

Pressure regulator, Series AS2-RGS

- G 1/4 G 3/8
- Qn = 2200-2700 l/min
- Standard pressure regulator
- Activation Mechanical
- lockable
- for padlocks
- suitable for ATEX



Parts	Pressure regulator
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
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	for padlocks
Pressure supply	single
Activation	Mechanical
Weight	See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412006101			G 1/4	2200 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412006103			G 1/4	2200 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412006105			G 1/4	2200 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412006107			G 1/4	2200 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412006109			G 1/4	2200 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412006111			G 1/4	2200 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412006100		—	G 1/4	2200 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412006102		—	G 1/4	2200 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412006104		—	G 1/4	2200 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412006106		—	G 1/4	2200 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412006108		—	G 1/4	2200 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412006110		—	G 1/4	2200 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412006113			G 3/8	2700 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412006115			G 3/8	2700 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412006117			G 3/8	2700 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412006119			G 3/8	2700 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412006121			G 3/8	2700 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412006123			G 3/8	2700 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412006112		—	G 3/8	2700 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412006114		—	G 3/8	2700 l/min	0,1 ... 16 bar	0,1 ... 2 bar

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412006116		—	G 3/8	2700 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412006118		—	G 3/8	2700 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412006120		—	G 3/8	2700 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412006122		—	G 3/8	2700 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R414012351		—	G 3/8	2700 l/min	0,5 ... 16 bar	0,5 ... 16 bar

Part No.	Pressure gauge	Weight	
R412006101	with pressure gauge	0,32 kg	1)
R412006103	with pressure gauge	0,32 kg	1)
R412006105	with pressure gauge	0,32 kg	1)
R412006107	with pressure gauge	0,32 kg	1)
R412006109	with pressure gauge	0,32 kg	1)
R412006111	with pressure gauge	0,32 kg	1)
R412006100	-	0,248 kg	2)
R412006102	-	0,248 kg	2)
R412006104	-	0,248 kg	2)
R412006106	-	0,248 kg	2)
R412006108	-	0,248 kg	2)
R412006110	-	0,248 kg	2)
R412006113	with pressure gauge	0,32 kg	1)
R412006115	with pressure gauge	0,32 kg	1)
R412006117	with pressure gauge	0,32 kg	1)
R412006119	with pressure gauge	0,32 kg	1)
R412006121	with pressure gauge	0,32 kg	1)
R412006123	with pressure gauge	0,32 kg	1)
R412006112	-	0,248 kg	2)
R412006114	-	0,248 kg	2)
R412006116	-	0,248 kg	2)
R412006118	-	0,248 kg	2)
R412006120	-	0,248 kg	2)
R412006122	-	0,248 kg	2)
R414012351	-	0,248 kg	3)

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

1) Pressure gauge enclosed separately, Suitable for use in Ex zones 1, 2, 21, 22

2) Order pressure gauge separately, Suitable for use in Ex zones 1, 2, 21, 22

3) Order pressure gauge separately, Suitable for use in Ex zones 1, 2, 21, 22, Safe rear exhaust in case of drop (removal) of pilot pressure

Technical information

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

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).

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

A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Relieving exhaust (≤ 0.3 bar over set pressure)

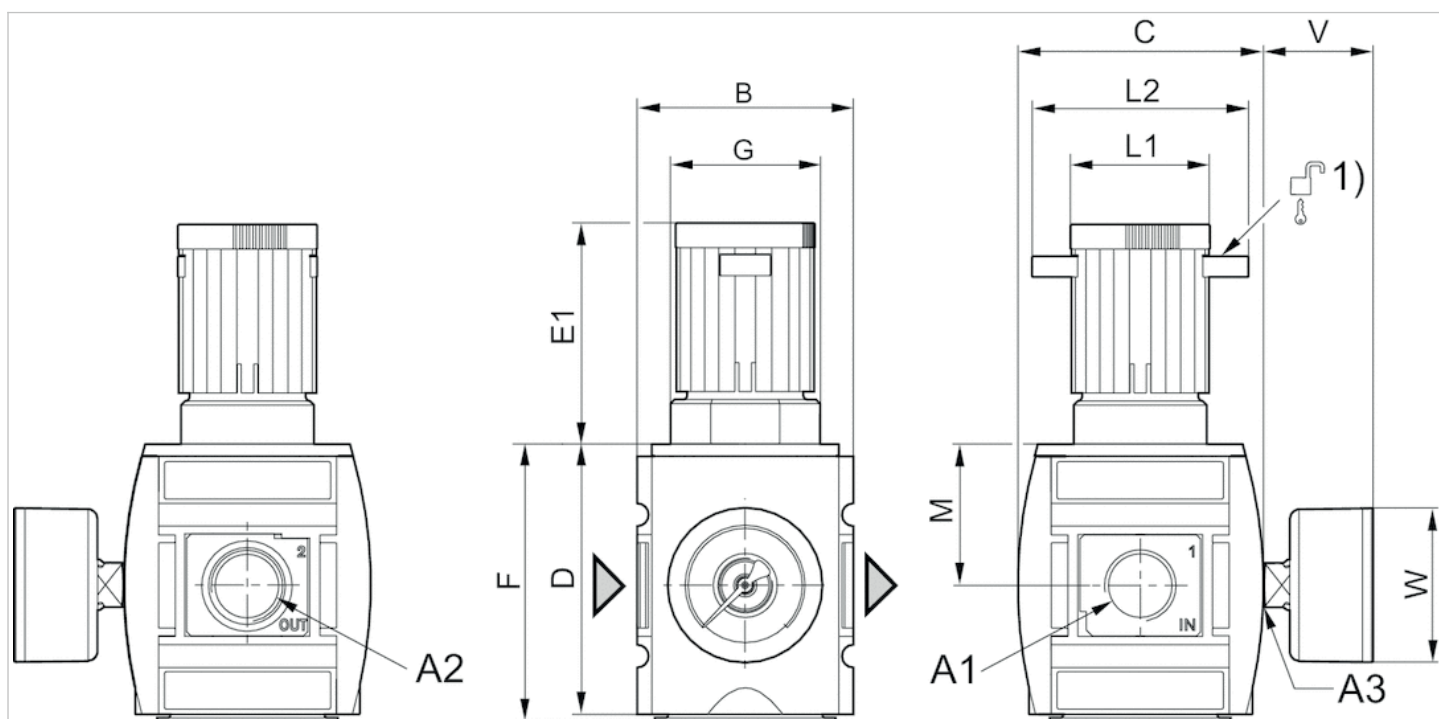
With rear exhaust (> 3 bar)

