

# Series NL4



**Series NL4**

The AVENTICS Series NL maintenance units are suitable for all areas: as individual components or as assembled maintenance units, for centralized or decentralized compressed air preparation, in compact or powerful versions, for use in high or low temperatures. This line offers a complete, customizable compressed air preparation technology. It includes an option to combine every component in the Series to achieve the desired function, making it possible to adjust the components precisely to the application requirements.

- Easy-to-assemble
- Manual, semi-automatic or fully-automatic condensate drains available
- Transparent reservoirs available
- Bayonet catches ensure easy maintenance



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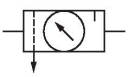
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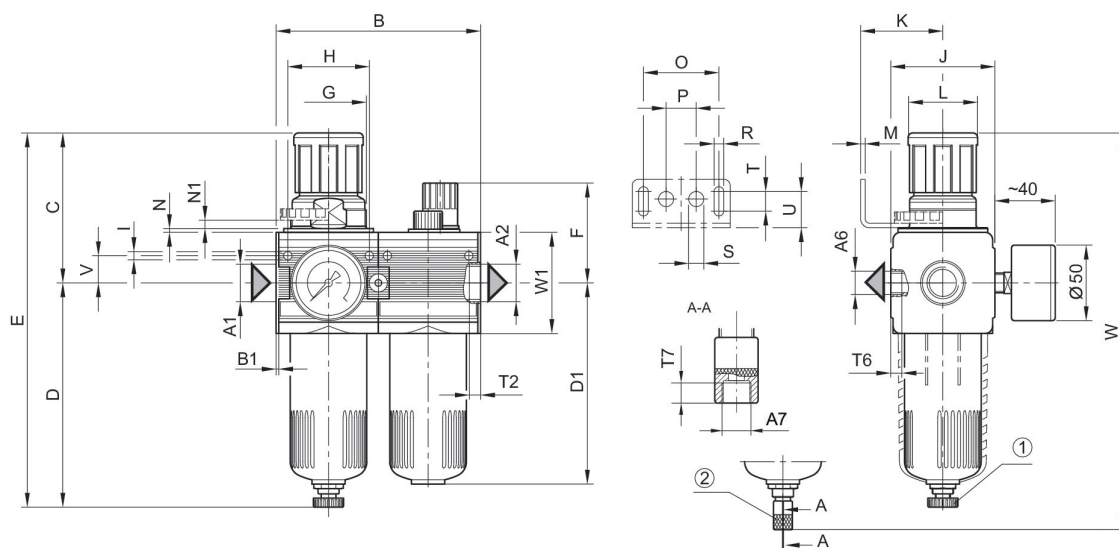
Air preparation unit, 2-part, Series NL4-ACD



	Port	Condensate drain	Reservoir	Min. regulation range [bar]	Max. regulation range [bar]	Protective guard	Part No.
	G 1/2	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10		0821300500
	G 1/2	fully automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10		0821300503
	G 1/2	semi-automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	0.5	10	Steel, chrome-plated	0821300501
	G 1/2	fully automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	0.5	10	Steel, chrome-plated	0821300504
	G 1/2	semi-automatic, open without pressure	reservoir, metal, with inspection glass	0.5	10		0821300502
	G 1/2	fully automatic, open without pressure	reservoir, metal, with inspection glass	0.5	10		0821300505
	G 3/4	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10		0821300530
	G 3/4	fully automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10		0821300533
	G 3/4	semi-automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	0.5	10	Steel, chrome-plated	0821300531

	Port	Condensate drain	Reservoir	Min. regulation range [bar]	Max. regulation range [bar]	Protective guard	Part No.
	G 3/4	fully automatic, open without pressure	reservoir, metal, with inspection glass	0.5	10		0821300535

Dimensions



A1 = input A2 = output  
 A7 = condensate drain  
 1) Semi-automatic condensate drain 2) fully automatic condensate drain

Dimensions in mm

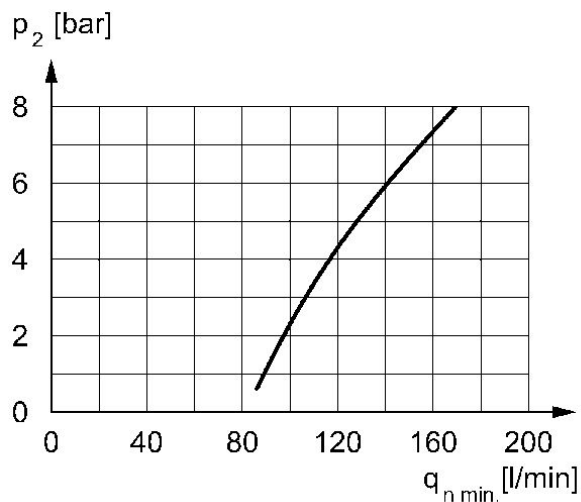
Part No.	A1	A2	A6	A7	B	B1	C	D	D1
0821300500	G 1/2	G 1/2	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300503	G 1/2	G 1/2	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300501	G 1/2	G 1/2	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300504	G 1/2	G 1/2	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300502	G 1/2	G 1/2	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300505	G 1/2	G 1/2	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300530	G 3/4	G 3/4	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300533	G 3/4	G 3/4	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300531	G 3/4	G 3/4	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300534	G 3/4	G 3/4	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300532	G 3/4	G 3/4	G 1/4	G 1/8	135.6	1.8	100.5	147	132
0821300535	G 3/4	G 3/4	G 1/4	G 1/8	135.6	1.8	100.5	147	132

Part No.	E	F	G	H	I	J	K	L	M
0821300500	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300503	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300501	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300504	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300502	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300505	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300530	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300533	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300531	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300534	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300532	247.5	65	M50x1,5	54	5.5	69	54.5	46	3
0821300535	247.5	65	M50x1,5	54	5.5	69	54.5	46	3

Part No.	N	N1	O	P	R	S	T	T2	T6
0821300500	3	5.5	50	20	6.4	10	13	13	7
0821300503	3	5.5	50	20	6.4	10	13	13	7
0821300501	3	5.5	50	20	6.4	10	13	13	7
0821300504	3	5.5	50	20	6.4	10	13	13	7
0821300502	3	5.5	50	20	6.4	10	13	13	7
0821300505	3	5.5	50	20	6.4	10	13	13	7
0821300530	3	5.5	50	20	6.4	10	13	13	7
0821300533	3	5.5	50	20	6.4	10	13	13	7
0821300531	3	5.5	50	20	6.4	10	13	13	7
0821300534	3	5.5	50	20	6.4	10	13	13	7
0821300532	3	5.5	50	20	6.4	10	13	13	7
0821300535	3	5.5	50	20	6.4	10	13	13	7

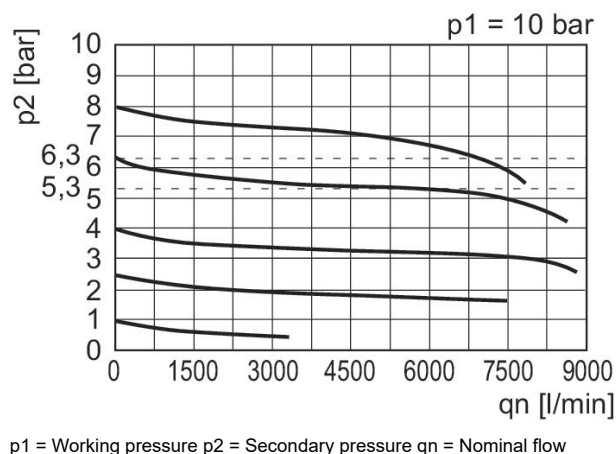
Part No.	T7	U	V	W	W1
0821300500	8.5	24	18	262.5	67
0821300503	8.5	24	18	262.5	67
0821300501	8.5	24	18	262.5	67
0821300504	8.5	24	18	262.5	67
0821300502	8.5	24	18	262.5	67
0821300505	8.5	24	18	262.5	67
0821300530	8.5	24	18	262.5	67
0821300533	8.5	24	18	262.5	67
0821300531	8.5	24	18	262.5	67
0821300534	8.5	24	18	262.5	67
0821300532	8.5	24	18	262.5	67
0821300535	8.5	24	18	262.5	67

minimum flow rate curve (flow rate necessary for the correct functioning of the lubricator)



p1 = operating pressure p2 = secondary pressure qn = nominal flow qnmin. = min. nominal flow

Flow rate characteristic, p2 = 0,05 - 7 bar



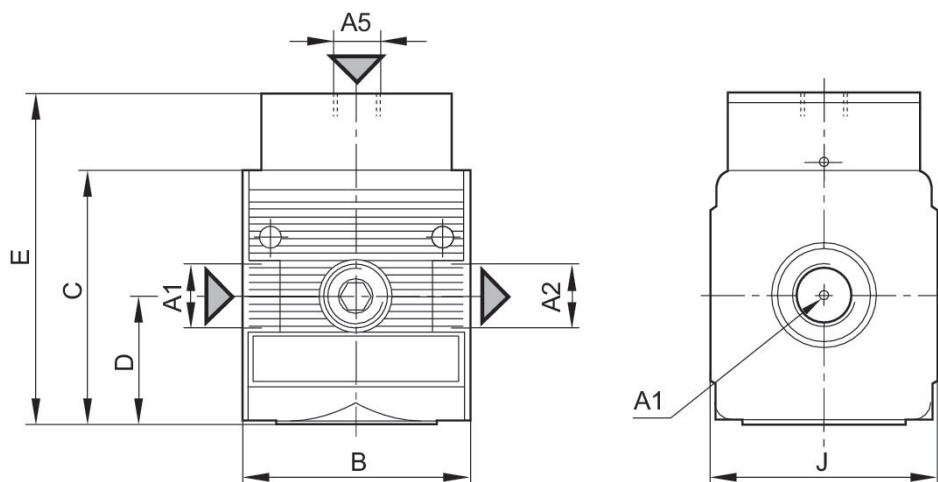
p1 = Working pressure p2 = Secondary pressure qn = Nominal flow

Pressure regulator, Series NL4-RGS



	Port	Nominal flow [l/min]	Working pressure min./max. [bar]	Min. regulation range <sup>2</sup> [bar]	Max. regulation range <sup>2</sup> [bar]	Part No.
	G 1/2	9500	0.5, 16	0.5	10	R412004952
	G 3/4	9500	0.5, 16	0.5	10	R412007667

Dimensions

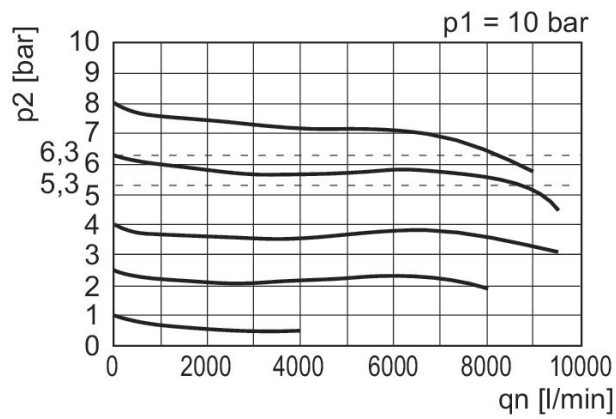


A1 = input A2 = output  
A5 = Control pressure connection

Dimensions in mm

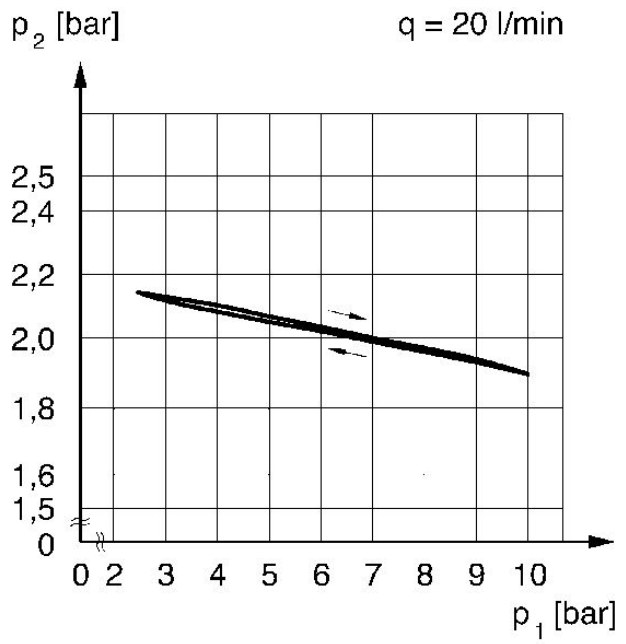
Part No.	A1	A2	A5	B	C	D	E	J
R412004952	G 1/2	G 1/2	G 1/4	69.5	70	36.5	93.5	67
R412007667	G 3/4	G 3/4	G 1/4	69.5	70	36.5	93.5	67

Flow rate characteristic (setting range p2: 0.5 - 10 bar)



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

Pressure characteristics curve

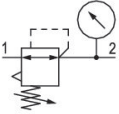
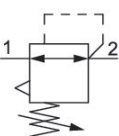
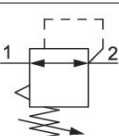


p1 = working pressure p2 = secondary pressure q = flow rate

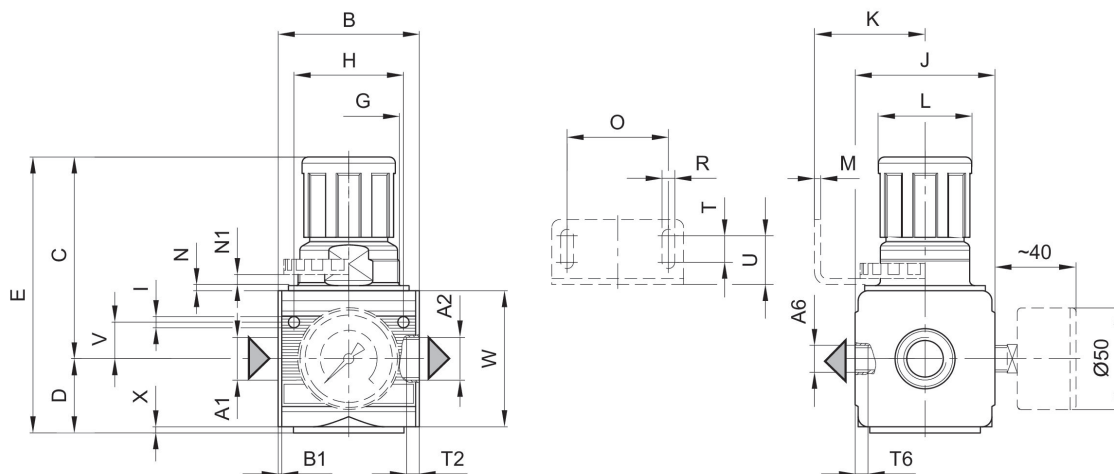
Pressure regulator, Series NL4-RGS



	Port	Nominal flow [l/min]	Working pressure min./max. [bar]	Min. regulation range <sup>2</sup> [bar]	Max. regulation range <sup>2</sup> [bar]	Pressure gauge	Part No.
	G 1/2	9500	0.5, 10	0.1	3	with pressure gauge	0821302505
	G 1/2	9500	0.5, 16	0.2	6	with pressure gauge	0821302580
	G 1/2	9500	0.5, 16	0.5	10	with pressure gauge	0821302500
	G 1/2	9500	0.5, 10	0.1	3		0821302504
	G 1/2	9500	0.5, 10	0.2	6		0821302506
	G 1/2	9500	0.5, 16	0.5	10		0821302501
	G 3/4	9500	0.5, 16	0.1	3	with pressure gauge	0821302544
	G 3/4	9500	0.5, 16	0.2	6	with pressure gauge	0821302545

	Port	Nominal flow [l/min]	Working pressure min./max. [bar]	Min. regulation range <sup>2</sup> [bar]	Max. regulation range <sup>2</sup> [bar]	Pressure gauge	Part No.
	G 3/4	9500	0.5, 16	0.5	10	with pressure gauge	0821302540
	G 3/4	9500	0.5, 16	0.1	3		0821302546
	G 3/4	9500	0.5, 16	0.2	6		0821302547
	G 3/4	9500	0.5, 16	0.5	10		0821302541

Dimensions



A1 = input  
A2 = output  
A6 = output

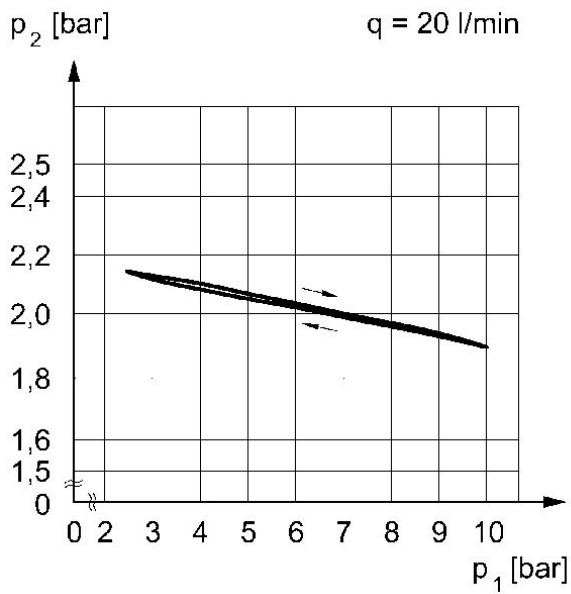
Dimensions in mm

Part No.	A1	A2	A6	B	B1	C	D	E	G
0821302505	G 1/2	G 1/2	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302580	G 1/2	G 1/2	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302500	G 1/2	G 1/2	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302544	G 3/4	G 3/4	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302545	G 3/4	G 3/4	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302540	G 3/4	G 3/4	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302504	G 1/2	G 1/2	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302506	G 1/2	G 1/2	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302501	G 1/2	G 1/2	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302546	G 3/4	G 3/4	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302547	G 3/4	G 3/4	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5
0821302541	G 3/4	G 3/4	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5

Part No.	H	I	J	K	L	M	N	N1	O
0821302505	54	5.5	69	54.5	46	3	3	5.5	50
0821302580	54	5.5	69	54.5	46	3	3	5.5	50
0821302500	54	5.5	69	54.5	46	3	3	5.5	50
0821302544	54	5.5	69	54.5	46	3	3	5.5	50
0821302545	54	5.5	69	54.5	46	3	3	5.5	50
0821302540	54	5.5	69	54.5	46	3	3	5.5	50
0821302504	54	5.5	69	54.5	46	3	3	5.5	50
0821302506	54	5.5	69	54.5	46	3	3	5.5	50
0821302501	54	5.5	69	54.5	46	3	3	5.5	50
0821302546	54	5.5	69	54.5	46	3	3	5.5	50
0821302547	54	5.5	69	54.5	46	3	3	5.5	50
0821302541	54	5.5	69	54.5	46	3	3	5.5	50

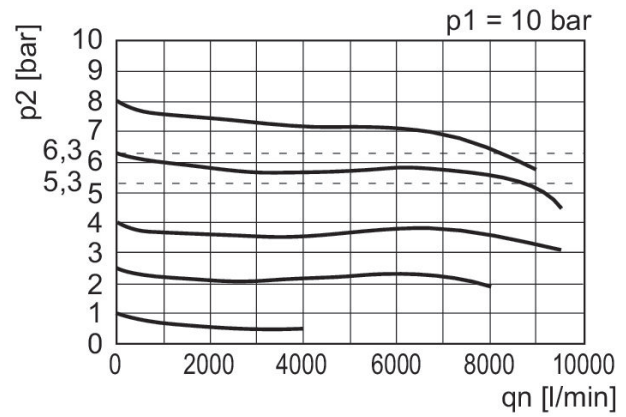
Part No.	R	S	T	T2	T6	U	V	W	X
0821302505	6.4	10	13	13	10	24	18	67	2
0821302580	6.4	10	13	13	10	24	18	67	2
0821302500	6.4	10	13	13	10	24	18	67	2
0821302544	6.4	10	13	13	10	24	18	67	2
0821302545	6.4	10	13	13	10	24	18	67	2
0821302540	6.4	10	13	13	10	24	18	67	2
0821302504	6.4	10	13	13	10	24	18	67	2
0821302506	6.4	10	13	13	10	24	18	67	2
0821302501	6.4	10	13	13	10	24	18	67	2
0821302546	6.4	10	13	13	10	24	18	67	2
0821302547	6.4	10	13	13	10	24	18	67	2
0821302541	6.4	10	13	13	10	24	18	67	2

Pressure characteristics curve



$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q$  = flow rate

Flow rate characteristic (setting range  $p_2$ : 0.5 - 10 bar)



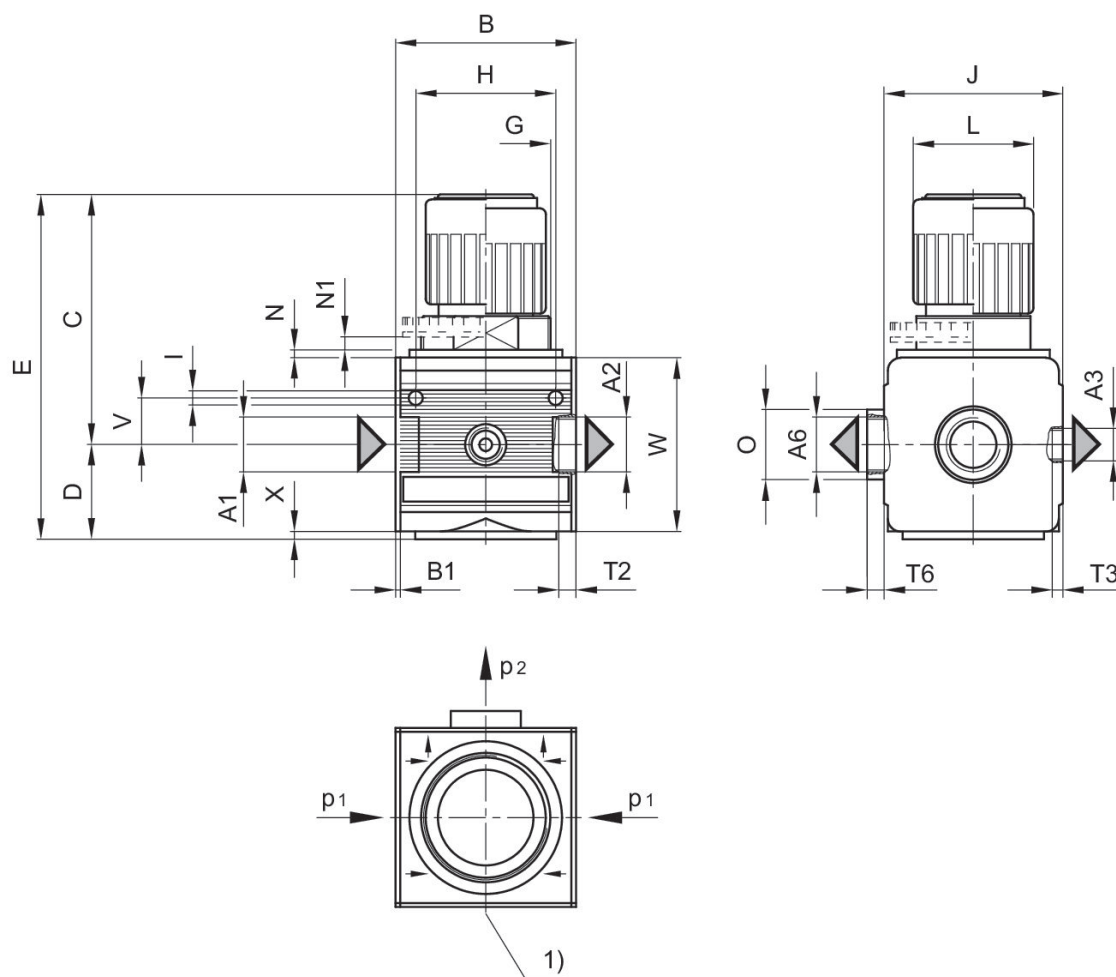
$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

Pressure regulator, Series NL4-RGS-...-DS



	Port	Nominal flow [l/min]	Working pressure min./max. [bar]	Min. regula- tion range <sup>2</sup> [bar]	Max. regula- tion range <sup>2</sup> [bar]	Part No.
	G 1/2	9500	0.5, 16	0.1	3	0821302509
	G 1/2	9500	0.5, 16	0.2	6	0821302508
	G 1/2	9500	0.5, 16	0.5	10	0821302507

Dimensions



A1 = input A2 = output  
A3 = output A6 = output  
1) pressure gauge connection p1 = working pressure p2 = secondary pressure

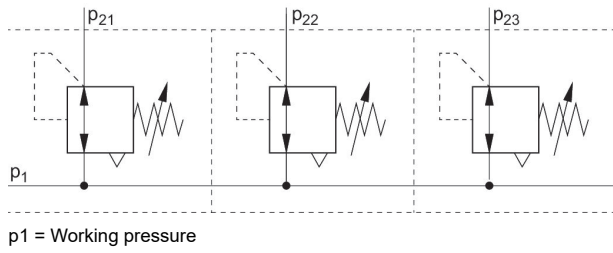
Dimensions in mm

Part No.	A1	A2	A3	A6	B	B1	C	D	E
0821302509	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5
0821302508	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5
0821302507	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5

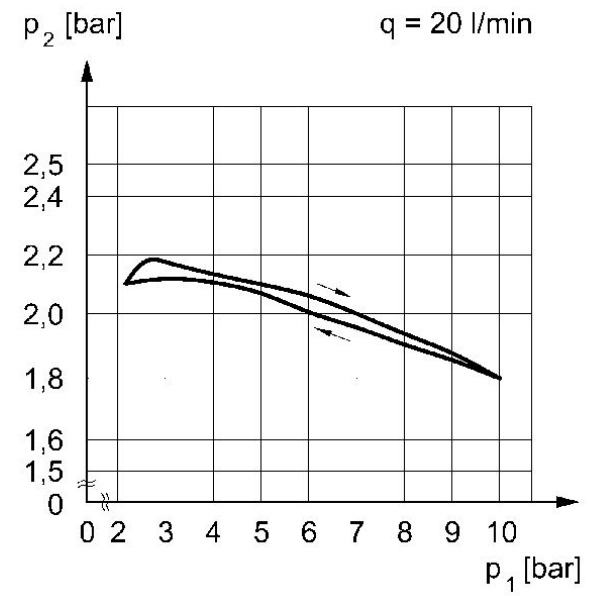
Part No.	G	H	I	J	L	N	N1	O	T2
0821302509	M50x1,5	54	5.5	69	46	3	5.5	27	13
0821302508	M50x1,5	54	5.5	69	46	3	5.5	27	13
0821302507	M50x1,5	54	5.5	69	46	3	5.5	27	13

Part No.	T3	T6	V	W	X
0821302509	7	6	18	67	2
0821302508	7	6	18	67	2
0821302507	7	6	18	67	2

Application example

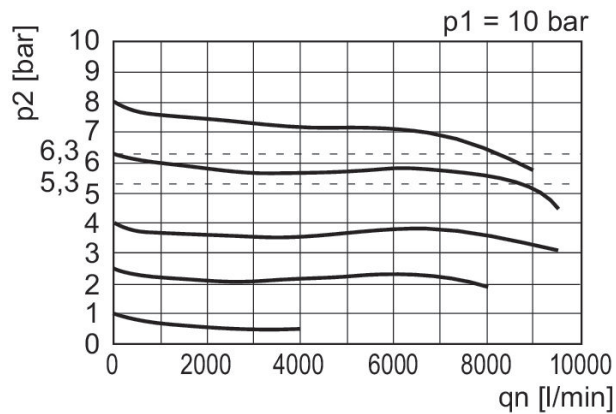


Pressure characteristics curve



$p_1$  = working pressure  $p_2$  = secondary pressure  $q$  = flow rate

Flow rate characteristic (setting range  $p_2$ : 0.5 - 10 bar)



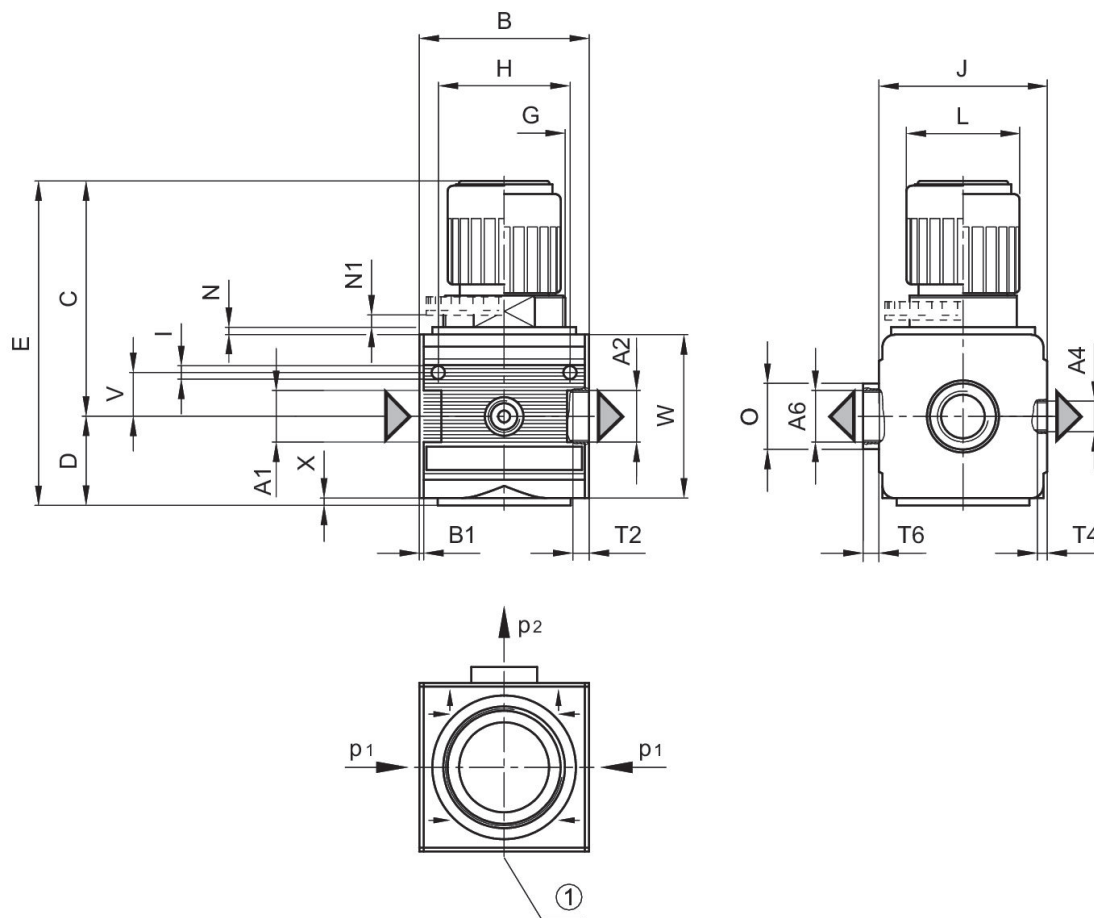
$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

Precision pressure regulator, Series NL4-RGP-...-DS



Port	Nominal flow [l/min]	Working pressure min./max. [bar]	Min. regulation range <sup>2</sup> [bar]	Max. regulation range <sup>2</sup> [bar]	Part No.
G 1/2	5600	0.5, 16	0.1	3	0821302524
G 1/2	5600	0.5, 16	0.2	6	0821302525
G 1/2	5600	0.5, 16	0.5	10	0821302526

Dimensions



A1 = input  
 A2 = output  
 A4 = output  
 A6 = output  
 1) Pressure gauge connection  
 p1 = Working pressure  
 p2 = Secondary pressure

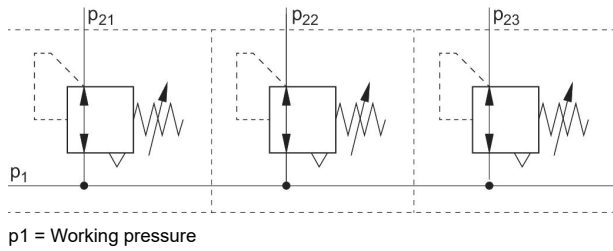
Dimensions in mm

Part No.	A1	A2	A4	A6	B	B1	C	D	E
0821302524	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5
0821302525	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5
0821302526	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5

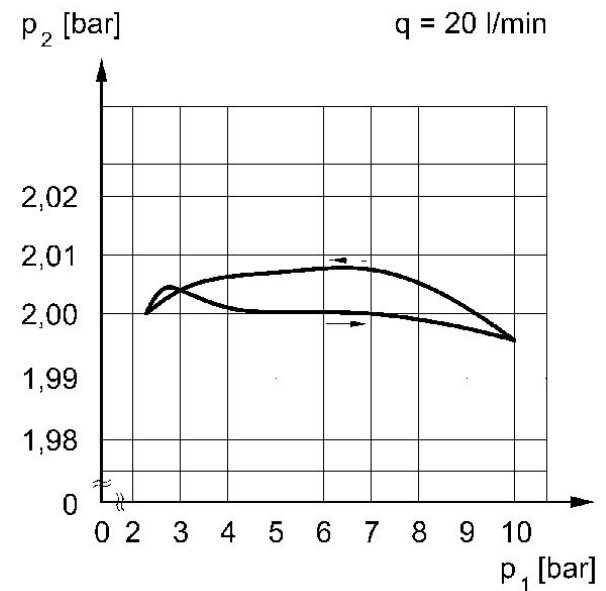
Part No.	G	H	I	J	L	N	N1	O	T2
0821302524	M50x1,5	54	5.5	69	46	3	5.5	27	13
0821302525	M50x1,5	54	5.5	69	46	3	5.5	27	13
0821302526	M50x1,5	54	5.5	69	46	3	5.5	27	13

Part No.	T4	T6	V	W	X
0821302524	7	6	18	67	2
0821302525	7	6	18	67	2
0821302526	7	6	18	67	2

**Application example**

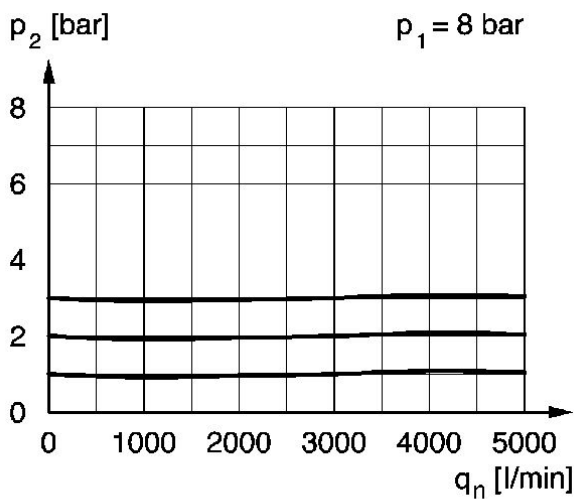


**Pressure characteristics curve**



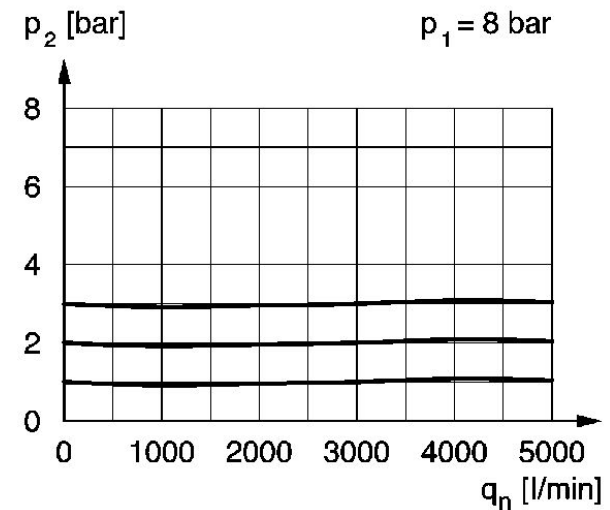
$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q$  = flow rate

**Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$**



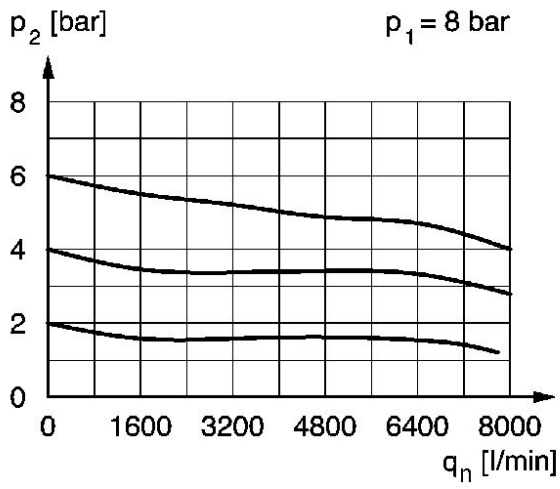
$p_2 = 0,1 - 3 \text{ bar}$   
 $p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

**Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$**



$p_2 = 0,2 - 6 \text{ bar}$   
 $p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$



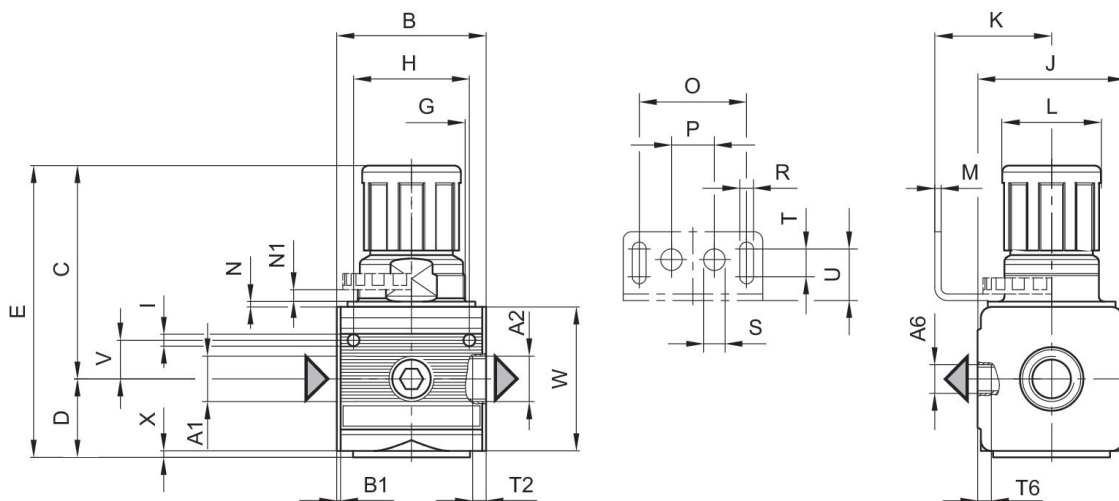
$p_2 = 0,5 - 10 \text{ bar}$   
 $p_1 = \text{Working pressure}$   
 $p_2 = \text{Secondary pressure}$   
 $q_n = \text{Nominal flow}$

