0.564 lbs	Fig. 2	2)
R412014655	Polycarbonate	-	0.531 lbs	Fig. 1	1)
R412014656	Polycarbonate	-	0.571 lbs	Fig. 1	1)
R412014657	Polycarbonate	-	0.571 lbs	Fig. 1	1)
R412014658	Polycarbonate	metal	0.604 lbs	Fig. 1	1)
R412014659	Die cast zinc	-	0.701 lbs	Fig. 1	1)
R412014660	Die cast zinc	-	0.728 lbs	Fig. 1	1)
R412014661	Die cast zinc	-	0.728 lbs	Fig. 1	1)

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

1) regulator with pressure gauge

2) Order pressure gauge separately

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

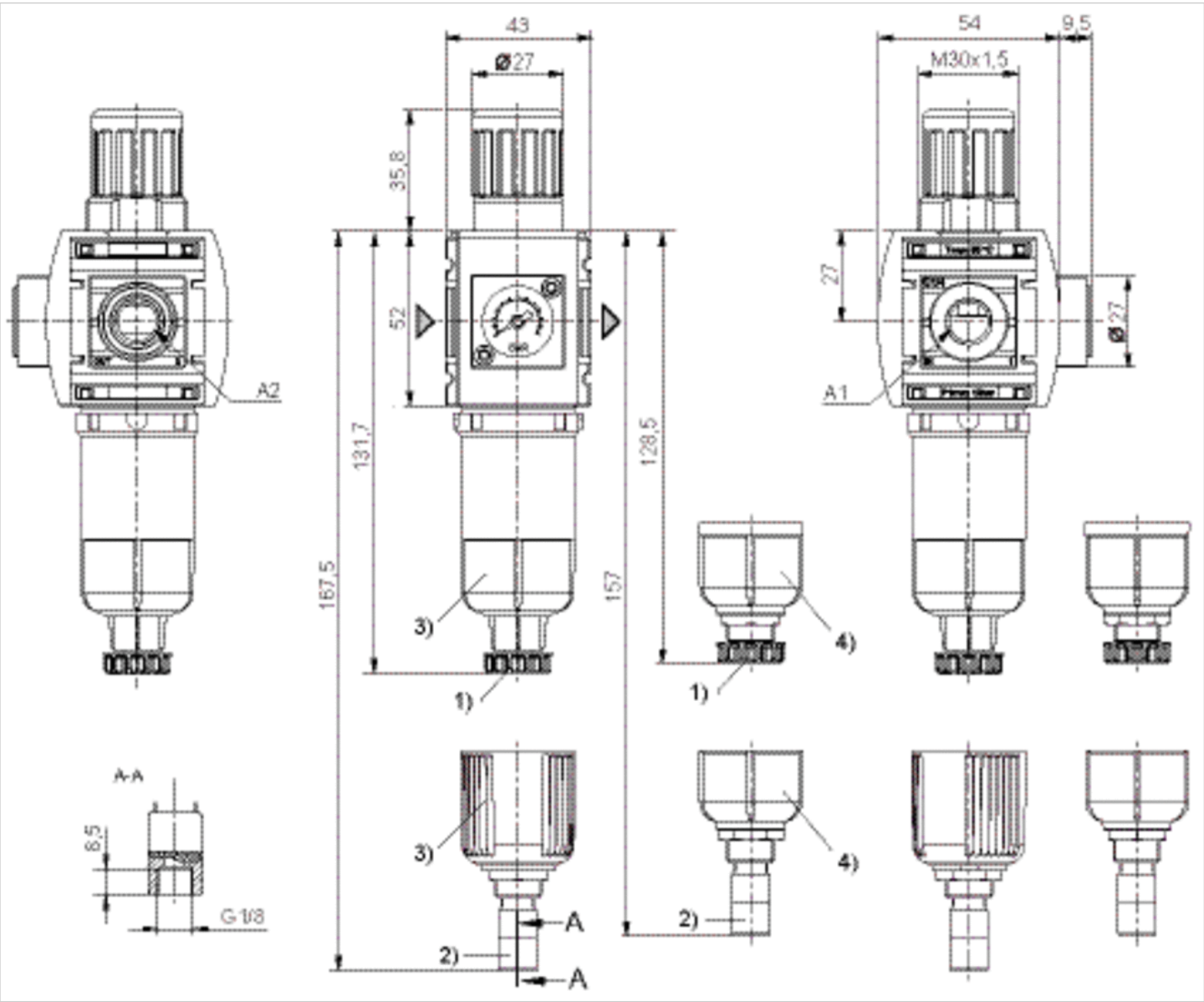
Compressed air class 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate, Die cast zinc
Protective guard	metal
Filter insert	Cellpor

Dimensions

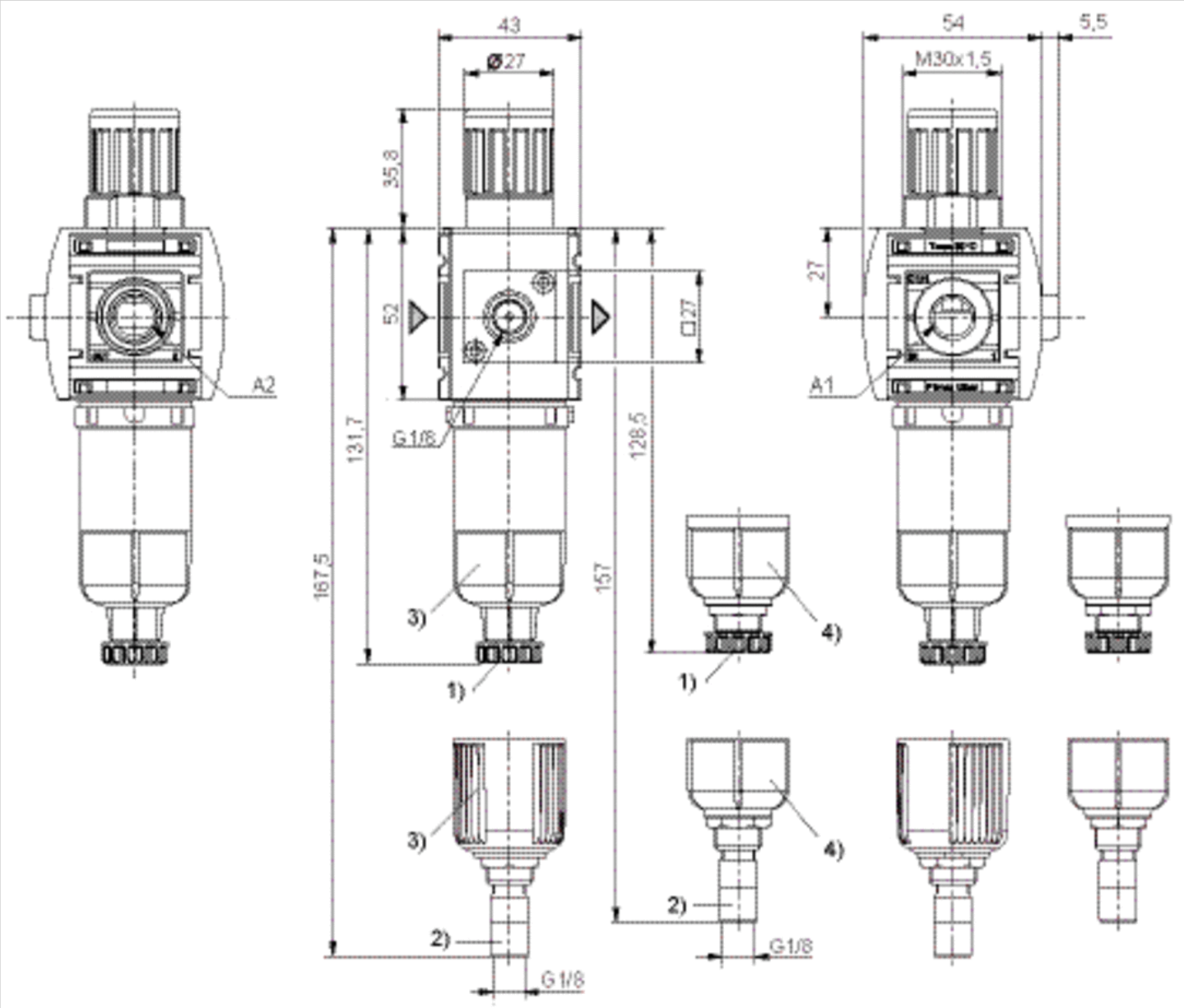
Dimensions Fig. 1



A1 = input

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

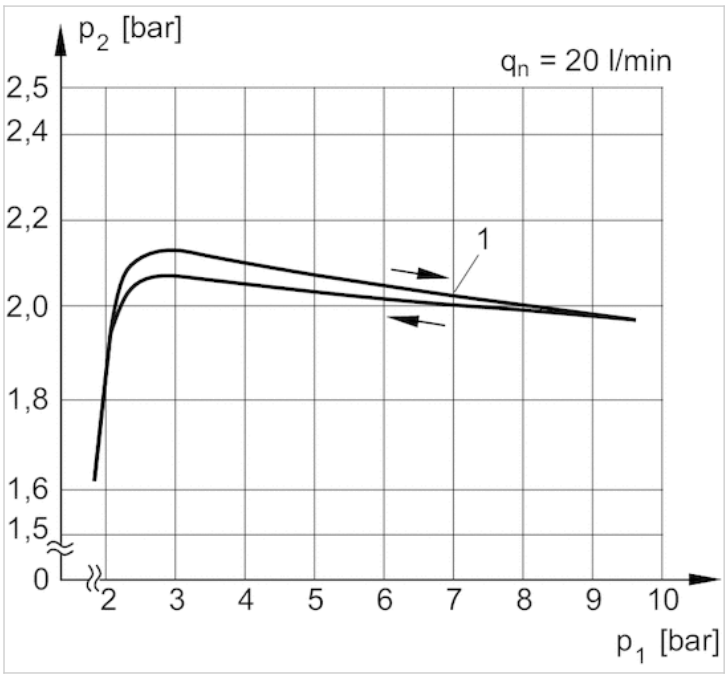
Dimensions Fig. 2



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

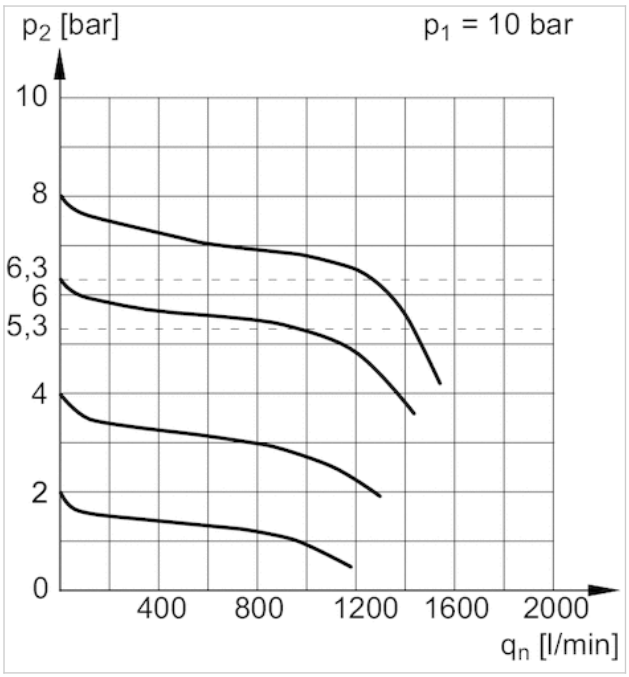
Diagrams

Pressure characteristics curve



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

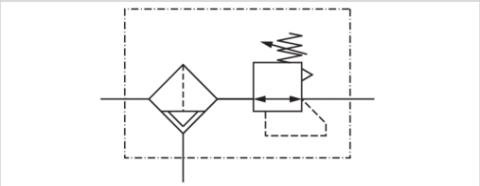
Flow rate characteristic



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

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

- G 1/4
- Air supply left
- lockable
- with E11 locking



Version	1-in-1, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	1.02 Cv
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	8 ... 116 psi
Pressure supply	single
Filter reservoir volume	0.54 fl.oz.
Filter element	exchangeable
Condensate drain	fully automatic, closed without pressure
Weight	0.564 lbs

Technical data

Part No.	Port	Flow	Condensate drain
		Qn	
R412010650	G 1/4	1.02 Cv	fully automatic, closed without pressure

Part No.	Max. pressure gauge Ø in blocked state
R412010650	40 mm

Order pressure gauge separately, Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
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".
Also suitable for separation of fluid oil or water due to the design.

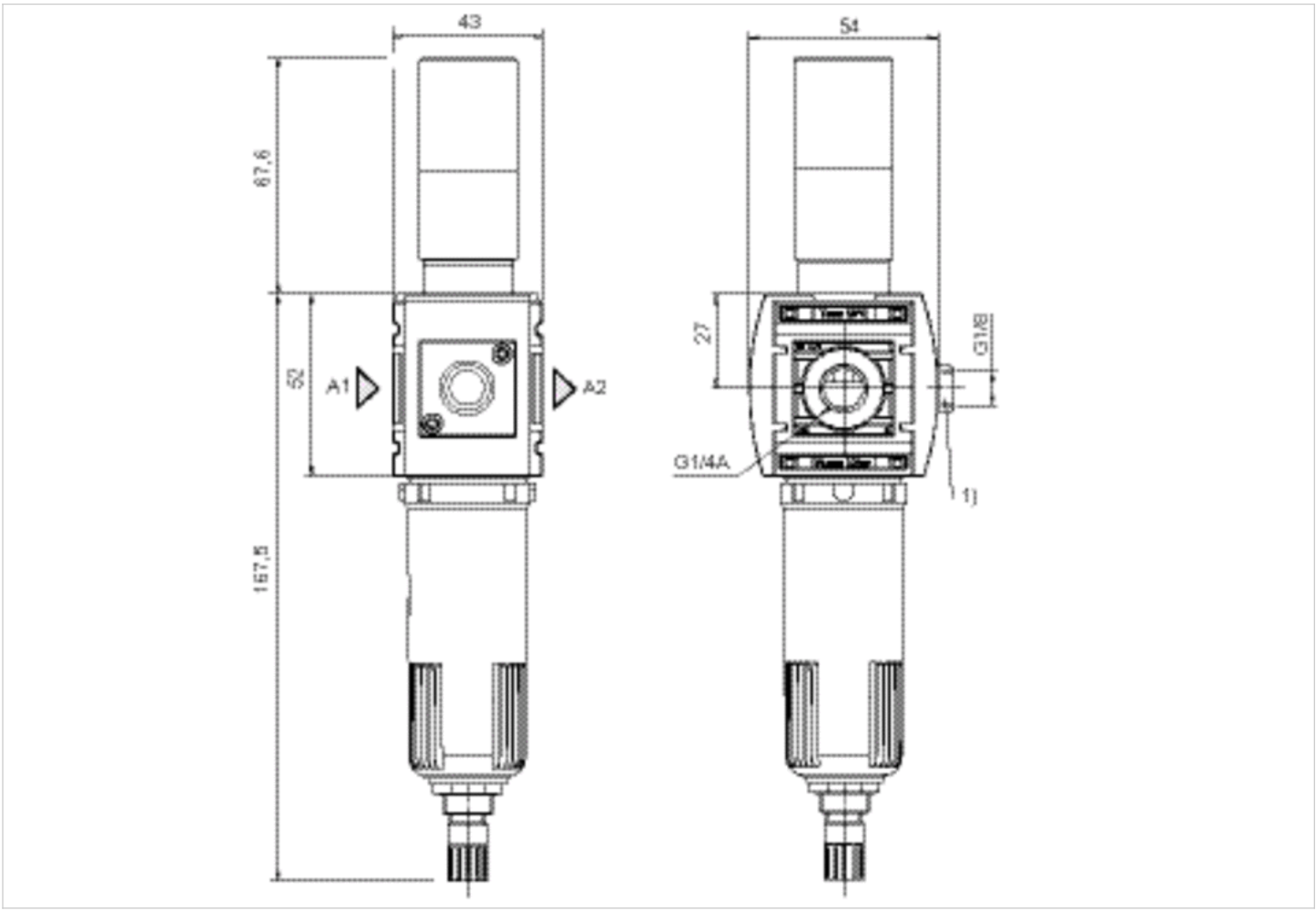
Compressed air class 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Filter insert	Cellpor

Dimensions

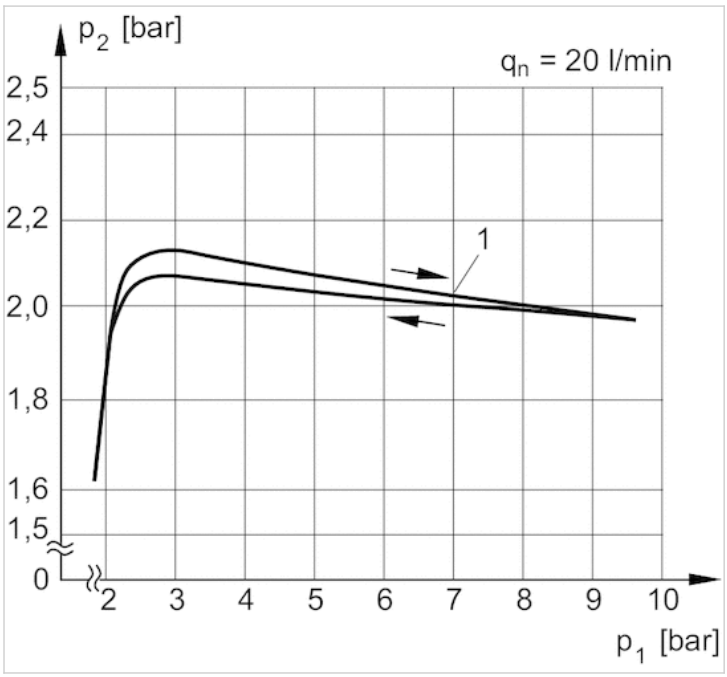
Dimensions



A1 = input
A2 = output
1) Adapter
Order pressure gauge separately

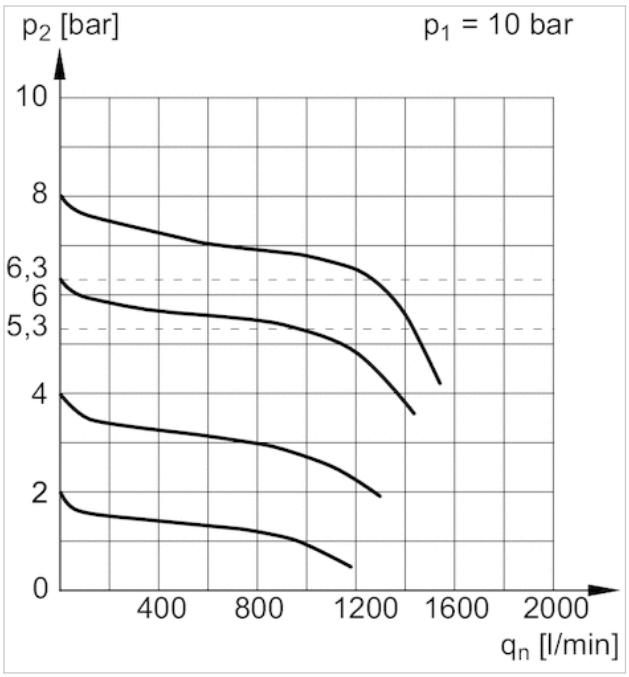
Diagrams

Pressure characteristics curve



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

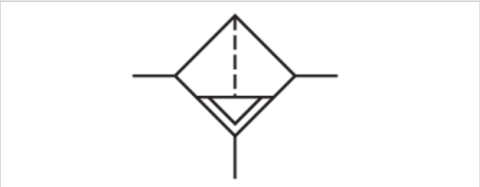
Flow rate characteristic



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

Standard filter, Series AS1-FLS

- G 1/4
- Air supply left



Version	Standard filter, Can be assembled into blocks
Parts	Filter
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.54 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

Technical data

Part No.	Port	Qn	Condensate drain	Reservoir
R412014600	G 1/4	1.02 Cv	semi-automatic, open without pressure	Polycarbonate
R412014601	G 1/4	1.02 Cv	fully automatic, open without pressure	Polycarbonate
R412014602	G 1/4	1.02 Cv	fully automatic, closed without pressure	Polycarbonate
R412014603	G 1/4	1.02 Cv	semi-automatic, open without pressure	Polycarbonate
R412014604	G 1/4	1.02 Cv	semi-automatic, open without pressure	metal
R412014605	G 1/4	1.02 Cv	fully automatic, open without pressure	metal
R412014606	G 1/4	1.02 Cv	fully automatic, closed without pressure	metal

Part No.	Protective guard	Weight
R412014600	-	0.366 lbs
R412014601	-	0.406 lbs
R412014602	-	0.406 lbs
R412014603	metal	0.425 lbs
R412014604	-	0.536 lbs
R412014605	-	0.562 lbs
R412014606	-	0.562 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

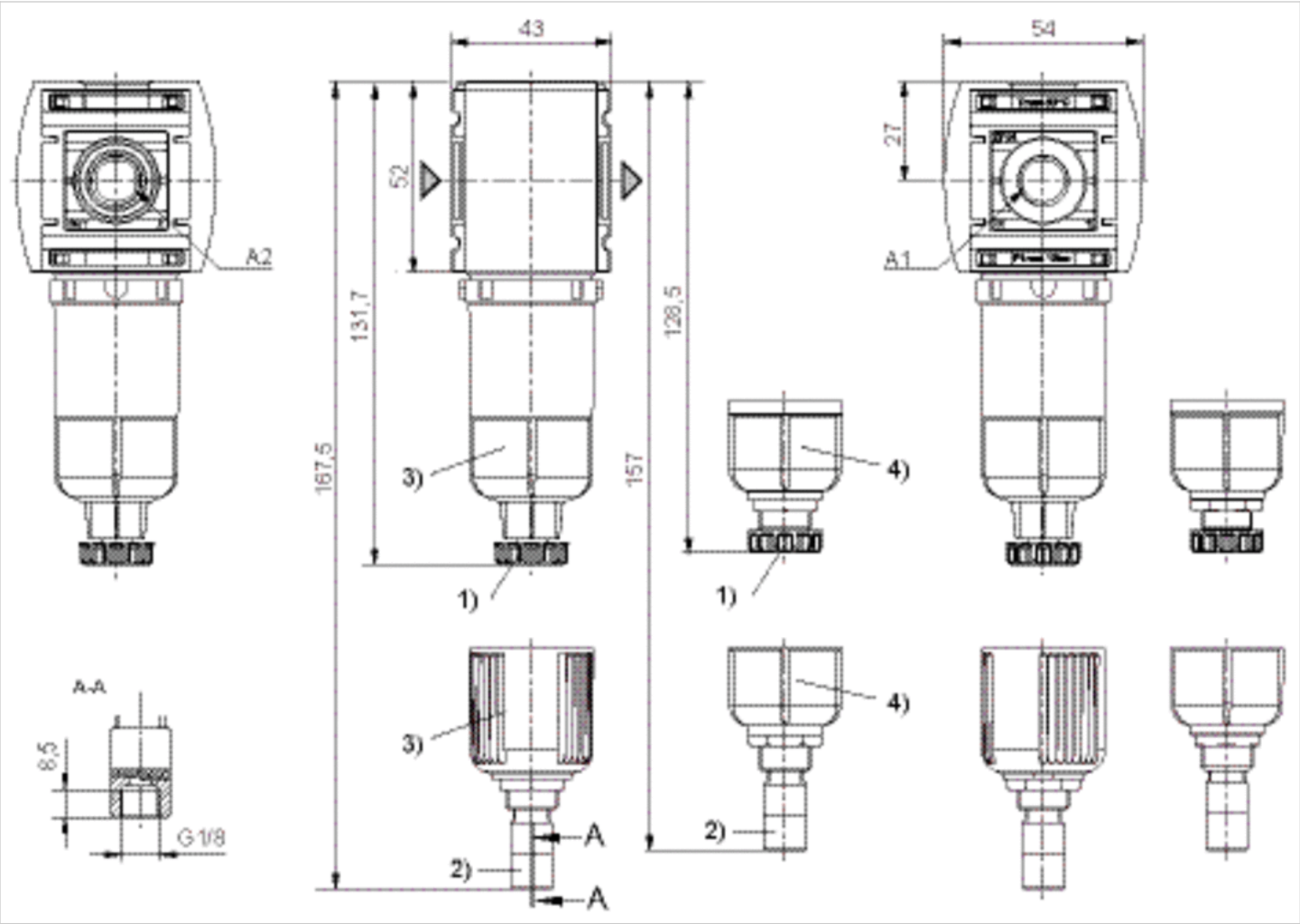
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate, metal
Protective guard	metal
Filter insert	Cellpor

Dimensions

Dimensions

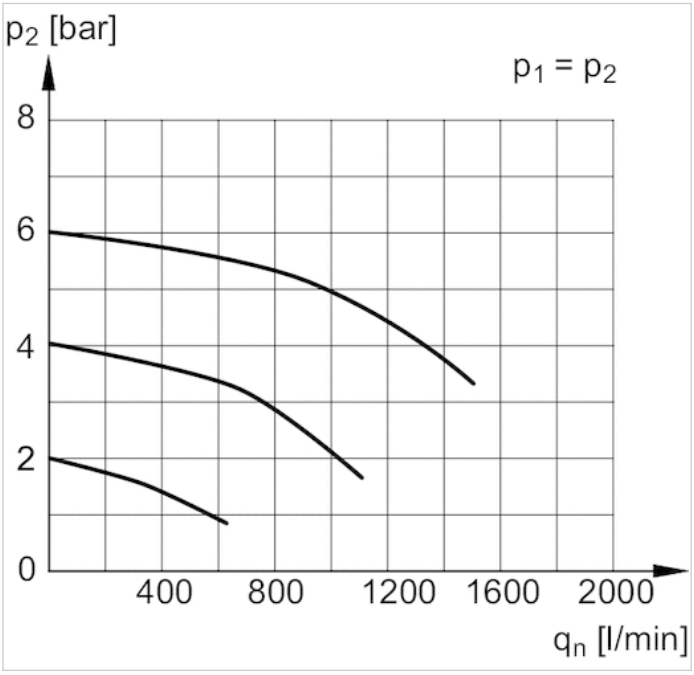


A1 = input

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

Diagrams

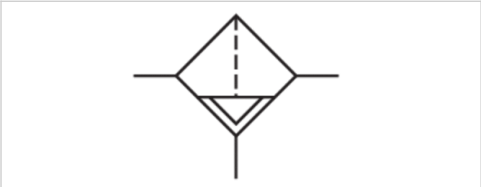
Flow rate characteristic



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

Pre-filter, Series AS1-FLP

- G 1/4
- Air supply left



Version	Pre-filter, Can be assembled into blocks
Parts	Pre-filter
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.41 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

Technical data

Part No.	Port	Qn	Condensate drain	Reservoir
R412014607	G 1/4	0.356 Cv	semi-automatic, open without pressure	Polycarbonate
R412014608	G 1/4	0.356 Cv	fully automatic, open without pressure	Polycarbonate
R412014609	G 1/4	0.356 Cv	fully automatic, closed without pressure	Polycarbonate
R412014610	G 1/4	0.356 Cv	semi-automatic, open without pressure	Polycarbonate
R412014611	G 1/4	0.356 Cv	semi-automatic, open without pressure	metal
R412014612	G 1/4	0.356 Cv	fully automatic, open without pressure	metal
R412014613	G 1/4	0.356 Cv	fully automatic, closed without pressure	metal

Part No.	Protective guard	Weight
R412014607	-	0.372 lbs
R412014608	-	0.412 lbs
R412014609	-	0.412 lbs
R412014610	metal	0.445 lbs
R412014611	-	0.542 lbs
R412014612	-	0.569 lbs
R412014613	-	0.569 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 1.45 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

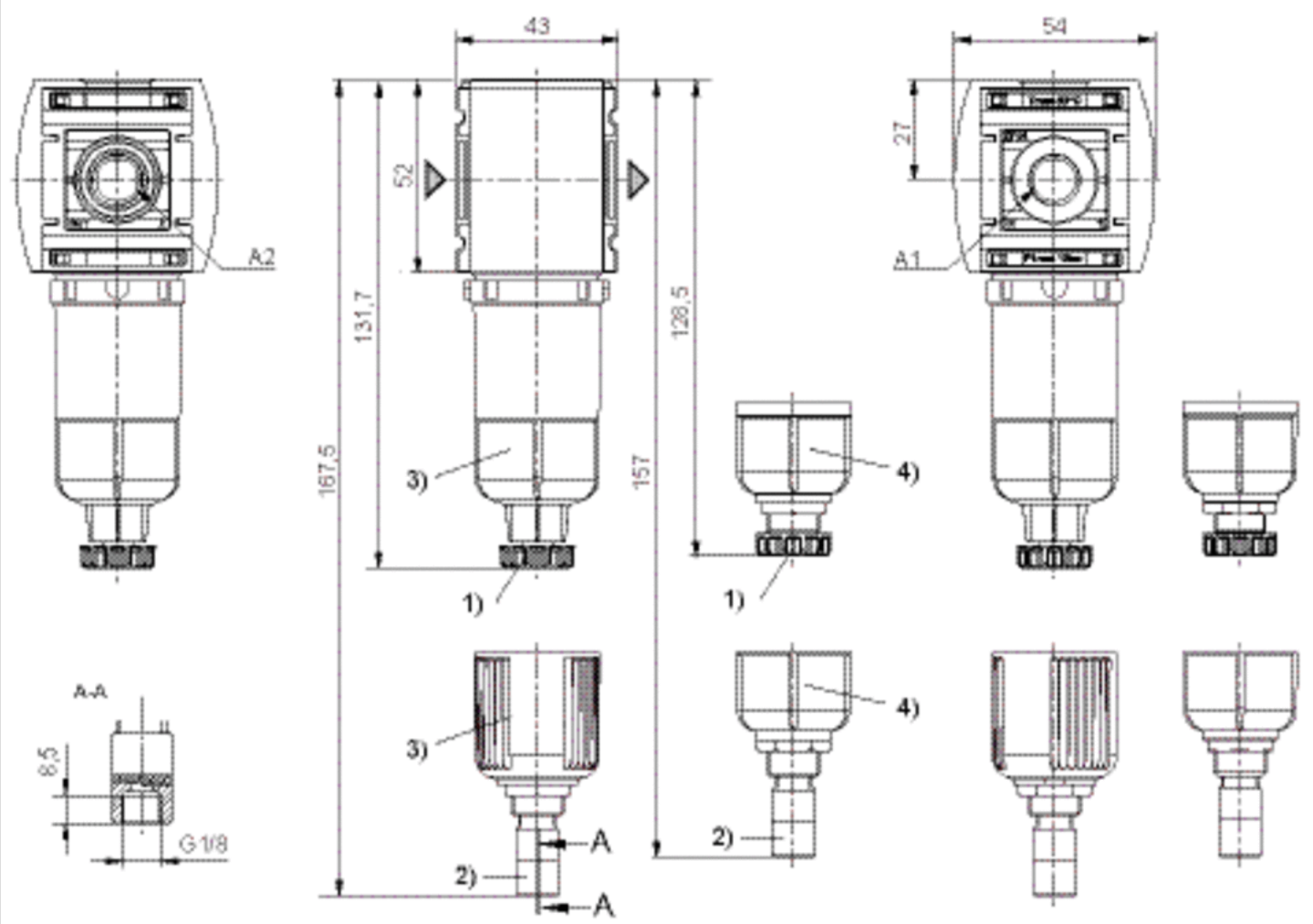
Max. achievable compressed air class acc. to ISO 8573-1:2010 2 : - : 3

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate, metal
Protective guard	metal
Filter insert	Impregnated paper

Dimensions

Dimensions

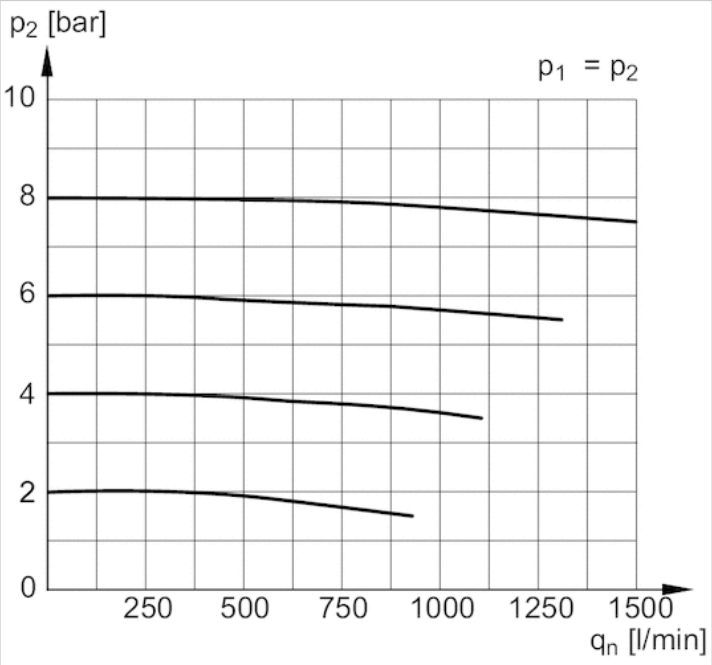


A1 = input
A2 = output

1) Semi-automatic condensate drain
2) Fully automatic condensate drain
3) Reservoir: polycarbonate
4) Reservoir: metal

Diagrams

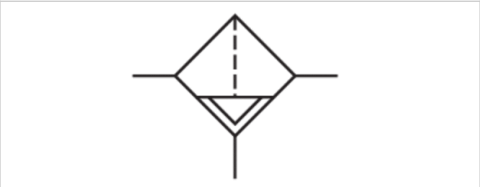
Flow rate characteristic



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

Microfilter, Series AS1-FLC

- G 1/4
- Air supply left



Version	Microfilter, Can be assembled into blocks
Parts	Microfilter
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.41 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

Technical data

Part No.	Port	Qn	Condensate drain	Reservoir
R412014614	G 1/4	0.356 Cv	semi-automatic, open without pressure	Polycarbonate
R412014615	G 1/4	0.356 Cv	fully automatic, open without pressure	Polycarbonate
R412014616	G 1/4	0.356 Cv	fully automatic, closed without pressure	Polycarbonate
R412014617	G 1/4	0.356 Cv	semi-automatic, open without pressure	Polycarbonate
R412014618	G 1/4	0.356 Cv	semi-automatic, open without pressure	metal
R412014619	G 1/4	0.356 Cv	fully automatic, open without pressure	metal
R412014620	G 1/4	0.356 Cv	fully automatic, closed without pressure	metal

Part No.	Protective guard	Weight
R412014614	-	0.372 lbs
R412014615	-	0.412 lbs
R412014616	-	0.412 lbs
R412014617	metal	0.445 lbs
R412014618	-	0.542 lbs
R412014619	-	0.569 lbs
R412014620	-	0.569 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 1.45 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

Recommended pre-filtering 0.3 µm

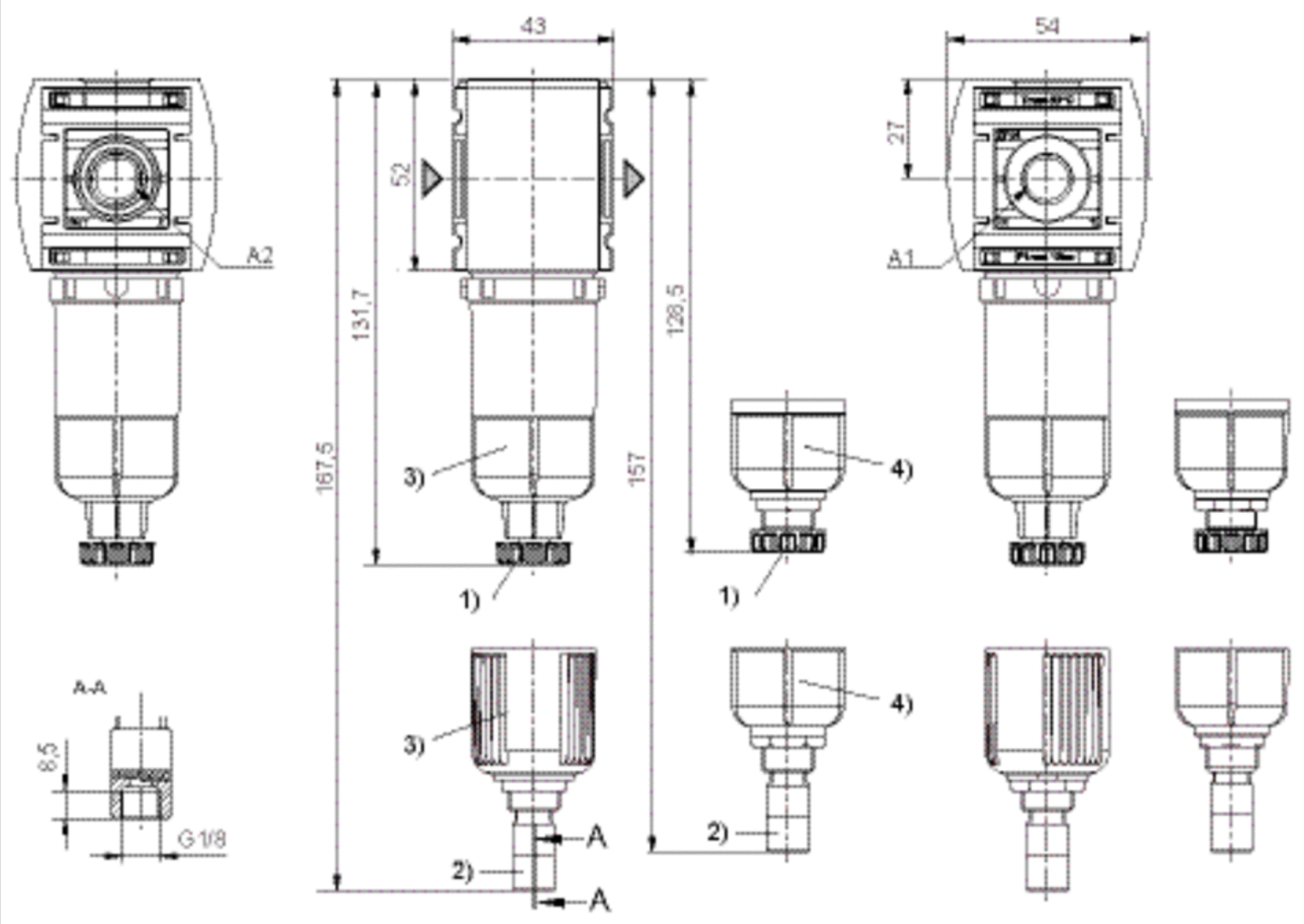
Max. achievable compressed air class acc. to ISO 8573-1:2010 1 : - : 2

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate, metal
Protective guard	metal
Filter insert	Borosilicate aluminum

Dimensions

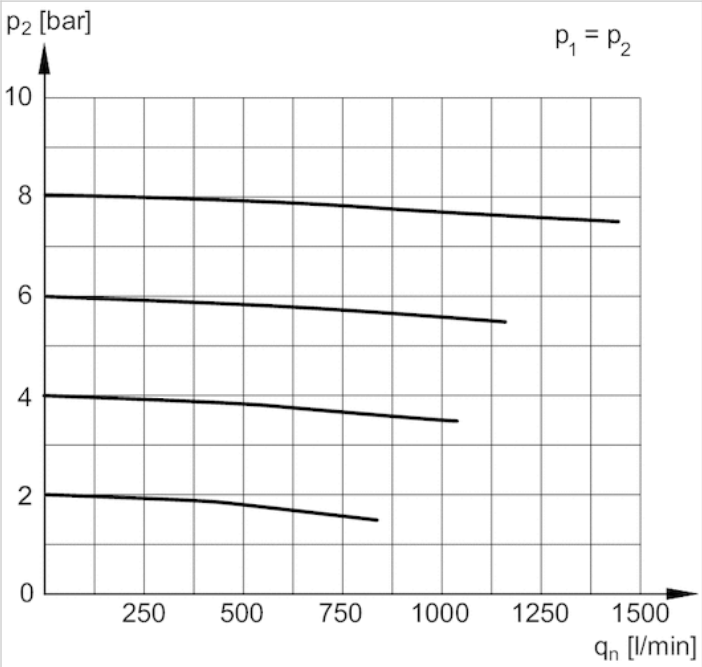
Dimensions



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

Diagrams

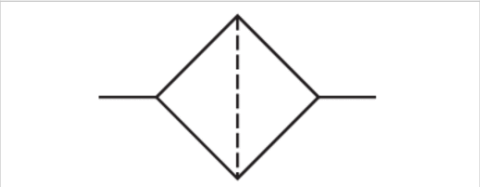
Flow rate characteristic



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

Active carbon filter, Series AS1-FLA

- G 1/4
- Air supply left



Version	Active carbon filter, Can be assembled into blocks
Parts	Active carbon filter
Mounting orientation	vertical
Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.41 fl.oz.
Filter element	exchangeable
Weight	See table below

Technical data

Part No.	Port	Qn	Reservoir	Protective guard	Weight
R412014621	G 1/4	0.356 Cv	Polycarbonate	-	0.377 lbs
R412014622	G 1/4	0.356 Cv	Polycarbonate	metal	0.45 lbs
R412014623	G 1/4	0.356 Cv	metal	-	0.511 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 1.45 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Recommended pre-filtering 0.01 µm

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

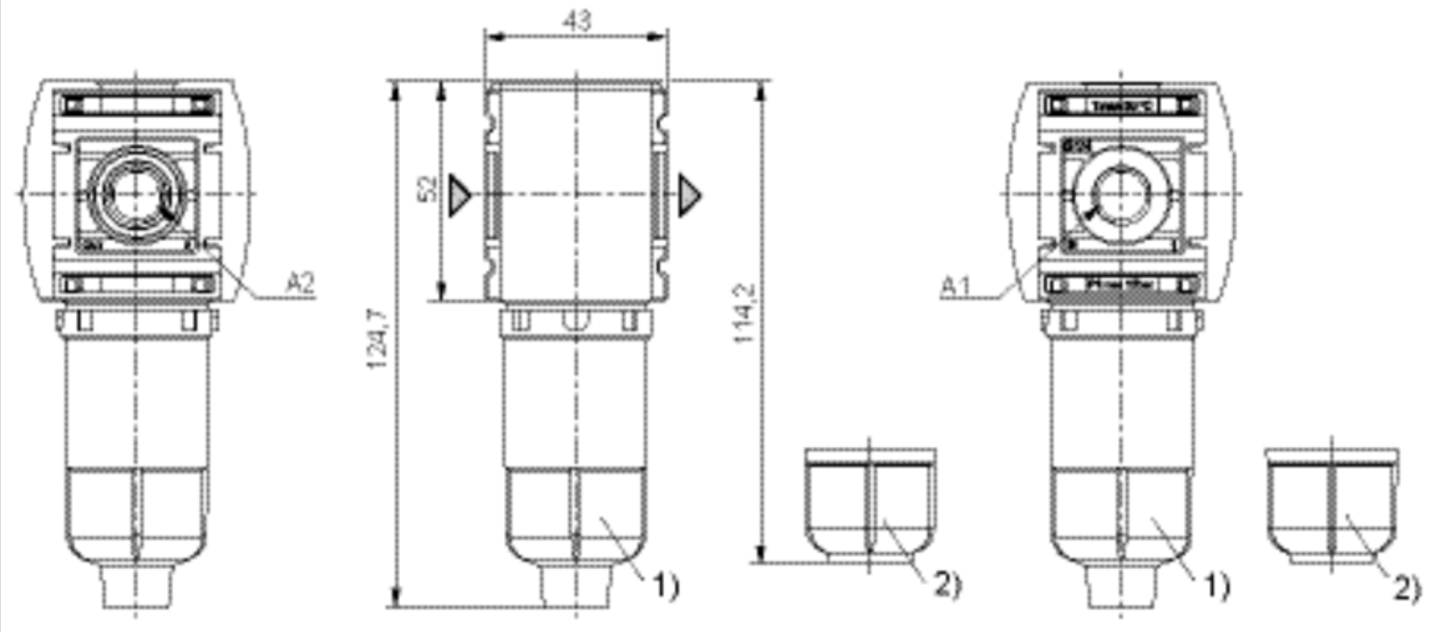
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate, metal

Material	
Protective guard	metal
Filter insert	Active carbon

Dimensions

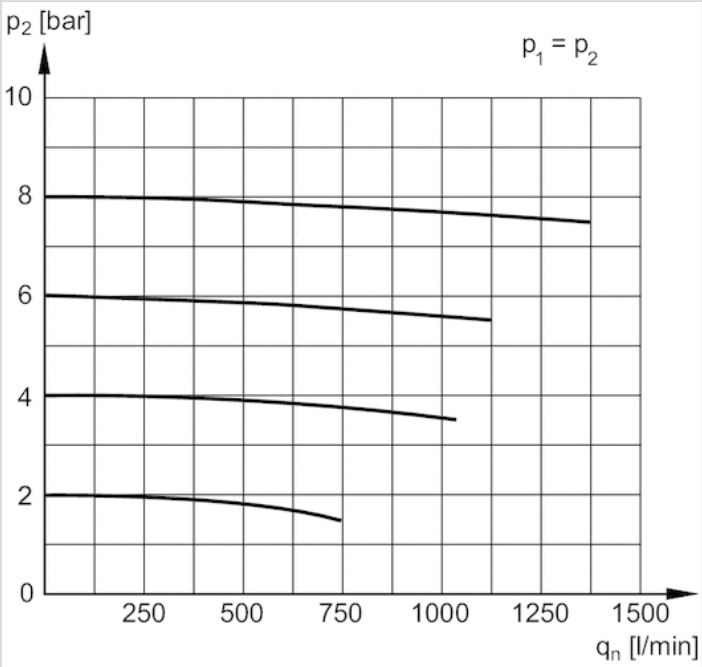
Dimensions



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

Diagrams

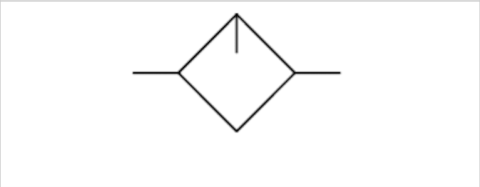
Flow rate characteristic



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

Micro oil-mist lubricator, Series AS1-LBM

- G 1/4
- Air supply left



Version	Micro oil-mist lubricator, Can be assembled into blocks
Parts	Micro oil-mist lubricator
Mounting orientation	vertical
Compressed air connection	G 1/4
Working pressure min./max.	12 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Lubricator reservoir volume	1.18 fl.oz.
Type of filling	Manual oil filling
Weight	See table below

Technical data

Part No.	Port	Nominal flow Qn	Reservoir	Protective guard	Weight
R412014624	G 1/4	1.42 Cv	Polycarbonate	-	0.412 lbs
R412014625	G 1/4	1.42 Cv	Polycarbonate	metal	0.485 lbs
R412014626	G 1/4	1.42 Cv	Die cast zinc	-	0.547 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
only approx. 10% of the preset drip quantity enters the compressed air system
oil filling not possible during operation
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Oil dosing at 1 Cv 10-20 drops

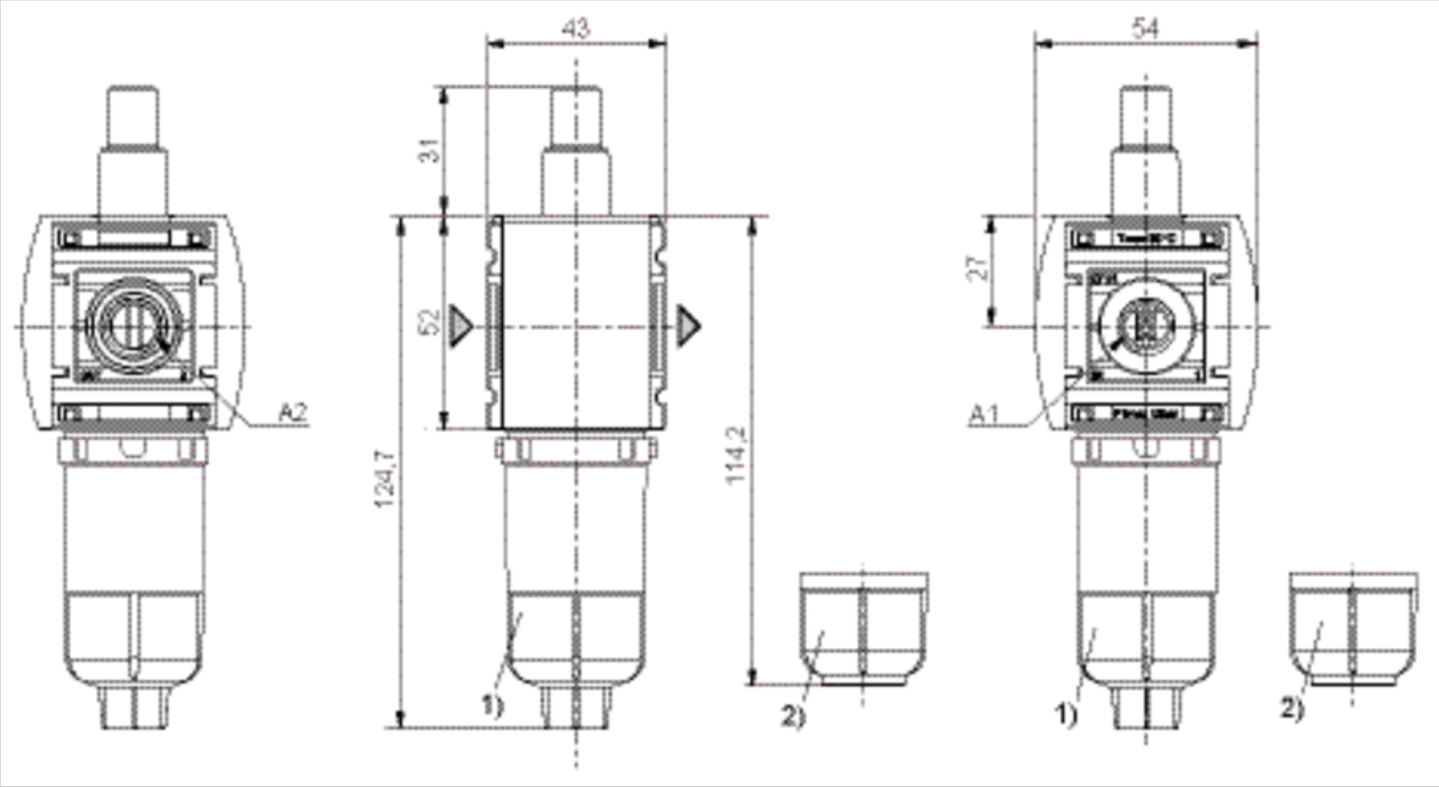
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Material	
Reservoir	Polycarbonate, Die cast zinc
Protective guard	metal

Dimensions

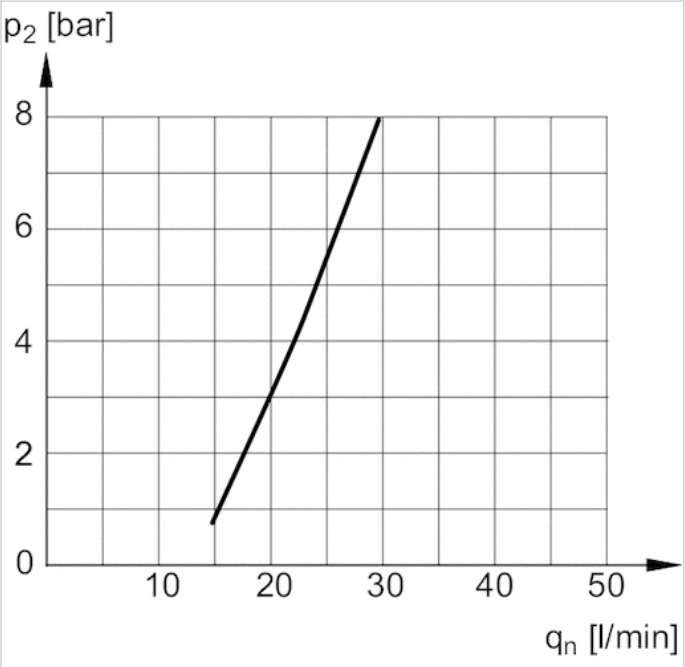
Dimensions



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

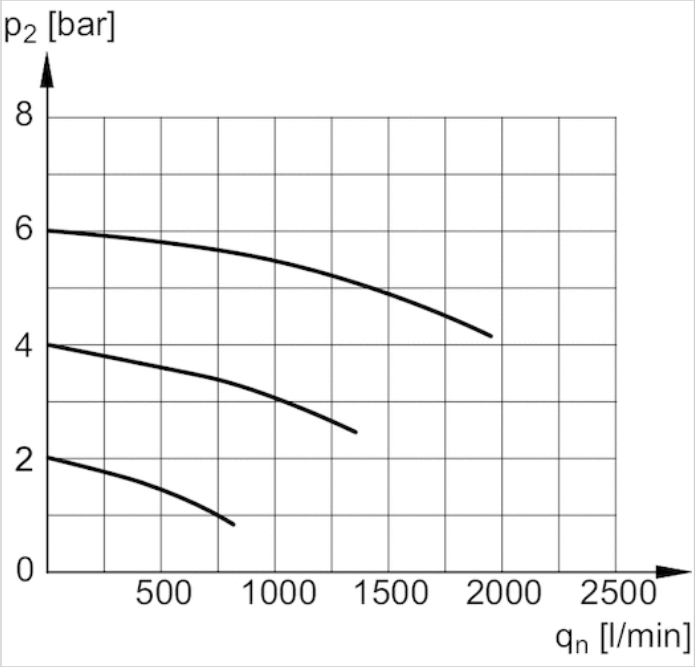
Diagrams

Lubricator activation margin



p2 = secondary pressure
qn = nominal flow

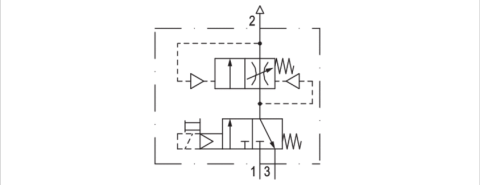
Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Filling unit, electrically operated, Series AS1-SSU

- Compressed air connection G 1/4
- Air supply left
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Parts	Filling valve, 3/2-directional valve, electrically operated
Nominal flow	1.32 Cv
Nominal flow 1 ▸ 2	1.32 Cv
Nominal flow 2 ▸ 3	0.386 Cv
Working pressure min./max.	37 ... 145 psi
Medium	Compressed air, Neutral gases
Medium temperature min./max.	14 ... 122 °F
Ambient temperature min./max.	14 ... 122 °F
Pilot	Internal
Sealing principle	Soft sealing
Max. particle size	25 µm
Protection class acc. to DIN EN 61140,with plug	IP65
Duty cycle	100 %
Weight	See table below

Technical data

Part No.		Compressed air connection input	Compressed air connection output	Exhaust
R412010484		G 1/4	G 1/4	G 1/4
R412010682		G 1/4	G 1/4	G 1/4

Part No.	Operational voltage	Power consumption	Electrical connection
	DC	DC	Pilot valve
R412010484	24 V	2 W	Plug, ISO 15217, form C
R412010682	24 V	2 W	Plug, M12

Part No.	basic valve with electrical connector	Weight	Fig.
R412010484	Basic valve with pilot valve	0.794 lbs	Fig. 1
R412010682	Basic valve with pilot valve	0.831 lbs	Fig. 2

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi, MO = Manual override

Technical information

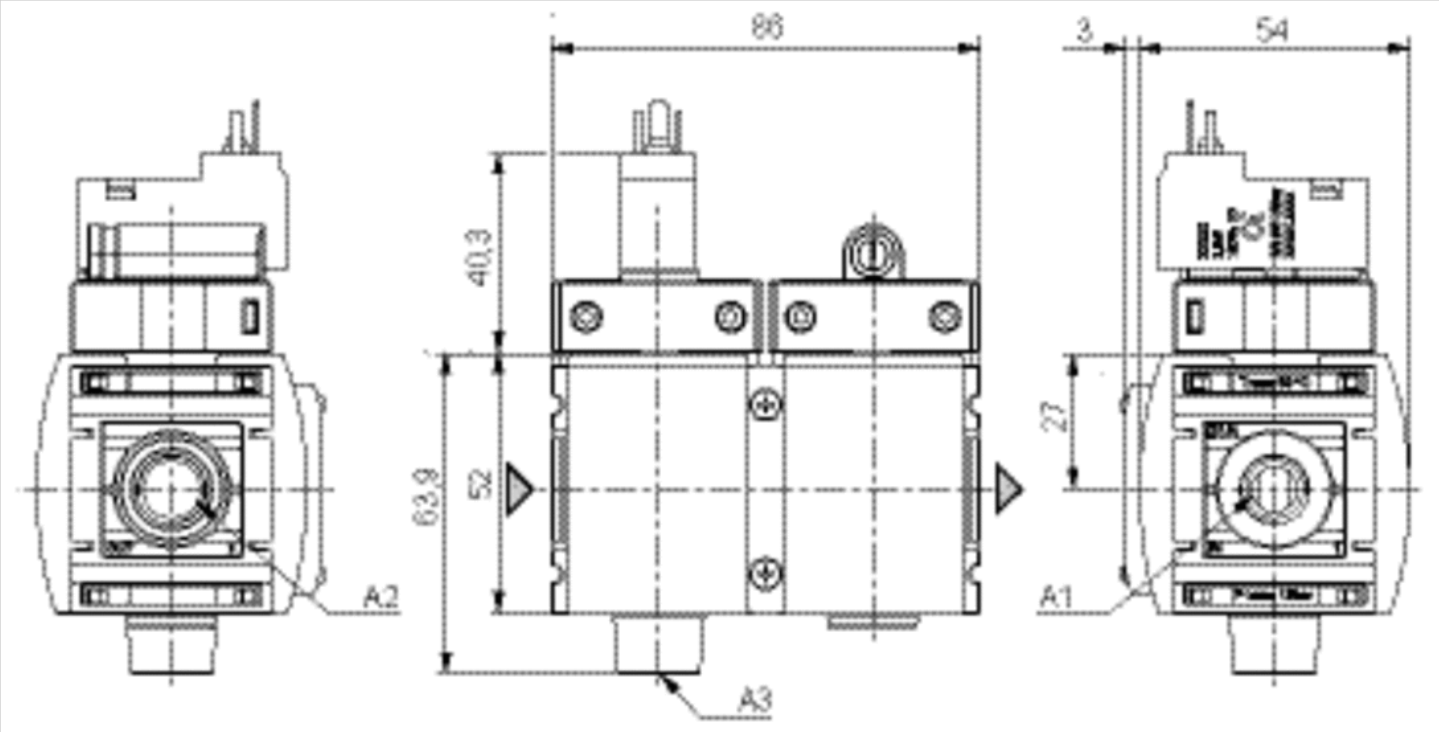
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids 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.