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

A3 = pressure gauge connection

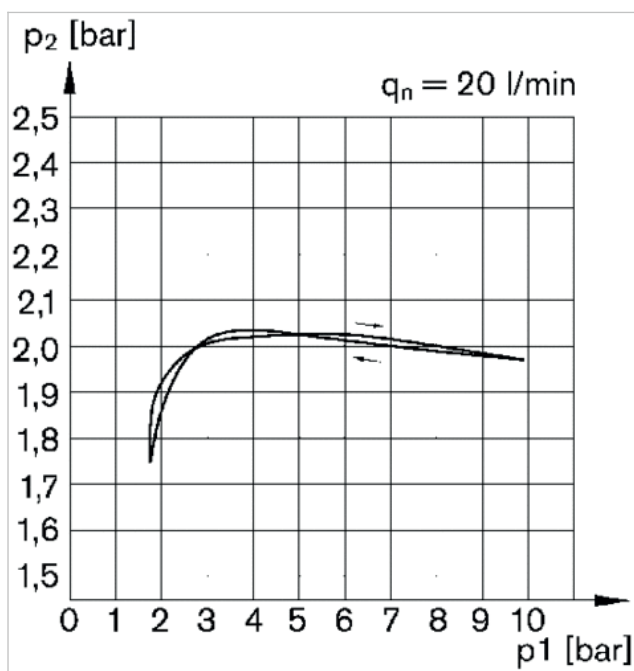
1) Mounting option for padlocks; max. shackle Ø 8

Dimensions in mm

A1	A2	A3	B	C	D	E1	F	G	L1	L2	M	V	W
G 1/4	G 1/4	G 1/4	52	59	65	57.9	66.8	M36x1,5	34	54	34	37	50
G 3/8	G 3/8	G 1/4	52	59	65	57.9	66.8	M36x1,5	34	54	34	37	50