Precision pressure regulator, Series NL4-RGP



	Port	Nominal flow [l/min]	Working pressure min./max. [bar]	Min. regulation range <sup>2</sup> [bar]	Max. regulation range <sup>2</sup> [bar]	Part No.
	G 1/2	6000	0.5, 16	0.1	3	0821302511
	G 1/2	6000	0.5, 16	0.2	6	0821302512
	G 1/2	6000	0.5, 16	0.5	10	0821302513

Dimensions



A1 = input A2 = output  
A6 = output

Dimensions in mm

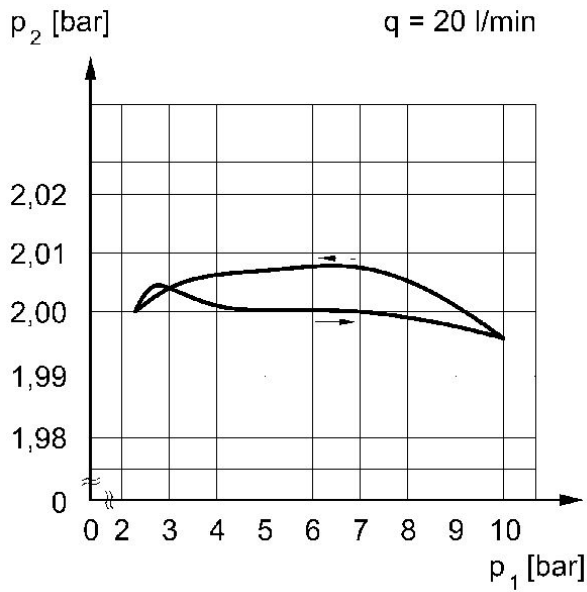
Part No.	A1	A2	A6	B	B1	C	D	E	G
0821302511	G 1/2	G 1/2	G 1/4	69.6	1.8	97	35.5	132.5	M50x1,5
0821302512	G 1/2	G 1/2	G 1/4	69.6	1.8	97	35.5	132.5	M50x1,5
0821302513	G 1/2	G 1/2	G 1/4	69.6	1.8	97	35.5	132.5	M50x1,5

Part No.	H	I	J	K	L	M	N	N1	O
0821302511	54	5.5	69	54.5	46	3	3	5.5	50
0821302512	54	5.5	69	54.5	46	3	3	5.5	50
0821302513	54	5.5	69	54.5	46	3	3	5.5	50

Part No.	P	R	S	T	T2	T6	U	V	W
0821302511	20	6.4	10	13	13	7	24	18	67
0821302512	20	6.4	10	13	13	7	24	18	67
0821302513	20	6.4	10	13	13	7	24	18	67

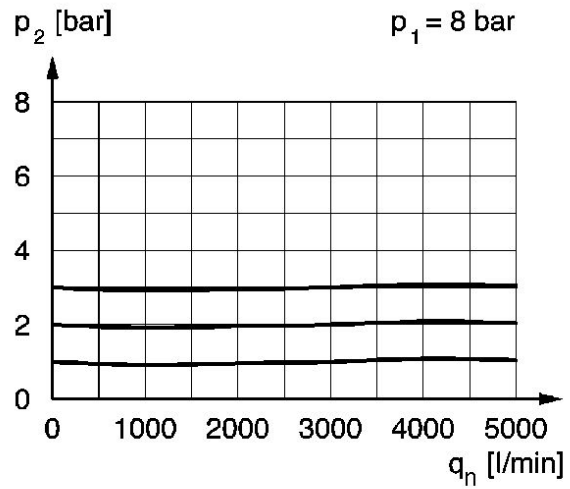
Part No.	X
0821302511	2
0821302512	2
0821302513	2

**Pressure characteristics curve**



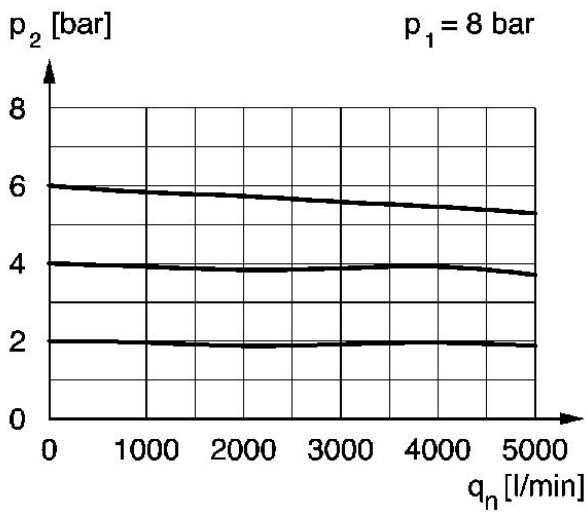
$p_1$  = working pressure  $p_2$  = secondary pressure  $q$  = flow rate

**Flow rate characteristic,  $p_2 = 0,05 - 7$  bar**



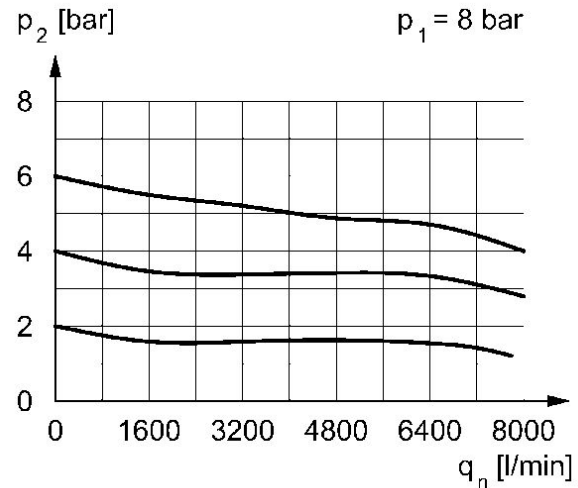
$p_1$  = Working pressure  $p_2$  = Secondary pressure  $q_n$  = Nominal flow  
 $p_2 = 0,1 - 3$  bar

**Flow rate characteristic,  $p_2 = 0,05 - 7$  bar**



$p_1$  = Working pressure  $p_2$  = Secondary pressure  $q_n$  = Nominal flow  
 $p_2 = 0,2 - 6$  bar

**Flow rate characteristic,  $p_2 = 0,05 - 7$  bar**

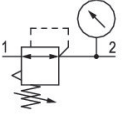


$p_1$  = Working pressure  $p_2$  = Secondary pressure  $q_n$  = Nominal flow  
 $p_2 = 0,5 - 10$  bar

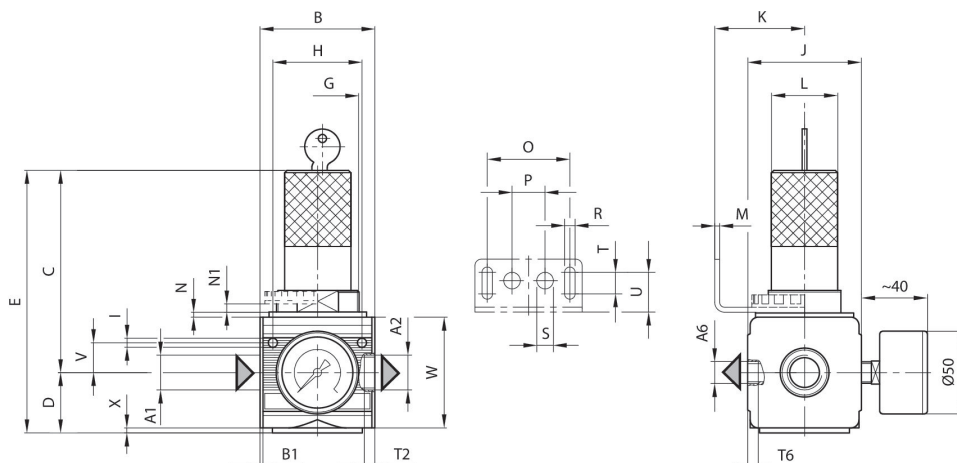
Pressure regulator, Series NL4-RGS



	Port	Nominal flow [l/min]	Working pressure min./max. [bar]	Min. regulation range <sup>2</sup> [bar]	Max. regulation range <sup>2</sup> [bar]	Pressure gauge	Part No.
	G 1/2	9500	0.5, 16	0.1	3	with pressure gauge	0821302581
	G 1/2	9500	0.5, 16	0.2	6	with pressure gauge	0821302582
	G 1/2	9500	0.5, 16	0.5	10	with pressure gauge	0821302502
	G 1/2	9500	0.5, 16	0.1	3		0821302583
	G 1/2	9500	0.5, 16	0.2	6		0821302584
	G 1/2	9500	0.5, 16	0.5	10		0821302503
	G 3/4	9500	0.5, 16	0.1	3	with pressure gauge	0821302548
	G 3/4	9500	0.5, 16	0.2	6	with pressure gauge	0821302549

	Port	Nominal flow [l/min]	Working pressure min./max. [bar]	Min. regulation range <sup>2</sup> [bar]	Max. regulation range <sup>2</sup> [bar]	Pressure gauge	Part No.
	G 3/4	9500	0.5, 16	0.5	10	with pressure gauge	0821302542

Dimensions



A1 = input A2 = output  
A6 = output

Dimensions in mm

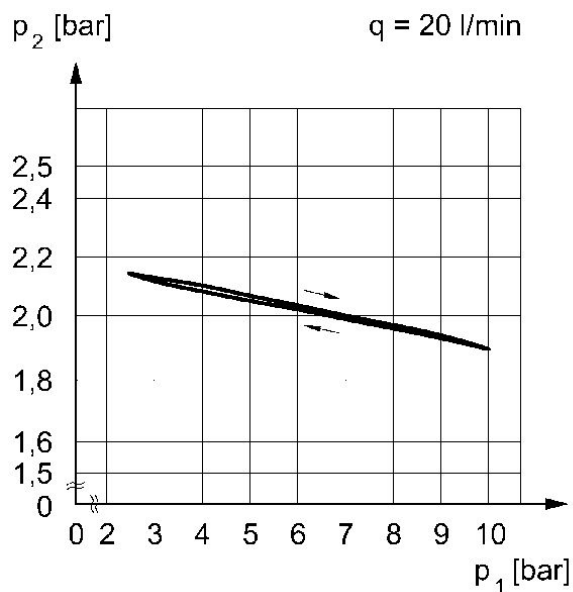
Part No.	A1	A2	A6	B	B1	C	D	E	G
0821302581	G 1/2	G 1/2	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302582	G 1/2	G 1/2	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302502	G 1/2	G 1/2	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302548	G 3/4	G 3/4	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302549	G 3/4	G 3/4	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302542	G 3/4	G 3/4	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302583	G 1/2	G 1/2	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302584	G 1/2	G 1/2	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302503	G 1/2	G 1/2	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302550	G 3/4	G 3/4	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302551	G 3/4	G 3/4	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5
0821302543	G 3/4	G 3/4	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5

Part No.	H	I	J	K	L	M	N	N1	O
0821302581	54	5.5	67	54.5	46	3	3	5.5	50
0821302582	54	5.5	67	54.5	46	3	3	5.5	50
0821302502	54	5.5	67	54.5	46	3	3	5.5	50
0821302548	54	5.5	67	54.5	46	3	3	5.5	50
0821302549	54	5.5	67	54.5	46	3	3	5.5	50
0821302542	54	5.5	67	54.5	46	3	3	5.5	50
0821302583	54	5.5	67	54.5	46	3	3	5.5	50
0821302584	54	5.5	67	54.5	46	3	3	5.5	50
0821302503	54	5.5	67	54.5	46	3	3	5.5	50
0821302550	54	5.5	67	54.5	46	3	3	5.5	50
0821302551	54	5.5	67	54.5	46	3	3	5.5	50
0821302543	54	5.5	67	54.5	46	3	3	5.5	50

Part No.	P	R	S	T	T2	T6	U	V	W
0821302581	20	6.4	10	13	13	7	24	18	67
0821302582	20	6.4	10	13	13	7	24	18	67
0821302502	20	6.4	10	13	13	7	24	18	67
0821302548	20	6.4	10	13	13	7	24	18	67
0821302549	20	6.4	10	13	13	7	24	18	67
0821302542	20	6.4	10	13	13	7	24	18	67
0821302583	20	6.4	10	13	13	7	24	18	67
0821302584	20	6.4	10	13	13	7	24	18	67
0821302503	20	6.4	10	13	13	7	24	18	67
0821302550	20	6.4	10	13	13	7	24	18	67
0821302551	20	6.4	10	13	13	7	24	18	67
0821302543	20	6.4	10	13	13	7	24	18	67

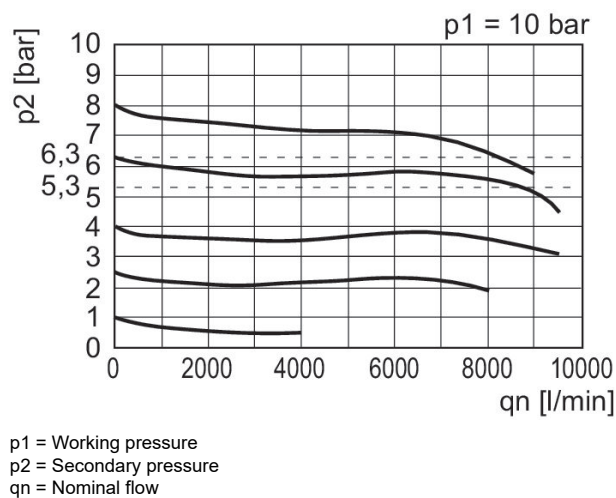
Part No.	X
0821302581	2
0821302582	2
0821302502	2
0821302548	2
0821302549	2
0821302542	2
0821302583	2
0821302584	2
0821302503	2
0821302550	2
0821302551	2
0821302543	2

Pressure characteristics curve



$p_1$  = working pressure  $p_2$  = secondary pressure  $q$  = flow rate

Flow rate characteristic (setting range  $p_2$ : 0.5 - 10 bar)

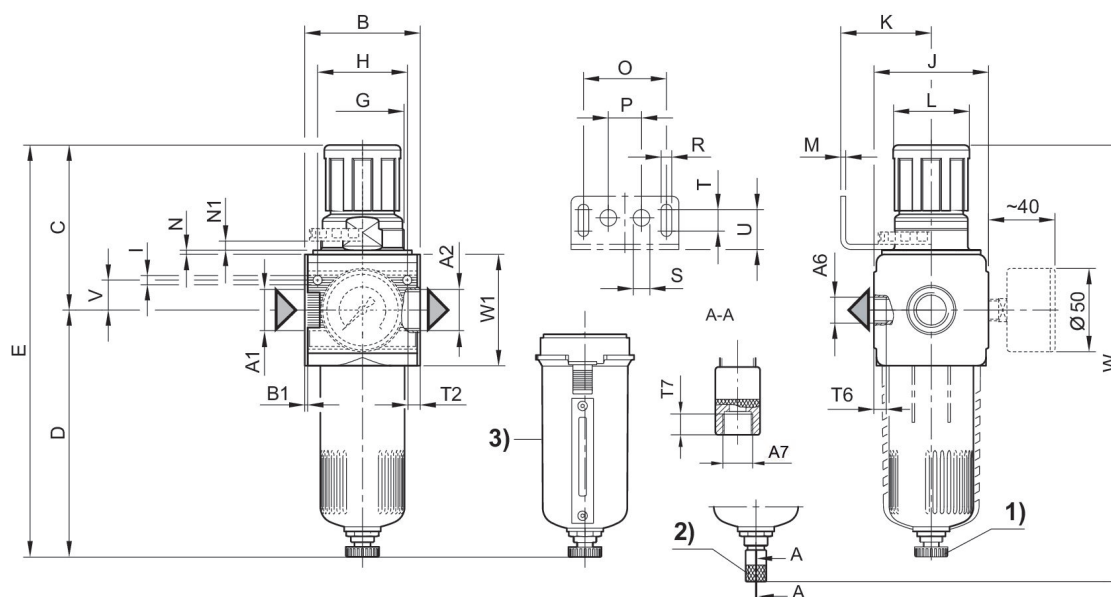


Filter pressure regulator, Series NL4-FRE



	Port	Condensate drain	Reservoir	Min. regulation range [bar]	Max. regulation range [bar]	Part No.
	G 1/2	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10	0821300364
	G 1/2	fully automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10	0821300367

Dimensions



A1 = input A2 = output A6 = output  
 1) Semi-automatic condensate drain 2) fully automatic condensate drain  
 3) Metal reservoir with level indicator

Dimensions in mm

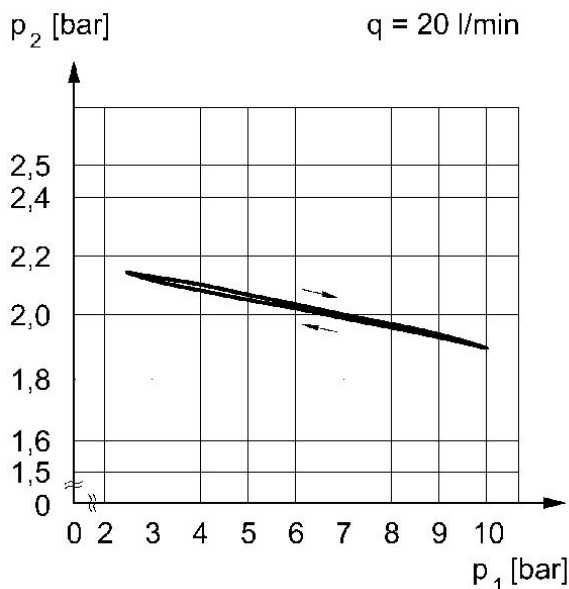
	A1	A2	A6	A7	B	B1	C	D	E
0821300364	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300367	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300281	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8

	G	H	I	J	K	L	M	N	N1
0821300364	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300367	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300281	M50x1,5	54	5.5	69	54.5	46	3	3	5.5

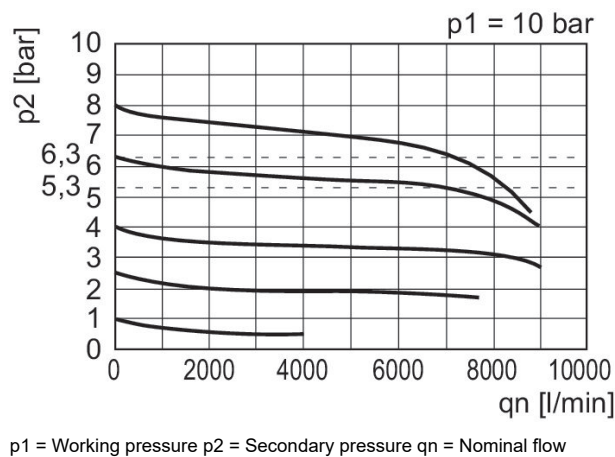
	O	P	R	S	T	T2	T6	T7	U
0821300364	50	20	6.4	10	13	13	7	8.5	24
0821300367	50	20	6.4	10	13	13	7	8.5	24
0821300281	50	20	6.4	10	13	13	7	8.5	24

	V	W	W1
0821300364	18	262.8	67
0821300367	18	262.8	67
0821300281	18	262.8	67

Pressure characteristics curve



Flow rate characteristic, p2 = 0,05 - 7 bar

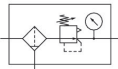
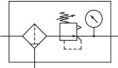


p1 = working pressure p2 = secondary pressure q = flow rate

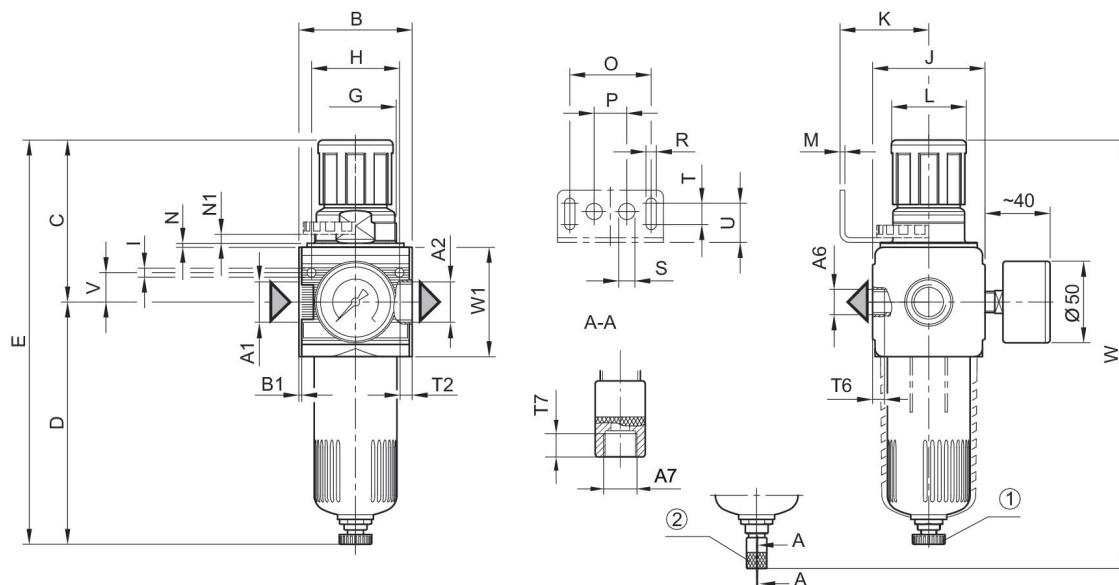
Filter pressure regulator, Series NL4-FRE



	Port	Condensate drain	Reservoir	Min. regulation range [bar]	Max. regulation range [bar]	Protective guard	Part No.
	G 1/2	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10		0821300350
	G 1/2	semi-automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	0.5	10	Steel, chrome-plated	0821300351
	G 1/2	semi-automatic, open without pressure	reservoir, metal, with inspection glass	0.5	10		0821300352
	G 1/2	fully automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10		0821300353
	G 1/2	fully automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	0.5	10	Steel, chrome-plated	0821300354
	G 1/2	fully automatic, open without pressure	reservoir, metal, with inspection glass	0.5	10		0821300355
	G 3/4	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10		0821300380
	G 3/4	semi-automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	0.5	10	Steel, chrome-plated	0821300381
	G 3/4	semi-automatic, open without pressure	reservoir, metal, with inspection glass	0.5	10		0821300382

	Port	Condensate drain	Reservoir	Min. regulation range [bar]	Max. regulation range [bar]	Protective guard	Part No.
	G 3/4	fully automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	0.5	10	Steel, chrome-plated	0821300384
	G 3/4	fully automatic, open without pressure	reservoir, metal, with inspection glass	0.5	10		0821300385

Dimensions



A1 = input A2 = output A6 = output  
A7 = condensate drain  
1) Semi-automatic condensate drain 2) fully automatic condensate drain

Dimensions in mm

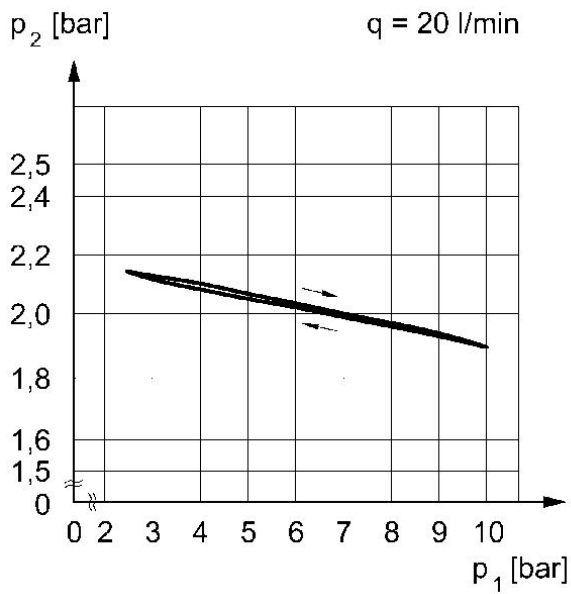
	A1	A2	A6	A7	B	B1	C	D	E
0821300350	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300351	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300352	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300353	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300354	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300355	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300380	G 3/4	G 3/4	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300381	G 3/4	G 3/4	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300382	G 3/4	G 3/4	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300383	G 3/4	G 3/4	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300384	G 3/4	G 3/4	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8
0821300385	G 3/4	G 3/4	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8

	G	H	I	J	K	L	M	N	N1
0821300350	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300351	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300352	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300353	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300354	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300355	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300380	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300381	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300382	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300383	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300384	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300385	M50x1,5	54	5.5	69	54.5	46	3	3	5.5

	O	P	R	S	T	T2	T6	T7	U
0821300350	50	20	6.4	10	13	13	7	8.5	24
0821300351	50	20	6.4	10	13	13	7	8.5	24
0821300352	50	20	6.4	10	13	13	7	8.5	24
0821300353	50	20	6.4	10	13	13	7	8.5	24
0821300354	50	20	6.4	10	13	13	7	8.5	24
0821300355	50	20	6.4	10	13	13	7	8.5	24
0821300380	50	20	6.4	10	13	13	7	8.5	24
0821300381	50	20	6.4	10	13	13	7	8.5	24
0821300382	50	20	6.4	10	13	13	7	8.5	24
0821300383	50	20	6.4	10	13	13	7	8.5	24
0821300384	50	20	6.4	10	13	13	7	8.5	24
0821300385	50	20	6.4	10	13	13	7	8.5	24

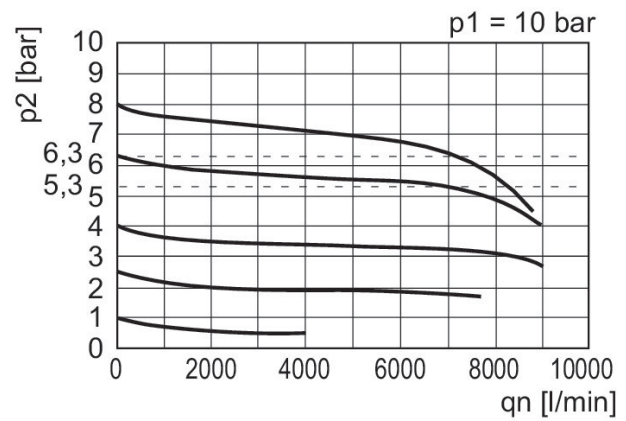
	V	W	W1
0821300350	18	262.8	67
0821300351	18	262.8	67
0821300352	18	262.8	67
0821300353	18	262.8	67
0821300354	18	262.8	67
0821300355	18	262.8	67
0821300380	18	262.8	67
0821300381	18	262.8	67
0821300382	18	262.8	67
0821300383	18	262.8	67
0821300384	18	262.8	67
0821300385	18	262.8	67

Pressure characteristics curve



$p_1$  = working pressure  $p_2$  = secondary pressure  $q$  = flow rate

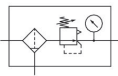
Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$



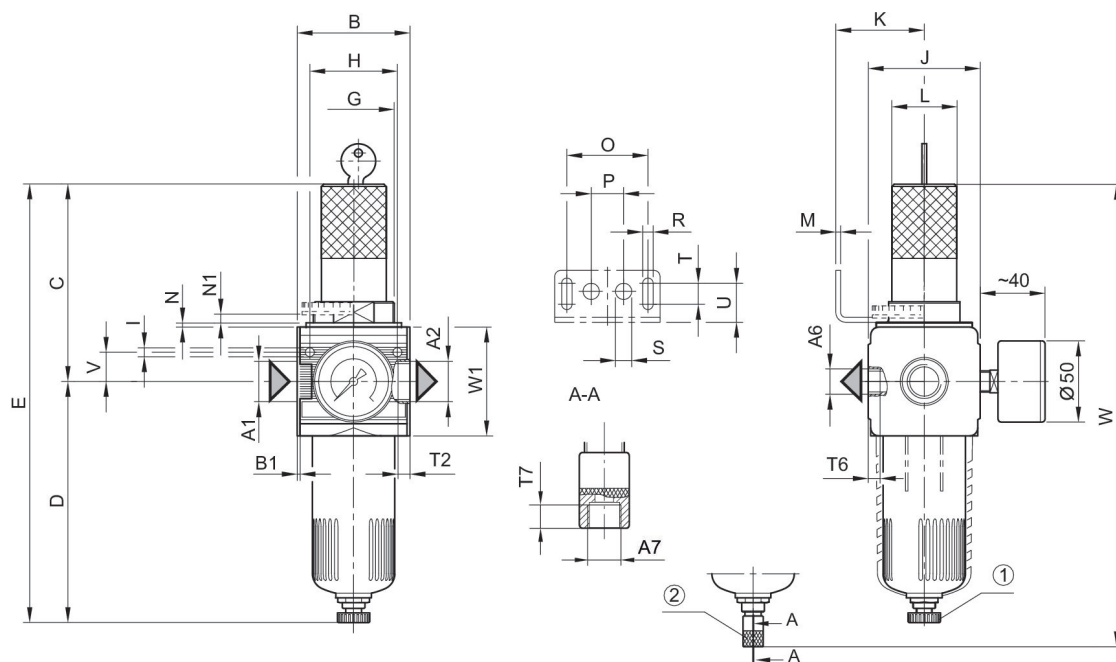
$p_1$  = Working pressure  $p_2$  = Secondary pressure  $q_n$  = Nominal flow

Filter pressure regulator, Series NL4-FRE



	Port	Condensate drain	Reservoir	Min. regulation range [bar]	Max. regulation range [bar]	Protective guard	Part No.
	G 1/2	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	0.5	10		0821300356
	G 1/2	fully automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	0.5	10	Steel, chrome-plated	0821300237

Dimensions



A1 = input A2 = output A6 = output  
A7 = condensate drain  
1) Semi-automatic condensate drain 2) fully automatic condensate drain

Dimensions in mm

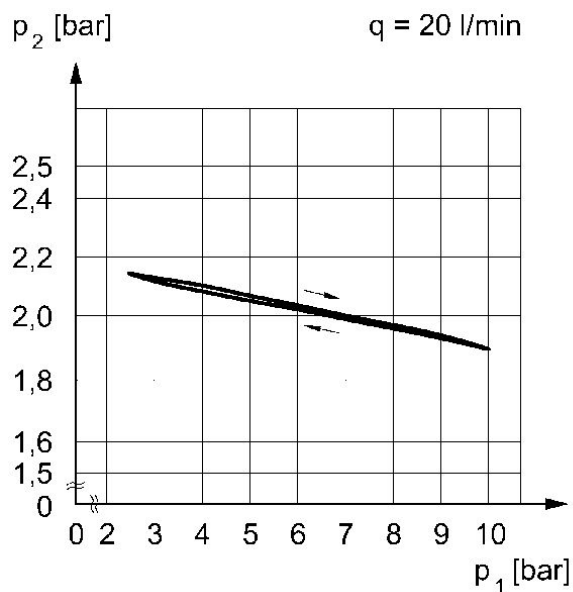
Part No.	A1	A2	A6	A7	B	B1	C	D	E
0821300356	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	122	146.5	268.5
0821300237	G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	122	146.5	268.5

Part No.	G	H	I	J	K	L	M	N	N1
0821300356	M50x1,5	54	5.5	69	54.5	46	3		5.5
0821300237	M50x1,5	54	5.5	69	54.5	46	3		5.5

Part No.	O	P	R	S	T	T2	T6	T7	U
0821300356	50	20	6.4	10	13	13	7	8.5	24
0821300237	50	20	6.4	10	13	13	7	8.5	24

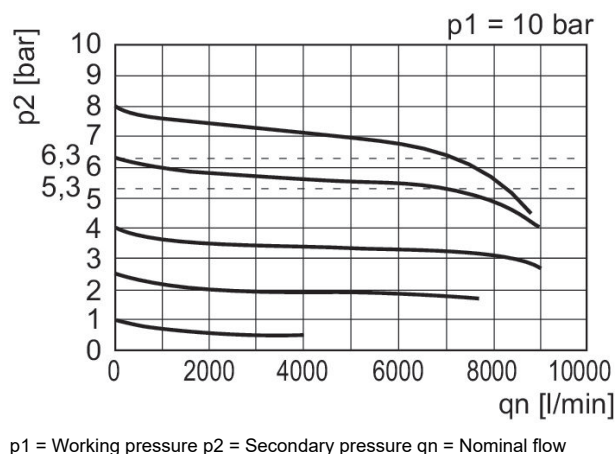
Part No.	V	W	W1
0821300356	18	286.5	67
0821300237	18	286.5	67

Pressure characteristics curve



$p_1$  = working pressure  $p_2$  = secondary pressure  $q$  = flow rate

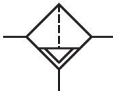
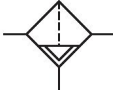
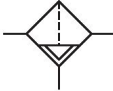
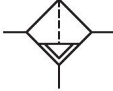
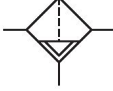
Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$



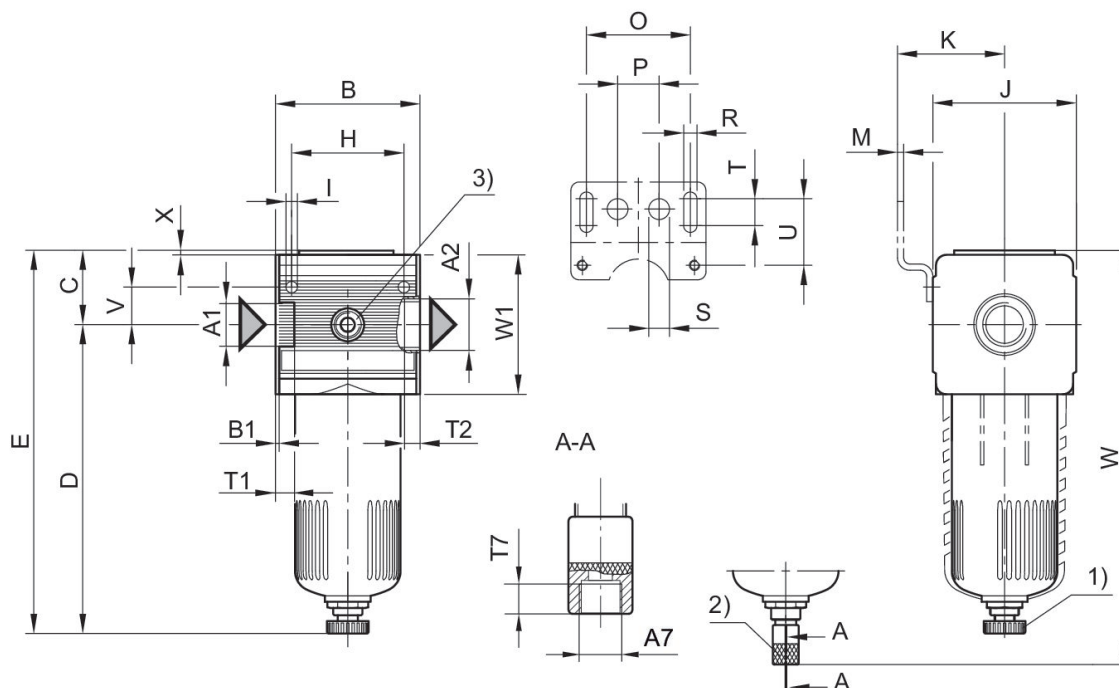
Filter, Series NL4-FLS



	Port	Nominal flow [l/min]	Filter porosity [µm]	Condensate drain	Reservoir	Filter insert	Part No.
	G 1/2	4000	5	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	Cellpor	0821303500
	G 1/2	4000	5	semi-automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	Cellpor	0821303501
	G 1/2	4000	5	fully automatic, open without pressure	reservoir, polycarbonate, without protective guard	Cellpor	0821303503
	G 1/2	4000	5	fully automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	Cellpor	0821303504
	G 1/2	4000	5	semi-automatic, open without pressure	reservoir, metal, with inspection glass	Cellpor	0821303502
	G 1/2	4000	5	fully automatic, open without pressure	reservoir, metal, with inspection glass	Cellpor	0821303505
	G 1/2	4000	5	fully automatic, open without pressure	reservoir, metal, with inspection glass	Cellpor	0821303559
	G 3/4	4000	5	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	Cellpor	0821303540
	G 3/4	4000	5	semi-automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	Cellpor	0821303541

	Port	Nominal flow [l/min]	Filter porosity [µm]	Condensate drain	Reservoir	Filter insert	Part No.
	G 3/4	4000	5	fully automatic, open without pressure	reservoir, polycarbonate, without protective guard	Cellpor	0821303543
	G 3/4	4000	5	semi-automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	Cellpor	0821303558
	G 3/4	4000	5	fully automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	Cellpor	0821303544
	G 3/4	4000	5	fully automatic, open without pressure	reservoir, metal, with inspection glass	Cellpor	0821303545
	G 3/4	4000	5	semi-automatic, open without pressure	reservoir, metal, with inspection glass	Cellpor	0821303542

Dimensions



A1 = input A2 = output  
 A7 = condensate drain  
 1) Semi-automatic condensate drain 2) fully automatic condensate drain  
 3) Optional pressure gauge connection G 1/4

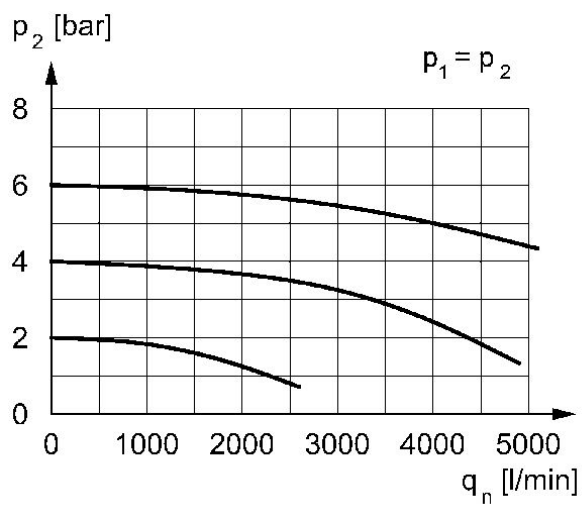
Dimensions in mm

Part No.	A1	A2	A7	B	B1	C	D	E	H
0821303500	G 1/2	G 1/2	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303501	G 1/2	G 1/2	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303502	G 1/2	G 1/2	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303503	G 1/2	G 1/2	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303504	G 1/2	G 1/2	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303505	G 1/2	G 1/2	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303559	G 1/2	G 1/2	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303540	G 3/4	G 3/4	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303558	G 3/4	G 3/4	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303541	G 3/4	G 3/4	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303542	G 3/4	G 3/4	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303543	G 3/4	G 3/4	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303544	G 3/4	G 3/4	G 1/8	69.6	1.8	36.5	146.5	183	54
0821303545	G 3/4	G 3/4	G 1/8	69.6	1.8	36.5	146.5	183	54