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

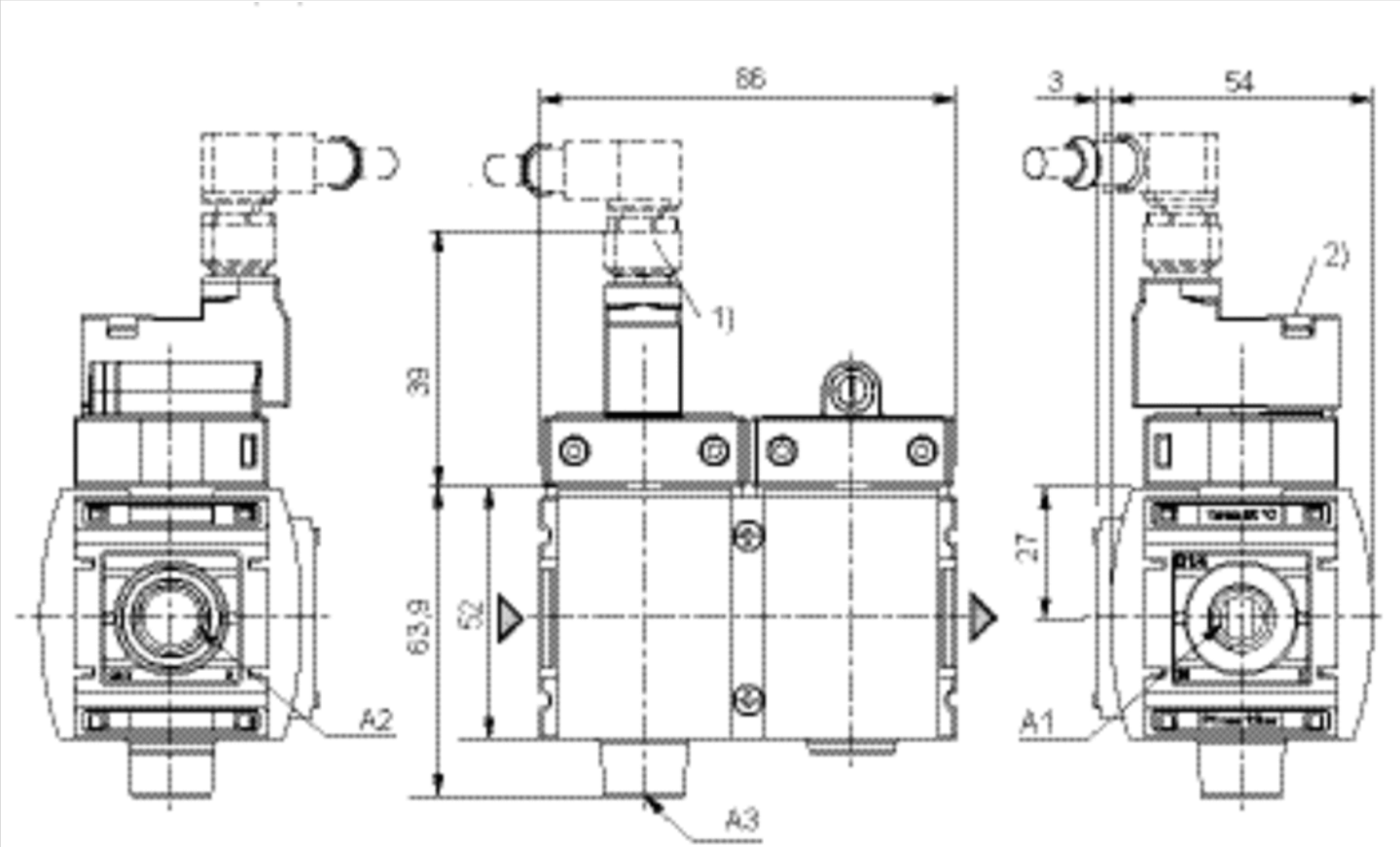
Dimensions

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



A1 = input
A2 = output
A3 = ventilation port

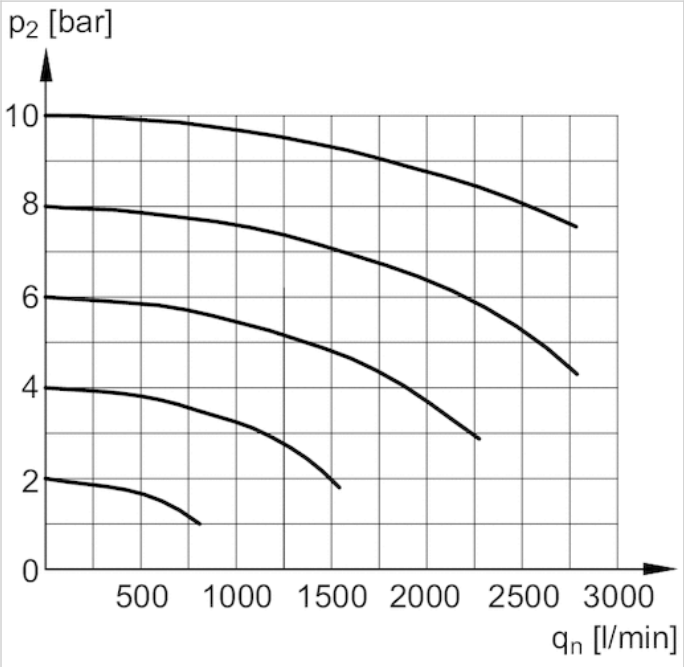
Fig. 2: Filling unit with pilot valve and electrical connector for plug M12x1



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

Diagrams

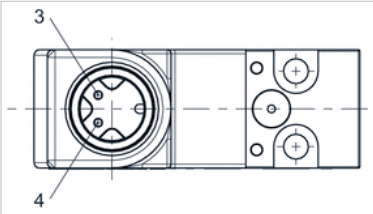
Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Pin assignments

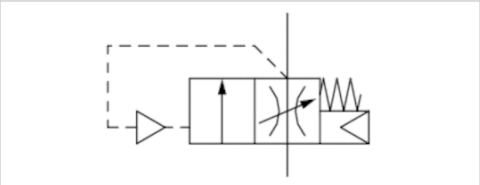
Pin assignment M12x1



3: +/-
4: +/-

Filling valve, pneumatically operated, Series AS1-SSV

- adjustable filling time
- Compressed air connection G 1/4
- Air supply left
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 232 psi
Control pressure min./max.	37 ... 232 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Max. particle size	40 µm
Weight	0.294 lbs

Technical data

Part No.	Port	Flow	Flow
		Qn	Qn 1▸2
R412014671	G 1/4	2.03 Cv	2.03 Cv

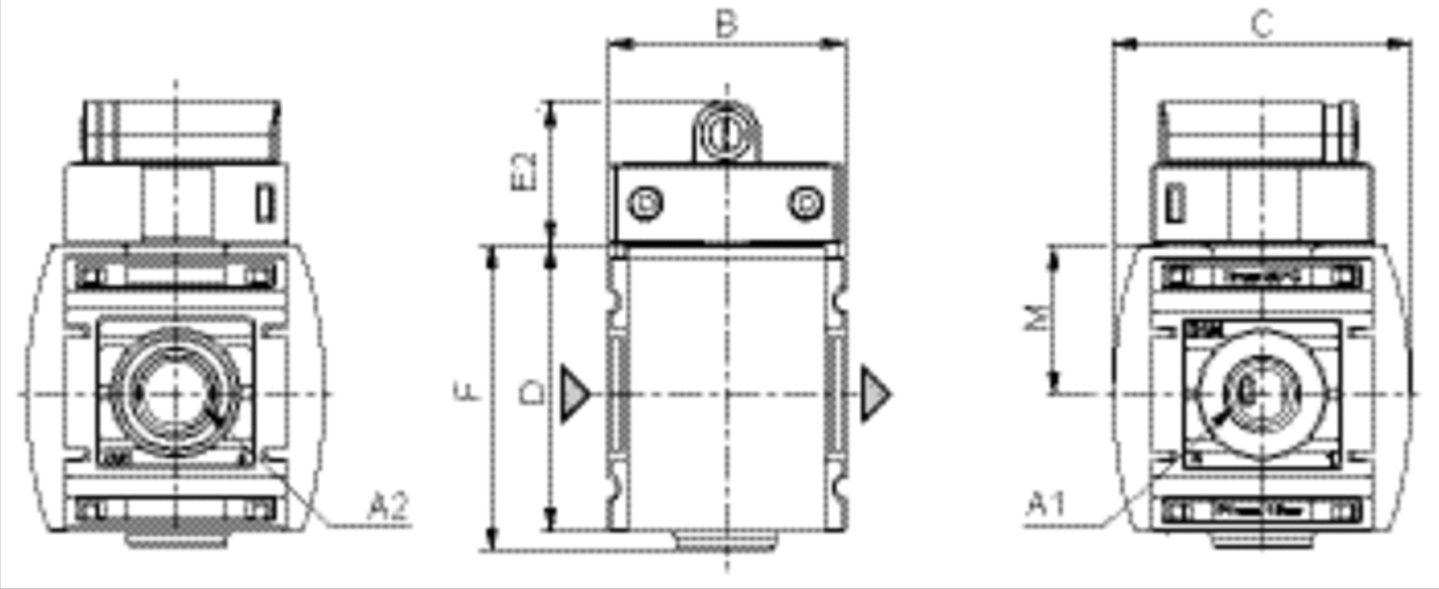
Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

Dimensions

Dimensions



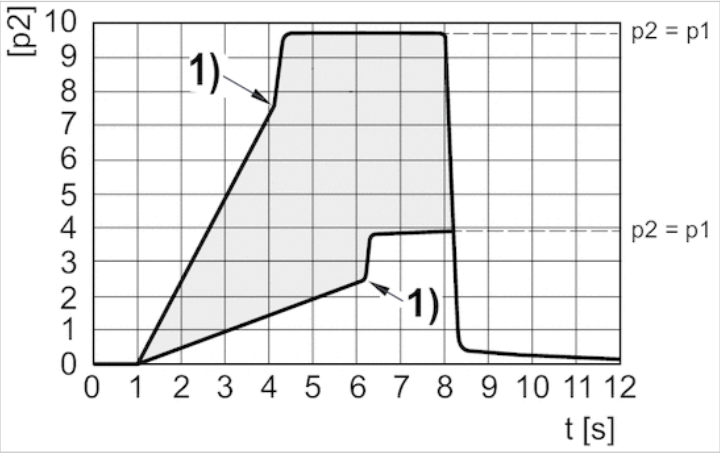
A1 = input
A2 = output

Dimensions in mm

A1	A2	B	C	D	E2	F	M
G 1/4	G 1/4	43	54	52	26	54.9	27

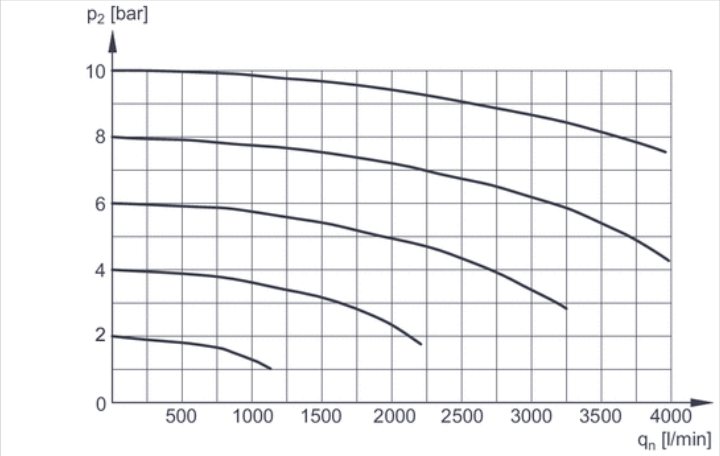
Diagrams

Secondary pressure while filling



p1 = working pressure
p2 = secondary pressure
t = filling time, adjustable via adjustment screw (throttle)
Change-over pressure individually adjustable via pneumatic signal
1) Switching point: adjustable filling time and change-over pressure

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

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

- Compressed air connection G 1/4
- Air supply left
- Pipe connection
- NC

Version	Poppet valve, Can be assembled into blocks
Parts	3/2-directional valve, electrically operated
Nominal flow 1 ▸ 2	2.03 Cv
Nominal flow 2 ▸ 3	0.386 Cv
Working pressure min./max.	29 ... 145 psi
Medium	Compressed air, Neutral gases
Medium temperature min./max.	14 ... 122 °F
Ambient temperature min./max.	14 ... 122 °F
Pilot	Internal
Sealing principle	Soft sealing
Max. particle size	25 µm
Oil content of compressed air	0 ... 5 mg/m³
Protection class acc. to DIN EN 61140,with plug	IP65
Weight	See table below

Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412014669		—	G 1/4	G 1/4	G 1/4
R412014670		—	G 1/4	G 1/4	G 1/4
R412014666			G 1/4	G 1/4	G 1/4
R412014668			G 1/4	G 1/4	G 1/4
R412010680			G 1/4	G 1/4	G 1/4

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412014669	-	-	-
R412014670	-	-	-
R412014666	24 V	-	-
R412014668	-	230 V	230 V
R412010680	24 V	-	-

Part No.	Power consumption	Holding power	Switch-on power	Switch-on power
	DC	AC 50 Hz	AC 50 Hz	AC 60 Hz
R412014669	-	-	-	-
R412014670	-	-	-	-
R412014666	2 W	-	-	-
R412014668	-	1.6 VA	3 VA	3 VA
R412010680	2 W	-	-	-

Part No.	Electrical connection	Connector standard
	Pilot valve	
R412014669	-	-
R412014670	-	-
R412014666	Plug, ISO 15217, form C	EN 175301-803, form C
R412014668	Plug, ISO 15217, form C	EN 175301-803, form C
R412010680	Plug, M12	-

Part No.	basic valve with electrical connector	Weight	Fig.
R412014669	Basic valve without pilot valve	0.433 lbs	Fig. 1
R412014670	Basic valve without pilot valve, with CNOMO subbase	0.462 lbs	Fig. 1
R412014666	Basic valve with pilot valve	0.475 lbs	Fig. 2
R412014668	Basic valve with pilot valve	0.472 lbs	Fig. 2
R412010680	Basic valve with pilot valve	0.512 lbs	Fig. 3

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi, MO = Manual override

Technical information

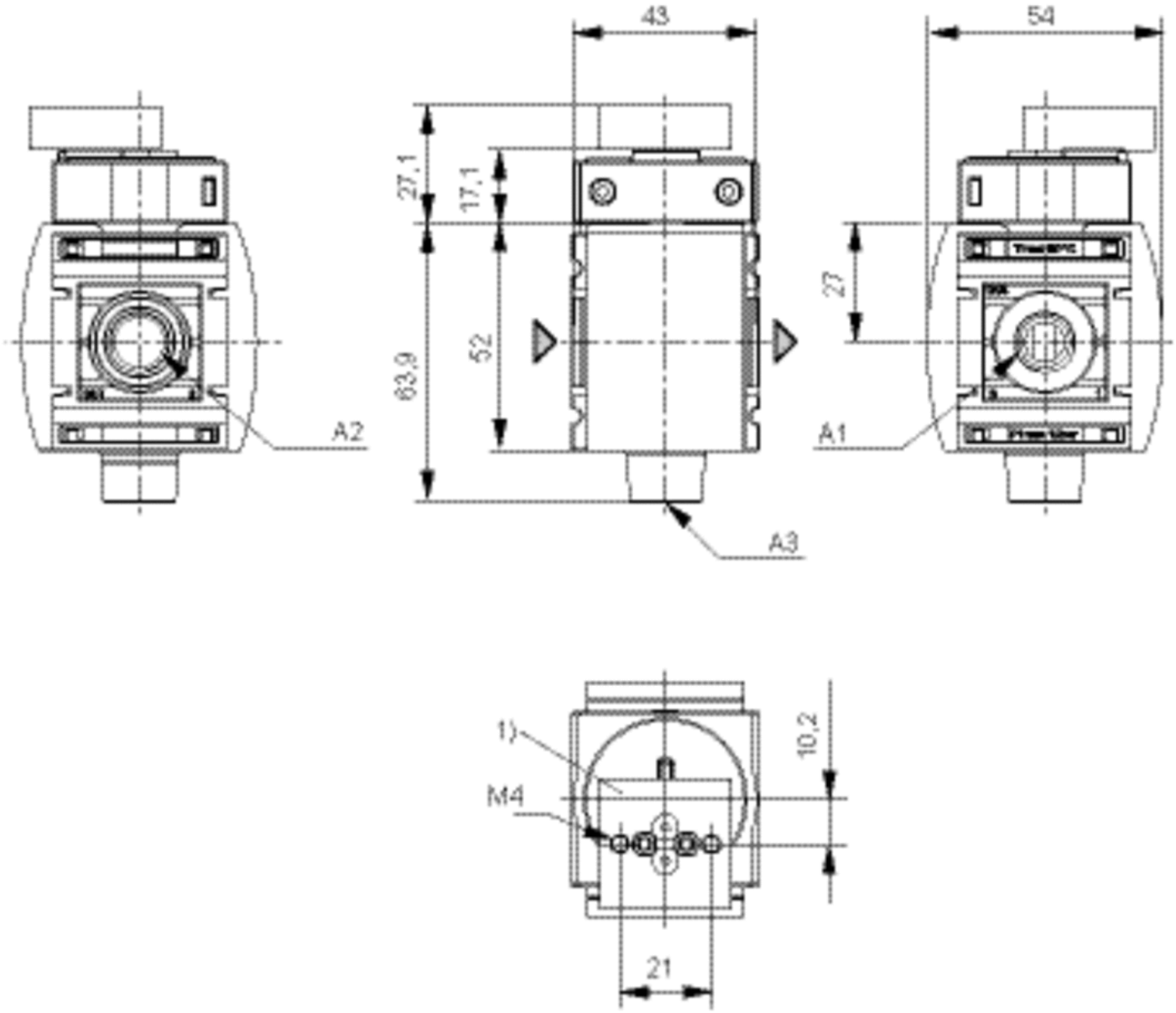
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

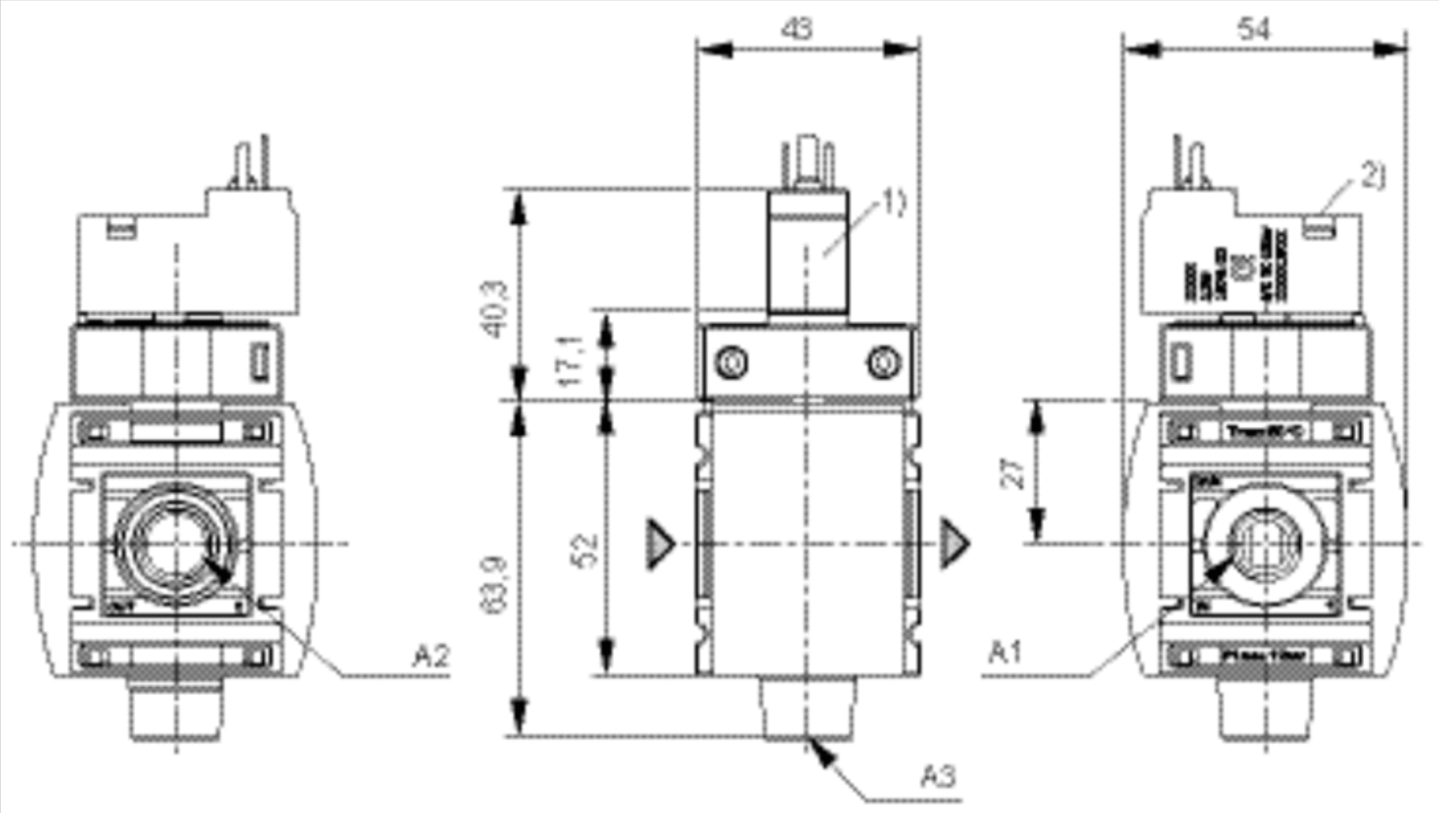
Dimensions

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



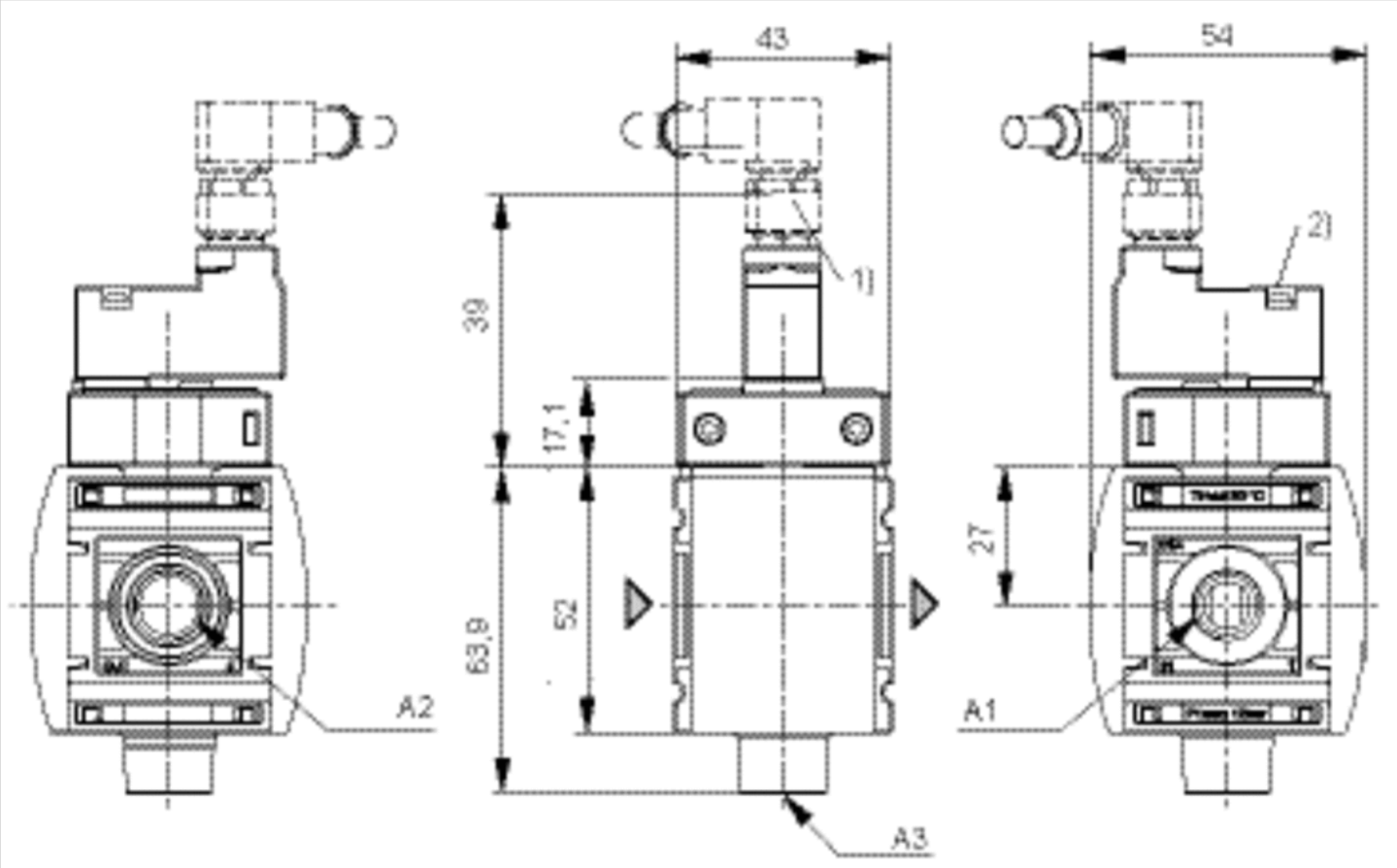
A1 = input
A2 = output
A3 = ventilation port
1) Transition plate with CNOMO porting configuration for pilot valve DO30

Fig. 2: 3/2 directional valve with pilot valve and connection for valve plug connector form C



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

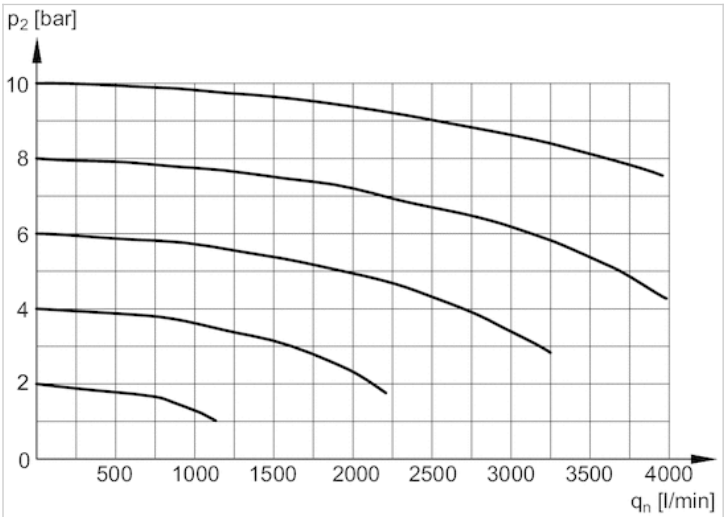
Fig. 3: 3/2-directional valve with pilot valve push-in fitting M12x1



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

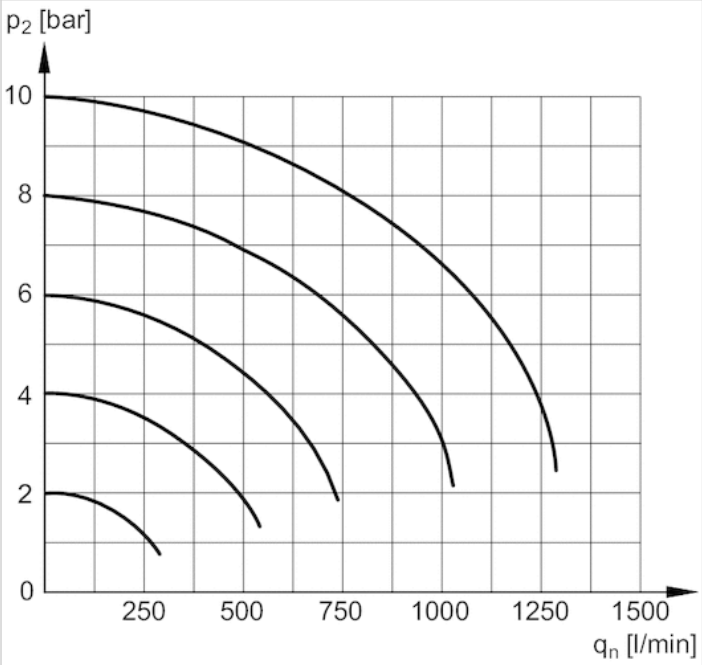
Diagrams

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

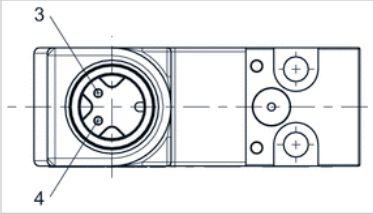
Rear exhaust



p2 = secondary pressure
qn = nominal flow

Pin assignments

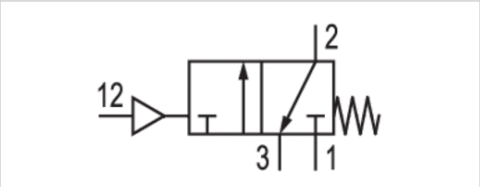
Pin assignment M12x1



3: +/-
4: +/-

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

- Compressed air connection G 1/4
- Air supply left
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 232 psi
Control pressure min./max.	37 ... 232 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Weight	0.198 lbs

Technical data

Part No.	Port	Pilot connection	Exhaust	Flow	Flow	Flow
				Qn	Qn 1▸2	Qn 2▸3
R412014665	G 1/4	G 1/8	G 1/4	2.03 Cv	2.03 Cv	0.386 Cv

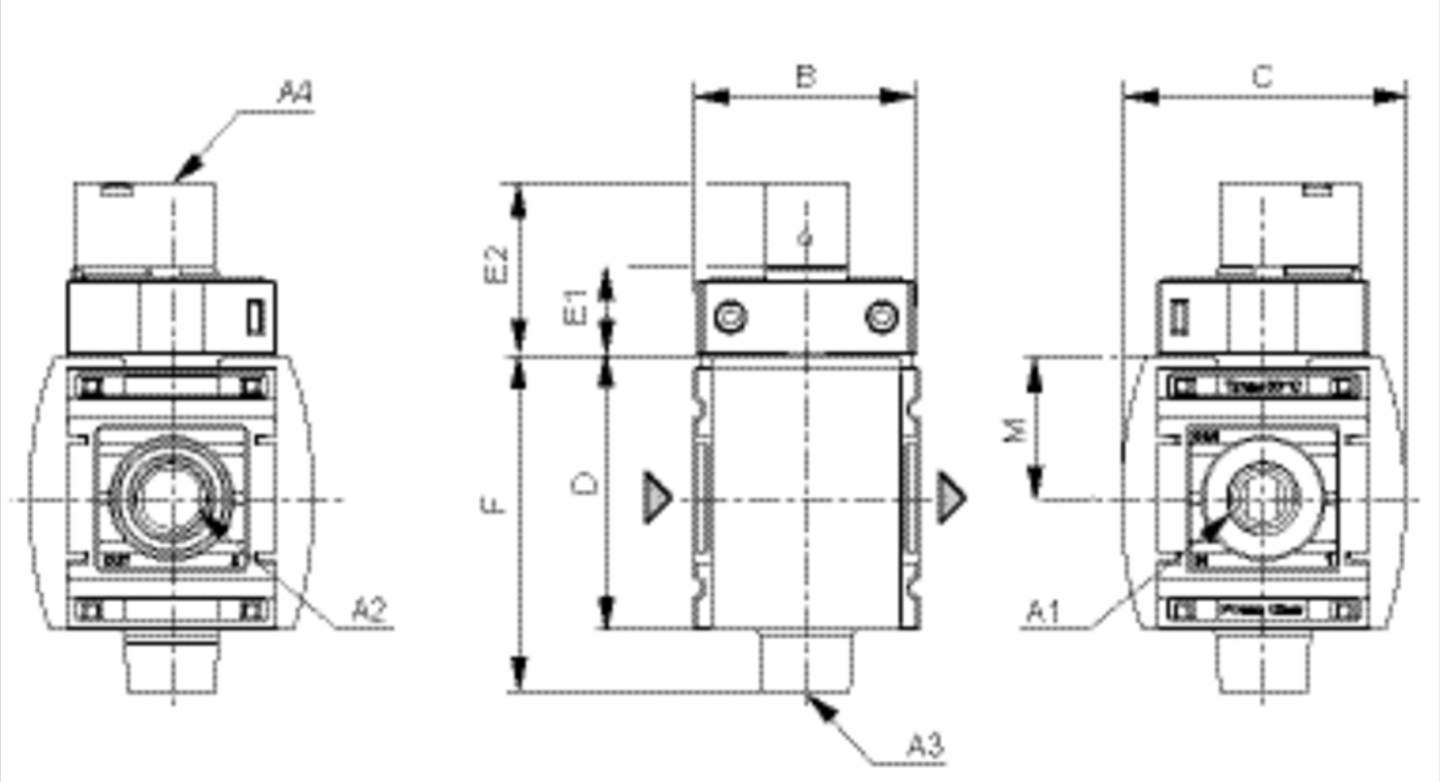
Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



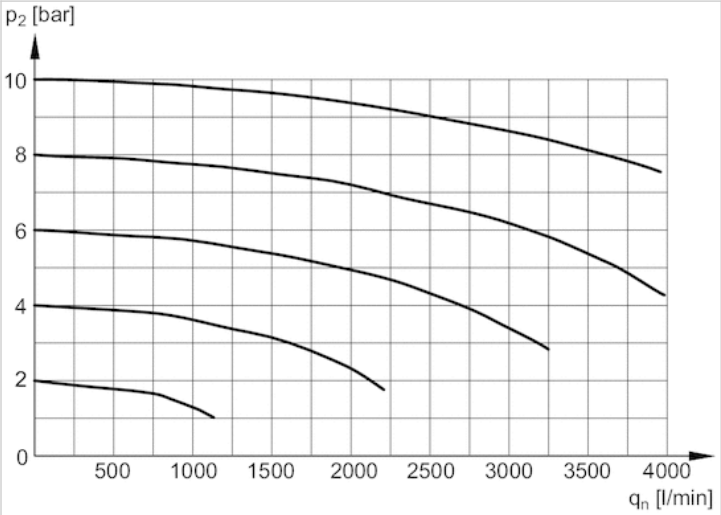
A1 = input
A2 = output
A3 = ventilation port
A4 = control pressure connection

Dimensions in mm

A1	A2	A3	A4	B	C	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

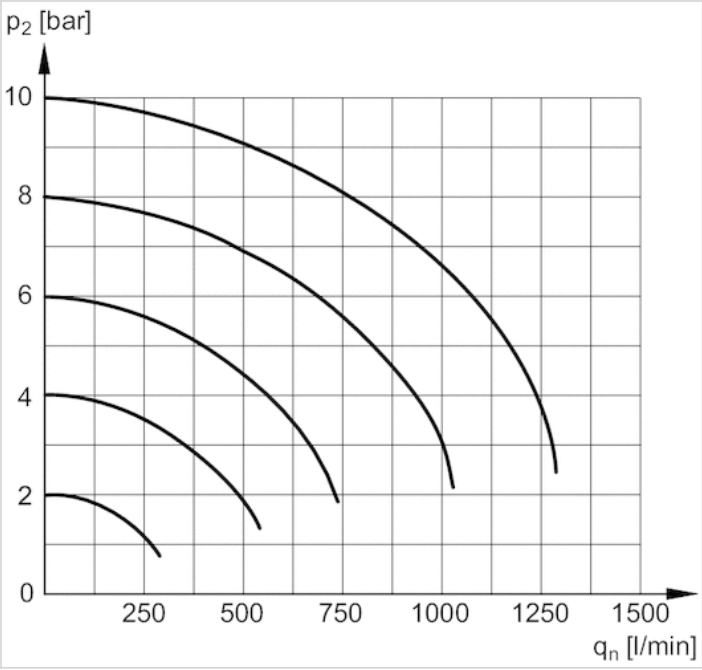
Diagrams

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

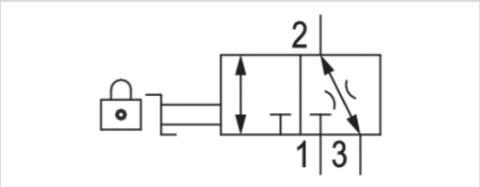
Rear exhaust



p2 = secondary pressure
qn = nominal flow

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

- G 1/4
- Air supply left
- lockable
- for padlocks



Version	Ball valve
Activation	Mechanical
Lock type	lockable
Actuating element	rotary switch
Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Max. particle size	25 µm
Weight	0.331 lbs

Technical data

Part No.	Compressed air connection	Compressed air connection
	Input	Output
R412014664	G 1/4	G 1/4

Part No.	Compressed air connection	Flow	Flow	Lock type
	Exhaust	Qn 1 ▸ 2	Qn 2▸3	
R412014664	G 1/4	2.64 Cv	0.335 Cv	for padlocks

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .

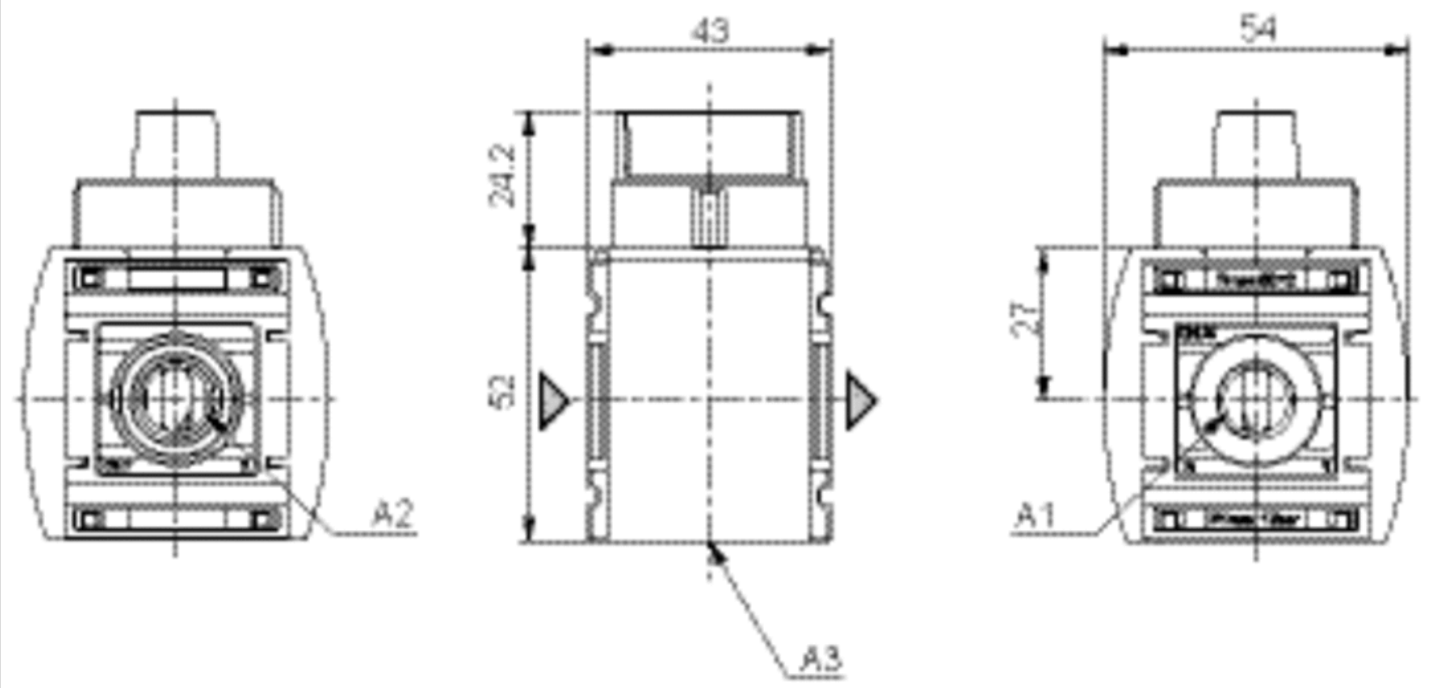
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Material	
Actuating element	Polyoxymethylene

Dimensions

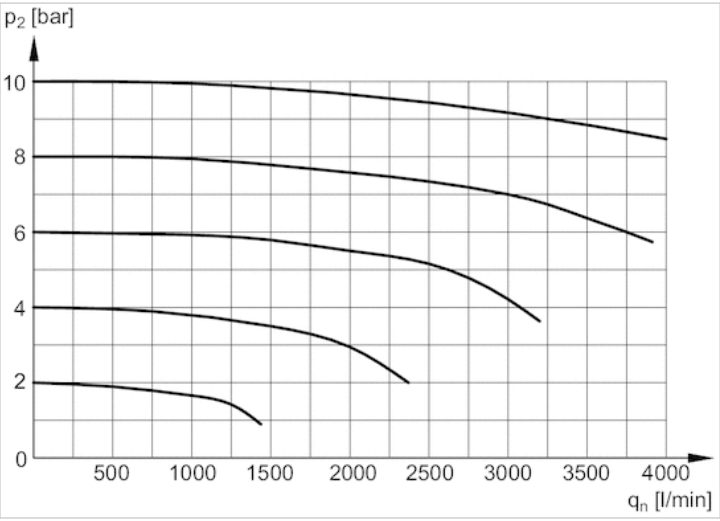
Dimensions



A1 = input
A2 = output
A3 = ventilation port

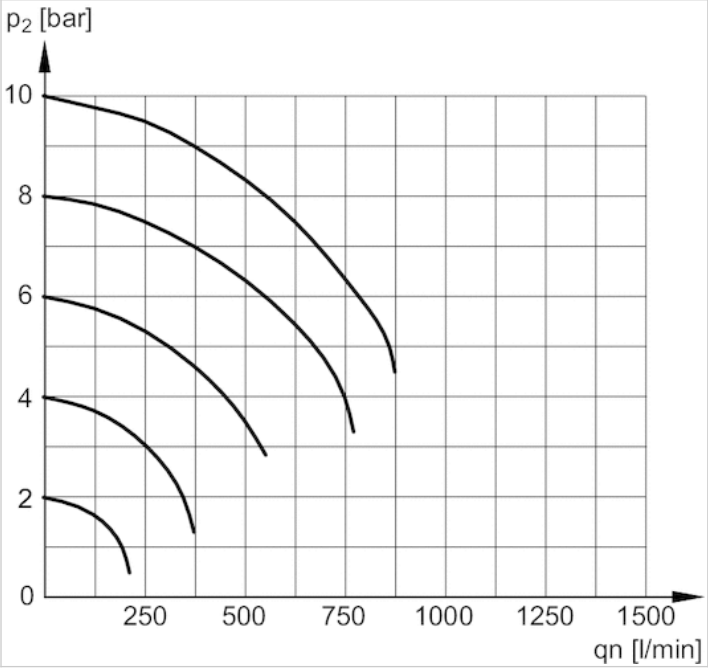
Diagrams

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

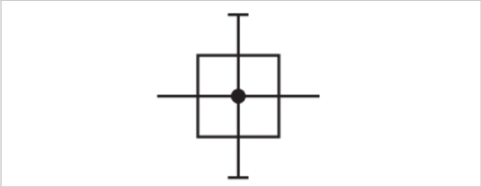
Rear exhaust



p2 = secondary pressure
qn = nominal flow

Distributor, Series AS1-DIS

- G 1/4
- Air supply left
- Distributor 2x
- Distributor



Version	Distributor, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Weight	0.326 lbs

Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow
		Qn 1▸2	Qn 1▸3	Qn 1▸5
R412014662	G 1/4	2.74 Cv	0.965 Cv	2.03 Cv

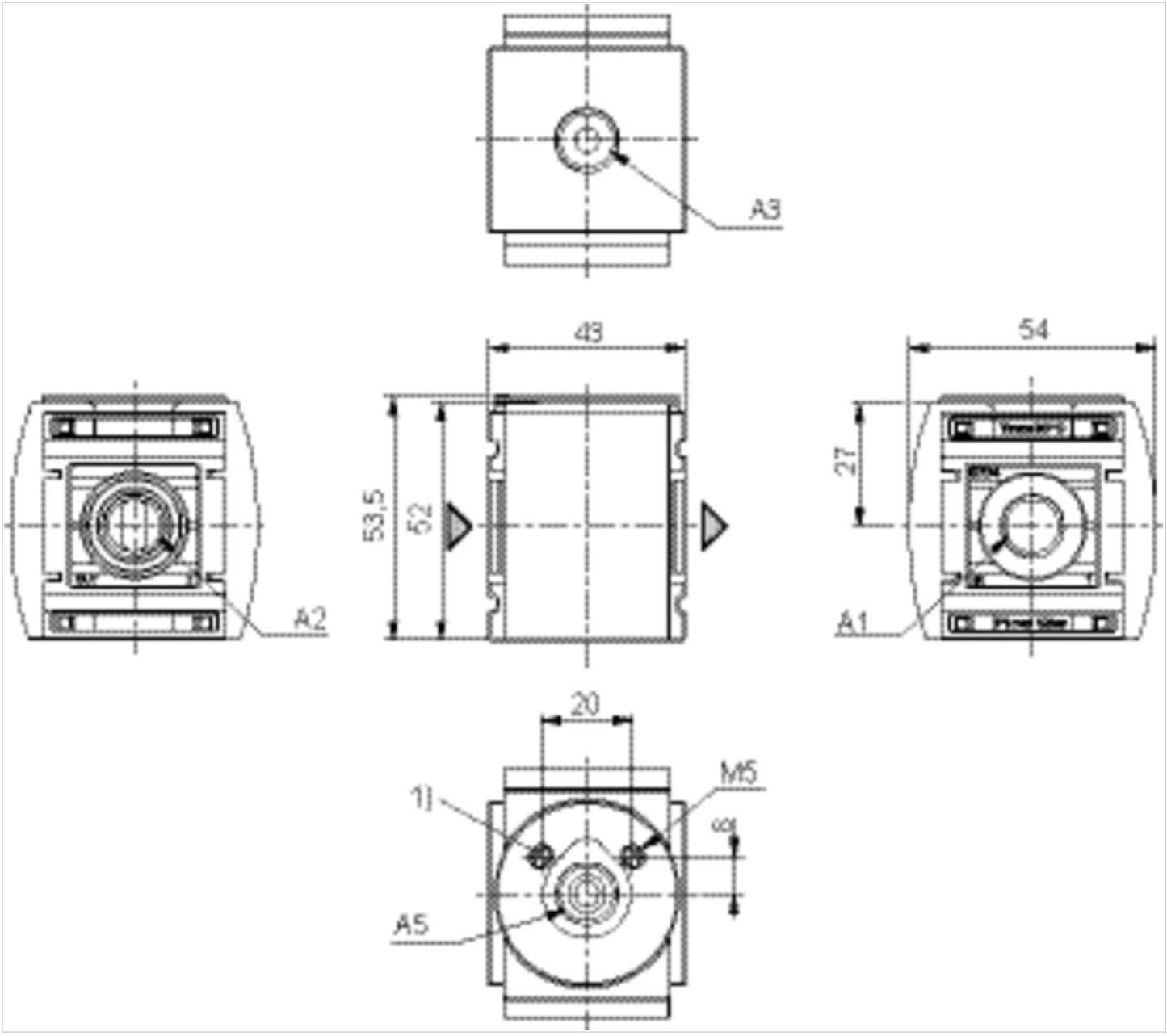
Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

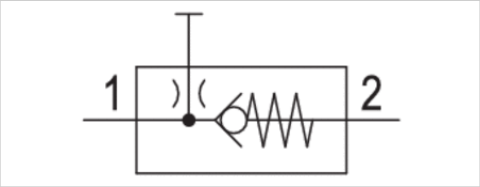
Dimensions



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
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Weight	0.392 lbs

Technical data

Part No.	Port	Nominal flow	Nominal flow
		Qn 1▸2	Qn 1▸3
R412014663	G 1/4	0.813 Cv	1.02 Cv

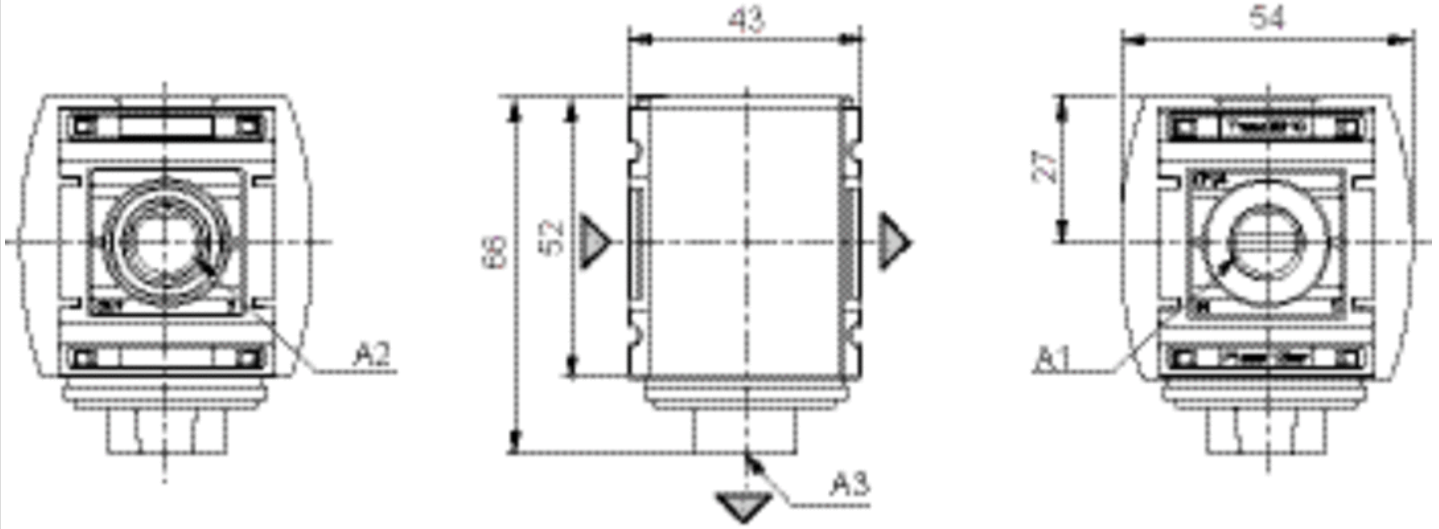
Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

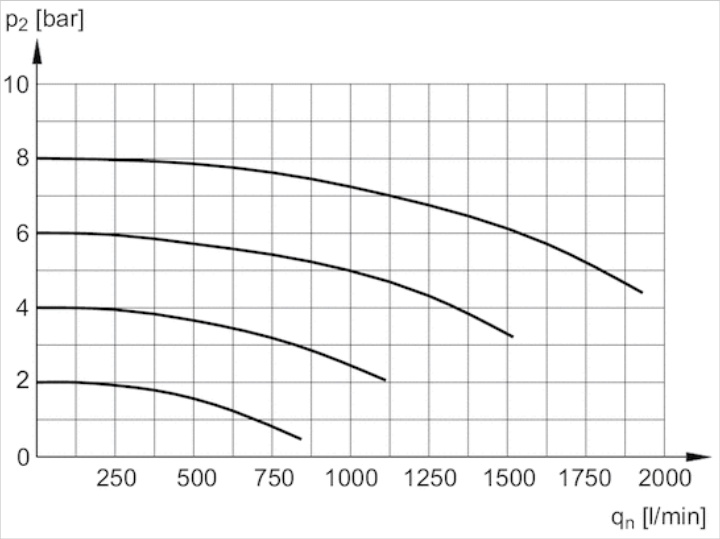
Dimensions



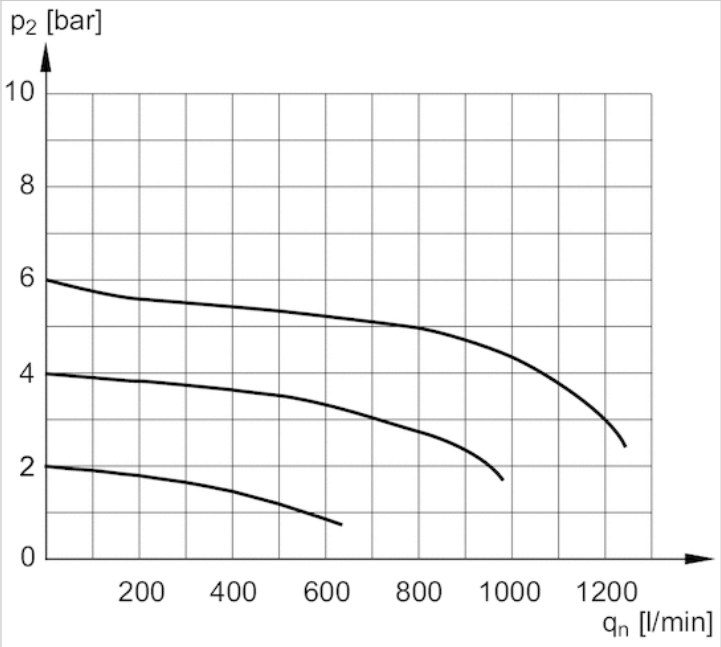
A1 = input
A2 = output
A3 = output

Diagrams

Flow rate characteristic



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



Nominal flow 1 ▸ 3
p2 = secondary pressure
qn = nominal flow

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply right
- Qn = 1.02 Cv
- Standard pressure regulator
- Activation Manual

Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Activation	Manual
Weight	See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412014705			G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014706			G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014707			G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi
R412014711		–	G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014712		–	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014713		–	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight
R412014705	40 mm	With integrated pressure gauge	0.461 lbs
R412014706	40 mm	With integrated pressure gauge	0.461 lbs
R412014707	40 mm	With integrated pressure gauge	0.461 lbs
R412014711	40 mm	-	0.454 lbs
R412014712	40 mm	-	0.454 lbs
R412014713	40 mm	-	0.454 lbs

Part No.	Fig.
R412014705	Fig. 1
R412014706	Fig. 1
R412014707	Fig. 1
R412014711	Fig. 2
R412014712	Fig. 2
R412014713	Fig. 2

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

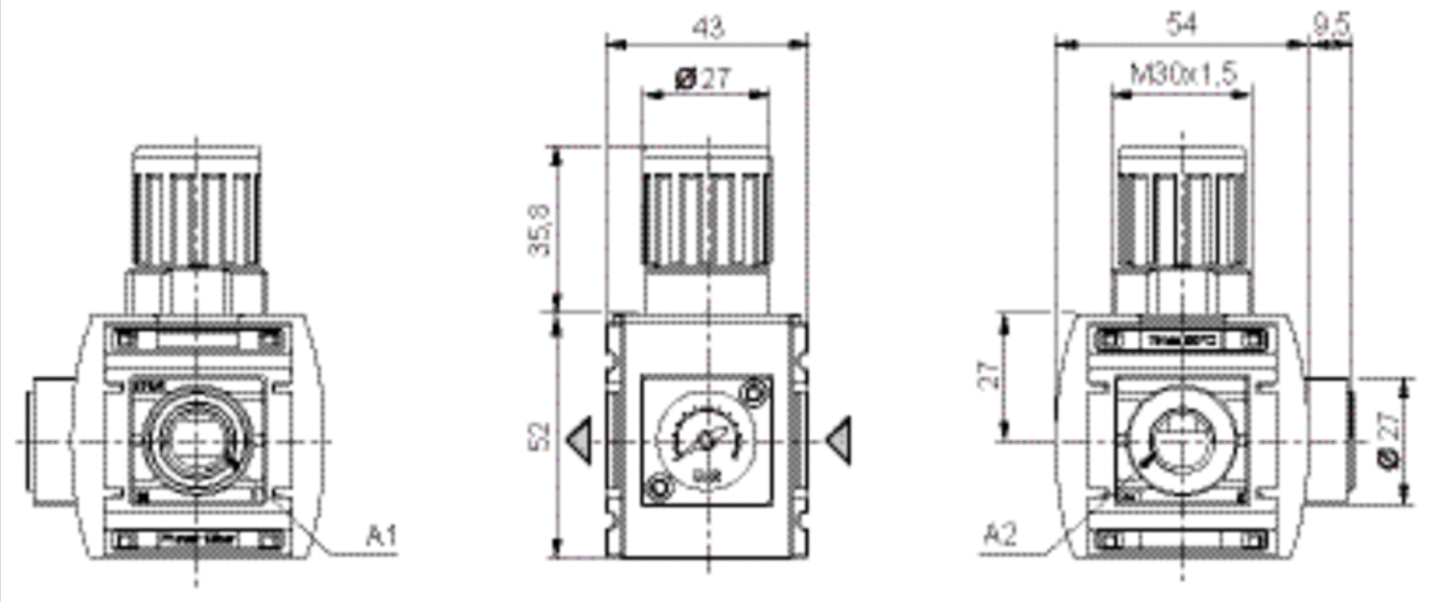
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

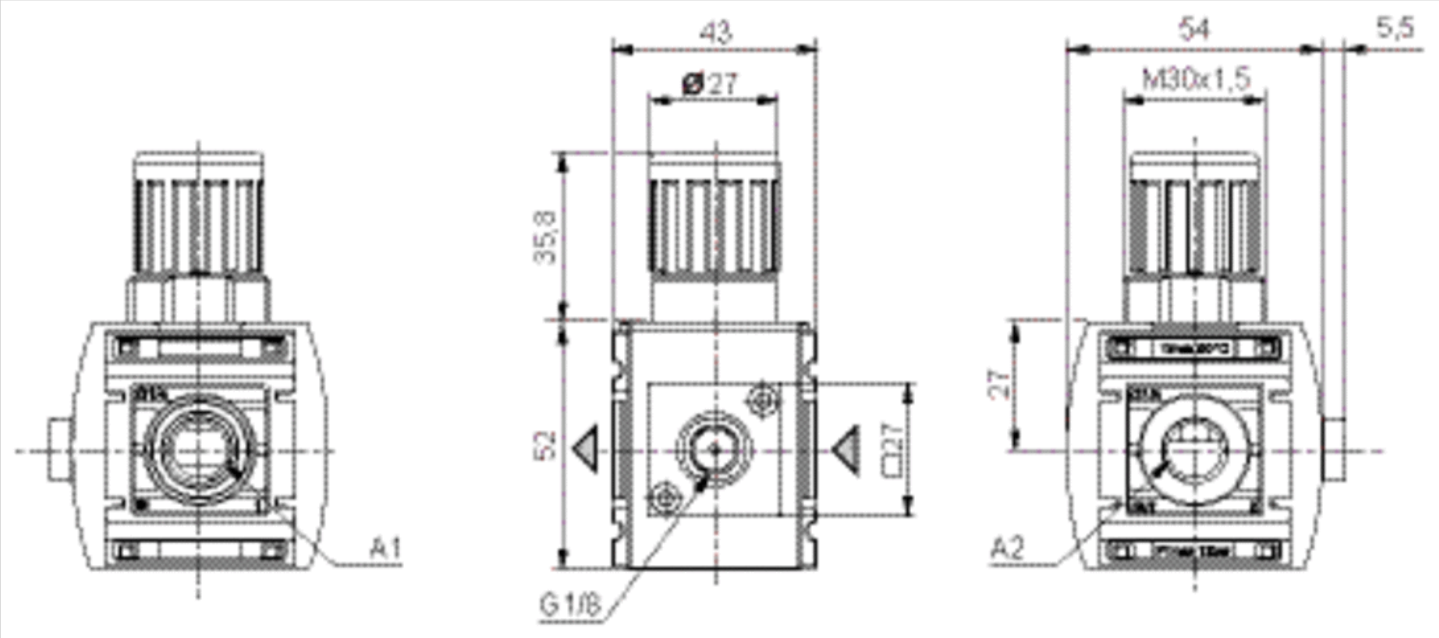
Dimensions

Dimensions Fig. 1



A1 = input
A2 = output

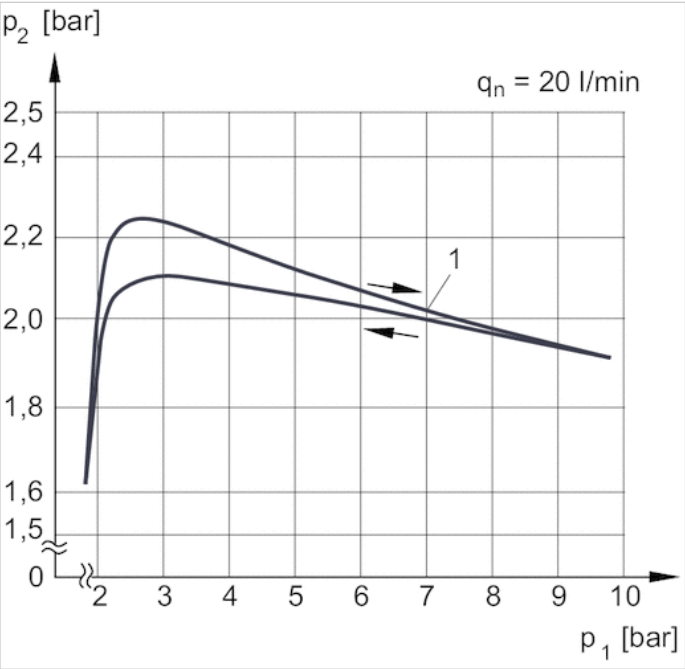
Dimensions Fig. 2



A1 = input
A2 = output

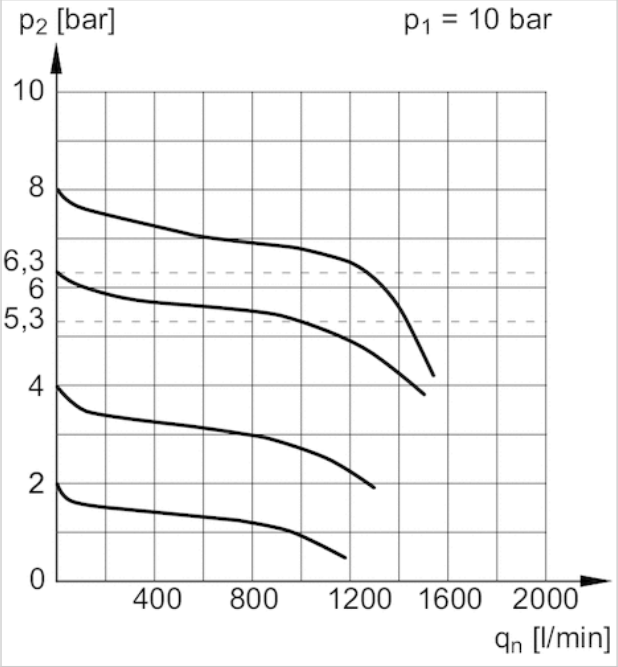
Diagrams

Pressure characteristics curve



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

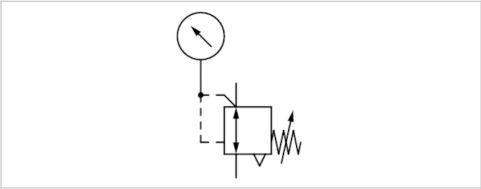
Flow rate characteristic



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

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply right
- Qn = 1.02 Cv
- Standard pressure regulator
- Activation Manual
- with pressure gauge in hand wheel



Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Activation	Manual
Weight	0.527 lbs

Technical data

Part No.		Port	Flow	Working pressure min./max.	Adjustment range min./max.
			Qn		
R412014717		G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014718		G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014719		G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi

Part No.	Pressure gauge
R412014717	with pressure gauge in hand wheel
R412014718	with pressure gauge in hand wheel
R412014719	with pressure gauge in hand wheel

Panel nut included in scope of delivery, Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

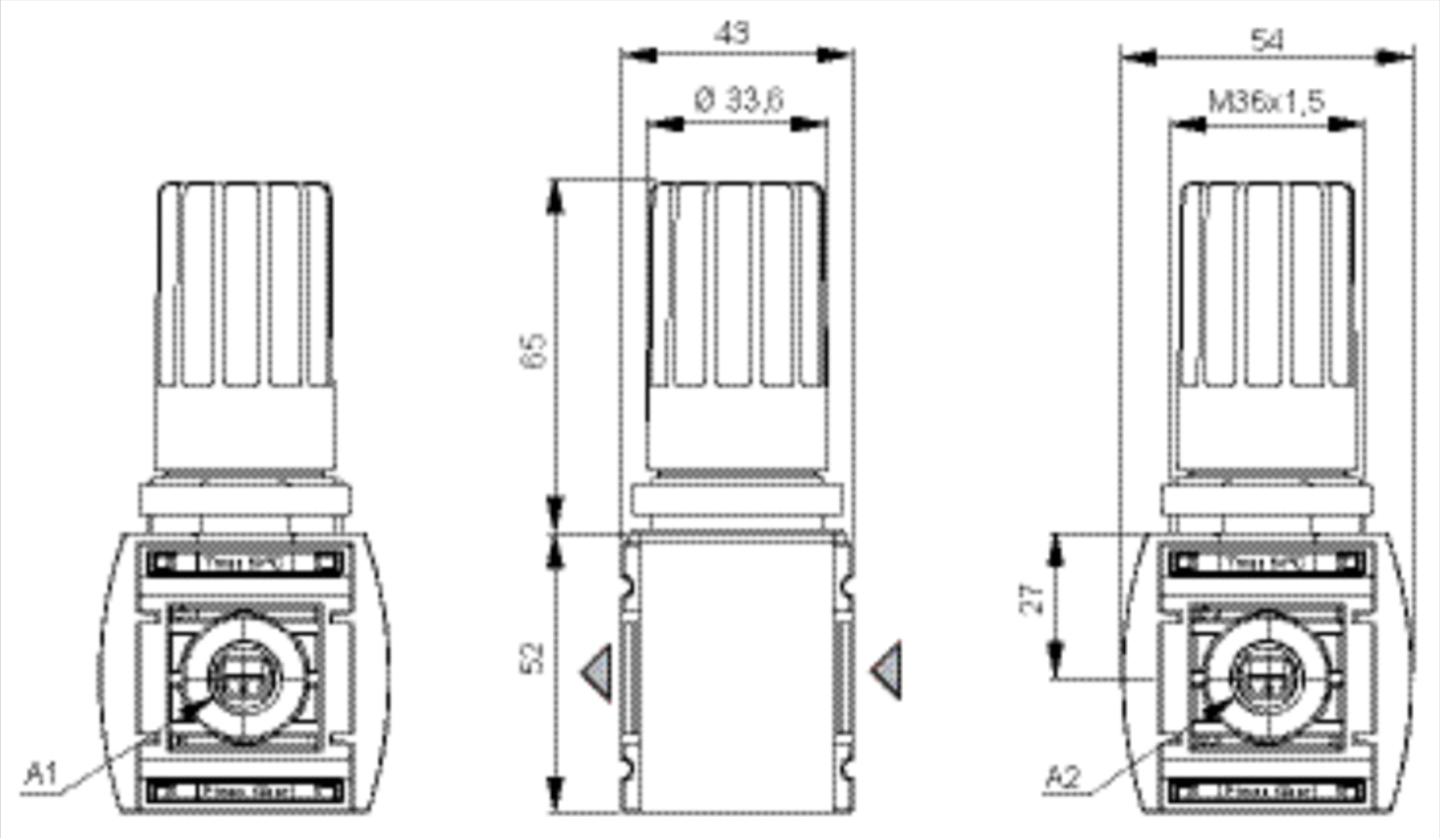
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