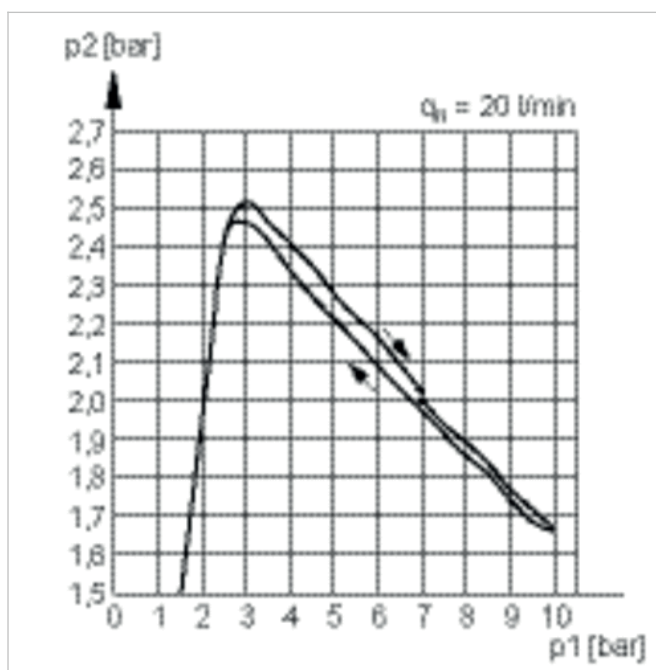
Diagrams

Pressure characteristics curve Standard version



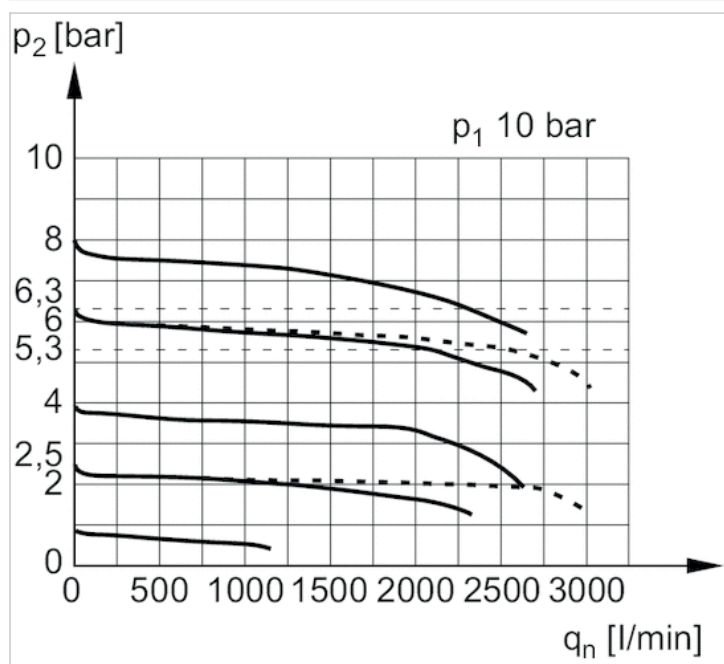
p_1 = Working pressure p_2 = Secondary pressure q_n = Nominal flow

Pressure characteristics curve Version with safe rear exhaust in case of drop (removal) of pilot



p_1 = Working pressure p_2 = Secondary pressure q_n = Nominal flow

Flow rate characteristic (p2: 05 - 8 bar)



p_1 = Working pressure
 p_2 = Secondary pressure
 q_n = Nominal flow

Pressure regulator, Series AS3-RGS

- G 3/8 G 1/2
- Qn = 1600-5200 l/min
- Standard pressure regulator
- Activation Mechanical
- lockable
- for padlocks
- suitable for ATEX



Parts	Pressure regulator
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
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	for padlocks
Pressure supply	single
Activation	Mechanical
Weight	See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412007101			G 3/8	1600 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412007103			G 3/8	4600 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412007105			G 3/8	5000 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412007107			G 3/8	4300 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412007109			G 3/8	4300 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412007111			G 3/8	3500 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412007100		—	G 3/8	1600 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412007102		—	G 3/8	4600 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412007104		—	G 3/8	5000 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412007106		—	G 3/8	4300 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412007108		—	G 3/8	4300 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412007110		—	G 3/8	3500 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412007113			G 1/2	1600 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412007115			G 1/2	4600 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412007117			G 1/2	5000 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412007119			G 1/2	5200 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412007121			G 1/2	5200 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412007123			G 1/2	4000 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412007112		—	G 1/2	1600 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412007114		—	G 1/2	4600 l/min	0,1 ... 16 bar	0,1 ... 2 bar

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412007116		—	G 1/2	5000 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412007118		—	G 1/2	5200 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412007120		—	G 1/2	5200 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412007122		—	G 1/2	4000 l/min	0,5 ... 16 bar	0,5 ... 16 bar

Part No.	Pressure gauge	Weight	
R412007101	with pressure gauge	0,6 kg	1)
R412007103	with pressure gauge	0,6 kg	1)
R412007105	with pressure gauge	0,6 kg	1)
R412007107	with pressure gauge	0,6 kg	1)
R412007109	with pressure gauge	0,6 kg	1)
R412007111	with pressure gauge	0,6 kg	1)
R412007100	-	0,528 kg	2)
R412007102	-	0,528 kg	2)
R412007104	-	0,528 kg	2)
R412007106	-	0,528 kg	2)
R412007108	-	0,528 kg	2)
R412007110	-	0,528 kg	2)
R412007113	with pressure gauge	0,6 kg	1)
R412007115	with pressure gauge	0,6 kg	1)
R412007117	with pressure gauge	0,6 kg	1)
R412007119	with pressure gauge	0,6 kg	1)
R412007121	with pressure gauge	0,6 kg	1)
R412007123	with pressure gauge	0,6 kg	1)
R412007112	-	0,528 kg	2)
R412007114	-	0,528 kg	2)
R412007116	-	0,528 kg	2)
R412007118	-	0,528 kg	2)
R412007120	-	0,528 kg	2)
R412007122	-	0,528 kg	2)

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

- 1) Pressure gauge enclosed separately, Suitable for use in Ex zones 1, 2, 21, 22
- 2) Order pressure gauge separately, Suitable for use in Ex zones 1, 2, 21, 22

Technical information

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

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).

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

A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Relieving exhaust (≤ 0.3 bar over set pressure)