Part No.	I	J	K	M	O	P	R	S	T
0821303500	5.5	69	54.5	3	50	20	6.4	10	13
0821303501	5.5	69	54.5	3	50	20	6.4	10	13
0821303502	5.5	69	54.5	3	50	20	6.4	10	13
0821303503	5.5	69	54.5	3	50	20	6.4	10	13
0821303504	5.5	69	54.5	3	50	20	6.4	10	13
0821303505	5.5	69	54.5	3	50	20	6.4	10	13
0821303559	5.5	69	54.5	3	50	20	6.4	10	13
0821303540	5.5	69	54.5	3	50	20	6.4	10	13
0821303558	5.5	69	54.5	3	50	20	6.4	10	13
0821303541	5.5	69	54.5	3	50	20	6.4	10	13
0821303542	5.5	69	54.5	3	50	20	6.4	10	13
0821303543	5.5	69	54.5	3	50	20	6.4	10	13
0821303544	5.5	69	54.5	3	50	20	6.4	10	13
0821303545	5.5	69	54.5	3	50	20	6.4	10	13

Part No.	T1	T2	T7	U	V	W	W1	X
0821303500	13	13	8.5	33	18	199	67	3
0821303501	13	13	8.5	33	18	199	67	3
0821303502	13	13	8.5	33	18	199	67	3
0821303503	13	13	8.5	33	18	199	67	3
0821303504	13	13	8.5	33	18	199	67	3
0821303505	13	13	8.5	33	18	199	67	3
0821303559	13	13	8.5	33	18	199	67	3
0821303540	13	13	8.5	33	18	199	67	3
0821303558	13	13	8.5	33	18	199	67	3
0821303541	13	13	8.5	33	18	199	67	3
0821303542	13	13	8.5	33	18	199	67	3
0821303543	13	13	8.5	33	18	199	67	3
0821303544	13	13	8.5	33	18	199	67	3
0821303545	13	13	8.5	33	18	199	67	3

Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$



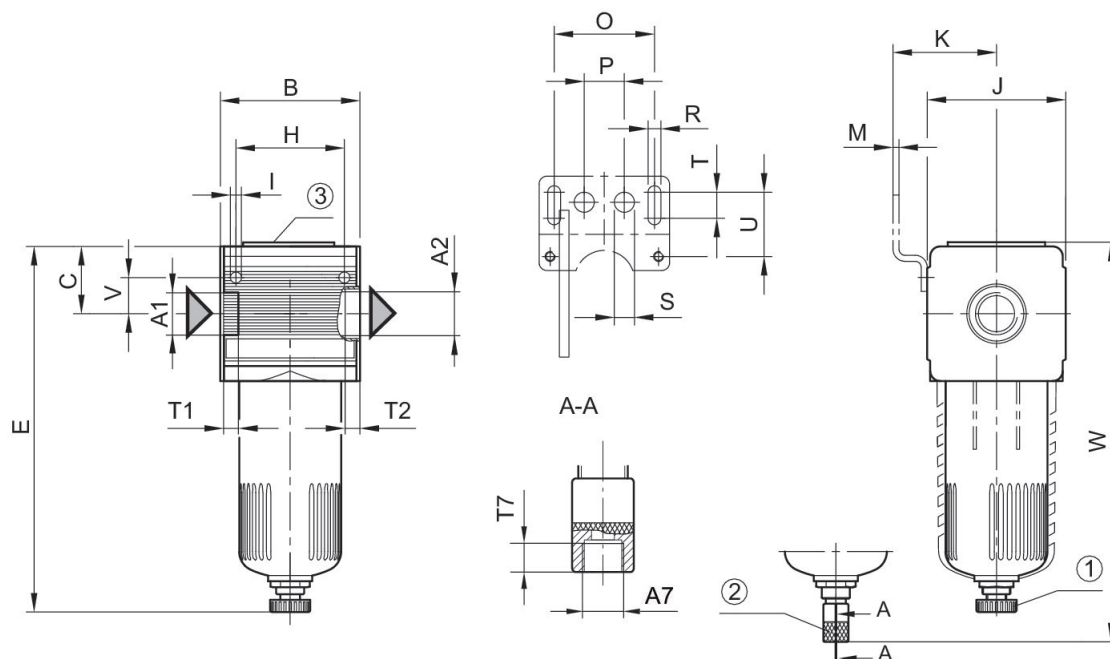
$p_2$  = secondary pressure  $q_n$  = nominal flow

Pre-filter, Series NL4-FLP



	Port	Nominal flow [l/min]	Filter porosity [µm]	Condensate drain	Reservoir	Filter insert	Part No.
	G 1/4	1000	0.3	fully automatic, open without pressure	Metal reservoir without window	Impregnated paper	0821303302
	G 1/4	2500	0.3	fully automatic, open without pressure	reservoir, metal, long, without inspection glass	Impregnated paper	0821303303
	G 1/2	2500	0.3	fully automatic, open without pressure	reservoir, metal, long, without inspection glass	Impregnated paper	0821303515
	G 1/2	1000	0.3	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	Impregnated paper	0821303529

Dimensions



A1 = input A2 = output  
A7 = condensate drain

1) semi-automatic condensate drain 2) fully automatic condensate drain 3) differential pressure gauge connection

Dimensions in mm

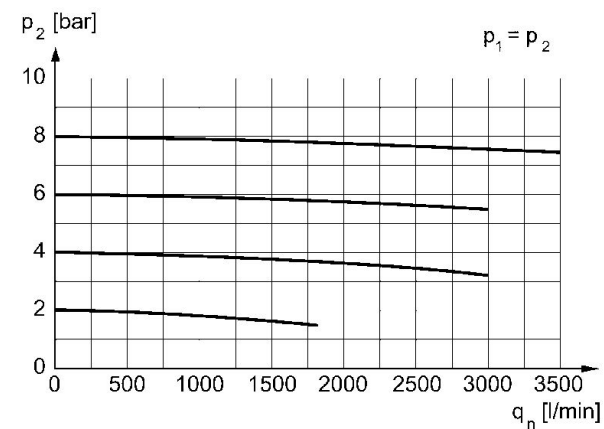
Part No.	A1	A2	A7	B	C	E	H	I	J
0821303302	G 1/4	G 1/4	G 1/8	69.6	38.5	-	54	5.5	69
0821303303	G 1/4	G 1/4	G 1/8	69.6	38.5	-	54	5.5	69
0821303515	G 1/2	G 1/2	G 1/8	69.6	38.5	-	54	5.5	69
0821303529	G 1/2	G 1/2	G 1/8	69.6	38.5	185	54	5.5	69

Part No.	K	M	O	P	R	S	T	T1	T2
0821303302	54.5	3	50	20	6.4	10	13	13	13
0821303303	54.5	3	50	20	6.4	10	13	13	13
0821303515	54.5	3	50	20	6.4	10	13	13	13
0821303529	54.5	3	50	20	6.4	10	13	13	13

Part No.	T7	U	V	W
0821303302	8.5	33	18	203
0821303303	8.5	33	18	232
0821303515	8.5	33	18	317
0821303529	8.5	33	18	-

Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$

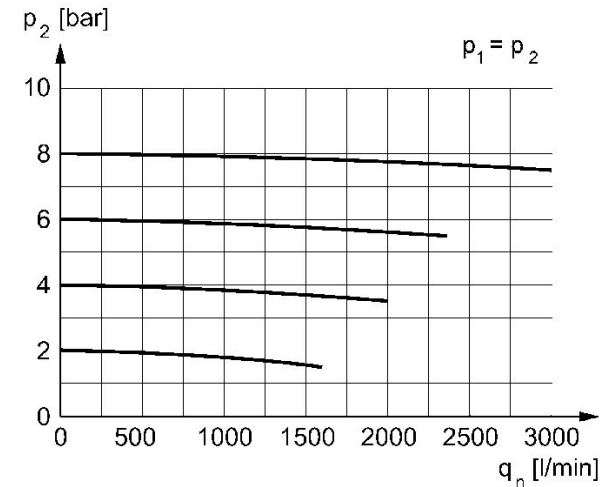
Fig. 1



$p_2$  = secondary pressure  $q_n$  = nominal flow

Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$

Fig. 2



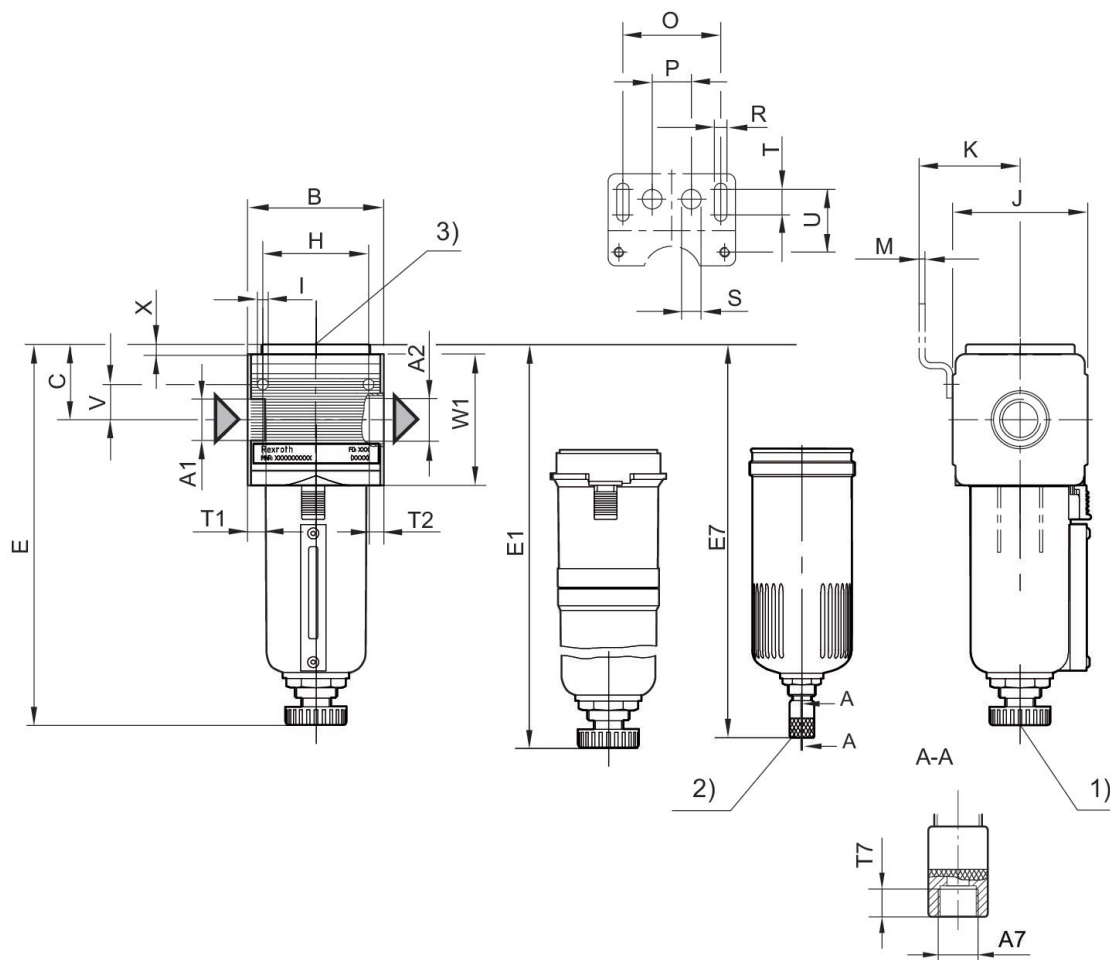
$p_2$  = secondary pressure  $q_n$  = nominal flow

Microfilter, Series NL4-FLC



	Port	Nominal flow [l/min]	Filter porosity [µm]	Condensate drain	Reservoir	Filter insert	Part No.
	G 1/4	720	0.01	fully automatic, open without pressure	reservoir, metal, with inspection glass	Borosilicate glass fiber	0821303418
	G 1/4	720	0.01	fully automatic, open without pressure	Metal reservoir without window	Borosilicate glass fiber	0821303419
	G 1/2	720	0.01	semi-automatic, open without pressure	reservoir, polycarbonate, without protective guard	Borosilicate glass fiber	0821303514
	G 1/2	1200	0.01	fully automatic, open without pressure	Metal reservoir without window	Borosilicate glass fiber	0821303516
	G 1/2	720	0.01	semi-automatic, open without pressure	reservoir, metal, with inspection glass	Borosilicate glass fiber	R412010795
	G 1/2	720	0.01	semi-automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	Borosilicate glass fiber	R412010794
	G 1/2	720	0.01	fully automatic, open without pressure	reservoir, polycarbonate, without protective guard	Borosilicate glass fiber	0821303571
	G 1/2	720	0.01	fully automatic, open without pressure	reservoir, polycarbonate, with metal protective guard	Borosilicate glass fiber	R412010796
	G 1/2	720	0.01	fully automatic, open without pressure	reservoir, metal, with inspection glass	Borosilicate glass fiber	R412010797

Dimensions



A1 = input A2 = output  
A7 = condensate drain

1) semi-automatic condensate drain 2) fully automatic condensate drain 3) differential pressure gauge connection

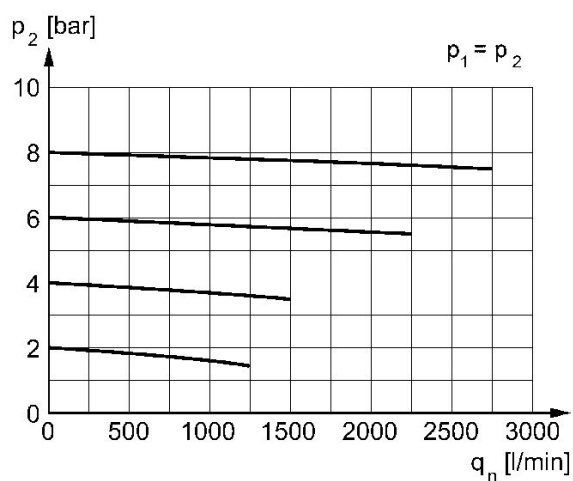
Dimensions in mm

Part No.	A1	A2	A7	B	C	E	E1	E7	H
0821303418	G 1/4	G 1/4	G 1/8	69.6	38.5	202	-	-	54
0821303419	G 1/4	G 1/4	G 1/8	69.6	-	-	249	-	54
0821303514	G 1/2	G 1/2	G 1/8	69.6	39.5	186	-	-	54
0821303516	G 1/2	G 1/2	G 1/8	69.6	38.5	-	335	-	54
R412010794	G 1/2	G 1/2	G 1/8	69.6	38.5	-	186	-	54
R412010795	G 1/2	G 1/2	G 1/8	69.6	38.5	186	-	-	54
0821303571	G 1/2	G 1/2	G 1/8	69.6	38.5	-	-	201	54
R412010796	G 1/2	G 1/2	G 1/8	69.6	38.5	-	-	201	54
R412010797	G 1/2	G 1/2	G 1/8	69.6	38.5	-	-	201	54

Part No.	I	J	K	M	O	P	R	S	T
0821303418	5.5	69	54.5	3	50	20	6.4	10	13
0821303419	5.5	69	54.5	3	50	20	6.4	10	13
0821303514	5.5	69	54.5	3	50	20	6.4	10	13
0821303516	5.5	69	54.5	3	50	20	6.4	10	13
R412010794	5.5	69	54.5	3	50	20	6.4	10	13
R412010795	5.5	69	54.5	3	50	20	6.4	10	13
0821303571	5.5	69	54.5	3	50	20	6.4	10	13
R412010796	5.5	69	54.5	3	50	20	6.4	10	13
R412010797	5.5	69	54.5	3	50	20	6.4	10	13

Part No.	T1	T2	T7	U	V	W1	X
0821303418	13	13	8.5	33	18	67	5
0821303419	13	13	8.5	33	18	67	-
0821303514	13	13	8.5	33	18	67	-
0821303516	13	13	8.5	33	18	67	5
R412010794	13	13	8.5	33	18	67	-
R412010795	13	13	8.5	33	18	67	-
0821303571	13	13	8.5	33	18	67	-
R412010796	13	13	8.5	33	18	67	-
R412010797	13	13	8.5	33	18	67	-

Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$



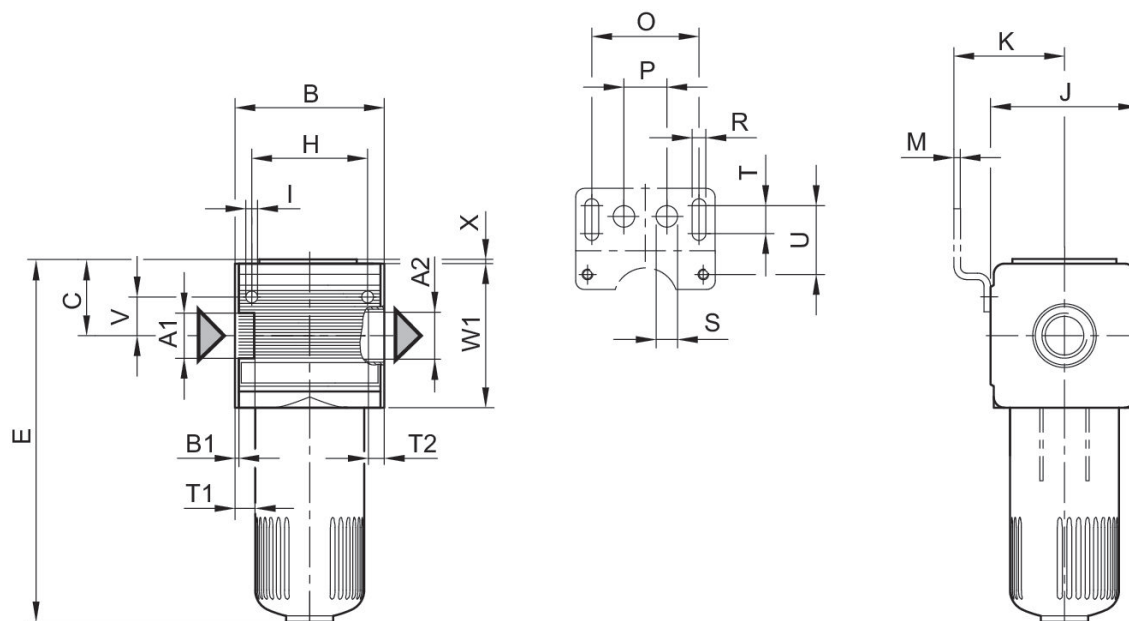
$p_2$  = secondary pressure  $q_n$  = nominal flow

Active carbon filter, Series NL4-FLA



	Port	Nominal flow [l/min]	Condensate drain	Reservoir	Filter insert	Part No.
	G 1/4	2250	without	Metal reservoir without window	Active carbon	0821303300
	G 1/4	2250	without	reservoir, metal, long, without inspection glass	Active carbon	0821303301
	G 1/2	2250	without	reservoir, metal, long, without inspection glass	Active carbon	0821303517

Dimensions



A1 = input A2 = output

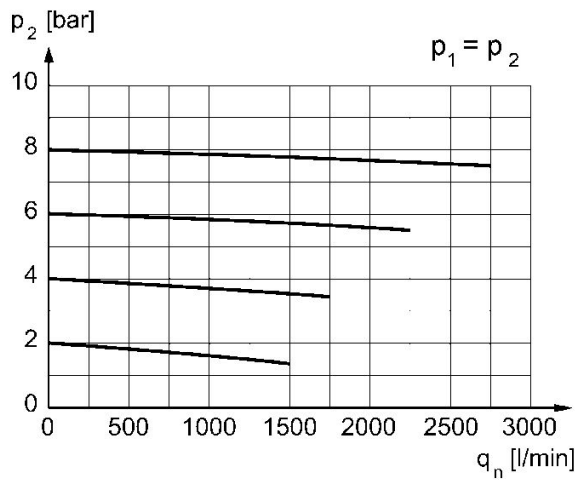
Dimensions in mm

Part No.	A1	A2	B	B1	C	D	E	H	I
0821303300	G 1/4	G 1/4	69.6	1.8	34.5	-	170	54	5.5
0821303301	G 1/4	G 1/4	69.6	1.8	34.5	-	222	54	5.5
0821303517	G 1/2	G 1/2	69.6	1.8	34.5	-	308	54	5.5

Part No.	J	K	M	O	P	R	S	T	T1
0821303300	69	54.5	3	50	20	6.4	10	13	13
0821303301	69	54.5	3	50	20	6.4	10	13	13
0821303517	69	54.5	3	50	20	6.4	10	13	13

Part No.	T2	U	V	W1	X
0821303300	13	33	18	67	1
0821303301	13	33	18	67	1
0821303517	13	33	18	67	1

Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$



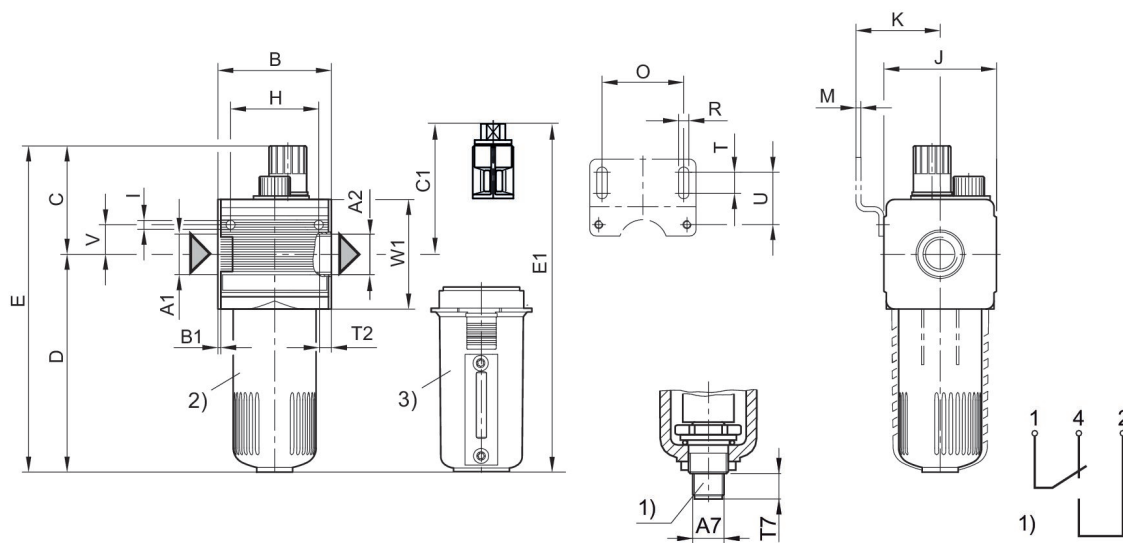
$p_2$  = secondary pressure  $q_n$  = nominal flow

Standard oil-mist lubricator, Series NL4-LBS



	Port	Nominal flow [l/min]	Reservoir	Lubricator reservoir volume [cm <sup>3</sup> ]	Electrical level indicator	Part No.
	G 1/2	6000	reservoir, PA, without protective guard	125		0821301500
	G 1/2	6000	reservoir, polycarbonate, with metal protective guard	125		0821301501
	G 1/2	6000	reservoir, PA, without protective guard	116	with internal query	0821301515
	G 1/2	6000	reservoir, metal, with inspection glass	125		0821301502
	G 3/4	6000	reservoir, polycarbonate, without protective guard	125		0821301540
	G 3/4	6000	reservoir, polycarbonate, with metal protective guard	125		0821301541
	G 3/4	6000	reservoir, polycarbonate, without protective guard	116	with internal query	0821301545
	G 3/4	6000	reservoir, metal, with inspection glass	125		0821301542

Dimensions



A1 = input A2 = output

1) electrical level indicator – connection: 4-pin, M12x1 – contact load: 50 V AC/0.5 A/5 W – type: 1 change-over contact (make contact/break contact) for min. fluid level

Order valve plug connector (M12x1) separately

2) PC reservoir

3) Metal reservoir with level indicator

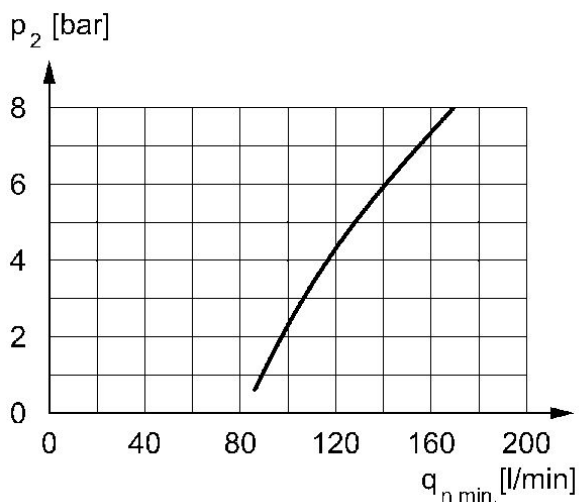
Dimensions in mm

Part No. G 1/2	A1	A2	A7	B	B1	C	C1	D	D2
0821301500	G 1/2	G 1/2	M12x1	69.5	1.8	65	-	132	12
0821301501	G 1/2	G 1/2	M12x1	69.5	1.8	65	-	132	12
0821301502	G 1/2	G 1/2	M12x1	69.5	1.8	65	81	132	12
0821301515	G 1/2	G 1/2	M12x1	69.5	1.8	65	-	132	12
0821301540	G 3/4	G 3/4	M12x1	69.5	1.8	65	-	132	12
0821301541	G 3/4	G 3/4	M12x1	69.5	1.8	65	-	132	12
0821301542	G 3/4	G 3/4	M12x1	69.5	1.8	65	81	132	12
0821301545	G 3/4	G 3/4	M12x1	69.5	1.8	65	-	132	12

Part No. G 1/2	E	E1	F	H	I	J	K	M	O
0821301500	197	-	M12x1	54	5.5	67	54.5	3	50
0821301501	197	-	M12x1	54	5.5	67	54.5	3	50
0821301502	197	212	M12x1	54	5.5	67	54.5	3	50
0821301515	197	-	M12x1	54	5.5	67	54.5	3	50
0821301540	197	-	M12x1	54	5.5	67	54.5	3	50
0821301541	197	-	M12x1	54	5.5	67	54.5	3	50
0821301542	197	212	M12x1	54	5.5	67	54.5	3	50
0821301545	197	-	M12x1	54	5.5	67	54.5	3	50

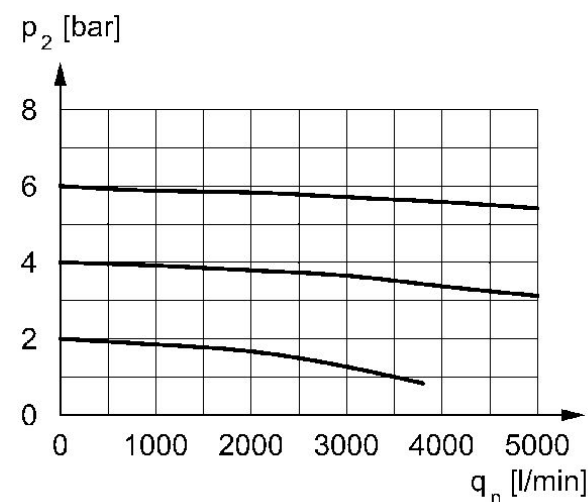
Part No. G 1/2	P	R	S	T	T2	T7	U	V	W1
0821301500	20	6.4	10	13	13	12	33	18	67
0821301501	20	6.4	10	13	13	12	33	18	67
0821301502	20	6.4	10	13	13	12	33	18	67
0821301515	20	6.4	10	13	13	12	33	18	67
0821301540	20	6.4	10	13	13	12	33	18	67
0821301541	20	6.4	10	13	13	12	33	18	67
0821301542	20	6.4	10	13	13	12	33	18	67
0821301545	20	6.4	10	13	13	12	33	18	67

minimum flow rate curve (flow rate necessary for the correct functioning of the lubricator)



$p_2$  = secondary pressure  $q_{n \text{ min.}}$  = min. nominal flow

Flow rate characteristic,  $p_2 = 0,05 - 7$  bar



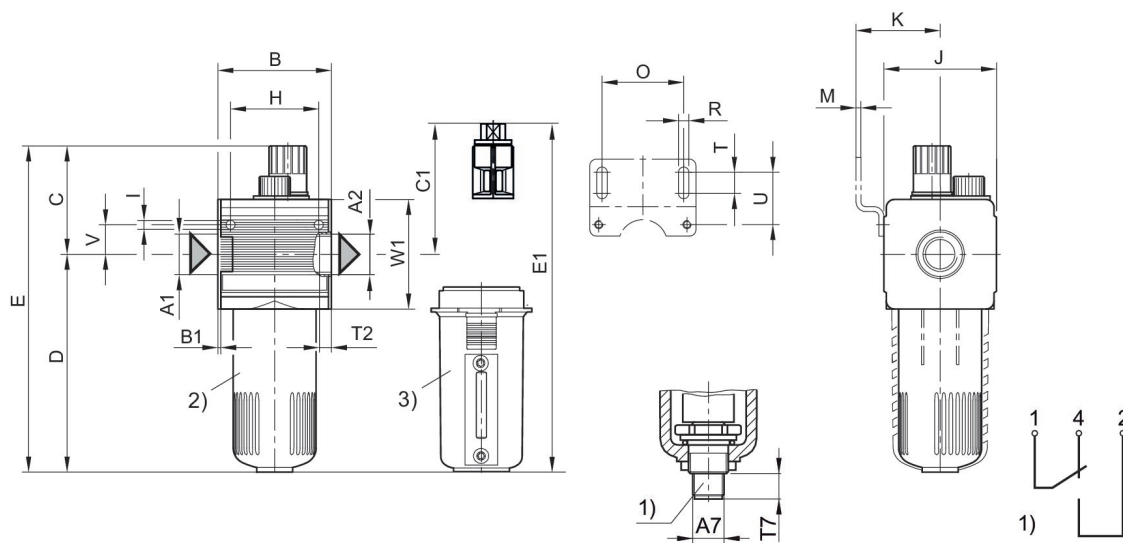
$p_2$  = secondary pressure  $q_n$  = nominal flow

Micro oil-mist lubricator, Series NL4-LBM



	Port	Nominal flow [l/min]	Reservoir	Lubricator reservoir volume [cm <sup>3</sup> ]	Electrical level indicator	Part No.
	G 1/2	4700	reservoir, polycarbonate, with metal protective guard	125		R412007655
	G 1/2	4700	reservoir, polycarbonate, without protective guard	125		R412007654
	G 1/2	4700	reservoir, polycarbonate, without protective guard	125	with internal query	R412007657
	G 1/2	4700	1.0 l metal reservoir with window	1000	with internal query	R412007658
	G 1/2	4700	1.5 l metal reservoir with window	1500	with internal query	R412007659

Dimensions



A1 = input A2 = output

1) electrical level indicator – connection: 4-pin, M12x1 – contact load: 50 V AC/0.5 A/5 W – type: 1 change-over contact (make contact/break contact) for min. fluid level

Order valve plug connector (M12x1) separately

2) PC reservoir

3) Metal reservoir with level indicator

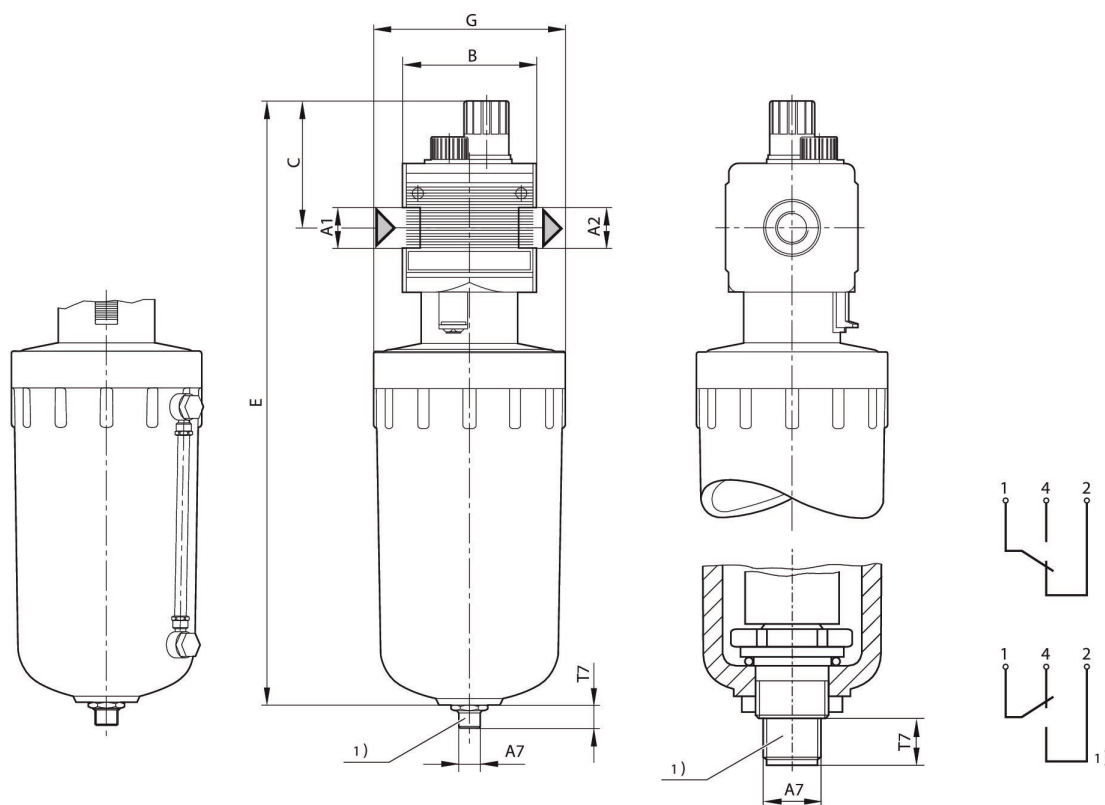
Dimensions in mm

Part No.	A1	A2	A7	B	B1	C	C1	D	E
R412007654	G 1/2	G 1/2	M12x1	69.5	1.8	65	-	132	197
R412007655	G 1/2	G 1/2	M12x1	69.5	1.8	65	81	132	197
R412007657	G 1/2	G 1/2	M12x1	69.5	1.8	65	-	132	197

Part No.	E1	H	I	J	K	M	O	P	R
R412007654	-	54	5.5	67	54.5	3	50	20	6.4
R412007655	212	54	5.5	67	54.5	3	50	20	6.4
R412007657	-	54	5.5	67	54.5	3	50	20	6.4

Part No.	S	T	T2	T7	U	V	W1
R412007654	10	13	13	12	33	18	67
R412007655	10	13	13	12	33	18	67
R412007657	10	13	13	12	33	18	67

Fig. 3  
Dimensions



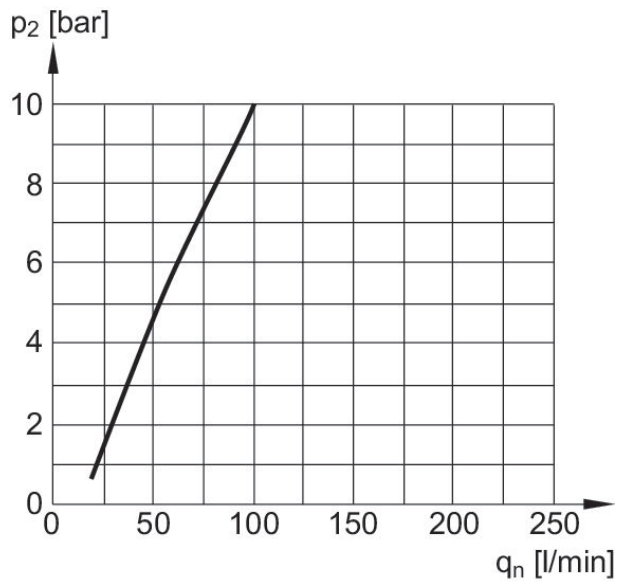
A1 = input A2 = output

1) electrical level indicator – connection: 4-pin, M12x1 – contact load: 50 V AC/0.5 A/5 W – type: 1 change-over contact (make contact/break contact) for min. fluid level  
Order valve plug connector (M12x1) separately

### Dimensions in mm

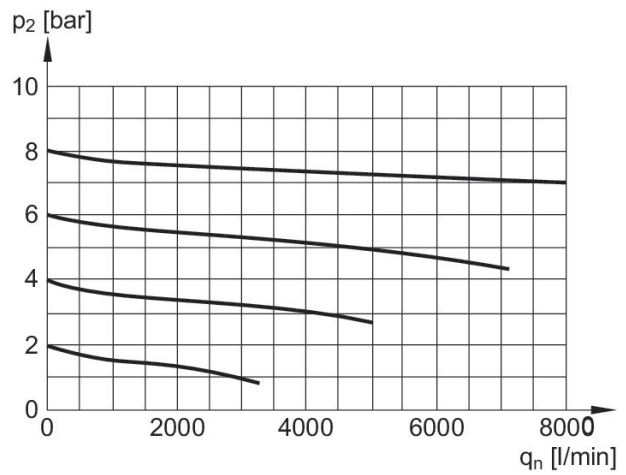
Part No.	A1		A2	A7	B ±5	C ±5	E	G ±5	T7
R412007658	G 1/2	1 L	G 1/2	M12x1	69.6	66	315	Ø 100	12
R412007659	G 1/2	1,5 L	G 1/2	M12x1	69.6	66	415	Ø 100	12

minimum flow rate curve (flow rate necessary for the correct functioning of the lubricator)



p2 = secondary pressure qnmin. = min. nominal flow

Flow rate characteristic, p2 = 0,05 - 7 bar



p2 = secondary pressure qn = nominal flow

**Filling unit, electrically operated, Series NL4-SSU**

Activation: Electrically

Parts: 3/2-directional valve, Filling valve

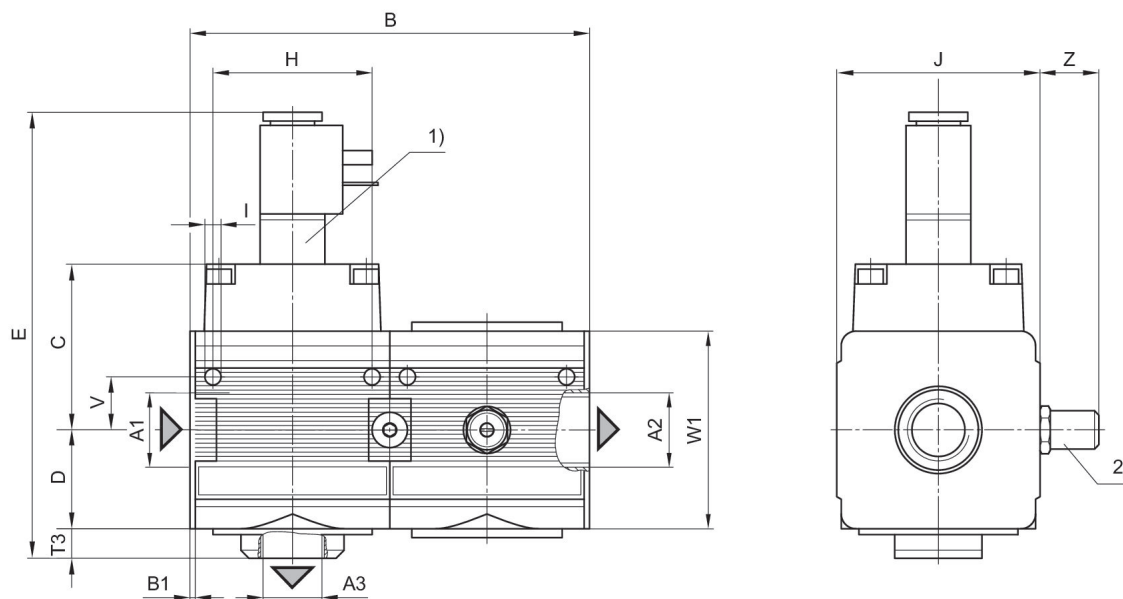
Ambient temperature min./max.: -10 °C ... 60 °C