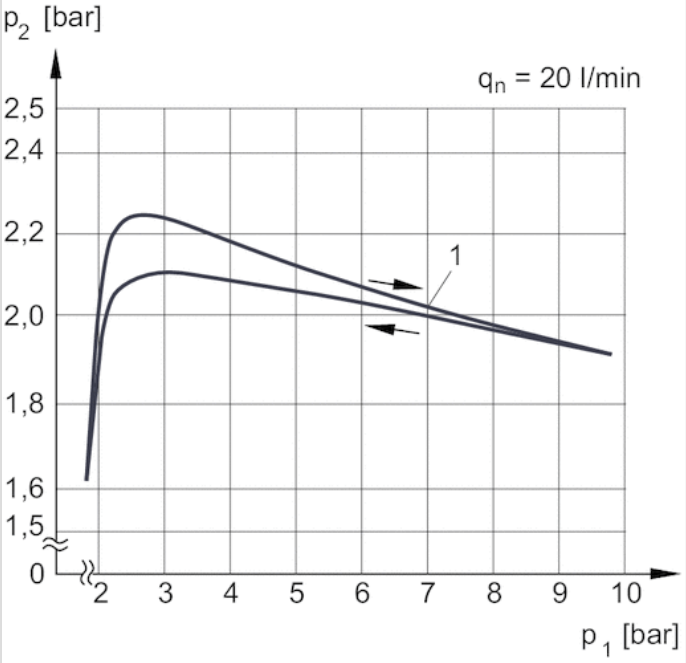
Dimensions



A1 = input
A2 = output

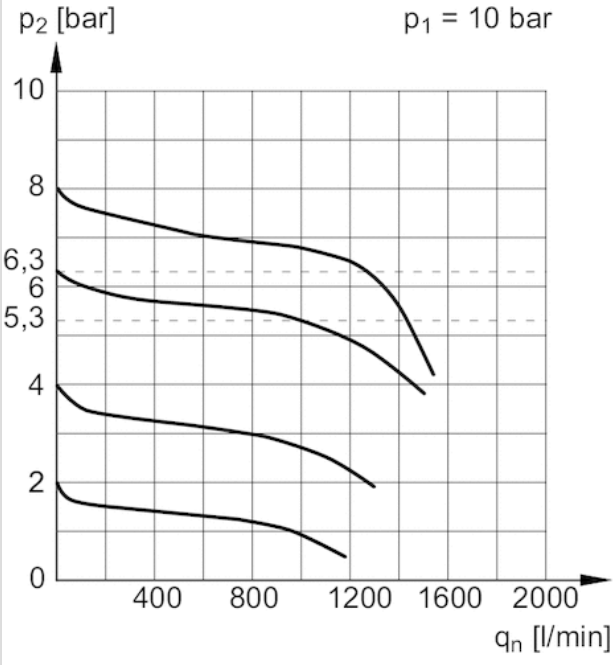
Diagrams

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 = 1.02 Cv
- Standard pressure regulator
- Activation Manual
- with continuous pressure supply

Parts	Pressure regulator with continuous pressure supply
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	double
Activation	Manual
Weight	See table below

Technical data

Part No.			Port	Flow Qn	Working pressure min./max.	Adjustment range min./max.
R412014708			G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014709			G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014710			G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi
R412010559		–	G 1/4	1.02 Cv	2 ... 174 psi	2 ... 14 psi
R412014714		–	G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014715		–	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014716		–	G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight
R412014708	40 mm	With integrated pressure gauge	0.461 lbs
R412014709	40 mm	With integrated pressure gauge	0.461 lbs
R412014710	40 mm	With integrated pressure gauge	0.461 lbs
R412010559	40 mm	-	0.454 lbs
R412014714	40 mm	-	0.454 lbs
R412014715	40 mm	-	0.454 lbs
R412014716	40 mm	-	0.454 lbs

Part No.	Fig.
R412014708	Fig. 1
R412014709	Fig. 1

Part No.	Fig.
R412014710	Fig. 1
R412010559	Fig. 2
R412014714	Fig. 2
R412014715	Fig. 2
R412014716	Fig. 2

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

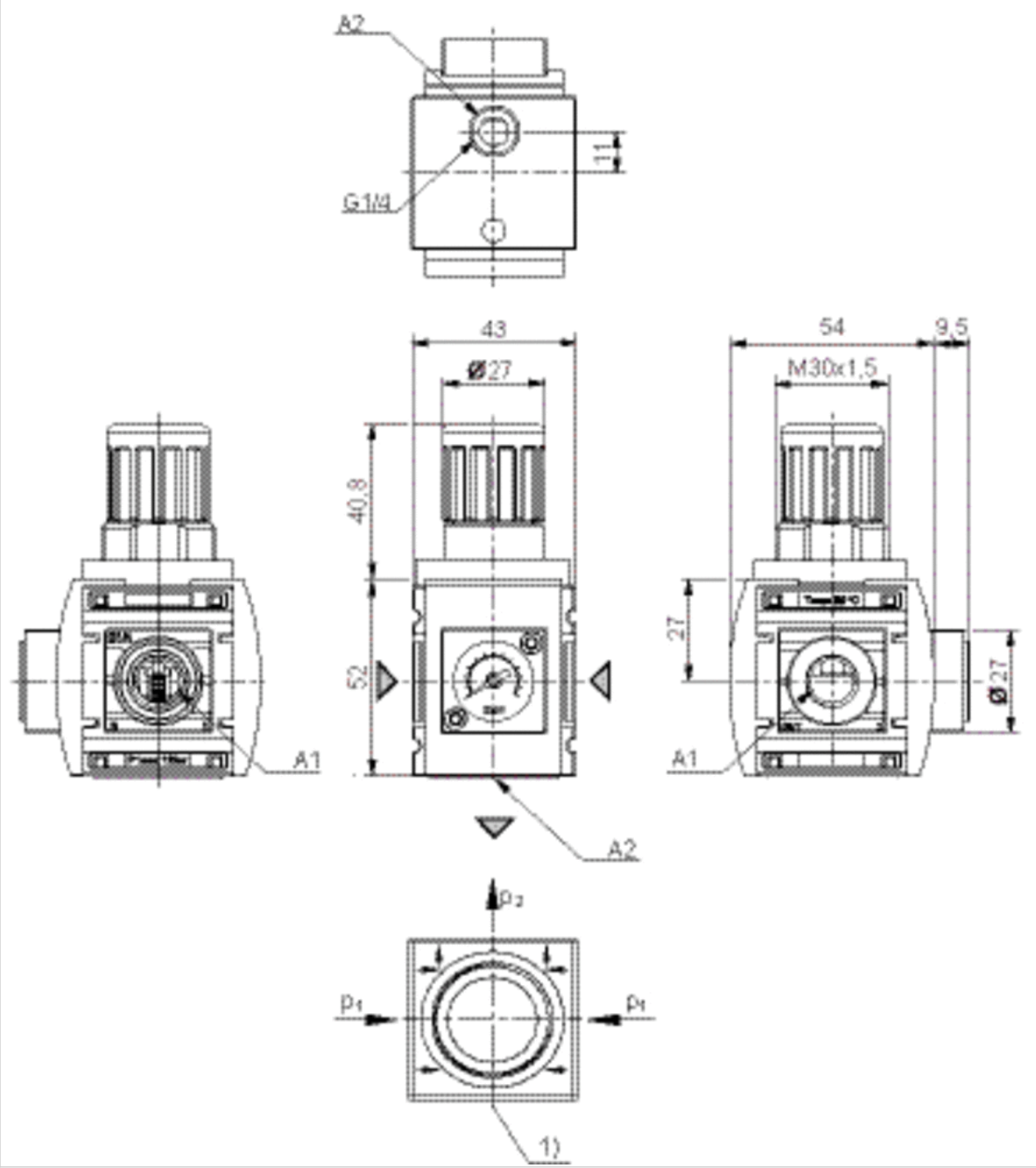
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

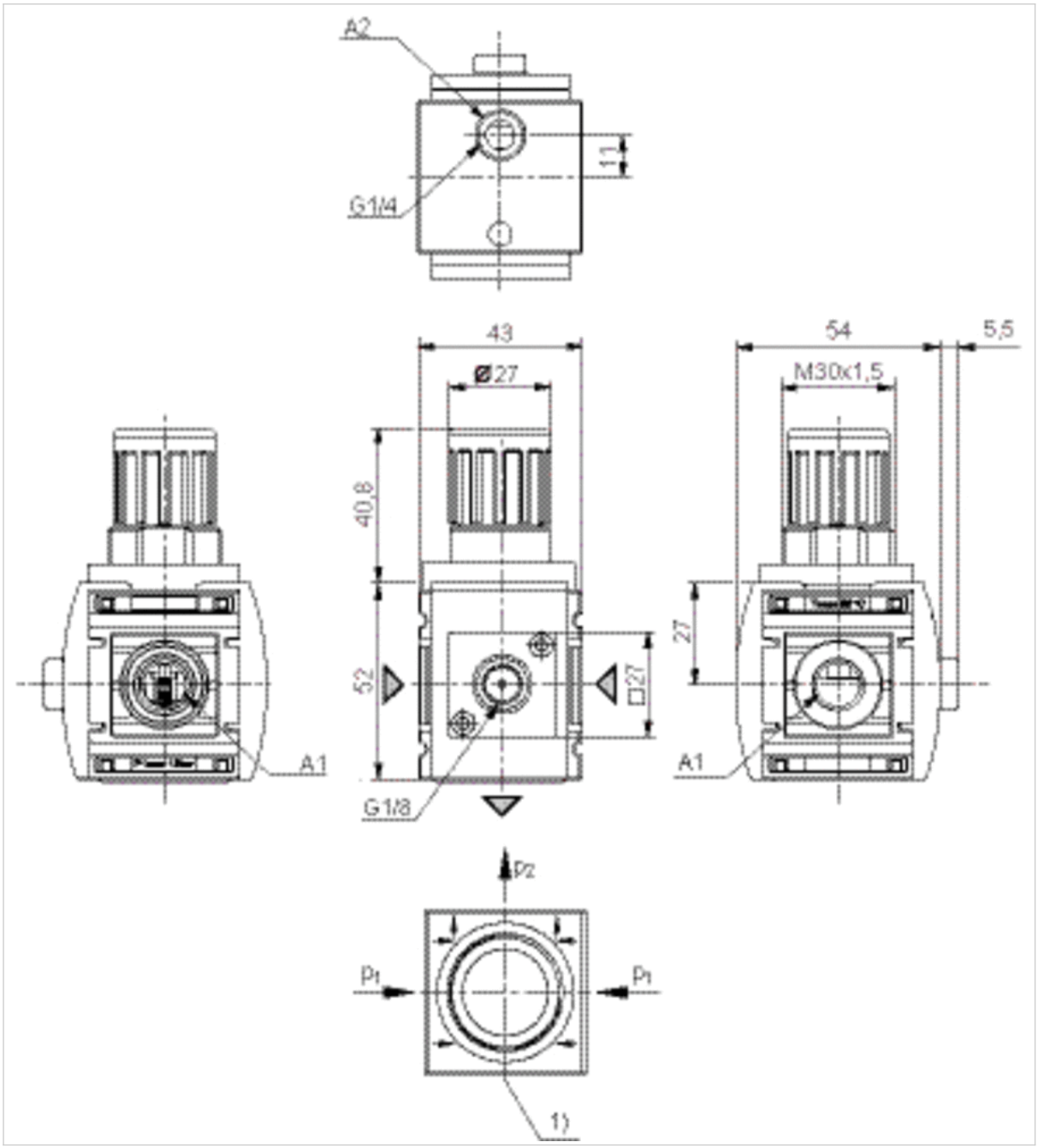
Dimensions

Dimensions Fig. 1



A1 = input
A2 = output

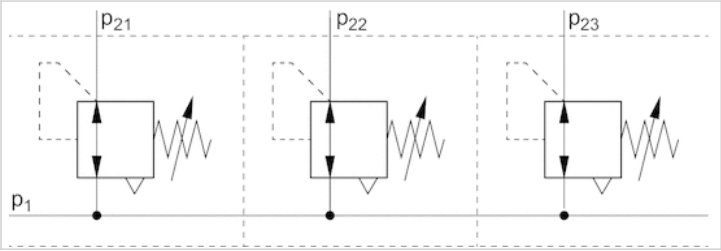
Dimensions Fig. 2



A1 = input
A2 = output

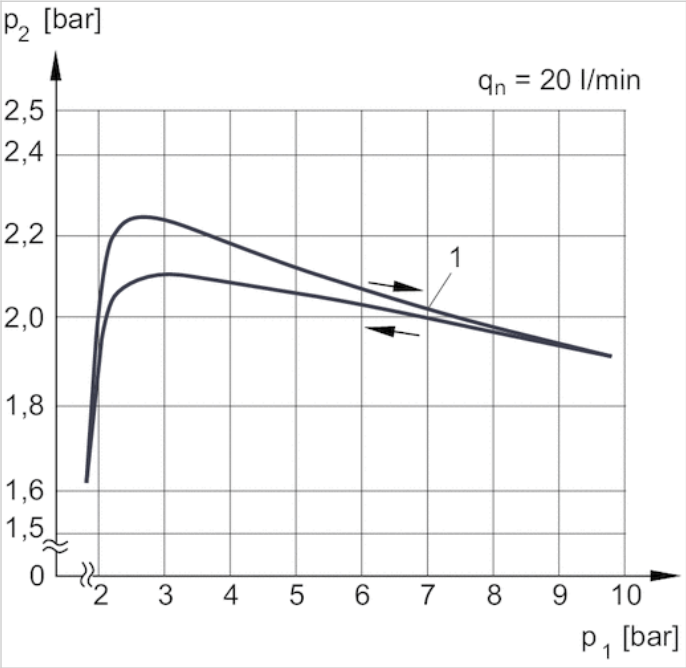
Diagrams

Application example



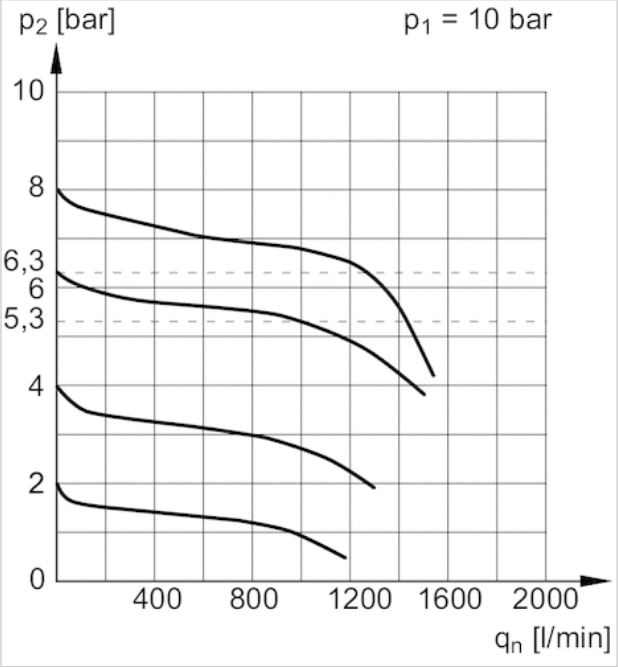
p1 = working pressure

Pressure characteristics curve



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

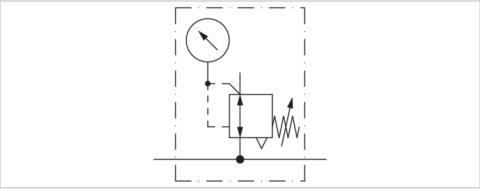
Flow rate characteristic



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

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

- G 1/4
- Air supply right
- Qn = 1.02 Cv
- Standard pressure regulator
- Activation Manual
- with continuous pressure supply
- with pressure gauge in hand wheel



Parts	Pressure regulator with continuous pressure supply
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	double
Activation	Manual
Weight	0.527 lbs

Technical data

Part No.		Port	Flow Qn	Working pressure min./max.	Adjustment range min./max.
R412014720		G 1/4	1.02 Cv	3 ... 174 psi	3 ... 58 psi
R412014721		G 1/4	1.02 Cv	8 ... 174 psi	8 ... 116 psi
R412014722		G 1/4	1.02 Cv	8 ... 174 psi	8 ... 145 psi

Part No.	Pressure gauge
R412014720	with pressure gauge in hand wheel
R412014721	with pressure gauge in hand wheel
R412014722	with pressure gauge in hand wheel

Panel nut included in scope of delivery, Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

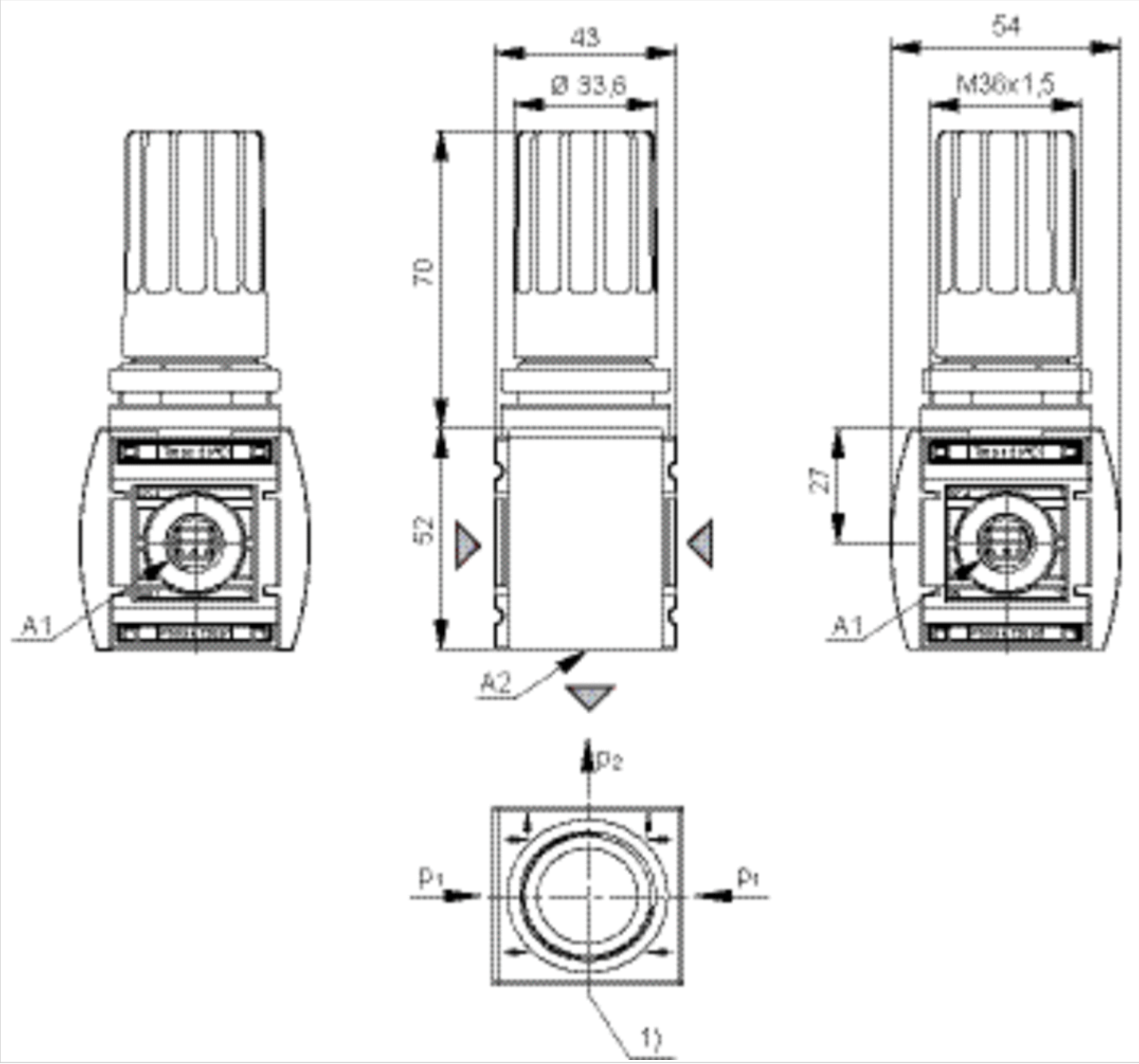
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Relieving exhaust (≤ 4.35 psi over set pressure)
With rear exhaust (> 43.5 psi)

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

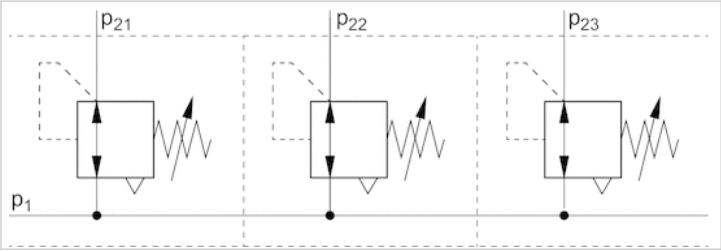
Dimensions



A1 = input
A2 = output

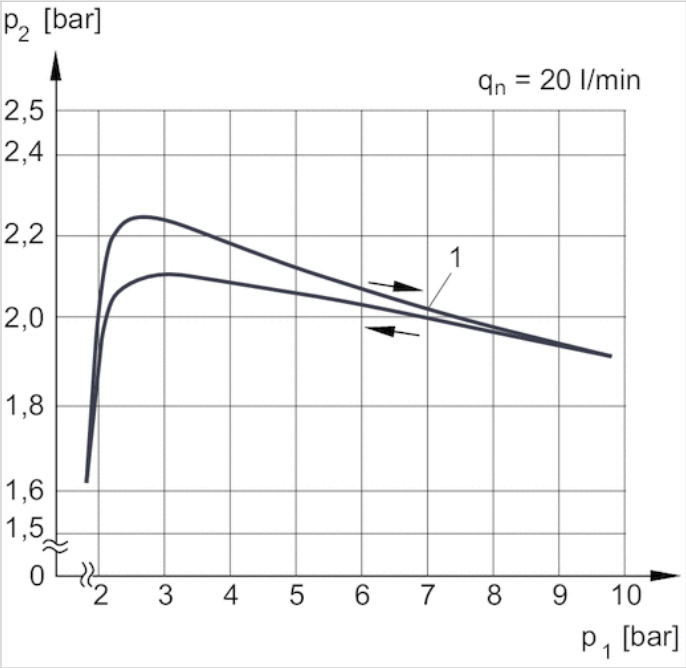
Diagrams

Application example



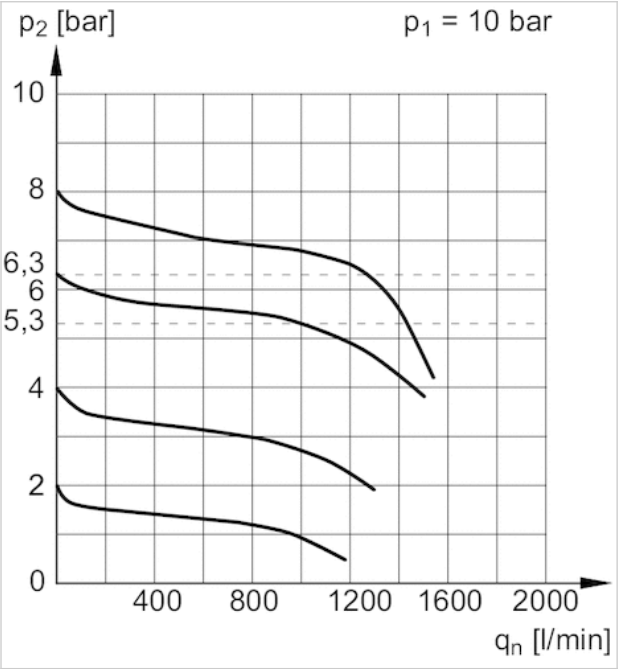
p1 = working pressure

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

- G 1/4
- Air supply right

Version	1-in-1, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	1.02 Cv
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	0.54 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

Technical data

Part No.			Port	Flow Qn	Adjustment range min./max.
R412014723			G 1/4	1.02 Cv	8 ... 116 psi
R412014724			G 1/4	1.02 Cv	8 ... 116 psi
R412014725			G 1/4	1.02 Cv	8 ... 116 psi
R412014726			G 1/4	1.02 Cv	8 ... 116 psi
R412014727			G 1/4	1.02 Cv	8 ... 116 psi
R412014728			G 1/4	1.02 Cv	8 ... 116 psi
R412014729			G 1/4	1.02 Cv	8 ... 116 psi
R412014730		–	G 1/4	1.02 Cv	8 ... 116 psi
R412014731		–	G 1/4	1.02 Cv	8 ... 116 psi
R412014732		–	G 1/4	1.02 Cv	8 ... 116 psi
R412014733			G 1/4	1.02 Cv	8 ... 145 psi
R412014734			G 1/4	1.02 Cv	8 ... 145 psi
R412014735			G 1/4	1.02 Cv	8 ... 145 psi
R412014736			G 1/4	1.02 Cv	8 ... 145 psi
R412014737			G 1/4	1.02 Cv	8 ... 145 psi
R412014738			G 1/4	1.02 Cv	8 ... 145 psi
R412014739			G 1/4	1.02 Cv	8 ... 145 psi

Part No.	Condensate drain	Max. pressure gauge Ø in blocked state
R412014723	semi-automatic, open without pressure	-
R412014724	fully automatic, open without pressure	-
R412014725	fully automatic, closed without pressure	-

Part No.	Condensate drain	Max. pressure gauge Ø in blocked state
R412014726	semi-automatic, open without pressure	-
R412014727	semi-automatic, open without pressure	-
R412014728	fully automatic, open without pressure	-
R412014729	fully automatic, closed without pressure	-
R412014730	semi-automatic, open without pressure	40 mm
R412014731	fully automatic, open without pressure	40 mm
R412014732	fully automatic, closed without pressure	40 mm
R412014733	semi-automatic, open without pressure	-
R412014734	fully automatic, open without pressure	-
R412014735	fully automatic, closed without pressure	-
R412014736	semi-automatic, open without pressure	-
R412014737	semi-automatic, open without pressure	-
R412014738	fully automatic, open without pressure	-
R412014739	fully automatic, closed without pressure	-

Part No.	Reservoir	Protective guard	Weight	Fig.
R412014723	Polycarbonate	-	0.531 lbs	Fig. 1
R412014724	Polycarbonate	-	0.571 lbs	Fig. 1
R412014725	Polycarbonate	-	0.571 lbs	Fig. 1
R412014726	Polycarbonate	metal	0.604 lbs	Fig. 1
R412014727	Die cast zinc	-	0.701 lbs	Fig. 1
R412014728	Die cast zinc	-	0.728 lbs	Fig. 1
R412014729	Die cast zinc	-	0.728 lbs	Fig. 1
R412014730	Polycarbonate	-	0.525 lbs	Fig. 2
R412014731	Polycarbonate	-	0.564 lbs	Fig. 2
R412014732	Polycarbonate	-	0.564 lbs	Fig. 2
R412014733	Polycarbonate	-	0.531 lbs	Fig. 1
R412014734	Polycarbonate	-	0.571 lbs	Fig. 1
R412014735	Polycarbonate	-	0.571 lbs	Fig. 1
R412014736	Polycarbonate	metal	0.604 lbs	Fig. 1
R412014737	Die cast zinc	-	0.701 lbs	Fig. 1
R412014738	Die cast zinc	-	0.728 lbs	Fig. 1
R412014739	Die cast zinc	-	0.728 lbs	Fig. 1

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

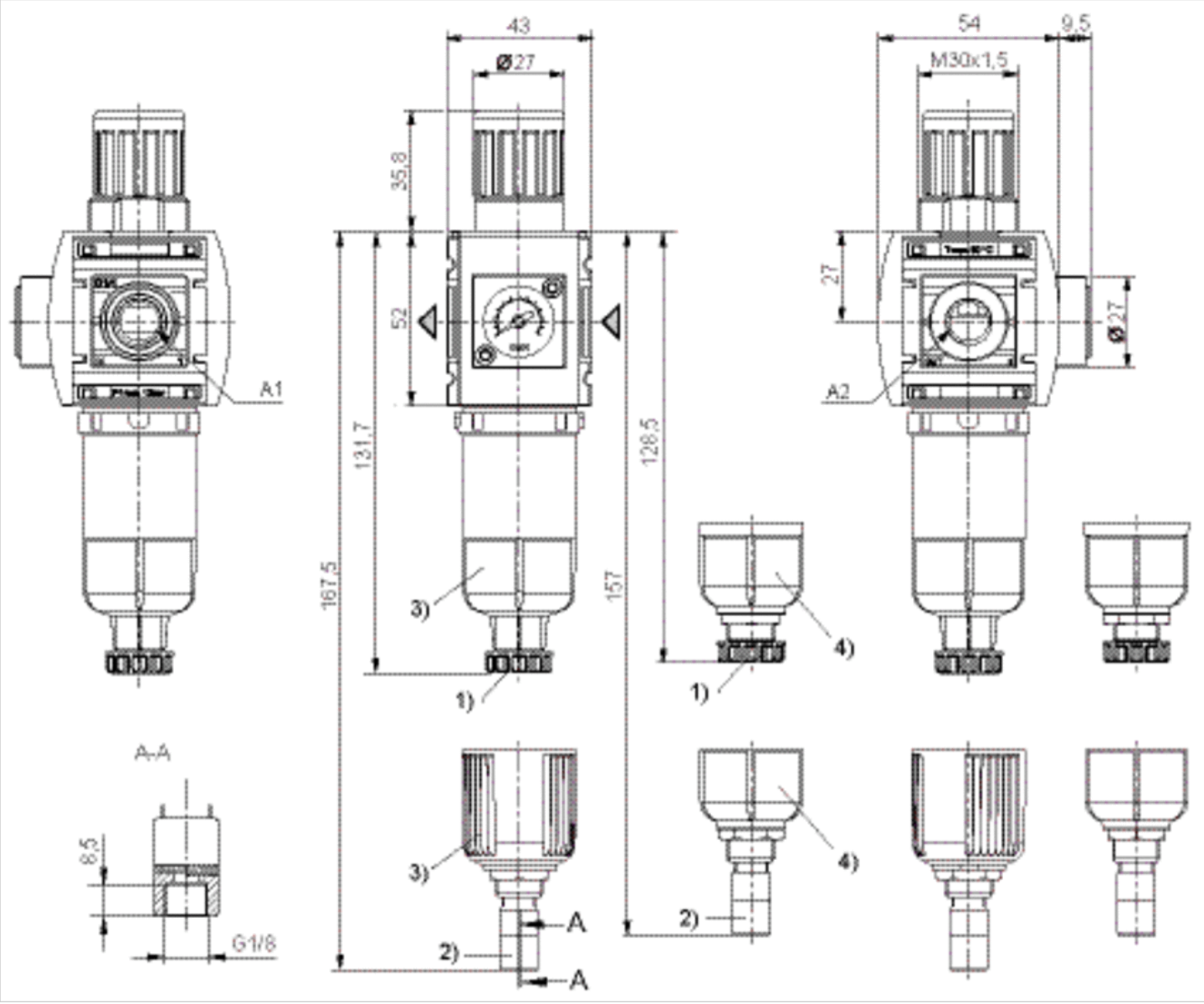
Compressed air class 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate, Die cast zinc
Protective guard	metal
Filter insert	Cellpor

Dimensions

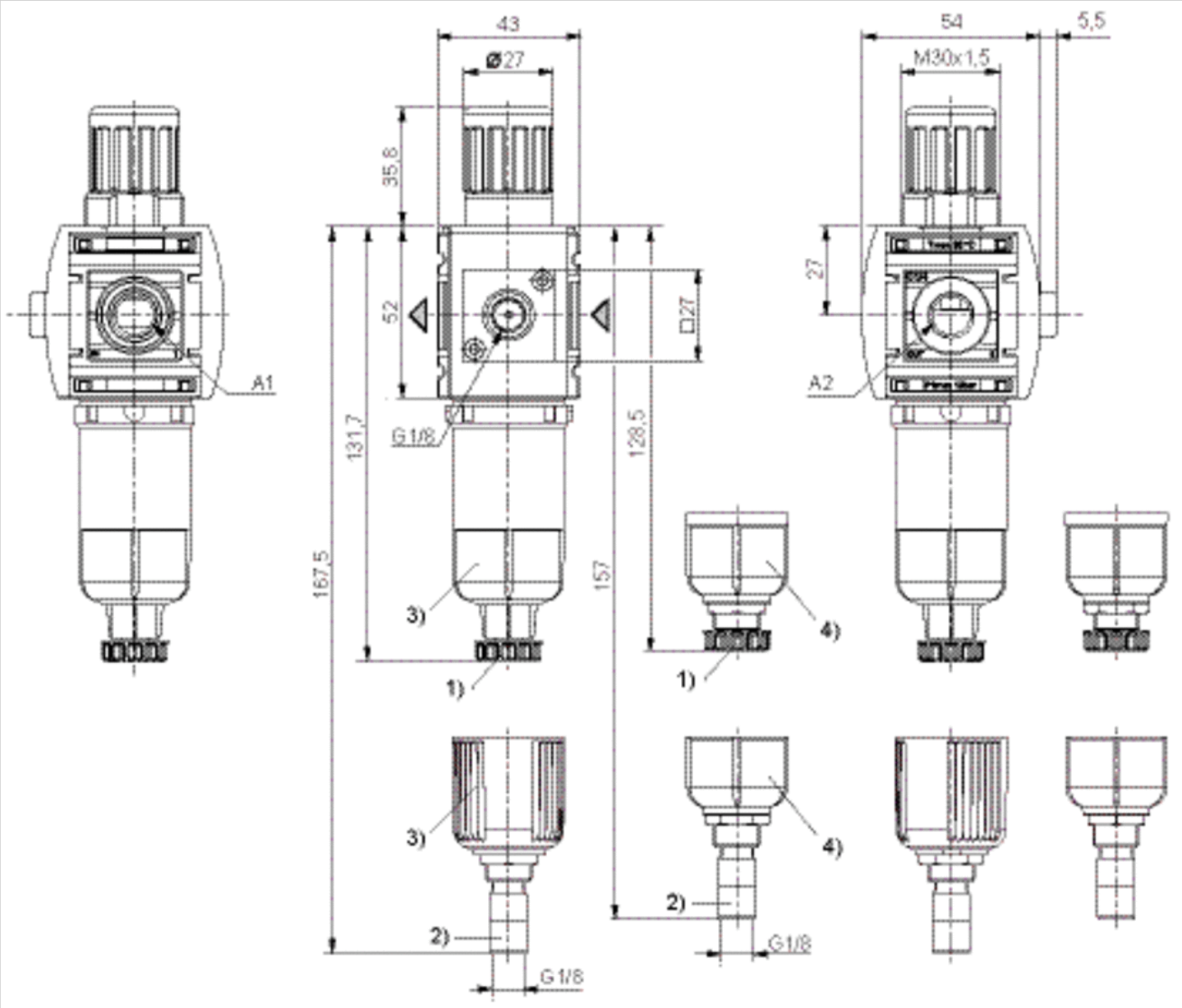
Dimensions Fig. 1



A1 = input

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

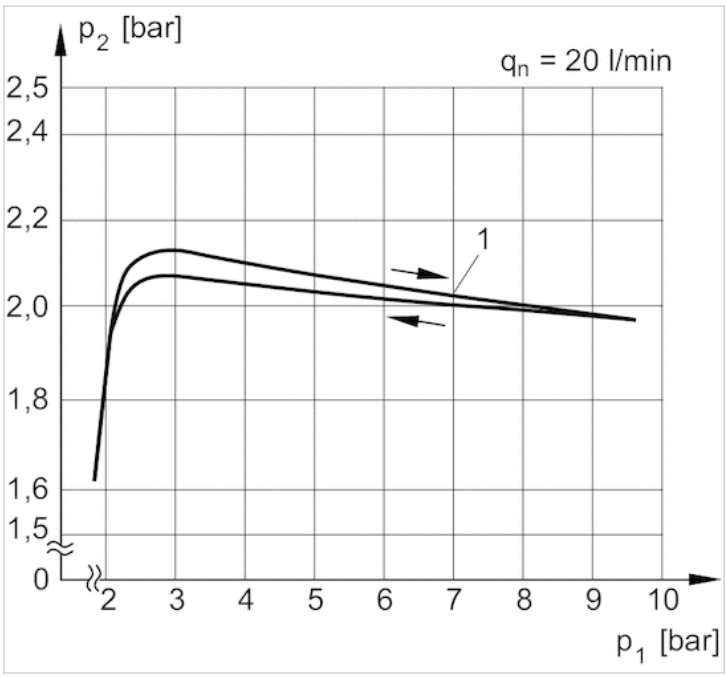
Dimensions Fig. 2



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

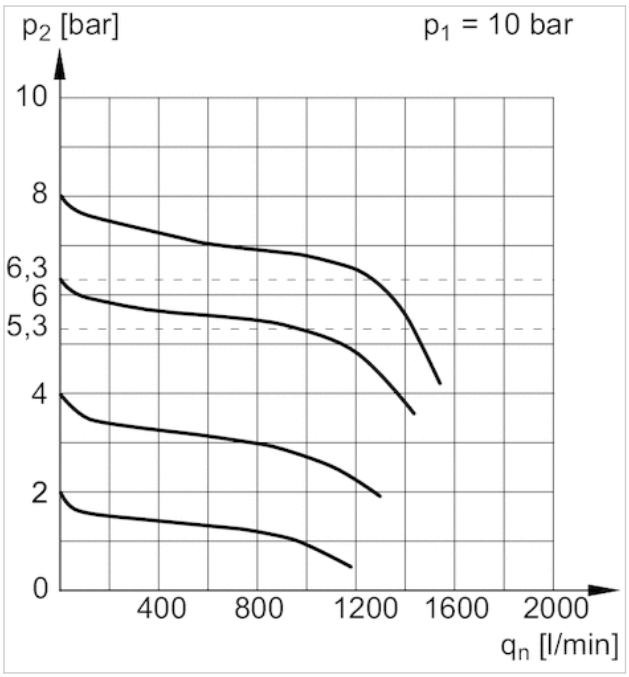
Diagrams

Pressure characteristics curve



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

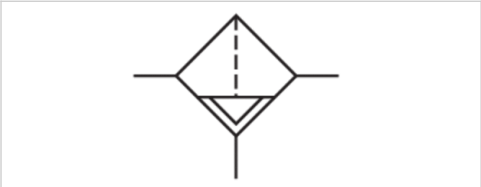
Flow rate characteristic



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

Standard filter, Series AS1-FLS

- G 1/4
- Air supply right



Version	Standard filter, Can be assembled into blocks
Parts	Filter
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.54 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

Technical data

Part No.	Port	Qn	Condensate drain	Reservoir
R412014678	G 1/4	1.02 Cv	semi-automatic, open without pressure	Polycarbonate
R412014679	G 1/4	1.02 Cv	fully automatic, open without pressure	Polycarbonate
R412014680	G 1/4	1.02 Cv	fully automatic, closed without pressure	Polycarbonate
R412014681	G 1/4	1.02 Cv	semi-automatic, open without pressure	Polycarbonate
R412014682	G 1/4	1.02 Cv	semi-automatic, open without pressure	metal
R412014683	G 1/4	1.02 Cv	fully automatic, open without pressure	metal
R412014684	G 1/4	1.02 Cv	fully automatic, closed without pressure	metal

Part No.	Protective guard	Weight
R412014678	-	0.366 lbs
R412014679	-	0.406 lbs
R412014680	-	0.406 lbs
R412014681	metal	0.425 lbs
R412014682	-	0.536 lbs
R412014683	-	0.562 lbs
R412014684	-	0.562 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

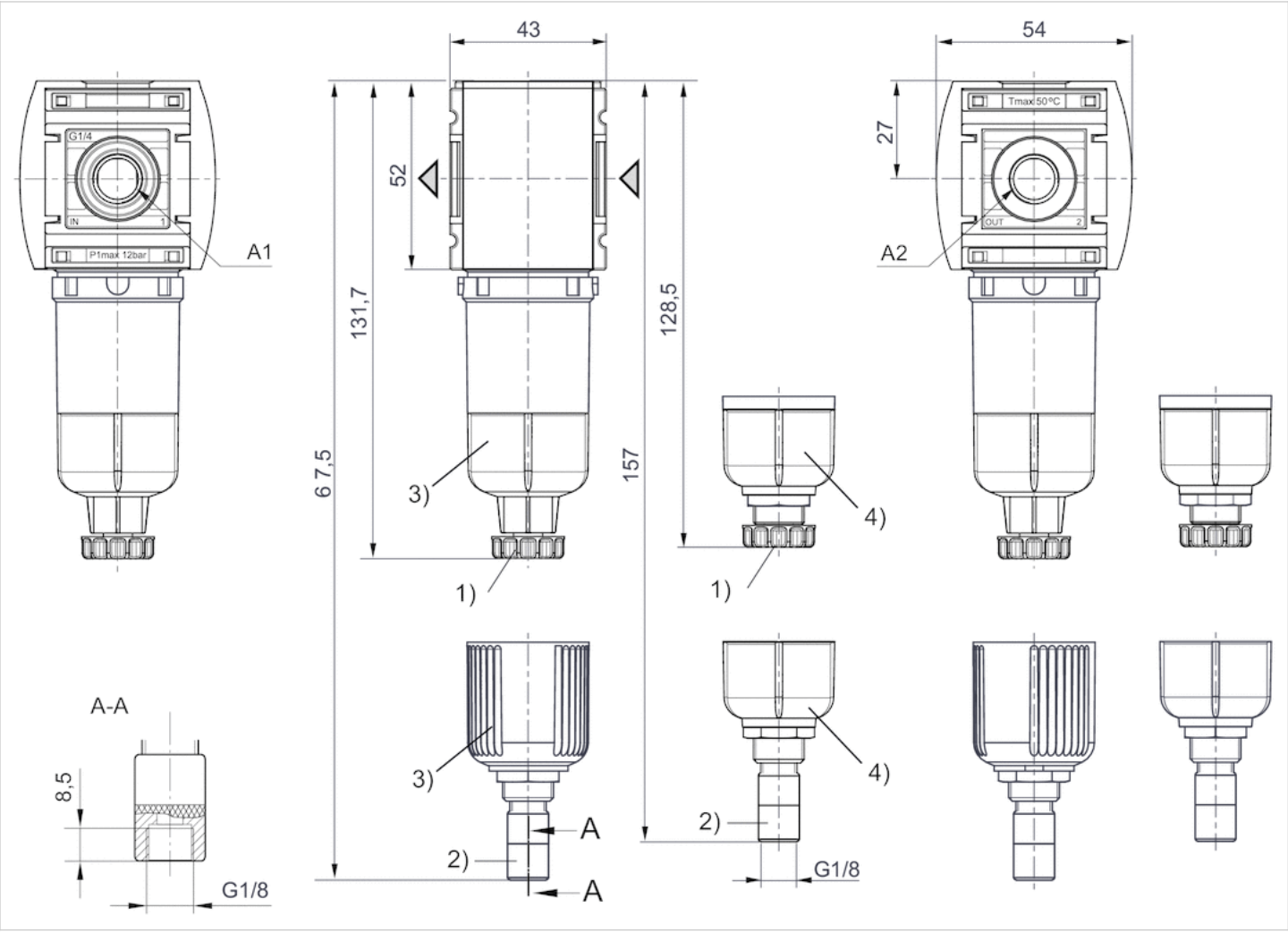
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate, metal
Protective guard	metal
Filter insert	Cellpor

Dimensions

Dimensions

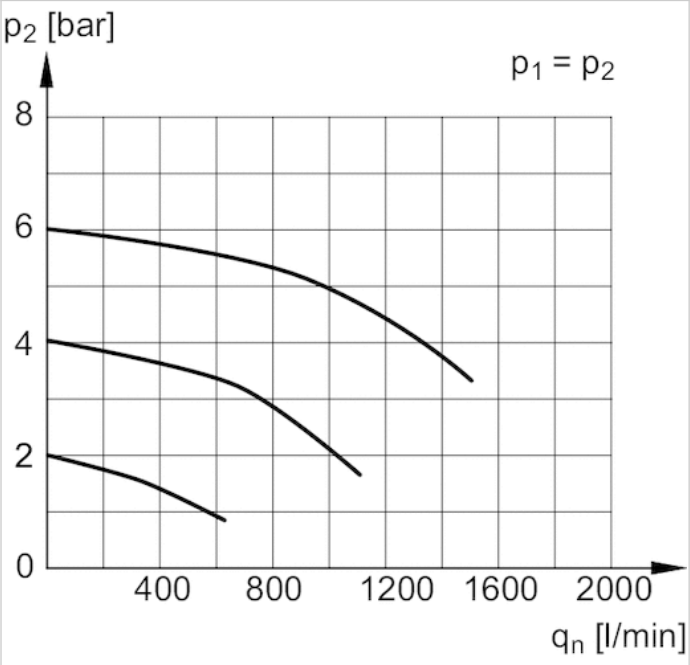


A1 = input
A2 = output

1) Semi-automatic condensate drain
2) Fully automatic condensate drain
3) Reservoir: polycarbonate
4) Reservoir: metal

Diagrams

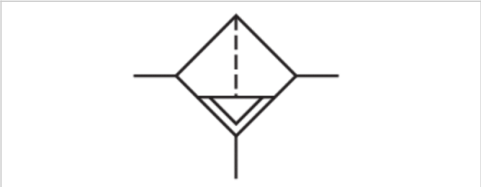
Flow rate characteristic



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

Pre-filter, Series AS1-FLP

- G 1/4
- Air supply right



Version	Pre-filter, Can be assembled into blocks
Parts	Pre-filter
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.41 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

Technical data

Part No.	Port	Qn	Condensate drain	Reservoir
R412014685	G 1/4	0.356 Cv	semi-automatic, open without pressure	Polycarbonate
R412014686	G 1/4	0.356 Cv	fully automatic, open without pressure	Polycarbonate
R412014687	G 1/4	0.356 Cv	fully automatic, closed without pressure	Polycarbonate
R412014688	G 1/4	0.356 Cv	semi-automatic, open without pressure	Polycarbonate
R412014689	G 1/4	0.356 Cv	semi-automatic, open without pressure	metal
R412014690	G 1/4	0.356 Cv	fully automatic, open without pressure	metal
R412014691	G 1/4	0.356 Cv	fully automatic, closed without pressure	metal

Part No.	Protective guard	Weight
R412014685	-	0.372 lbs
R412014686	-	0.412 lbs
R412014687	-	0.412 lbs
R412014688	metal	0.445 lbs
R412014689	-	0.542 lbs
R412014690	-	0.569 lbs
R412014691	-	0.569 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 1.45 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

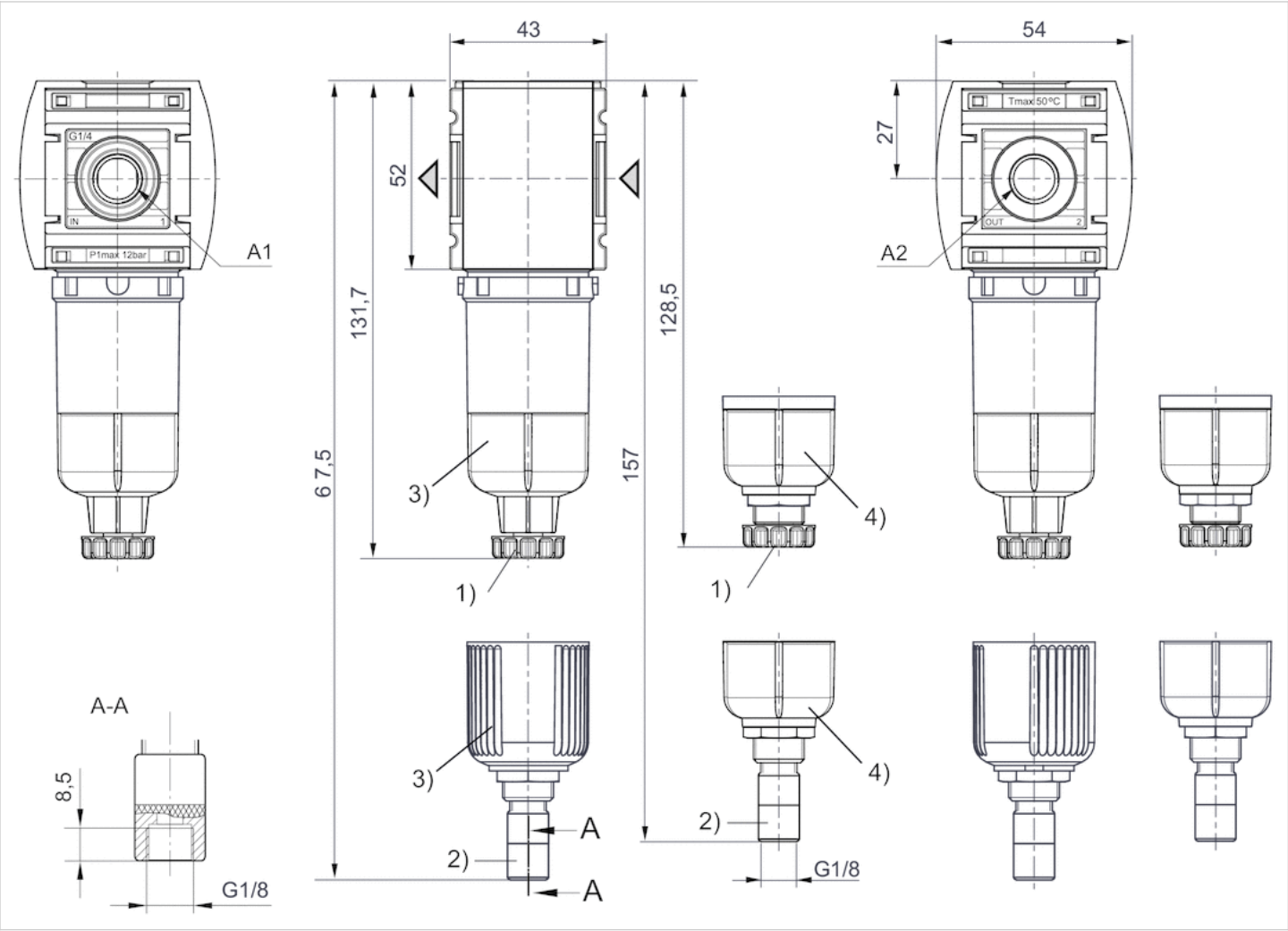
Max. achievable compressed air class acc. to ISO 8573-1:2010 2 : - : 3

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate, metal
Protective guard	metal
Filter insert	Paper

Dimensions

Dimensions

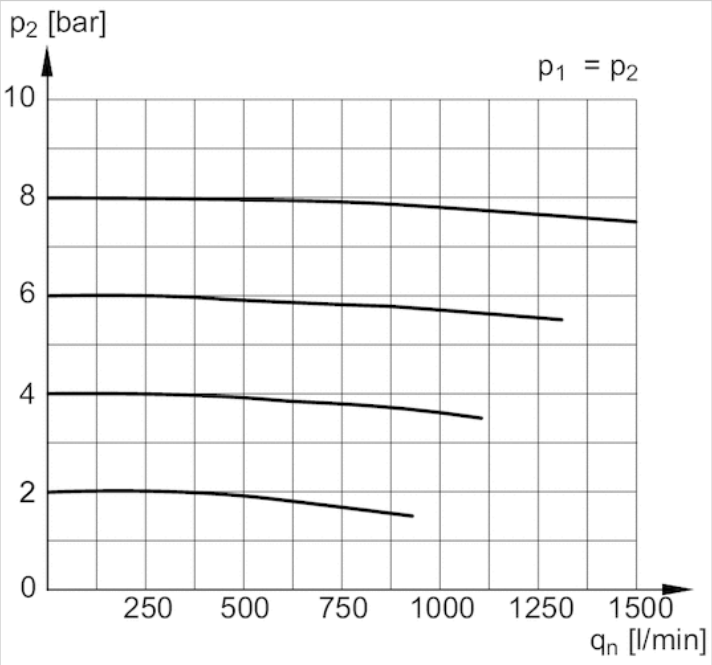


A1 = input
A2 = output

1) Semi-automatic condensate drain
2) Fully automatic condensate drain
3) Reservoir: polycarbonate
4) Reservoir: metal

Diagrams

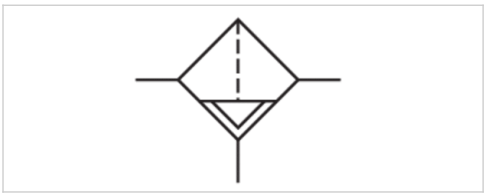
Flow rate characteristic



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

Microfilter, Series AS1-FLC

- G 1/4
- Air supply right



Version	Microfilter, Can be assembled into blocks
Parts	Microfilter
Mounting orientation	vertical
Working pressure min./max.	22 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.41 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

Technical data

Part No.	Port	Qn	Condensate drain	Reservoir
R412014692	G 1/4	0.356 Cv	semi-automatic, open without pressure	Polycarbonate
R412014693	G 1/4	0.356 Cv	fully automatic, open without pressure	Polycarbonate
R412014694	G 1/4	0.356 Cv	fully automatic, closed without pressure	Polycarbonate
R412014695	G 1/4	0.356 Cv	semi-automatic, open without pressure	Polycarbonate
R412014696	G 1/4	0.356 Cv	semi-automatic, open without pressure	metal
R412014697	G 1/4	0.356 Cv	fully automatic, open without pressure	metal
R412014698	G 1/4	0.356 Cv	fully automatic, closed without pressure	metal

Part No.	Protective guard	Weight
R412014692	-	0.372 lbs
R412014693	-	0.412 lbs
R412014694	-	0.412 lbs
R412014695	metal	0.445 lbs
R412014696	-	0.542 lbs
R412014697	-	0.569 lbs
R412014698	-	0.569 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 1.45 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

Recommended pre-filtering 0.3 µm

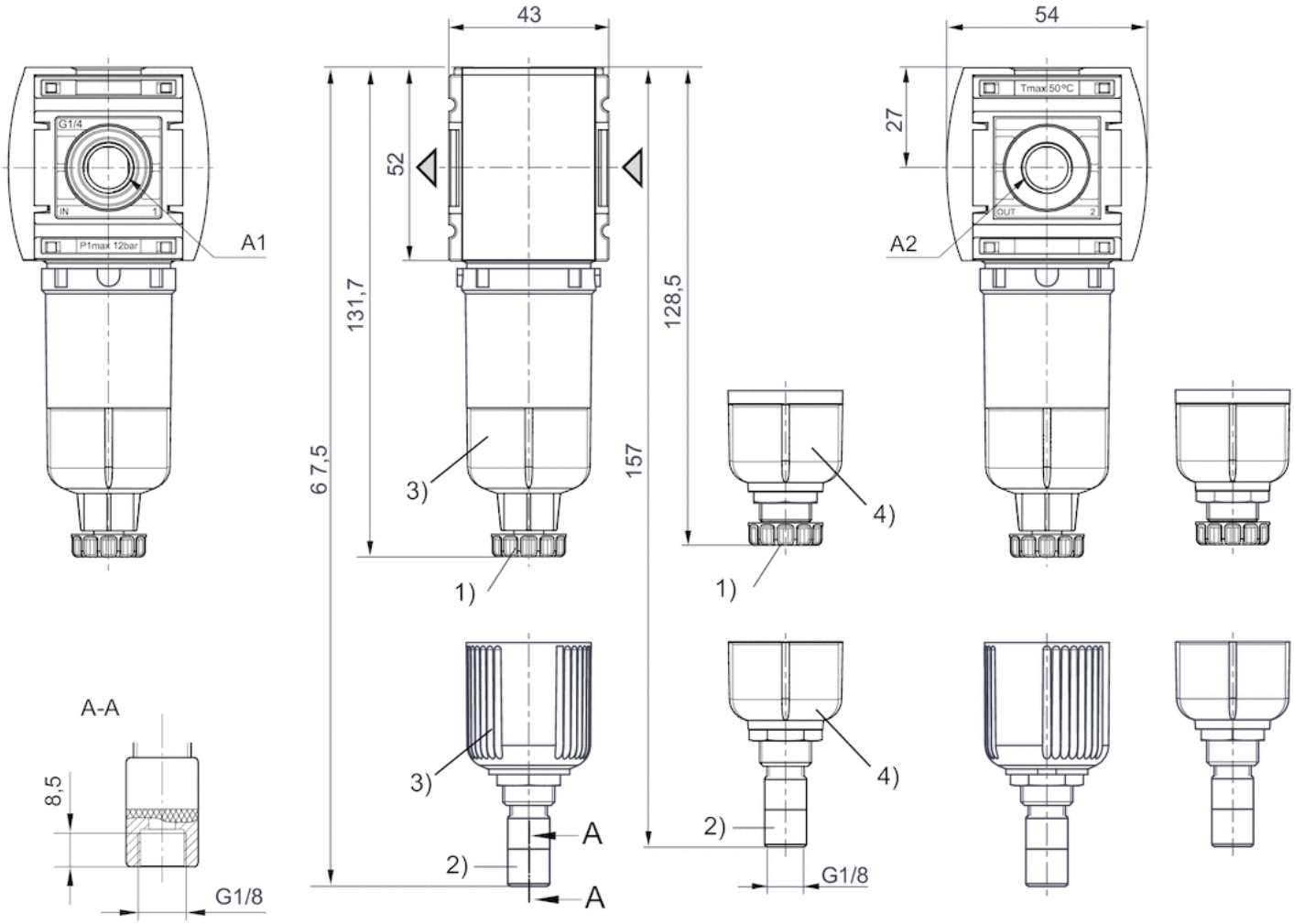
Max. achievable compressed air class acc. to ISO 8573-1:2010 1 : - : 2

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate, metal
Protective guard	metal
Filter insert	Borosilicate aluminum

Dimensions

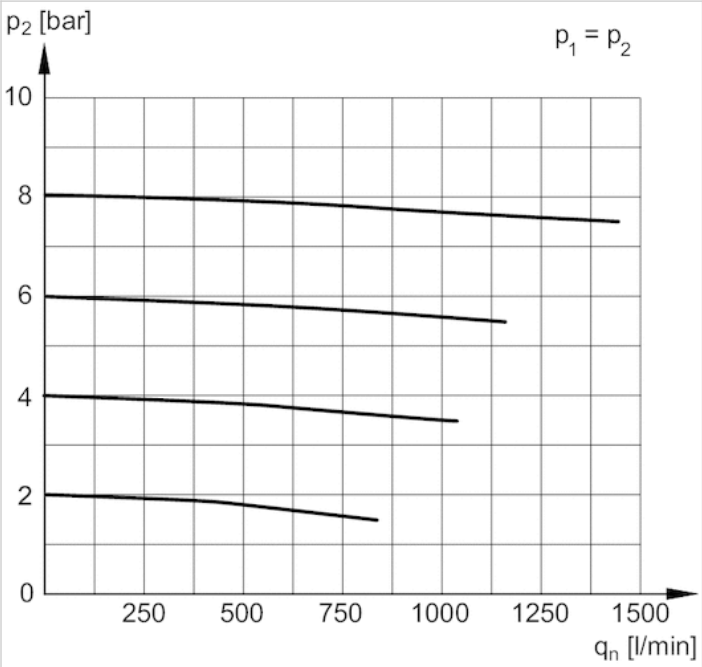
Dimensions



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

Diagrams

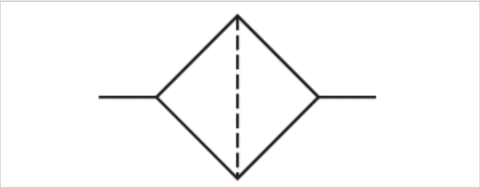
Flow rate characteristic



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

Active carbon filter, Series AS1-FLA

- G 1/4
- Air supply right



Version	Active carbon filter, Can be assembled into blocks
Parts	Active carbon filter
Mounting orientation	vertical
Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.41 fl.oz.
Filter element	exchangeable
Weight	See table below

Technical data

Part No.	Port	Qn	Reservoir	Protective guard	Weight
R412014699	G 1/4	0.356 Cv	Polycarbonate	-	0.377 lbs
R412014700	G 1/4	0.356 Cv	Polycarbonate	metal	0.45 lbs
R412014701	G 1/4	0.356 Cv	metal	-	0.511 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 1.45 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Recommended pre-filtering 0.01 µm

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

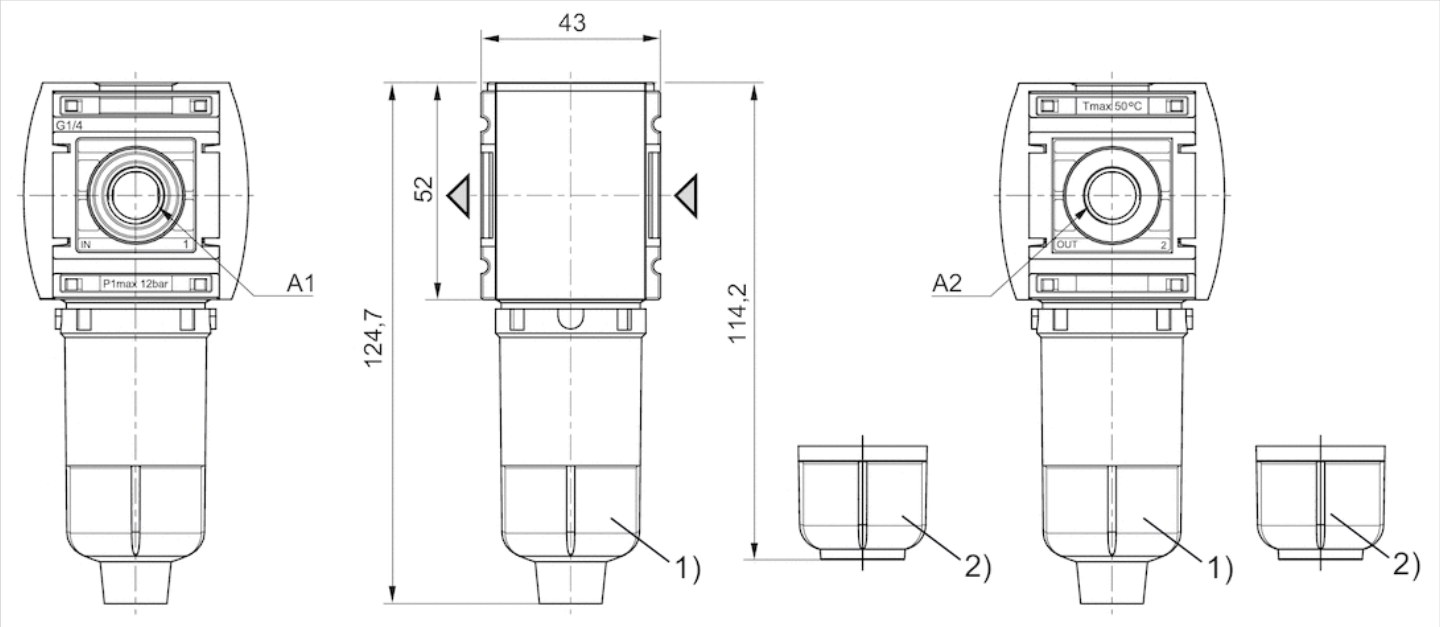
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate, metal

Material	
Protective guard	metal
Filter insert	Active carbon

Dimensions

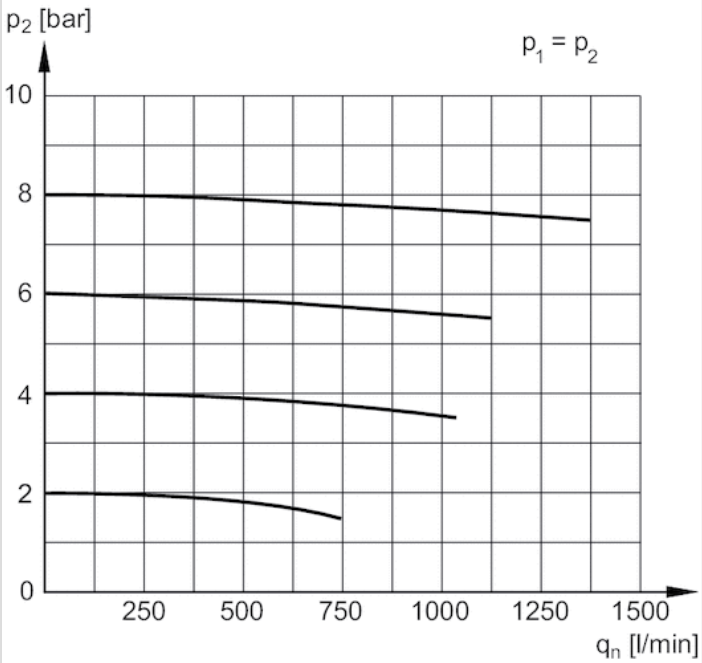
Dimensions



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

Diagrams

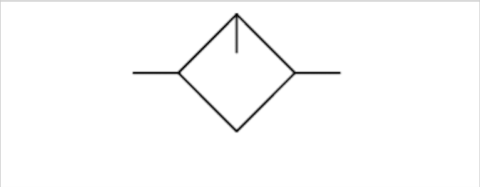
Flow rate characteristic



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

Micro oil-mist lubricator, Series AS1-LBM

- G 1/4
- Air supply right



Version	Micro oil-mist lubricator, Can be assembled into blocks
Parts	Micro oil-mist lubricator
Mounting orientation	vertical
Compressed air connection	G 1/4
Working pressure min./max.	12 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Lubricator reservoir volume	1.18 fl.oz.
Type of filling	Manual oil filling
Weight	See table below