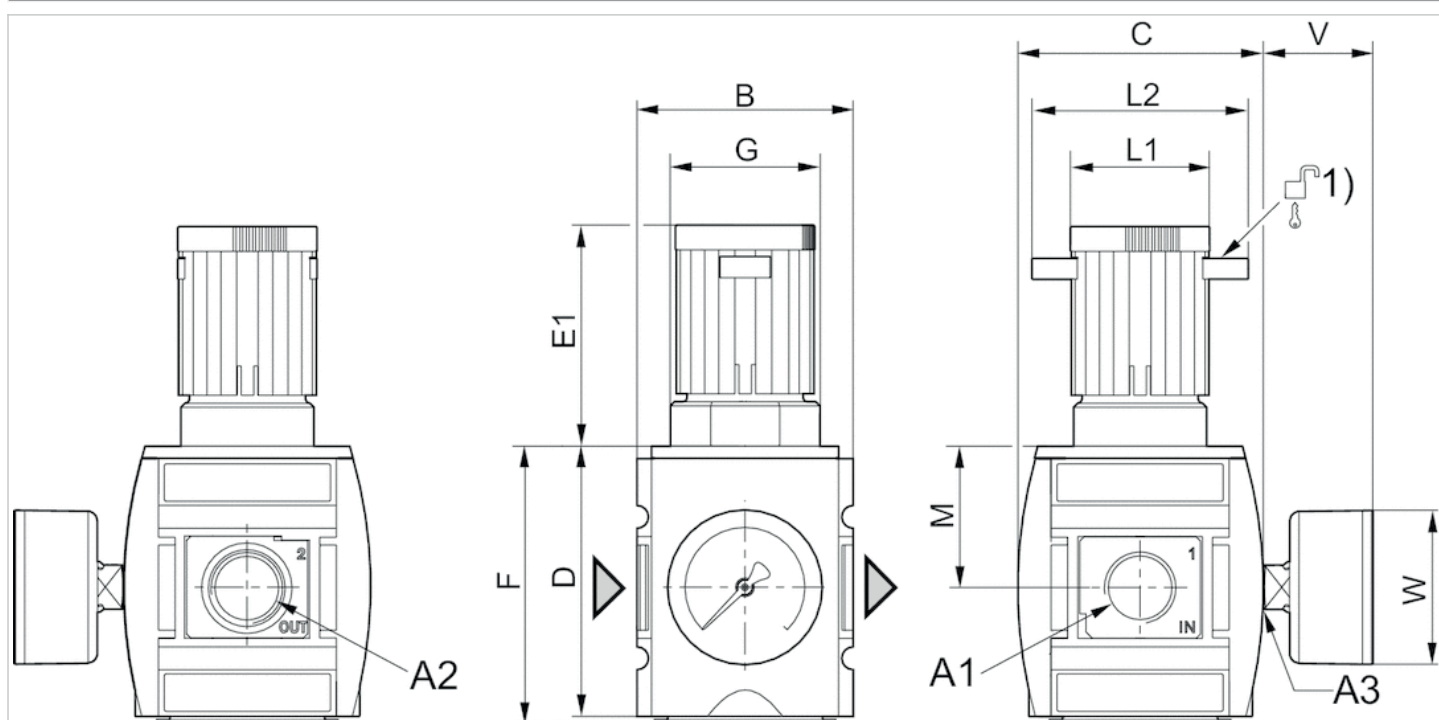
With rear exhaust (> 3 bar)

Technical information

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

Dimensions

Dimensions



A1 = input A2 = output

A3 = pressure gauge connection

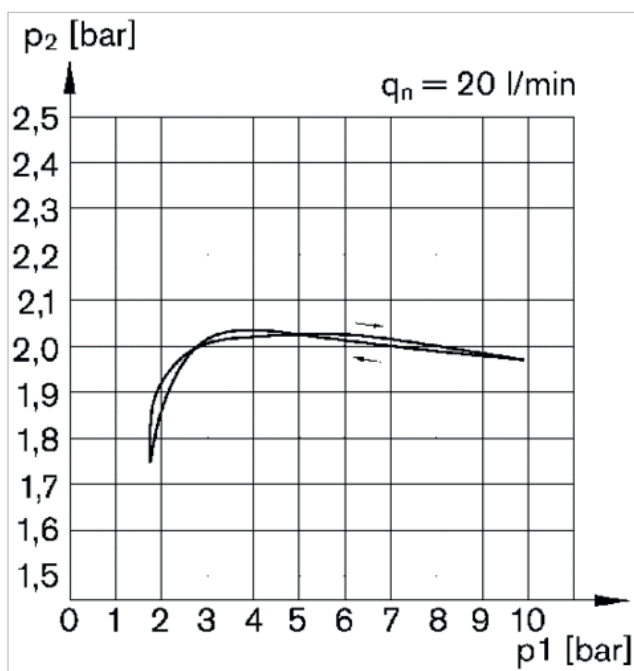
1) Mounting option for padlocks; max. shackle Ø 8

Dimensions in mm

A1	A2	A3	B	C	D	E1	F	G	L1	L2	M	V	W
G 3/8	G 3/8	G 1/4	63	74	80	63.5	82	M42x1,5	41	60	42.5	33	50
G 1/2	G 1/2	G 1/4	63	74	80	63.5	82	M42x1,5	41	60	42.5	33	50