Working pressure min./max.: 2.5 bar ... 10 bar



	Port	Nominal flow [l/min]	Electrical connection	Operational voltage DC	Part No.
	G 1/2	2500	ISO 6952, form B	24 V	0821300950
	G 1/2	2500	ISO 6952, form B	24 V	0821300955

Dimensions



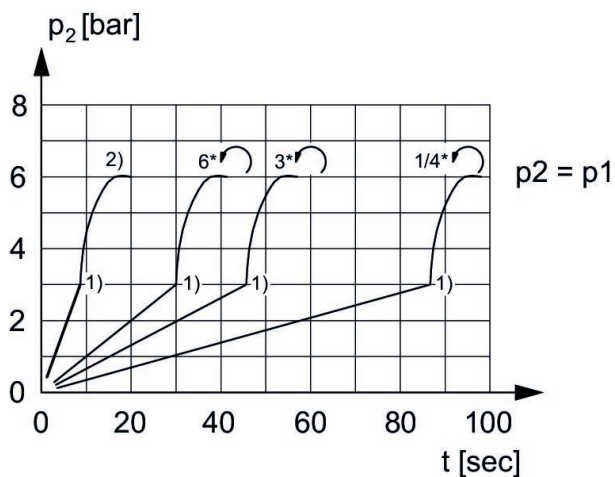
A1 = input A2 = output  
 A3 = ventilation port  
 1) electrically operated  
 2) Adjustment screw for filling time

Dimensions in mm

Part No.	A1	A2	A3	B	B1	C	D	E	H
0821300955	G 1/2	G 1/2	G 1/2	135.6	1.8	56.5	33.5	151	54
0821300950	G 1/2	G 1/2	G 1/2	135.6	1.8	56.5	33.5	151	54

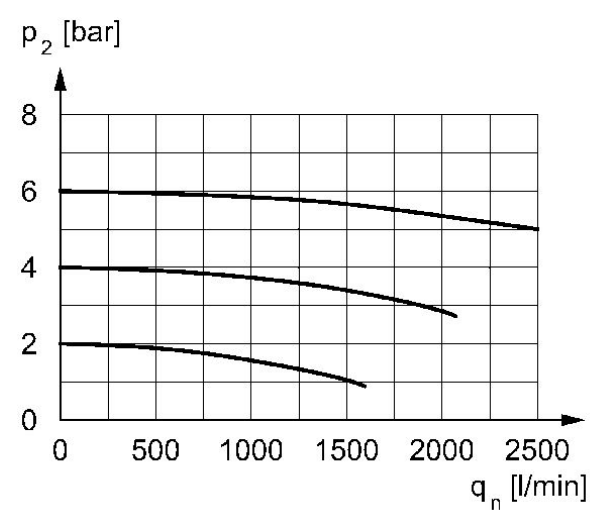
Part No.	I	J	T3	W1	Z
0821300955	5.5	69	10	52	-
0821300950	5.5	69	10	52	20

Secondary pressure while filling



- p1 = Working pressure
- p2 = Secondary pressure
- t = filling time, adjustable via adjustment screw (throttle)
- 1) Switching point: adjustable filling time, fixed change-over pressure  $\approx 0.5 \times p_1$  (50%)
- 2) Throttle fully opened
- \* Adjustment screw rotations

Flow rate characteristic,  $p_2 = 0,05 - 7$  bar

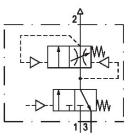
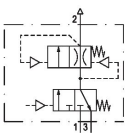


- p2 = Secondary pressure
- qn = Nominal flow

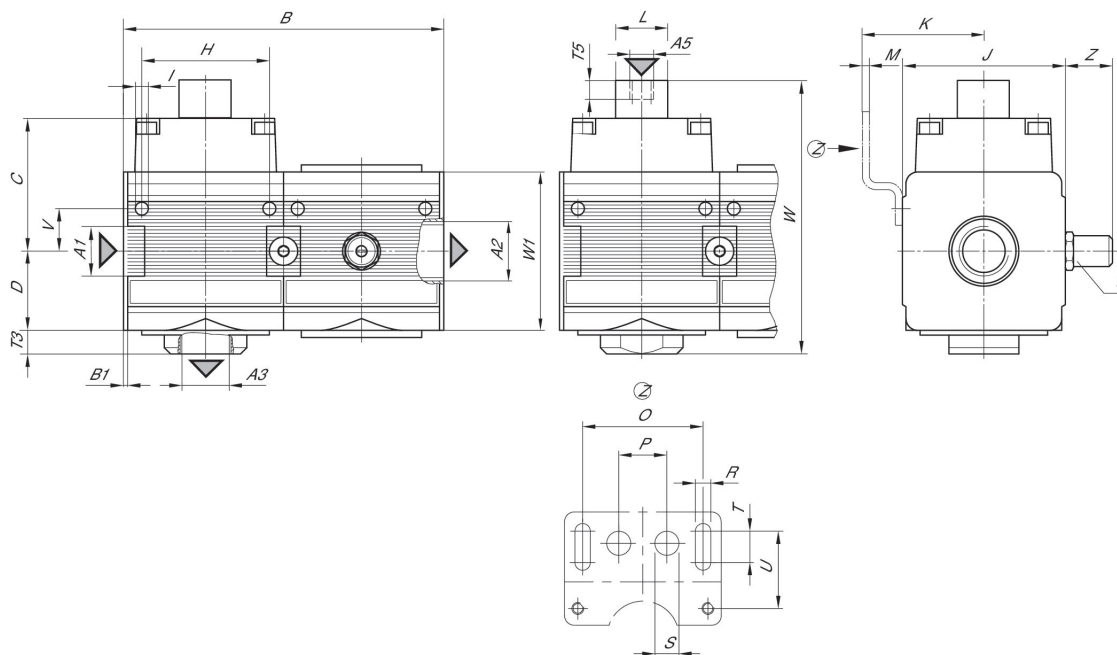
**Filling unit, pneumatically operated, Series NL4-SSU**

Activation: Pneumatically  
 Parts: 3/2-directional valve, Filling valve  
 Ambient temperature min./max.: -10 °C ... 60 °C  
 Working pressure min./max.: 0 bar ... 16 bar



	Port	Nominal flow [l/min]	Part No.
	G 1/2	2500	0821300949
	G 1/2	2500	0821300954

Dimensions



- A1 = input
- A2 = output
- A3 = ventilation port
- A3 = ventilation port
- A5 = Control pressure connection
- 1) Adjustment screw for filling time

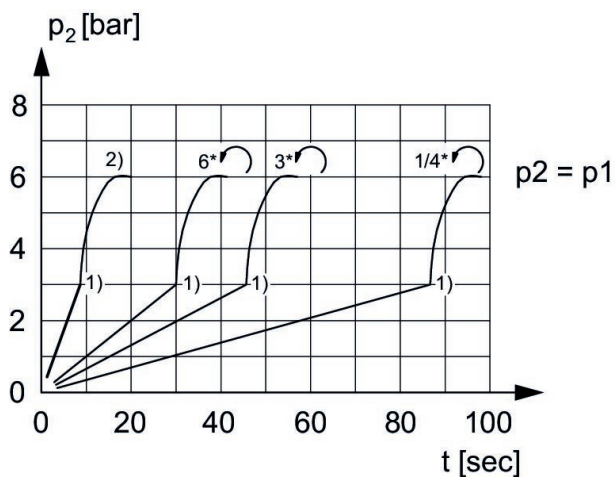
Dimensions in mm

Part No.	A1	A2	A3	A5	B	B1	C	D	H
0821300954	G 1/2	G 1/2	G 1/2	G 1/8	135.6	1.8	56.5	33.5	54
0821300949	G 1/2	G 1/2	G 1/2	G 1/8	135.6	1.8	56.5	33.5	54

Part No.	I	J	K	L	M	O	P	R	S
0821300954	5.5	69	54.5	22	3	50	20	6.4	20
0821300949	5.5	69	54.5	22	3	50	20	6.4	20

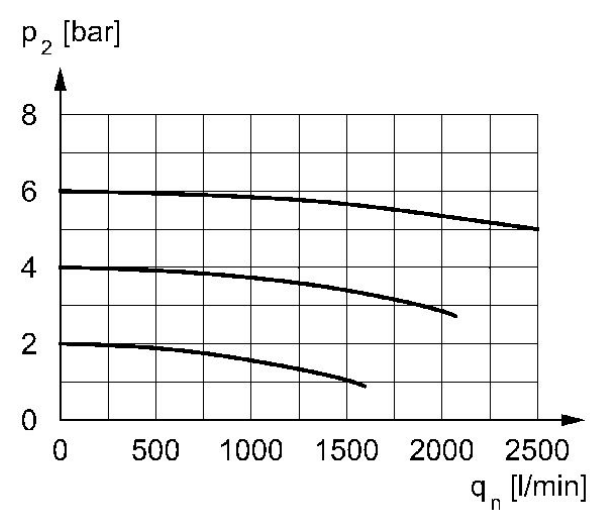
Part No.	T	T3	T5	U	V	W	W1	Z
0821300954	10	10	13	27.5	12.3	96	52	-
0821300949	10	10	13	27.5	12.3	96	52	20

Secondary pressure while filling



- $p_1$  = Working pressure
- $p_2$  = Secondary pressure
- $t$  = filling time, adjustable via adjustment screw (throttle)
- 1) Switching point: adjustable filling time, fixed change-over pressure  $\approx 0.5 \times p_1$  (50%)
- 2) Throttle fully opened
- \* Adjustment screw rotations

Flow rate characteristic,  $p_2 = 0,05 - 7$  bar



- $p_2$  = Secondary pressure
- $q_n$  = Nominal flow

**Filling valve, pneumatically operated, Series NL4-SSV**

Flow: 4000 l/min

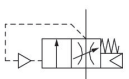
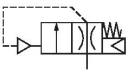
Activation: Pneumatically

Parts: Filling valve

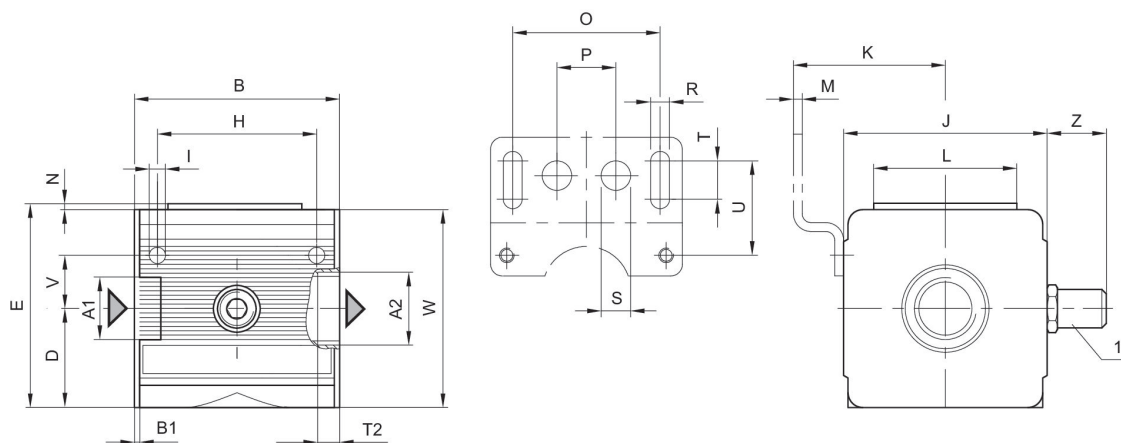
Ambient temperature min./max.: -10 °C ... 60 °C

Working pressure min./max.: 0 bar ... 16 bar



	Port	Nominal flow [l/min]	Part No.
	G 1/2	4000	0821300936
	G 1/2	4000	0821300935

Dimensions



A1 = input  
A2 = output  
1) Adjustment screw for filling time

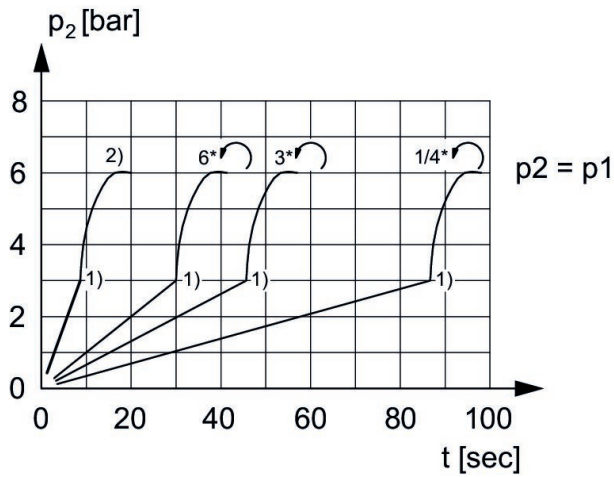
Dimensions in mm

Part No.	A1	A2	B	B1	D	E	H	I	J
0821300936	G 1/2	G 1/2	69.6	1.8	36.5	73	54	5.4	69
0821300935	G 1/2	G 1/2	69.6	1.8	36.5	73	54	5.4	69

Part No.	K	L	M	N	O	P	R	S	T
0821300936	54.5	48	3	3	50	20	6.4	10	13
0821300935	54.5	48	3	3	50	20	6.4	10	13

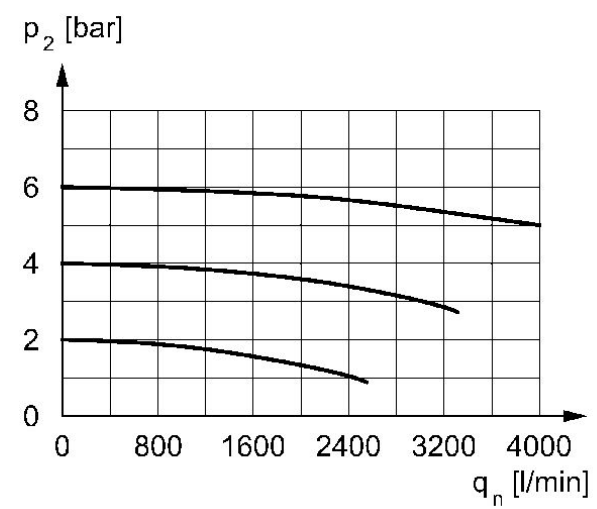
Part No.	T2	U	V	W	Z
0821300936	13	33	18	67	20
0821300935	13	33	18	67	-

Secondary pressure while filling



- $p_1$  = Working pressure
- $p_2$  = Secondary pressure
- $t$  = filling time, adjustable via adjustment screw (throttle)
- 1) Switching point: adjustable filling time, fixed change-over pressure  $\approx 0.5 \times p_1$  (50%)
- 2) Throttle fully opened
- \* Adjustment screw rotations

Flow rate characteristic,  $p_2 = 0,05 - 7$  bar



$p_2$  = secondary pressure  $q_n$  = nominal flow

**3/2-directional valve, electrically operated, Series NL4-SOV**

Activation: Electrically

Parts: 3/2-directional valve

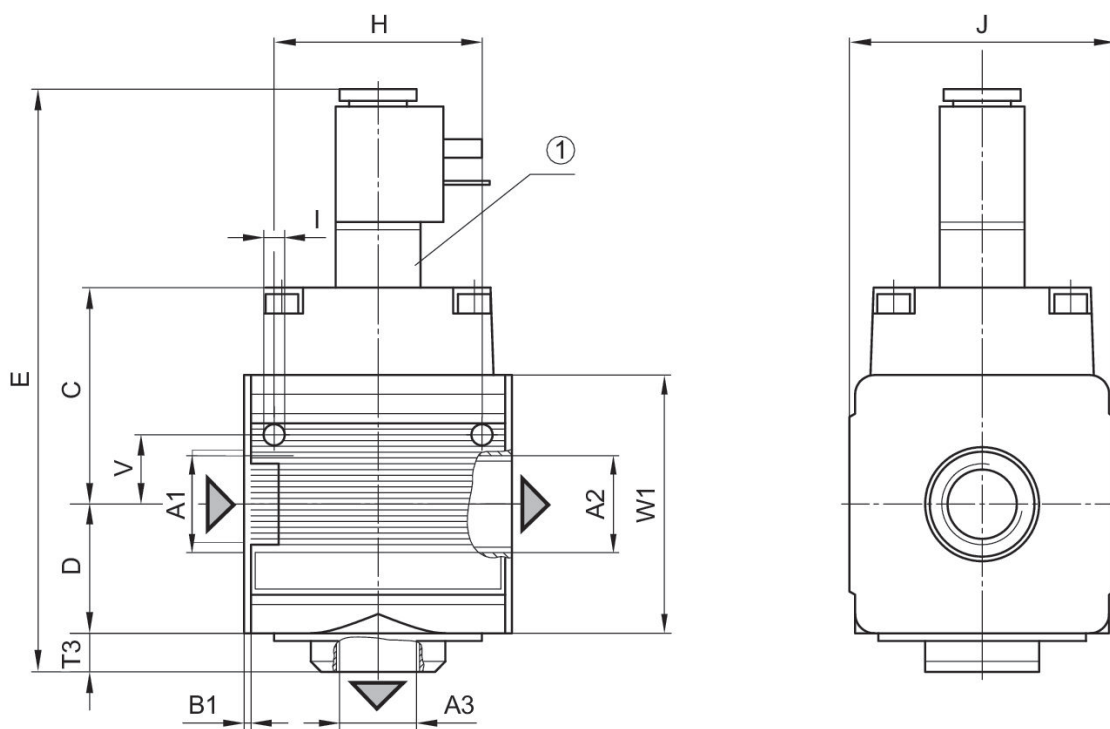
Ambient temperature min./max.: -10 °C ... 60 °C

Working pressure min./max.: 2.5 bar ... 10 bar



	Port	Nominal flow [l/min]	Operational voltage	Electrical connection	Operational voltage DC	Part No.
	G 1/2	4000		ISO 6952, form B	24 V	0821300932
	G 1/2	4000	230 V AC	ISO 6952, form B		0821300933

Dimensions



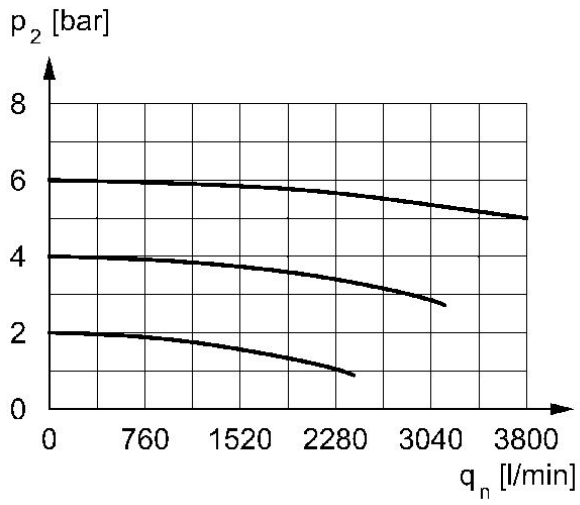
A1 = input A2 = output A3 = ventilation port  
1) electrically operated

Dimensions in mm

Part No.	A1	A2	A3	B1	C	D	E	H	I
0821300932	G 1/2	G 1/2	G 1/2	1.8	56.5	33.5	151	54	5.5
0821300933	G 1/2	G 1/2	G 1/2	1.8	56.5	33.5	151	54	5.5

Part No.	J	T3	W1
0821300932	69	10	67
0821300933	69	10	67

Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$



$p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

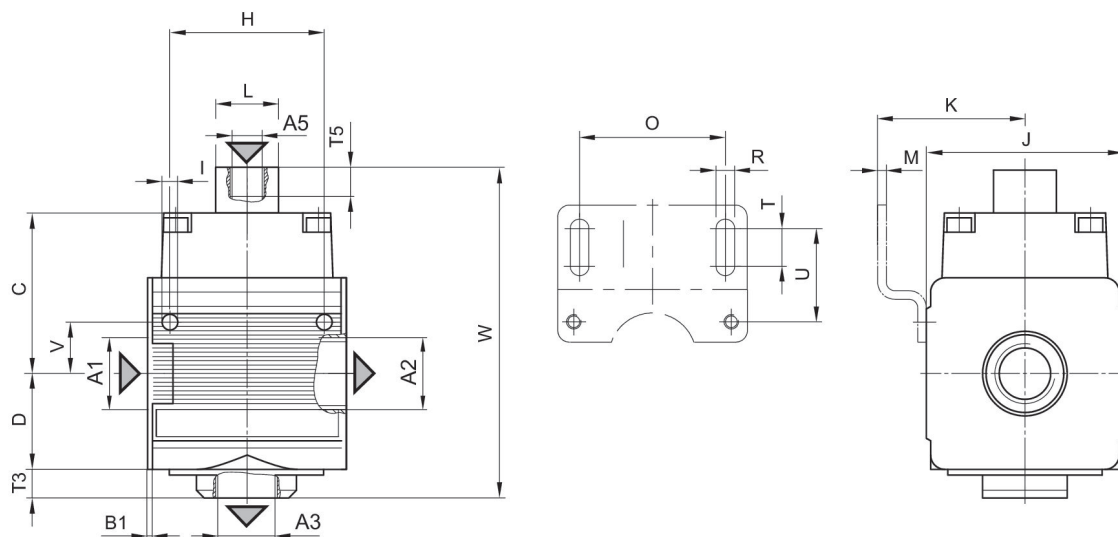
### 3/2-directional valve, pneumatically operated, Series NL4-SOV

Activation: Pneumatically  
 Parts: 3/2-directional valve  
 Ambient temperature min./max.: -10 °C ... 60 °C  
 Working pressure min./max.: 0 bar ... 16 bar



	Port	Nominal flow [l/min]	Part No.
	G 1/2	4000	0821300931

#### Dimensions



A1 = input  
 A2 = output  
 A3 = ventilation port  
 A5 = Control pressure connection

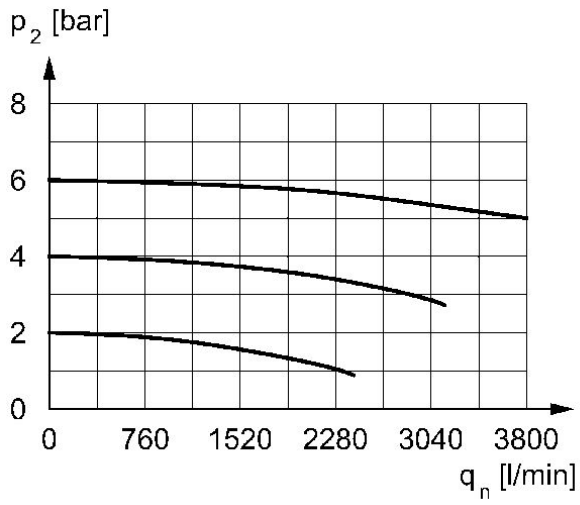
#### Dimensions in mm

Part No.	A1	A2	A3	A5	B1	C	D	F	H
0821300931	G 1/2	G 1/2	G 1/2	G 1/8	1.8	56.5	33.5	10	54

Part No.	I	J	K	L	M	O	R	T	T1
0821300931	5.5	69	54.4	22	3	50	6.4	13	1.8

Part No.	T5	U	V	W	W1
0821300931	13	33	18	116	67

Flow rate characteristic,  $p_2 = 0,05 - 7 \text{ bar}$



$p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

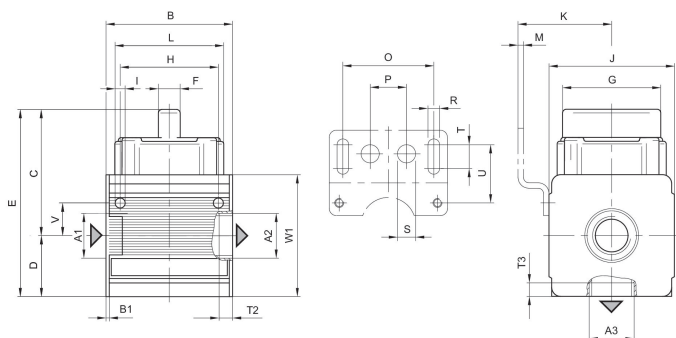
3/2-shut-off valve, mechanically operated, Series NL4-BAV



	Port	Nominal flow [l/min]	Part No.
	G 1/2	11000	0821300911
	G 3/4	11000	0821300913
	G 1/2	11000	0821300982
	G 3/4	11000	0821300983

0821300911, 0821300913

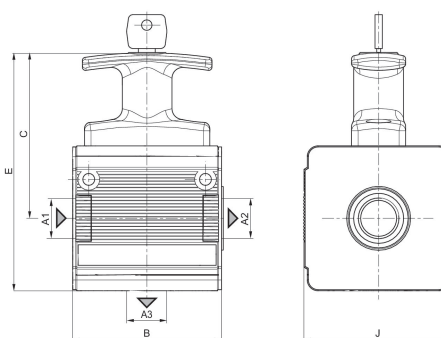
Dimensions



A1 = input  
A2 = output  
A3 = ventilation port

0821300982, 0821300983

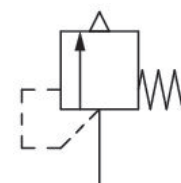
Dimensions



A1 = input  
A2 = output

**Series RV1**

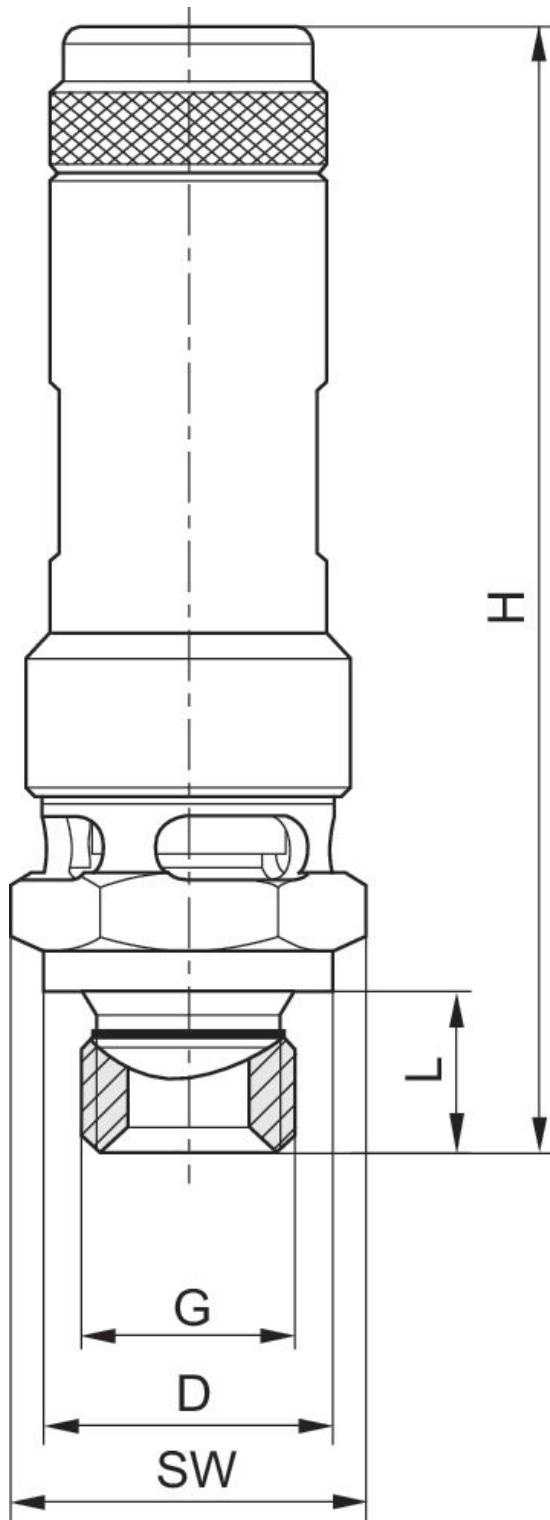
Compressed air connection: External thread  
 Certificates: CE declaration of conformity  
 Ambient temperature min./max.: -20 °C ... 100 °C  
 Working pressure min./max.: 0 bar ... 20 bar



Compressed air connection 1	Nominal flow Qn 1 to 2 [l/min]	Opening pressure of valve [bar]	Housing material	Part No.
G 1/4	676	0.8	Brass	R412007521
G 1/4	996	1.5	Brass	R412007522
G 1/4	1219	2	Brass	R412007523
G 1/4	1872	3.5	Brass	R412007524
G 1/4	2084	4	Brass	R412007525
G 1/4	2424	4.8	Brass	R412007526
G 1/4	2933	6	Brass	R412007527
G 1/4	3783	8	Brass	R412007528
G 1/4	4632	10	Brass	R412007529
G 1/4	5056	11	Brass	R412007530
G 1/4	6755	15	Brass	R412007531
G 1/4	7179	16	Brass	R412007532
G 3/8	2194	2	Brass	R412007533
G 3/8	3567	3.7	Brass	R412007534
G 3/8	3799	4	Brass	R412007535
G 3/8	4573	5	Brass	R412007721
G 3/8	5347	6	Brass	R412007536
G 3/8	5966	6.8	Brass	R412007537
G 3/8	6895	8	Brass	R412007538
G 3/8	8443	10	Brass	R412007539
G 3/8	9217	11	Brass	R412007540
G 3/8	13087	16	Brass	R412007541
G 1/2	1115	0.4	Brass	R412007542
G 1/2	3613	2.9	Brass	R412007720

Compressed air connection 1	Nominal flow Qn 1 to 2 [l/min]	Opening pressure of valve [bar]	Housing material	Part No.
G 1/2	4182	3.5	Brass	R412007690
G 1/2	4656	4	Brass	R412007691
G 1/2	5604	5	Brass	R412007692
G 1/2	6142	5.5	Brass	R412007699
G 1/2	6553	6	Brass	R412007696
G 1/2	7101	6.5	Brass	R412007702
G 1/2	7501	7	Brass	R412007698
G 1/2	8449	8	Brass	R412007697
G 1/2	9018	8.5	Brass	R412007693
G 1/2	9398	9	Brass	R412007694
G 1/2	10346	10	Brass	R412007700
G 1/2	10934	10.5	Brass	R412007701
G 1/2	11295	11	Brass	R412007695
G 1/2	12243	12	Brass	R412007703
G 1/2	16037	16	Brass	R412007543

Dimensions



G = connection 1

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
R412007533	G 3/8	22	75	10	24	40	10
R412007534	G 3/8	22	75	10	24	40	10
R412007535	G 3/8	22	75	10	24	40	10
R412007721	G 3/8	22	75	10	24	40	10
R412007536	G 3/8	22	75	10	24	40	10
R412007537	G 3/8	22	75	10	24	40	10
R412007538	G 3/8	22	75	10	24	40	10
R412007539	G 3/8	22	88	10	24	40	10
R412007540	G 3/8	22	88	10	24	40	10
R412007541	G 3/8	22	88	10	24	40	10
R412007542	G 1/2	26	78	12	27	50	15
R412007720	G 1/2	26	78	12	27	50	15
R412007690	G 1/2	26	78	12	27	50	15
R412007691	G 1/2	26	78	12	27	50	15
R412007692	G 1/2	26	78	12	27	50	15
R412007699	G 1/2	26	78	12	27	50	15
R412007696	G 1/2	26	78	12	27	50	15
R412007702	G 1/2	26	78	12	27	50	15
R412007698	G 1/2	26	78	12	27	50	15
R412007697	G 1/2	26	77.5	12	27	50	15
R412007693	G 1/2	26	91	12	27	50	15
R412007694	G 1/2	26	91	12	27	50	15
R412007700	G 1/2	26	91	12	27	50	15
R412007701	G 1/2	26	91	12	27	50	15
R412007695	G 1/2	26	91	12	27	50	15
R412007703	G 1/2	26	91	12	27	50	15
R412007543	G 1/2	26	91	12	27	50	15
R412007544	G 3/4	32	106	12	30	60	20
R412007684	G 3/4	32	106	12	30	60	20
R412007545	G 3/4	32	106	12	30	60	20
R412007546	G 3/4	32	106	12	30	60	20
R412007547	G 3/4	32	106	12	30	60	20
R412007548	G 3/4	32	106	12	30	60	20
R412007549	G 3/4	32	116	12	30	60	20
R412007550	G 3/4	32	116	12	30	60	20
R412007551	G 3/4	32	116	12	30	60	20
R412007552	G 3/4	32	116	12	30	60	20

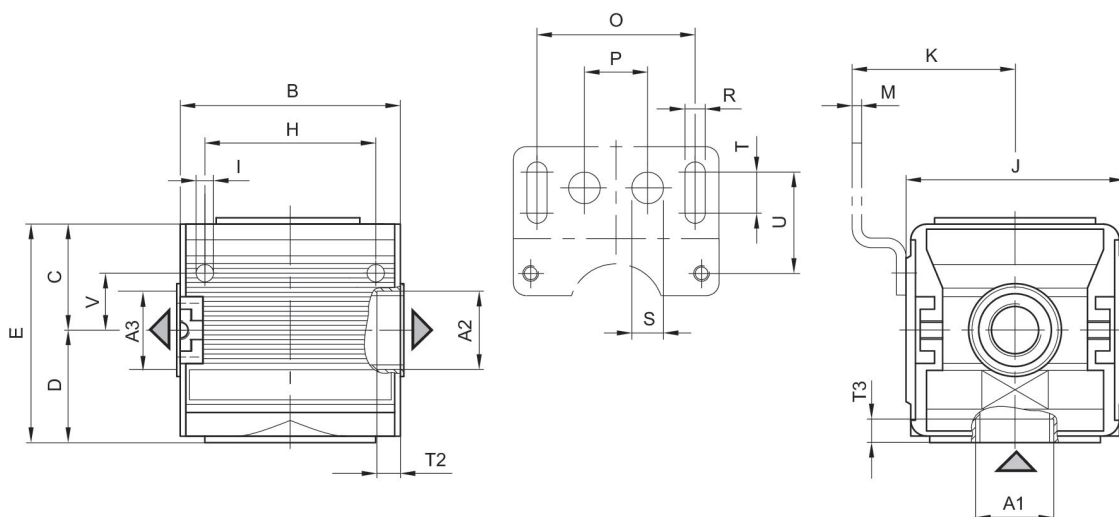
NW = nominal width

Distributor, Series NL4-DIC



	Port	Nominal flow [l/min]	Part No.
	G 3/4	11000	0821300928

Dimensions



A1 = input A2 = output A3 = output

Dimensions in mm

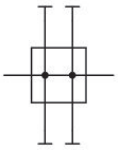
Part No.	A1	A2	A3	B	C	D	E	H	I
0821300928	G 1/2	G 1/2	G 1/2	66	35.5	35.5	71	54	5.5

Part No.	J	K	M	O	P	R	S	T	T2
0821300928	69	54.5	3	50	20	6.4	10	13	13

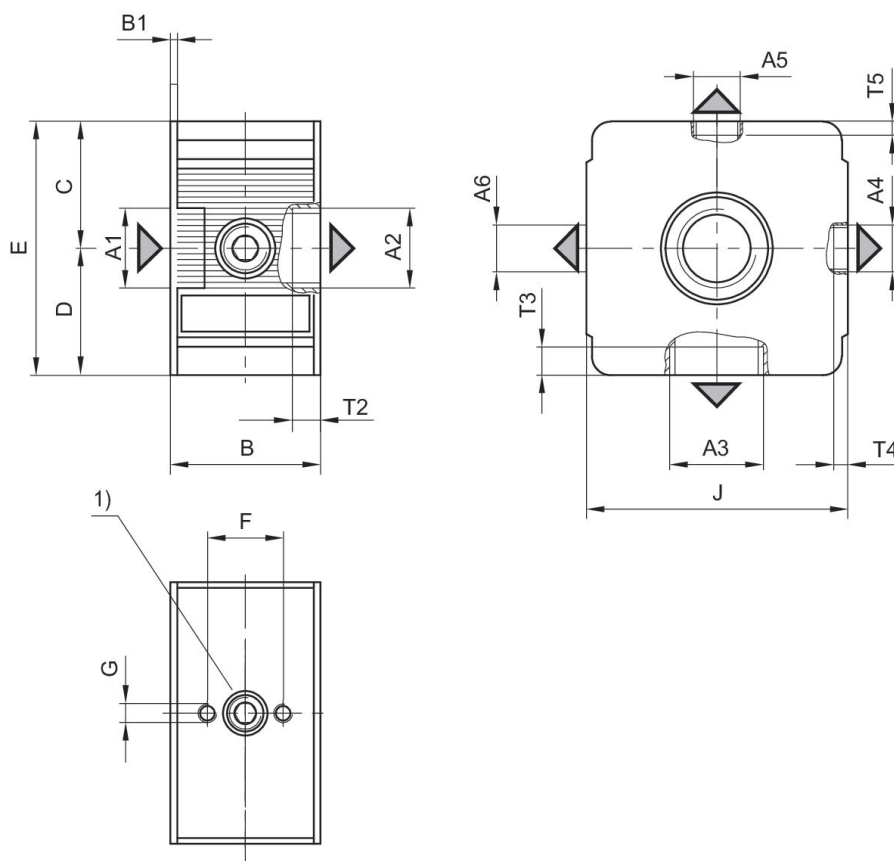
Part No.	T3	U	V
0821300928	10.5	33	18

Distributor, Series NL4-DIL



	Port	Nominal flow [l/min]	Part No.
	G 1/2	11000	0821300930

Dimensions



A1 = input A2 = output A3 = output A4 = output A5 = output A6 = output  
1) hole pattern for mechanical vacuum/pressure switch