Technical data

Part No.	Port	Nominal flow Qn	Reservoir	Protective guard	Weight
R412014702	G 1/4	1.42 Cv	Polycarbonate	-	0.412 lbs
R412014703	G 1/4	1.42 Cv	Polycarbonate	metal	0.485 lbs
R412014704	G 1/4	1.42 Cv	Die cast zinc	-	0.547 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
only approx. 10% of the preset drip quantity enters the compressed air system
oil filling not possible during operation
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Oil dosing at 1 Cv 10-20 drops

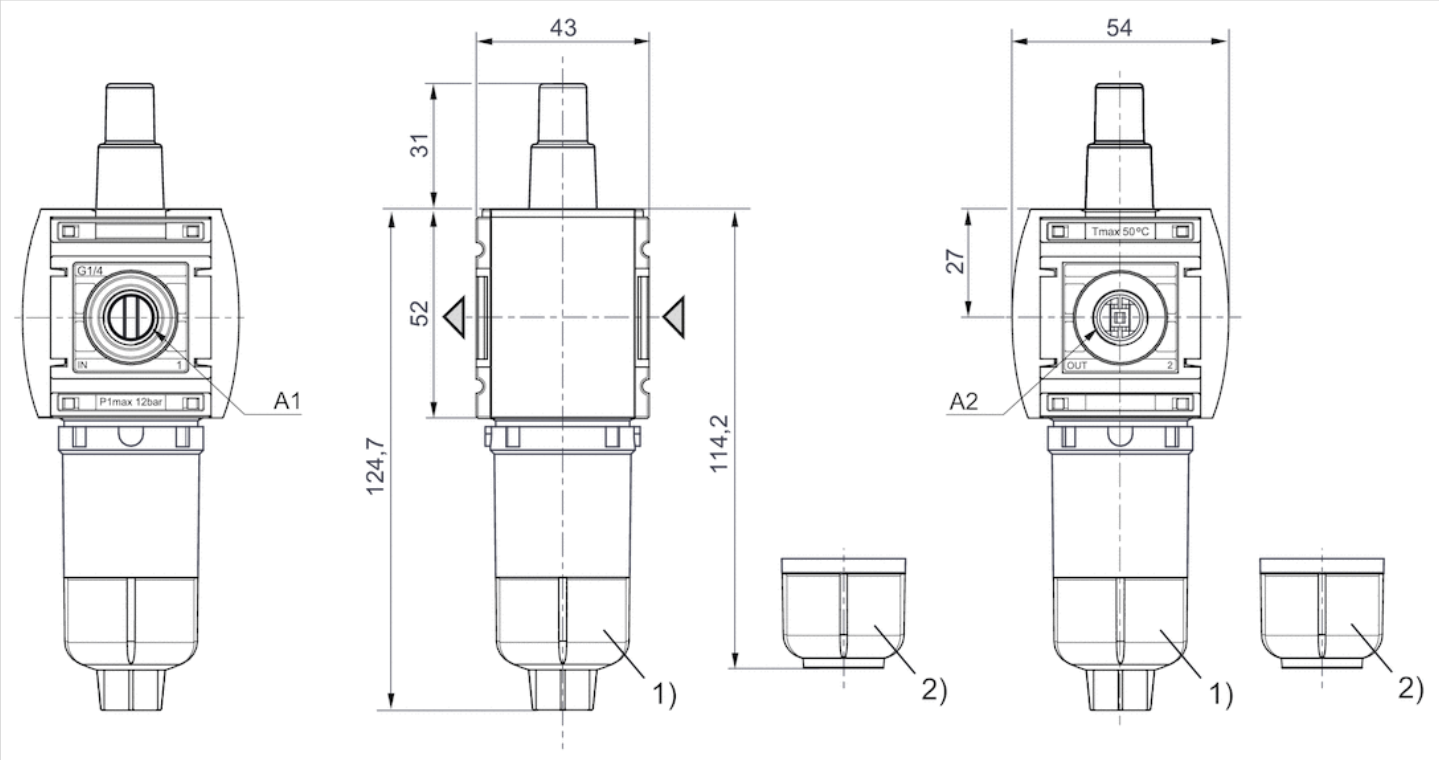
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Material	
Reservoir	Polycarbonate, Die cast zinc
Protective guard	metal

Dimensions

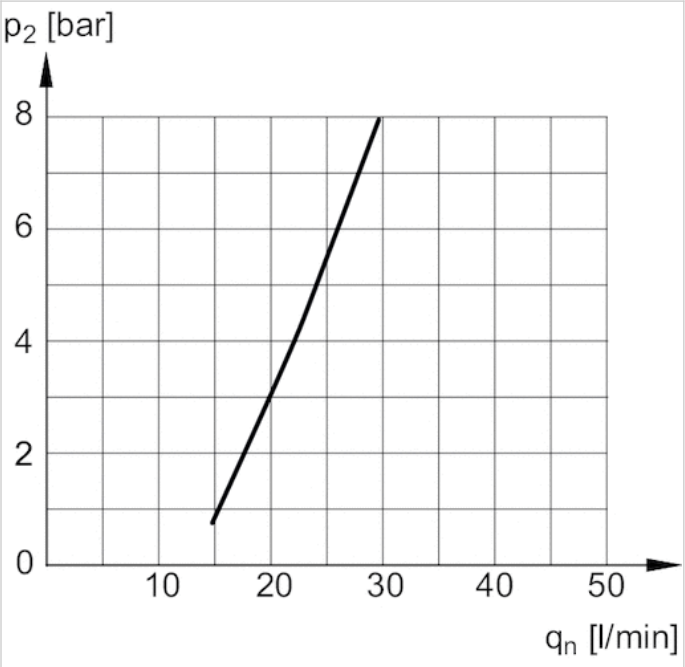
Dimensions



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

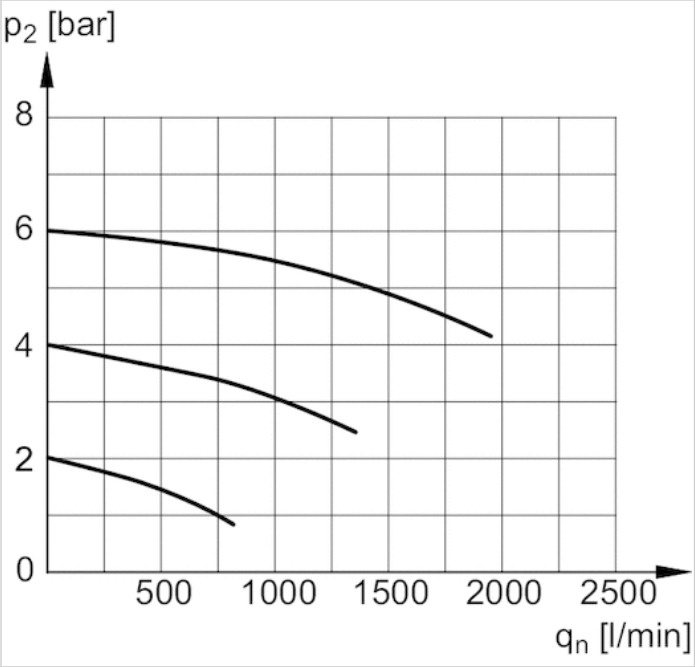
Diagrams

Lubricator activation margin



p2 = secondary pressure
qn = nominal flow

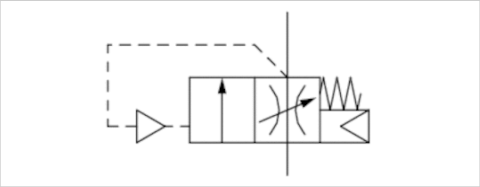
Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

Filling valve, Series AS1-SSV

- adjustable filling time
- Compressed air connection G 1/4
- Air supply right
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 232 psi
Control pressure min./max.	37 ... 232 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Max. particle size	40 µm
Weight	0.294 lbs

Technical data

Part No.	Port	Flow	Flow
		Qn	Qn 1▸2
R412014749	G 1/4	2.03 Cv	2.03 Cv

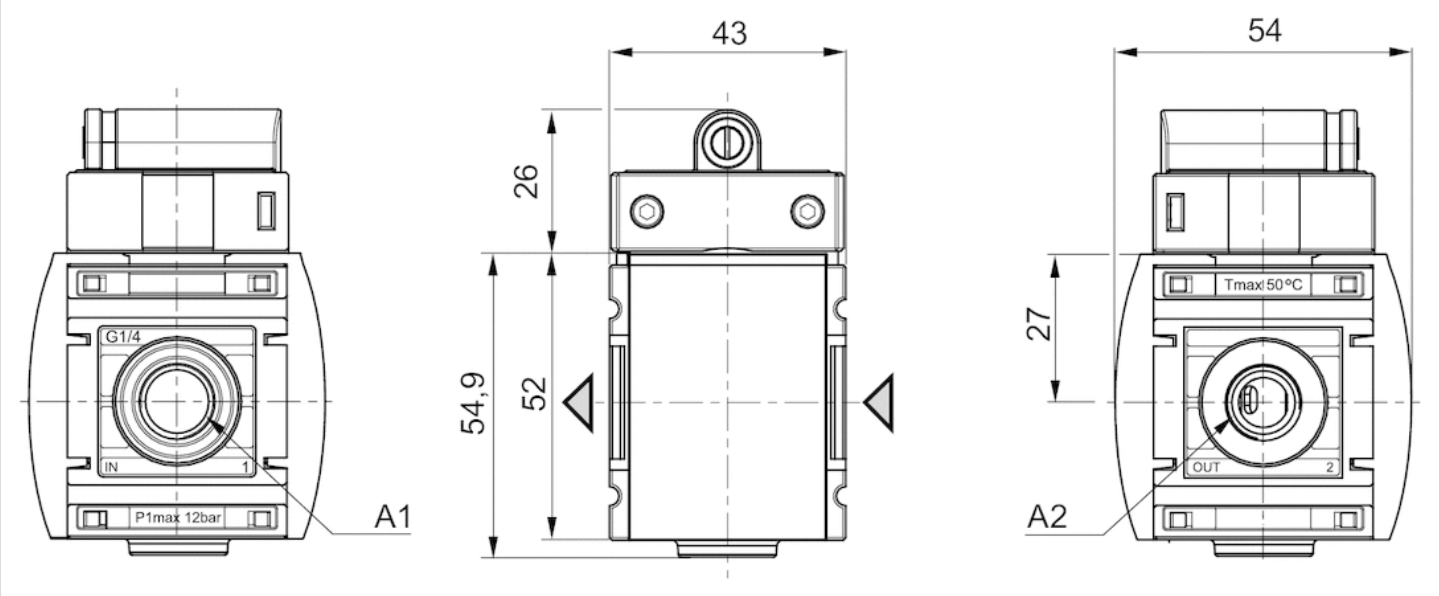
Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

Dimensions

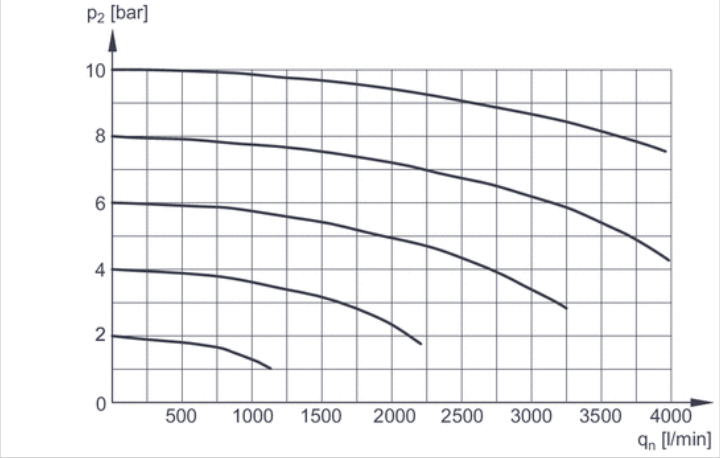
Dimensions



A1 = input
A2 = output

Diagrams

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

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

- Compressed air connection G 1/4
- Air supply right
- Pipe connection
- NC

Version	Poppet valve, Can be assembled into blocks
Parts	3/2-directional valve, electrically operated
Nominal flow 1 ▸ 2	2.03 Cv
Nominal flow 2 ▸ 3	0.386 Cv
Working pressure min./max.	29 ... 145 psi
Medium	Compressed air, Neutral gases
Medium temperature min./max.	14 ... 122 °F
Ambient temperature min./max.	14 ... 122 °F
Pilot	Internal
Sealing principle	Soft sealing
Max. particle size	25 µm
Oil content of compressed air	0 ... 5 mg/m³
Protection class acc. to DIN EN 61140,with plug	IP65
Weight	See table below

Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412014747		–	G 1/4	G 1/4	G 1/4
R412014748		–	G 1/4	G 1/4	G 1/4
R412014744			G 1/4	G 1/4	G 1/4
R412014746			G 1/4	G 1/4	G 1/4
R412010681			G 1/4	G 1/4	G 1/4

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412014747	-	-	-
R412014748	-	-	-
R412014744	24 V	-	-
R412014746	-	230 V	230 V
R412010681	24 V	-	-

Part No.	Power consumption	Holding power	Switch-on power	Switch-on power
	DC	AC 50 Hz	AC 50 Hz	AC 60 Hz
R412014747	-	-	-	-
R412014748	-	-	-	-
R412014744	2 W	-	-	-
R412014746	-	1.6 VA	3 VA	3 VA
R412010681	2 W	-	-	-

Part No.	Electrical connection	Connector standard
	Pilot valve	
R412014747	-	-
R412014748	-	-
R412014744	Plug, ISO 15217, form C	EN 175301-803, form C
R412014746	Plug, ISO 15217, form C	EN 175301-803, form C
R412010681	Plug, M12	-

Part No.	basic valve with electrical connector	Weight	Fig.
R412014747	Basic valve without pilot valve	0.433 lbs	Fig. 1
R412014748	Basic valve without pilot valve, with CNOMO subbase	0.462 lbs	Fig. 1
R412014744	Basic valve with pilot valve	0.475 lbs	Fig. 2
R412014746	Basic valve with pilot valve	0.472 lbs	Fig. 2
R412010681	Basic valve with pilot valve	0.512 lbs	Fig. 3

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi, MO = Manual override

Technical information

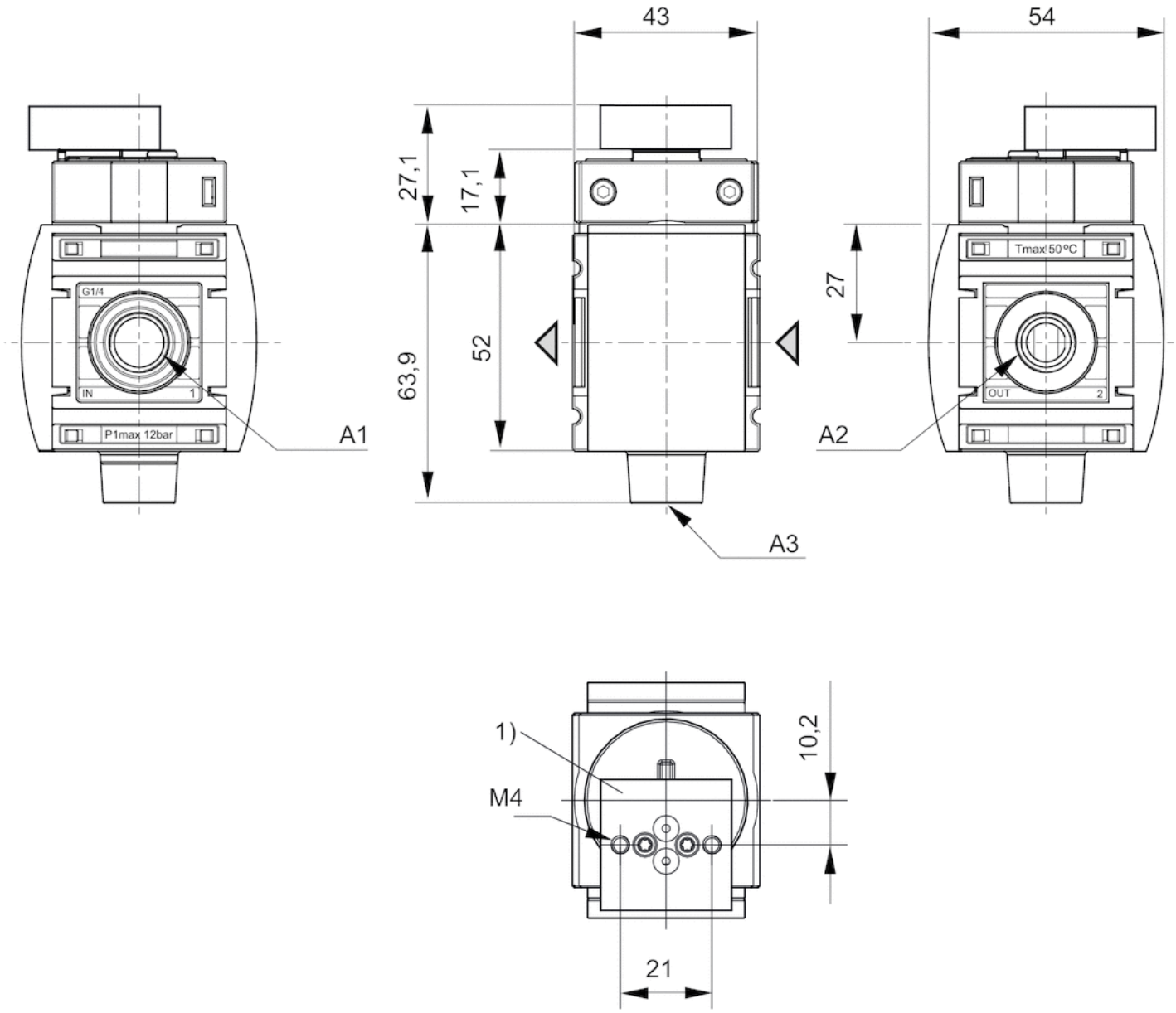
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

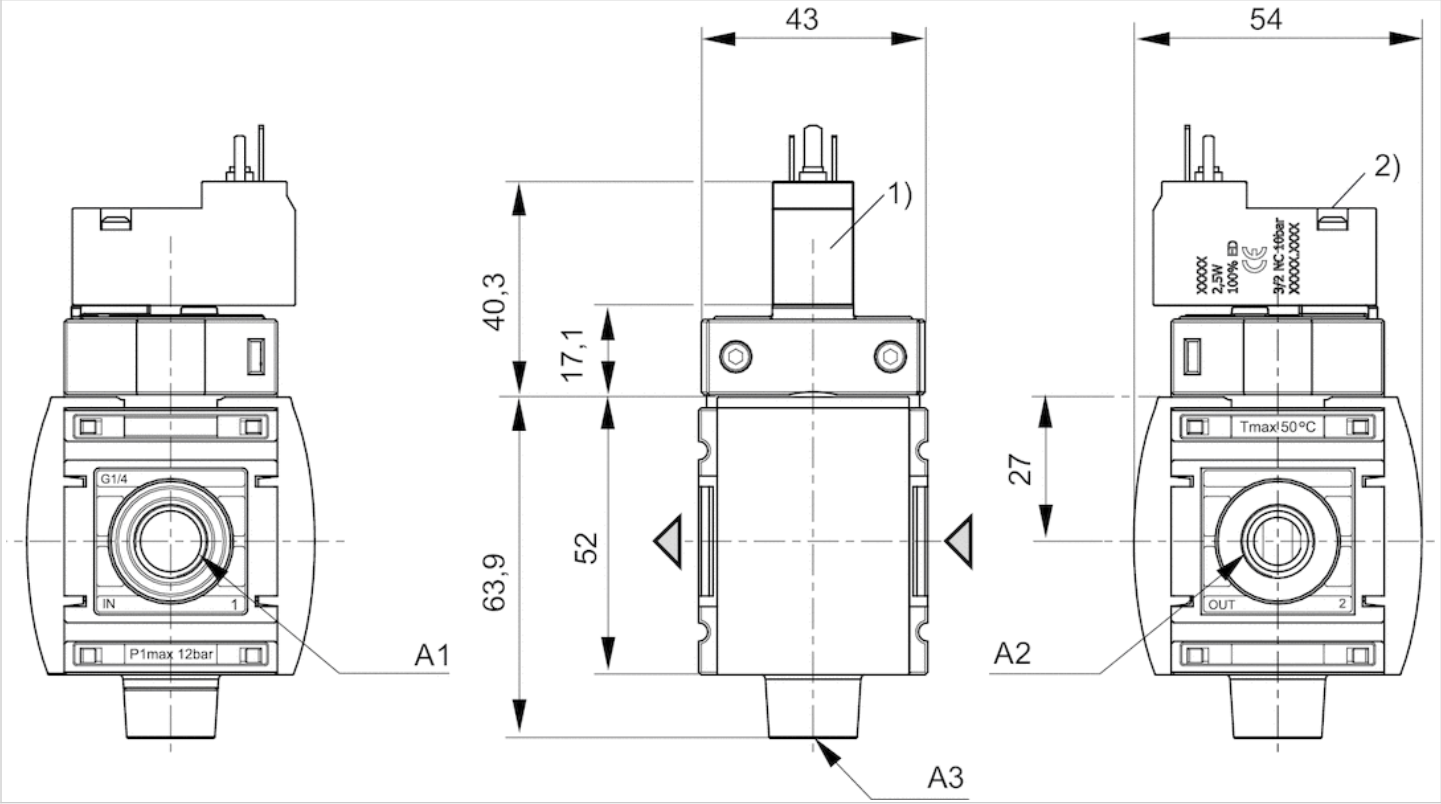
Dimensions

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



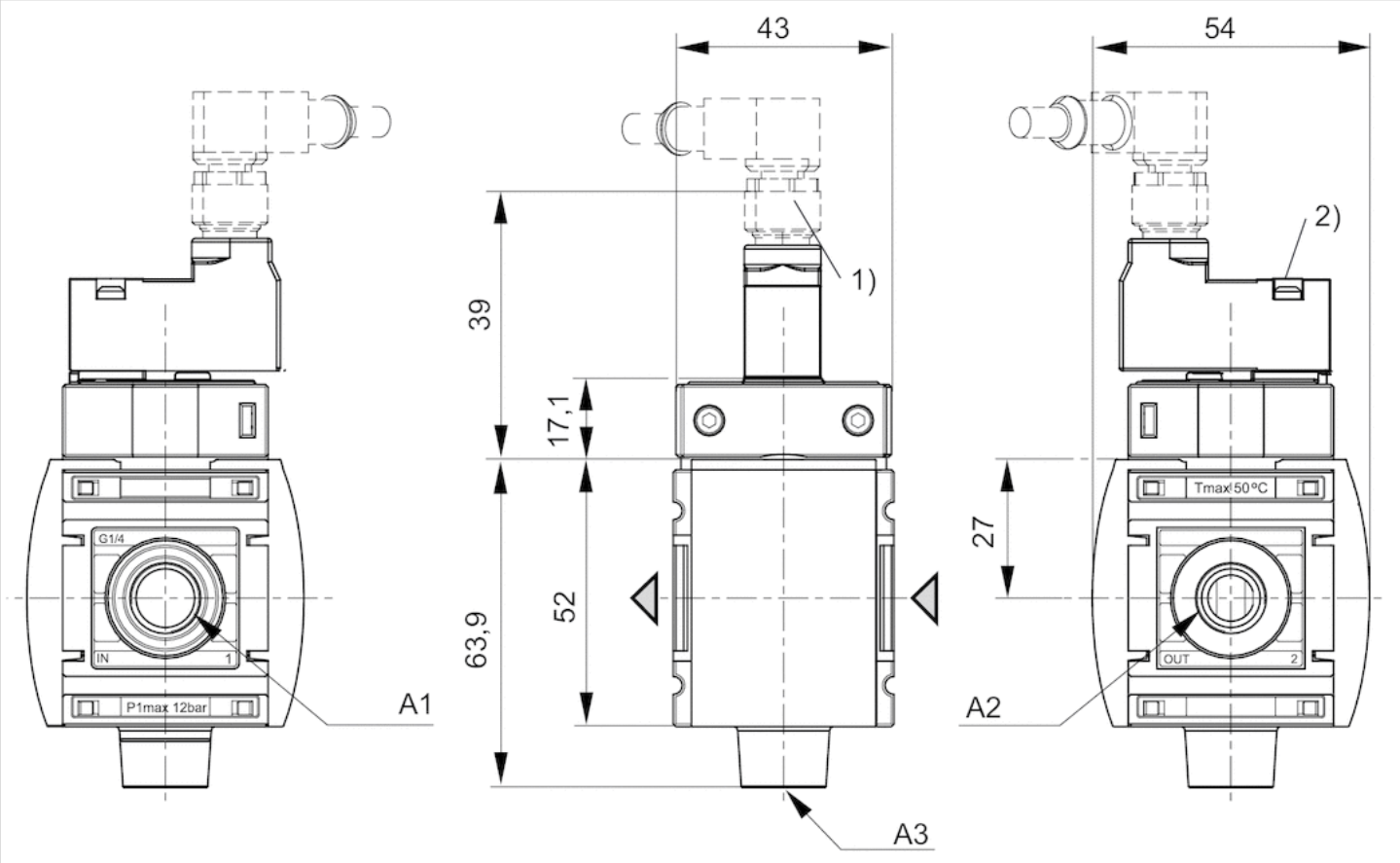
A1 = input
A2 = output
A3 = ventilation port
1) Transition plate with CNOMO porting configuration for pilot valve DO30

Fig. 2: 3/2 directional valve with pilot valve and connection for valve plug connector form C



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

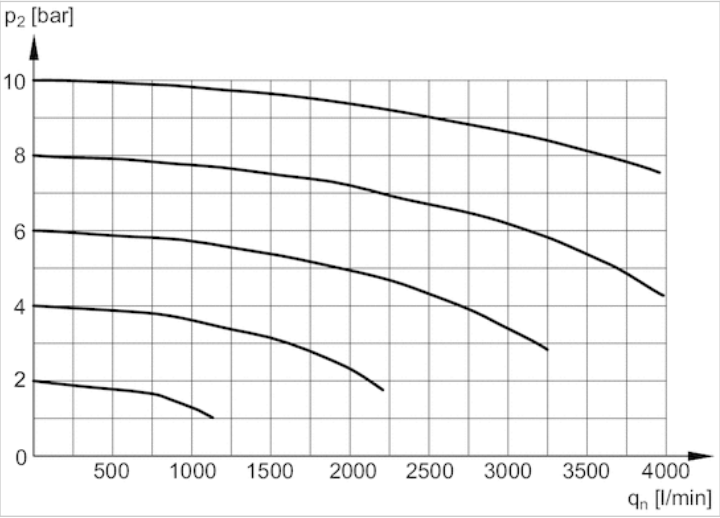
Fig. 3: 3/2-directional valve with pilot valve push-in fitting M12x1



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

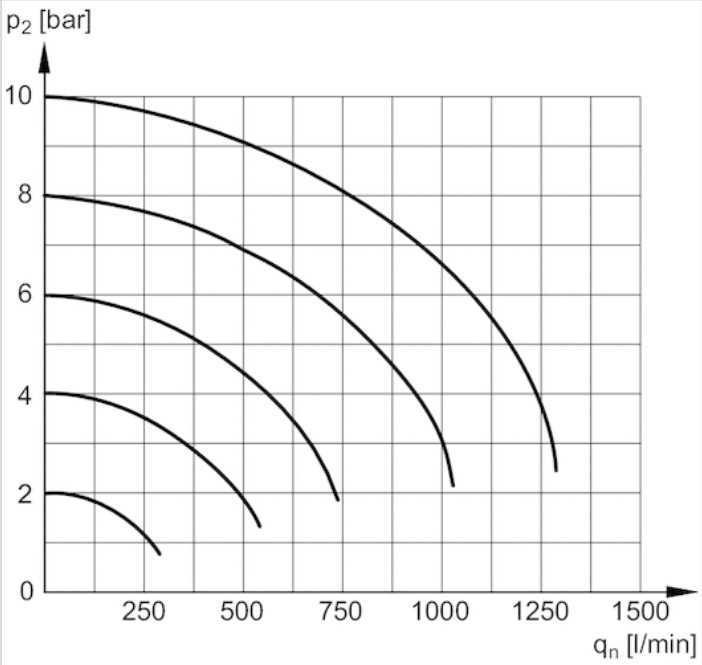
Diagrams

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

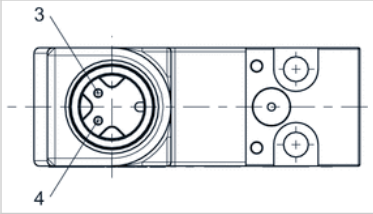
Rear exhaust



p2 = secondary pressure
qn = nominal flow

Pin assignments

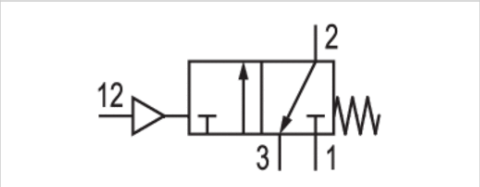
Pin assignment M12x1



3: +/-
4: +/-

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

- Compressed air connection G 1/4
- Air supply right
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 232 psi
Control pressure min./max.	37 ... 232 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Weight	0.198 lbs

Technical data

Part No.	Port	Pilot connection	Exhaust	Flow	Flow	Flow
				Qn	Qn 1▸2	Qn 2▸3
R412014743	G 1/4	G 1/8	G 1/4	2.03 Cv	2.03 Cv	0.386 Cv

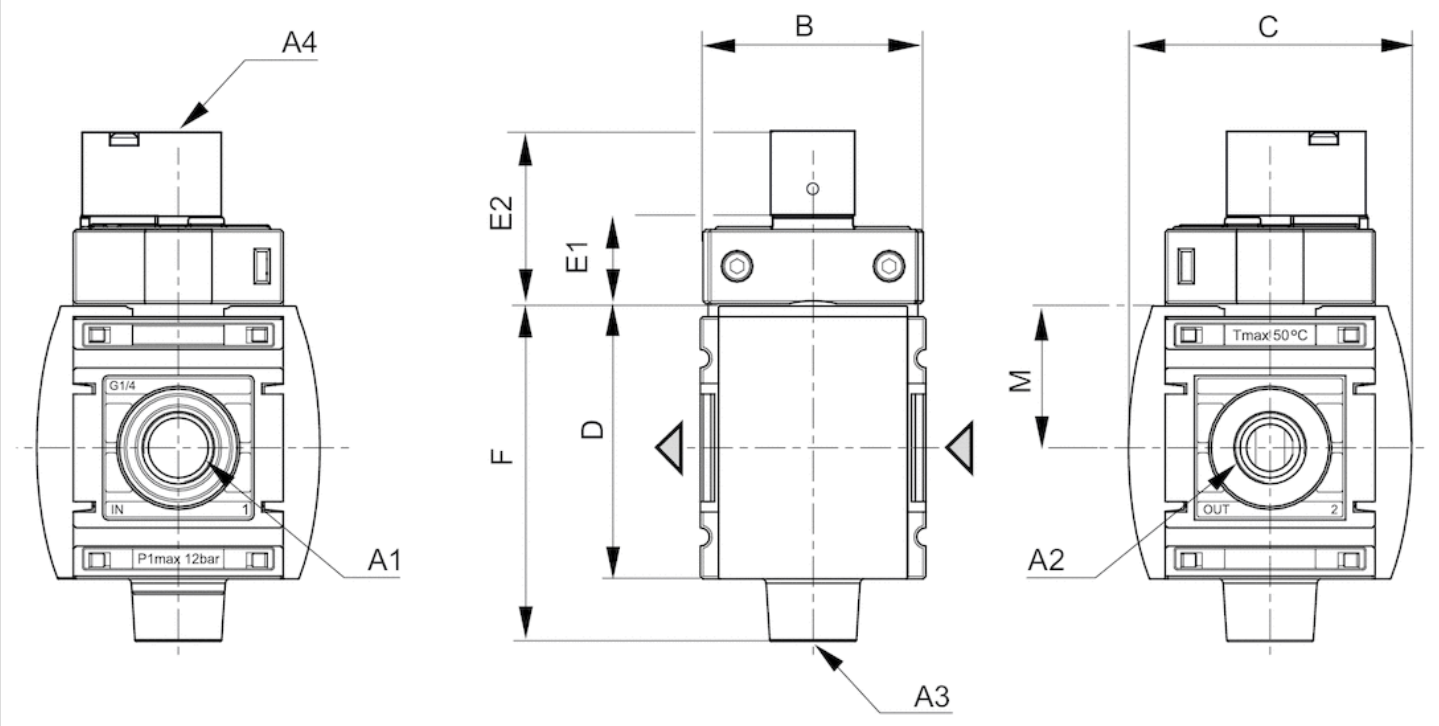
Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



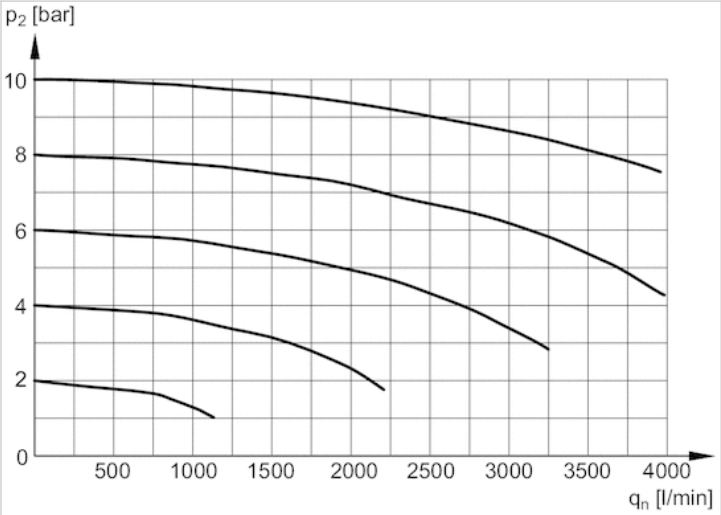
A1 = input
A2 = output
A3 = ventilation port
A4 = control pressure connection

Dimensions in mm

A1	A2	A3	A4	B	C	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

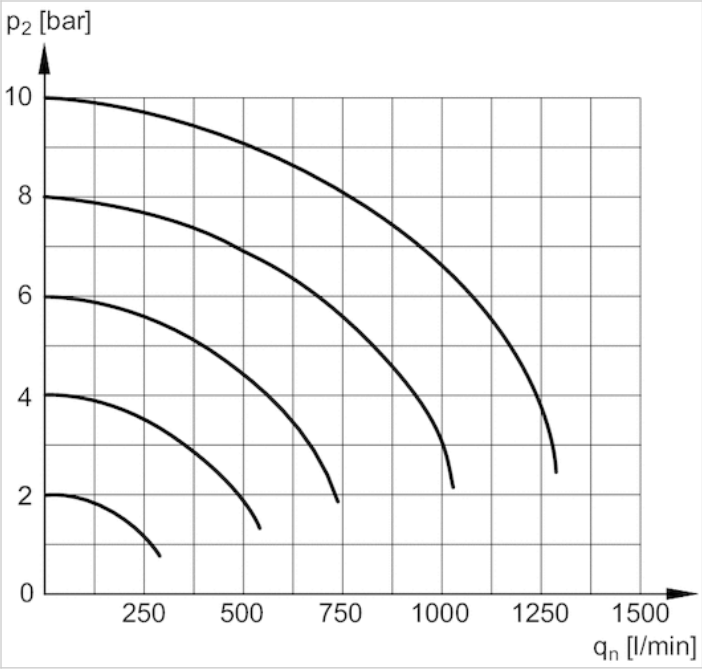
Diagrams

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

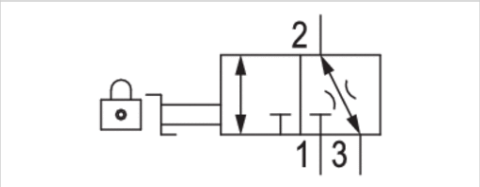
Rear exhaust



p2 = secondary pressure
qn = nominal flow

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

- G 1/4
- Air supply right
- lockable
- for padlocks



Version	Ball valve
Activation	Mechanical
Lock type	lockable
Actuating element	rotary switch
Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Max. particle size	25 µm
Weight	0.331 lbs

Technical data

Part No.	Compressed air connection	Compressed air connection
	Input	Output
R412014742	G 1/4	G 1/4

Part No.	Compressed air connection	Flow	Flow	Lock type
	Exhaust	Qn 1 ▸ 2	Qn 2▸3	
R412014742	G 1/4	2.64 Cv	0.386 Cv	for padlocks

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .

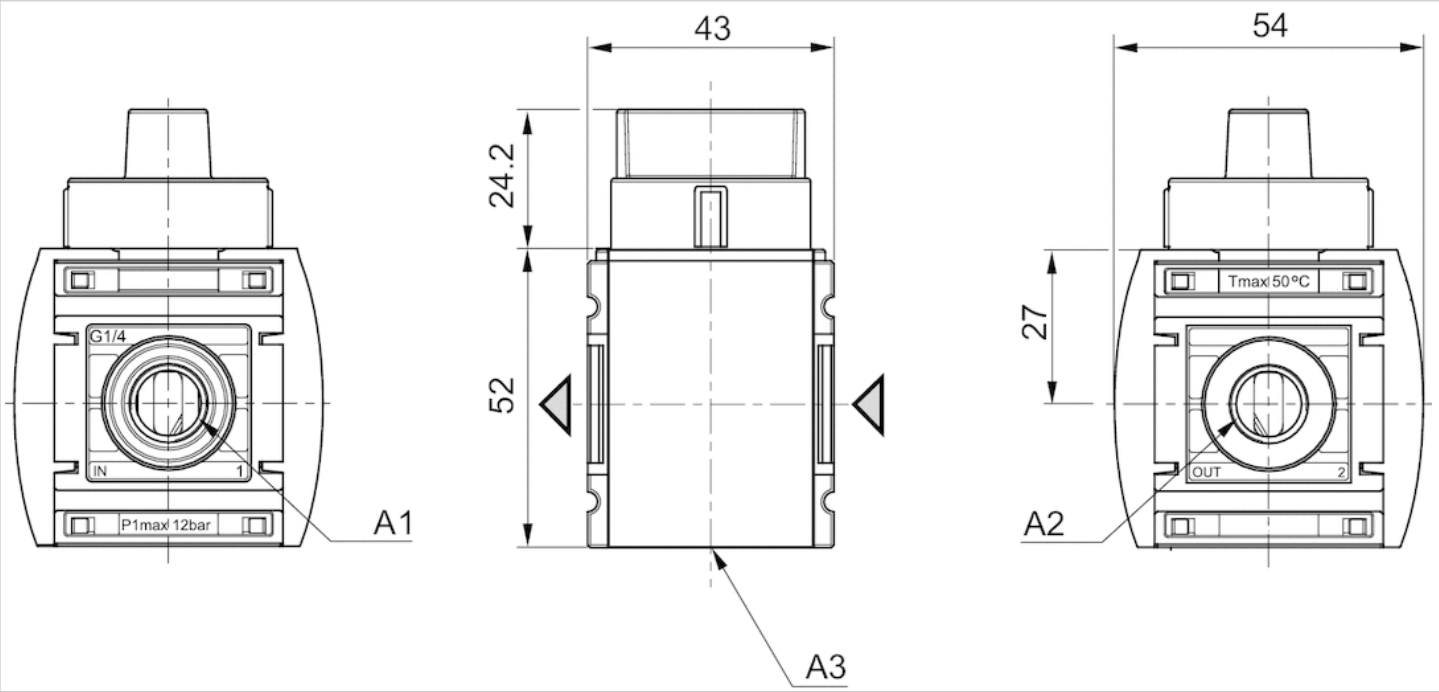
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Material	
Actuating element	Polyoxymethylene

Dimensions

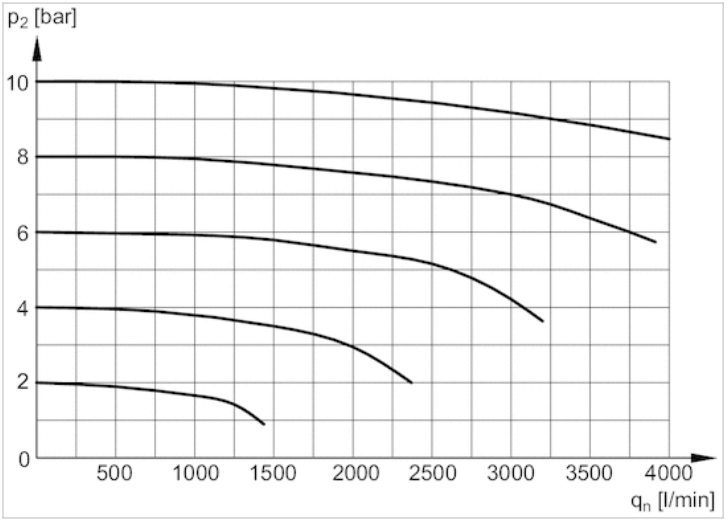
Dimensions



A1 = input
A2 = output
A3 = ventilation port

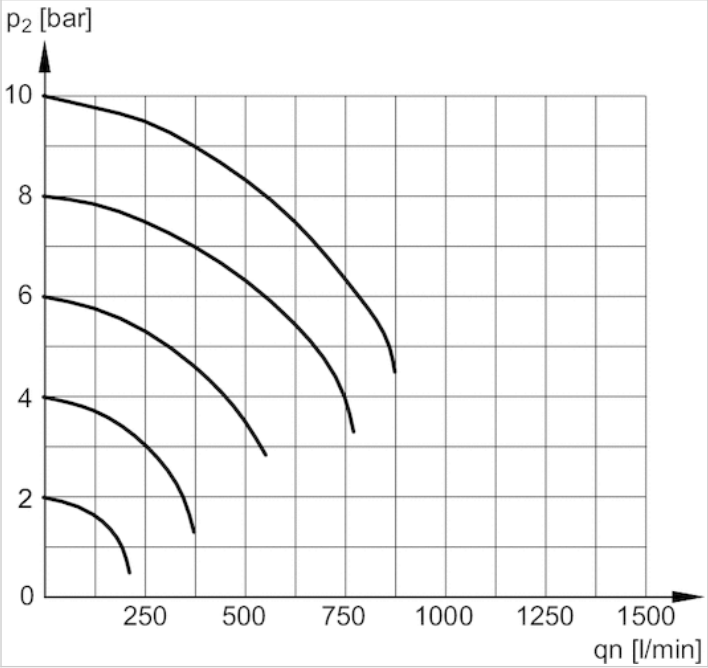
Diagrams

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

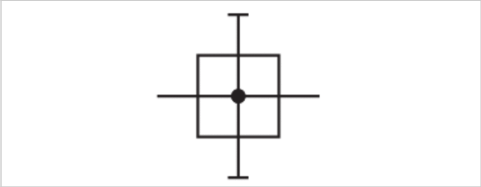
Rear exhaust



p2 = secondary pressure
qn = nominal flow

Distributor, Series AS1-DIS

- G 1/4
- Air supply right
- Distributor 2x
- Distributor



Version	Distributor, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Weight	0.326 lbs

Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow
		Qn 1▸2	Qn 1▸3	Qn 1▸5
R412014740	G 1/4	2.74 Cv	0.965 Cv	2.03 Cv

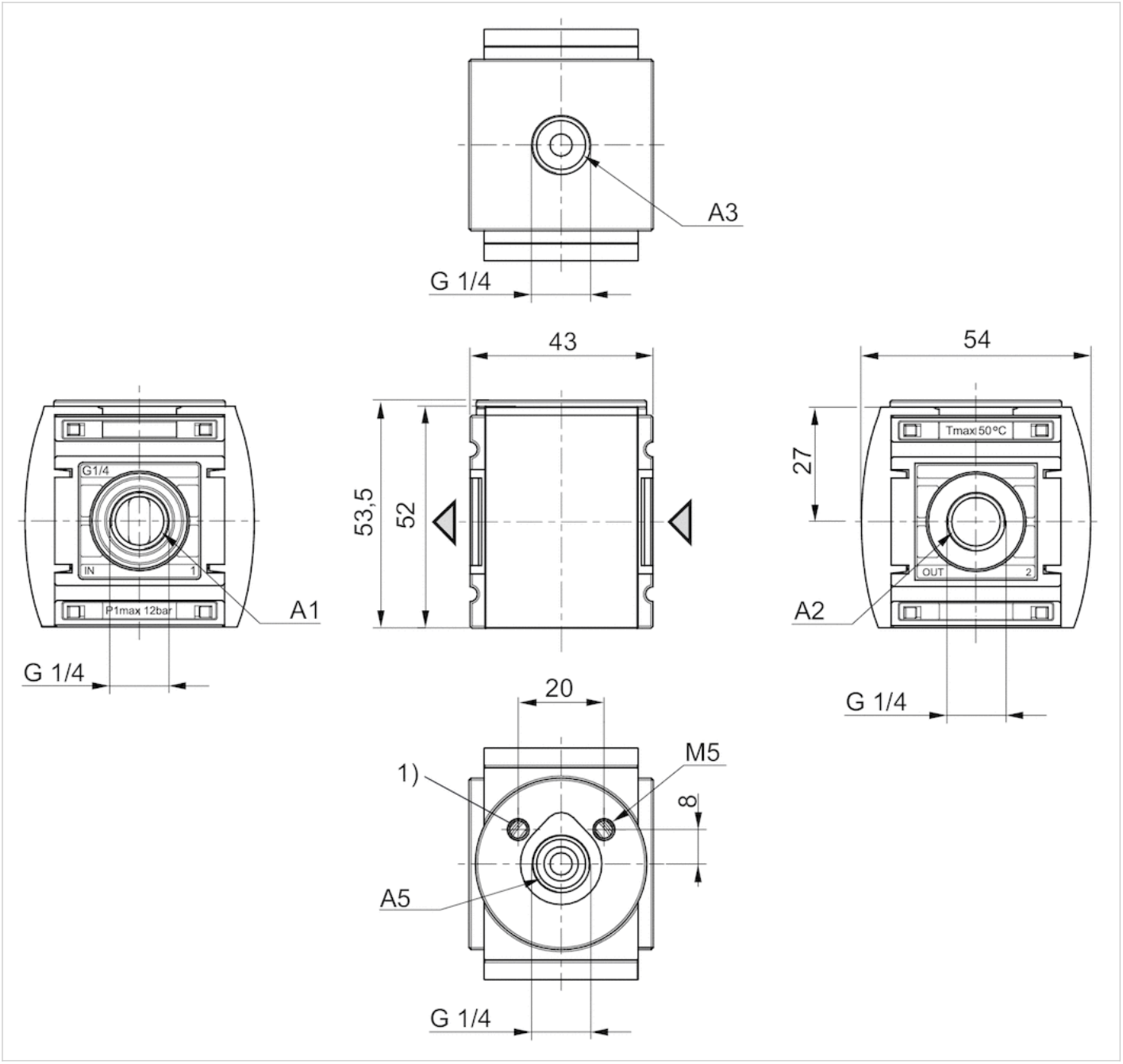
Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

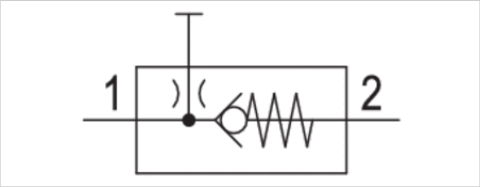
Dimensions



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

Distributor, Series AS1-DIN

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



Version	Non-return valve, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Neutral gases
Weight	0.392 lbs

Technical data

Part No.	Port	Nominal flow	Nominal flow
		Qn 1▸2	Qn 1▸3
R412014741	G 1/4	0.813 Cv	1.02 Cv

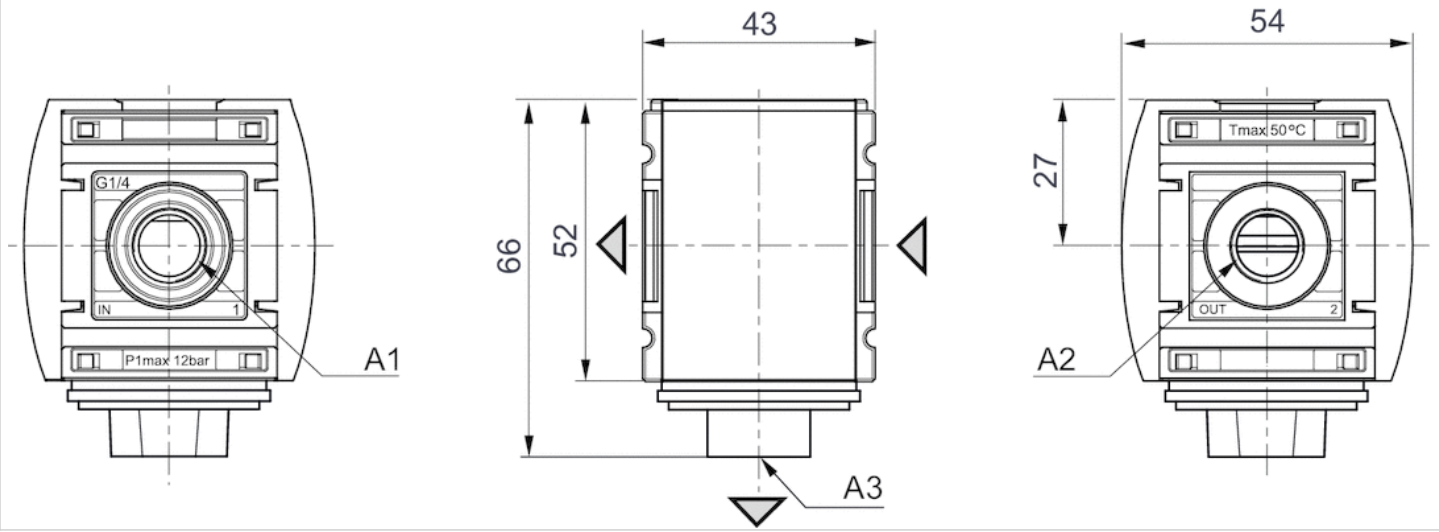
Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

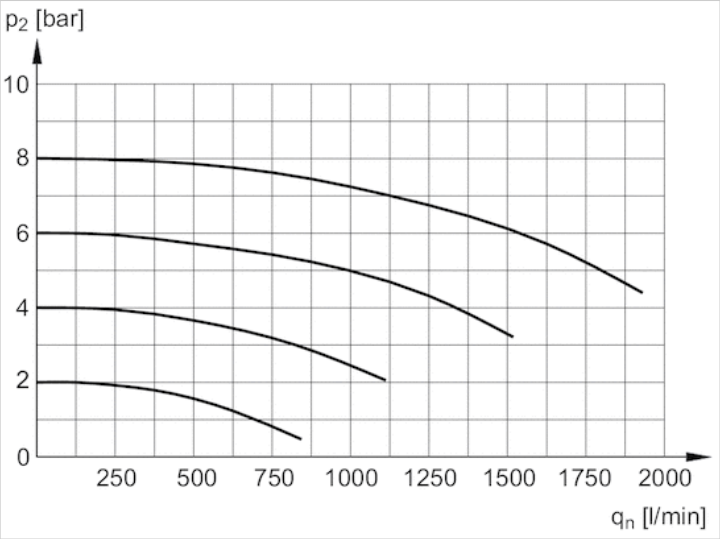
Dimensions



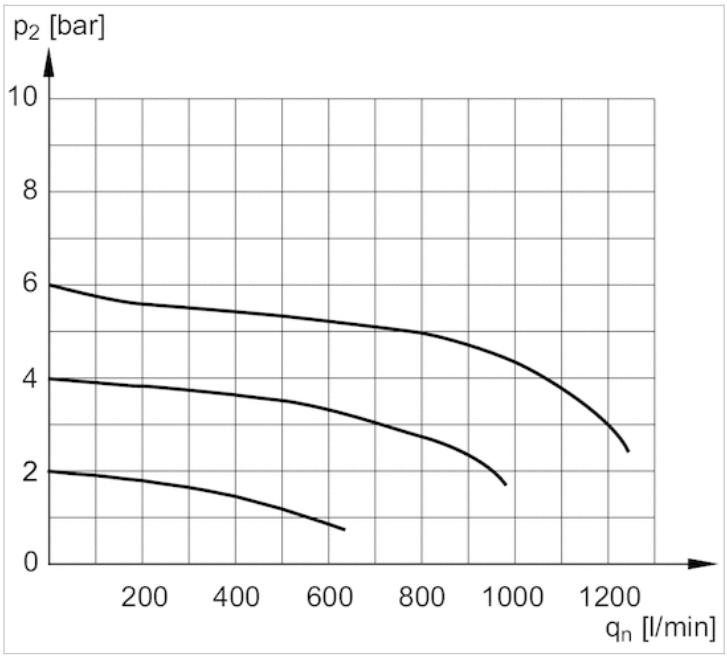
A1 = input
A2 = output
A3 = output

Diagrams

Flow rate characteristic



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



Nominal flow 1 ▸ 3
p2 = secondary pressure
qn = nominal flow

Reservoir, Series AS1-CLS

- Material Die cast zinc, Polycarbonate

Version	Reservoir
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Filter reservoir volume	0.54 fl.oz.
Weight	See table below

Technical data

Part No.	Condensate drain	Reservoir	Weight	Fig.	
R412014751	fully automatic, open without pressure	Die cast zinc	0.276 lbs	Fig. 1	1)
1827009640	semi-automatic, open without pressure	Die cast zinc	0.337 lbs	Fig. 2	-
1827009639	semi-automatic, open without pressure	Polycarbonate	0.187 lbs	Fig. 3	1)

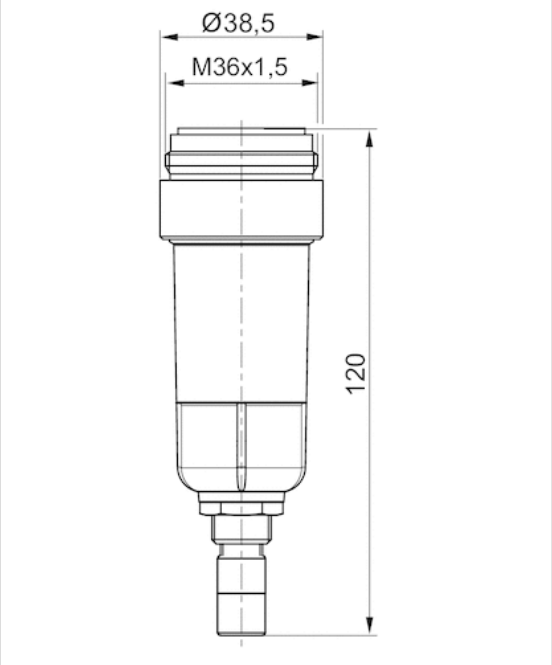
1) Suitable for use in Ex zones 1, 2, 21, 22

Technical information

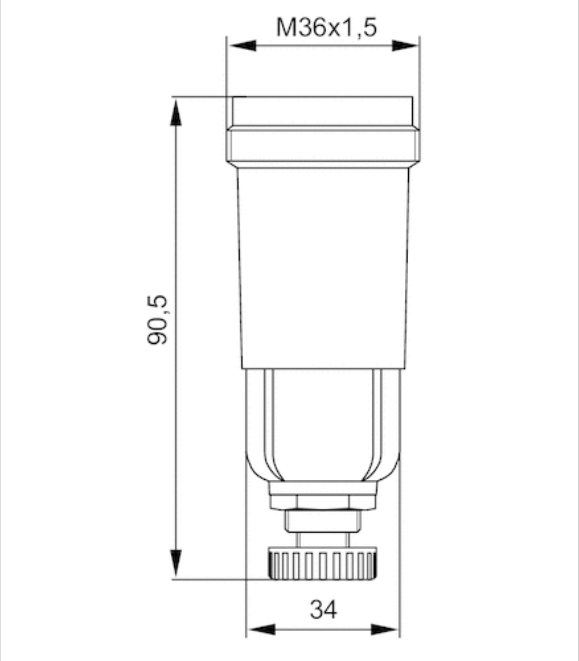
Material	
Reservoir	Die cast zinc, Polycarbonate
Seal	Acrylonitrile butadiene rubber

Dimensions

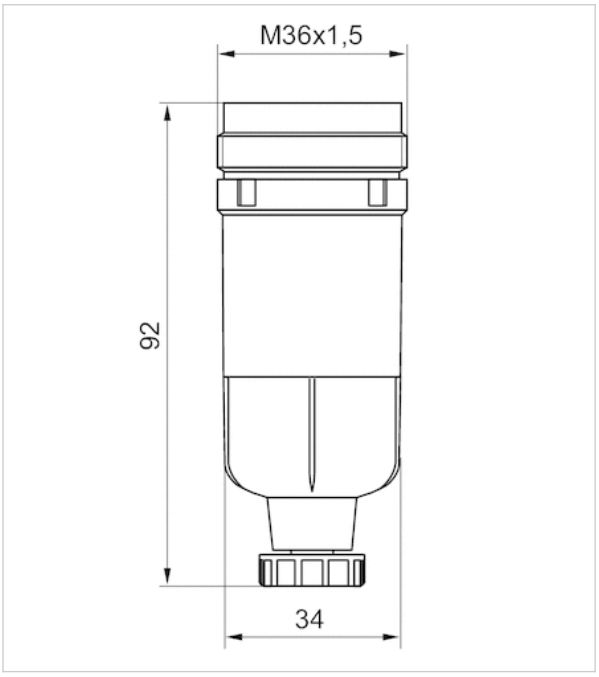
Dimensions Fig. 1



Dimensions Fig. 2



Dimensions Fig. 3



Reservoir, Series NL1/AS1-CBM/-CLA

- for active carbon filter and lubricator
- Material Polycarbonate, Die cast zinc

Version	Reservoir
Certificates	suitable for ATEX
Working pressure min./max.	232 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air, Oil
Filter reservoir volume	0.54 fl.oz.
Weight	See table below

Technical data

Part No.	Reservoir	Weight	Fig.
1827009637	Polycarbonate	0.132 lbs	Fig. 1
1827009638	Die cast zinc	0.276 lbs	Fig. 2

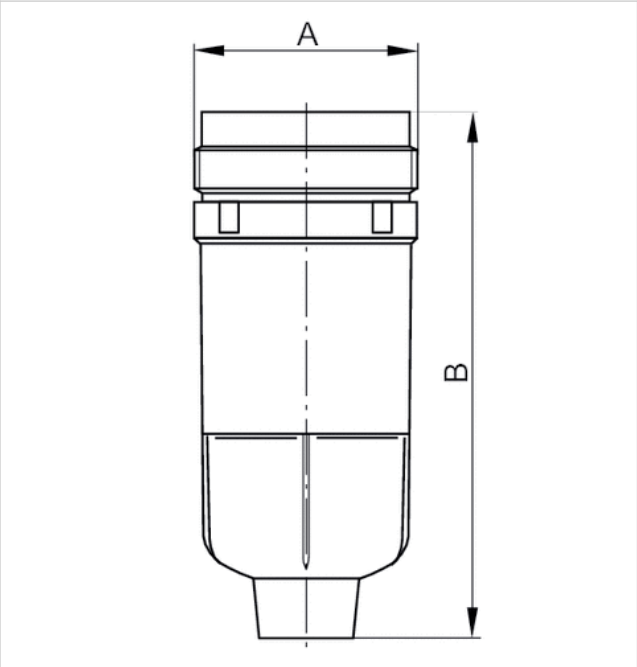
Suitable for use in Ex zones 1, 2, 21, 22

Technical information

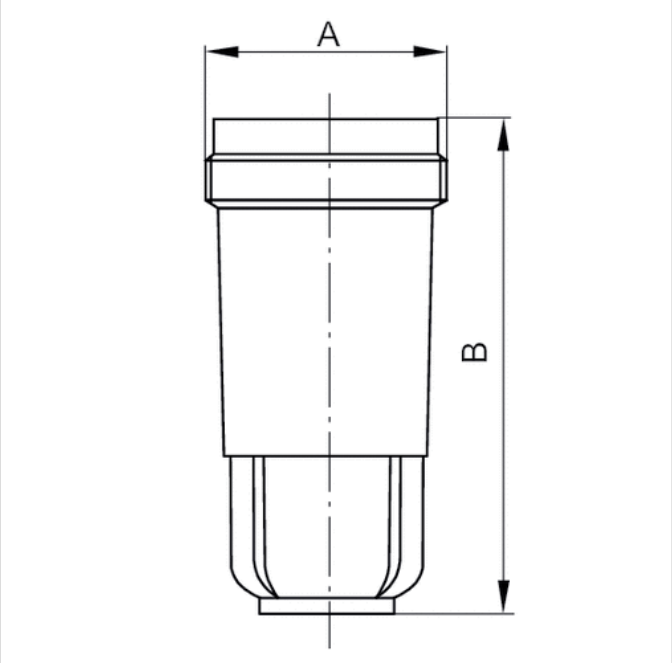
Material	
Reservoir	Polycarbonate, Die cast zinc
Seal	Acrylonitrile butadiene rubber