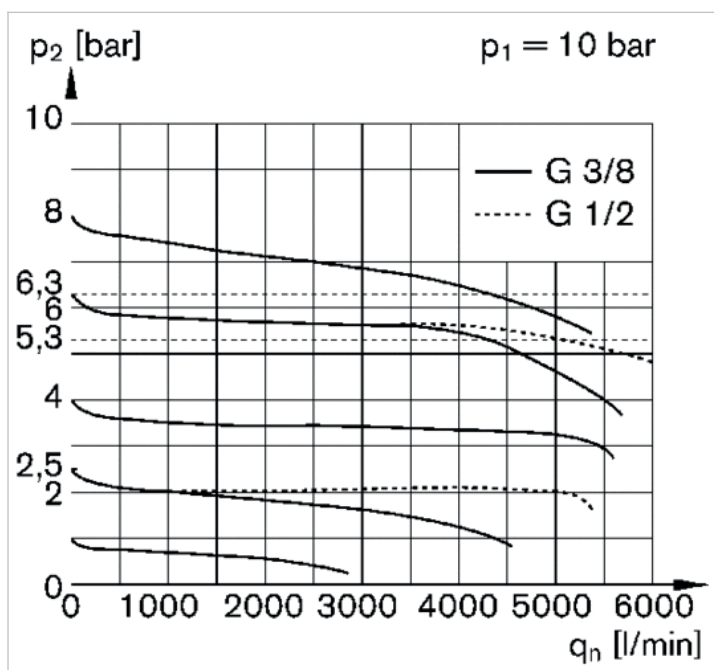
Diagrams

Pressure characteristics curve Standard version



p_1 = Working pressure p_2 = Secondary pressure q_n = Nominal flow

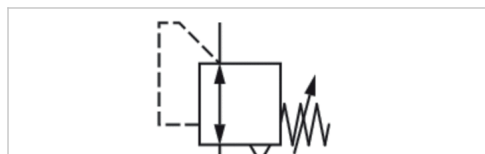
Flow rate characteristic (p_2 : 0.5 - 8 bar)



p_1 = Working pressure p_2 = Secondary pressure q_n = Nominal flow

Pressure regulator, Series AS5-RGS

- G 3/4
- Qn = 14500 l/min
- Standard pressure regulator
- Activation Mechanical
- lockable
- for padlocks
- suitable for ATEX



Parts	Pressure regulator
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	See table
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
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
Lock type	for padlocks
Pressure supply	single
Activation	Mechanical
Internal air consumption q max.	1,5 l/min
Weight	See table

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412009101			G 3/4	14500 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412009103			G 3/4	14500 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412009105			G 3/4	14500 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412009107			G 3/4	14500 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412009109			G 3/4	14500 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412009111			G 3/4	14500 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412009100		—	G 3/4	14500 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412009102		—	G 3/4	14500 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412009104		—	G 3/4	14500 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412009106		—	G 3/4	14500 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412009108		—	G 3/4	14500 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412009110		—	G 3/4	14500 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412009113			G 1	14500 l/min	0,1 ... 16 bar	0,1 ... 1 bar
R412009115			G 1	14500 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412009117			G 1	14500 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412009119			G 1	14500 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412009121			G 1	14500 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412009123			G 1	14500 l/min	0,5 ... 16 bar	0,5 ... 16 bar
R412009112		—	G 1	14500 l/min	0,1 ... 16 bar	0,1 ... 1 bar

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412009114		—	G 1	14500 l/min	0,1 ... 16 bar	0,1 ... 2 bar
R412009116		—	G 1	14500 l/min	0,2 ... 16 bar	0,2 ... 4 bar
R412009118		—	G 1	14500 l/min	0,5 ... 16 bar	0,5 ... 8 bar
R412009120		—	G 1	14500 l/min	0,5 ... 16 bar	0,5 ... 10 bar
R412009122		—	G 1	14500 l/min	0,5 ... 16 bar	0,5 ... 16 bar

Part No.	Weight	
R412009101	0,997 kg	1)
R412009103	0,997 kg	1)
R412009105	0,997 kg	1)
R412009107	0,997 kg	1)
R412009109	0,997 kg	1)
R412009111	0,997 kg	1)
R412009100	0,905 kg	2)
R412009102	0,905 kg	2)
R412009104	0,905 kg	2)
R412009106	0,905 kg	2)
R412009108	0,905 kg	2)
R412009110	0,905 kg	2)
R412009113	0,997 kg	1)
R412009115	0,997 kg	1)
R412009117	0,997 kg	1)
R412009119	0,997 kg	1)
R412009121	0,997 kg	1)
R412009123	0,997 kg	1)
R412009112	0,905 kg	2)
R412009114	0,905 kg	2)
R412009116	0,905 kg	2)
R412009118	0,905 kg	2)
R412009120	0,905 kg	2)
R412009122	0,905 kg	2)

Technical information

2) Order pressure gauge separately. Suitable for use in Ex zones 1, 2, 21, 22

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

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).

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

A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Relieving exhaust (≤ 0.3 bar over set pressure)