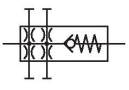
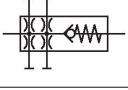
Dimensions in mm

Part No.	A1	A2	A3	A4	A5	A6	B	B1	C
0821300930	G 1/2	G 1/2	G 3/8	G 1/4	G 1/8	G 1/4	39.6	1.8	33.5

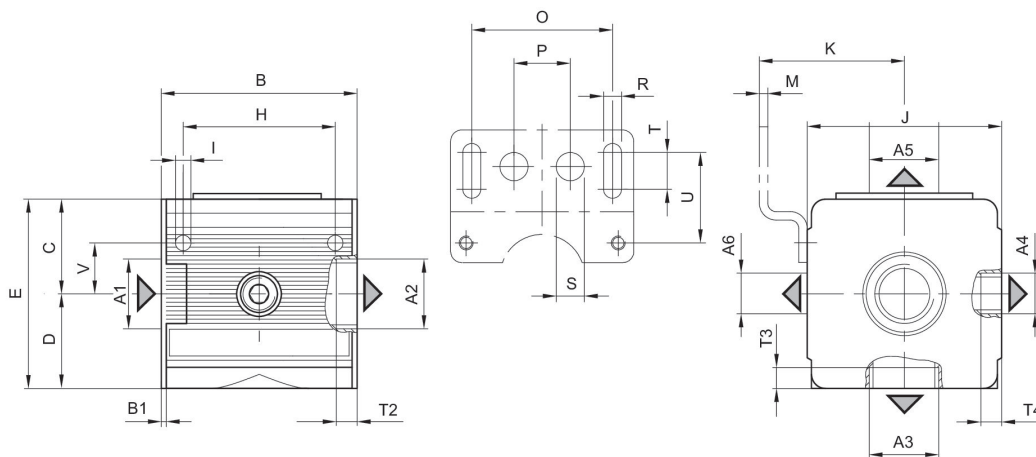
Part No.	D	E	F	G	J	T2	T3	T4	T5
0821300930	33.5	67	20	M5	69	14	10.5	7	8

Distributor, Series NL4-DIN



	Port	Nominal flow [l/min]	Part No.
	G 1/2	2400	0821300914
	G 3/4	2400	0821300916

Dimensions



A1 = input A2 = output A3 = output A4 = output A5 = output A6 = output

Dimensions in mm

Part No.	A1	A2	A3	A4	A5	A6	B	B1	C
0821300914	G 1/2	G 1/2	G 1/2	G 1/4	G 1/2	G 1/4	69.6	1.8	33.5
0821300916	G 3/4	G 3/4	G 1/2	G 1/4	G 1/2	G 1/4	69.6	1.8	33.5

Part No.	D	E	H	I	J	K	M	O	P
0821300914	33.5	67	54	5.5	69	54.5	3	50	20
0821300916	33.5	67	54	5.5	69	54.5	3	50	20

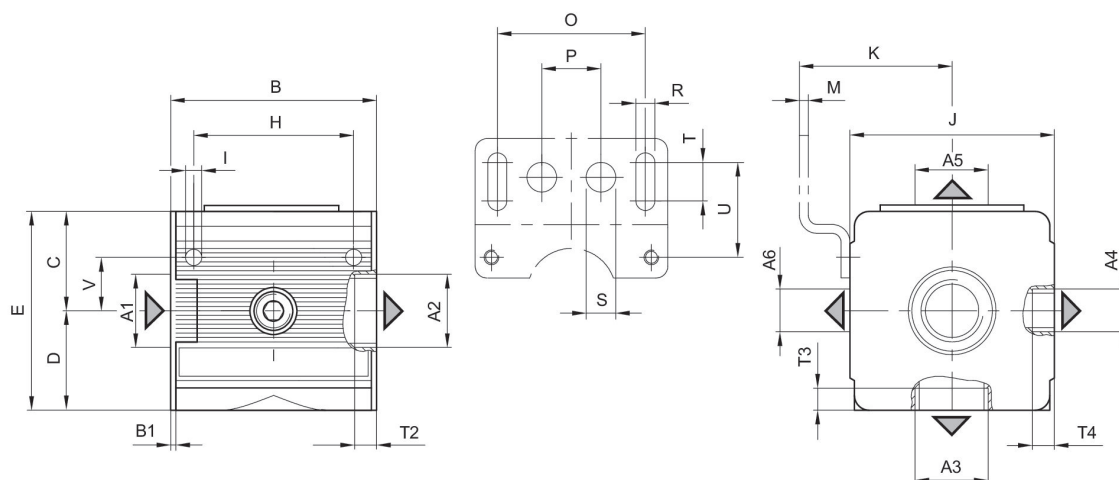
Part No.	R	S	T	T2	T3	T4	U	V
0821300914	6.4	10	13	13	7.5	9	33	18
0821300916	6.4	10	13	13	7.5	9	33	18

Distributor, Series NL4-DIS



	Port	Nominal flow [l/min]	Part No.
	G 1/2	11000	0821300917
	G 3/4	11000	0821300919

Dimensions



A1 = input A2 = output A3 = output A4 = output A5 = output A6 = output

Dimensions in mm

Part No.	A1	A2	A3	A4	A5	A6	B	B1	C
0821300917	G 1/2	G 1/2	G 1/2	G 1/4	G 1/2	G 1/4	69.6	1.8	33.5
0821300919	G 3/4	G 3/4	G 1/2	G 1/4	G 1/2	G 1/4	69.6	1.8	33.5

Part No.	D	E	H	I	J	K	M	O	P
0821300917	33.5	67	54	5.5	69	54.5	3	50	20
0821300919	33.5	67	54	5.5	69	54.5	3	50	20

Part No.	R	S	T	T2	T3	T4	U	V
0821300917	6.4	10	13	13	7.5	9	33	18
0821300919	6.4	10	13	13	7.5	9	33	18

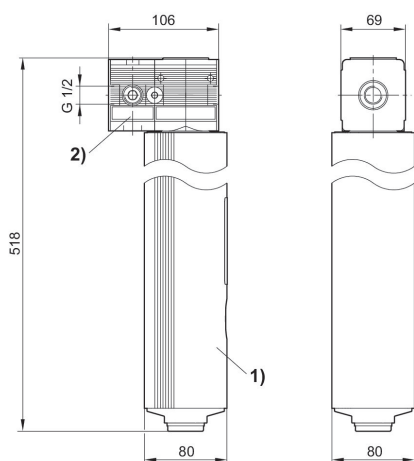
Diaphragm-type dryer, Series NL4-ADD



	Port	Nominal flow [l/min]	Material	Part No.
	G 1/2	500	Die cast zinc	R412007606
	G 1/2	650	Die cast zinc	R412007607
	G 1/2	950	Die cast zinc	R412007608

**R412007606**

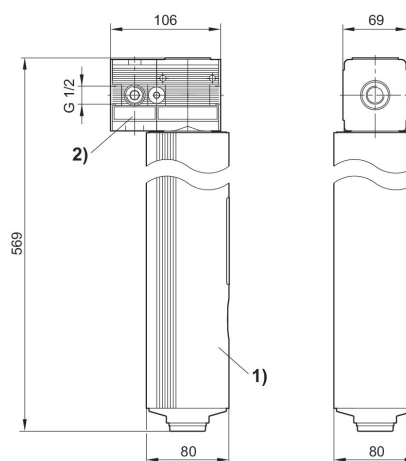
Dimensions in mm



- 1) Diaphragm-type dryer
- 2) Incl. second distributor

**R412007607**

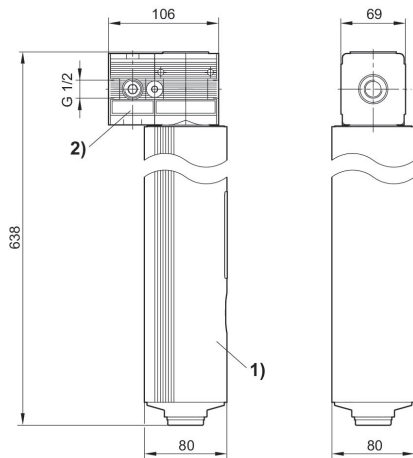
Dimensions in mm



- 1) Diaphragm-type dryer
- 2) Incl. second distributor

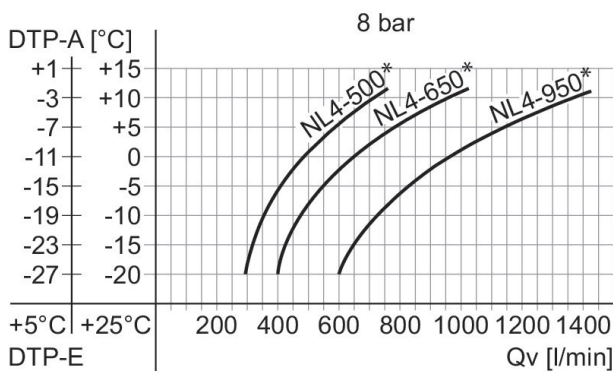
**R412007608**

Dimensions in mm



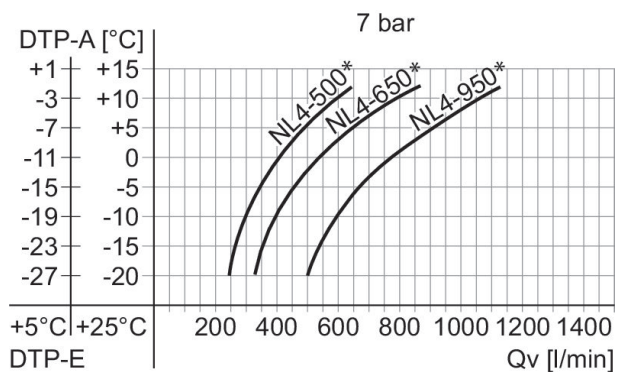
- 1) Diaphragm-type dryer
- 2) Incl. second distributor

**Performance charts**



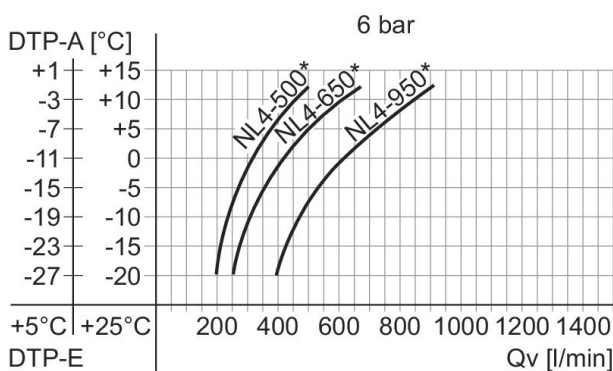
DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).  
\* Nominal flow Qn

**Performance charts**



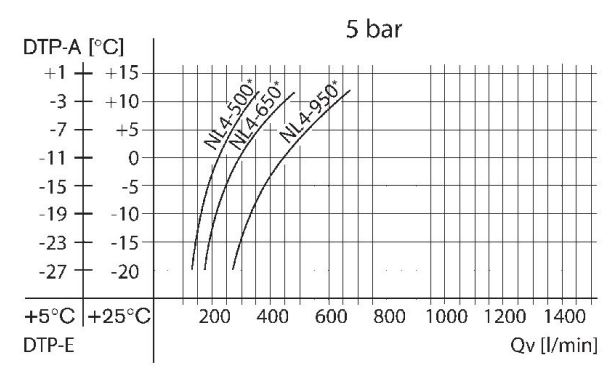
DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).  
\* Nominal flow Qn

**Performance charts**



DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).  
\* Nominal flow Qn

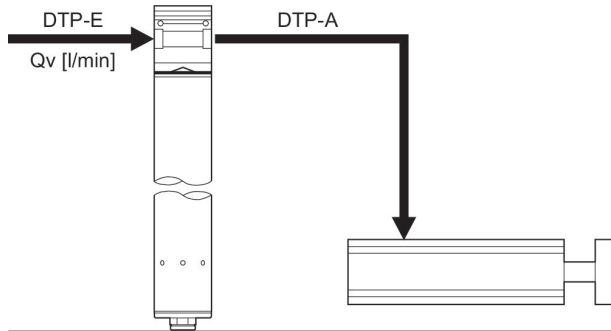
**Performance charts**



DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).  
\* Nominal flow Qn

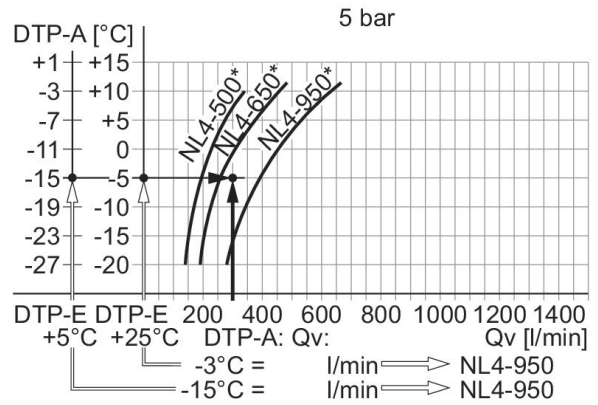
**Example**

**Wanted:**



**Example**

**Give values:**



Result: membrane dryer series NL4-950 (with a Qn of 950 l/min), part no. R412007608  
\* Nominal flow Qn

Reservoir, Series NL4-CLS, NL6-CLS



Condensate drain	Filter reservoir volume [cm³]	Fig.	Version	Part No.
semi-automatic, open without pressure	50	Fig. 1	reservoir, polycarbonate, without protective guard	1827009337
semi-automatic, open without pressure	50	Fig. 2	reservoir, metal, with inspection glass	1827009343
fully automatic, open without pressure	50	Fig. 3	reservoir, polycarbonate, without protective guard	1827009338
fully automatic, open without pressure	50	Fig. 4	reservoir, metal, with inspection glass	1827009344

Fig. 1

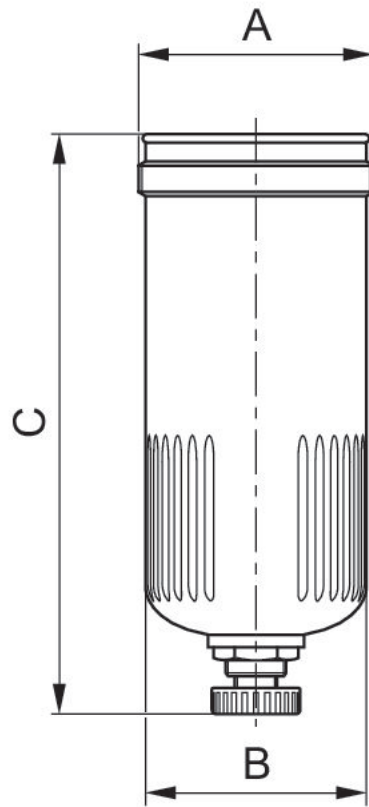


Fig. 2

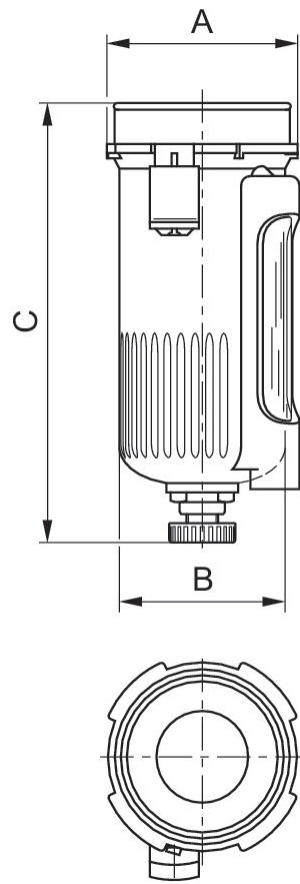


Fig. 3

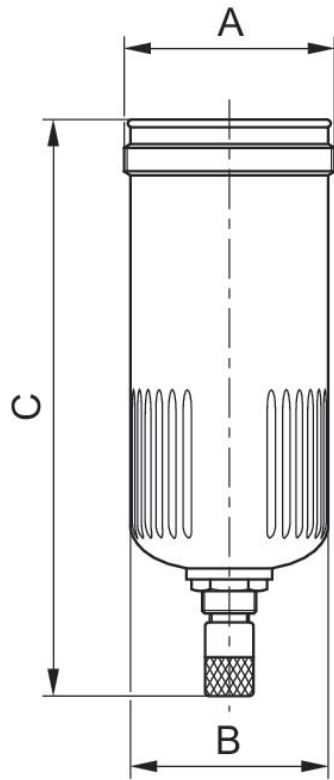
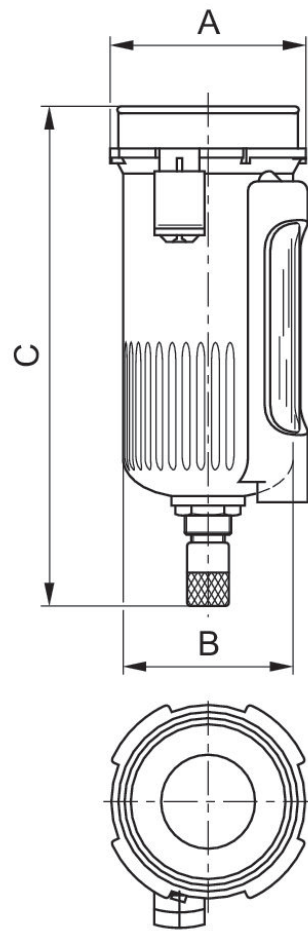


Fig. 4



Dimensions in mm

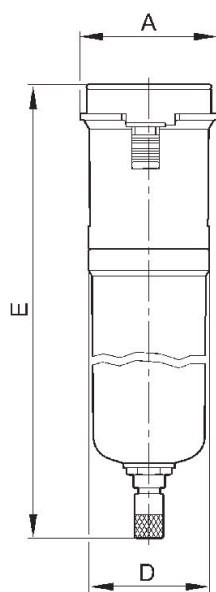
Part No.	A	B	C
1827009337	M56x1,5	53.5	132
1827009338	M56x1,5	53.5	150
1827009343	62.5	53.5	132
1827009344	62.5	53.5	150

Reservoir, Series NL4-CLC



Condensate drain	Filter reservoir volume [cm³]	Version	Part No.
fully automatic, open without pressure	50	Metal reservoir without window	1827009602
fully automatic, open without pressure	50	Metal reservoir without window	1827009603

Dimensions



Dimensions in mm

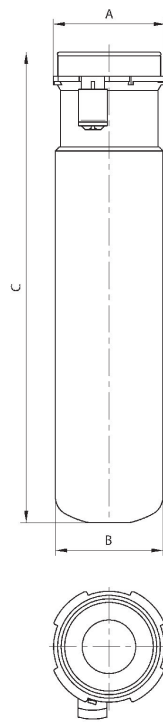
Part No.	A	D	E
1827009602	62.5	52	195
1827009603	62.5	52	281

**Reservoir, Series NL4-CLA**



Conden- sate drain	Filter reser- voir volume [cm³]	Version	Part No.
semi-auto- matic, open without pres- sure	50	Metal reser- voir without window	1827009608
semi-auto- matic, open without pres- sure	50	Metal reser- voir without window	1827009609

Dimensions



Dimensions in mm

Part No.	A	B	C
1827009608	62.5	56	172
1827009609	62.5	56	258

Reservoir, Series NL4-CBS, NL4-CLA, NL6-CBS



Fig.	Version	Part No.
Fig. 1	reservoir, polycarbonate, without protective guard	R412003757
Fig. 2	reservoir, polycarbonate, without protective guard	1827009336
Fig. 3	reservoir, metal, with inspection glass	1827009342

Fig. 1

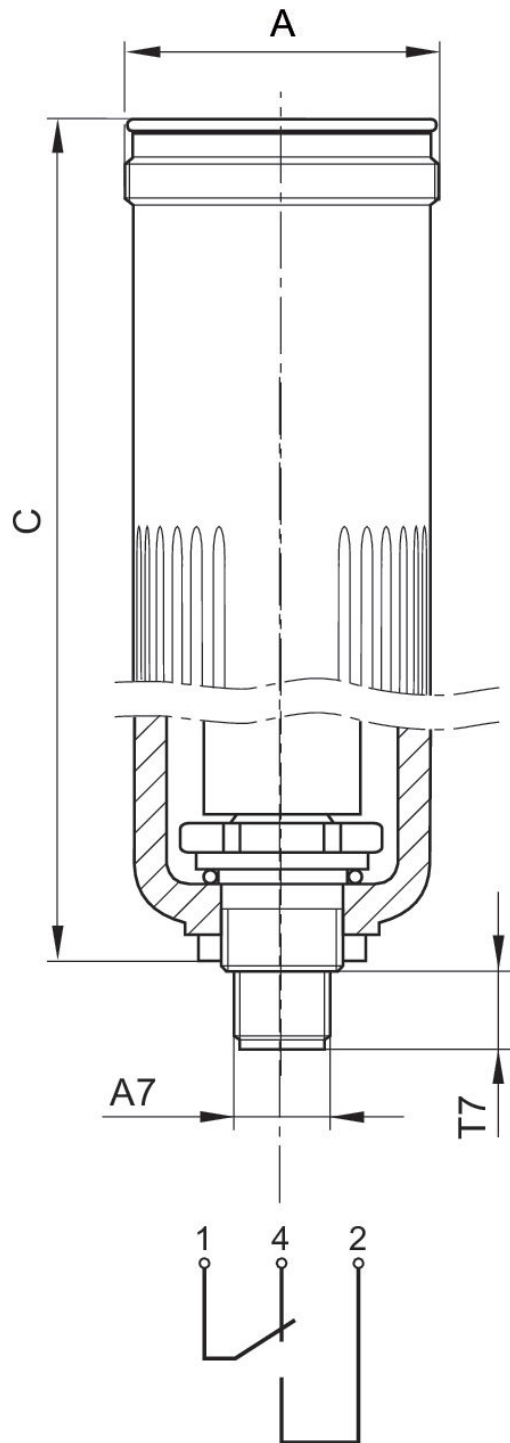


Fig. 2

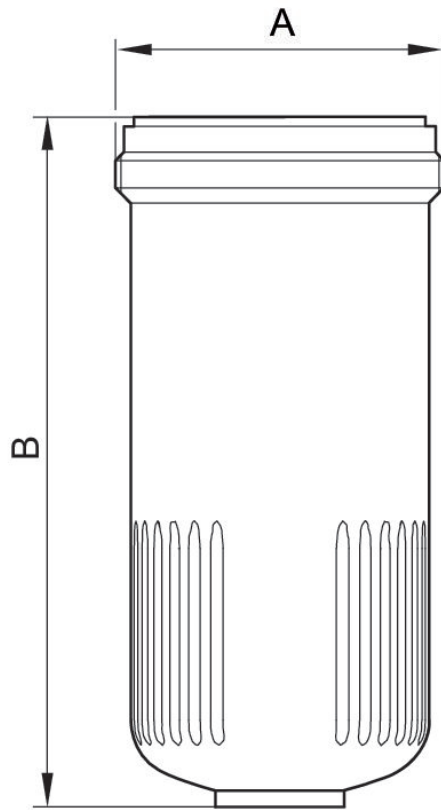
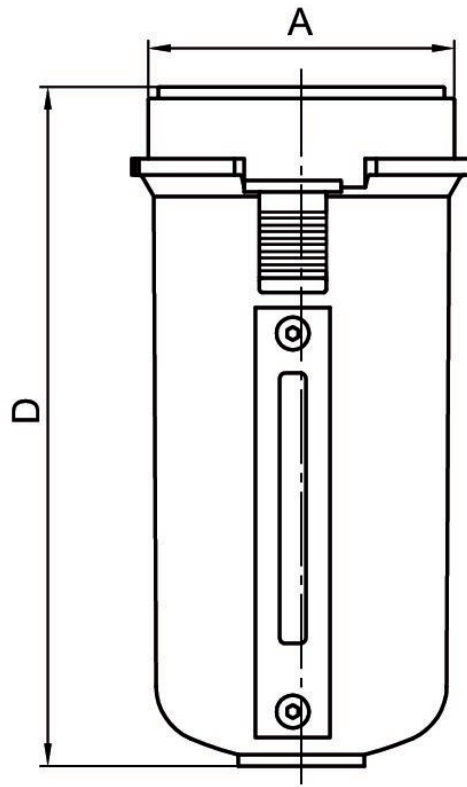


Fig. 3



Dimensions in mm

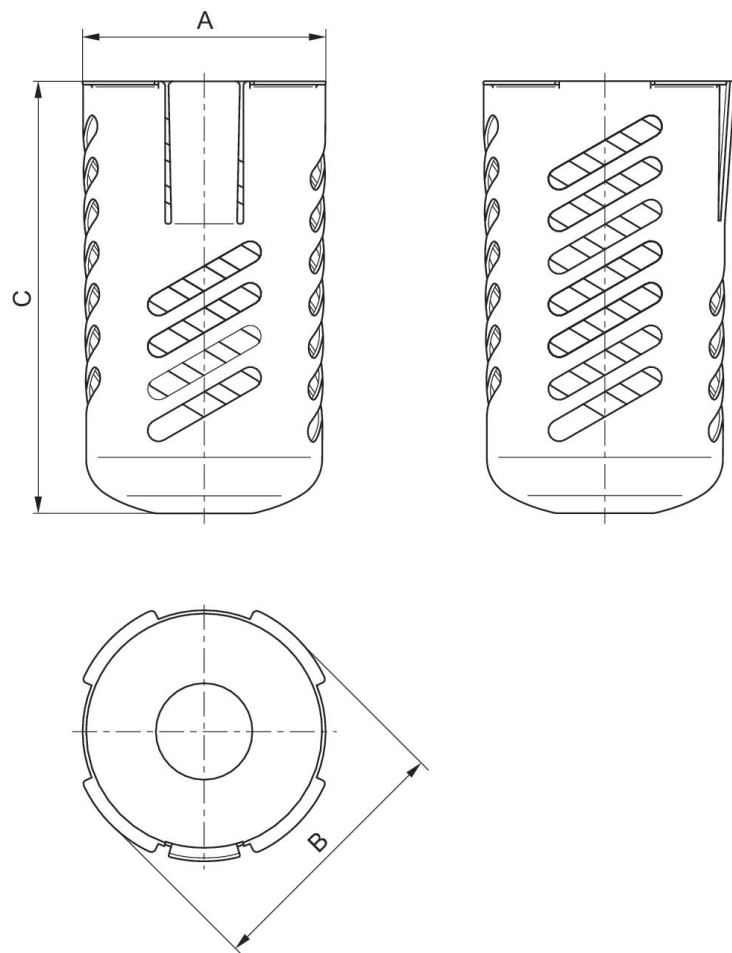
Part No.	A	A7	B	C	D	T7
1827009336	M56x1.5	-	117.5	129.5	-	-
1827009342	Ø53.1	-	-	119	119	-
R412003757	M56x1.5	M12x1	-	129.5	-	12

Protective guard



Type	Material	Weight [kg]	Part No.
NL4	Steel, chrome-plated	0.14	1820507001

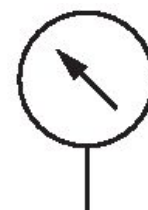
Dimensions



Part No.	Type	A	B	C
1820507001	NL4	57,8	62,6	103

### Pressure gauge, Series PG1-SNL

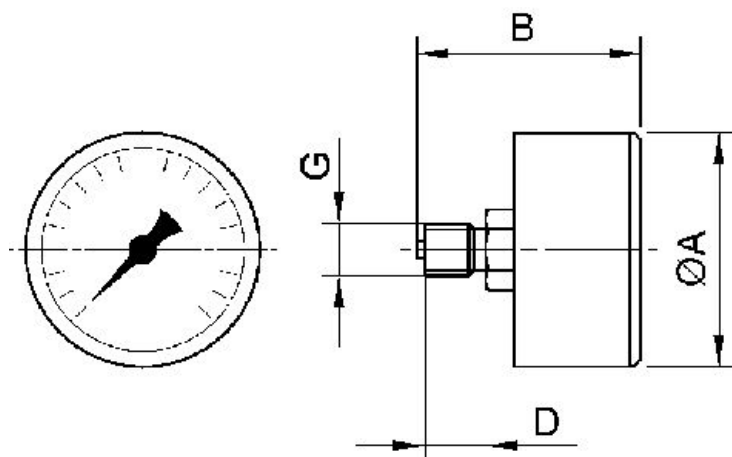
Background color: Black  
 Scale color: Green  
 Material viewing window: Mineral glass  
 Main scale unit (outside): bar  
 Secondary scale unit (inside): psi  
 Standardization: EN 837-1



Nominal diameter [mm]	Port	Min. main scale range of application [bar]	Max. main scale range of application [bar]	Min. main scale display range [bar]	Max. main scale display range [bar]	Min. working pressure [bar]	Max. working pressure [bar]	Part No.
50	G 1/4	0	12	0	16	0	16	R412004987

Scale value	Part No.
0.5	R412004987

Dimensions



### Dimensions in mm

Part No.	G	Nominal diameter	Ø A	B	D
R412004987	G 1/4	50 mm	49	48.3	13

### Pressure gauge, Series PG1-SNL

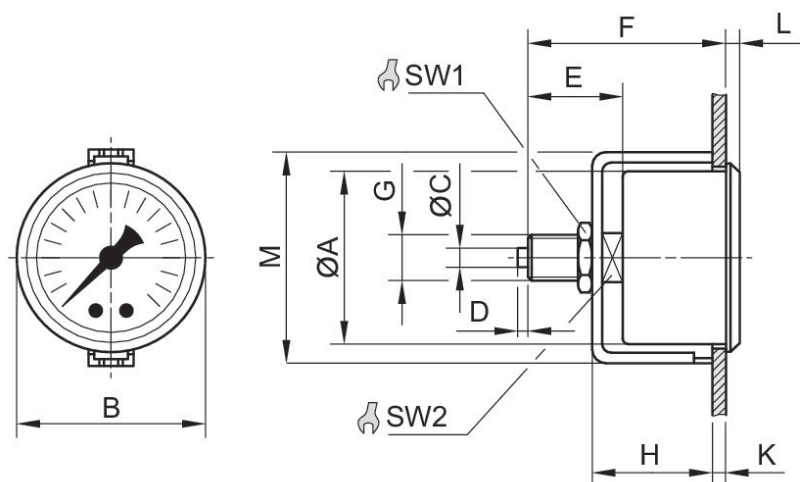
Type: Bourdon tube pressure gauge, For panel installation, with U-clip  
 Background color: Black  
 Scale color: Green  
 Material viewing window: Polystyrene  
 Main scale unit (outside): bar  
 Secondary scale unit (inside): psi  
 Standardization: EN 837-1



Nominal diameter [mm]	Port	Min. main scale range of application [bar]	Max. main scale range of application [bar]	Min. main scale display range [bar]	Max. main scale display range [bar]	Min. working pressure [bar]	Max. working pressure [bar]	Part No.
50	G 1/4	0	2	0	2.5	0	2.5	1827231032
63	G 1/4	0	2	0	2.5	0	2.5	1827231036
50	G 1/4	0	4	0	6	0	6	1827231033
63	G 1/4	0	4	0	6	0	6	1827231037
50	G 1/4	0	8	0	10	0	10	1827231034
63	G 1/4	0	8	0	10	0	10	1827231038
50	G 1/4	0	12	0	16	0	16	1827231035
63	G 1/4	0	12	0	16	0	16	1827231039

Scale value	Part No.
0.1	1827231032
0.1	1827231036
0.2	1827231033
0.2	1827231037
0.5	1827231034
0.5	1827231038
0.5	1827231035
0.5	1827231039

Dimensions



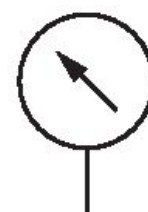
Dimensions in mm

Part No.	Compressed air connection	Nominal diameter	Ø A	B	C	D	E	F	H
1827231031	G 1/8	40 mm	40	43	-	-	25.5	49	32
1827231035	G 1/4	50 mm	50	54	5	3	29.5	51.5	34.5
1827231039	G 1/4	63 mm	62	67	5	3	27	53	36.3

Part No.	K	L	M	SW1	SW2
1827231031	4	4	49	17	14
1827231035	3	4.5	61	17	14
1827231039	4.2	5.5	75	17	14

### Pressure gauge, Series PG1-SNL

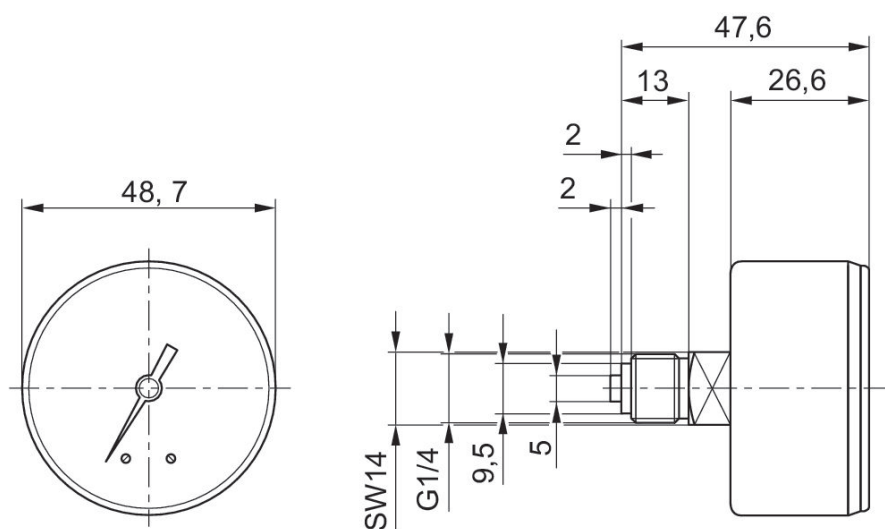
Background color: Black  
 Scale color: Green  
 Material viewing window: Polystyrene  
 Main scale unit (outside): bar  
 Secondary scale unit (inside): psi  
 Standardization: EN 837-1



Nominal diameter [mm]	Port	Min. main scale range of application [bar]	Max. main scale range of application [bar]	Min. main scale display range [bar]	Max. main scale display range [bar]	Min. working pressure [bar]	Max. working pressure [bar]	Part No.
50	G 1/4	0	1.2	0	1.6	0	1.6	1827231023

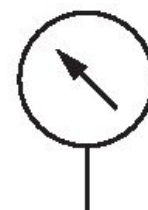
Scale value	Part No.
0.05	1827231023

Dimensions in mm



### Pressure gauge, Series PG1-SNL-ADJ

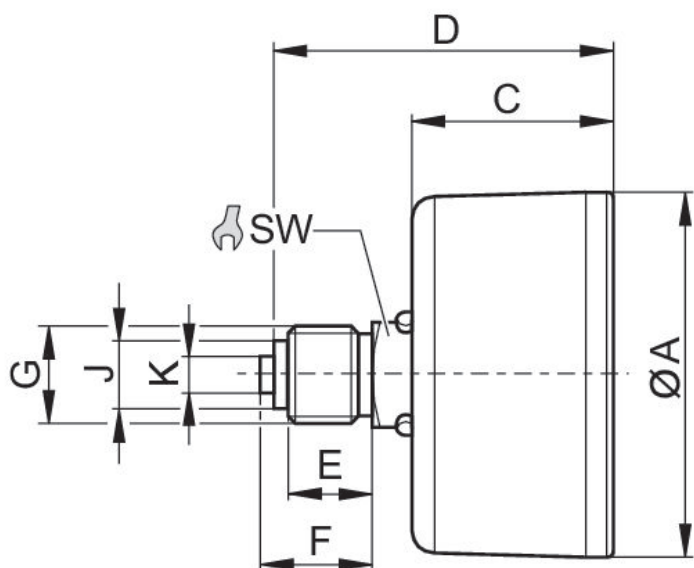
Background color: White  
 Scale color: Black  
 Material viewing window: Polystyrene  
 Main scale unit (outside): bar  
 Standardization: EN 837-1



Nominal diameter [mm]	Port	Min. main scale range of application [bar]	Max. main scale range of application [bar]	Min. main scale display range [bar]	Max. main scale display range [bar]	Min. working pressure [bar]	Max. working pressure [bar]	Part No.
50	G 1/4	0	1.2	0	1.6	0	1.6	R412003474
50	G 1/4	0	2	0	2.5	0	2.5	R412003475
50	G 1/4	0	3.2	0	4	0	4	R412003476
50	G 1/4	0	4	0	6	0	6	R412003477
50	G 1/4	0	8	0	10	0	10	R412003478
50	G 1/4	0	12	0	16	0	16	R412003479

Scale value	Part No.
0.05	R412003474
0.1	R412003475
0.2	R412003476
0.2	R412003477
0.5	R412003478
0.5	R412003479

Dimensions



Part No.	Compressed air connection	Nominal diameter	Ø A	C	D	E	F	J	K
1827231075	G 1/8	50 mm	49	26.5	41.5	8	10	8	-
R412003474	G 1/4	50 mm	49	26.5	44.5	11	15	9.5	5

Part No.	SW
1827231075	14
R412003474	14

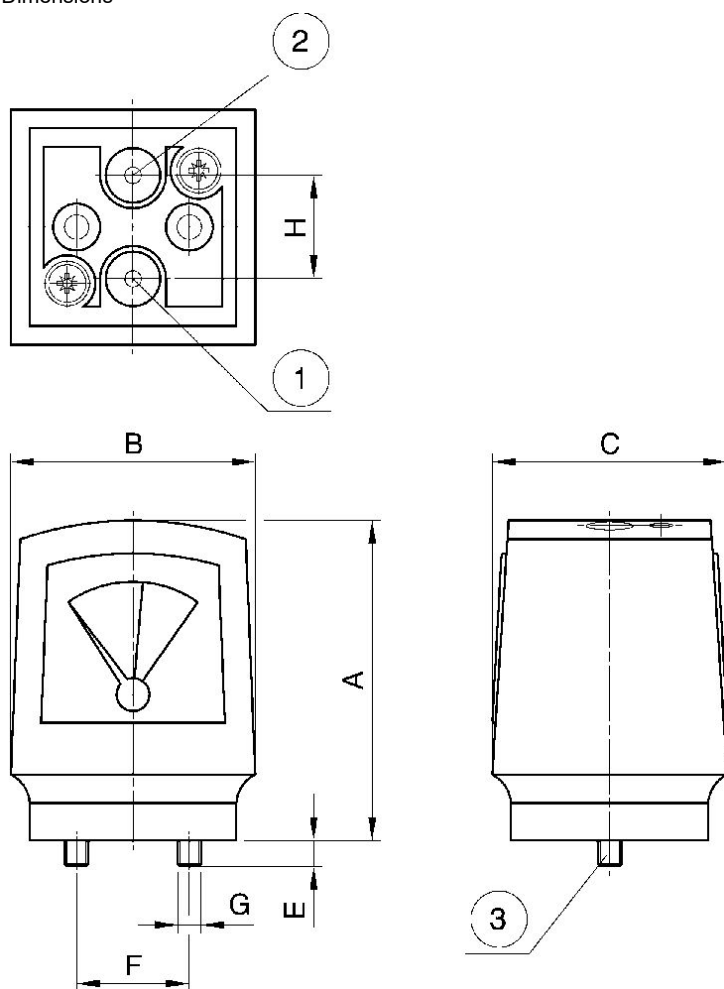
**Pressure gauge, Series PG1-DIM**

Background color: White  
 Scale color: Black  
 Material viewing window: Polystyrene  
 Main scale unit (outside): bar