Dimensions

Dimensions Fig. 1



Dimensions Fig. 2



Dimensions

Part No.	Fig.	A	B
1827009637	Fig. 1	M36x1.5	85
1827009638	Fig. 2	M36x1.5	74.5

Protective guard

- NL1
- Filter, Lubricator

Weight 0.066 lbs

Technical data

Part No.
1820507004

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

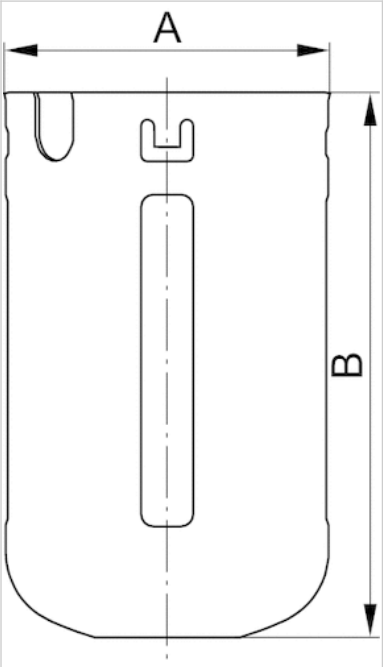
Technical information

Can be retrofitted for PC reservoir

Technical information

Material	
Material	Steel, galvanized

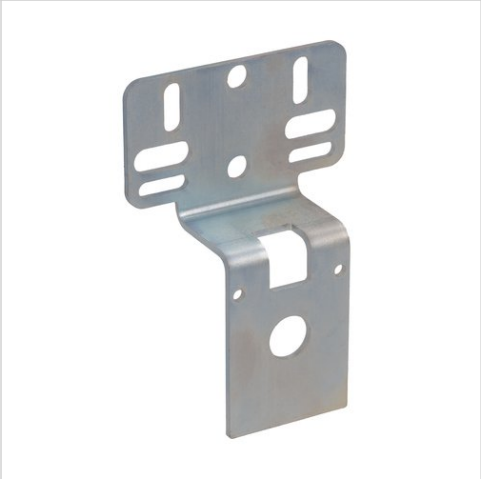
Dimensions



Dimensions

Part No.	A	B
1820507004	37	63

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



Ambient temperature min./max.	14 ... 122 °F
Weight	0.154 lbs

Technical data

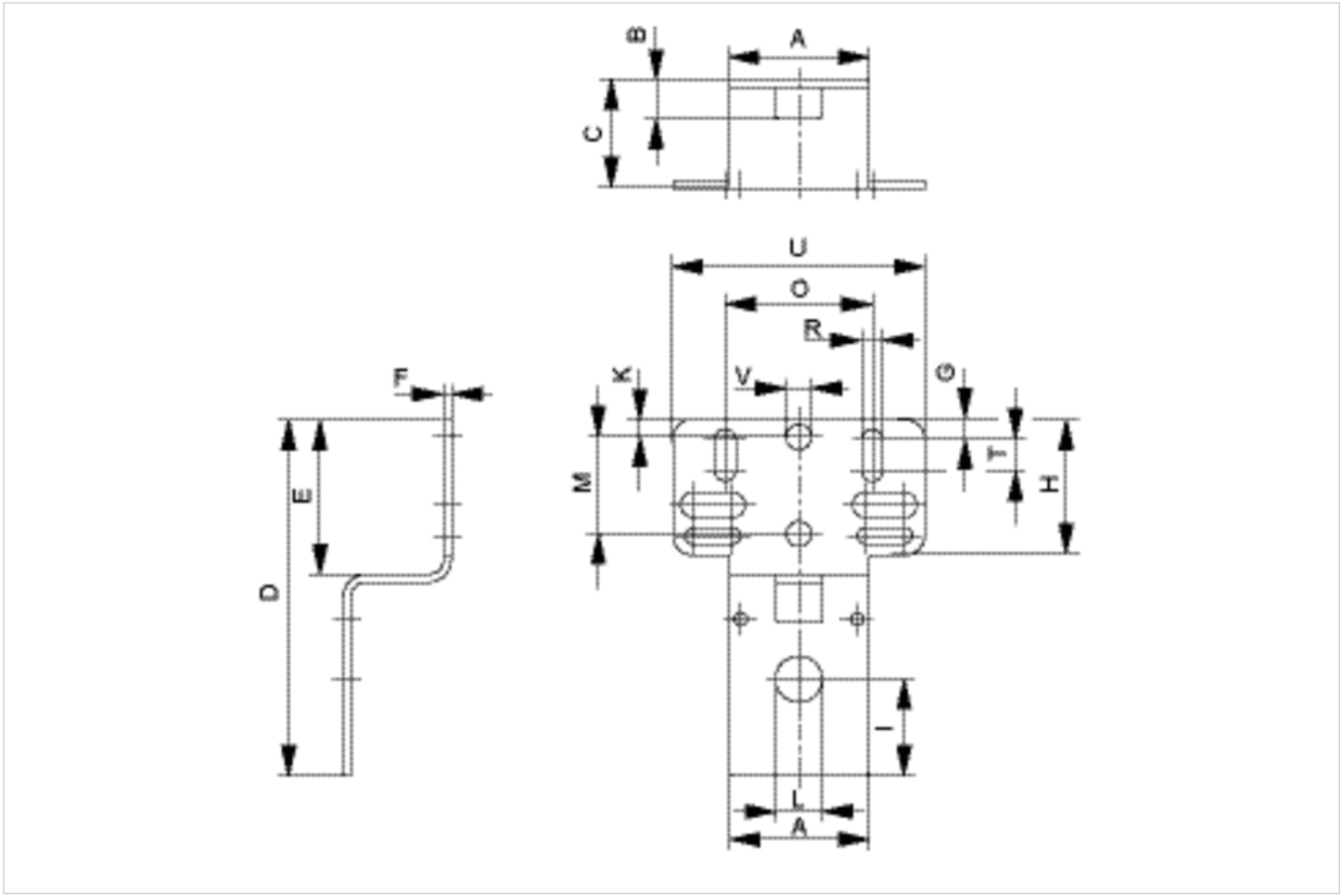
Part No.
R412014755

Scope of delivery incl. 2 mounting screws 3x10 (Torx 10 IP) DIN EN ISO 10664

Technical information

Material	
Housing	Steel, galvanized

Dimensions



Dimensions

A	B	C	D	E	F	G	H	I	K	Ø L	M	O	R	T	U	V
36	10	28	92	40	2	5.2	35	25	4.5	12	25	38	5.4	8	65	6.5

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

Ambient temperature min./max.	14 ... 122 °F
Weight	0.13 lbs

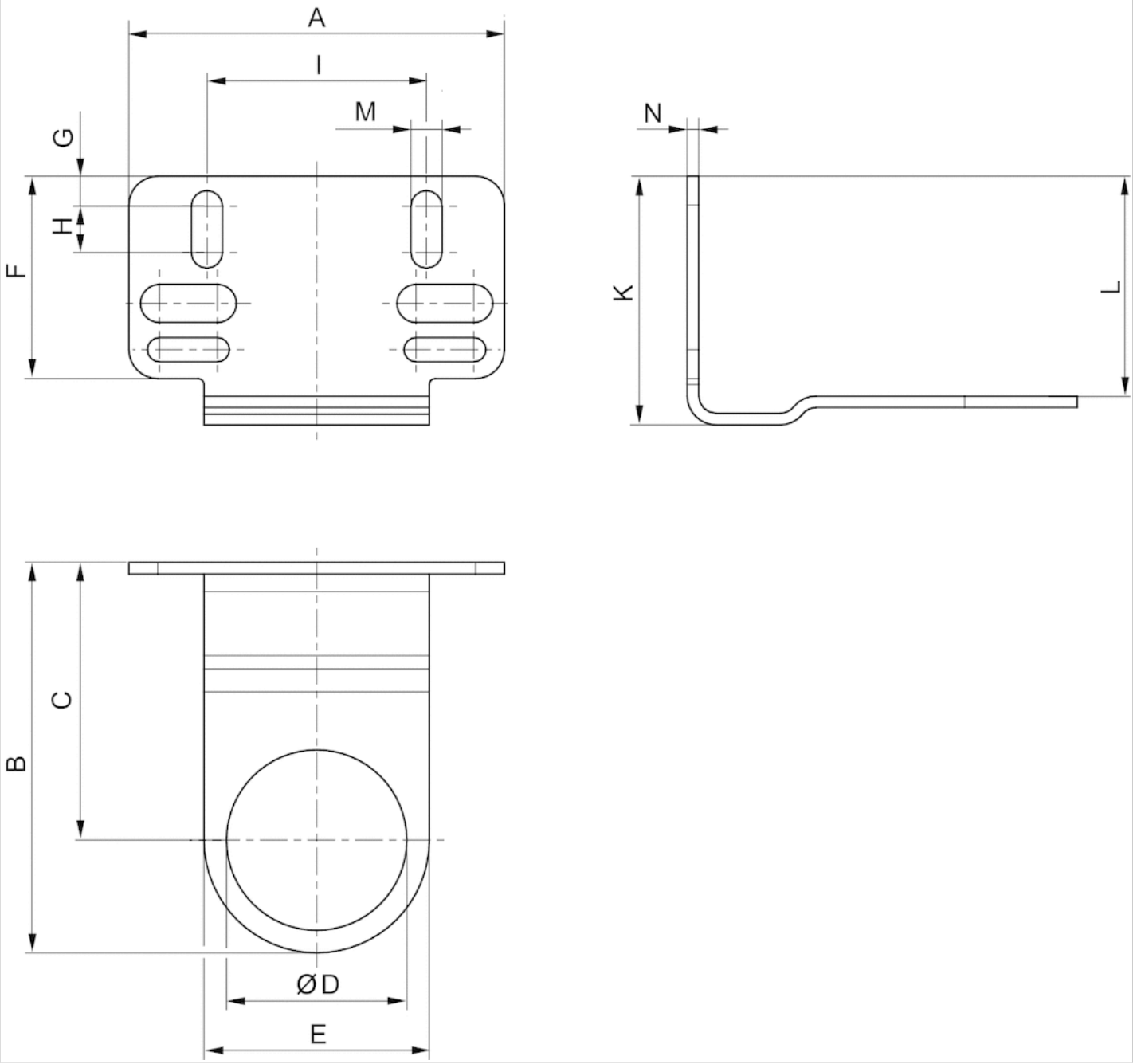
Technical data

Part No.
R412014756

Technical information

Material	
Housing	Steel, galvanized

Dimensions



Dimensions

A	B	C	Ø D	E	F	G	H	I	K	L	M	N
65	67.5	48	31.2	39	35	5.2	8	38	43	38	5.4	2

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

Ambient temperature min./max.	14 ... 122 °F
Weight	0.055 lbs

Technical data

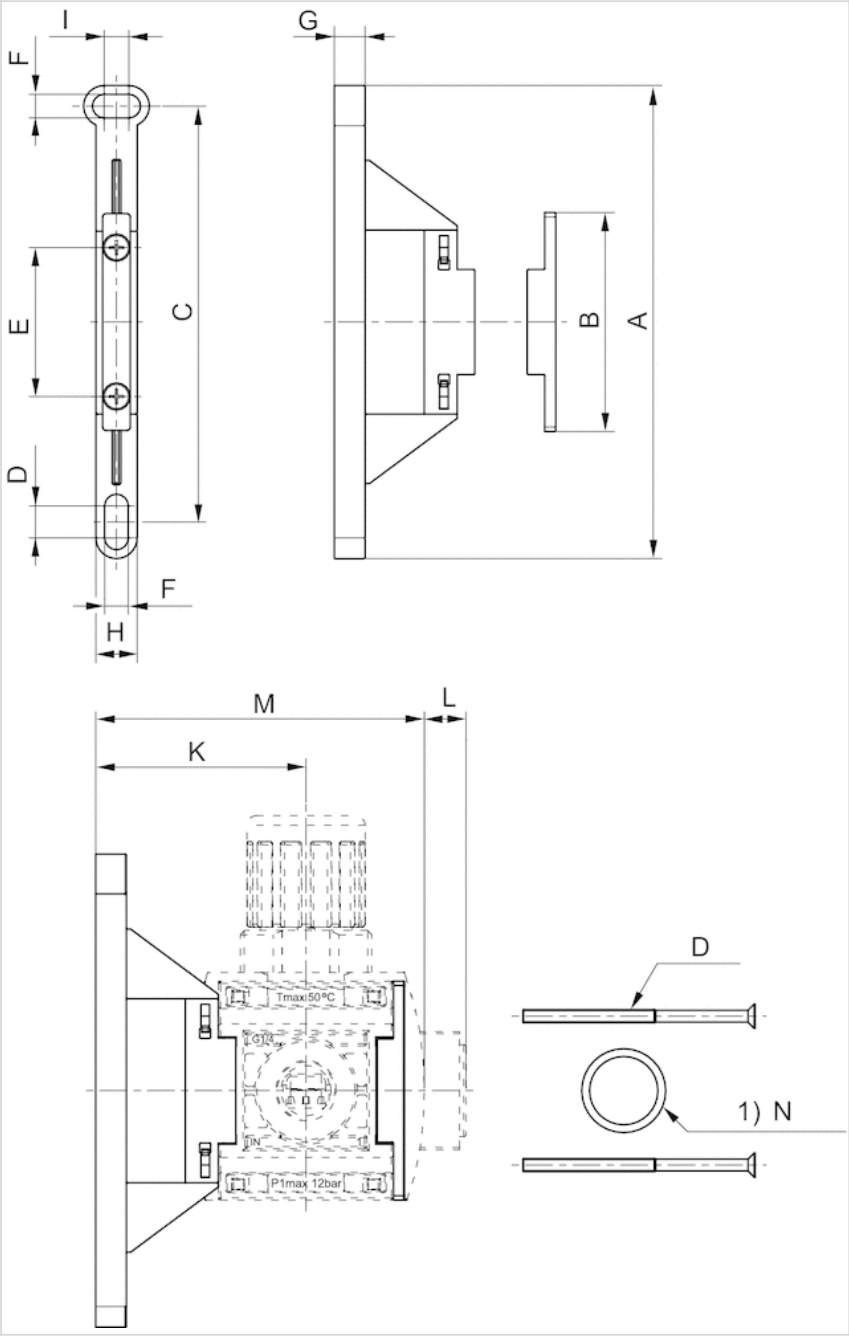
Part No.
R412014757

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

Technical information

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber

Dimensions



Dimensions

A	B	C	D	E	F	G	H	I	K	L	M	N	O
108	50	95	7.3	34	5.4	7	9.4	5.6	48	9.5	75	17,17x1,78	M3x53

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

Ambient temperature min./max.	14 ... 122 °F
Weight	0.031 lbs

Technical data

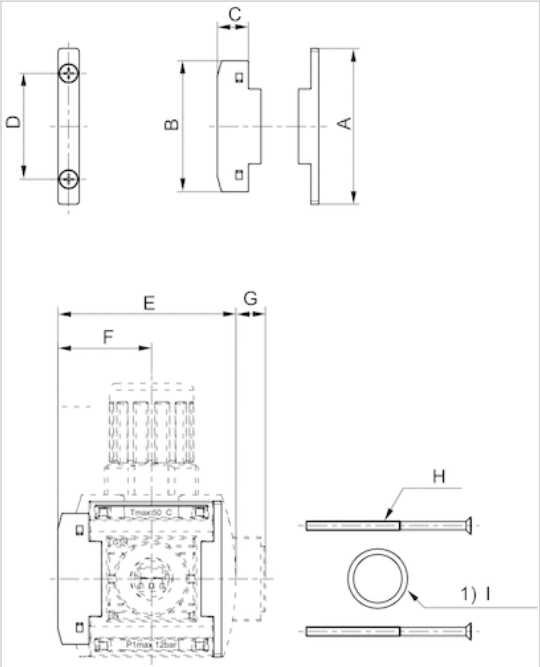
Part No.
R412014758

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

Technical information

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber

Dimensions



Dimensions

Part No.	A	B	C	D	E	F	G	H	I
R412014758	50	42	10	34	57	30	9.5	M3x53	17,17x1,78

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

Ambient temperature min./max.	14 ... 122 °F
Weight	0.888 lbs

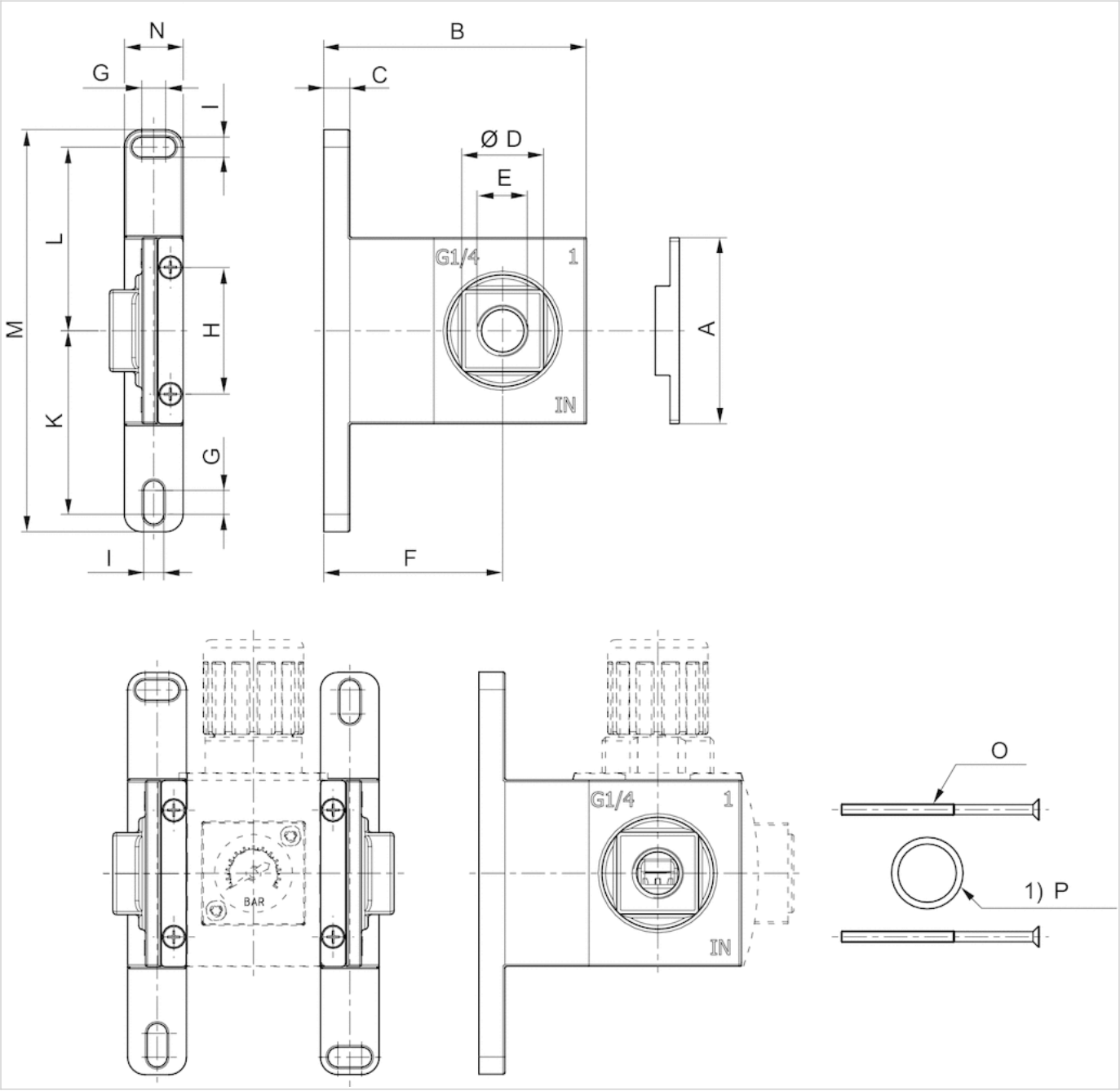
Technical data

Part No.	Port
R412014753	G 1/8
R412014754	G 1/4

Technical information

Material	
Housing	Die cast zinc, black painted
Seal	Acrylonitrile butadiene rubber

Dimensions



Dimensions

Part No.	A	B	C	Ø D	E	F	G	H	I	K	L	M	N	O	P
R412014753	50	70.5	7	22	G 1/8	48.1	6.4	34	5.4	49.3	49.3	108	15.8	M3x53	17,17x1,78
R412014754	50	70.5	7	22	G 1/4	48.1	6.4	34	5.4	49.3	49.3	108	15.8	M3x53	17,17x1,78

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

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

Ambient temperature min./max.	14 ... 122 °F
Weight	0.121 lbs

Technical data

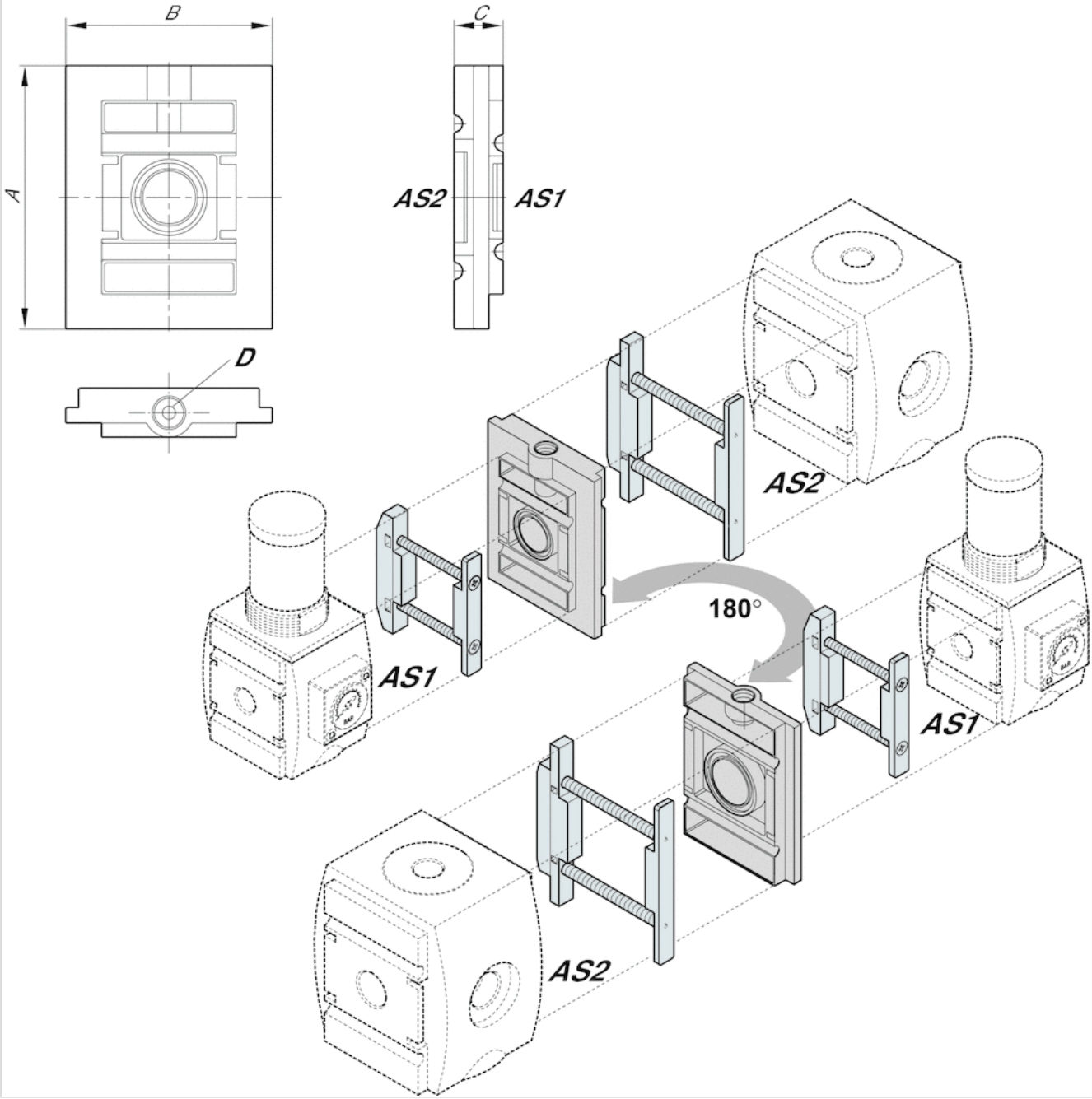
Part No.
R412014759

Scope of delivery incl. 1 blanking screw and 2 mounting strap kits

Technical information

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber

Dimensions



Dimensions

A	B	C	D
62	47.5	14	G 1/8

Panel nut, Series AS-MBR-...-W06

- for AS1, NL1, NL2, MU1, AS1, NL1, NL2

Weight

See table below

The delivered product may vary from that in the illustration.

Technical data

Part No.	Port	Material	Scope of delivery	Weight	
1829234070	M30x1,5	Brass	5 piece	0.029 lbs	1)
1829234073	M30x1,5	Plastic	5 piece	0.013 lbs	-

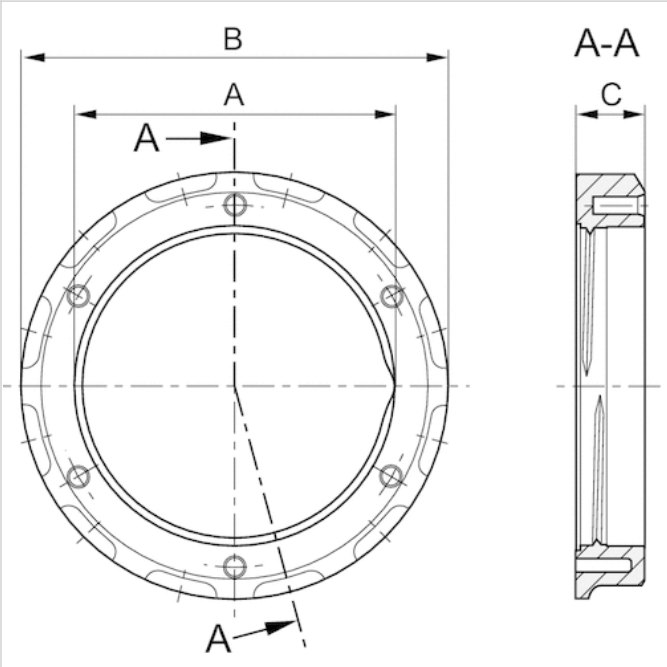
1) Suitable for use in Ex zones 1, 2, 21, 22

Technical information

Material	
Housing	Brass, Plastic

Dimensions

Dimensions



Dimensions

Part No.	For series	A	B	C
1829234070	AS1, NL1, NL2, MU1	M30x1,5	35	5.5
1829234073	AS1, NL1, NL2	M30x1,5	37.5	7.5

Panel nut, Series AS-MBR-...-W06

- for AS1, AS2

Ambient temperature min./max. 14 ... 122 °F

The delivered product may vary from that in the illustration.

Technical data

Part No.	Port
R412006372	M36x1.5

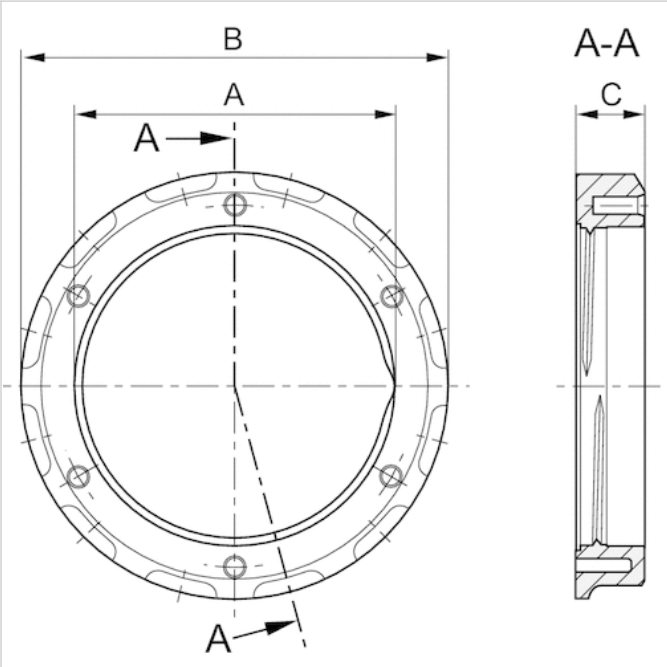
Suitable for use in Ex zones 1, 2, 21, 22

Technical information

Material	
Housing	Polyamide

Dimensions

Dimensions



Dimensions

Part No.	For series	A	B	C
R412006372	AS1, AS2	M36x1,5	48	8

Pressure gauge, Series PG1-INT

- flange version
- Background color White
- Scale color Black
- Viewing window Polycarbonate
- Units bar

Version	Diaphragm pressure gauge
Ambient temperature min./max.	32 ... 140 °F
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	Black
Background color	White
Pointer color	Black
Weight	0.053 lbs

Technical data

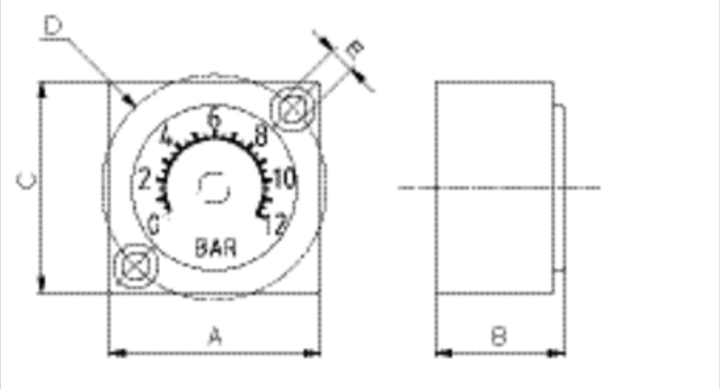
Part No.	Range of application	Display range	Operating pressure	Scale value
R412014760	0 ... 6	0 ... 6	0 ... 87 psi	0.25
R412014761	0 ... 12	0 ... 12	0 ... 174 psi	0.25

Technical information

Material	
Housing	Polyamide
Viewing window	Polycarbonate
Seal	Nitrile butadiene rubber

Dimensions

Dimensions



Dimensions in mm

Part No.	A	B	C	D	E
R412014760	27	16.5	27	28.3	3.3
R412014761	27	16.5	27	28.3	3.3

Pressure gauge, Series PG1-SAS

- Back port
- Background color Black
- Scale color White, Grey
- Viewing window Polystyrene
- Units bar
- Units psi

Version	Bourdon tube pressure gauge
Standardization	EN 837-1
Class	2,5
Ambient temperature min./max.	-40 ... 140 °F
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	White
Secondary scale unit (inside)	psi
Secondary scale color (inside)	Grey
Background color	Black
Pointer color	White
Weight	0.176 lbs

Technical data

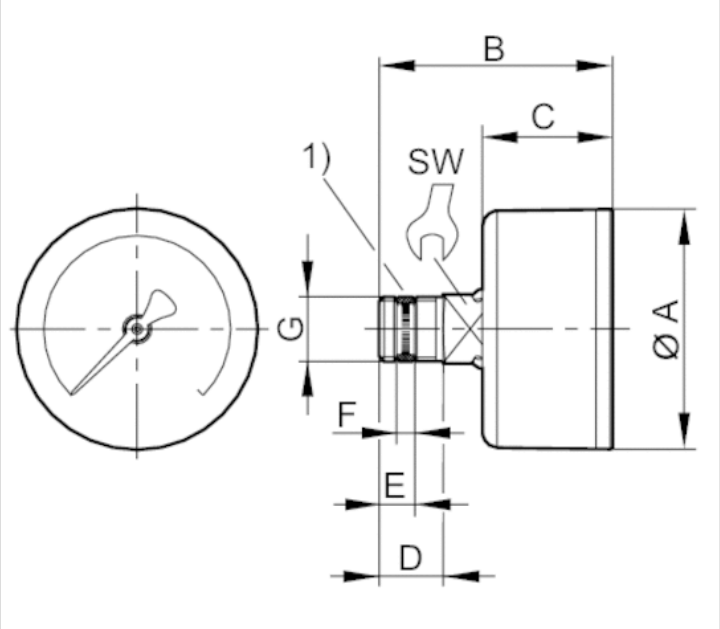
Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value
R412003853	G 1/8	1.57 inch	0 ... 1.2	0 ... 1.6	0 ... 23 psi	0.05
R412003854	G 1/8	1.57 inch	0 ... 2	0 ... 2.5	0 ... 36 psi	0.1
R412003855	G 1/8	1.57 inch	0 ... 3.2	0 ... 4	0 ... 58 psi	0.1
R412003856	G 1/8	1.57 inch	0 ... 4	0 ... 6	0 ... 87 psi	0.2
R412003857	G 1/8	1.57 inch	0 ... 8	0 ... 10	0 ... 145 psi	0.2
R412003858	G 1/8	1.57 inch	0 ... 12	0 ... 16	0 ... 232 psi	0.5

Technical information

Material	
Housing	Acrylonitrile butadiene styrene
Thread	Brass
Viewing window	Polystyrene
Seal	Polytetrafluorethylene

Dimensions

Dimensions



1) Gasket thread

Dimensions in mm

Compressed air connection	Nominal diameter	Ø A	B	C	D	E	F 1)	SW
G 1/8	1.57 inch	39	44.5	26.5	10	5.6	2.1	14

3/2-directional valve, Series DO16

- 3/2
- Plate connection
- Electrical connection : Plug, ISO 15217, form C
- Manual override : without detent, with detent
- With spring return

Version	Poppet valve
Activation	Electrically
Sealing principle	Soft sealing
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow 1 ▸ 2	See table below
Nominal flow 2 ▸ 3	See table below
Protection class acc. to DIN EN 61140,Electrically	Class I
Protection class,with connection	IP65
Duty cycle	100 %
Mounting on manifold strip	PRS strip
mounting screws	M3
Weight	0.077 lbs

Technical data

Part No.		MO	Operational voltage	Operational voltage
			DC	AC 50 Hz
0820048002			24 V	-
0820048004			-	24 V
0820048005			-	-
0820048001			-	230 V
0820048026			24 V	-
0820048028			-	24 V
0820048101			-	230 V
0820048029			-	-
0820048025			-	230 V
0820048102			24 V	-
0820048126			24 V	-

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
0820048002	-	-10% / +15%	-	-
0820048004	-	-	-10% / +15%	-
0820048005	110 V	-	-	-10% / +15%
0820048001	-	-	-10% / +15%	-

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
0820048026	-	-10% / +15%	-	-
0820048028	-	-	-10% / +15%	-
0820048101	-	-	-10% / +15%	-
0820048029	110 V	-	-	-10% / +15%
0820048025	-	-	-10% / +15%	-
0820048102	-	-10% / +15%	-	-
0820048126	-	-10% / +15%	-	-

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
0820048002	2 W	-	-	-
0820048004	-	1.6 VA	-	2.2 VA
0820048005	-	-	1.4 VA	-
0820048001	-	1.6 VA	-	2.2 VA
0820048026	2 W	-	-	-
0820048028	-	1.6 VA	-	2.2 VA
0820048101	-	1.6 VA	-	2.2 VA
0820048029	-	-	1.4 VA	-
0820048025	-	1.6 VA	-	2.2 VA
0820048102	2 W	-	-	-
0820048126	2 W	-	-	-

Part No.	Switch-on power	Nominal flow 1 ▸ 2	Nominal flow 2 ▸ 3	Working pressure min./max.
	AC 60 Hz			
0820048002	-	0.025 Cv	0.036 Cv	0 ... 145 psi
0820048004	-	0.025 Cv	0.036 Cv	0 ... 145 psi
0820048005	2 VA	0.025 Cv	0.036 Cv	0 ... 145 psi
0820048001	-	0.025 Cv	0.036 Cv	0 ... 145 psi
0820048026	-	0.025 Cv	0.036 Cv	0 ... 145 psi
0820048028	-	0.025 Cv	0.036 Cv	0 ... 145 psi
0820048101	-	0.016 Cv	0.019 Cv	0 ... 87 psi
0820048029	2 VA	0.025 Cv	0.036 Cv	0 ... 145 psi
0820048025	-	0.025 Cv	0.036 Cv	0 ... 145 psi
0820048102	-	0.02 Cv	0.026 Cv	0 ... 116 psi
0820048126	-	0.02 Cv	0.026 Cv	0 ... 116 psi

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

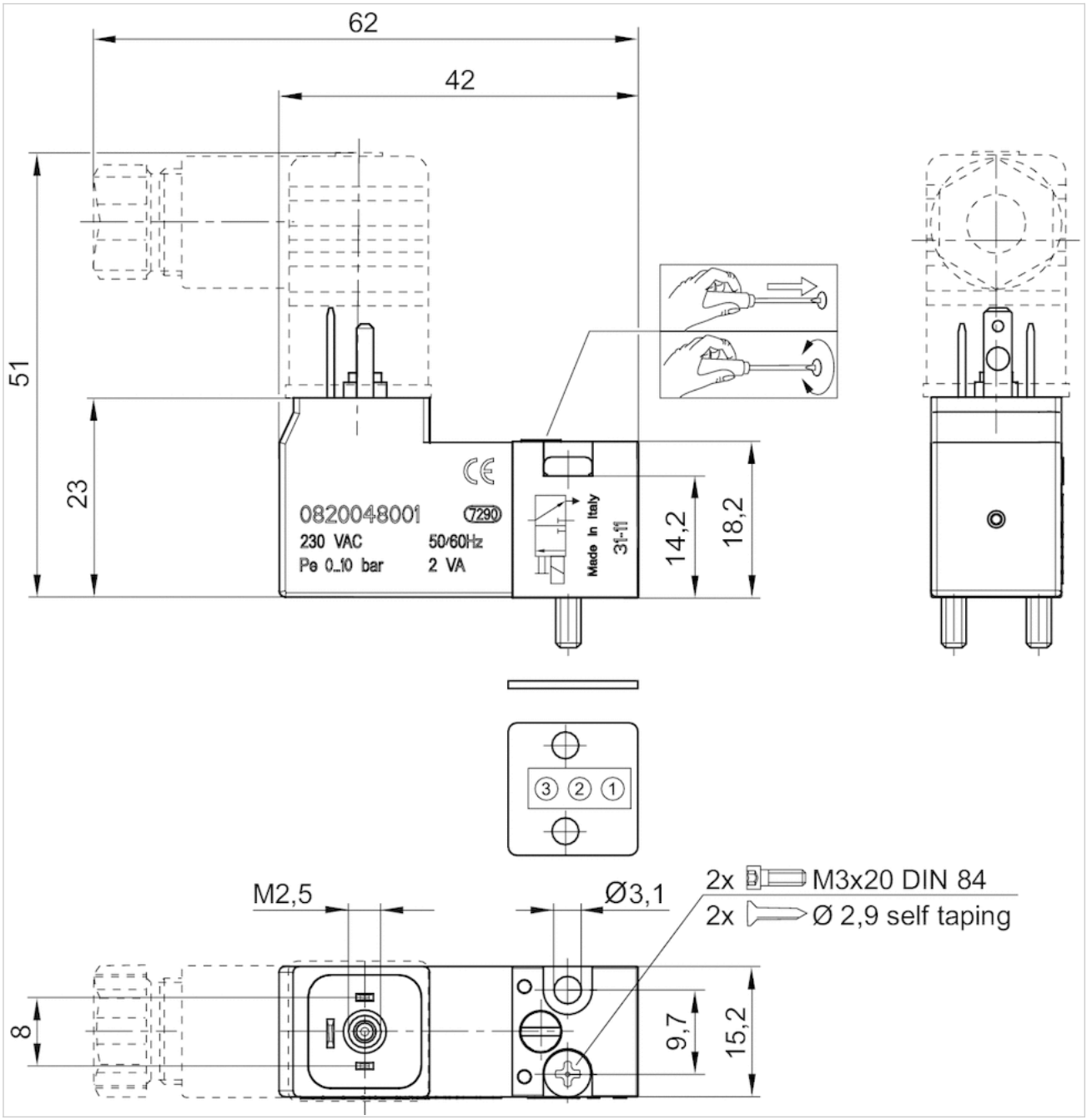
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

Material	
Housing	polyphenylene sulfide, Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



3/2-directional valve, Series DO30

- 3/2
- Pilot valve width : 30 mm
- Plate valve with pipe connection
- Compressed air connection output : CNOMO
- Electrical connection : Plug, EN 175301-803, form A
- Manual override : without detent, with detent
- With spring return
- suitable for ATEX

Version	Poppet valve
Activation	Electrically
Sealing principle	Soft sealing
Standards	CNOMO / NFE 49-003-1
Working pressure min./max.	0 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow 1 ▸ 2	See table below
Nominal flow 2 ▸ 3	See table below
Protection class,with connection	IP65
Compatibility index	15
Duty cycle	100 %
Mounting on manifold strip	P-strip
mounting screws	M4
Weight	0.132 lbs

Technical data

Part No.		MO	Compressed air connection	Compressed air connection
			Input	Output
0820019985			CNOMO	CNOMO
0820019980			CNOMO	CNOMO

Part No.	Compressed air connection	Nominal flow 1 ▸ 2	Nominal flow 2 ▸ 3
	Exhaust		
0820019985	M5	0.069 Cv	0.091 Cv
0820019980	M5	0.066 Cv	0.081 Cv

Part No.	basic valve with electrical connector	ATEX
0820019985	Basic valve without coil	suitable for ATEX
0820019980	Basic valve without coil	suitable for ATEX

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

pilot valve without coil

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

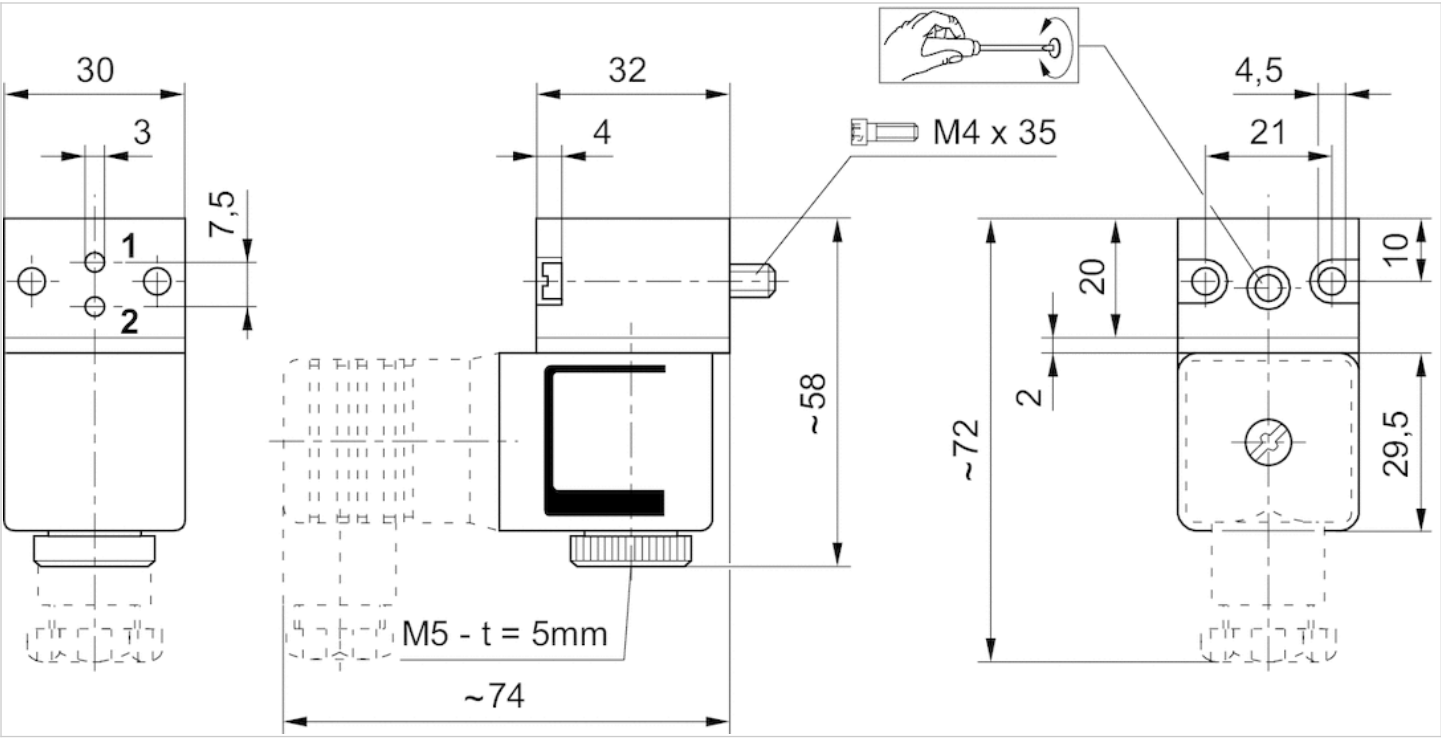
ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

Technical information

Material	
Housing	Plastic
Seals	Fluorocaoutchouc

Dimensions

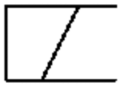
Dimensions



t = depth

Coil, Series CO1

- Cable with valve plug connector
- Power consumption,DC 3.25 W
- Holding power,AC 2.9-3 VA
- Switch-on power,AC 3-3.1 VA
- ATEX



Certificates	ATEX
ATEX class G	II 2G Ex mb IIC T4 Gb
ATEX class D	II 2D Ex mb tb IIIC T130°C Db IP65
Ambient temperature min./max.	-4 ... 122 °F
Protection class	IP65
Duty cycle ED	100 %
Compatibility index	14
Weight	See table below

Technical data

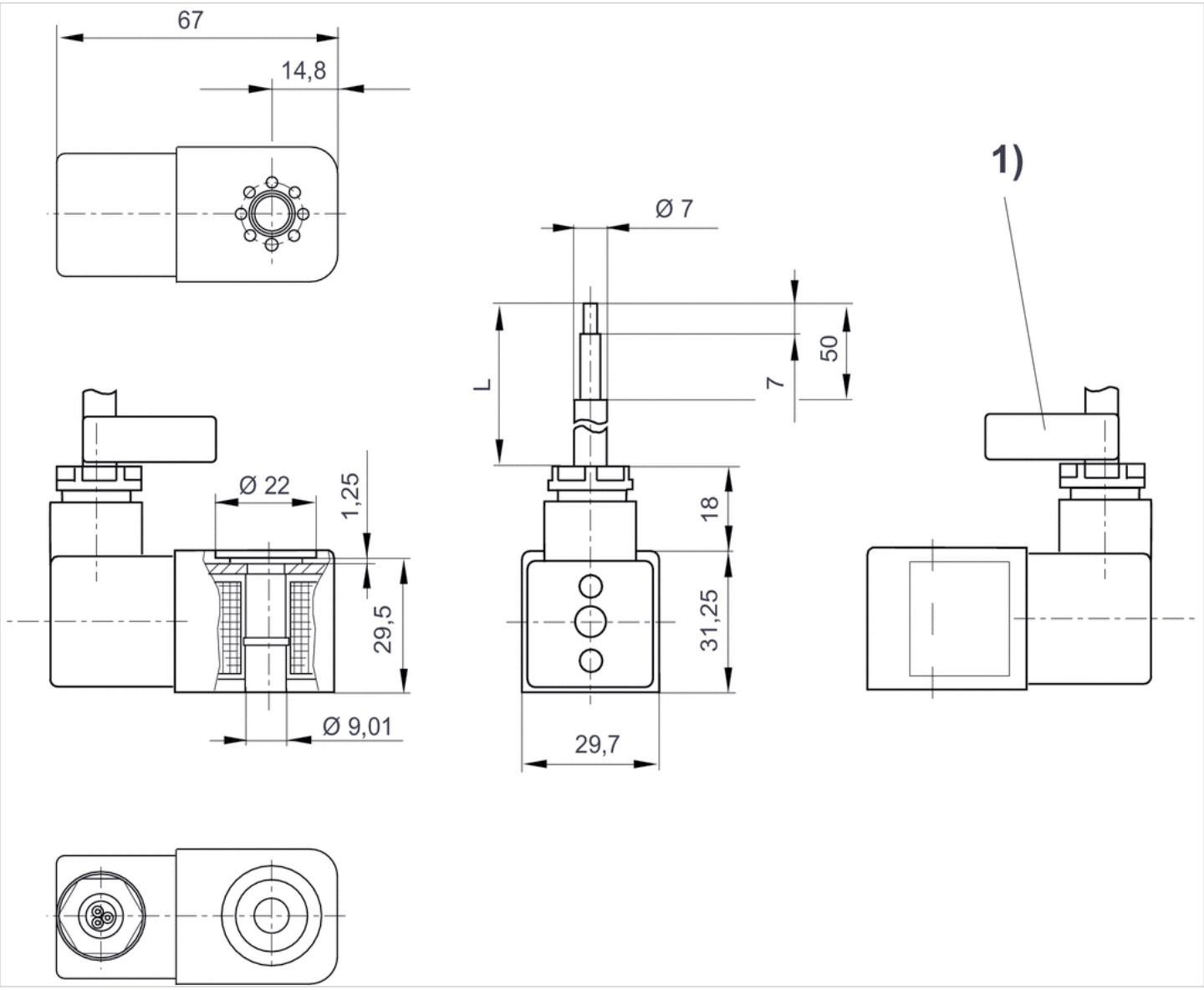
Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
1827414297	-	230 V	230 V
1827414298	-	230 V	230 V
1827414299	-	110 V	110 V
1827414300	-	110 V	110 V
1827414301	-	24 V	24 V
1827414302	-	24 V	24 V
1827414303	24 V	-	-
1827414304	24 V	-	-

Part No.	Voltage tolerance	Voltage tolerance	Power consumption	Holding power
	DC	AC 50 Hz	DC	AC 50 Hz
1827414297	-	-10% / +10%	-	3 VA
1827414298	-	-10% / +10%	-	3 VA
1827414299	-	-10% / +10%	-	2.9 VA
1827414300	-	-10% / +10%	-	2.9 VA
1827414301	-	-10% / +10%	-	2.9 VA
1827414302	-	-10% / +10%	-	2.9 VA
1827414303	-10% / +10%	-	3.25 W	-
1827414304	-10% / +10%	-	3.25 W	-

Part No.	Switch-on power	Weight
	AC 50 Hz	
1827414297	3.1 VA	0.838 lbs
1827414298	3.1 VA	2.01 lbs
1827414299	3 VA	0.838 lbs
1827414300	3 VA	0.838 lbs
1827414301	3 VA	0.838 lbs
1827414302	3 VA	2.01 lbs
1827414303	-	0.838 lbs
1827414304	-	2.01 lbs

Dimensions

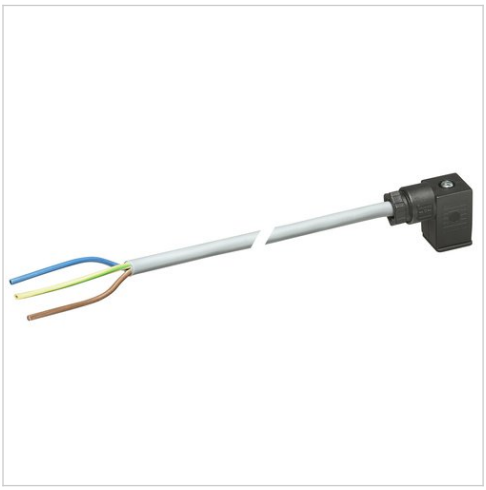
Dimensions



L = cable length
1) Cable ID band with serial number

Valve plug connector, series CON-VP

- Socket, form C, 2+E, angled, 90°
- open cable ends, 3-pin
- with cable
- unshielded



Ambient temperature min./max.	-4 ... 176 °F
Operational voltage	See table below
Protection class	IP67
Mounting screw tightening torque	0.3 ft./lbs.
Weight	See table below

Technical data

Part No.		Operational voltage	Max. current	Protective circuit	Contact assignment
1834484213		230 V, AC/DC	6 A	-	2+E
1834484215		230 V, AC/DC	6 A	-	2+E
1834484205		24 V, AC/DC	6 A	Z-diode	2+E
1834484207		24 V, AC/DC	6 A	Z-diode	2+E
1834484209		230 V, AC/DC	6 A	Varistor	2+E
1834484211		230 V, AC/DC	6 A	Varistor	2+E
1834484236		24 V, AC/DC	6 A	Z-diode	2+E

Part No.	LED status display	Number of wires	Cable length	Weight	Fig.	
1834484213	-	3	9.84 ft.	0.403 lbs	Fig. 2	-
1834484215	-	3	16.4 ft.	0.679 lbs	Fig. 2	-
1834484205	Yellow	3	9.84 ft.	0.408 lbs	Fig. 2	1)
1834484207	Yellow	3	16.4 ft.	0.657 lbs	Fig. 2	1)
1834484209	Yellow	3	9.84 ft.	0.428 lbs	Fig. 2	1)
1834484211	Yellow	3	16.4 ft.	0.628 lbs	Fig. 2	1)
1834484236	Yellow	3	32.81 ft.	1.26 lbs	Fig. 2	1)

1) Scope of delivery incl. flat gasket

Technical information

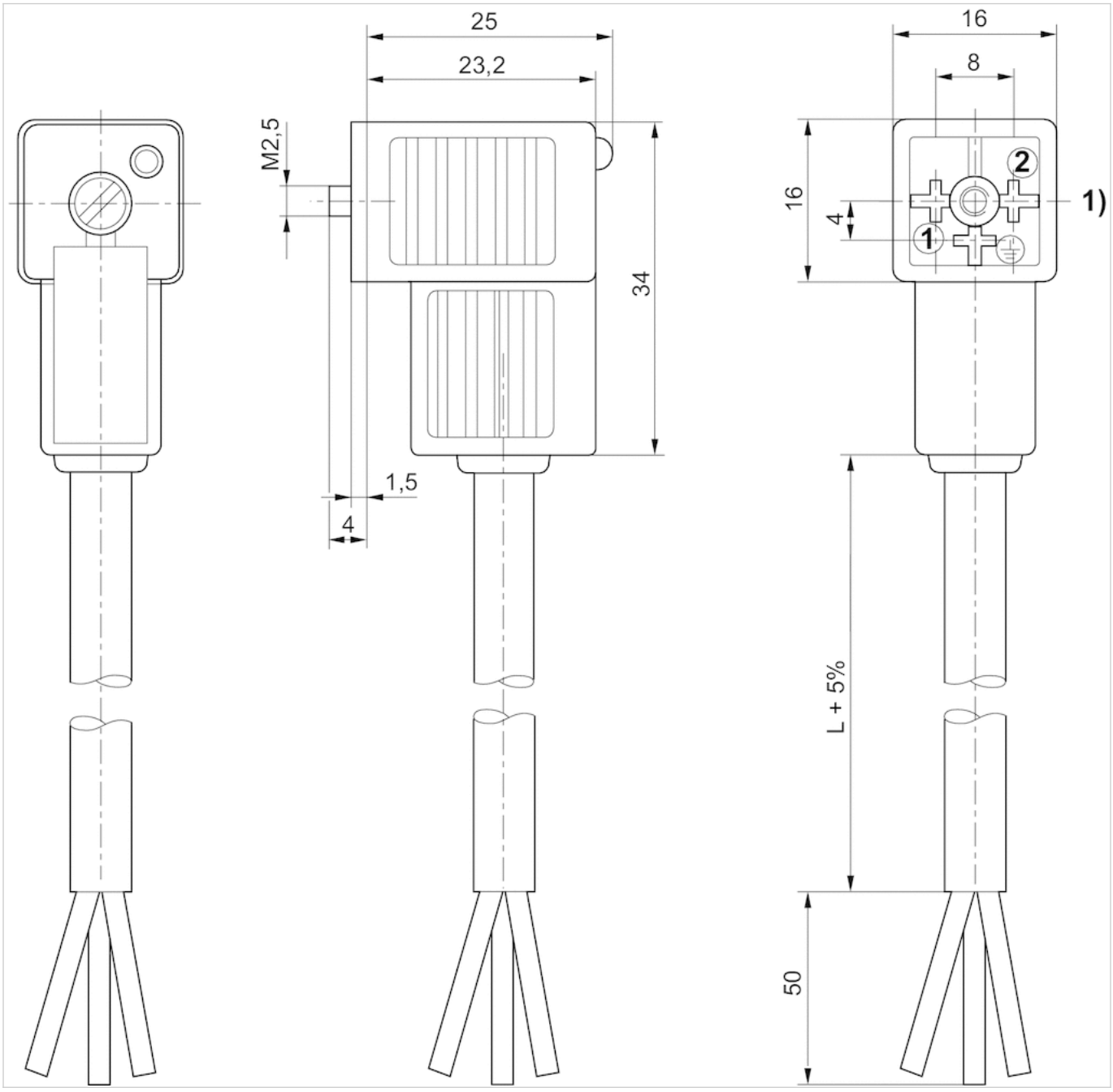
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc
Cable sheath	Polyvinyl chloride

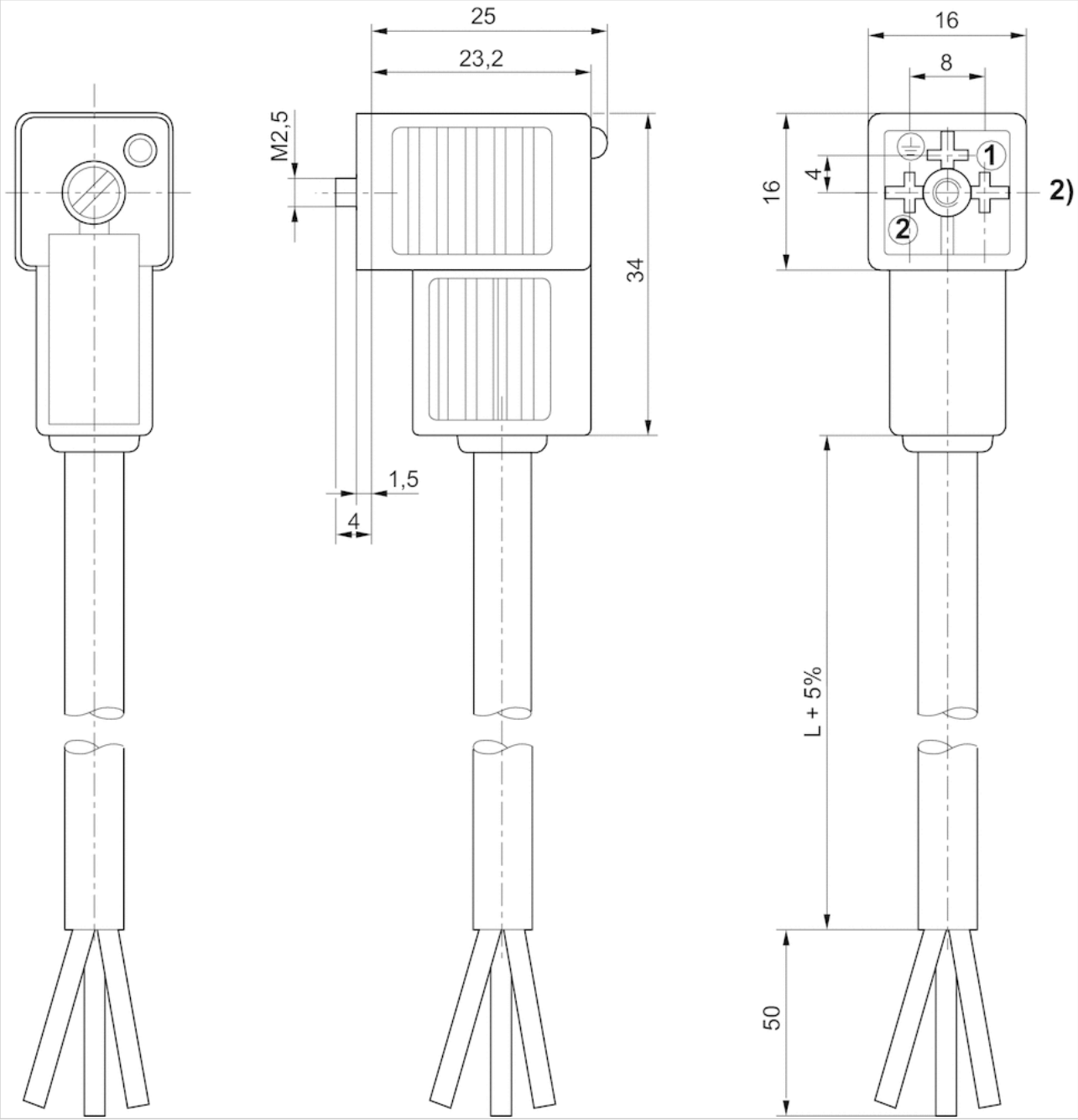
Dimensions

Fig. 1



1) 0° female insert

Fig. 2



2) 180° female insert

Round plug connector, Series CON-RD

- Socket, M12x1, 4-pin, A-coded, angled, 90°
- unshielded

Connection type	Screws
Ambient temperature min./max.	-40 ... 185 °F
Operational voltage	48 V, AC/DC
Protection class	IP67
Weight	0.035 lbs

Technical data

Part No.	Max. current	suitable cable-Ø min./max
1834484178	4 A	0.16 inch

Technical information

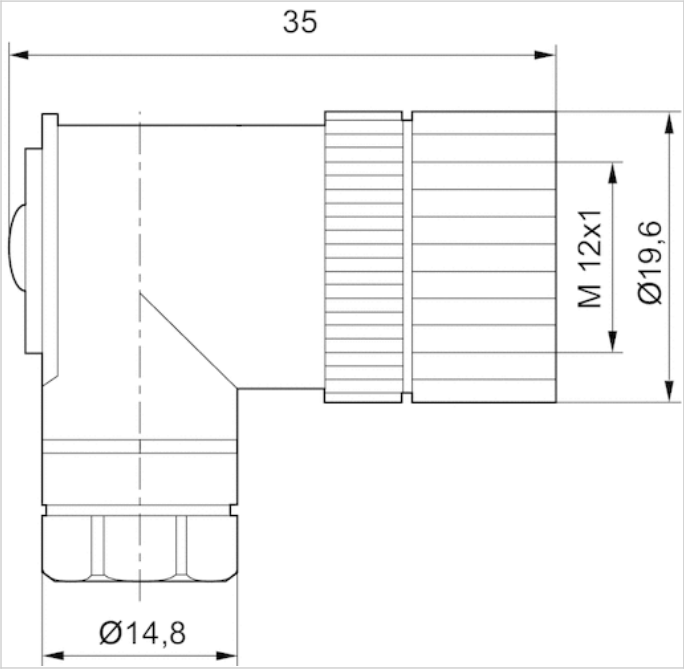
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

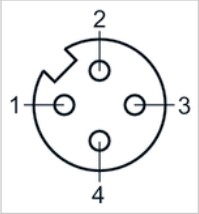
Dimensions

Dimensions



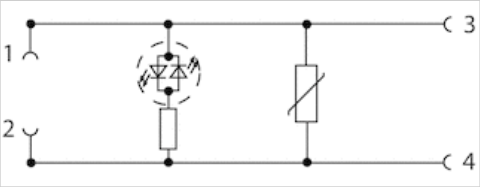
Pin assignments

Pin assignment socket



Adapter, Series CON-VP

- Socket, form C, 2+E, angled, 90°
- Plug, M12x1, 3-pin, A-coded, straight, 180°
- unshielded
- with LED Yellow



Ambient temperature min./max.	14 ... 212 °F
Operational voltage	24 V, DC
Protection class	IP65
Protective circuit	Varistor
Mounting screw tightening torque	0.44 ft./lbs.