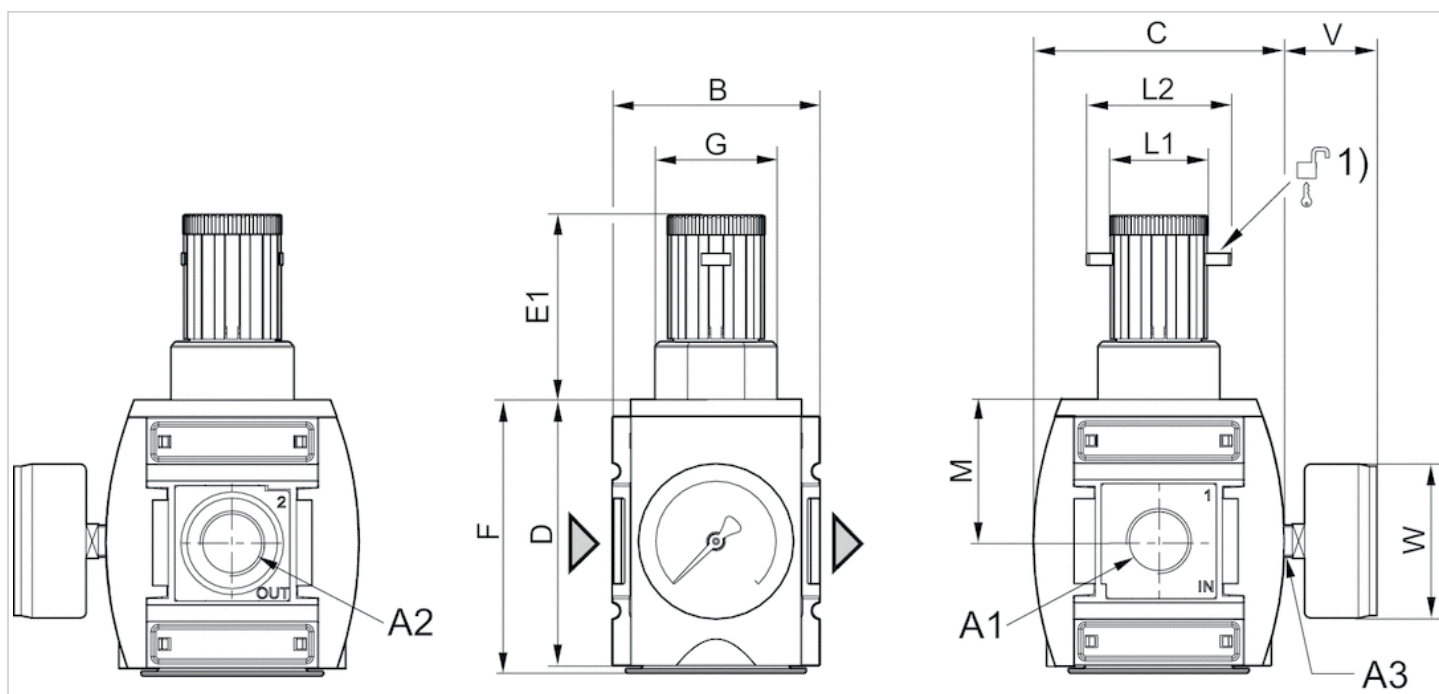
With rear exhaust (> 3 bar)

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 A3 = pressure gauge connection

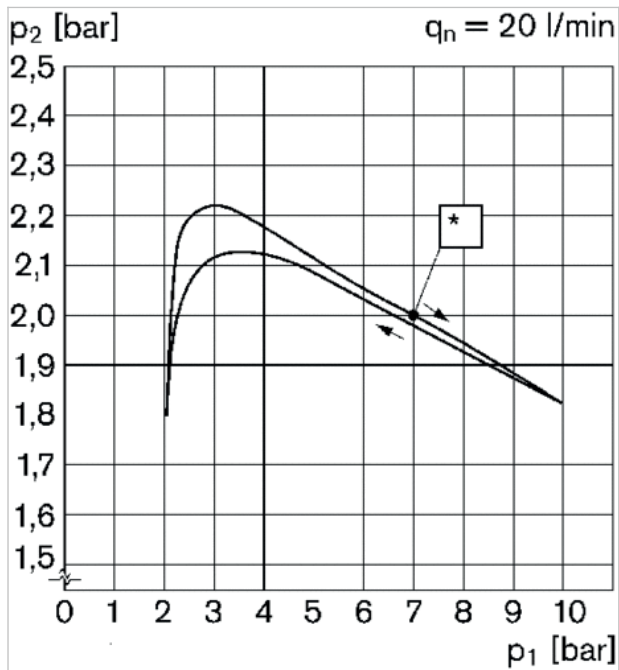
1) Mounting option for padlocks; max. shackle Ø 8

Dimensions in mm

A1	A2	A3	B	C	D	E1	F	G	L1	L2	M	V	W
G 3/4	G 3/4	G 1/4	85	103	109	75	112	M50x1,5	41	60	58	38	63
G 3/4	G 3/4	G 1/4	85	103	109	75	112	M50x1,5	41	60	58	38	63
G 3/4	G 3/4	G 1/4	85	103	109	75	112	M50x1,5	41	60	58	38	63
G 1	G 1	G 1/4	85	103	109	75	112	M50x1,5	41	60	58	38	63

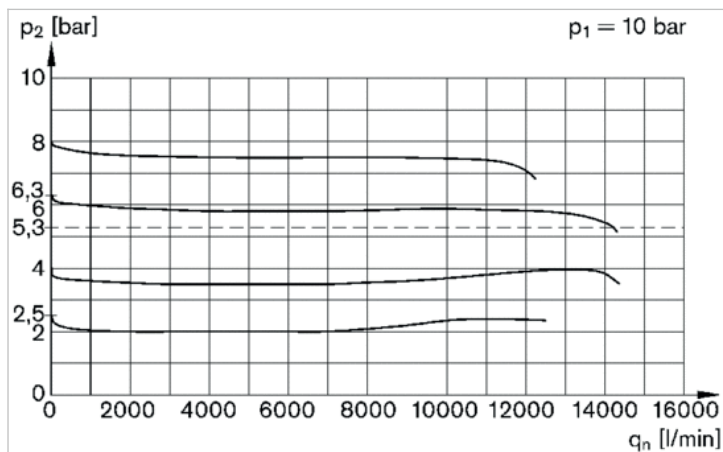
Diagrams

Pressure characteristics curve



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 * starting point

Flow rate characteristic (setting range p_2 : 0.5 - 8 bar)