Min. main scale range of application [bar]	Max. main scale range of application [bar]	Min. main scale display range [bar]	Max. main scale display range [bar]	Min. working pressure [bar]	Max. working pressure [bar]	Scale value	Certification	Part No.
0	0.5	0	0.5	0	16	0.1	Suitable for ATEX	1827231072

Dimensions



- 1) Input pressure p1 2) Output pressure p2
- 3) Mounting screw and 2 O-rings included in scope of delivery

Dimensions in mm

Part No.	A	B	C	E	F	G	H
1827231072	68	52	50	6	24	M5	22

### Pressure gauge, Series PG1-SNL

Type: Back port  
 Background color: Black  
 Scale color: Green  
 Material viewing window: Polystyrene  
 Main scale unit (outside): bar  
 Secondary scale unit (inside): psi  
 Standardization: EN 837-1

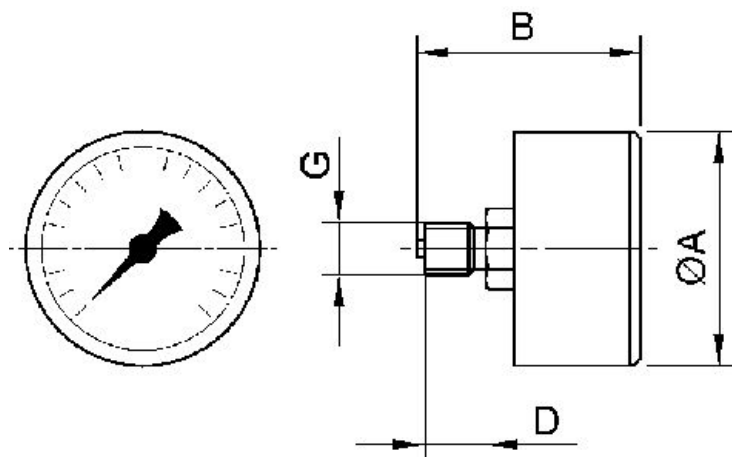


Nominal diameter [mm]	Port	Min. main scale range of application [bar]	Max. main scale range of application [bar]	Min. main scale display range [bar]	Max. main scale display range [bar]	Min. working pressure [bar]	Max. working pressure [bar]	Part No.
40	G 1/4	-0.8	0	-1	0	-1	0	1827231057
40	G 1/4	0	10	0	16	0	16	1827231047
40	G 1/4	0	4	0	6	0	6	1827231059
40	G 1/4	0	8	0	10	0	10	1827231060
50	G 1/4	-0.8	0	-1	0	-1	0	1827231054
50	G 1/4	0	2	0	2.5	0	2.5	1827231012
50	G 1/4	0	4	0	6	0	6	1827231016
50	G 1/4	0	8	0	10	0	10	1827231015
50	G 1/4	0	12	0	16	0	16	1827231010
63	G 1/4	-0.8	0	-1	0	-1	0	1827231055
63	G 1/4	0	12	0	16	0	16	1827231011

Scale value	Certification	Part No.
0.1		1827231057
0.5	Suitable for ATEX	1827231047
0.2		1827231059
0.5	Suitable for ATEX	1827231060
0.1		1827231054
0.1		1827231012
0.2	Suitable for ATEX	1827231016
0.5	Suitable for ATEX	1827231015

Scale value	Certification	Part No.
0.5	Suitable for ATEX	1827231010
0.1		1827231055
0.5	Suitable for ATEX	1827231011

Dimensions



Dimensions in mm

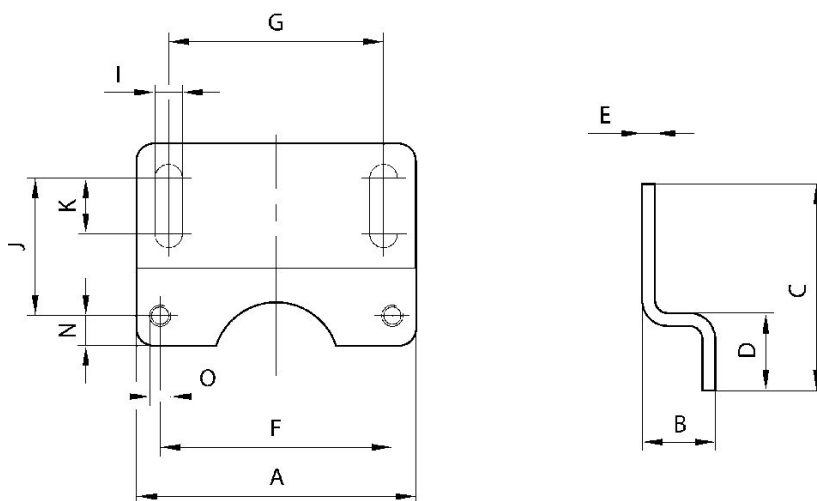
Part No.	G	Nominal diameter	Ø A	B	D
1827231059	G 1/4	40 mm	41	41.5	10
1827231016	G 1/4	50 mm	49	47.5	13

Mounting plate, Series NL4-MBR-...-W01



Material	Part No.
Steel, chrome-plated	1821336007

Dimensions



Part No.	A	B	C	D	E	F	G	I	J
1821336007	65	20	48	18	3	54	50	6.4	33

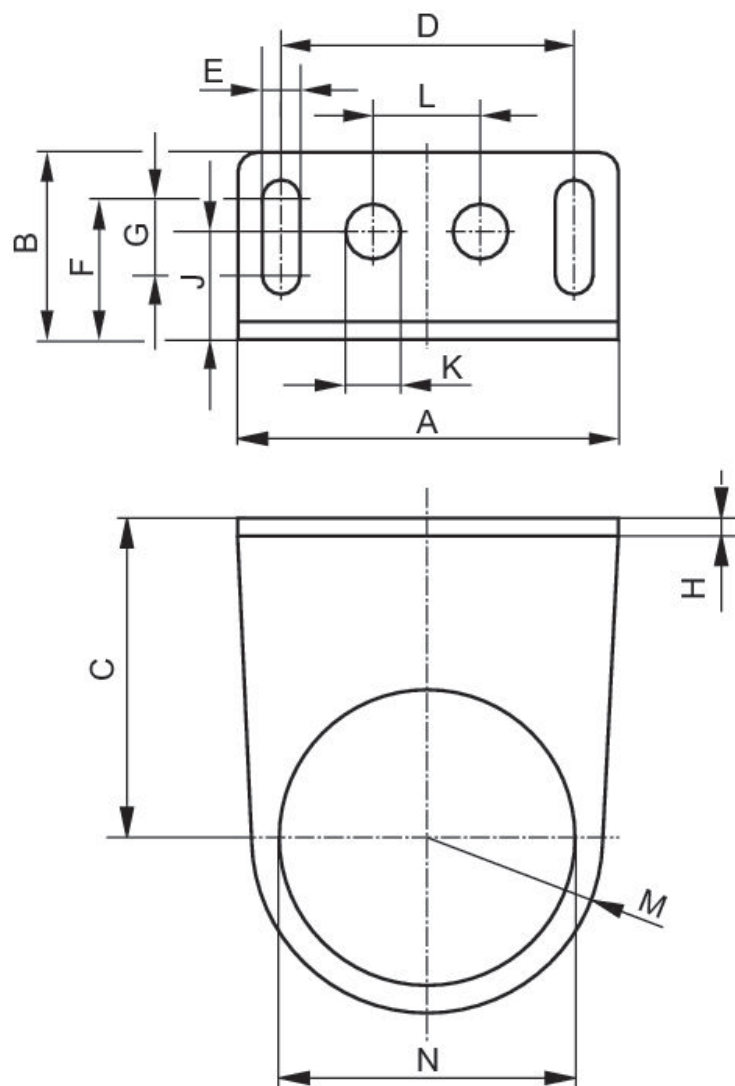
Part No.	K	N	O
1821336007	13	7	M5

Mounting bracket, Series NL4-MBR-...-W02



Material	Part No.
Steel, chrome-plat- ed	1821331014

Dimensions



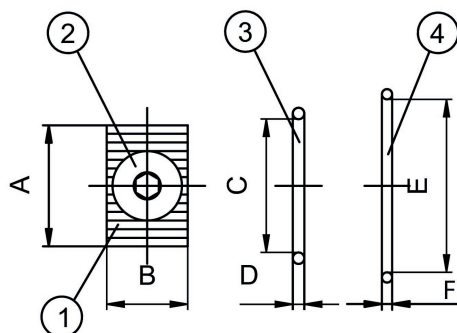
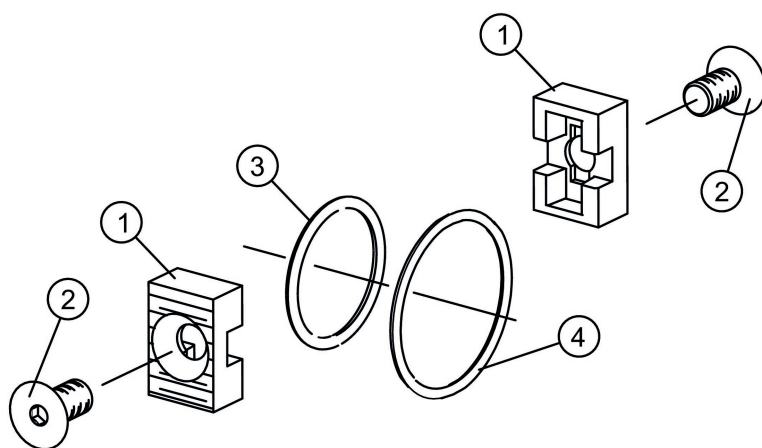
Part No.	A	B	C	D	E	F	G	H	J
1821331013	48	27	43.5	38	5.4	18.5	8	3	-
1821331014	65	32	54.5	50	6.4	24	13	3	19

Part No.	K	L	M	N
1821331013	-	-	20	30.5
1821331014	10	20	30	50.5

Block assembly kit, Series NL4-MBR-...-W04



Weight [kg]	Part No.
0.0248	1827009360



1) clamp mounting 2) screw 3) O-ring 4) O-ring

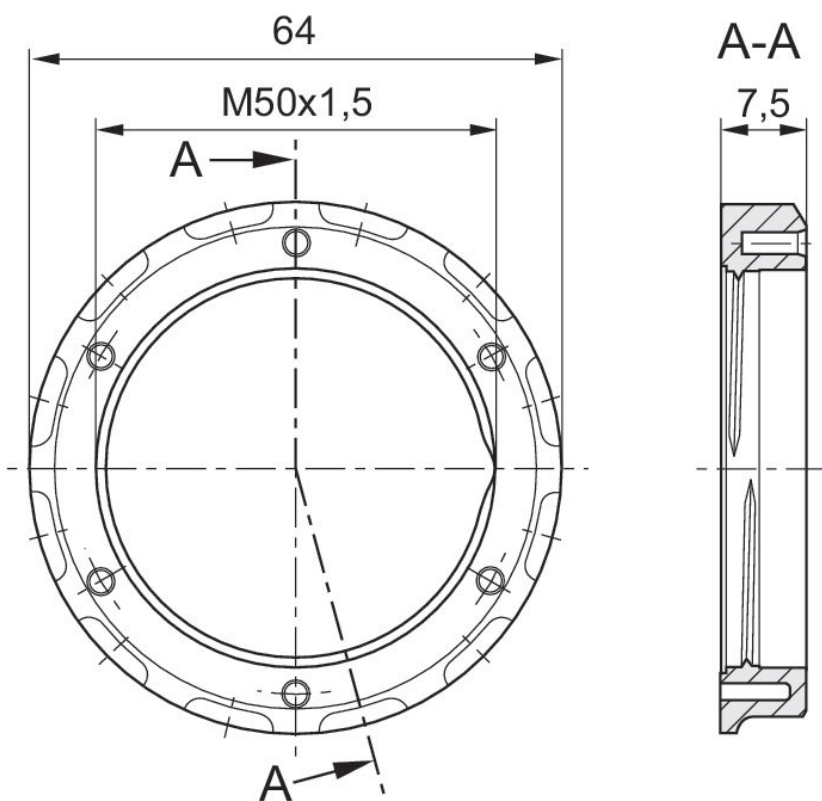
Part No.	A	B	C	D	E	F
1827009360	20.9	14	23	2	29.87	1.78

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



Port	Material	Scope of delivery [piece]	Part No.
M50x1.5	Plastic	2	1829234071

Dimensions in mm



### AVENTICS Series SI1 Silencers

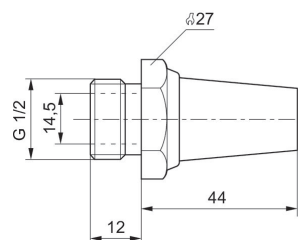
Compressed air connection type: External thread  
 Silencer material: Sintered bronze  
 Ambient temperature min./max.: -25 °C ... 80 °C  
 Working pressure min./max.: 0 bar ... 10 bar



G	Sound pressure level [dB]	Nominal flow [l/min]	Delivery unit [piece]	Weight [kg]	Part No.
G 1/2	90	7223	2	0.08	1827000003

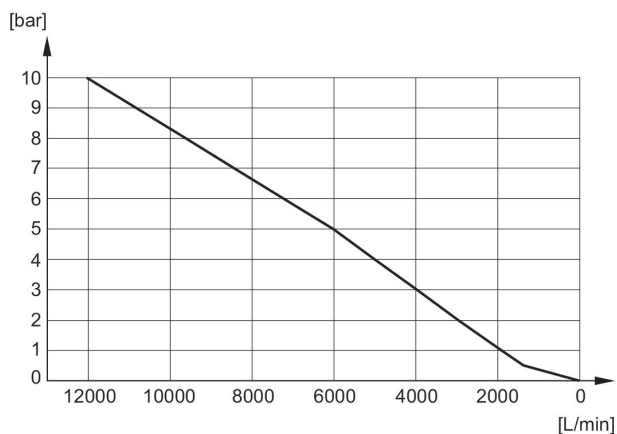
#### 1827000003

Dimensions in mm



#### Flow diagram

#### 1827000003



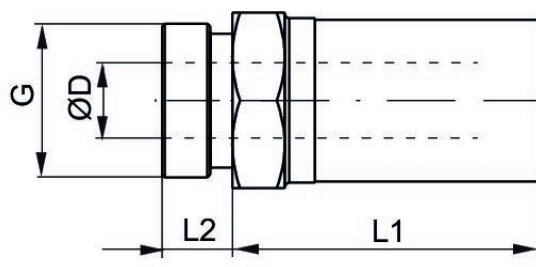
**AVENTICS Series SI1 Silencers**

Compressed air connection type: External thread  
 Silencer material: Stainless Steel  
 Ambient temperature min./max.: -20 °C ... 150 °C  
 Working pressure min./max.: 0 bar ... 10 bar



G	Sound pressure level [dB]	Nominal flow [l/min]	Delivery unit [piece]	Weight [kg]	Part No.
G 1/2	95	5649	1	0.048	R412010084

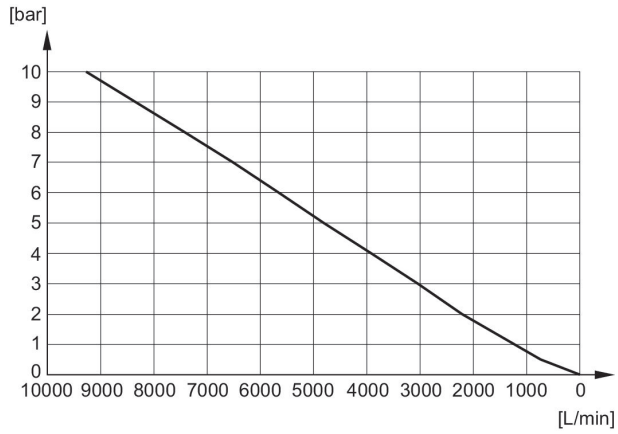
Dimensions



Part No.	Port G	SW	Ø D	L1	L2
R412010090	M5	9	3.1	16.5	5
R412010081	G 1/8	12	6.6	21.5	7
R412010082	G 1/4	15	8.6	24	9
R412010083	G 3/8	19	12.1	31	9
R412010084	G 1/2	23	15.3	38.5	9.5
R412010085	G 3/4	30	19.3	47.5	11
R412010086	G 1	36	25.5	56	15

Flow diagram

R412010084



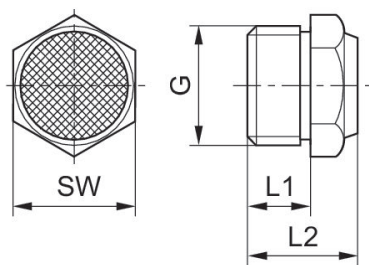
### AVENTICS Series SI1 Silencers

Compressed air connection type: External thread  
 Silencer material: Sintered bronze  
 Ambient temperature min./max.: -25 °C ... 80 °C  
 Working pressure min./max.: 0 bar ... 10 bar



G	Sound pressure level [dB]	Nominal flow [l/min]	Delivery unit [piece]	Weight [kg]	Part No.
G 1/2	85	2568	2	0.035	1827000035

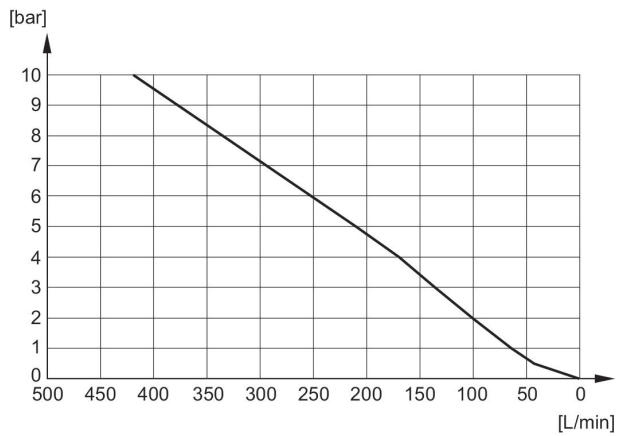
Dimensions



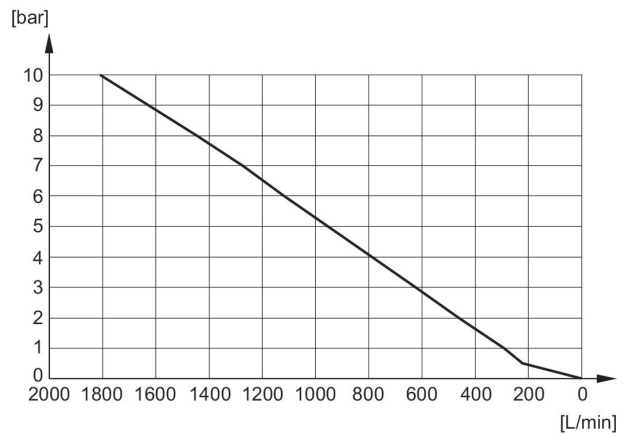
Part No.	Port G	L1	L2	SW
1827000032	M5	5	10.3	7
1827000031	G 1/8	6	11.5	13
1827000033	G 1/4	8	13.5	17
1827000034	G 3/8	10	17.5	22
1827000035	G 1/2	12	19.5	27
8145003400	G 3/4	14	22.5	32
8145001000	G 1	16	22.5	41

Sound pressure level measured at 6 bar at 1 m distance

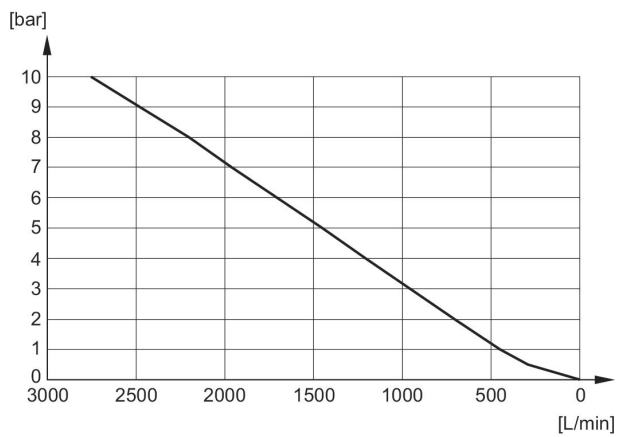
**Flow diagram 1827000032**



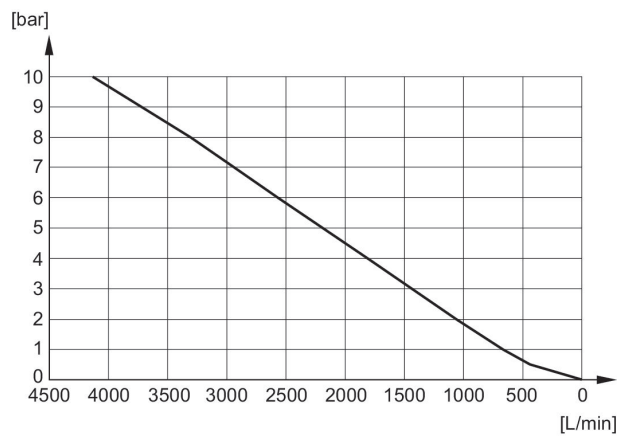
**Flow diagram 1827000033**



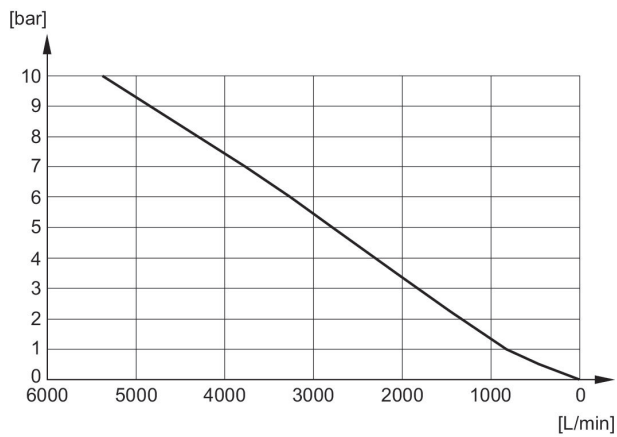
**Flow diagram 1827000034**



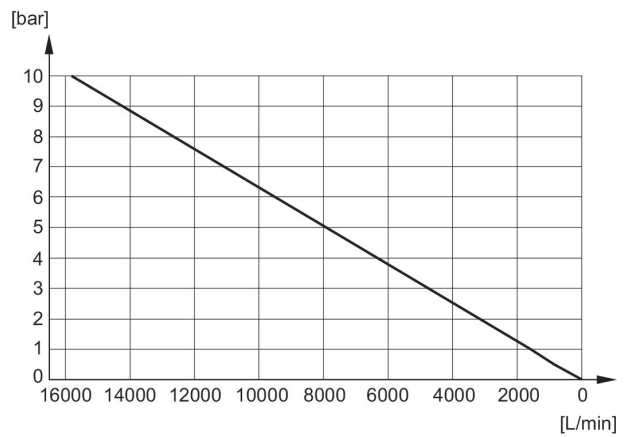
**Flow diagram 1827000035**



**Flow diagram 8145003400**



**Flow diagram 8145001000**



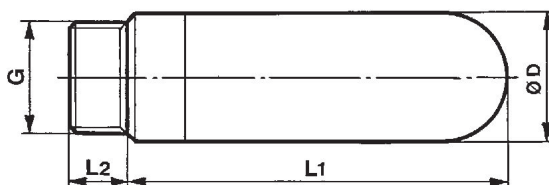
### AVENTICS Series SI1 Silencers

Compressed air connection type: External thread  
 Silencer material: Polyethylene  
 Ambient temperature min./max.: -25 °C ... 80 °C  
 Working pressure min./max.: 0 bar ... 10 bar



G	Sound pressure level [dB]	Nominal flow [l/min]	Delivery unit [piece]	Weight [kg]	Part No.
G 1/2	88	7142	1	0.013	1827000022

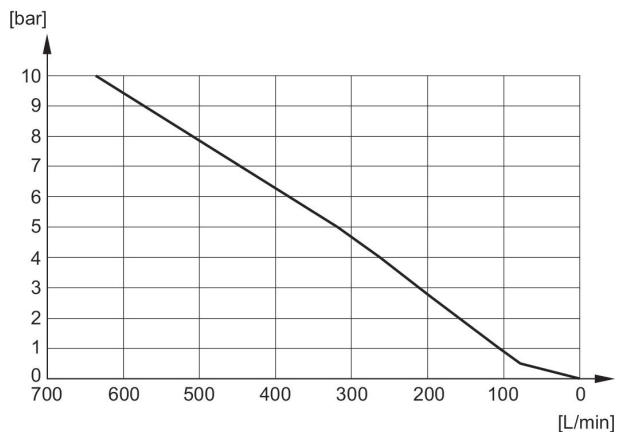
Dimensions



Part No.	Port G	Ø D	L1	L2
1827000018	M5	6.5	17.5	4
1827000019	G 1/8	12.5	28.5	5.5
1827000020	G 1/4	15.5	34.5	8
1827000021	G 3/8	18.5	56	11.5
1827000022	G 1/2	23.3	66.5	11
1827000023	G 3/4	38.5	115.5	16
1827000024	G 1	49	140	21

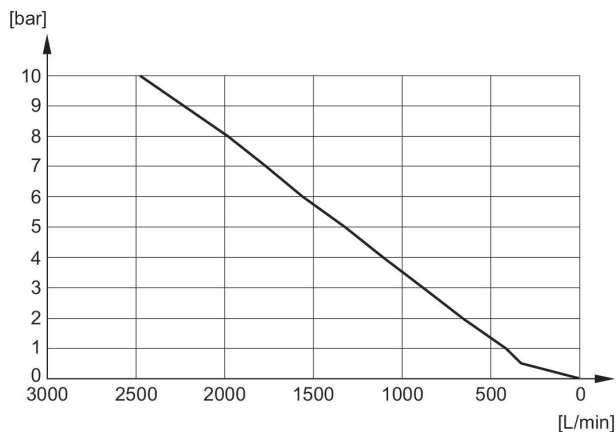
Flow diagram

1827000018



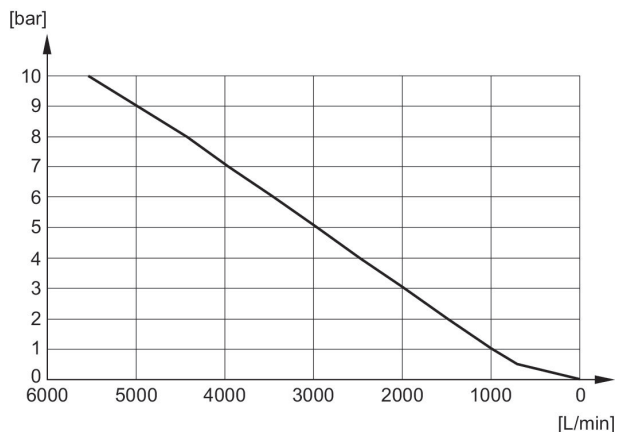
Flow diagram

1827000019



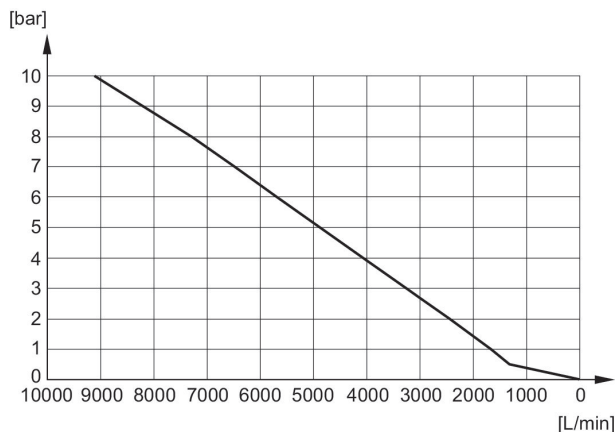
Flow diagram

1827000020



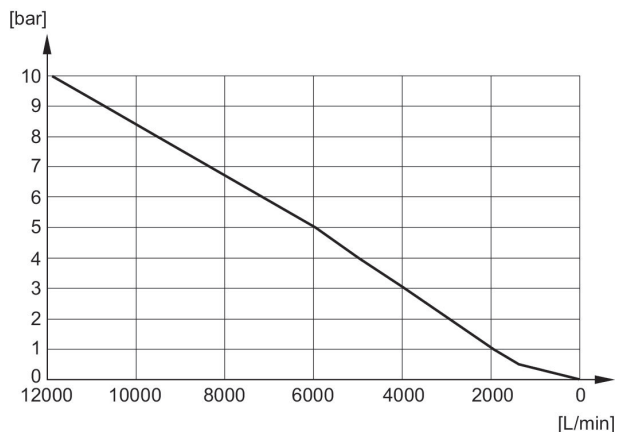
Flow diagram

1827000021



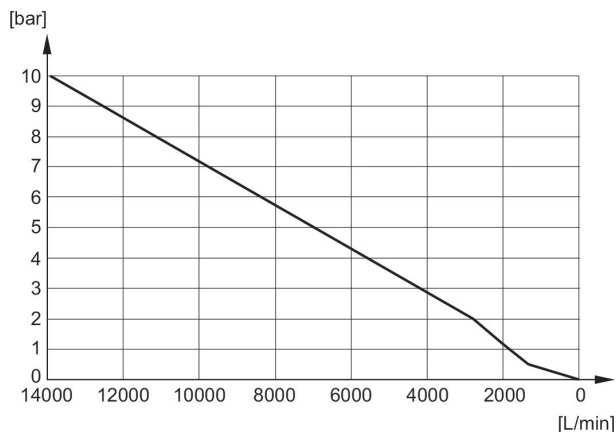
Flow diagram

1827000022



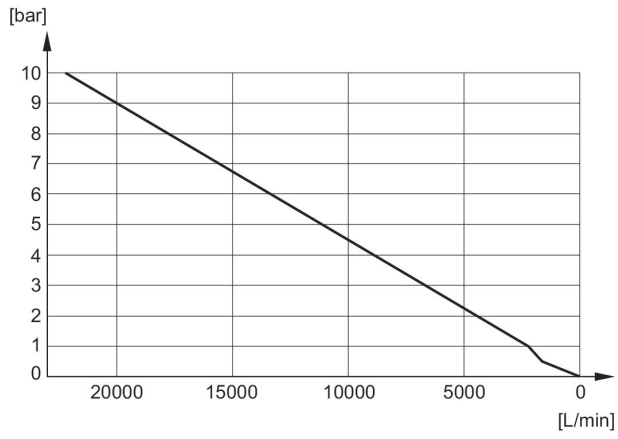
Flow diagram

1827000023



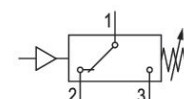
Flow diagram

1827000024



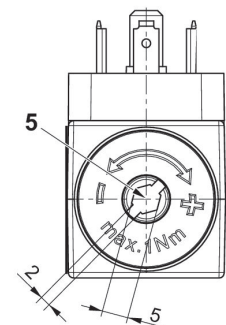
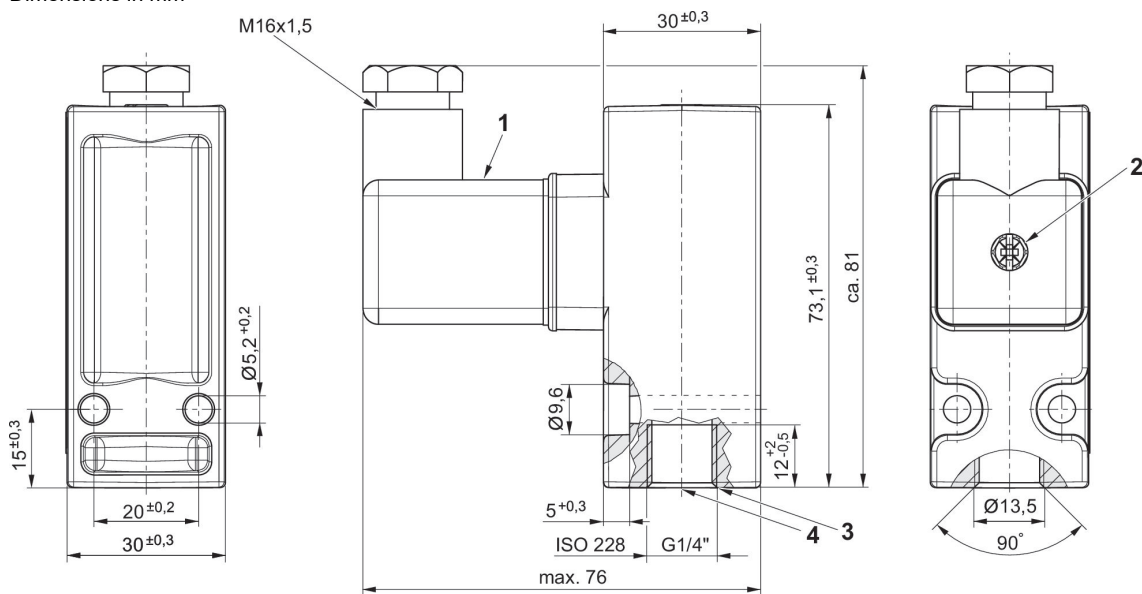
### Pressure Switches, Series PM1

Compressed air connection type: Internal thread  
 Electrical connection 2, thread size: EN 175301-803, form A  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -10 °C ... 80 °C



Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against over-pressure	Hysteresis	Mounting orientation	Part No.
G 1/4	-0.9	0	80 bar	max. switching pressure difference	Any	R412010711
G 1/4	0.2	16	80 bar	max. switching pressure difference	Any	R412010713
G 1/4	-0.9	3	80 bar	max. switching pressure difference	Any	R412022752

Dimensions in mm



- 1) Valve plug connector
- 2) Mounting screw
- 3) sealing surface
- 4) Tightening torque MA = 12 + 1 Nm
- 5) Adjustment screw, self-holding

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

U [V]	I [A] 1)	I [A] 2)
30-250	5	-
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**

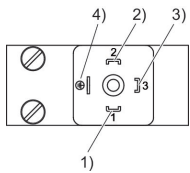
U [V]	I [A] 1) 3)	I [A] 2) 4)
30-250	3	-
30 / 48 / 60 / 125	-	2 / 0,55 / 0,4 / 0,05

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

- 1) AC
- 2) DC
- 3)  $\cos \approx 0,7^\circ$
- 4) L/R  $\approx 10$  ms

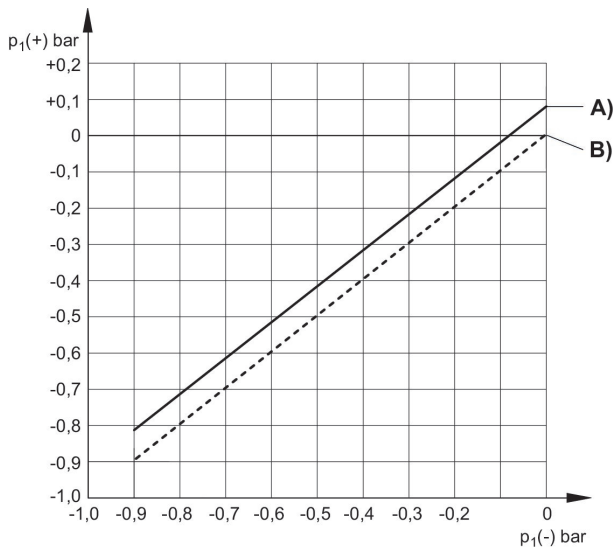
**R412010711, R412010713, R412022752**

PIN assignment for valve plug connectors



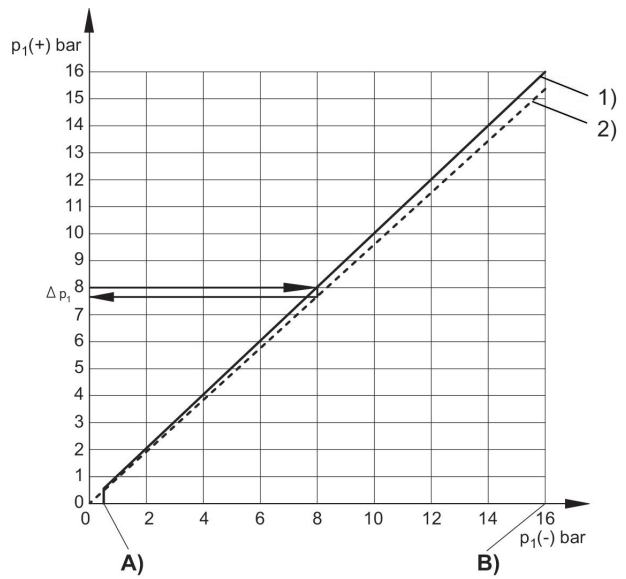
Pin	Allocation
1	+UB
2	break contact
3	NO (make contact)
4	GND

**Differential switching pressure characteristic curve (-0,9 Differential switching pressure characteristic curve (0,2 - 0 bar)**



A)  $p_1(-)$ , min.  
 B)  $p_1(-)$ , max.  
 $p_1(+)$  = upper switching pressure with increasing pressure  
 $p_1(-)$  = lower switching pressure with decreasing pressure

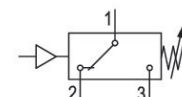
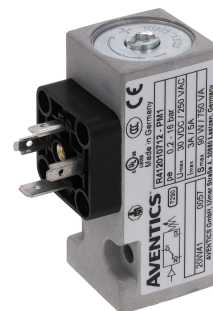
**Differential switching pressure characteristic curve (0,2 - 16 bar)**



A)  $p_1(-)$ , min.  
 B)  $p_1(-)$ , max.  
 1) Rising  
 2) Falling  
 $p_1(+)$  = upper switching pressure with increasing pressure  
 $p_1(-)$  = lower switching pressure with decreasing pressure  
 $\Delta p_1$  = max. operating pressure difference or hysteresis Example:  $p_1(+)$  = 8 bar >  $p_1(-)$  = 7,6 bar  $\Delta p_1$  = 0,4 bar