Technical data

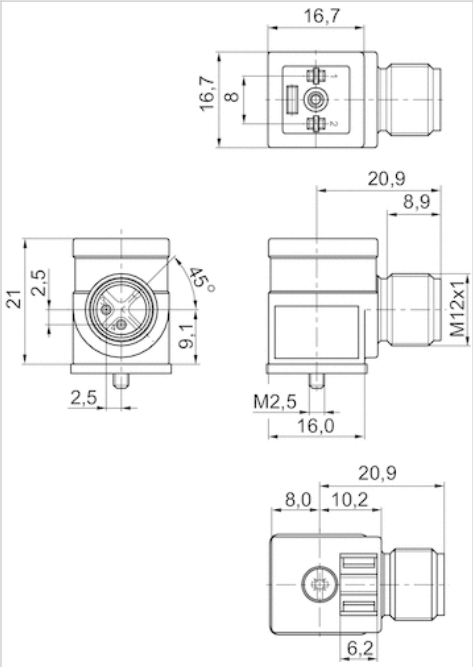
Part No.	Max. current	Protective circuit	Contact assignment	LED status display
R412009553	1 A	Varistor	2+E	Yellow

Technical information

Material	
Housing	Polyurethane

Dimensions

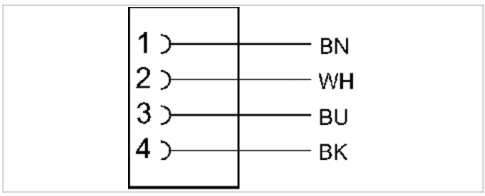
Dimensions



Round plug connector, Series CON-RD

- Socket, M12x1, 4-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded

Connection type	Screws
Ambient temperature min./max.	-40 ... 185 °F
Operational voltage	48 V, AC/DC
Protection class	IP67
Weight	0.029 lbs



Technical data

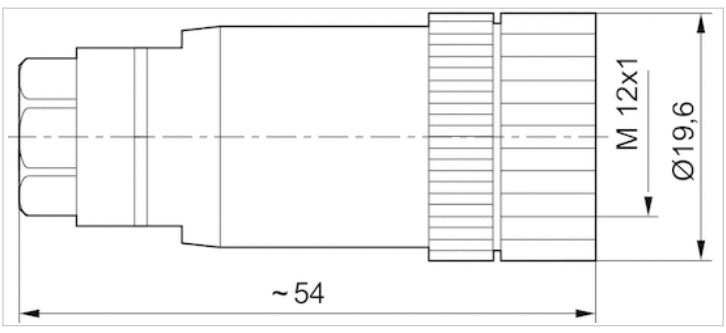
Part No.	Max. current
1834484177	4 A

Technical information

Material	
Housing	Polyamide

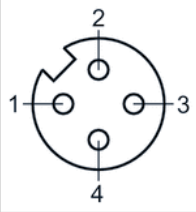
Dimensions

Dimensions



Pin assignments

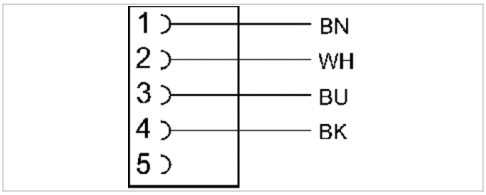
Pin assignment socket



Round plug connector, Series CON-RD

- Socket, M12x1, 5-pin, A-coded, straight, 180°
- open cable ends
- with cable
- unshielded

Ambient temperature min./max.	-13 ... 158 °F
Operational voltage	48 V, AC/DC
Protection class	IP67
Wire cross-section	0 in²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable length	Weight
1834484256	4 A	4	9.84 ft.	0.289 lbs
1834484257	4 A	4	16.4 ft.	0.443 lbs
1834484258	4 A	4	32.81 ft.	0.877 lbs

Technical information

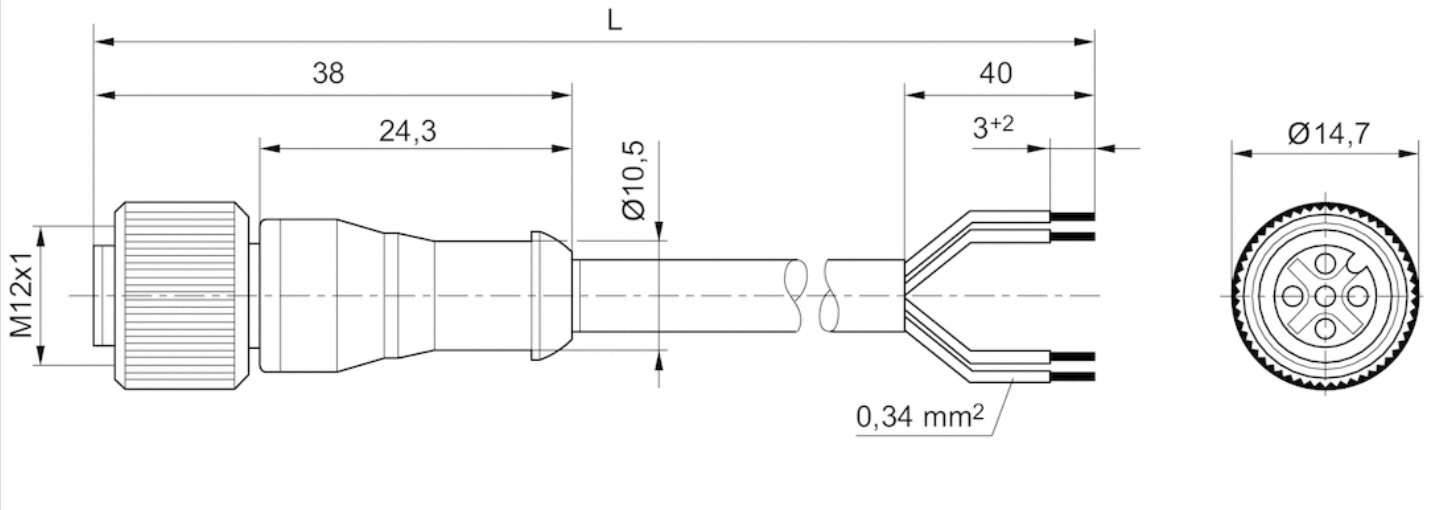
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Cable sheath	Polyurethane

Dimensions

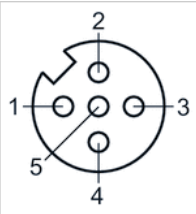
Dimensions



L = length

Pin assignments

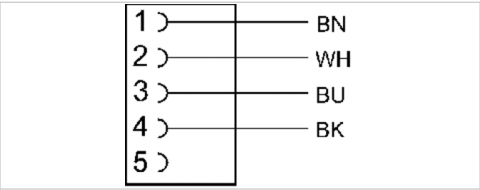
Pin assignment socket



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

Round plug connector, Series CON-RD

- Socket, M12x1, 5-pin, A-coded, angled, 90°
- open cable ends
- for DeviceNet
- with cable
- unshielded



Ambient temperature min./max.	-40 ... 185 °F
Operational voltage	48 V, AC/DC
Protection class	IP65
Wire cross-section	0 in²
Weight	See table below

Technical data

Part No.	Max. current	Number of wires	Cable length	Weight
1834484259	4 A	4	9.84 ft.	0.286 lbs
1834484260	4 A	4	16.4 ft.	0.445 lbs
1834484261	4 A	4	32.81 ft.	0.853 lbs

Technical information

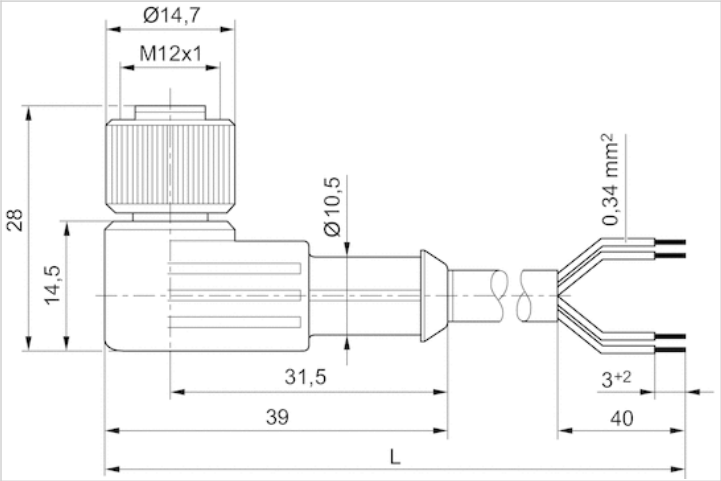
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Cable sheath	Polyurethane

Dimensions

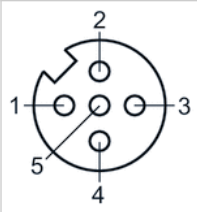
Dimensions



L = length

Pin assignments

Pin assignment socket



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

Adapter

- For connection of pneumatic actuation, G 1/8
- G 1/8
- AS1, AS2, AS3, AS5

Weight 0.042 lbs

Technical data

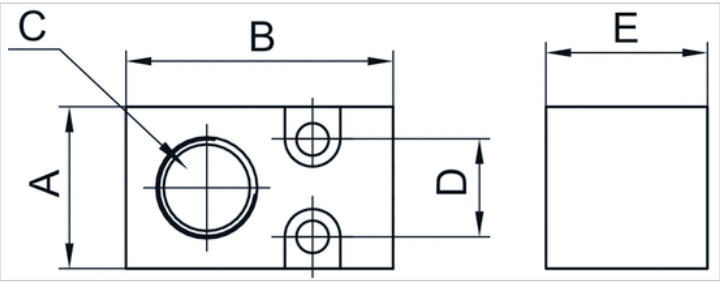
Part No.	Port G
R412006359	G 1/8

Delivery incl. 2 mounting screws M3x20, Flat gasket

Technical information

Material	
Material	Aluminum

Dimensions



Dimensions

Part No.	A	B	C	D	E
R412006359	16	26,5	G 1/8	9.7	16

Transition plate, Series AS1, AS2, AS3, AS5

Weight	0.055 lbs

Technical data

Part No.
R412006360

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

Technical information

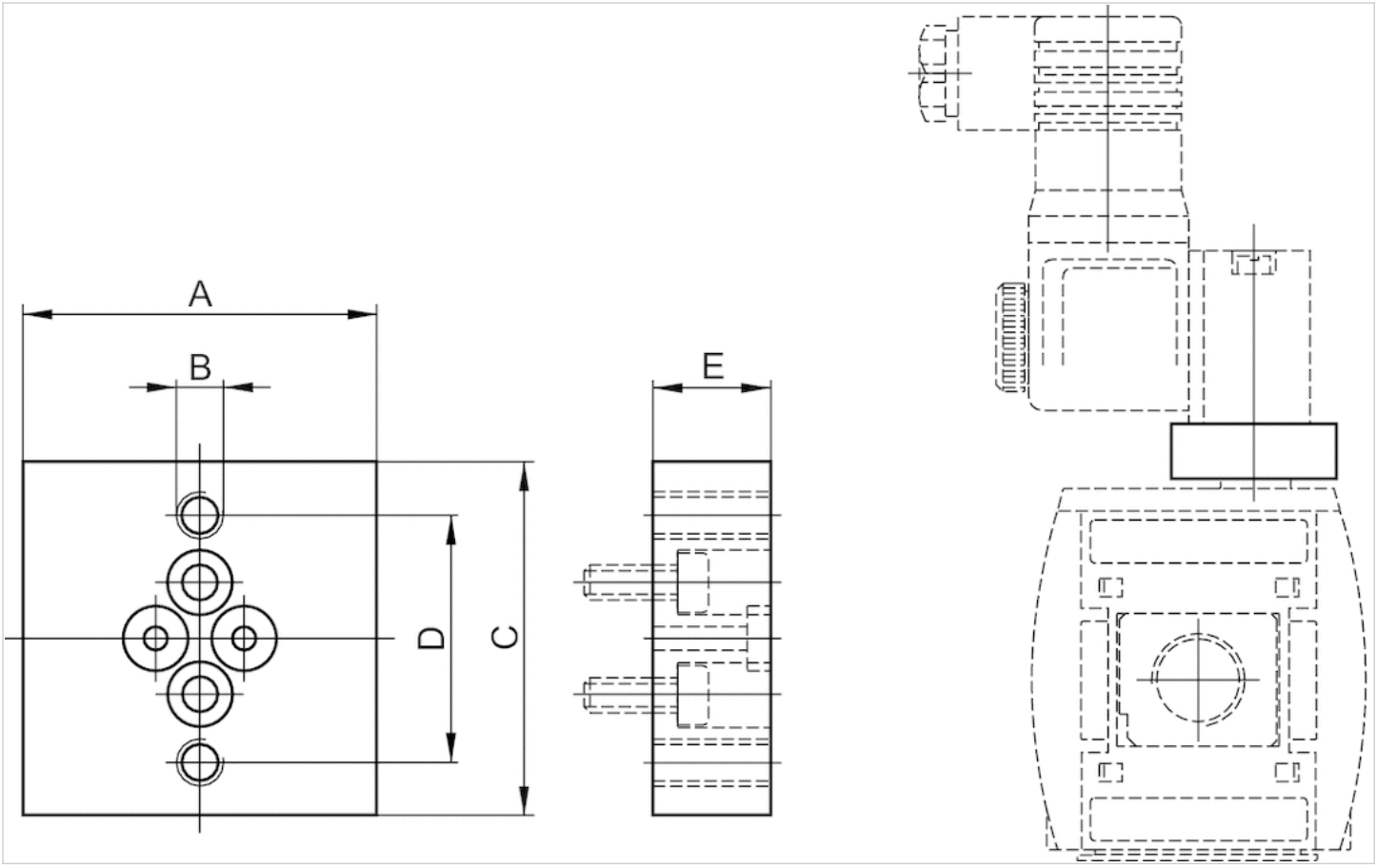
Adapter plate for assembling a series DO30 pilot valve with CNOMO porting configuration on a 3/2-way shut-off valve without pilot

Technical information

Material	
Material	Aluminum

Dimensions

Dimensions



Dimensions

Part No.	A	B	C	D	E
R412006360	30	M4	30	21	10

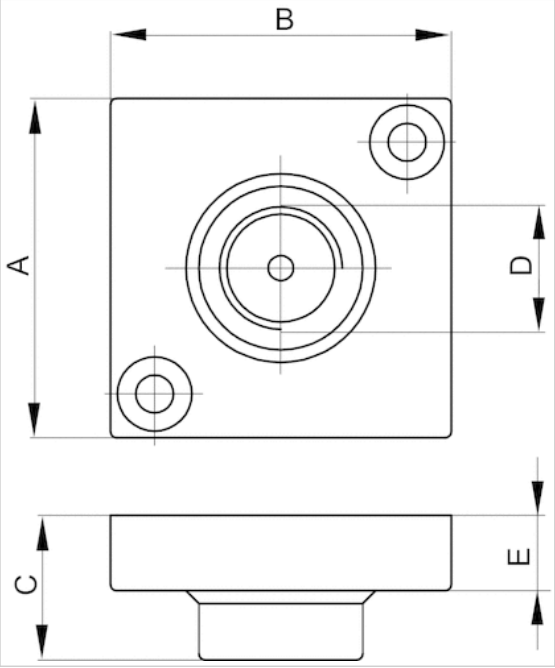
Transition plate, Series AS1

- Transition plate for assembling a pressure gauge with connection thread G 1/8

Technical data

Part No.
R412010538

Dimensions



Dimensions

A	B	C	D	E
27	27	11.5	G 1/8	6

Mounting aid

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

Technical data

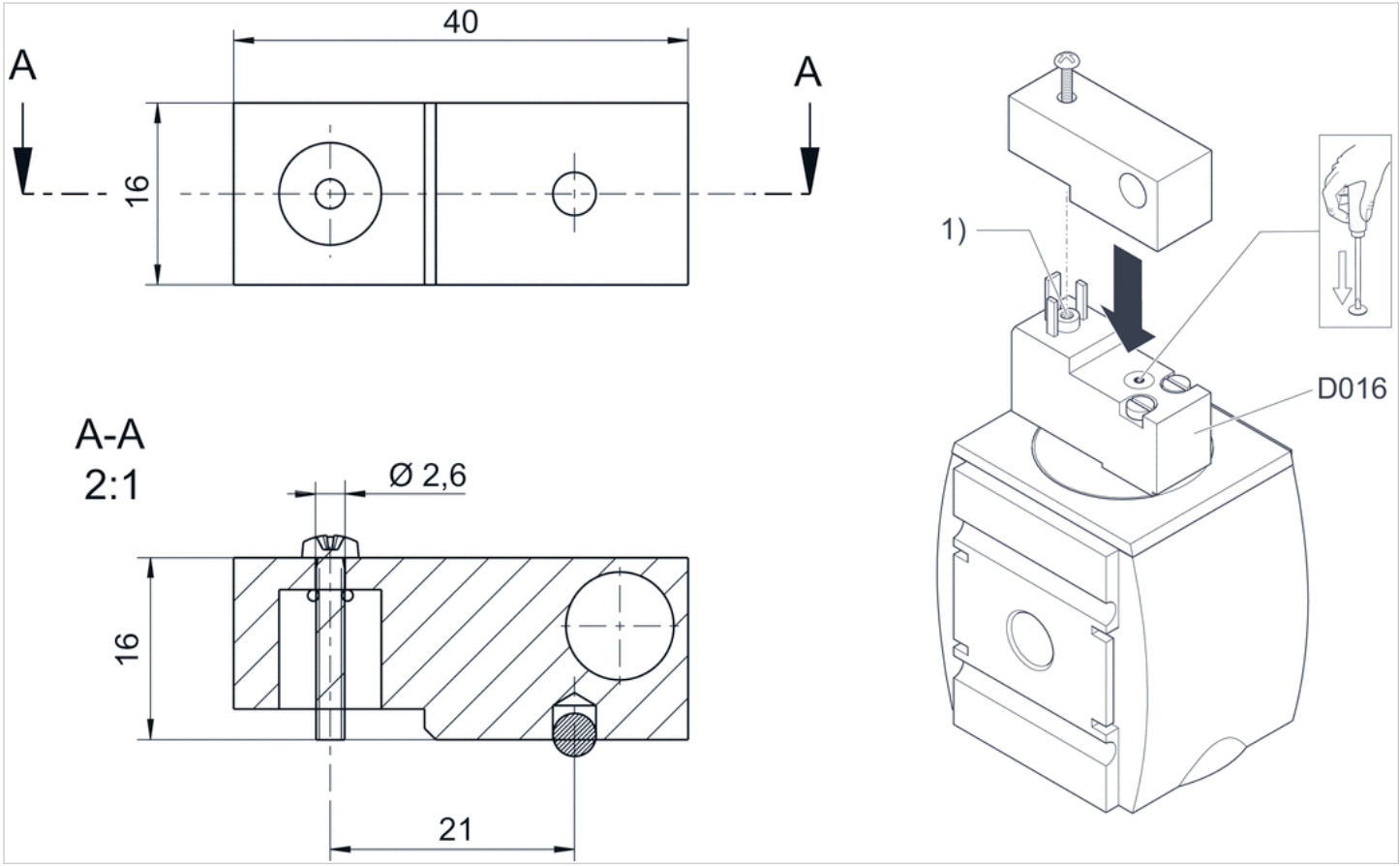
Part No.
R412019278

Scope of delivery incl. 1 mounting screw, 1 O-ring

Technical information

Material	
Housing	Aluminum

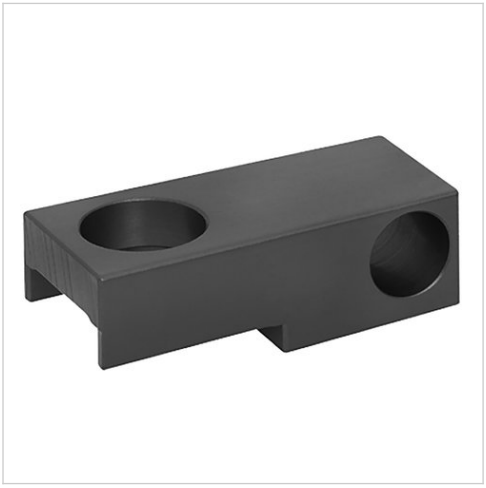
Dimensions



1) ISO 15217, form C

Mounting aid

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



Weight	0.051 lbs

Technical data

Part No.
R412015193

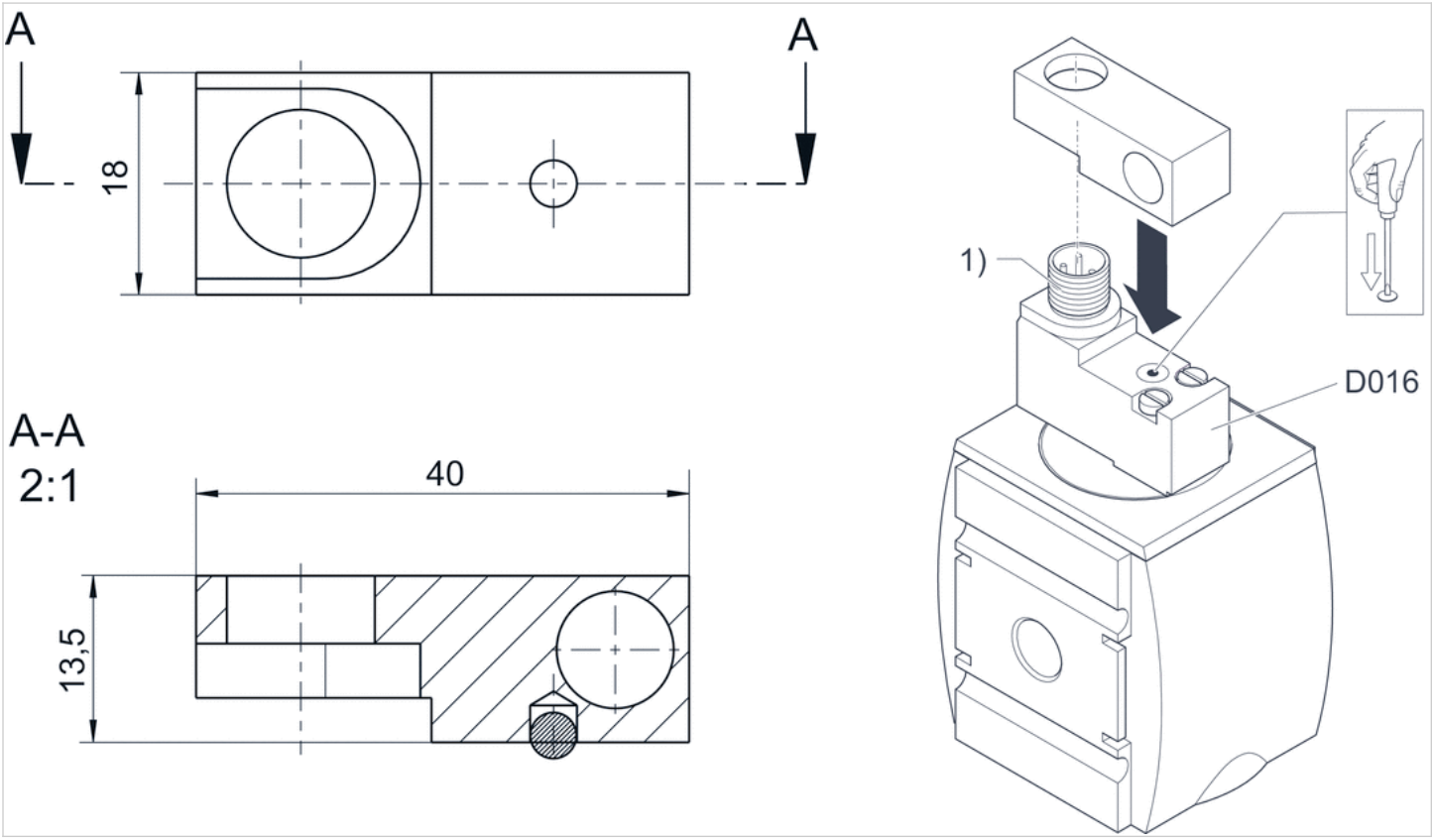
Technical information

Mounting the assembly aid to the pilot valve using valve plug connector M12x1

Technical information

Material	
Housing	Aluminum

Dimensions



1) M12x1

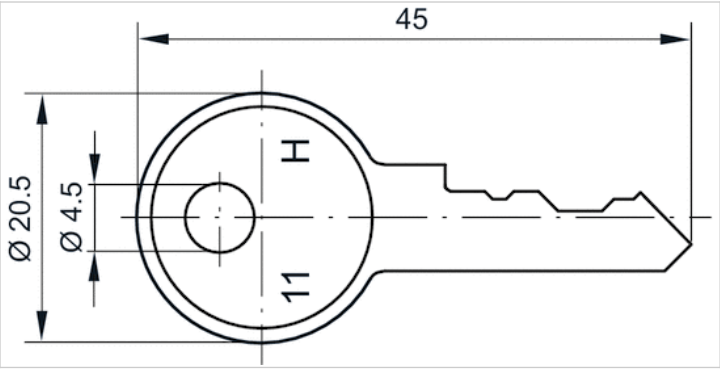
Key for E11 locking

Technical data

Part No.	Delivery unit
R961403407	1 piece

Dimensions

Dimensions



Pressure sensor, Series PE5

- Operating pressure -14.5 ... 0, -14.5 ... 14, 0 ... 87, 0 ... 145, 0 ... 174 psi
- electronic
- Output signal analog 4 ... 20 mA
- Output signal digital 2 outputs, 1 output
- IO-Link
- Electr. connection Plug, M12x1, 4-pin
- Compressed air connection Internal thread, G 1/4

Type	electronic
Certificates	CE declaration of conformity, cULus, RoHS, Conforms with REACH, Free of substances that impair surface wetting in the coating process
Compressed air connection	Internal thread, G 1/4
Ambient temperature min./max.	32 ... 140 °F
Medium temperature min./max.	32 ... 140 °F
Medium	Compressed air (max. 40 µm)
Max. oil content of compressed air	40 mg/m³
Measurement	Relative pressure
Display	LCD display, 4 digits, Color setting: green or red
Units displayed	bar, psi, kPa, MPa, inHg
Switching logic	NO/NC (adjustable)
Shock resistance max.	30 g
Vibration resistance	5 g (10 - 150 Hz)
Precision (% of full scale value)	±1.5% in temperature range of 10 - 30°C, ± 2 % including temperature drift
Repeatability (% of full scale value)	± 0,2 %
Switching time	5 ms
Switching point	adjustable 0 ... 100%
Resetting point	adjustable 0 ... 100%
Hysteresis	adjustable
Delayed hysteresis	adjustable
Window function	adjustable
DC operating voltage,min./max.	17 ... 30 V DC
Analog output	0 - 10 V DC, 4 - 20 mA
Quiescent current consumption	40 mA
Analog output linearity	± 0.5% of the final value
Maximum load (analog current output)	600 Ω
Short circuit resistance	Max. 600 ohms (current output), Min. 3K ohms (voltage output)
Mounting types	Directly on hat rail and wall mounting, For panel installation using mounting kit, via double nipple
Protection class	IP65, IP67 with connections assembled
Electr. connection	Plug, M12x1, 4-pin
Weight	0.088 lbs

Technical data

Part No.		Operating pressure range	Protection against overpressure
		min./max.	
R412010761		-14.5 ... 0 psi	72.5 psi
R412010769		-14.5 ... 0 psi	72.5 psi
R412010775		-14.5 ... 0 psi	72.5 psi
R412010763		-14.5 ... 14 psi	72.5 psi
R412010771		0 ... 87 psi	217.5 psi
R412010765		0 ... 87 psi	217.5 psi
R412010777		0 ... 87 psi	217.5 psi
R412010773		0 ... 145 psi	217.5 psi
R412010767		0 ... 145 psi	217.5 psi
R412010779		0 ... 145 psi	217.5 psi
R412010782		0 ... 174 psi	232 psi
R412010806		0 ... 174 psi	232 psi

Part No.	Output signal	Output signal
	Analog	digital
R412010761	-	2 outputs-PNP, NPN, Push-pull
R412010769	1 output-0 - 10 V DC-4 ... 20 mA	1 output-PNP, NPN, Push-pull
R412010775	-	1 output-PNP, NPN, push-pull, 1x IO-Link
R412010763	-	2 outputs-PNP, NPN, Push-pull
R412010771	1 output-0 - 10 V DC-4 ... 20 mA	1 output-PNP, NPN, Push-pull
R412010765	-	2 outputs-PNP, NPN, Push-pull
R412010777	-	1 output-PNP, NPN, push-pull, 1x IO-Link
R412010773	1 output-0 - 10 V DC-4 ... 20 mA	1 output-PNP, NPN, Push-pull
R412010767	-	2 outputs-PNP, NPN, Push-pull
R412010779	-	1 output-PNP, NPN, push-pull, 1x IO-Link
R412010782	-	2 outputs-PNP, NPN, Push-pull
R412010806	-	1 output-PNP, NPN, push-pull, 1x IO-Link

Part No.	Fig.
R412010761	Fig. 1
R412010769	Fig. 1
R412010775	Fig. 1
R412010763	Fig. 1
R412010771	Fig. 1
R412010765	Fig. 1
R412010777	Fig. 1
R412010773	Fig. 1
R412010767	Fig. 1
R412010779	Fig. 1
R412010782	Fig. 1
R412010806	Fig. 1

Technical information

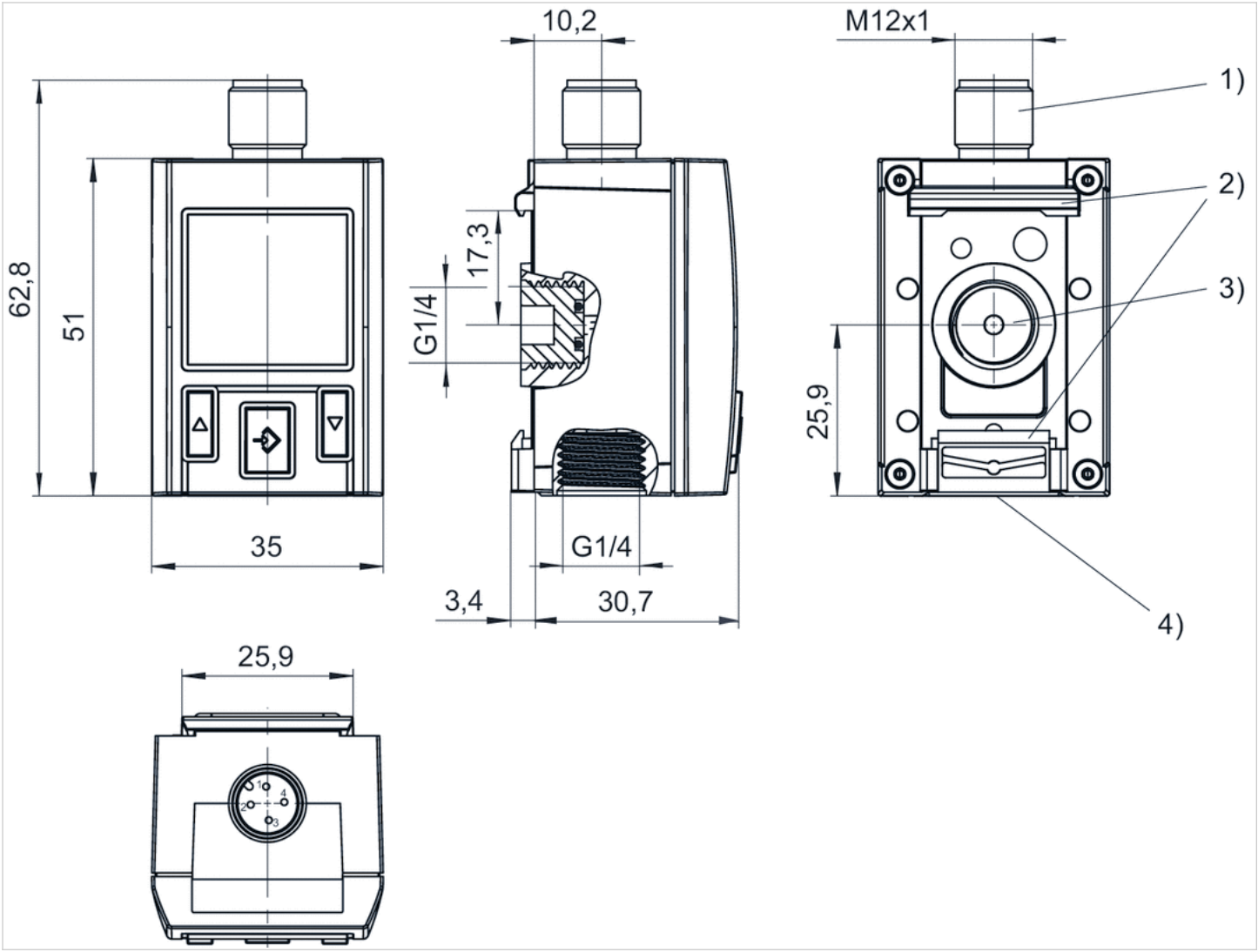
Alternative pressure connection (G1/4) on the rear side (closed with plug)
Display color selectable, red or green
The IO-Link device description (IODD) for the PE5 pressure sensor is available for download in the Media Centre.

Technical information

Material	
Housing	Polycarbonate
Seals	Acrylonitrile butadiene rubber
Blanking plug	Polyoxymethylene
Electr. connection	Aluminum, black anodized

Dimensions

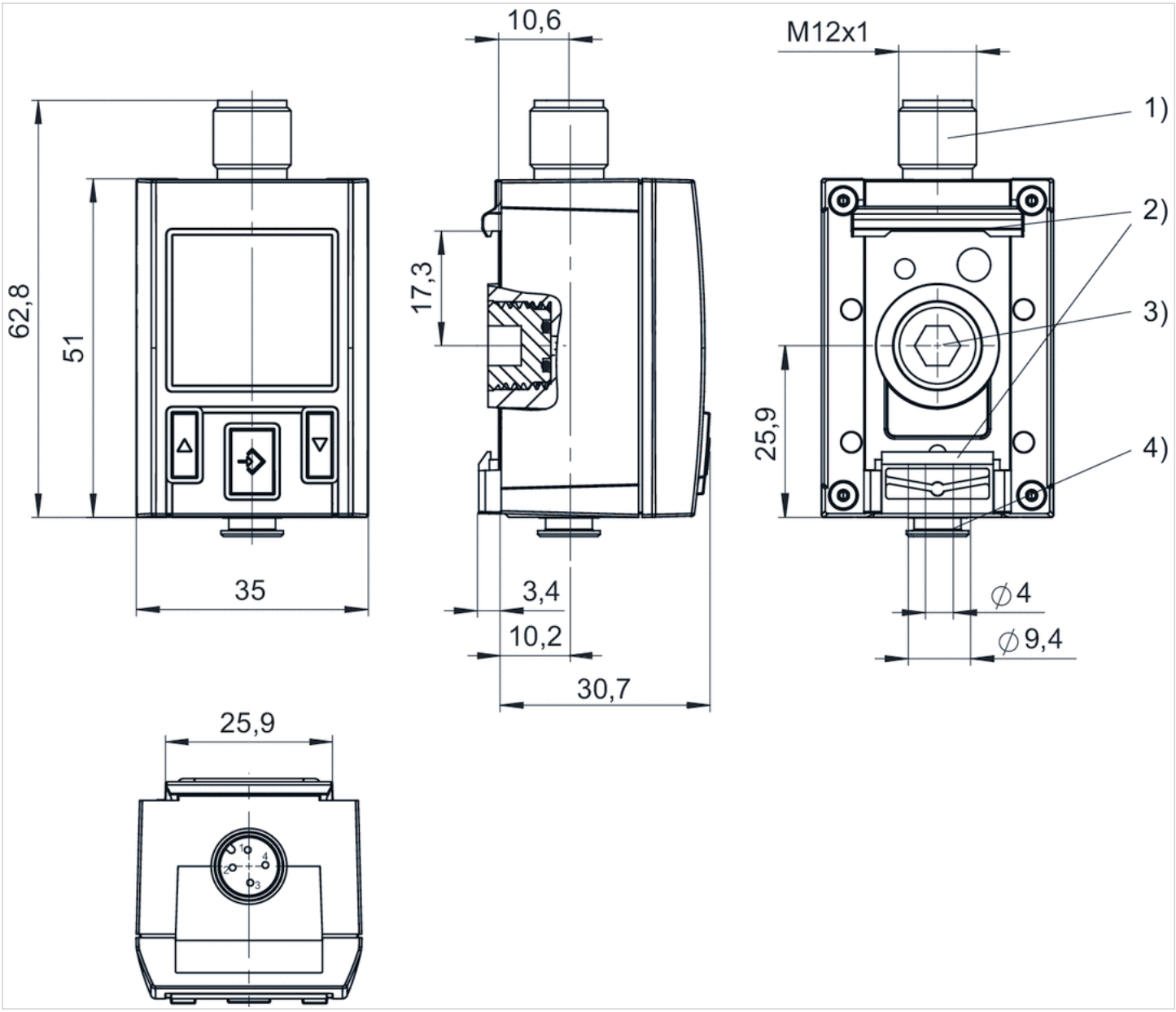
Fig. 1



1) M12x1 electrical connection
2) Mounting for hat rail and wall mounting

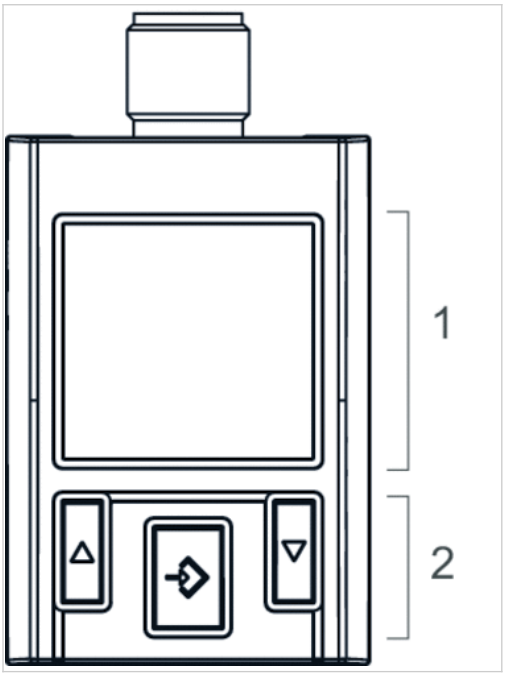
3) Alternative pressure connection (G1/4) closed with plug
4) Pressure connection G1/4

Fig. 2



1) M12x1 electrical connection
2) Mounting for hat rail and wall mounting
3) Alternative pressure connection (G1/4) closed with plug
4) Pressure connection, tubing Ø 4 mm

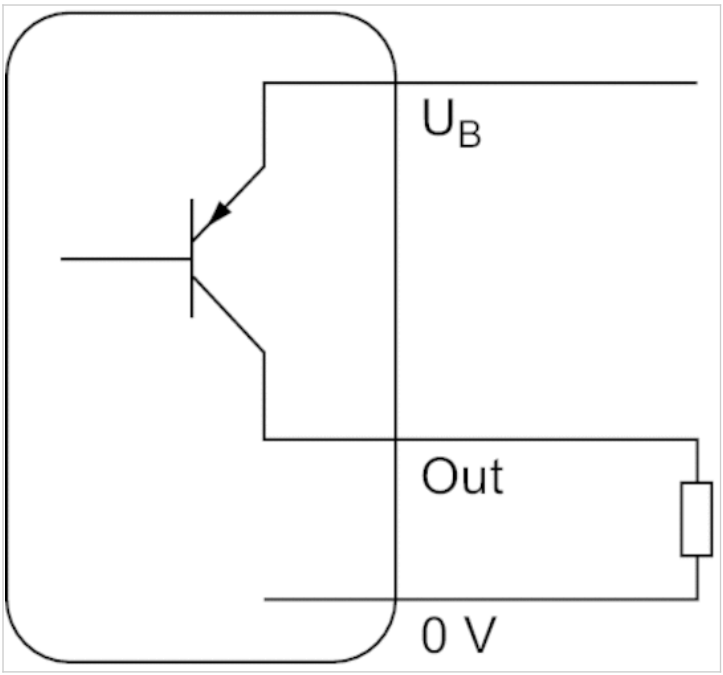
Display and operation area



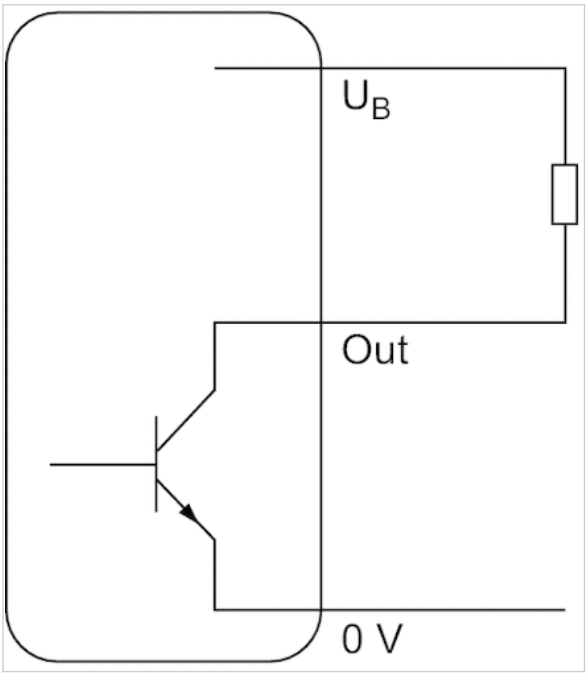
1) LCD display
2) Control panel with 3 buttons

Diagrams

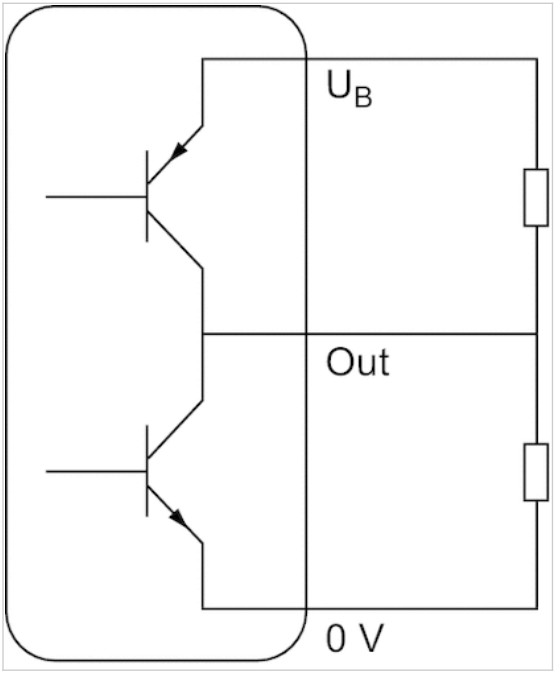
Operating mode PNP



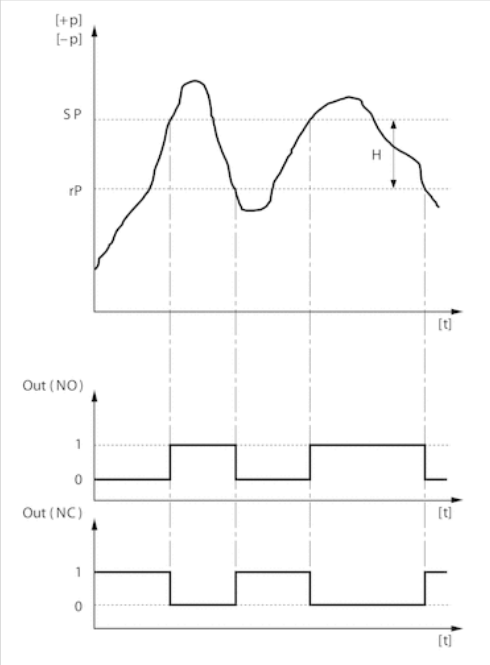
Operating mode NPN



Operating mode Push-pull

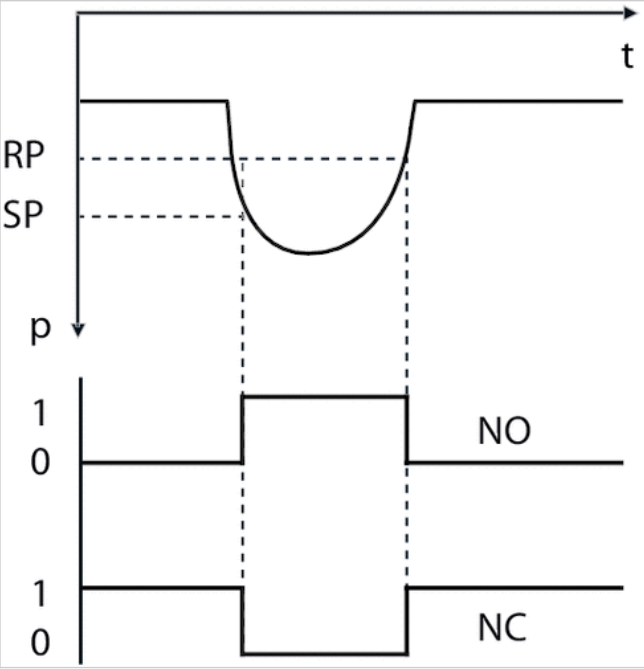


Hysteresis function: switching and resetting behavior dependent on pressure p and time t In case

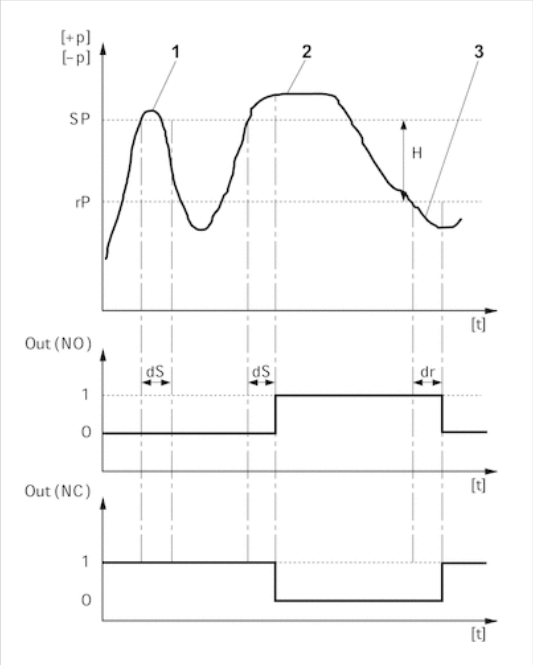


H: Hysteresis
SP = switching point
RP = resetting point
Out (NC): switch output, break contact
Out (NO): switch output, make contact

Hysteresis function: switching and resetting behavior dependent on pressure p and time t In case

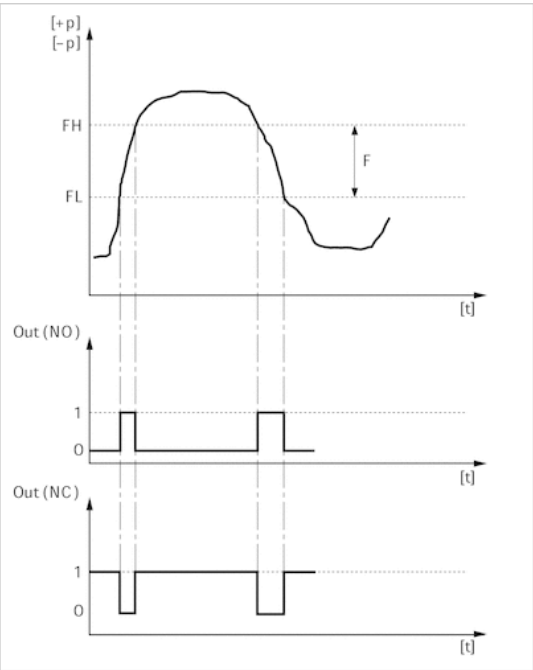


Delayed hysteresis function: switching and resetting behavior depending on pressure p and time



H: Hysteresis
SP = switching point
RP = resetting point
Out (NC): switch output, break contact
Out (NO): switch output, make contact
dS: switching delay
dR = reset delay
1) period of pressure over the switching point dS: pressure sensor does not switch
2) Period of pressure over the switching point > dS: pressure sensor switches
3) Period of pressure under the resetting point > dR: pressure sensor switches

Window function: switching and resetting behavior depending on pressure p and time t

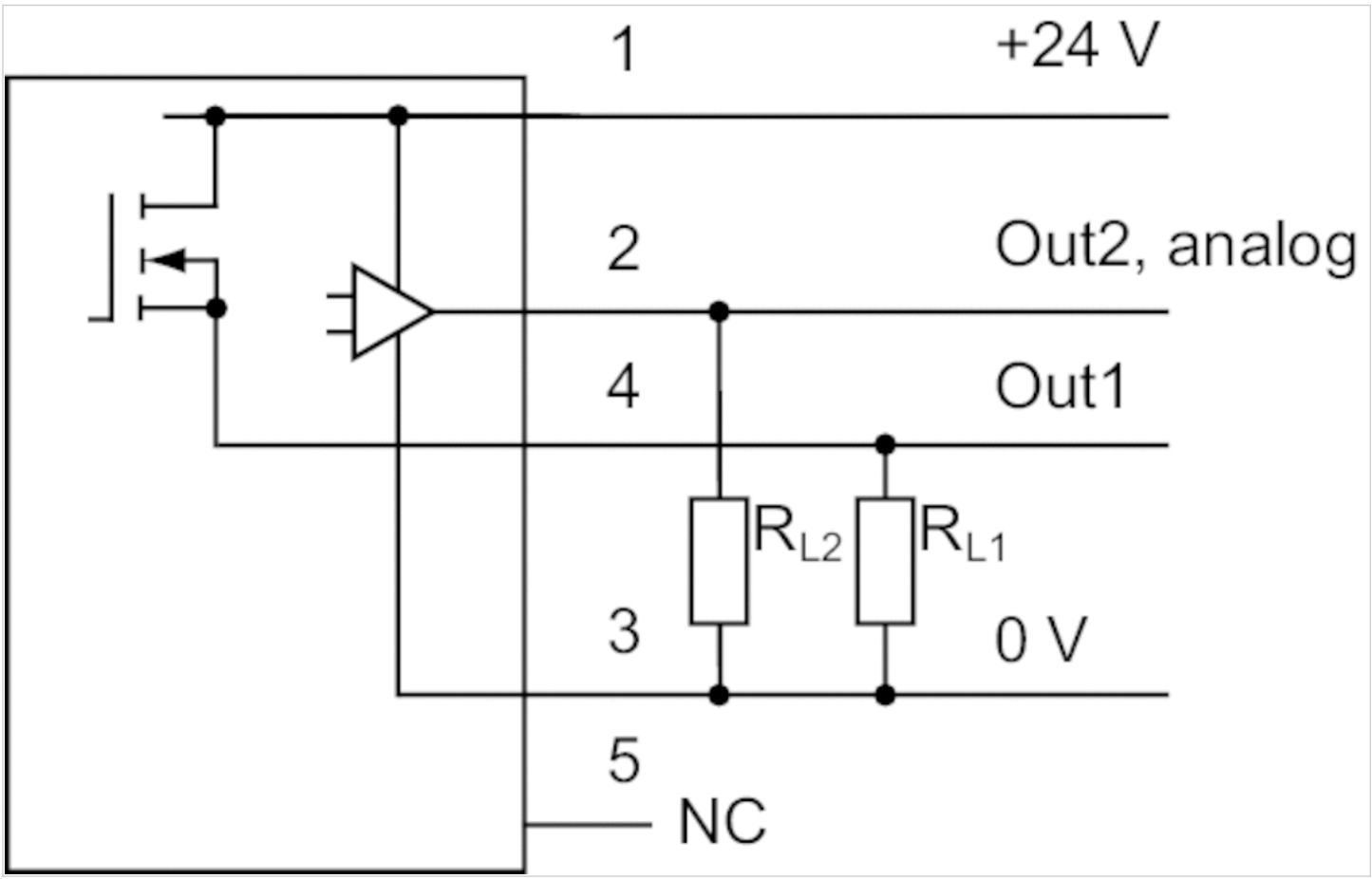


FH: pressure band, upper value
FL: pressure band, lower value
Out (NC): switch output, break contact

Out (NO): switch output, make contact

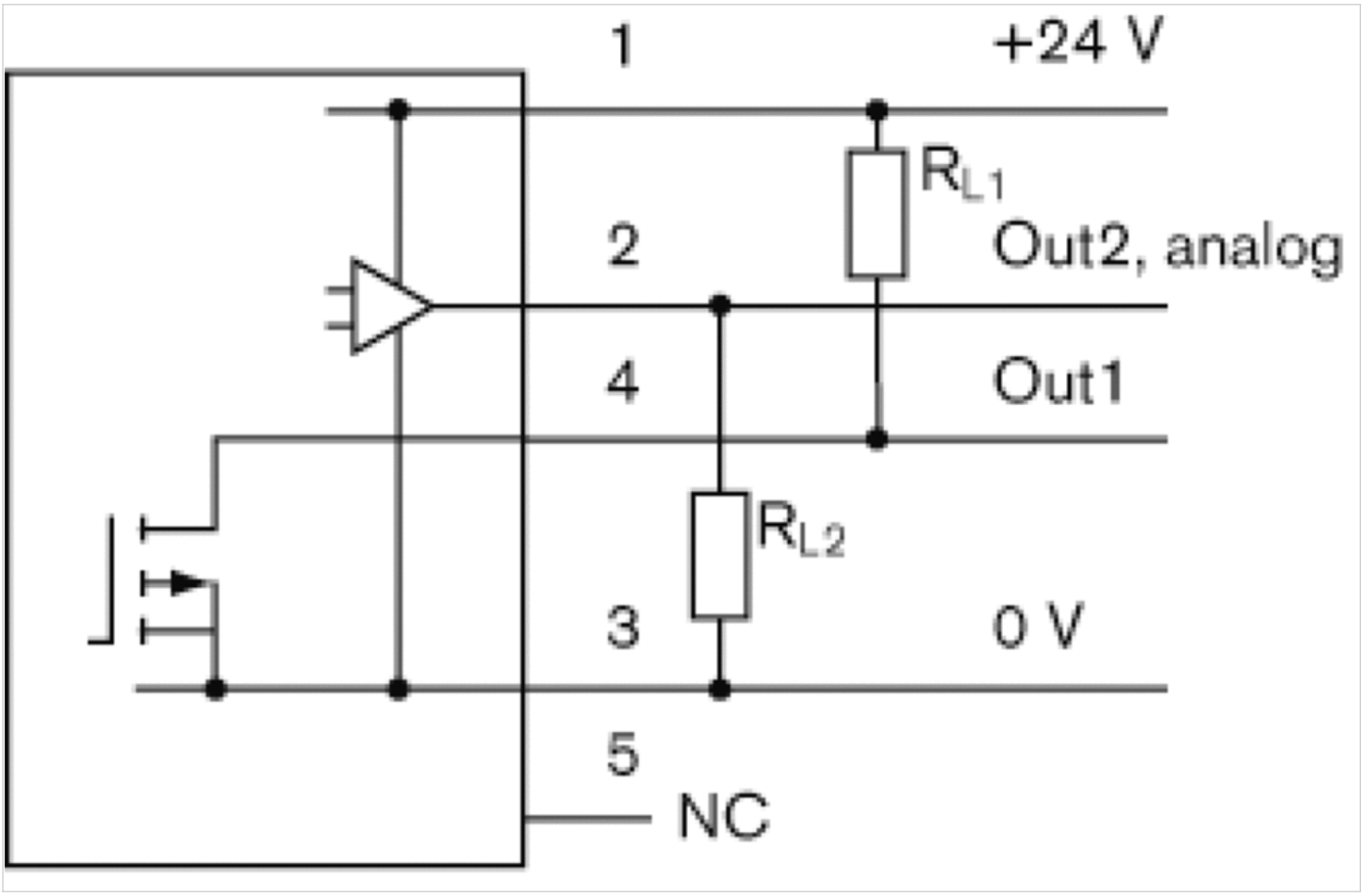
Circuit diagram

Block diagram 1x PNP and 1x analog



RL = storable postion

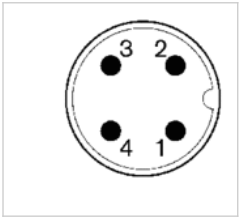
Block diagram 1x NPN and 1x analog



RL = storable postion

Pin assignments

Pin assignments M12x1



operational voltage + UB
Pin 2: switch output Out2, analog: A or V, digital: PNP, NPN, push-pull
Pin 3: 0 V
Pin 4: switch output Out1, digital: PNP, NPN, push-pull

Pressure sensor, Series PE2

- Operating pressure 0 ... 14, 0 ... 232 psi
- electronic
- Output signal analog 4 ... 20 mA
- Output signal digital 1 x PNP, 2 x PNP
- Electr. connection Plug, M12x1, 5-pin
- Compressed air connection Internal thread, G 1/4, Flange with O-ring, Ø 5x1,5

Type	electronic
Function	1 x PNP, 2 x PNP, 1x PNP and 1x analog
Mounting orientation	Any
Certificates	CE declaration of conformity, EMV
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 167 °F
Medium temperature min./max.	14 ... 167 °F
Medium	Compressed air, Neutral gases
Measurement	Relative pressure
Display	OLED
Units displayed	bar, mbar, psi, kPa, MPa, %
Switching logic	Hysteresis function NO/NC (programmable), Window function NO/NC (programmable)
Operating pressure display	2 LED
Shock resistance max.	30 g
Vibration resistance	5 g (10 - 150 Hz)
Precision (% of full scale value)	± 1 % including temperature drift
Switching time	10 ms at loads 100 kΩ, > 10 ms at loads > 100 kΩ
Switching point	Adjustable ≥ 0.5% ... 100% FS
Resetting point	Adjustable 0% FS to SP -0.5% FS (or +0.5% FS when SP 0)
Hysteresis	adjustable
Switching/reset delay	adjustable
DC operating voltage,min./max.	15 ... 32 V DC
Analog output	1 x PNP, 1 x analog 4-20 mA
Quiescent current consumption	50 mA
Maximum load (analog current output)	600 Ω
Short circuit resistance	short circuit resistant
Mounting types	via through holes
Protection class	IP65
Electr. connection	Plug, M12x1, 5-pin
Weight	0.661 lbs

Technical data

Part No.		Type	Operating pressure range
			min./max.
R412010848		PE2-P1-G014-V10-010-M012	0 ... 14 psi
R412010849		PE2-P1-F001-V10-010-M012	0 ... 14 psi
R412010853		PE2-P2-G014-V10-010-M012	0 ... 14 psi
R412010856		PE2-PA-G014-V10-010-M012	0 ... 14 psi
R412010850		PE2-P1-G014-000-160-M012	0 ... 232 psi
R412010851		PE2-P1-F001-000-160-M012	0 ... 232 psi
R412010854		PE2-P2-G014-000-160-M012	0 ... 232 psi
R412010855		PE2-P2-F001-000-160-M012	0 ... 232 psi
R412010857		PE2-PA-G014-000-160-M012	0 ... 232 psi
R412010858		PE2-PA-F001-000-160-M012	0 ... 232 psi

Part No.	Protection against overpressure	Output signal	Output signal	Compressed air connection
		Analog	digital	
R412010848	145 psi	-	1 x PNP	Internal thread, G 1/4
R412010849	145 psi	-	1 x PNP	Flange with O-ring, Ø 5x1,5
R412010853	145 psi	-	2 x PNP	Internal thread, G 1/4
R412010856	145 psi	4 ... 20 mA	1 x PNP	Internal thread, G 1/4
R412010850	580 psi	-	1 x PNP	Internal thread, G 1/4
R412010851	580 psi	-	1 x PNP	Flange with O-ring, Ø 5x1,5
R412010854	580 psi	-	2 x PNP	Internal thread, G 1/4
R412010855	580 psi	-	2 x PNP	Flange with O-ring, Ø 5x1,5
R412010857	580 psi	4 ... 20 mA	1 x PNP	Internal thread, G 1/4
R412010858	580 psi	4 ... 20 mA	1 x PNP	Flange with O-ring, Ø 5x1,5

Part No.	Fig.
R412010848	Fig. 1
R412010849	Fig. 2
R412010853	Fig. 1
R412010856	Fig. 1
R412010850	Fig. 1
R412010851	Fig. 2
R412010854	Fig. 1
R412010855	Fig. 2
R412010857	Fig. 1
R412010858	Fig. 2

Technical information

Menu navigation is based on the VDMA specification with an additional plain text menu.