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply left
- Qn = 1000 l/min
- Standard pressure regulator
- Activation Manual



Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
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		
R412014627			G 1/4	1000 l/min	0,2 ... 12 bar	0,2 ... 4 bar
R412014628			G 1/4	1000 l/min	0,5 ... 12 bar	0,5 ... 8 bar
R412014629			G 1/4	1000 l/min	0,5 ... 12 bar	0,5 ... 10 bar
R412014633		—	G 1/4	1000 l/min	0,2 ... 12 bar	0,2 ... 4 bar
R412014634		—	G 1/4	1000 l/min	0,5 ... 12 bar	0,5 ... 8 bar
R412014635		—	G 1/4	1000 l/min	0,5 ... 12 bar	0,5 ... 10 bar

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight	Fig.
R412014627	40 mm	With integrated pressure gauge	0,209 kg	Fig. 1
R412014628	40 mm	With integrated pressure gauge	0,209 kg	Fig. 1
R412014629	40 mm	With integrated pressure gauge	0,209 kg	Fig. 1
R412014633	40 mm	-	0,206 kg	Fig. 2
R412014634	40 mm	-	0,206 kg	Fig. 2
R412014635	40 mm	-	0,206 kg	Fig. 2

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

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

1) Order pressure gauge separately

Technical information

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

Relieving exhaust (≤ 0.3 bar over set pressure)

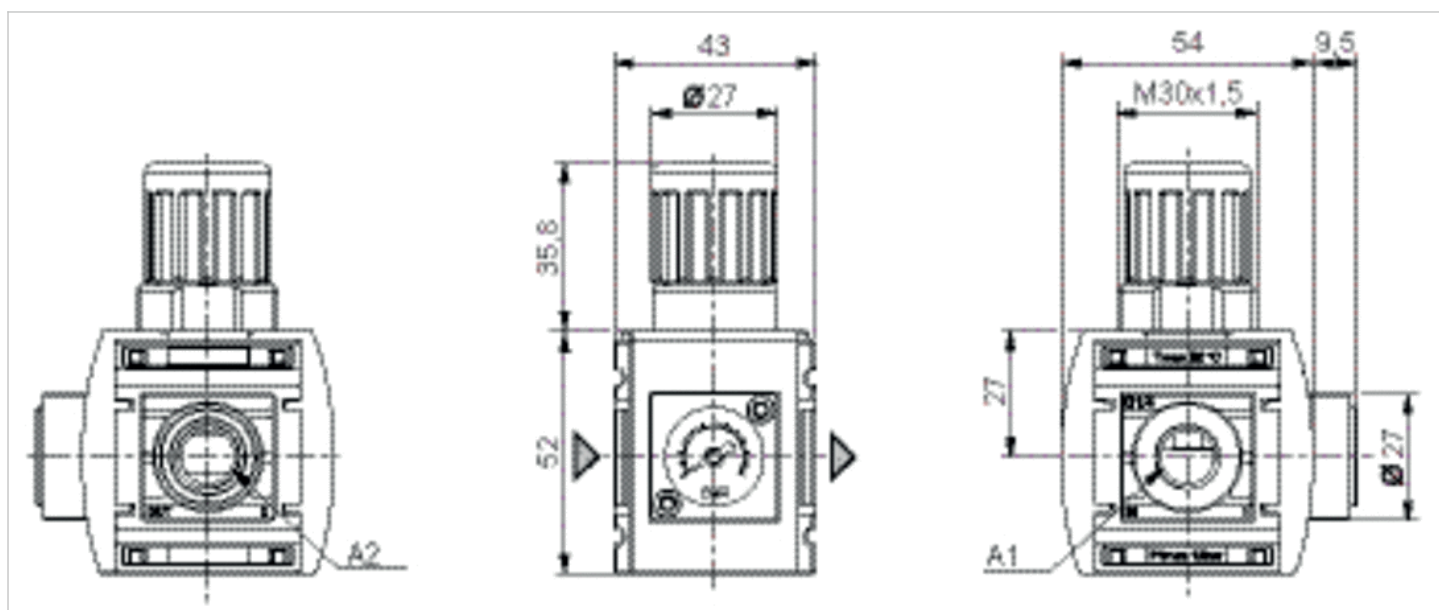
With rear exhaust (> 3 bar)