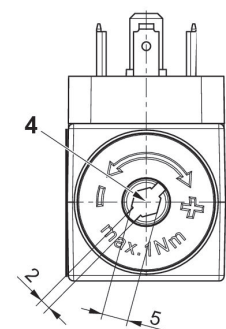
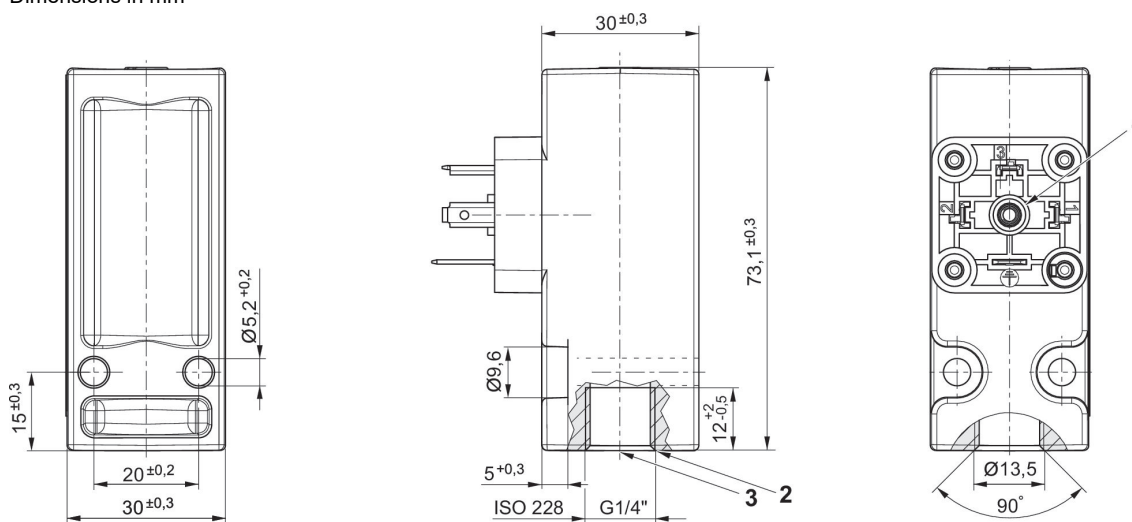
### Pressure Switches, Series PM1

Compressed air connection type: Internal thread  
 Electrical connection 2, thread size: EN 175301-803, form A  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -10 °C ... 80 °C



Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against over-pressure	Hysteresis	Mounting orientation	Part No.
G 1/4	0.2	16	80 bar	max. switching pressure difference	Any	R412010712

Dimensions in mm



- 1) Mounting screw
- 2) sealing surface
- 3) Tightening torque MA = 12 + 1 Nm
- 4) adjustment screw

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

U [V]	I [A] 1) 3)	I [A] 2) 4)
30-250	3	-
30 / 48 / 60 / 125	-	2 / 0,55 / 0,4 / 0,05

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

- 1) AC
- 2) DC
- 3) cos ≈ 0,7°
- 4) L/R ≈ 10 ms

### Max. permissible continuous current $I_{max}$ [A] with ohmic load

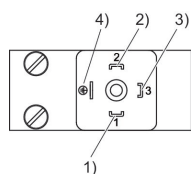
U [V]	I [A] 1)	I [A] 2)
30-250	5	-
30 / 48 / 60 / 125	-	3 / 1,2 / 0,8 / 0,4

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

- 1) AC
- 2) DC

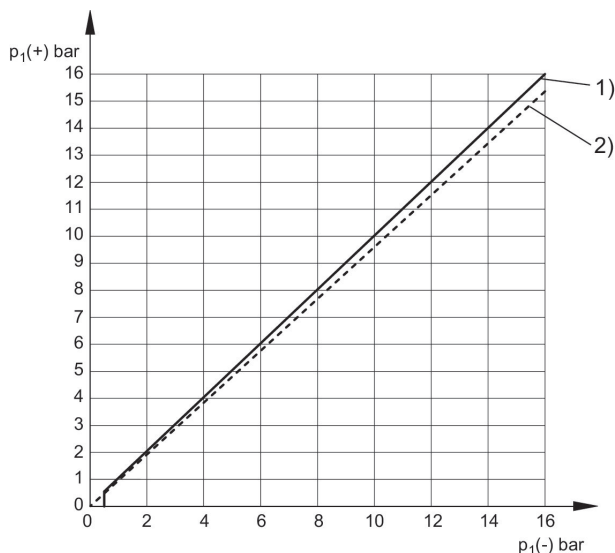
### R412010712

PIN assignment for valve plug connectors



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

### Differential switching pressure characteristic curve (0,2 - 16 bar)

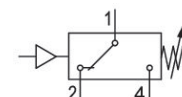
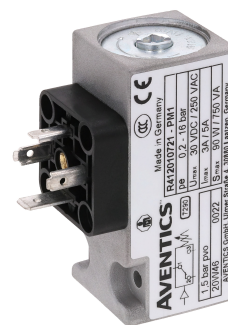


$p_1(+)$  = upper switching pressure with increasing pressure  
 $p_1(-)$  = lower switching pressure with decreasing pressure

- 1) Rising
- 2) Falling

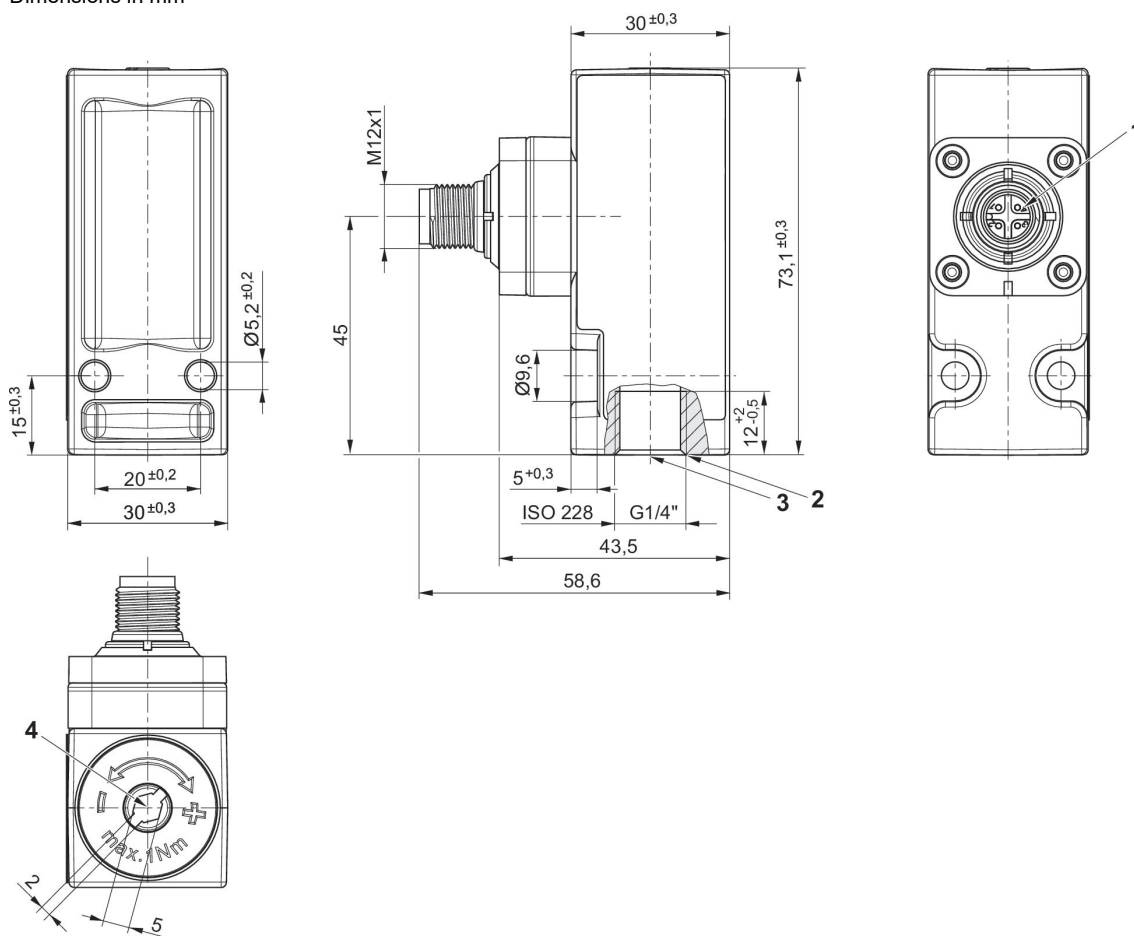
### Pressure Switches, Series PM1

Compressed air connection type: Internal thread  
 Electrical connection 2, thread size: M12x1  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -10 °C ... 80 °C



Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against over-pressure	Hysteresis	Mounting orientation	Part No.
G 1/4	0.2	16	80 bar	max. switching pressure difference	Any	R412010717

Dimensions in mm



- 1) M12 connection rotatable by 90° and 30° with detent
- 2) sealing surface
- 3) Tightening torque MA = 12 + 1 Nm
- 4) adjustment screw

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

U [V]	I [A] 1) 3)	I [A] 2) 4)
30	3	2

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

- 1) AC
- 2) DC
- 3) cos ≈ 0,7°
- 4) L/R ≈ 10 ms

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

U [V]	I [A] 1)	I [A] 2)
30	4	3

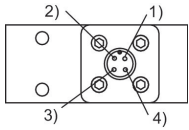
reference cycle: 30/min., reference temperature: +30 °C

- 1) AC
- 2) DC

**R412010717**

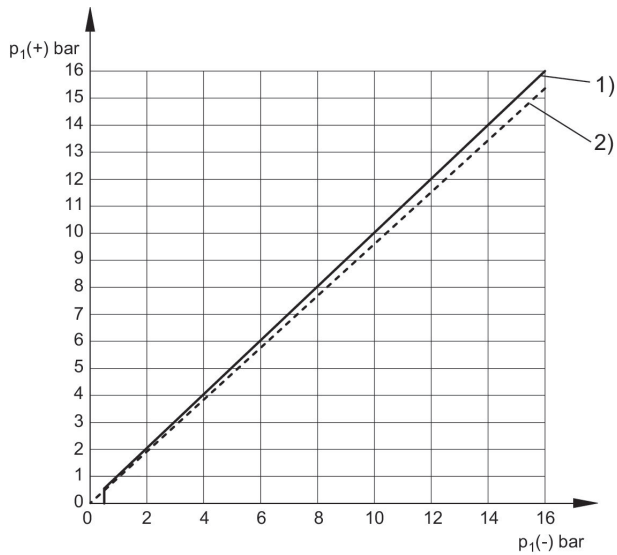
Pin assignments

M12x1



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

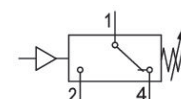
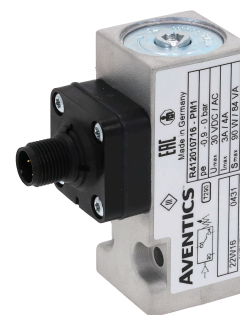
**Differential switching pressure characteristic curve (0,2 - 16 bar)**



$p_{1 (+)}$  = upper switching pressure with increasing pressure  
 $p_{1 (-)}$  = lower switching pressure with decreasing pressure  
 1) Rising  
 2) Falling

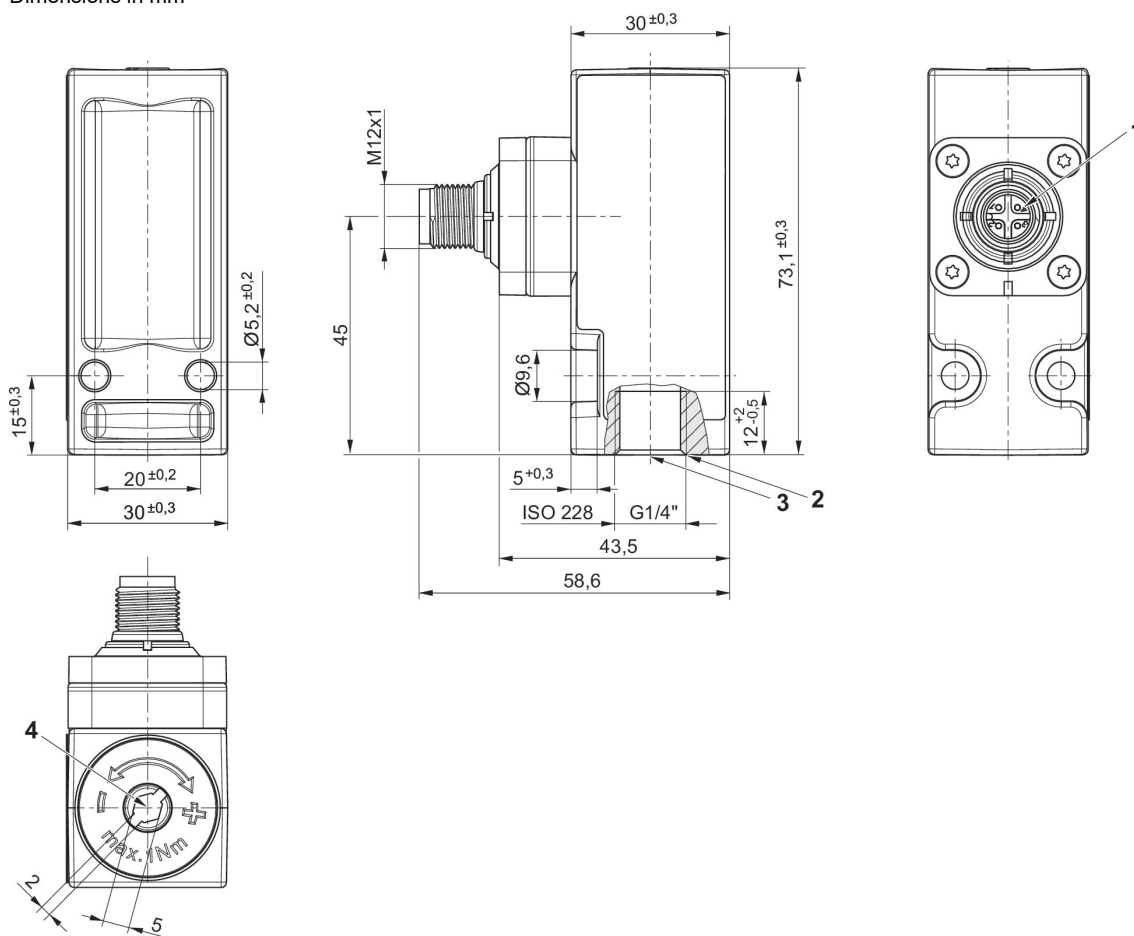
### Pressure Switches, Series PM1

Compressed air connection type: Internal thread  
 Electrical connection 2, thread size: M12x1  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -10 °C ... 80 °C



Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against overpressure	Hysteresis	Mounting orientation	Part No.
G 1/4	-0.9	0	80 bar	max. switching pressure difference	Any	R412010716

Dimensions in mm



- 1) M12 connection rotatable by 90° and 30° with detent
- 2) sealing surface
- 3) Mounting screw
- 4) Adjustment screw, self-holding

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

U [V]	I [A] 1) 3)	I [A] 2) 4)
30	3	2

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

- 1) AC
- 2) DC
- 3) cos ≈ 0,7°
- 4) L/R ≈ 10 ms

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

U [V]	I [A] 1)	I [A] 2)
30	4	3

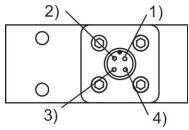
reference cycle: 30/min., reference temperature: +30 °C

- 1) AC
- 2) DC

**R412010716**

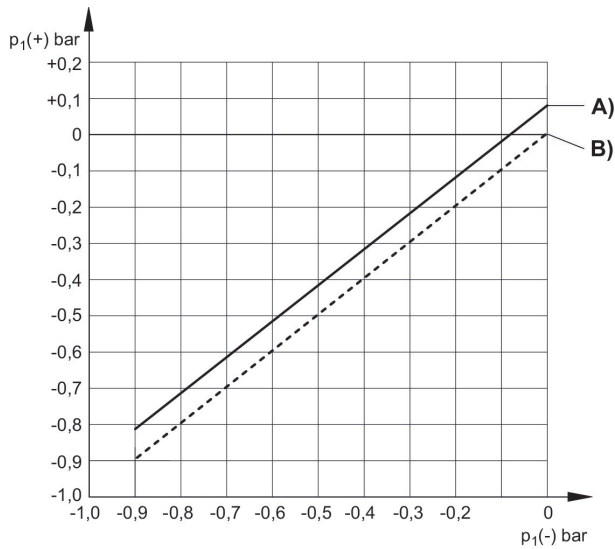
Pin assignments

M12x1



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

**Differential switching pressure characteristic curve (-0,9 – 0 bar)**

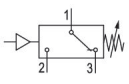
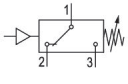


A)  $p_1(-)$ , min.  
 B)  $p_1(-)$ , max.  
 $p_1(+)$  = upper switching pressure with increasing pressure  
 $p_1(-)$  = lower switching pressure with decreasing pressure

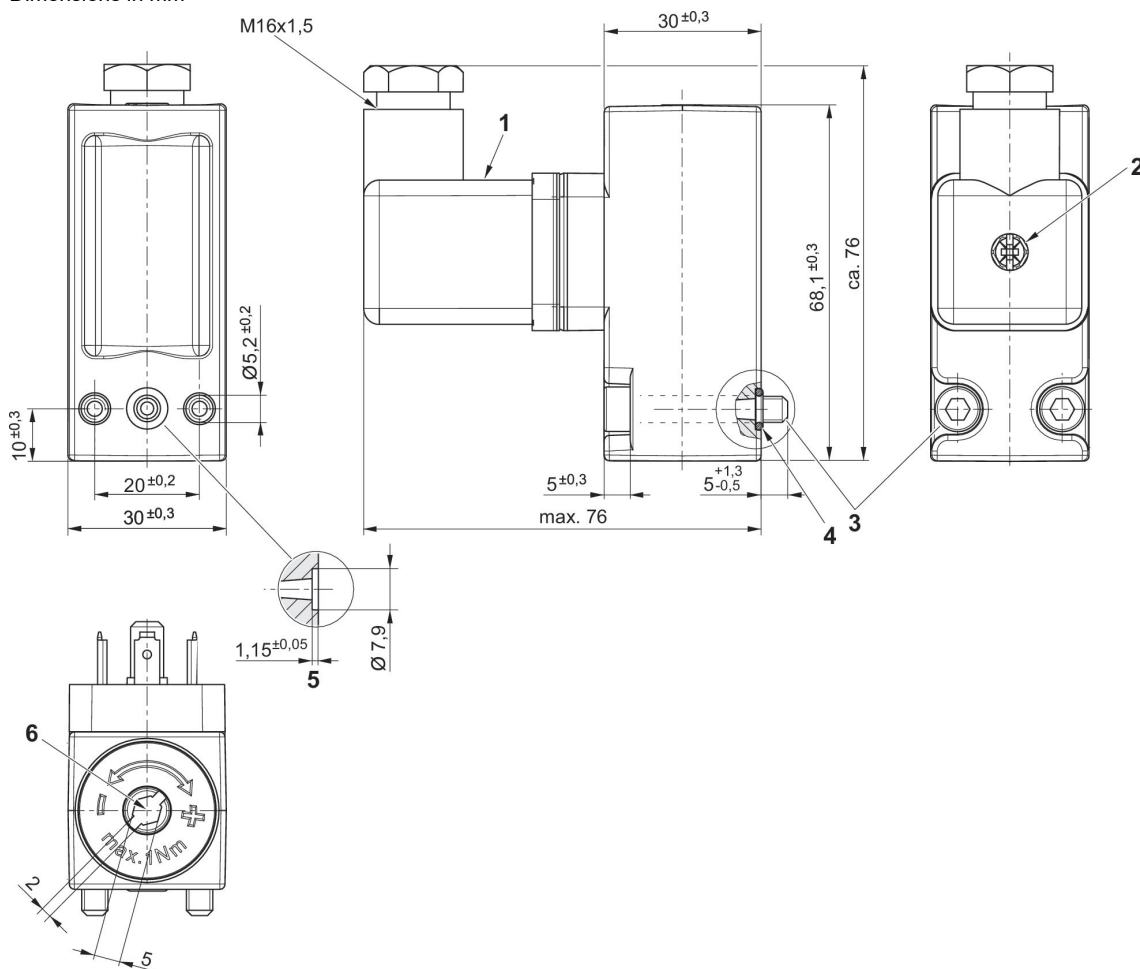
### Pressure Switches, Series PM1

Compressed air connection type: Flange with O-ring  
 Electrical connection 2, thread size: EN 175301-803, form A  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -10 °C ... 80 °C



	Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against overpressure	Hysteresis	Mounting orientation	Part No.
	Ø 5x1,5	-0.9	0	80 bar	max. switching pressure difference	Any	R412010714
	Ø 5x1,5	0.2	16	80 bar	max. switching pressure difference	Any	R412010718

Dimensions in mm



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

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

U [V]	I [A] 1) 3)	I [A] 2) 4)
30-250	3	-
30 / 48 / 60 / 125	-	2 / 0,55 / 0,4 / 0,05

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

- 1) AC
- 2) DC
- 3) cos ≈ 0,7°
- 4) L/R ≈ 10 ms

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

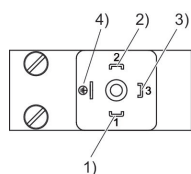
U [V]	I [A] 1)	I [A] 2)
30-250	5	-
30 / 48 / 60 / 125	-	3 / 1,2 / 0,8 / 0,4

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

- 1) AC
- 2) DC

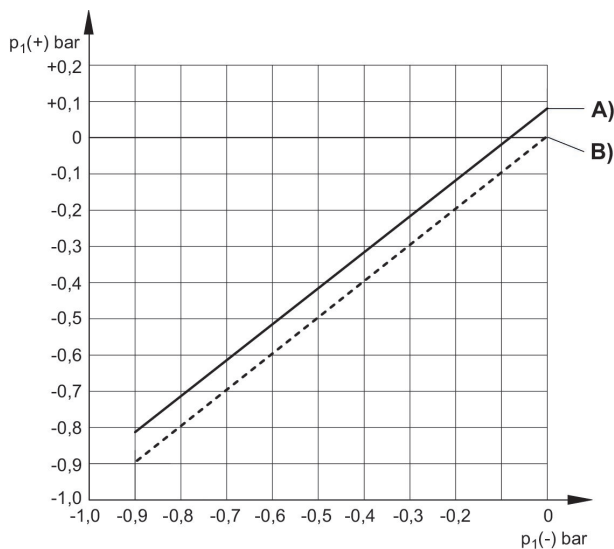
### R412010714, R412010718

PIN assignment for valve plug connectors

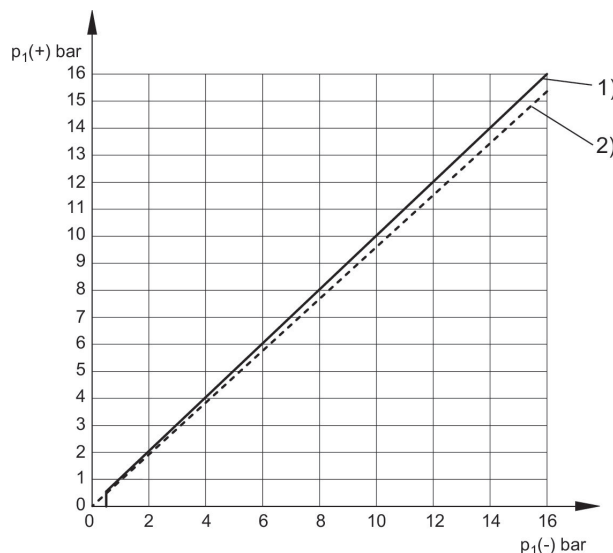


Pin	Allocation
1	+UB
2	break contact
3	NO (make contact)
4	GND

### Differential switching pressure characteristic curve (-0,9 - 0 bar) Differential switching pressure characteristic curve (0,2 - 16 bar)



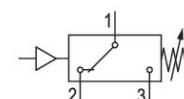
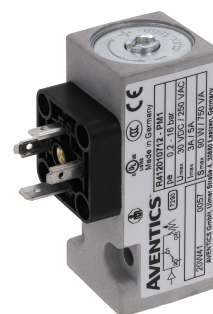
- A) p1 (-), min.
- B) p1 (-), max.
- p1 (+) = upper switching pressure with increasing pressure
- p1 (-) = lower switching pressure with decreasing pressure



- p1 (+) = upper switching pressure with increasing pressure
- p1 (-) = lower switching pressure with decreasing pressure
- 1) Rising
- 2) Falling

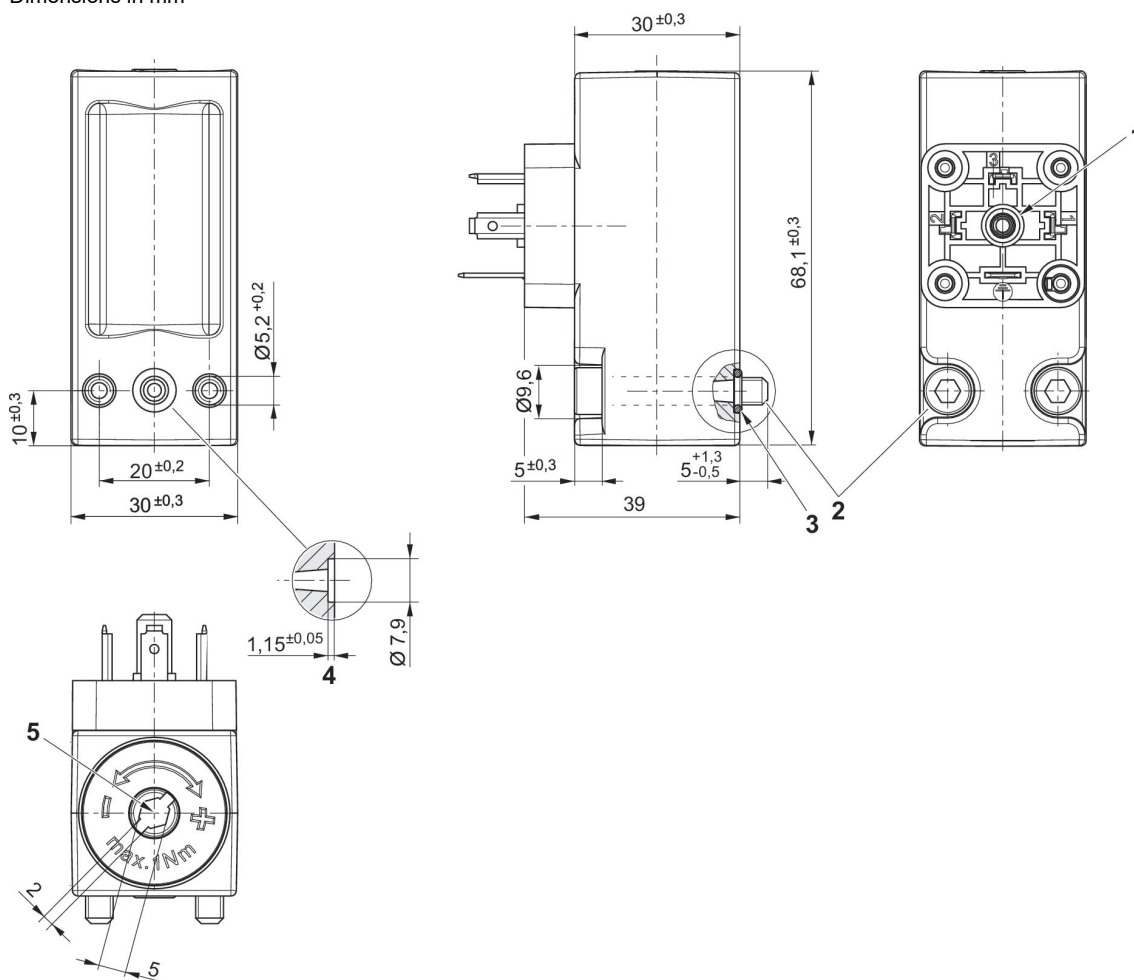
### Pressure Switches, Series PM1

Compressed air connection type: Flange with O-ring  
 Electrical connection 2, thread size: EN 175301-803, form A  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -10 °C ... 80 °C



Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against overpressure	Hysteresis	Mounting orientation	Part No.
Ø 5x1,5	0.2	16	80 bar	max. switching pressure difference	Any	R412010715

Dimensions in mm



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

## Max. permissible continuous current $I_{max}$ [A] with ohmic load

U [V]	30-250	30 / 48 / 60 / 125
I [A] 1)	5	-
I [A] 2)	-	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

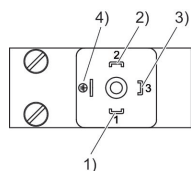
U [V]	30-250	30 / 48 / 60 / 125
I [A] 1) 3)	3	-
I [A] 2) 4)	-	2 / 0,55 / 0,4 / 0,15

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

- 1) AC
- 2) DC
- 3)  $\cos \approx 0,7^\circ$
- 4) L/R  $\approx 10$  ms

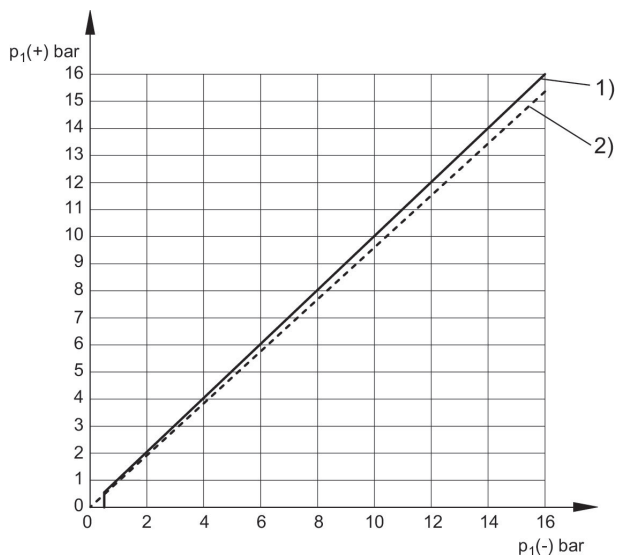
R412010715

PIN assignment for valve plug connectors



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

Differential switching pressure characteristic curve (0,2 - 16 bar)

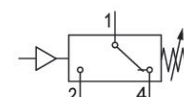
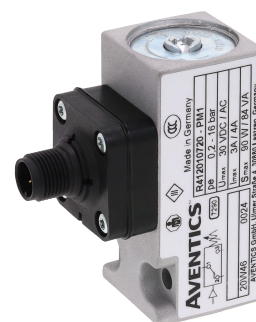


$p_1 (+)$  = upper switching pressure with increasing pressure  
 $p_1 (-)$  = lower switching pressure with decreasing pressure

- 1) Rising
- 2) Falling

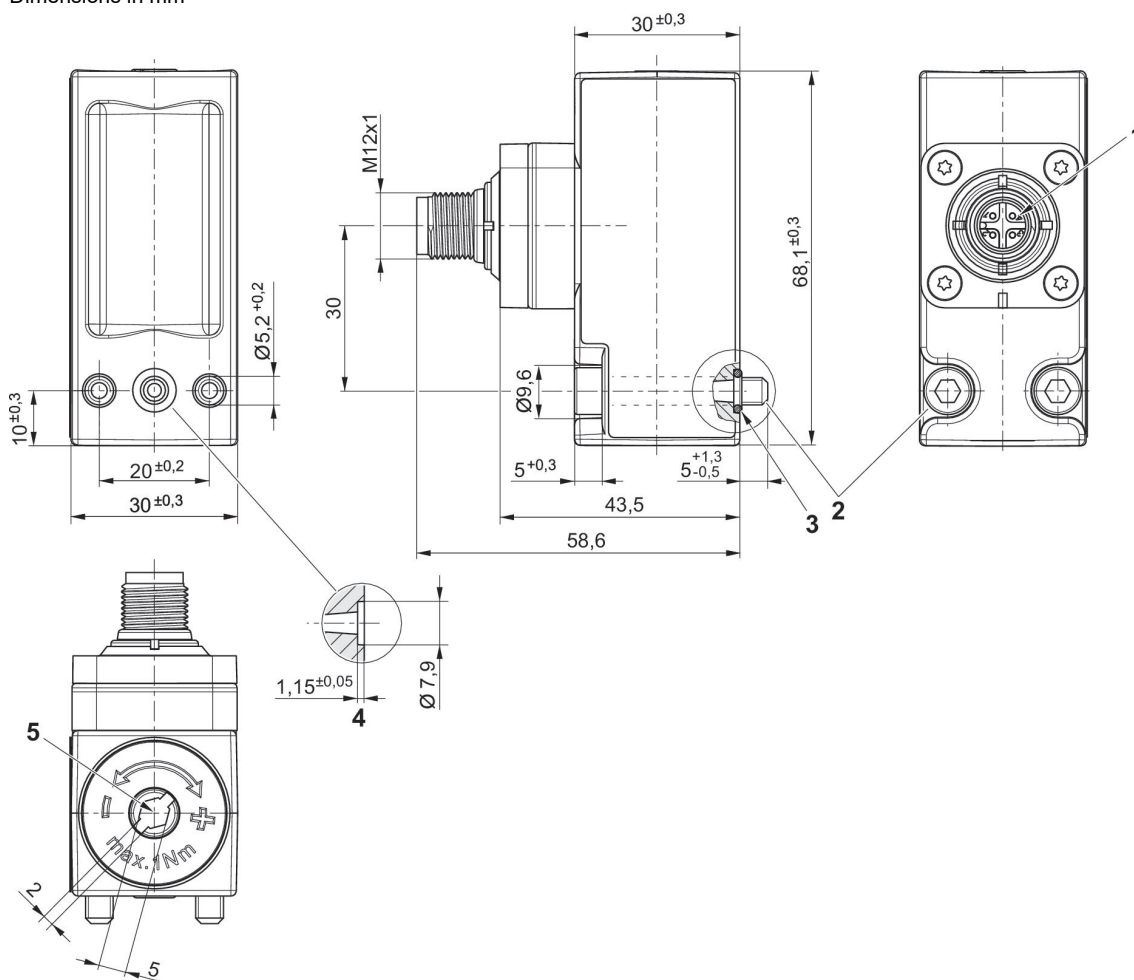
### Pressure Switches, Series PM1

Compressed air connection type: Flange with O-ring  
 Electrical connection 2, thread size: M12x1  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -10 °C ... 80 °C



Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against overpressure	Hysteresis	Mounting orientation	Part No.
Ø 5x1,5	-0.9	0	80 bar	max. switching pressure difference	Any	R412010719

Dimensions in mm



- 1) M12 connection rotatable by 90° and 30° with detent
- 2) cylinder screw M5x30 (included in scope of delivery)
- 3) O-ring Ø5x1,5 (included)
- 4) O-ring countersink
- 5) Adjustment screw, self-holding

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

U [V]	I [A] 1) 3)	I [A] 2) 4)
30	3	2

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

- 1) AC
- 2) DC
- 3) cos ≈ 0,7°
- 4) L/R ≈ 10 ms

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

U [V]	I [A] 1)	I [A] 2)
30	4	3

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

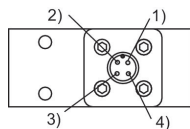
- 1) AC

2) DC

**R412010719**

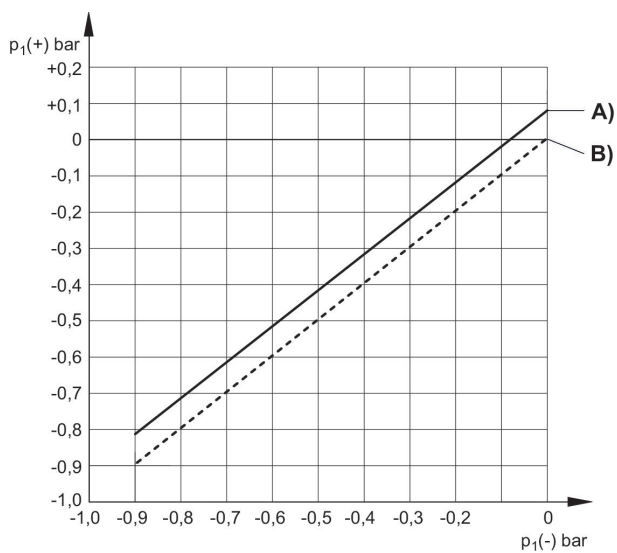
Pin assignments

M12x1



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

**Differential switching pressure characteristic curve (-0,9 – 0 bar)**



A)  $p_1 (-)$ , min.

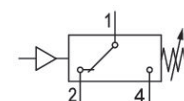
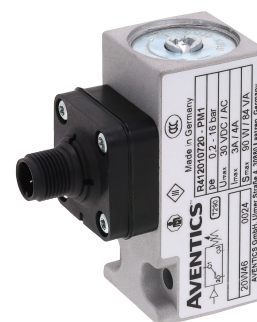
B)  $p_1 (-)$ , max.