Technical information

Material	
Housing	Aluminum, Vibration-ground
Seals	Fluorocaoutchouc
Electr. connection	Aluminum with polymer insert
	At the flange connection: Nitrile butadiene rubber and fluororubber

Dimensions

Fig. 1

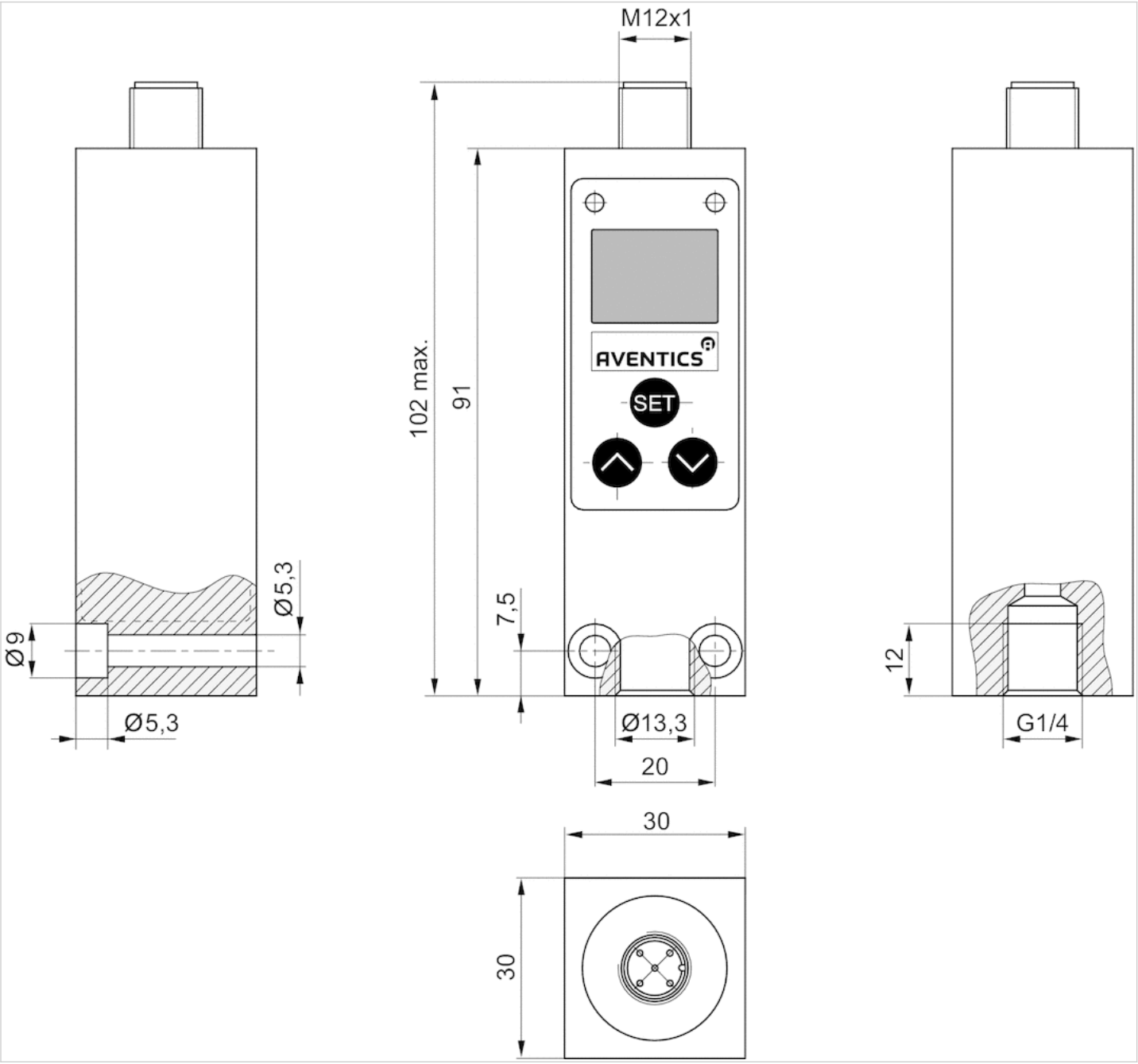
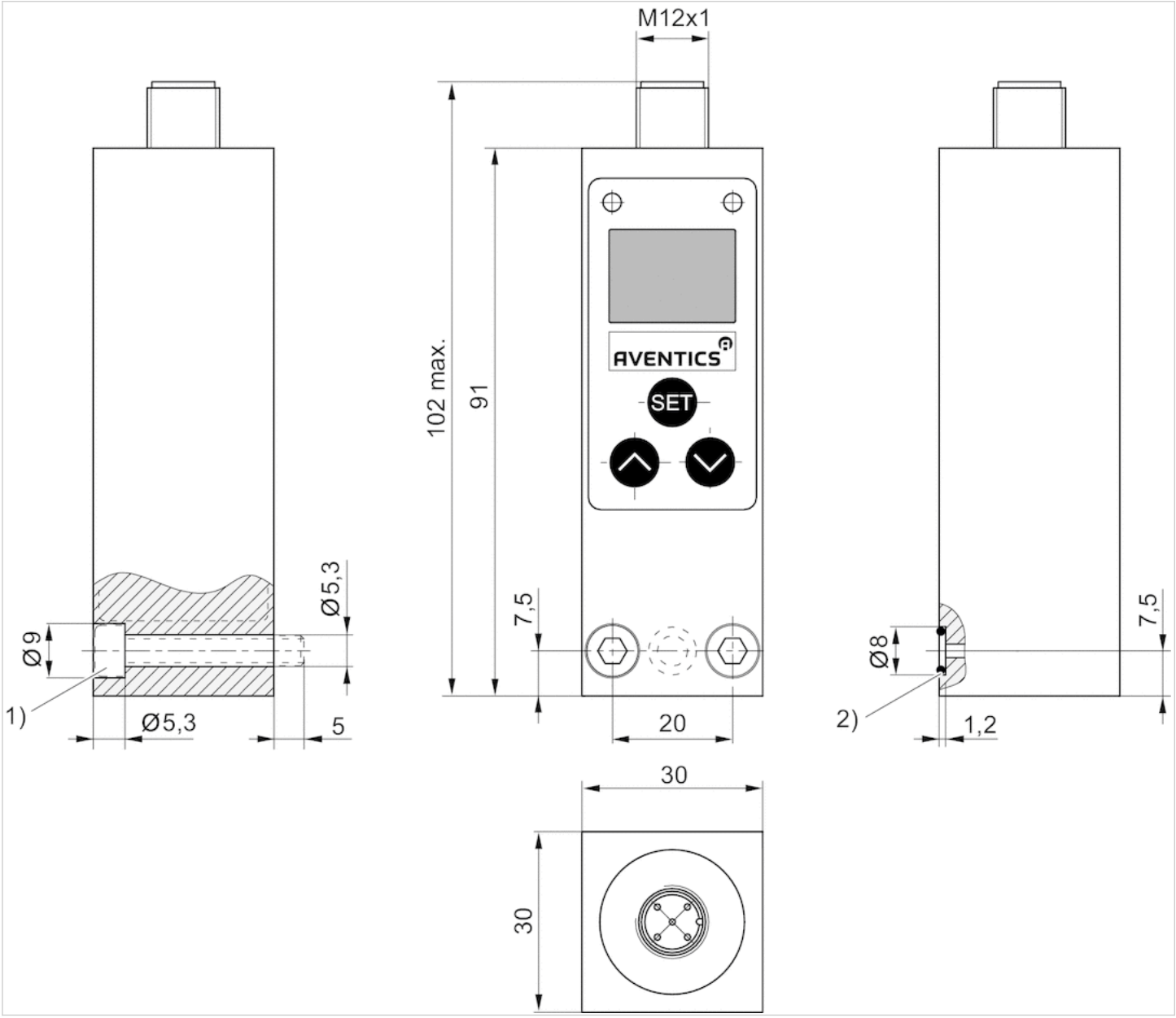
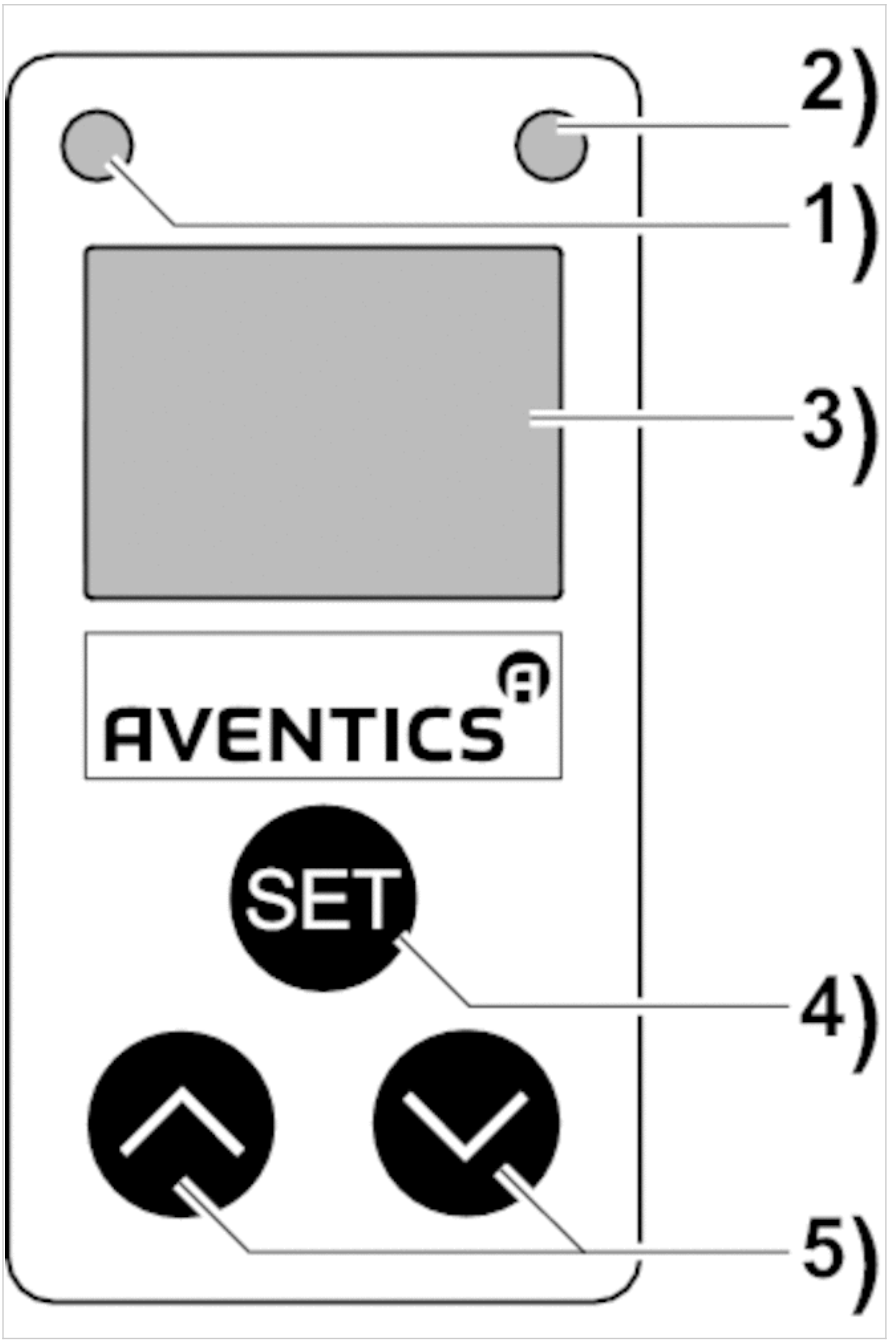


Fig. 2



1) cylinder screw M5x35 (included in scope of delivery)
2) O-ring Ø5x1,5 (included)

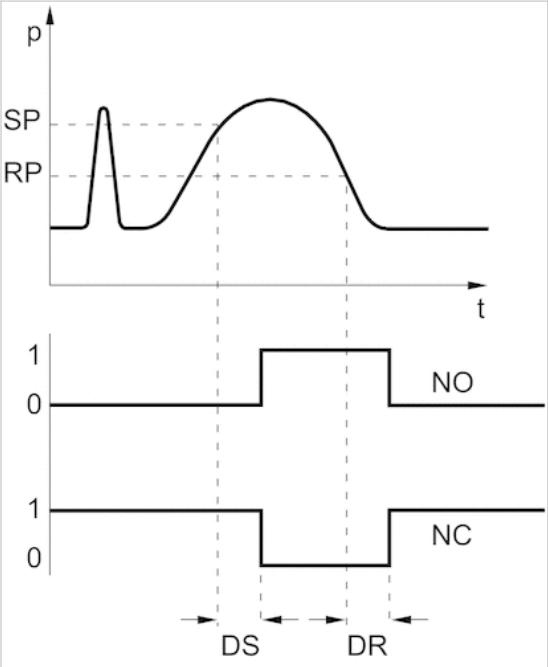
Display and operation area



1) LED for switch output 1
2) LED for switch output 2
3) Display (pressure, operating modes, navigation)
4) Confirm menu/menu item selection
5) Button for menu item/parameter change selection

Diagrams

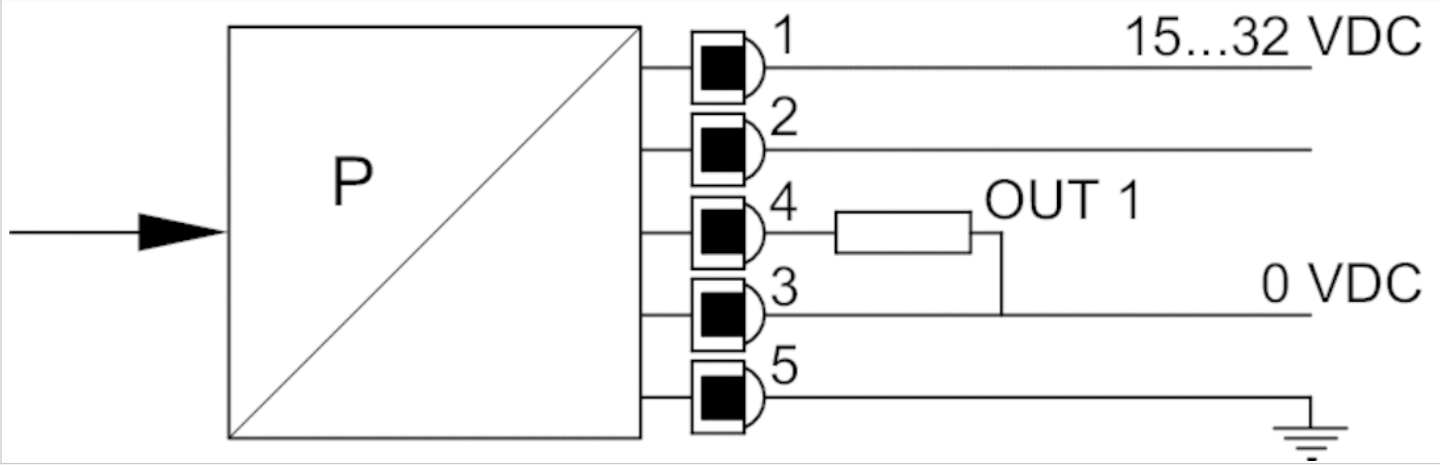
Pressure-voltage characteristics curve



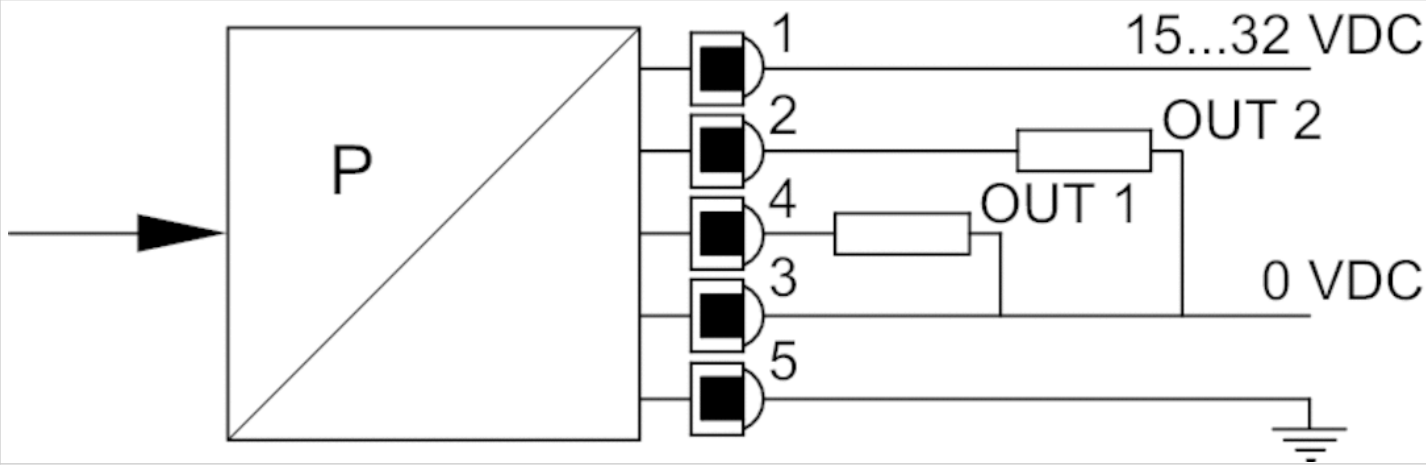
SP = switching point
RP = resetting point
NO = Switching function open
NC = Switching function closed without current
DS = Delay for the switching point
DR = Delay for the resetting point

Circuit diagram

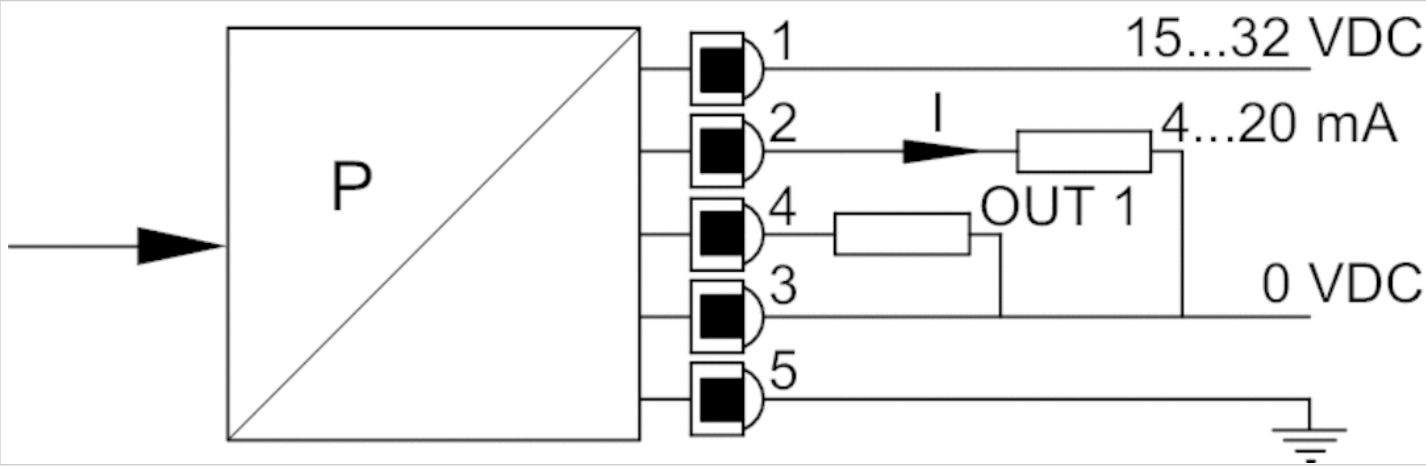
Block diagram 1 x PNP



Block diagram 2 x PNP

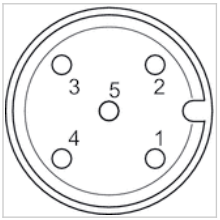


Block diagram 1x PNP and 1x analog



Pin assignments

Pin assignments



pin 1: signal + UB, color: brown pin 2: signal: out 2 (PNP)/analog 4 - 20 mA, color: white pin 3: signal: 0 volt, color: blue pin 4: signal: out 1 (PNP), color: black pin 5: signal: FE, color: gray

Pressure Switches, Series PM1

- Operating pressure -13.05 ... 0, -13.05 ... 43, 2.9 ... 232 psi
- Mechanical
- Spring-loaded bellow, adjustable
- Electr. connection Plug, EN 175301-803, form A
- Compressed air connection Internal thread, G 1/4, Flange with O-ring, Ø 5x1,5

Type	Mechanical
Function	change-over contact (mechanical)
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-4 ... 176 °F
Medium temperature min./max.	14 ... 176 °F
Medium	Compressed air
Measurement	Relative pressure
Switching element	microswitch (input/output)
Protection against overpressure	1160 psi
Max. switching frequency	1,5 Hz
Shock resistance max.	15 g
Vibration resistance	10 g (60 - 500 Hz)
Repeatability (% of full scale value)	± 1 %
Switching point	adjustable
Hysteresis	max. switching pressure difference
DC operating voltage,min./max.	12 ... 30 V DC
Operational voltage AC,min./max.	12 ... 250 V AC
Mounting types	via through holes
Protection class	IP65
Electr. connection	Plug, EN 175301-803, form A
Weight	0.353 lbs

Technical data

Part No.		Type	Operating pressure range min./max.	Compressed air connection
R412010711		PM1-M3-G014	-13.05 ... 0 psi	Internal thread, G 1/4
R412022752		PM1-M3-G014	-13.05 ... 43 psi	Internal thread, G 1/4
R412010712		PM1-M3-G014	2.9 ... 232 psi	Internal thread, G 1/4
R412010713		PM1-M3-G014	2.9 ... 232 psi	Internal thread, G 1/4
R412010714		PM1-M3-F001	-13.05 ... 0 psi	Flange with O-ring, Ø 5x1,5
R412010715		PM1-M3-F001	2.9 ... 232 psi	Flange with O-ring, Ø 5x1,5
R412010718		PM1-M3-F001	2.9 ... 232 psi	Flange with O-ring, Ø 5x1,5

Part No.	Scope of delivery	Fig.	
R412010711	With valve plug connector	Fig. 1	-
R412022752	Without valve plug connector	Fig. 1	-
R412010712	Without valve plug connector	Fig. 1	1)
R412010713	With valve plug connector	Fig. 1	1)
R412010714	With valve plug connector	Fig. 2	-
R412010715	Without valve plug connector	Fig. 2	1)

Part No.	Scope of delivery	Fig.	
R412010718	With valve plug connector	Fig. 2	1)

1) Min. switching pressure range 0.2 bar falling/0.5 bar rising

Technical information

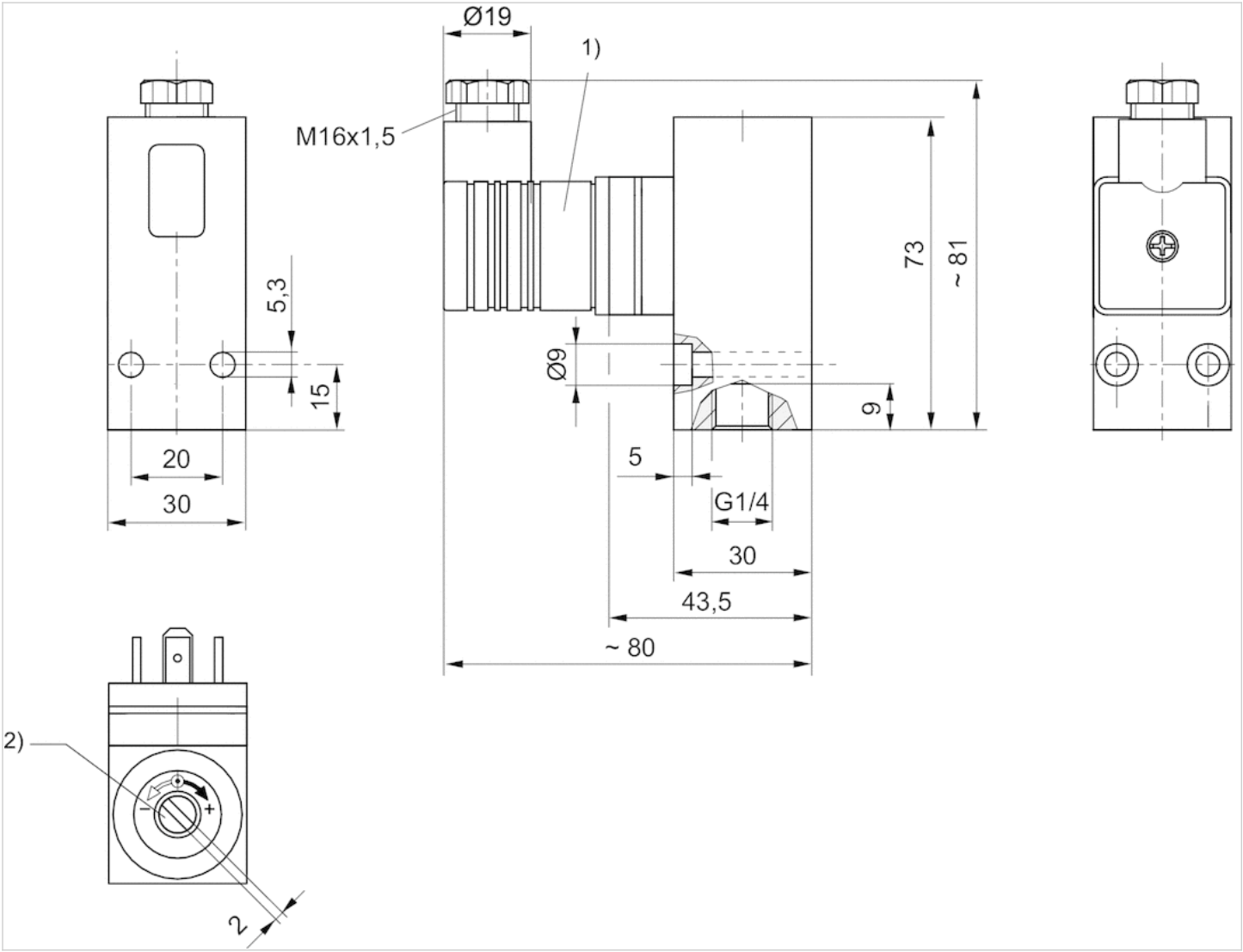
Switching function increasing pressure: contact switches from 1-2 to 1-3.
Switching function decreasing pressure: contact switches from 1-3 to 1-2.
Notice:Too-high currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching!
The microswitch has silver-plated contacts.
Please observe the pin assignment when selecting plug connectors.

Technical information

Material	
Housing	Aluminum
Seals	Acrylonitrile butadiene rubber
Electr. connection	Brass, nickel-plated

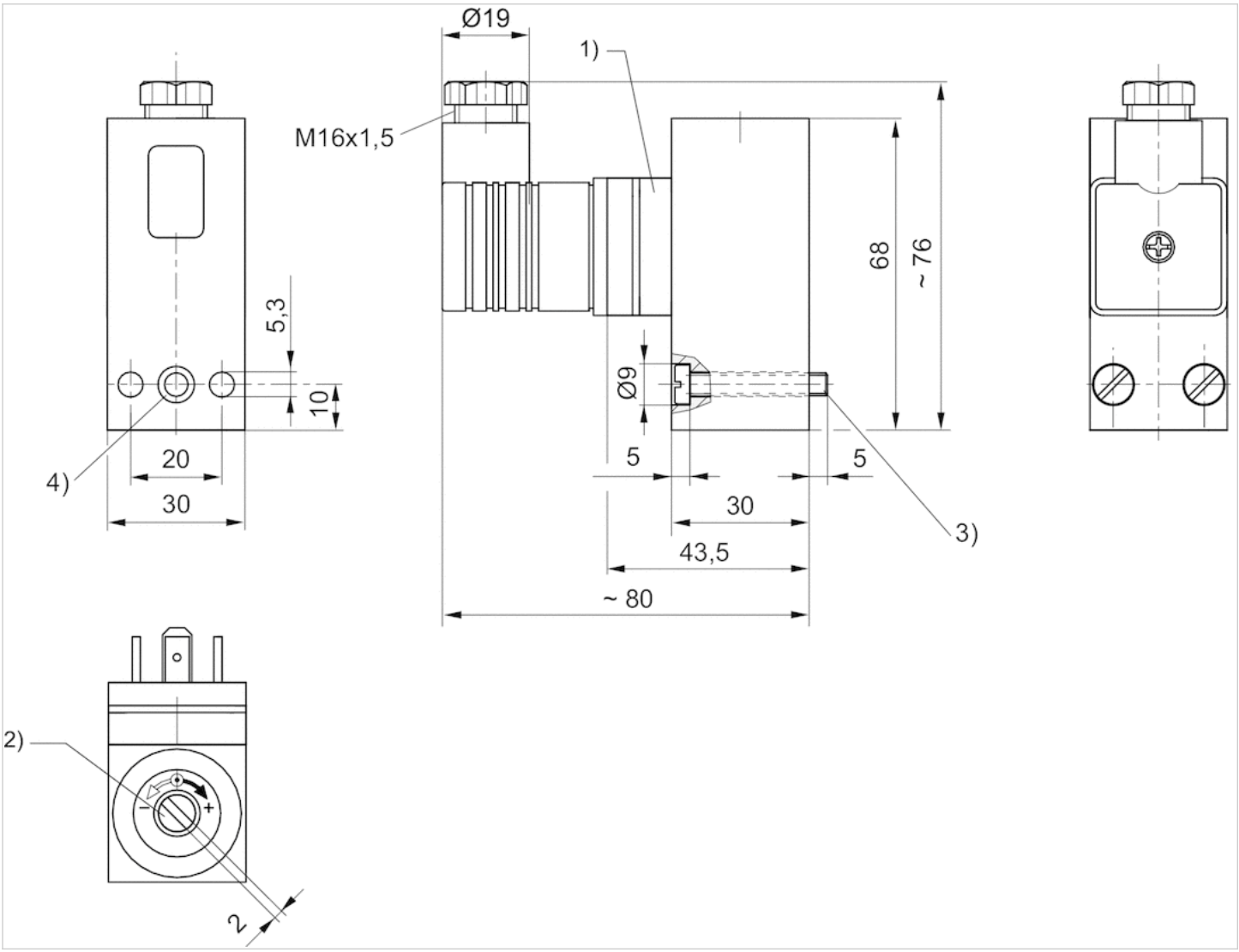
Dimensions

Fig. 1



1) Valve plug connector
2) Adjustment screw, self-holding

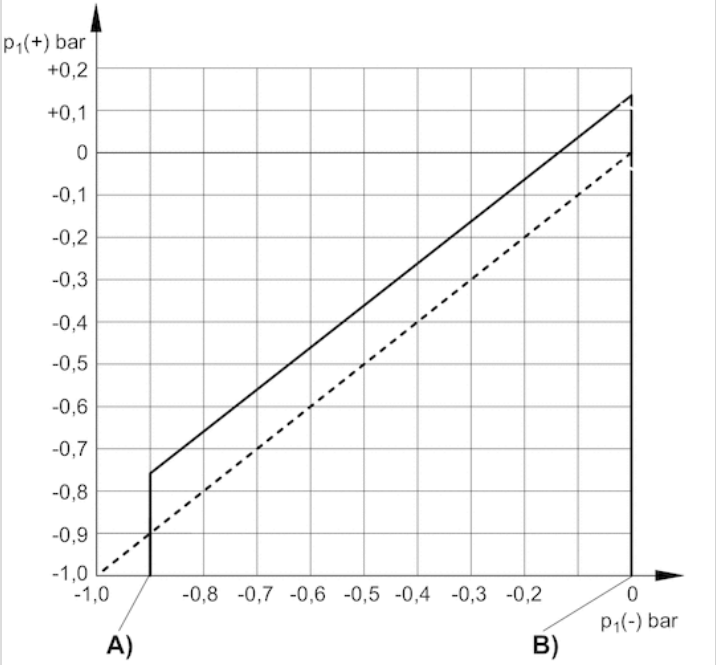
Fig. 2



1) Valve plug connector
2) Adjustment screw, self-holding
3) cylinder screw M5x30 (included in scope of delivery)
4) O-ring Ø5x1,5 (included)

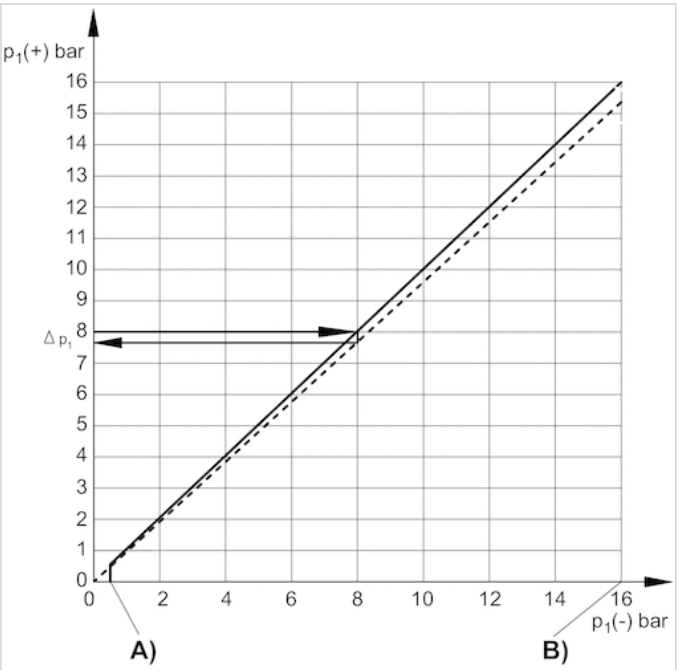
Diagrams

differential switching pressure characteristic curve (-09 – 0 bar)



A) p1 (-), min.
B) p1 (-), max.
p1 (+) = upper switching pressure with increasing pressure
p1 (-) = lower switching pressure with decreasing pressure

differential switching pressure characteristic curve (02 - 16 bar)



A) p1 (-), min.
B) p1 (-), max.
p1 (+) = upper switching pressure with increasing pressure
p1 (-) = lower switching pressure with decreasing pressure
Δ p1 = max. operating pressure difference or hysteresis
Example:

p1 (+) = 8 bar > p1(-) = 7.6 bar
Δ p1 = 0.4 bar

max. permissible continuous current I max. [A] with ohmic load

U [V]	I [A] 1)	I [A] 2)
30	5	3
48	5	1,2
60	5	0,8
125	5	0,4
250	5	–

reference cycle: 30/min., reference temperature: + 30 °C

1) AC

2) DC

max. permissible continuous current I max. [A] with inductive load

U [V]	I [A] 1) 3)	I [A] 2) 4)
30	3	2
48	3	0.55
60	3	0.4
125	3	0.15
250	3	–

reference cycle: 30/min., reference temperature: + 30 °C

1) AC

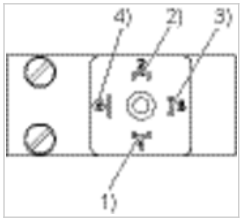
2) DC

3) cos ≈ 0,7°

4) L/R ≈ 10 ms

Pin assignments

PIN assignment for valve plug connectors



Pin	1	2	3	4
Allocation	+UB	break contact	NO (make contact)	GND

Pressure Switches, Series PM1

- Operating pressure -13.05 ... 0, 2.9 ... 232 psi
- Mechanical
- Spring-loaded bellow, adjustable
- Electr. connection Plug, M12x1
- Compressed air connection Internal thread, G 1/4, Flange with O-ring, Ø 5x1,5

Type	Mechanical
Function	change-over contact (mechanical)
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-4 ... 176 °F
Medium temperature min./max.	14 ... 176 °F
Medium	Compressed air
Measurement	Relative pressure
Switching element	microswitch (input/output)
Protection against overpressure	1160 psi
Max. switching frequency	1,5 Hz
Shock resistance max.	15 g
Vibration resistance	10 g (60 - 500 Hz)
Repeatability (% of full scale value)	± 1 %
Switching point	adjustable
Hysteresis	max. switching pressure difference
DC operating voltage,min./max.	12 ... 30 V DC
Operational voltage AC,min./max.	12 ... 30 V AC
Mounting types	via through holes
Protection class	IP67
Electr. connection	Plug, M12x1
Weight	0.331 lbs

Technical data

Part No.		Type	Operating pressure range min./max.	Compressed air connection
R412010716		PM1-M3-G014	-13.05 ... 0 psi	Internal thread, G 1/4
R412010717		PM1-M3-G014	2.9 ... 232 psi	Internal thread, G 1/4
R412010719		PM1-M3-F001	-13.05 ... 0 psi	Flange with O-ring, Ø 5x1,5
R412010720		PM1-M3-F001	2.9 ... 232 psi	Flange with O-ring, Ø 5x1,5

Part No.	Fig.	
R412010716	Fig. 1	-
R412010717	Fig. 1	1)
R412010719	Fig. 2	-
R412010720	Fig. 2	1)

1) Min. switching pressure range 0.2 bar falling/0.5 bar rising

Technical information

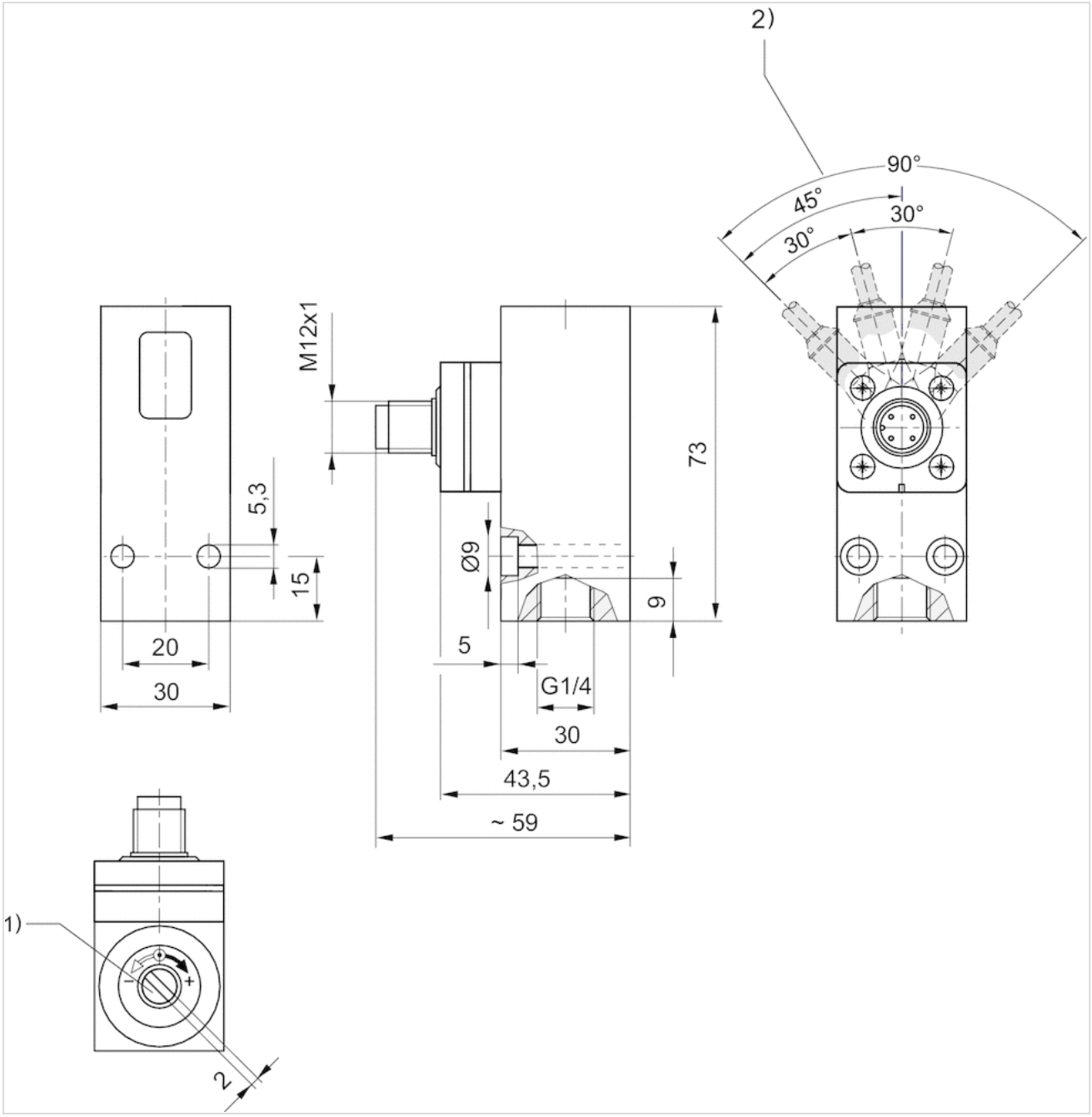
Switching function increasing pressure: contact switches from 1-2 to 1-3.
Switching function decreasing pressure: contact switches from 1-3 to 1-2.
Notice:Too-high currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching!
The microswitch has silver-plated contacts.

Technical information

Material	
Housing	Aluminum
Seals	Acrylonitrile butadiene rubber
Electr. connection	Brass, nickel-plated

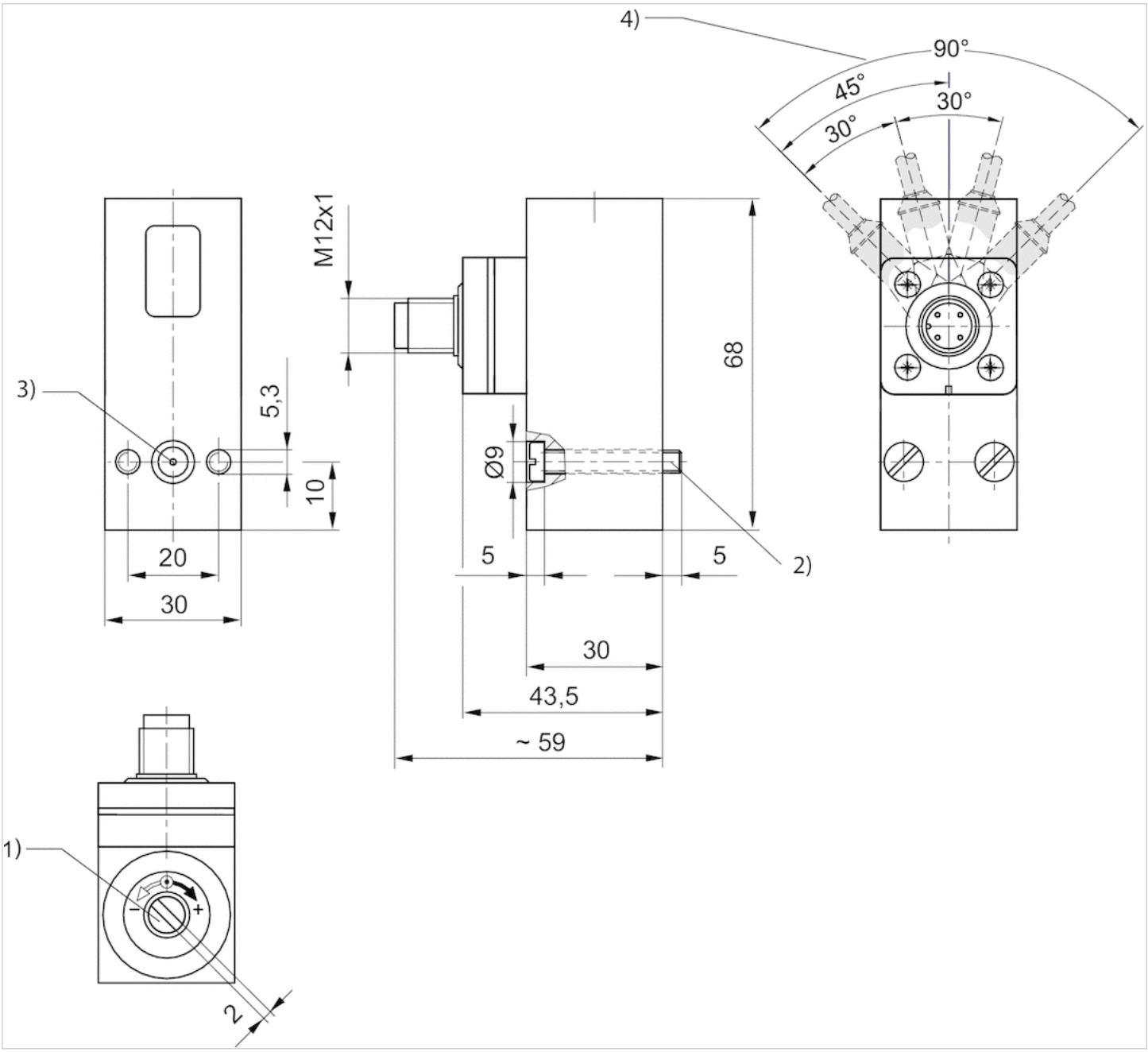
Dimensions

Fig. 1



1) Adjustment screw, self-holding
2) Detent position

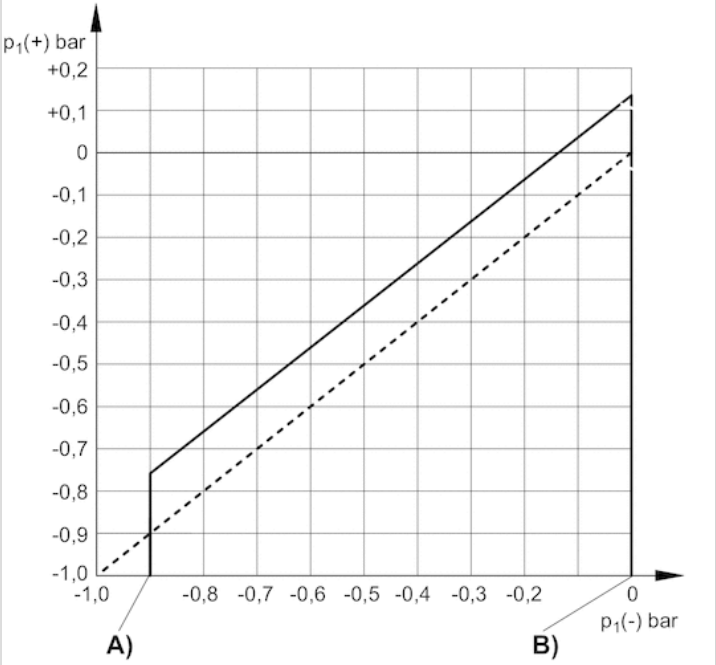
Fig. 2



1) Adjustment screw, self-holding
2) cylinder screw M5x30 (included in scope of delivery)
3) O-ring Ø5x1,5 (included)
4) Detent position

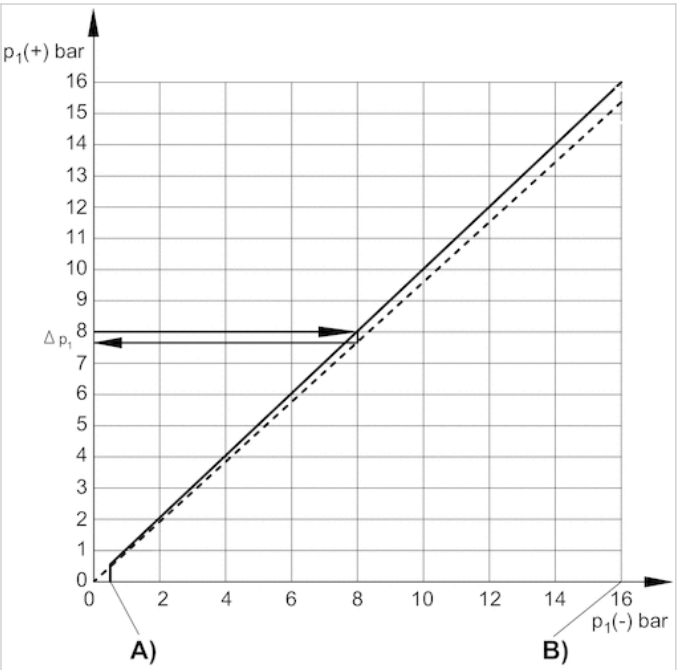
Diagrams

differential switching pressure characteristic curve (-09 – 0 bar)



A) p1 (-), min.
B) p1 (-), max.
p1 (+) = upper switching pressure with increasing pressure
p1 (-) = lower switching pressure with decreasing pressure

differential switching pressure characteristic curve (02 - 16 bar)



A) p1 (-), min.
B) p1 (-), max.
p1 (+) = upper switching pressure with increasing pressure
p1 (-) = lower switching pressure with decreasing pressure
Δ p1 = max. operating pressure difference or hysteresis
Example:

p1 (+) = 8 bar > p1(-) = 7.6 bar
Δ p1 = 0.4 bar

max. permissible continuous current I max. [A] with ohmic load

U [V]	I [A] 1)	I [A] 2)
30-250	3A	
30 / 48 / 60 / 125		3 / 1,2 / 0,8 / 0,4

reference cycle: 30/min., reference temperature: + 30 °C

1) AC

2) DC

max. permissible continuous current I max. [A] with inductive load

U [V]	I [A] 1) 3)	I [A] 2) 4)
30-250	3A	
30 / 48 / 60 / 125		2 / 0,55 / 0,4 / 0,2

reference cycle: 30/min., reference temperature: + 30 °C

1) AC

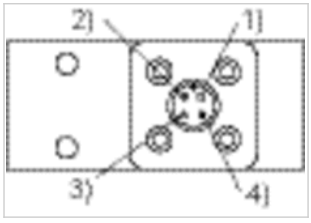
2) DC

3) cos ≈ 0,7°

4) L/R ≈ 10 ms

Pin assignments

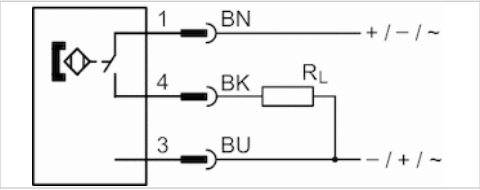
Pin assignments



Pin	1	2	3	4
Allocation	+UB	break contact	No function	NO (make contact)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M12, 4-pin, with knurled screw
- UL certification
- Reed
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR



Certificates	CE declaration of conformity, cULus, RoHS
Ambient temperature min./max.	-22 ... 176 °F
Protection class	IP65, IP67
Switching point precision	±0,1 mT
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	10 ... 30 V AC
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
Switching capacity	Reed, 3-pin: max. 6 W
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.	for	Type of contact	Cable length L
R412022876	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	0.984 ft.

Part No.	Voltage drop U at Imax	DC switching current, max.
R412022876	≤ 0,1 V	0.3 A

Part No.	AC switching current, max.	Max. switching frequency
R412022876	0.5 A	400 Hz

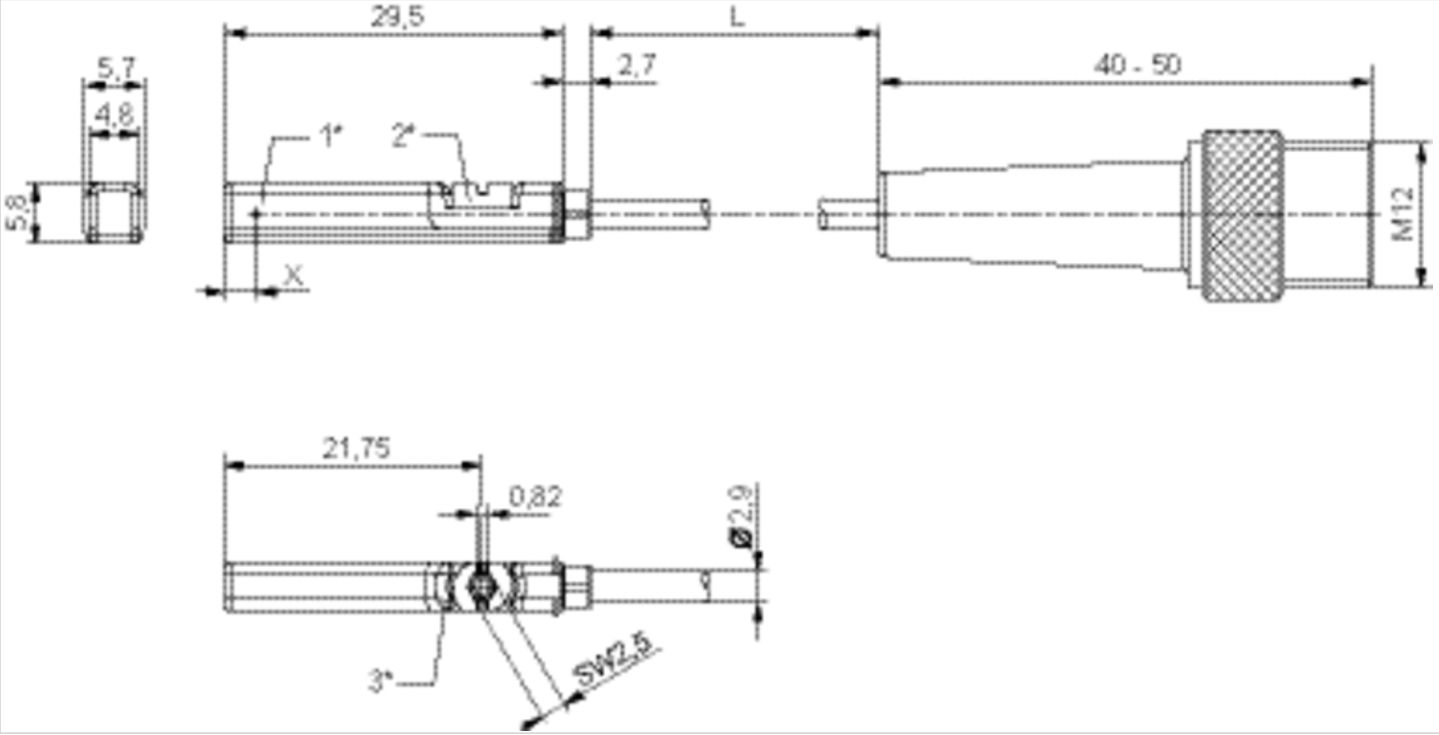
Part No.	Version
R412022876	Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = PNP: 11,6 mm, reed: 8,3 mm

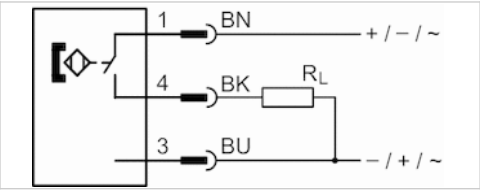
Pin assignments

Pin assignments

Pin	1	3	4
Allocation	(+)	(OUT)	(-)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M8, 3-pin, with knurled screw
- UL certification
- Reed
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR



Certificates	CE declaration of conformity, cULus, RoHS
Ambient temperature min./max.	-22 ... 176 °F
Protection class	IP65, IP67
Switching point precision	±0,1 mT
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	10 ... 30 V AC
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
Switching capacity	Reed, 3-pin: max. 6 W
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.	for	Type of contact	Cable sheath
R412022873	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyurethane
R412022875	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyvinyl chloride
R412022874	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyurethane

Part No.	Cable length L	Voltage drop U at Imax	DC switching current, max.
R412022873	0.984 ft.	I*Rs	0.3 A
R412022875	0.984 ft.	I*Rs	0.3 A
R412022874	1.64 ft.	I*Rs	0.3 A

Part No.	AC switching current, max.	Max. switching frequency
R412022873	0.5 A	400 Hz
R412022875	0.5 A	400 Hz
R412022874	0.5 A	400 Hz

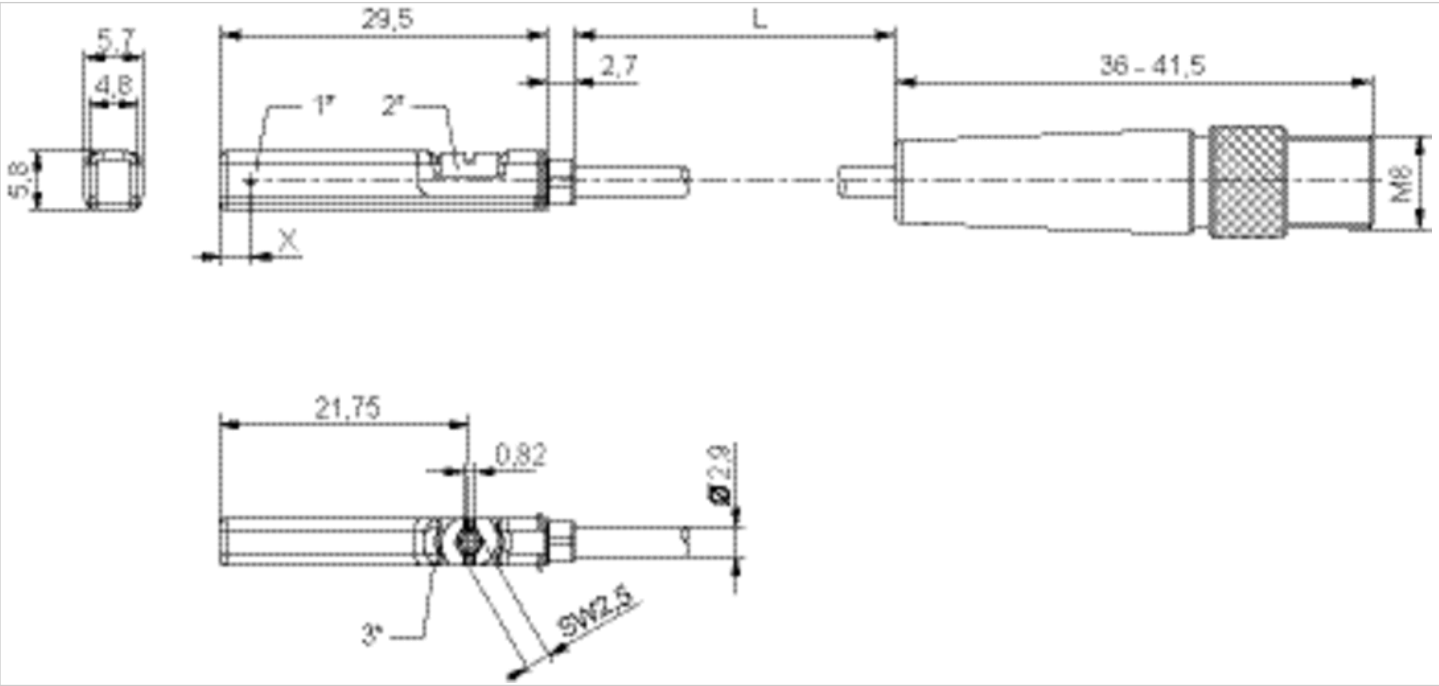
Part No.	Version
R412022873	Protected against polarity reversal
R412022875	Protected against polarity reversal
R412022874	Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane, Polyvinyl chloride
Locking screw	Stainless steel

Dimensions

Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = electronic: 11,6 mm, Reed: 8,3 mm

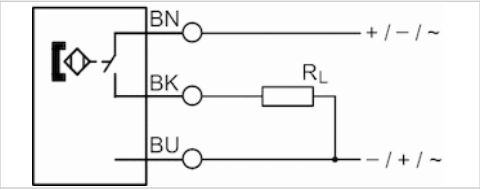
Pin assignments

Pin assignments

Pin	1	3	4
Allocation	(+)	(OUT)	(-)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- open cable ends, 3-pin
- UL certification
- Reed
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR



Certificates	CE declaration of conformity, cULus, RoHS
Ambient temperature min./max.	-22 ... 176 °F
Protection class	IP65, IP67, IP69K
Switching point precision	±0,1 mT
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	10 ... 30 V AC
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
Switching capacity	Reed, 2-pin: max. 10 W, Reed, 3-pin: max. 6 W
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.	for	Type of contact	Cable length L
R412022869	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	9.84 ft.
R412022870	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	16.4 ft.
R412022871	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	32.81 ft.

Part No.	Voltage drop U at Imax	DC switching current, max.
R412022869	I*Rs	0.3 A
R412022870	≤ 0,1 V	0.3 A
R412022871	I*Rs	0.3 A

Part No.	AC switching current, max.	Max. switching frequency
R412022869	0.5 A	400 Hz
R412022870	0.5 A	400 Hz
R412022871	0.5 A	400 Hz

Part No.	Version	Fig.
R412022869	Protected against polarity reversal	Fig. 2
R412022870	Protected against polarity reversal	Fig. 2
R412022871	Protected against polarity reversal	Fig. 2

open cable ends, 3-pin

Technical information

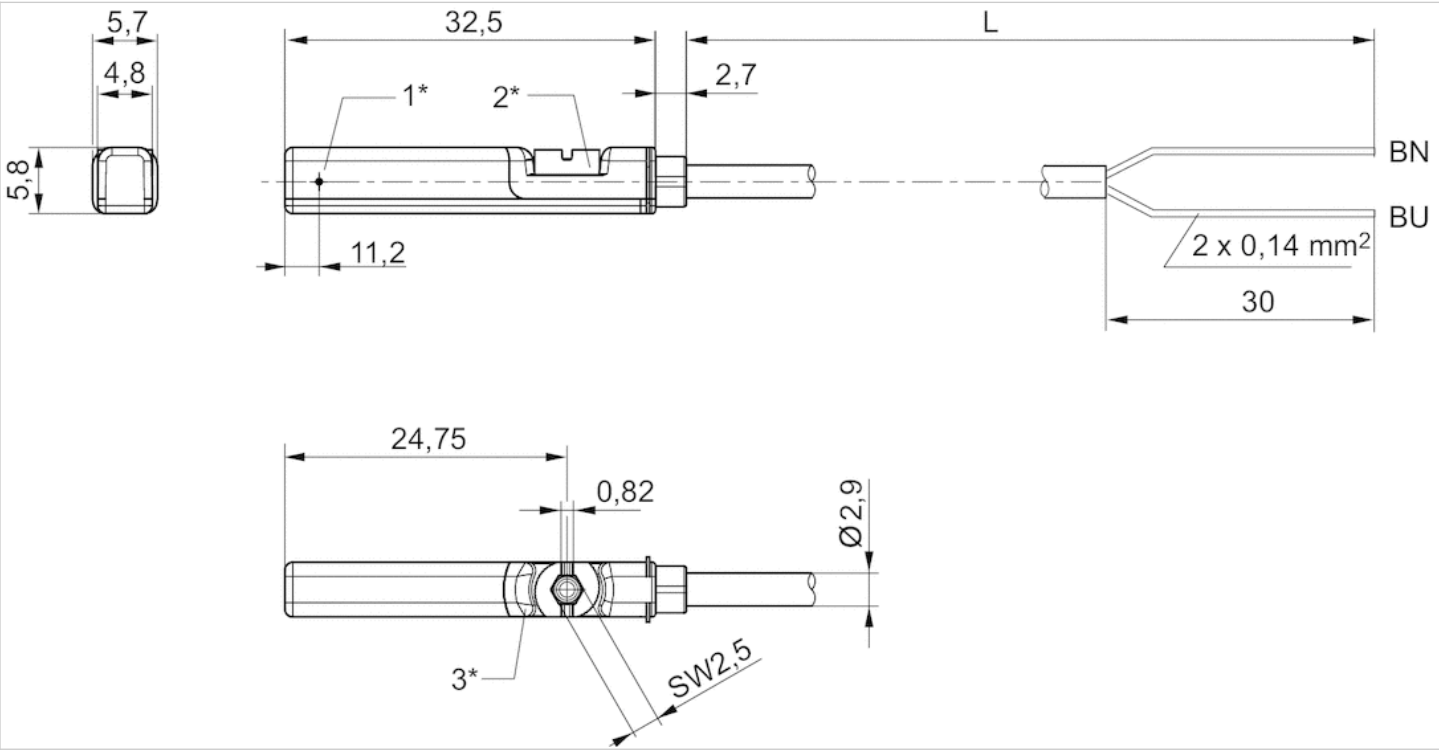
No cULus certification for 230 V variant.

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

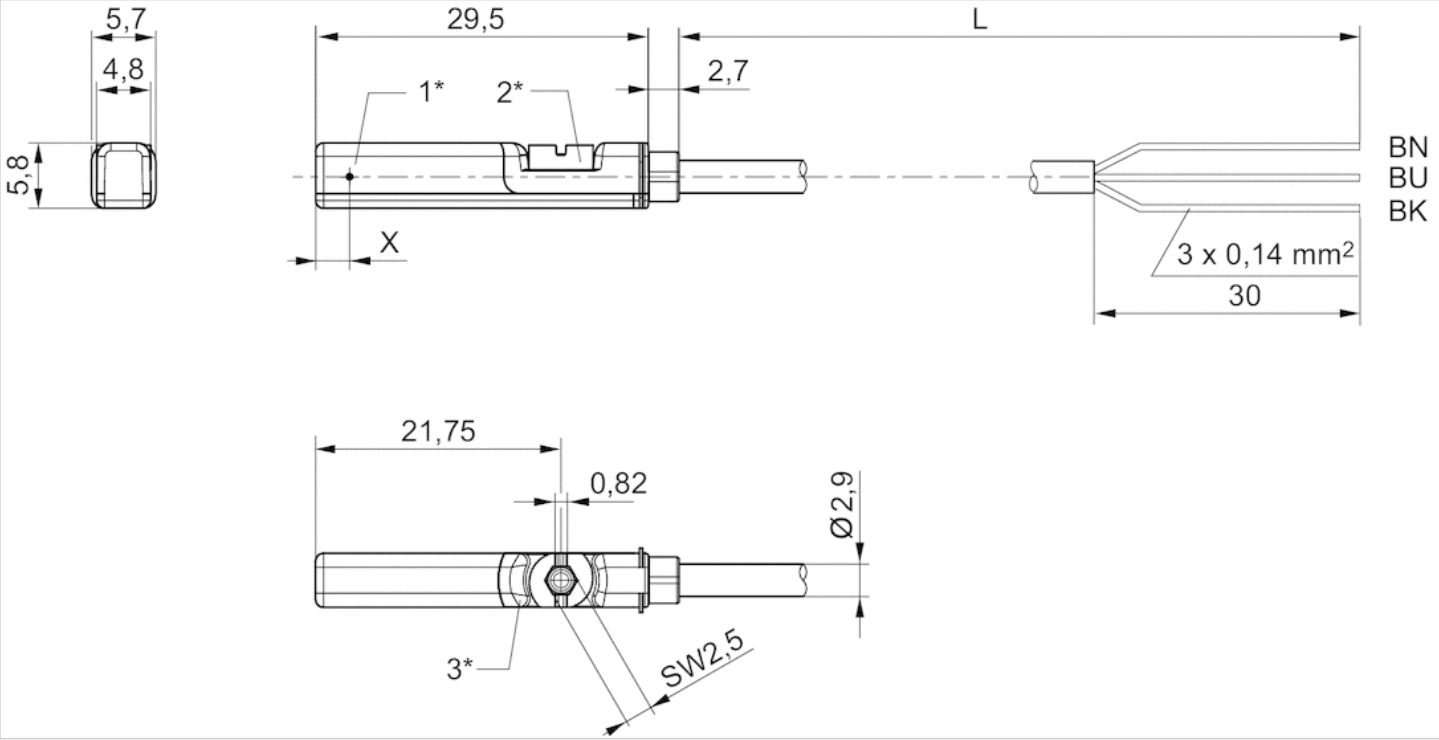
Dimensions

Fig. 1



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
BN=brown, BU=blue

Fig. 2



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
BN = brown, BK = black, BU = blue
X = electronic: 11.6 mm

QR1-S standard series

- Straight fitting
- External thread
- G 1/8, G 1/4
- push-in fitting
- Ø 4, Ø 6, Ø 8, Ø 10, Ø 12
- QR1-S-RPN

Working pressure min./max.	-13 ... 145 psi
Ambient temperature min./max.	32 ... 140 °F
Weight	See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight
2121004180	G 1/8	Ø 4	10 piece	0.031 lbs
2121006180	G 1/8	Ø 6	10 piece	0.036 lbs
2121008180	G 1/8	Ø 8	10 piece	0.047 lbs
R412005002	G 1/8	Ø 10	10 piece	0.052 lbs
R412005003	G 1/8	Ø 12	10 piece	0.079 lbs
2121004140	G 1/4	Ø 4	10 piece	0.044 lbs
2121006140	G 1/4	Ø 6	10 piece	0.047 lbs
2121008140	G 1/4	Ø 8	10 piece	0.053 lbs
2121010140	G 1/4	Ø 10	10 piece	0.058 lbs
2121012140	G 1/4	Ø 12	10 piece	0.087 lbs

Technical information

The series QR1 (plastic) and QR2 (metal) can not be combined
Thread seal with captive O-ring

For further information about assembling and tolerances of adaptable tubing can be found in the “Technical information” document (available in the MediaCentre).