Technical information

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

Dimensions

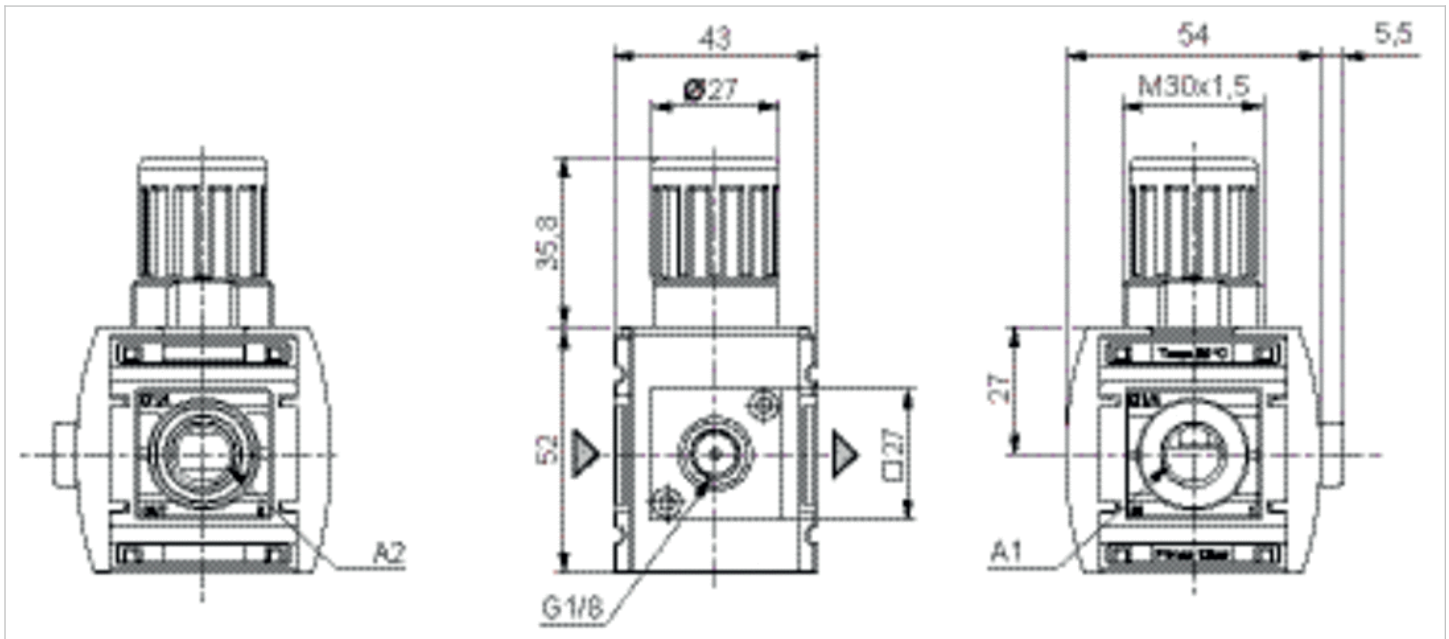
Dimensions Fig. 1



A1 = input

A2 = output

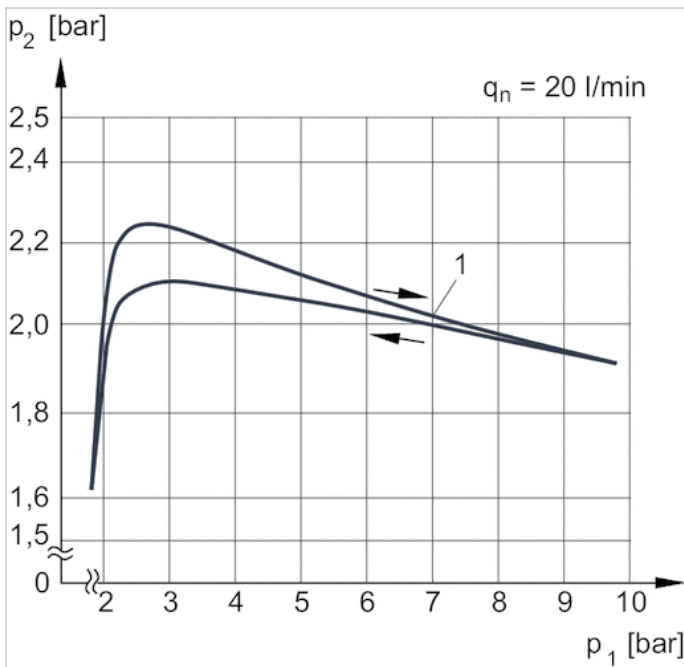
Dimensions Fig. 2



A1 = input
A2 = output

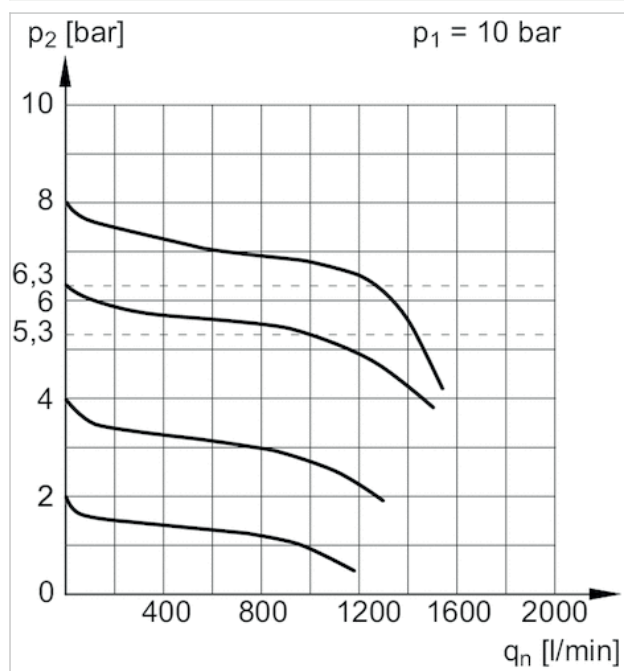
Diagrams

Pressure characteristics curve



p_1 = Working pressure
 p_2 = Secondary pressure
 q_n = Nominal flow
1) = Starting point

Flow rate characteristic



p_1 = Working pressure
 p_2 = Secondary pressure
 q_n = Nominal flow