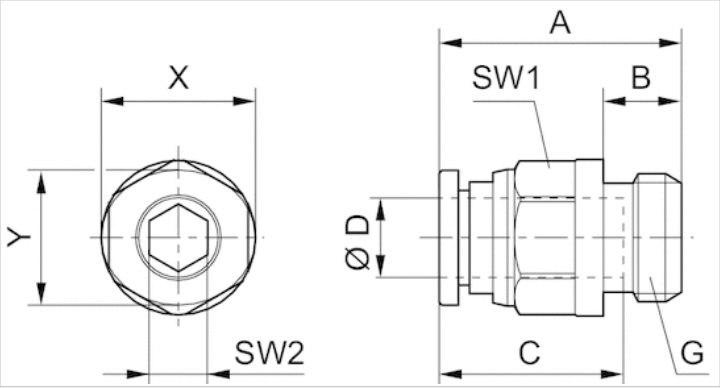
Technical information

Material	
Material	nickel-plated
Housing	Brass, nickel-plated

Material	
Seal	Acrylonitrile butadiene rubber
Tooth lock washer	Stainless steel
Release ring	Polyoxymethylene
Release ring holder	Die cast zinc, Brass, nickel-plated
Thread	Brass, nickel-plated

Dimensions

Dimensions



Dimensions

Part No.	Port D	Port G	A	B	C	SW1	SW2	X	Y
2121004180	Ø 4	G 1/8	20.1	5	16	10	3	12	10
2121006180	Ø 6	G 1/8	24.6	5	17	12	4	14	12
2121008180	Ø 8	G 1/8	26.5	5	18.5	14	5	16	14
R412005002	Ø 10	G 1/8	28.9	5	21	17	4	19	17
R412005003	Ø 12	G 1/8	33.5	5	22.5	21	4	23	21
2121004140	Ø 4	G 1/4	19.1	6	16	10	3	12	10
2121006140	Ø 6	G 1/4	21.6	6	17	12	4	14	12
2121008140	Ø 8	G 1/4	22.4	6	18.5	14	6	16	14
2121010140	Ø 10	G 1/4	29.9	6	21	17	7	19	17
2121012140	Ø 12	G 1/4	33.4	6	22.5	21	7	23	21

QR1-S standard series

- Elbow fitting
- External thread
- G 1/8, G 1/4
- push-in fitting
- Ø 4, Ø 6, Ø 8, Ø 10, Ø 12
- QR1-S-RVT

Working pressure min./max.	-13 ... 145 psi
Ambient temperature min./max.	32 ... 140 °F
Weight	See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight
2122004180	G 1/8	Ø 4	10 piece	0.027 lbs
2122006180	G 1/8	Ø 6	10 piece	0.028 lbs
2122008180	G 1/8	Ø 8	10 piece	0.034 lbs
R412005094	G 1/8	Ø 10	10 piece	0.061 lbs
R412005095	G 1/8	Ø 12	10 piece	0.086 lbs
2122004140	G 1/4	Ø 4	10 piece	0.038 lbs
2122006140	G 1/4	Ø 6	10 piece	0.042 lbs
2122008140	G 1/4	Ø 8	10 piece	0.051 lbs
2122010140	G 1/4	Ø 10	10 piece	0.063 lbs
2122012140	G 1/4	Ø 12	10 piece	0.093 lbs

Weight per piece

Technical information

The series QR1 (plastic) and QR2 (metal) can not be combined
Thread seal with captive O-ring

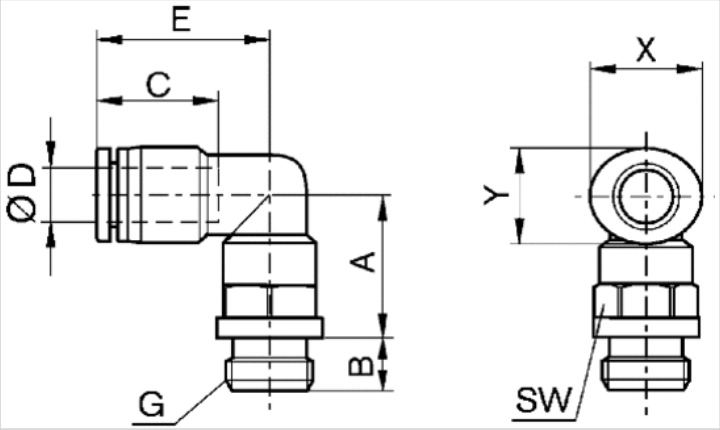
For further information about assembling and tolerances of adaptable tubing can be found in the “Technical information” document (available in the MediaCentre).

Technical information

Material	
Material	nickel-plated
Housing	Polybutyleneterephthalate
Seal	Acrylonitrile butadiene rubber
Tooth lock washer	Stainless steel
Release ring	Polyoxymethylene
Release ring holder	Die cast zinc, Brass, nickel-plated
Thread	Brass, nickel-plated

Dimensions

Dimensions



Dimensions

Part No.	Port D	Port G	A	B	C	E	SW	X	Y
2122004180	Ø 4	G 1/8	9.5	5	16	18.5	13	12	10
2122006180	Ø 6	G 1/8	10.7	5	17	20.3	13	14	12
2122008180	Ø 8	G 1/8	14.4	5	18.5	22.6	13	16	14
R412005094	Ø 10	G 1/8	16.5	5	21	27	16	19	17
R412005095	Ø 12	G 1/8	18.2	5	22.5	29.2	16	23	21
2122004140	Ø 4	G 1/4	9.5	6	16	18.5	16	12	10
2122006140	Ø 6	G 1/4	10.7	6	17	20.3	16	14	12
2122008140	Ø 8	G 1/4	11.5	6	18.5	22.6	16	16	14
2122010140	Ø 10	G 1/4	16.5	6	21	27	16	19	17
2122012140	Ø 12	G 1/4	18.3	6	22.5	29.2	16	23	21

Series QR2-S, standard

- Straight fitting
- External thread
- G 1/8, G 1/4
- push-in fitting
- Ø 4, Ø 5, Ø 6, Ø 8, Ø 10, Ø 12
- QR2-S-RPN

Working pressure min./max.	-13 ... 232 psi
Ambient temperature min./max.	-4 ... 176 °F
Weight	See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight	Fig.
1823373041	G 1/8	Ø 4	25 piece	0.011 lbs	Fig. 1
1823373042	G 1/8	Ø 5	10 piece	0.022 lbs	Fig. 1
1823373043	G 1/8	Ø 6	25 piece	0.024 lbs	Fig. 1
1823373044	G 1/8	Ø 8	25 piece	0.026 lbs	Fig. 1
1823373045	G 1/4	Ø 4	25 piece	0.026 lbs	Fig. 1
1823373046	G 1/4	Ø 5	10 piece	0.029 lbs	Fig. 1
1823373047	G 1/4	Ø 6	25 piece	0.033 lbs	Fig. 1
1823373048	G 1/4	Ø 8	10 piece	0.035 lbs	Fig. 1
1823373049	G 1/4	Ø 10	10 piece	0.057 lbs	Fig. 1
1823391809	G 1/4	Ø 12	10 piece	0.068 lbs	Fig. 1
R412004708	G 1/4	Ø 12	10 piece	0.048 lbs	Fig. 2

Weight per piece

Technical information

The series QR1 (plastic) and QR2 (metal) can not be combined
Thread seal with captive O-ring

For further information about assembling and tolerances of adaptable tubing can be found in the “Technical information” document (available in the MediaCentre).

Technical information

Material	
Housing	Brass, nickel-plated
Seal	Acrylonitrile butadiene rubber
Tooth lock washer	Stainless steel
Release ring	Brass, nickel-plated
Thread	Brass, nickel-plated

Dimensions

Fig. 1

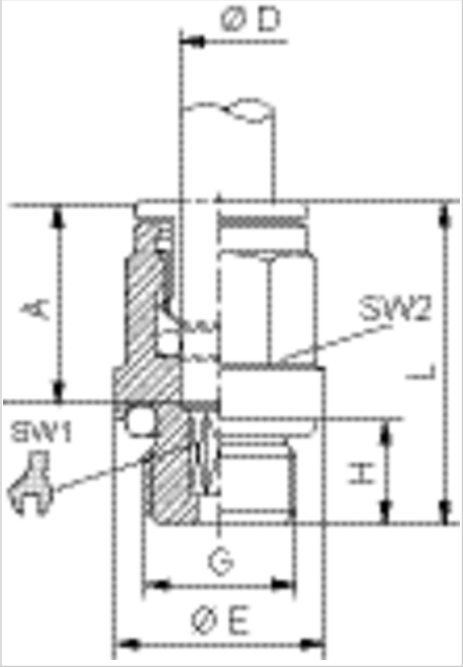
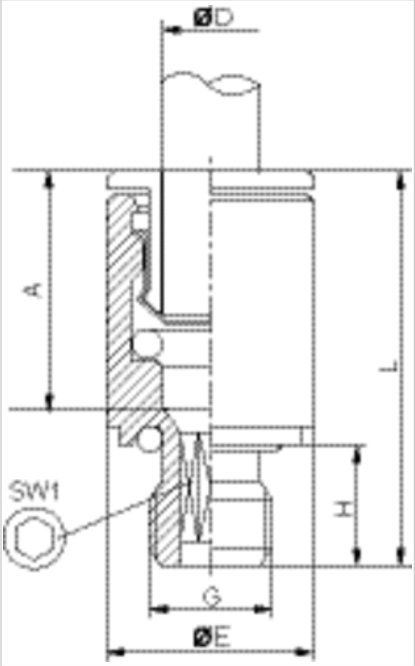


Fig. 2



Dimensions

Part No.	Port D	Port G	Ø E	H	L	A*	SW 1	SW 2	Fig.
1823373041	Ø 4	G 1/8	13.5	6	20	15	2.5	9	Fig. 1
1823373042	Ø 5	G 1/8	13.5	6	22	16	4	10	Fig. 1
1823373043	Ø 6	G 1/8	13.5	6	24	16	4	11	Fig. 1
1823373044	Ø 8	G 1/8	13	6	26.5	18	5	13	Fig. 1
1823373045	Ø 4	G 1/4	17	8	21	15	2.5	9	Fig. 1
1823373046	Ø 5	G 1/4	17	8	22	16	4	10	Fig. 1
1823373047	Ø 6	G 1/4	17	6.5	22.5	16	4	11	Fig. 1
1823373048	Ø 8	G 1/4	17	8	25	18	6	13	Fig. 1
1823373049	Ø 10	G 1/4	16	8	29.5	19	7	16	Fig. 1
1823391809	Ø 12	G 1/4	16	6.5	30	20	7	18	Fig. 1
R412004708	Ø 12	G 1/4	17	8.3	31	7	–	-	Fig. 2

* Insertion depth

Series QR2-S, standard

- Elbow fitting, rotatable
- External thread
- G 1/8, G 1/4
- push-in fitting
- Ø 4, Ø 6, Ø 8, Ø 10, Ø 12
- QR2-S-RVT

Working pressure min./max.	-13 ... 232 psi
Ambient temperature min./max.	-4 ... 176 °F
Weight	See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight
1823391710	G 1/8	Ø 4	10 piece	0.04 lbs
1823391711	G 1/8	Ø 6	10 piece	0.044 lbs
1823391712	G 1/8	Ø 8	10 piece	0.048 lbs
R412007687	G 1/8	Ø 10	5 piece	0.07 lbs
1823391713	G 1/4	Ø 4	10 piece	0.053 lbs
1823391714	G 1/4	Ø 6	10 piece	0.055 lbs
1823391715	G 1/4	Ø 8	10 piece	0.06 lbs
1823391718	G 1/4	Ø 10	5 piece	0.068 lbs
1823391843	G 1/4	Ø 12	5 piece	0.092 lbs

Weight per piece

Technical information

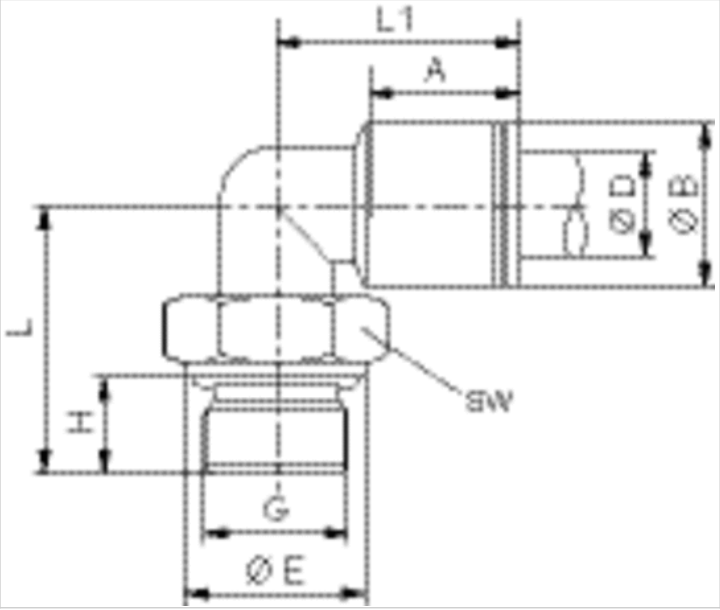
The series QR1 (plastic) and QR2 (metal) can not be combined
Thread seal with captive O-ring

For further information about assembling and tolerances of adaptable tubing can be found in the “Technical information” document (available in the MediaCentre).

Technical information

Material	
Housing	Brass, nickel-plated
Seal	Acrylonitrile butadiene rubber
Tooth lock washer	Stainless steel
Release ring	Brass, nickel-plated
Thread	Brass, nickel-plated

Dimensions



Dimensions

Part No.	Port D	Port G	ØB	ØE	H	L	L1	A*	SW
1823391710	Ø 4	G 1/8	9	13	6	20	19	15	13
1823391711	Ø 6	G 1/8	11	13	6	20	21	16	13
1823391712	Ø 8	G 1/8	13	13	6	20	24	18	13
R412007687	Ø 10	G 1/8	15	13	6	24	27	19	13
1823391713	Ø 4	G 1/4	9	16	8	24	19	15	13
1823391714	Ø 6	G 1/4	11	16	8	24	21	16	13
1823391715	Ø 8	G 1/4	13	16	8	24	24	18	13
1823391718	Ø 10	G 1/4	15	16	8	24	27	19	16
1823391843	Ø 12	G 1/4	17	16	8	30.5	29	20	16

* Insertion depth

Series NU2

- Swivel banjo connection 1-fold
- External thread
- G 1/4
- plug-in with tube nut
- Ø 6, Ø 8, Ø 9
- NU2-S-RW1

Working pressure min./max.	-13 ... 145 psi
Ambient temperature min./max.	14 ... 140 °F
Weight	See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight
1823391294	G 1/4	Ø 6	2 piece	0.075 lbs
1823391295	G 1/4	Ø 8	2 piece	0.097 lbs
R412010658	G 1/4	Ø 9	1 piece	0.608 lbs

Weight per piece

Technical information

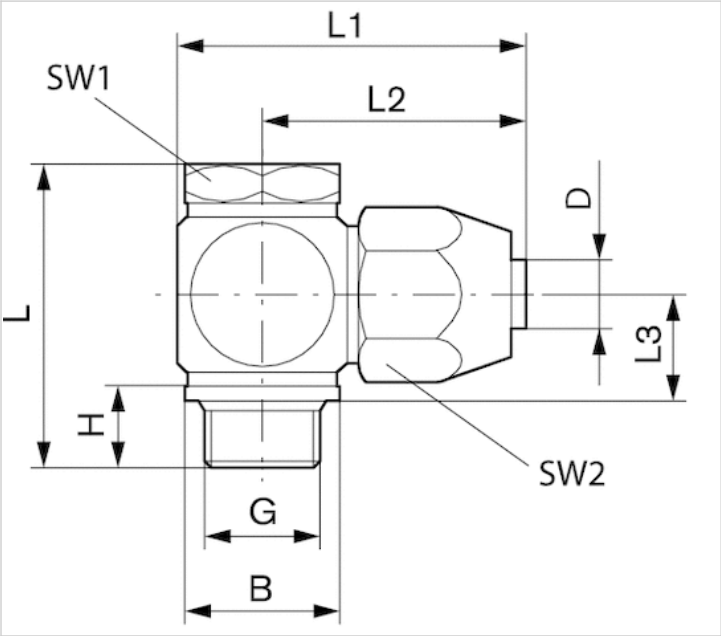
For further information about assembling and tolerances of adaptable tubing can be found in the “Technical information” document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seal	Polyvinyl chloride

Dimensions

Dimensions



for fabric-reinforced plastic tubing

Dimensions

Part No.	Port D	Port G	B	H	L	L1	L2	L3	SW1	SW2
1823391294	Ø 6	G 1/4	18	12.5	39	39.5	30	14.5	17	19
1823391295	Ø 8	G 1/4	18	12.5	42	42	32.5	16	17	22
R412010658	Ø 9	G 1/4	18.9	7.9	40	42	32.5	15.6	17	24

Connection D = inside diameter of the tubing to be used

Reducing nipple

- External thread
- G 1/8, G 1/4, G 3/8, G 1/2, G 3/4, G 1
- M5, G 1/8, G 1/4, G 3/8, G 1/2, G 3/4
- FPT-S-RDZ

Working pressure min./max.	0 ... 870 psi
Ambient temperature min./max.	-4 ... 158 °F

Technical data

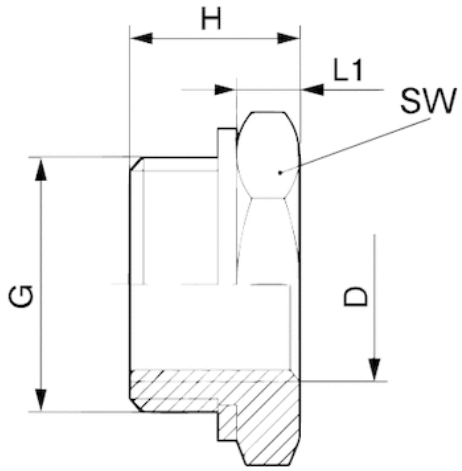
Part No.	Port G	Port D	Delivery unit	Material
1823391080	G 1/8	M5	10 piece	Brass
1823391012	G 1/4	G 1/8	10 piece	-
1823391298	G 3/8	G 1/8	10 piece	Brass
1823391013	G 3/8	G 1/4	10 piece	Brass
1823391299	G 1/2	G 1/8	5 piece	Brass
1823391300	G 1/2	G 1/4	5 piece	Brass
1823391014	G 1/2	G 3/8	5 piece	Brass
1823391301	G 3/4	G 1/4	5 piece	Brass
1823391302	G 3/4	G 3/8	5 piece	Brass
1823391028	G 3/4	G 1/2	5 piece	Brass
1823391303	G 1	G 3/8	2 piece	Brass
1823391304	G 1	G 1/2	2 piece	Brass
1823391285	G 1	G 3/4	2 piece	Brass

Technical information

Material	
Material	Brass, nickel-plated
Seal	Polyvinyl chloride, hard

Dimensions

Dimensions



Dimensions

Part No.	Port D	Port G	H	L1	SW
1823391080	M5	G 1/8	10.5	4.5	14
1823391012	G 1/8	G 1/4	13	4	17
1823391298	G 1/8	G 3/8	14	5	19
1823391013	G 1/4	G 3/8	15	5	19
1823391299	G 1/8	G 1/2	15.5	5.5	24
1823391300	G 1/4	G 1/2	15.5	5.5	24
1823391014	G 3/8	G 1/2	15.5	5.5	24
1823391301	G 1/4	G 3/4	19	7	32
1823391302	G 3/8	G 3/4	19	7	32
1823391028	G 1/2	G 3/4	19	7	32
1823391303	G 3/8	G 1	23	8	41
1823391304	G 1/2	G 1	23	8	41
1823391285	G 3/4	G 1	23	8	41

Double nipple, Series PE5

- External thread

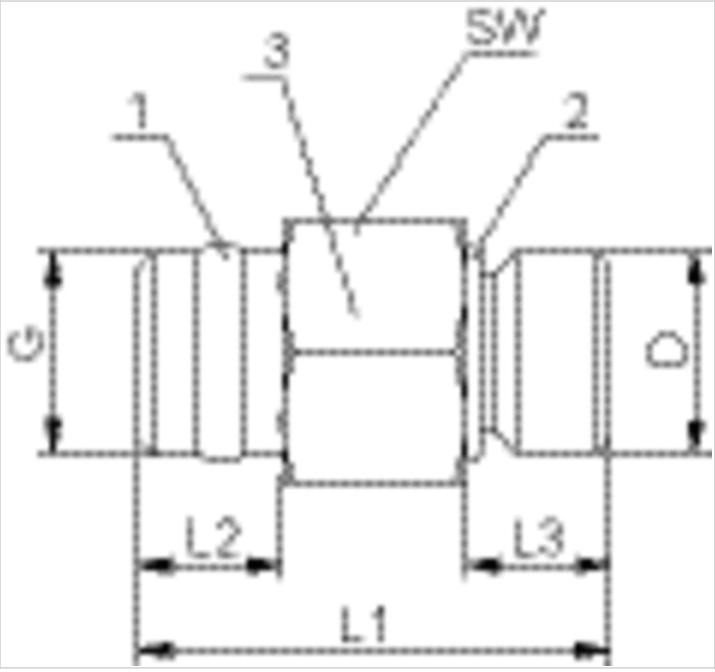
Weight 0.088 lbs

Technical data

Part No.	Port G	Port D	Delivery unit
R412010015	G 1/4	G 1/8	2 piece
R412010016	G 1/4	G 1/4	2 piece

Dimensions

Dimensions



1) sealing ring Polytetrafluorethylen
2) O-ring - acrylonitrile butadiene rubber
3) Housing - brass, nickel-plated

Dimensions

Part No.	Port G	Port D	L1	L2	L3	SW
R412010015	G 1/4	G 1/8	30	10	8.5	17
R412010016	G 1/4	G 1/4	30	10	8.5	17

Blanking screw

- External thread
- G 1/8
- FPT-S-RIO

Working pressure min./max.	0 ... 232 psi
Ambient temperature min./max.	-4 ... 176 °F

Technical data

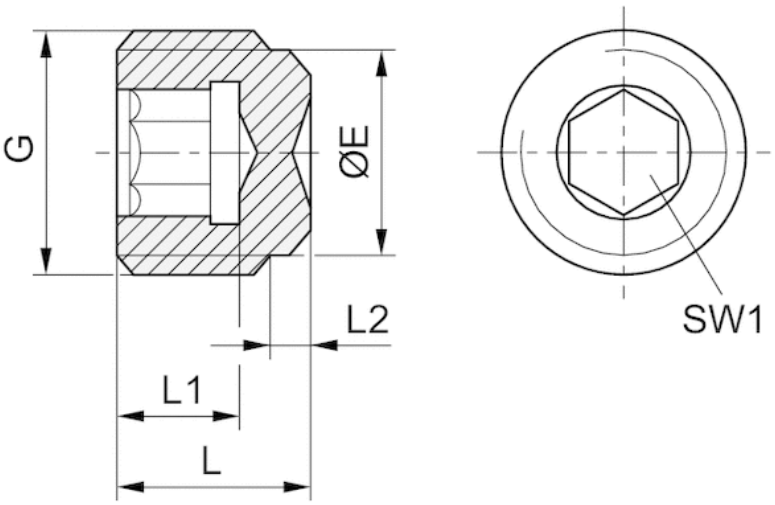
Part No.	Port G	Delivery unit
1823462004	G 1/8	10 piece

Technical information

Material	
Material	Brass

Dimensions

Dimensions



Dimensions

Port G	ØE	L	L1	L2	SW1
G 1/8	8	8	5	2	5

Blanking screw, gasket

- G 1/8
- FPT-S-RBI

Working pressure min./max.	0 ... 232 psi
Ambient temperature min./max.	-4 ... 176 °F

The delivered product may vary from that in the illustration.

Technical data

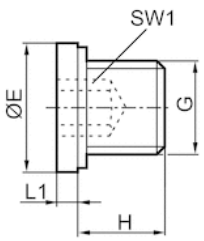
Part No.	Port G	Delivery unit
1823462028	G 1/8	25 piece

Technical information

Material	
Material	Steel, galvanized
Seal	Polyvinyl chloride, hard

Dimensions

Dimensions

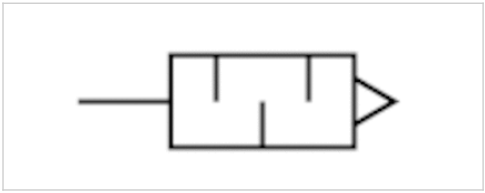


Dimensions

Port G	Ø E	H	L1	SW1
G 1/8	14	8	3	5

Silencers, series SI1

- Sintered bronze



Working pressure min./max.	0 ... 145 psi
Ambient temperature min./max.	-13 ... 176 °F
Medium	Compressed air
Sound pressure level	See table below
Weight	See table below
Comment	Flow characteristic curves can be found under “Diagrams”.

Technical data

Part No.	Compressed air connection	Sound pressure level	Flow	Delivery unit	Weight
			Qn		
R412004817	G 1/4	-	6.05 Cv	10 piece	0.029 lbs
1827000001	G 1/4	79 dB	2.9 Cv	10 piece	0.044 lbs

Weight per piece

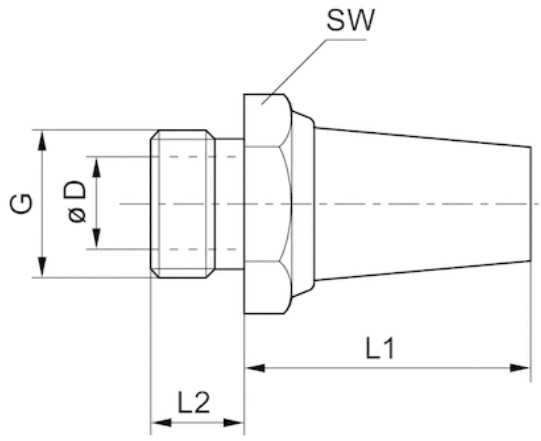
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

Technical information

Material	
Silencers	Sintered bronze
Thread	Brass

Dimensions

Dimensions

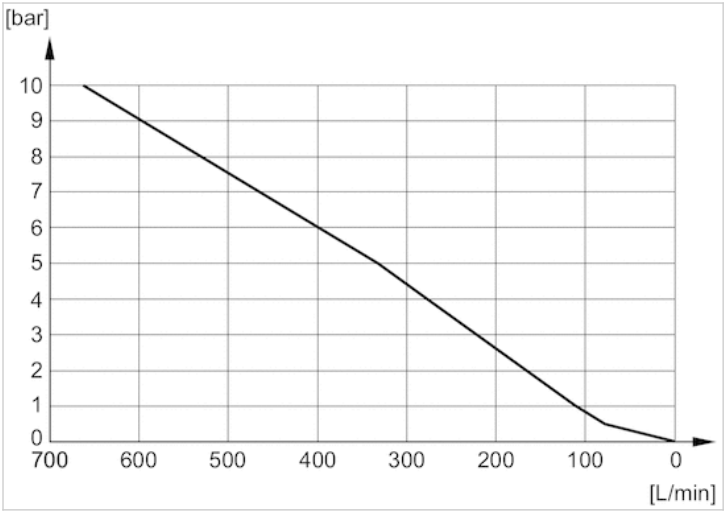


Dimensions

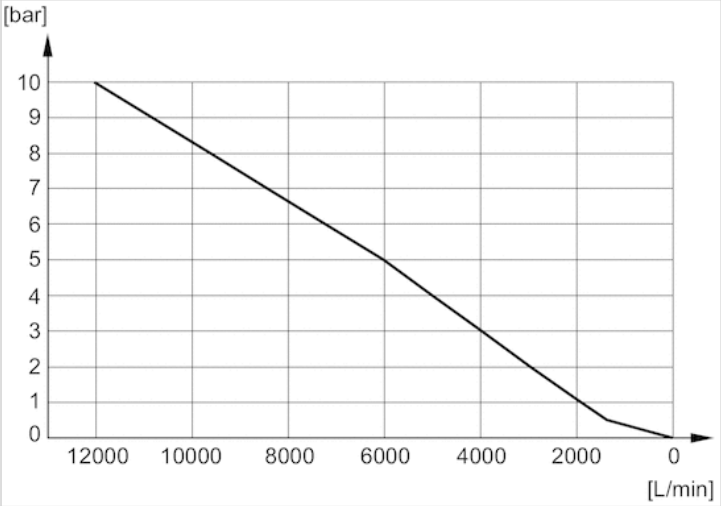
Part No.	Port G	SW	Ø D	L1	L2
R412004817	G 1/4	16	8.5	18.7	7.6
1827000001	G 1/4	17	8.5	25	8

Diagrams

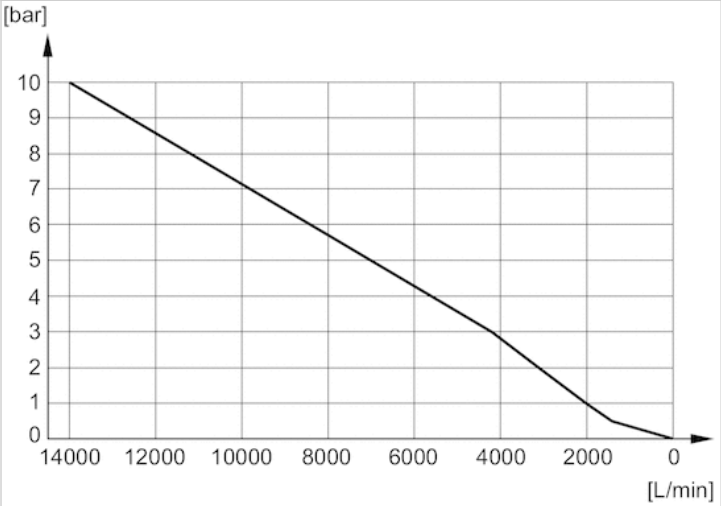
Flow diagram 1827000006



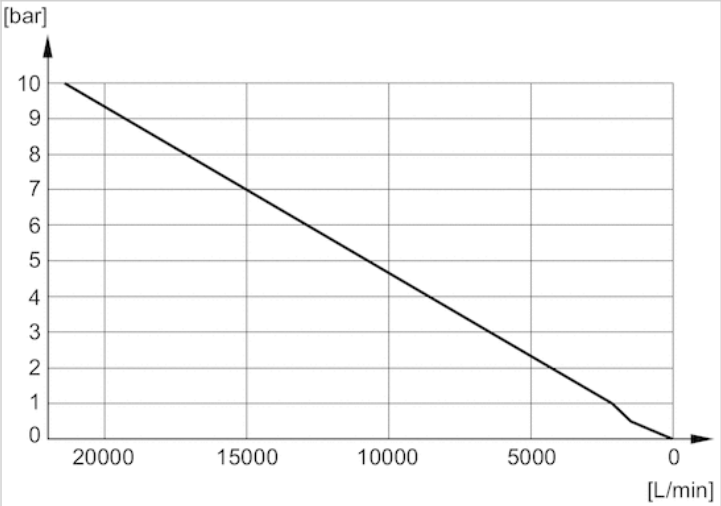
Flow diagram 1827000003



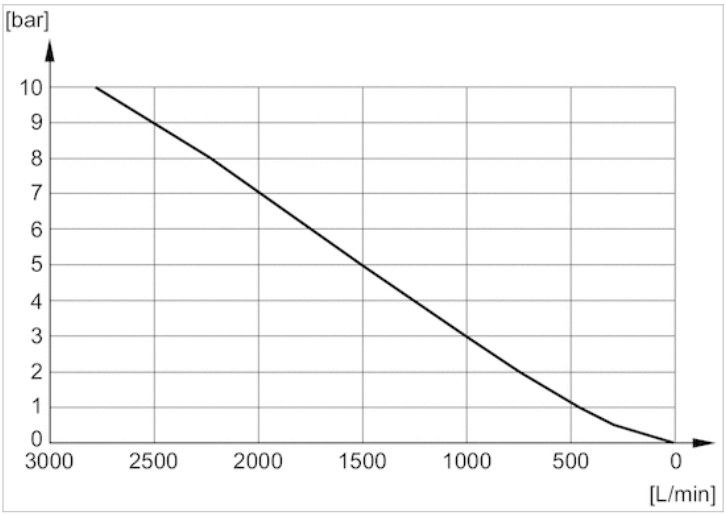
Flow diagram 1827000004



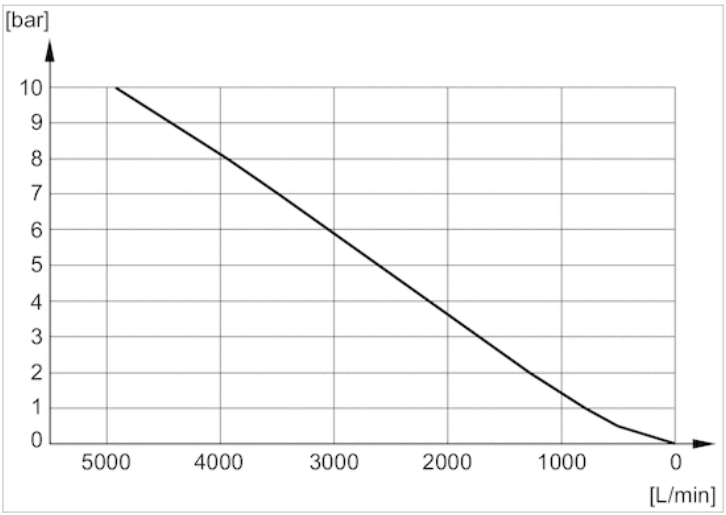
Flow diagram 1827000005



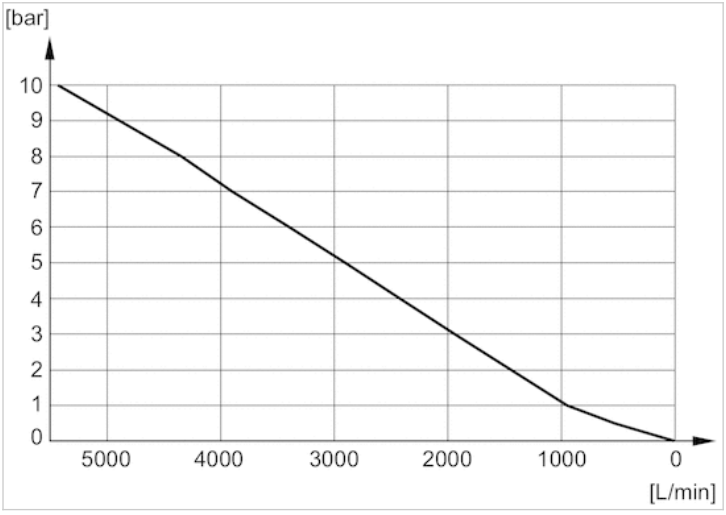
Flow diagram 5324001110



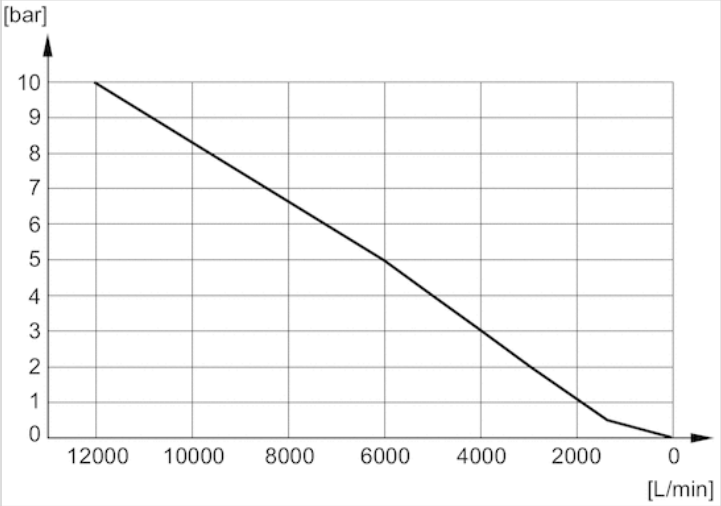
Flow diagram 5324001170



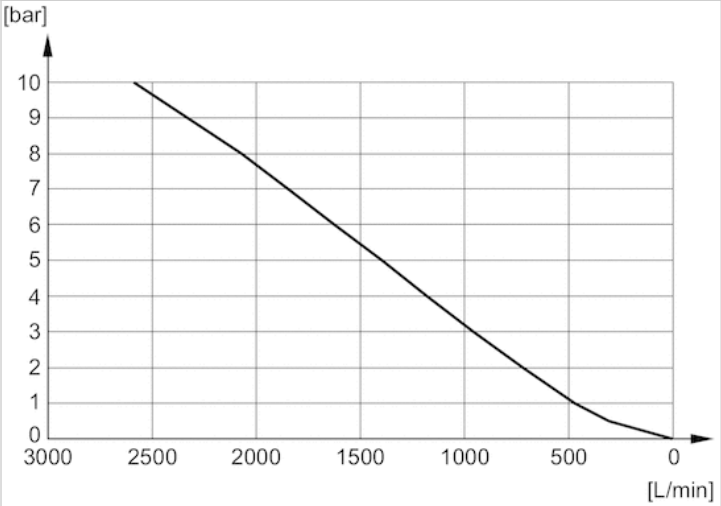
Flow diagram 5324001120



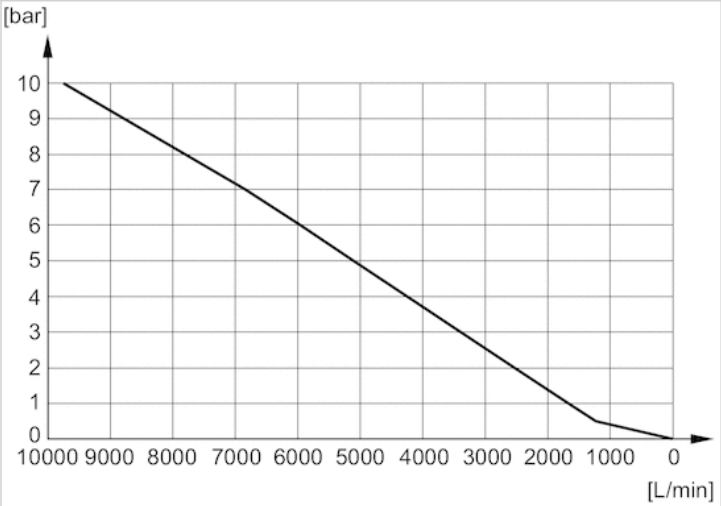
Flow diagram 5324001140



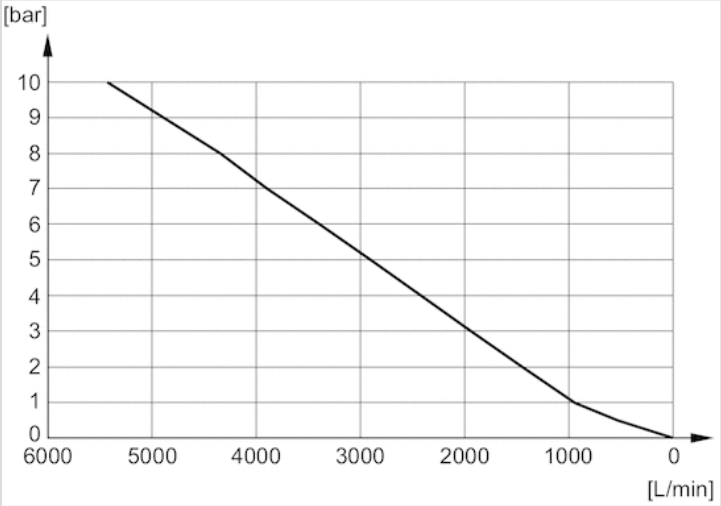
Flow diagram 1827000000



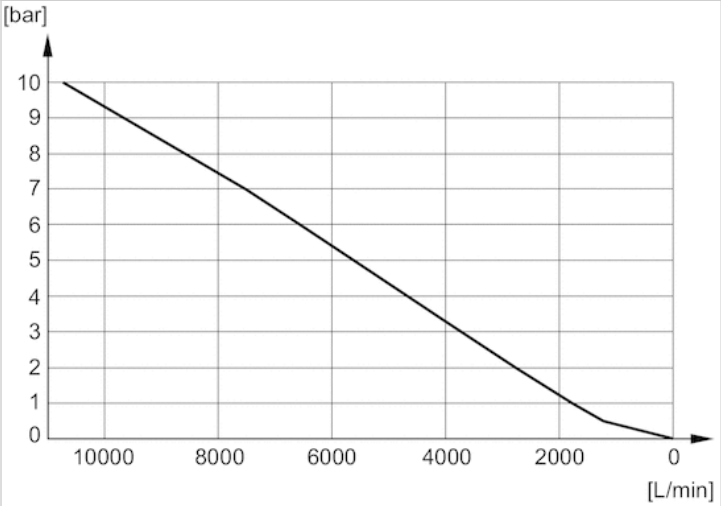
Flow diagram R412004817



Flow diagram 1827000001

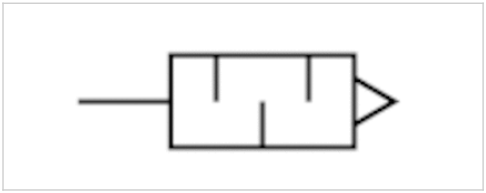


Flow diagram 1827000002



Silencers, series SI1

- Stainless steel



Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	-4 ... 302 °F
Medium	Compressed air
Sound pressure level	93 dB
Weight	0.046 lbs
Comment	Flow characteristic curves can be found under “Diagrams”.

Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
R412010082	G 1/4	0.85 Cv	1 piece

Weight per piece

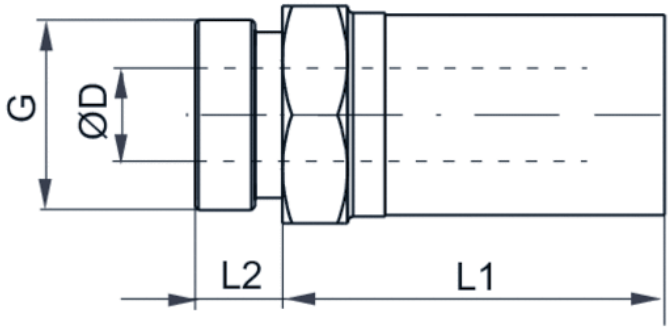
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

Technical information

Material	
Silencers	Stainless steel
Thread	Stainless steel

Dimensions

Dimensions

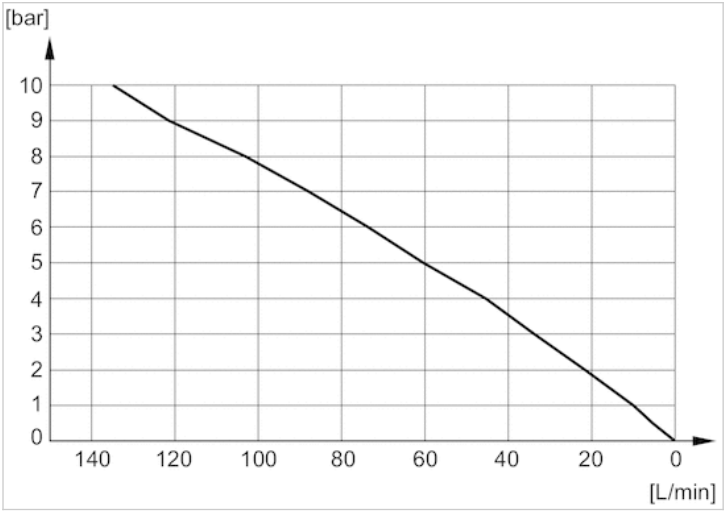


Dimensions

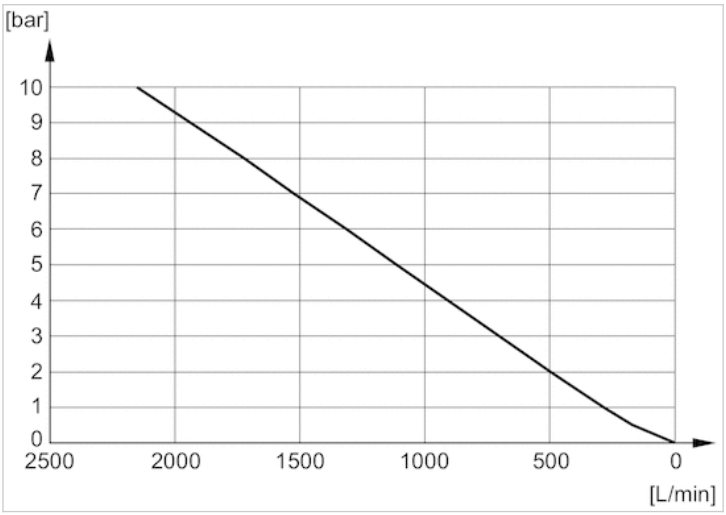
Part No.	Port G	SW	Ø D	L1	L2
R412010082	G 1/4	16	8.6	29.5	7.5

Diagrams

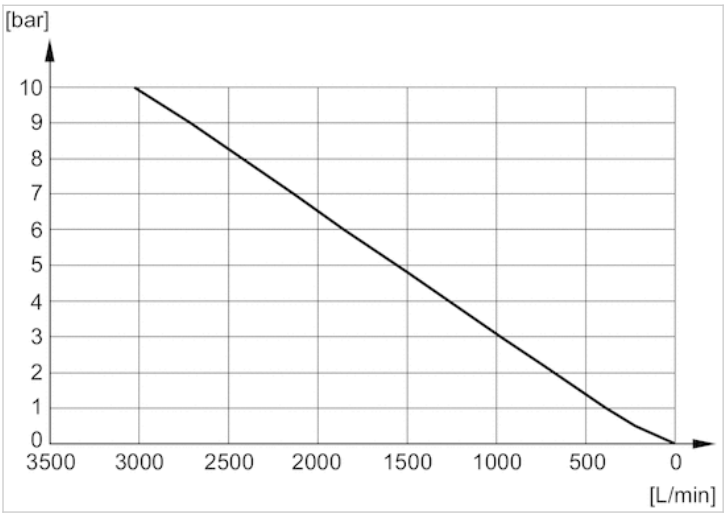
Flow diagram R412010090



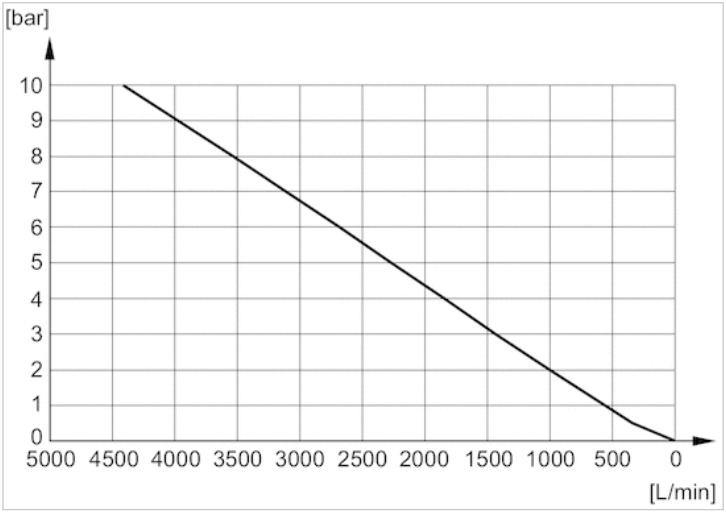
Flow diagram R412010081



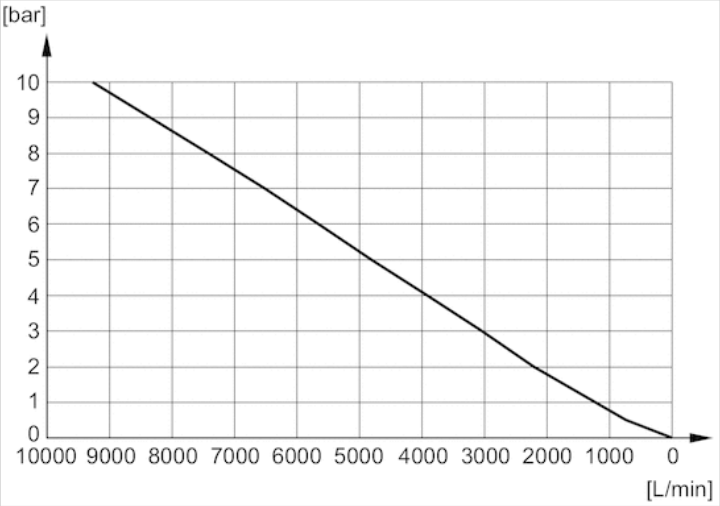
Flow diagram R412010082



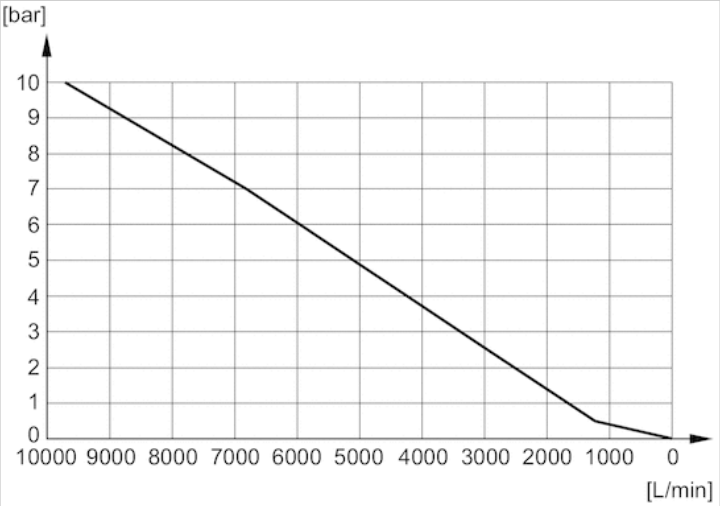
Flow diagram R412010083



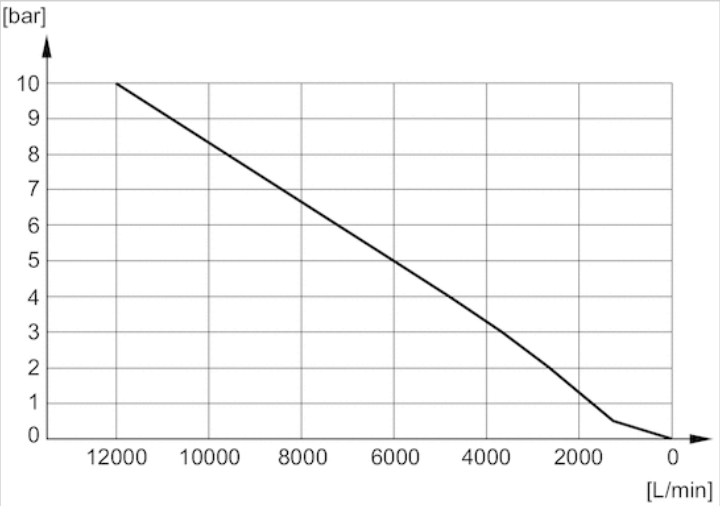
Flow diagram R412010084



Flow diagram R412010085

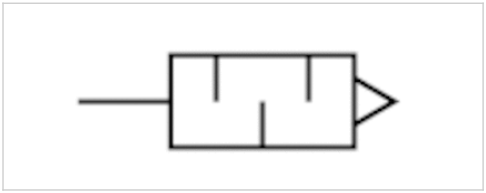


Flow diagram R412010086



Silencers, series SI1

- Polyethylene



Working pressure min./max.	0 ... 145 psi
Ambient temperature min./max.	-13 ... 176 °F
Medium	Compressed air
Sound pressure level	80 dB
Weight	0.007 lbs
Comment	Flow characteristic curves can be found under “Diagrams”.

Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
1827000020	G 1/4	3.1 Cv	5 piece

Weight per piece

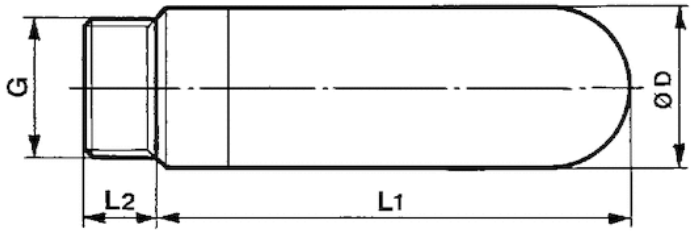
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

Technical information

Material	
Silencers	Polyethylene
Thread	Polyethylene

Dimensions

Dimensions

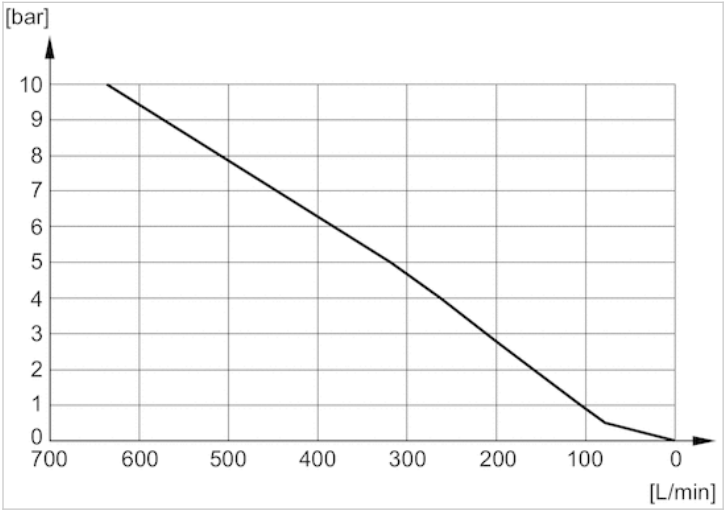


Dimensions

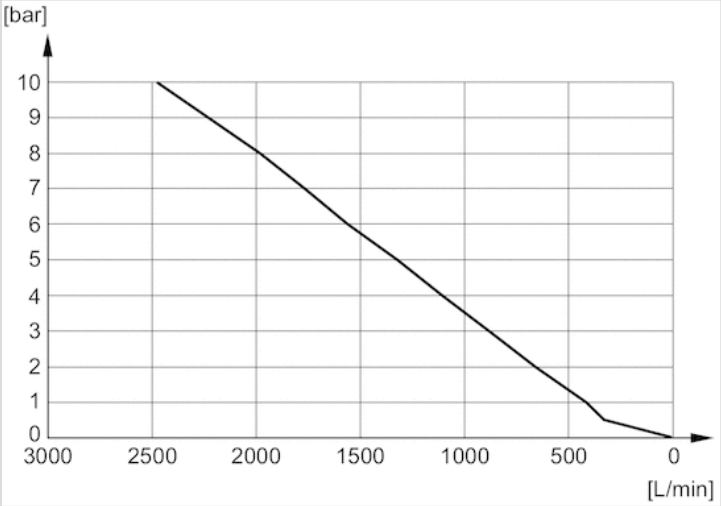
Part No.	Port G	Ø D	L1	L2
1827000020	G 1/4	15.5	34.5	8

Diagrams

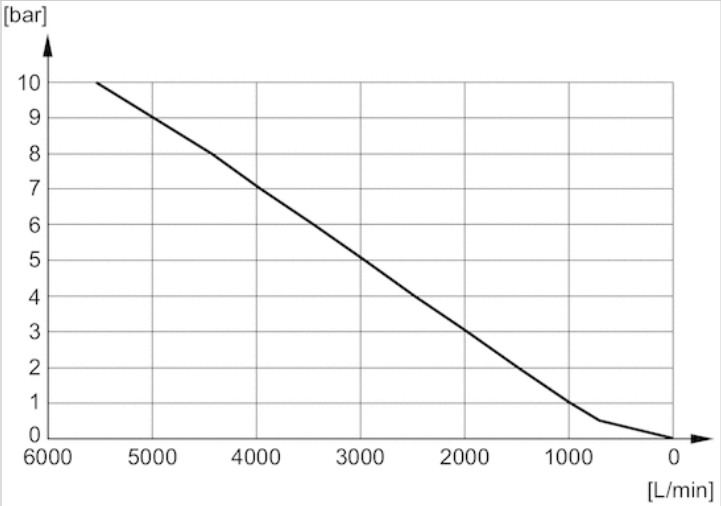
Flow diagram 1827000018



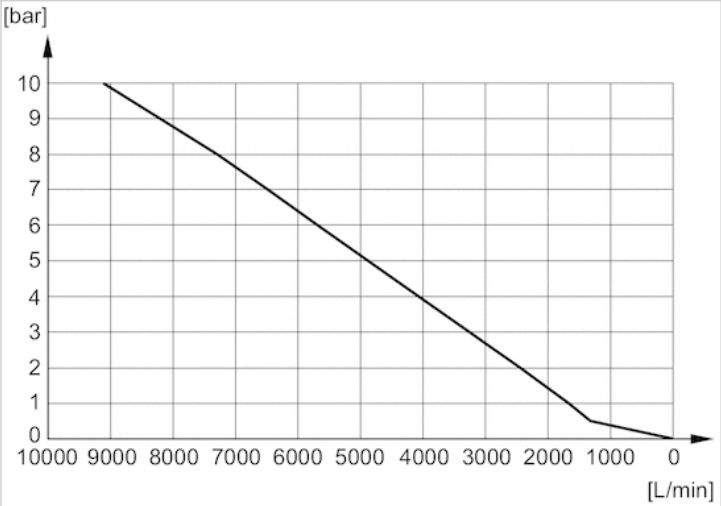
Flow diagram 1827000019



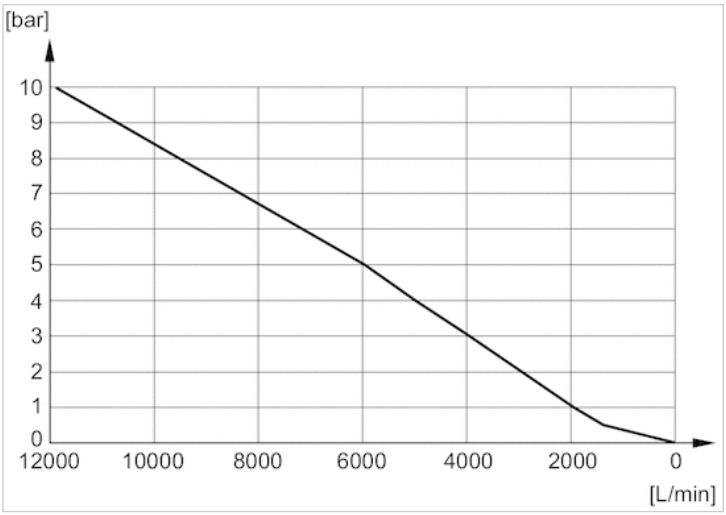
Flow diagram 1827000020



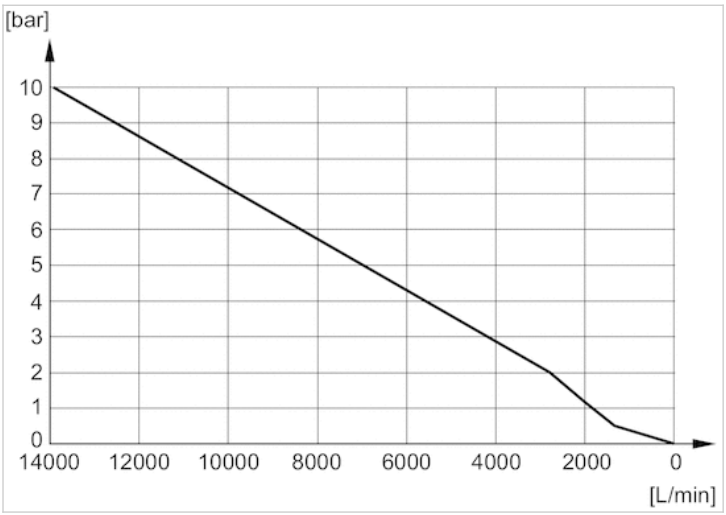
Flow diagram 1827000021



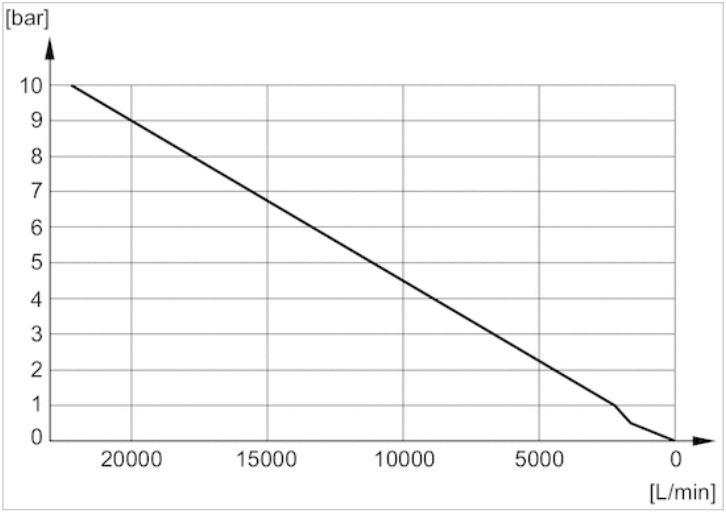
Flow diagram 1827000022



Flow diagram 1827000023

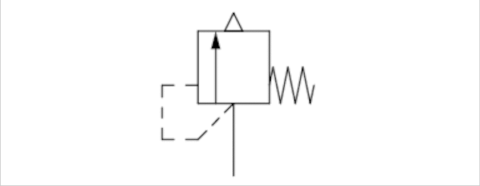


Flow diagram 1827000024



Series RV1

- Qn 1▸2 = 0.687-7.3 Cv
- thread-in
- External thread
- G 1/4
- Uncollected



Version	Poppet valve
Certificates	CE declaration of conformity
Working pressure min./max.	0 ... 290 psi
Opening pressure of valve	See table below
Ambient temperature min./max.	-4 ... 212 °F
Medium	Compressed air

Technical data

Part No.	Port 1	Opening pressure of valve	Flow
			Qn 1▸2
R412007521	G 1/4	0.8 bar	0.687 Cv
R412007522	G 1/4	1.5 bar	1.01 Cv
R412007523	G 1/4	2 bar	1.24 Cv
R412007524	G 1/4	3.5 bar	1.9 Cv
R412007525	G 1/4	4 bar	2.12 Cv
R412007526	G 1/4	4.8 bar	2.46 Cv
R412007527	G 1/4	6 bar	2.98 Cv
R412007528	G 1/4	8 bar	3.84 Cv
R412007529	G 1/4	10 bar	4.71 Cv
R412007530	G 1/4	11 bar	5.14 Cv
R412007531	G 1/4	15 bar	6.86 Cv
R412007532	G 1/4	16 bar	7.3 Cv

Technical information

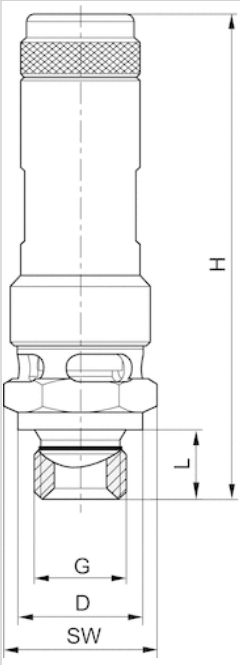
The specified performance values are achieved at a 10% (PE 14.5 psi , 1.45 psi) pressure increase, measured with compressed air at 68 °F .

Technical information

Material	
Housing	Brass
Seals	Fluorocaoutchouc

Dimensions

Dimensions



G = connection 1

Dimensions

Part No.	Port G	Ø D	H	L	SW	T [Nm]	NW
R412007521	G 1/4	18	69	10	19	30	8
R412007522	G 1/4	18	69	10	19	30	8
R412007523	G 1/4	18	69	10	19	30	8
R412007524	G 1/4	18	69	10	19	30	8
R412007525	G 1/4	18	69	10	19	30	8
R412007526	G 1/4	18	69	10	19	30	8
R412007527	G 1/4	18	69	10	19	30	8
R412007528	G 1/4	18	69	10	19	30	8
R412007529	G 1/4	18	69	10	19	30	8
R412007530	G 1/4	18	69	10	19	30	8
R412007531	G 1/4	18	69	10	19	30	8
R412007532	G 1/4	18	69	10	19	30	8

T = maximum torque

NW = nominal width