$p_1 (+)$  = upper switching pressure with increasing pressure

$p_1 (-)$  = lower switching pressure with decreasing pressure

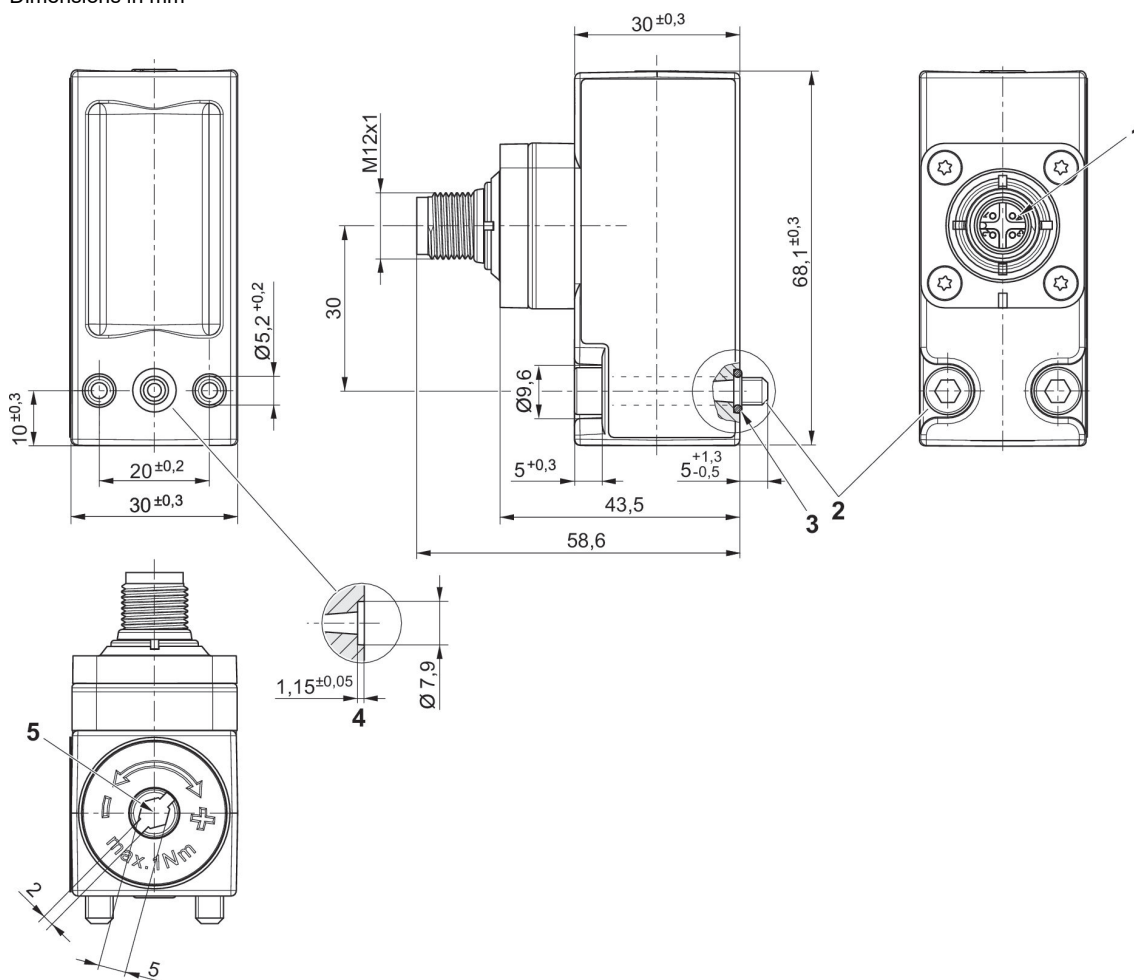
### Pressure Switches, Series PM1

Compressed air connection type: Flange with O-ring  
 Electrical connection 2, thread size: M12x1  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -10 °C ... 80 °C



Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against overpressure	Hysteresis	Mounting orientation	Part No.
Ø 5x1,5	0.2	16	80 bar	max. switching pressure difference	Any	R412010720

Dimensions in mm



- 1) M12 connection rotatable by 90° and 30° with detent
- 2) cylinder screw M5x30 (included in scope of delivery)
- 3) O-ring Ø5x1,5 (included)
- 4) O-ring countersink
- 5) adjustment screw

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

U [V]	I [A] 1)	I [A] 2)
30-250	5	-
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	3	2

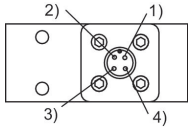
reference cycle: 30/min., reference temperature: +30 °C

- 1) AC
- 2) DC
- 3)  $\cos \approx 0,7^\circ$
- 4) L/R  $\approx 10$  ms

**R412010720**

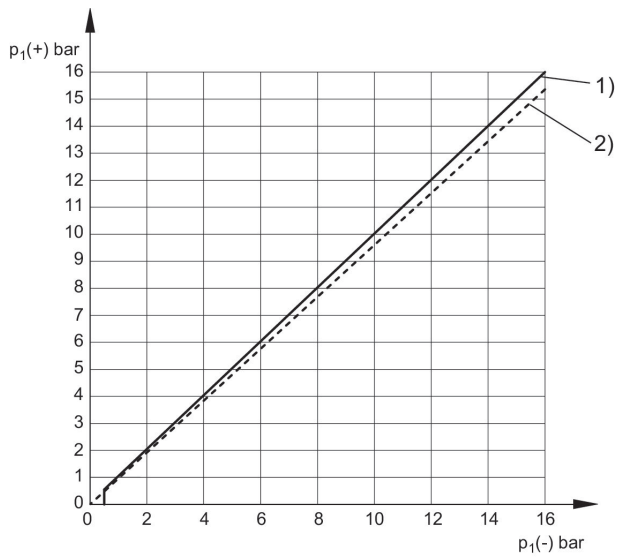
Pin assignments

M12x1



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

**Differential switching pressure characteristic curve (0,2 - 16 bar)**



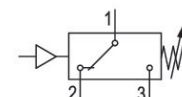
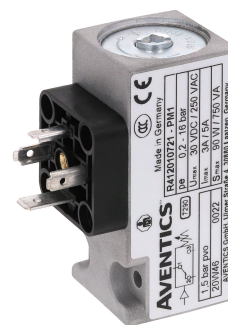
$p_1 (+)$  = upper switching pressure with increasing pressure  
 $p_1 (-)$  = lower switching pressure with decreasing pressure  
 1) Rising  
 2) Falling

### Pressure Switches, Series PM1

Electrical connection 2, thread size: EN 175301-803, form A

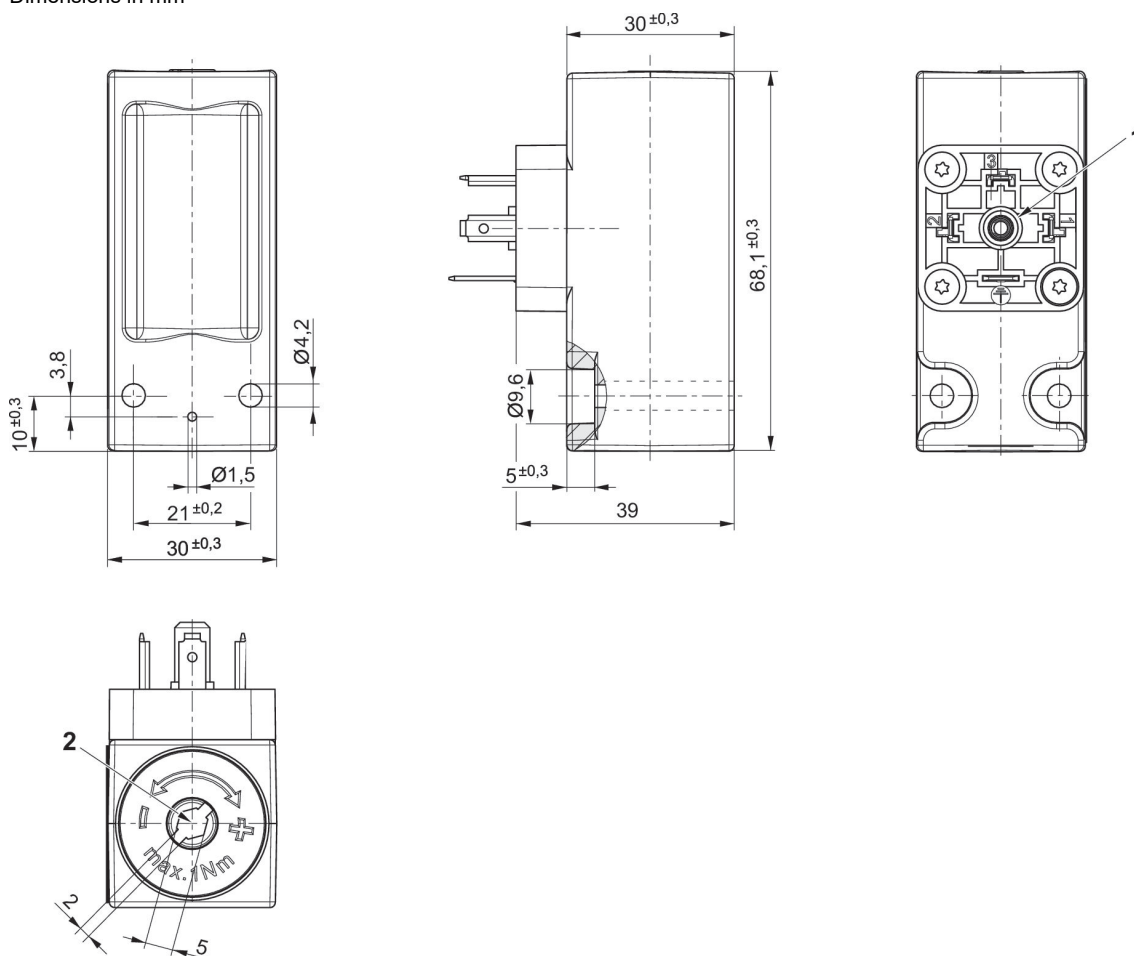
Ambient temperature min./max.: -20 °C ... 80 °C

Medium temperature min./max.: -10 °C ... 80 °C



Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Protection against over-pressure	Hysteresis	Mounting orientation	Part No.
CNOMO	0.2	16	80 bar	max. switching pressure difference	Any	R412010721

Dimensions in mm



- 1) Mounting screw
- 2) Adjustment screw, self-holding

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

U [V]	I [A] 1)	I [A] 2)
30-250	5	-
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]	30-250	30 / 48 / 60 / 125
I [A] 1) 3)	3	-
I [A] 2) 4)	-	2 / 0,55 / 0,4 / 0,15

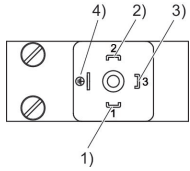
reference cycle: 30/min., reference temperature: +30 °C

- 1) AC

- 2) DC
- 3)  $\cos \approx 0,7^\circ$
- 4) L/R  $\approx 10$  ms

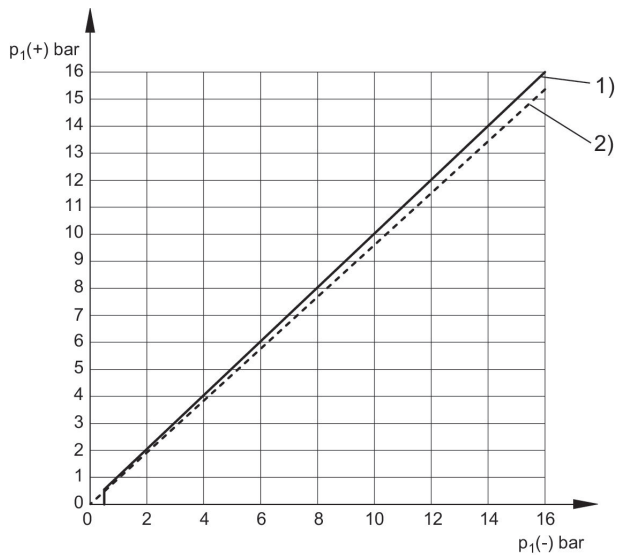
**R412010721**

PIN assignment for valve plug connectors



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

**Differential switching pressure characteristic curve (0,2 - 16 bar)**



p1 (+) = upper switching pressure with increasing pressure  
 p1 (-) = lower switching pressure with decreasing pressure  
 1) Rising  
 2) Falling

### Pressure sensor, Series PE5, push-in fitting

Certificates: CE declaration of conformity, cULus, RoHS, Conforms with REACH, Free of substances that impair surface wetting in the coating process

Electrical connection 2, type: Plug

Electrical connection 2, thread size: M12x1

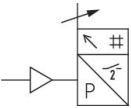
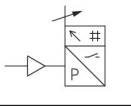
Electrical connection 2, number of poles: 4-pin

Ambient temperature min./max.: 0 °C ... 60 °C

Medium temperature min./max.: 0 °C ... 60 °C

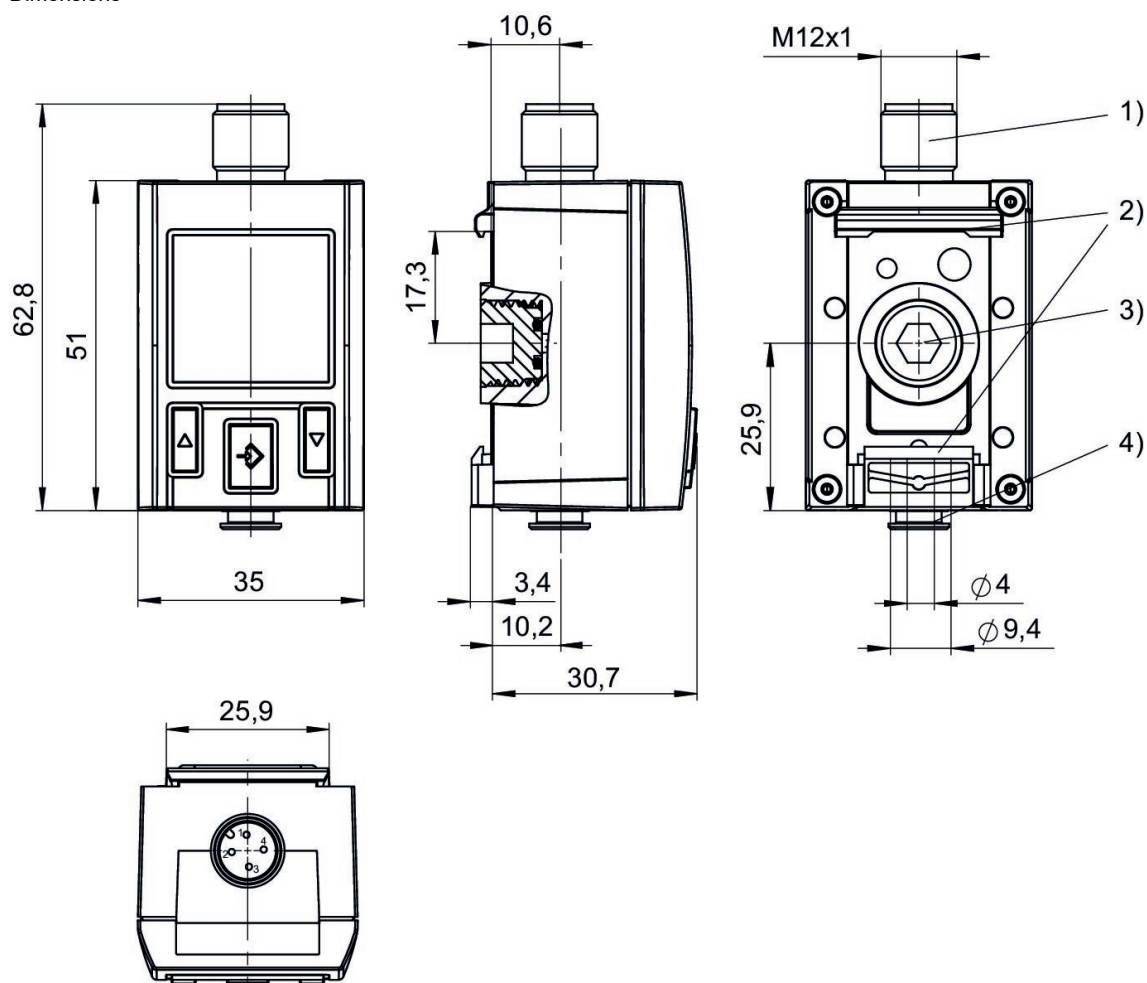


	Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Protection against overpressure	Output signal digital	Part No.
	G 1/4	-1	0	17	30	5 bar	2 x PNP, NPN, Push-pull	R412010761
	G 1/4	-1	0	17	30	5 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	R412010769
	G 1/4	-1	0	17	30	5 bar	PNP, NPN, push-pull, 1x IO-Link	R412010775
	G 1/4	-1	1	17	30	5 bar	2 x PNP, NPN, Push-pull	R412010763
	G 1/4	0	6	17	30	15 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	R412010771
	G 1/4	0	6	17	30	15 bar	2 x PNP, NPN, Push-pull	R412010765
	G 1/4	0	6	17	30	15 bar	PNP, NPN, push-pull, 1x IO-Link	R412010777
	G 1/4	0	10	17	30	15 bar	PNP, NPN, Push-pull, 0 - 10 V DC, 4 ... 20 mA	R412010773
	G 1/4	0	10	17	30	15 bar	2 x PNP, NPN, Push-pull	R412010767
	G 1/4	0	10	17	30	15 bar	PNP, NPN, push-pull, 1x IO-Link	R412010779

	Thread connection	Operating pressure min [bar]	Operating pressure max [bar]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Protection against overpressure	Output signal digital	Part No.
	G 1/4	0	12	17	30	16 bar	2 x PNP, NPN, Push-pull	R412010782
	G 1/4	0	12	17	30	16 bar	PNP, NPN, push-pull, 1x IO-Link	R412010806

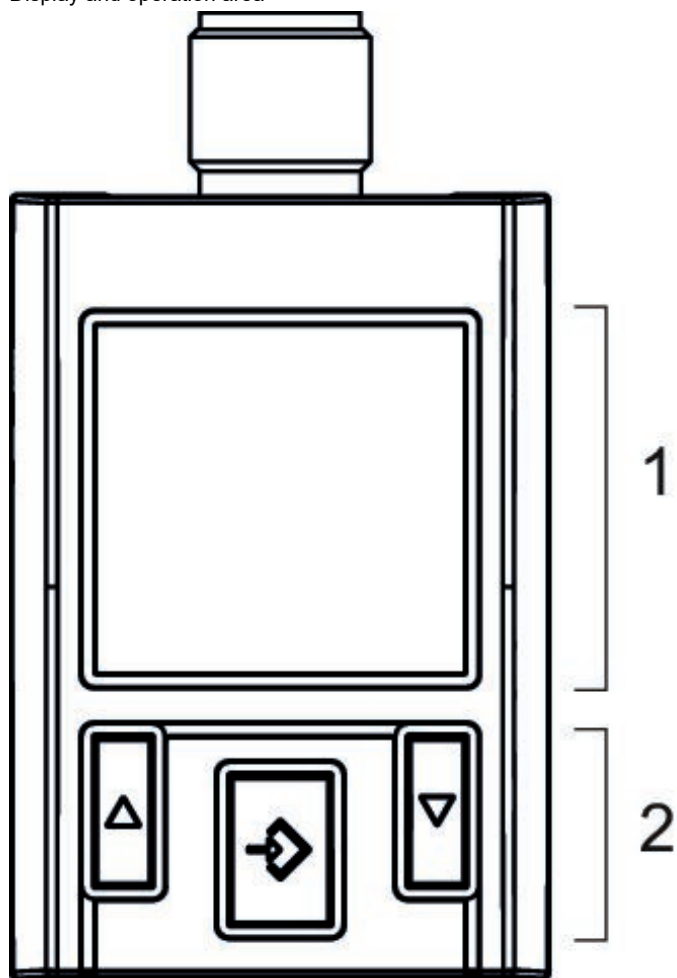
Hysteresis	Part No.
adjustable	R412010761
adjustable	R412010769
adjustable	R412010775
adjustable	R412010763
adjustable	R412010771
adjustable	R412010765
adjustable	R412010777
adjustable	R412010773
adjustable	R412010767
adjustable	R412010779
adjustable	R412010782
adjustable	R412010806

Dimensions



- 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  $\varnothing$  4 mm

Display and operation area

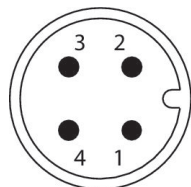


- 1) LCD display
- 2) Control panel with 3 buttons

**R412010761, R412010769, R412010775, R412010763, R412010771, R412010765, R412010777, R412010773, R412010767, R412010779, R412010782, R412010806**

Pin assignments

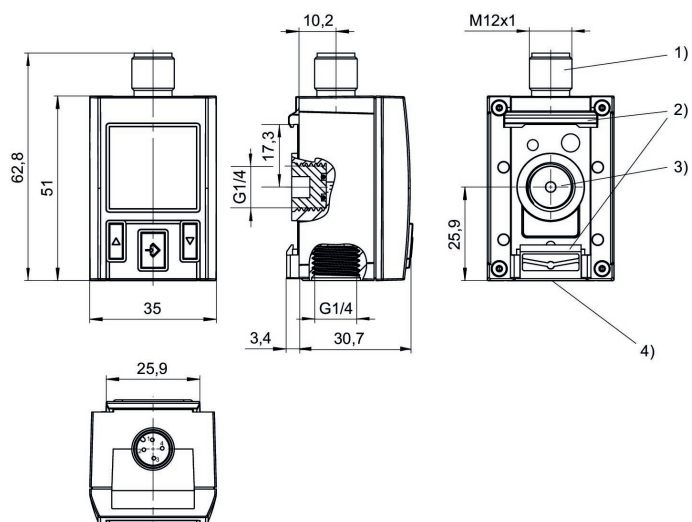
M12x1



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

**R412010761, R412010769, R412010775, R412010763, R412010771, R412010765, R412010777, R412010773, R412010767, R412010779, R412010782, R412010806**

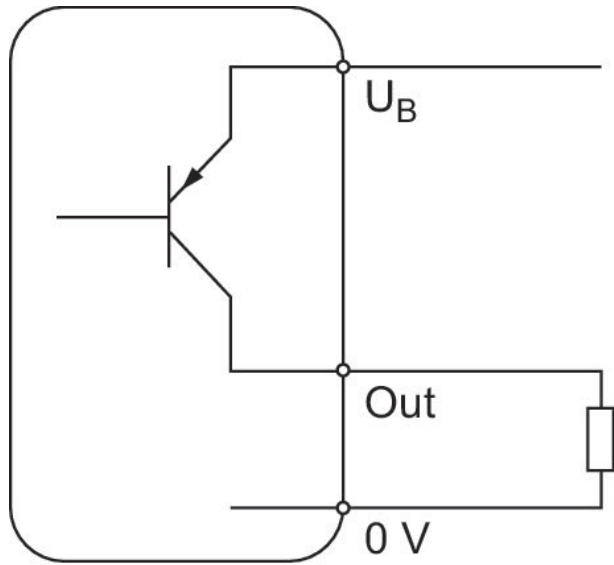
Dimensions



- 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

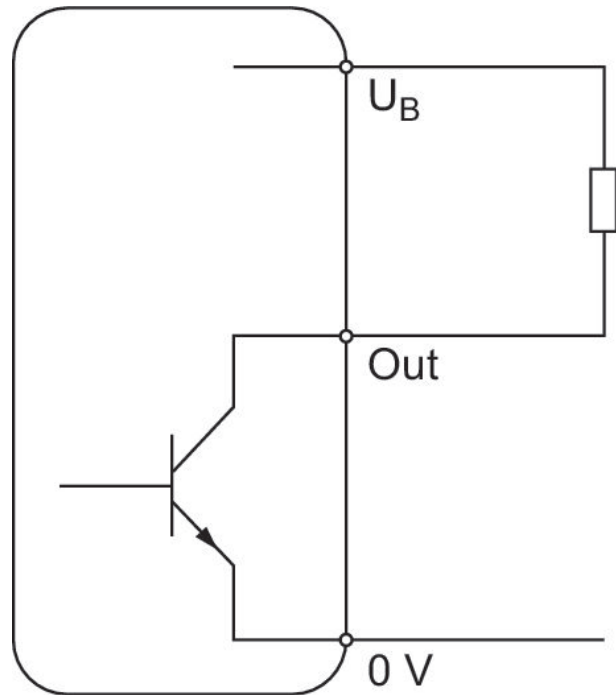
Operating mode

PNP



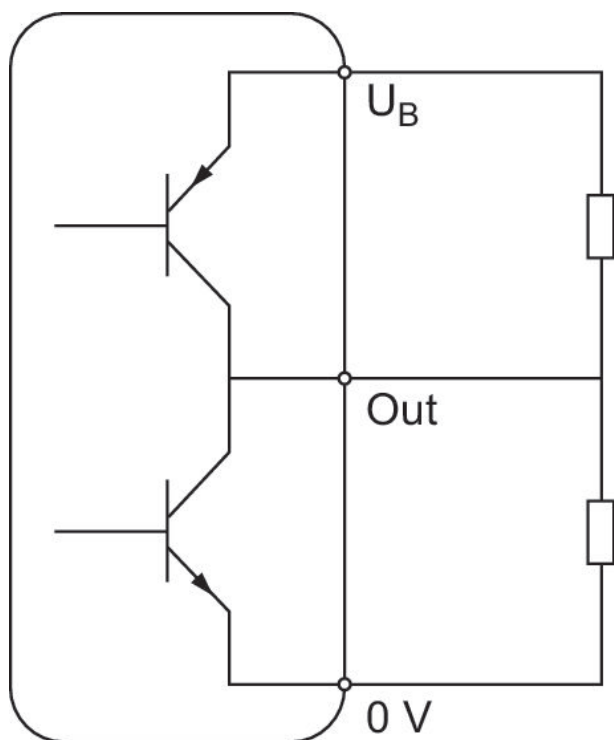
Operating mode

NPN



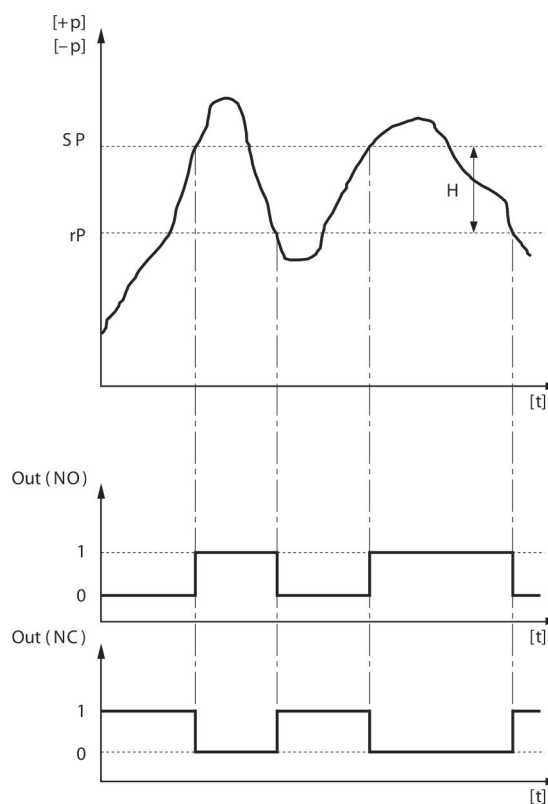
Operating mode

Push-pull



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

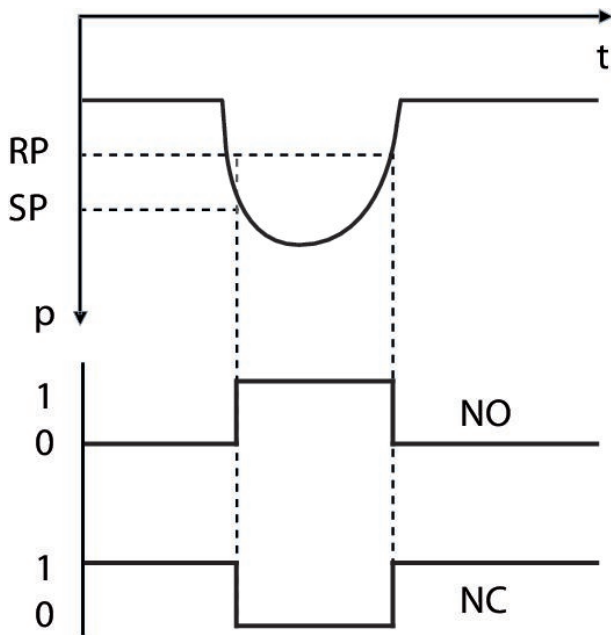
In case of overpressure



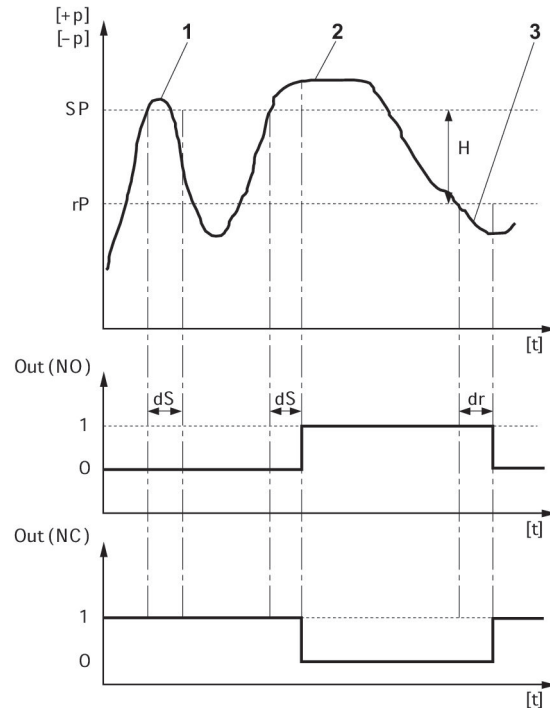
H: Hysteresis  
 SP = switching point RP = resetting point  
 Out (NC): switch output, break contact Out (NO): switch output, make contact

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

In case of underpressure

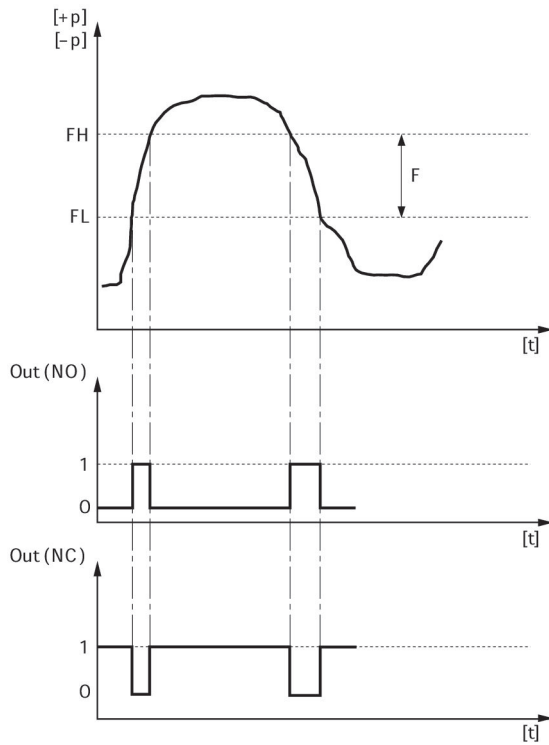


**Delayed hysteresis function: switching and resetting behavior depending on pressure p and time t**



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**



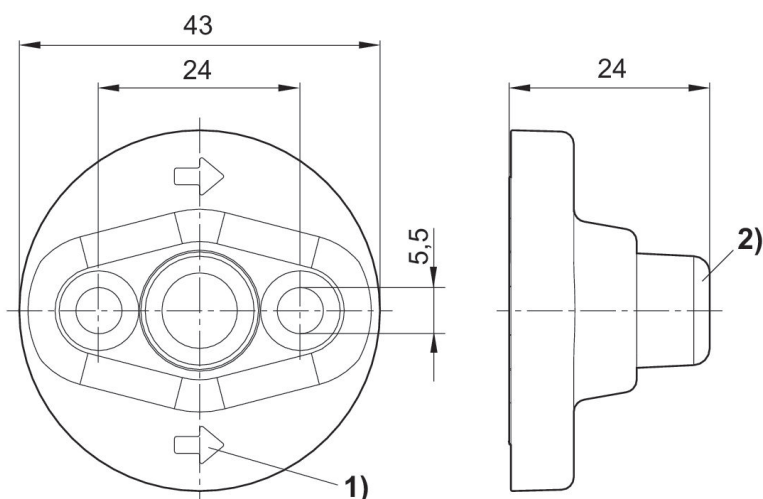
FH: pressure band, upper value  
 FL: pressure band, lower value  
 Out (NC): switch output, break contact Out (NO): switch output, make contact

contamination display



Material	Weight [kg]	Part No.
Polyamide	0.025	R412006363

Dimensions in mm



1) Flow direction

2) Display in initial state: green (=  $\Delta p < [[0.35] \text{ bar}]$ ) Display turns red on contamination of the filter element (=  $\Delta p \geq [[0.35] \text{ bar}]$ ).

**QR1-S-RPN standard series**

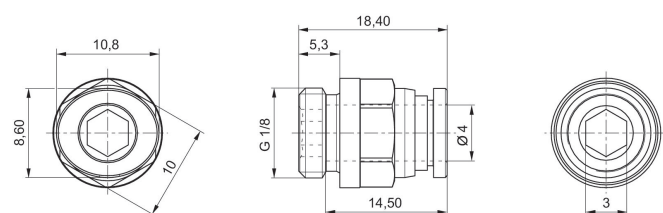
Compressed air connection type: External thread  
 Compressed air connection type 2: Push-in fitting  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -20 °C ... 80 °C  
 Working pressure min./max.: -1 bar ... 16 bar



G	Ø D	Delivery unit [piece]	Material	Part No.
G 1/8	Ø 4	10	Brass	2121004180
G 1/8	Ø 6	10	Brass	2121006180
G 1/4	Ø 4	10	Brass	2121004140
G 1/4	Ø 6	10	Brass	2121006140
G 1/4	Ø 8	10	Brass	2121008140
G 3/8	Ø 6	10	Brass	R412005000
G 3/8	Ø 8	10	Brass	2121008380
G 3/8	Ø 10	10	Brass	2121010380
G 1/2	Ø 8	10	Brass	R412005001
G 1/2	Ø 10	10	Brass	2121010120
G 1/2	Ø 12	10	Brass	2121012120

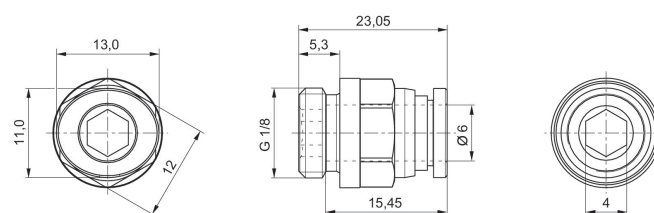
**2121004180**

Dimensions in mm



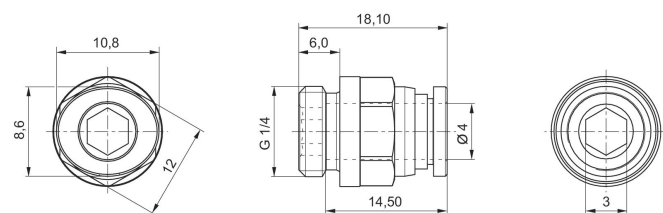
**2121006180**

Dimensions in mm



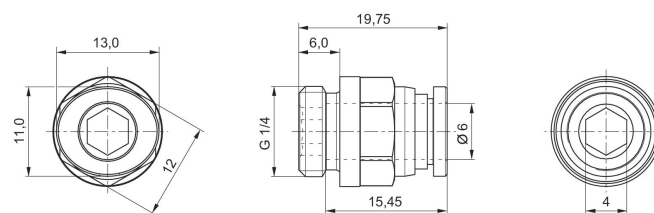
**2121004140**

Dimensions in mm



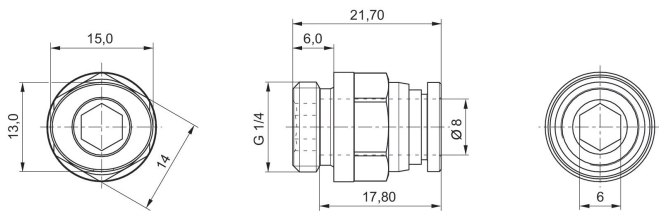
**2121006140**

Dimensions in mm



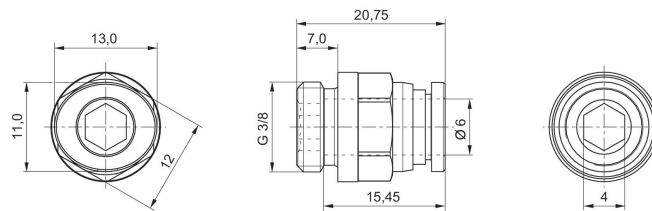
**2121008140**

Dimensions in mm



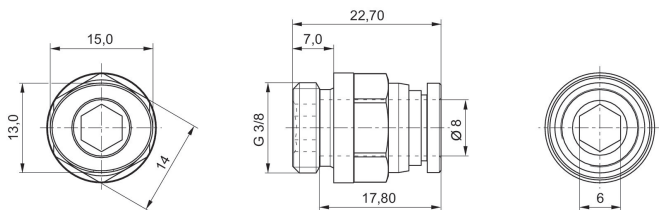
**R412005000**

Dimensions in mm



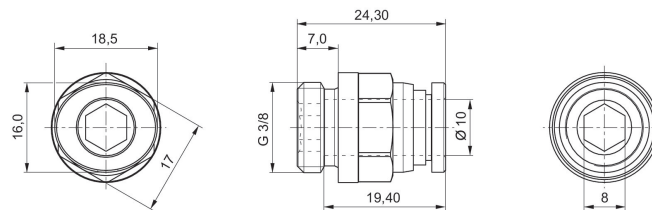
**2121008380**

Dimensions in mm



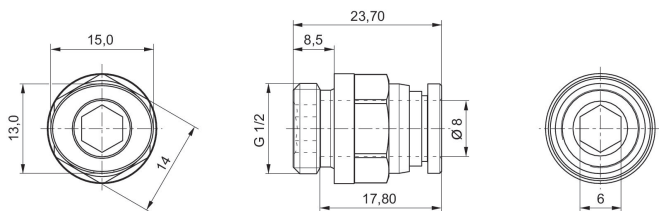
**2121010380**

Dimensions in mm



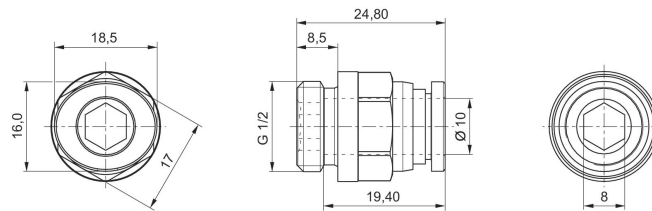
**R412005001**

Dimensions in mm



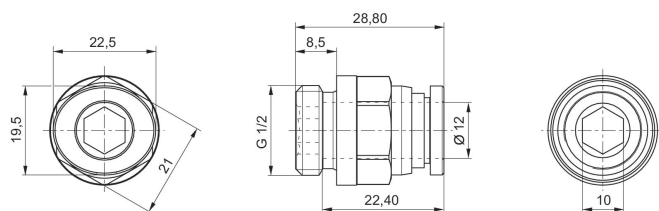
**2121010120**

Dimensions in mm



**2121012120**

Dimensions in mm



**QR1-S-RVT standard series**

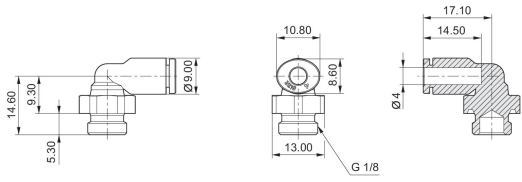
Compressed air connection type: External thread  
 Compressed air connection type 2: Push-in fitting  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Medium temperature min./max.: -20 °C ... 80 °C  
 Working pressure min./max.: -1 bar ... 16 bar



G	Ø D	Delivery unit [piece]	Material	Part No.
G 1/8	Ø 4	10	Polyamide	2122004180
G 1/8	Ø 6	10	Polyamide	2122006180
G 1/8	Ø 8	10	Polyamide	2122008180
G 1/8	Ø 10	10	Polyamide	R412005094
G 1/8	Ø 12	10	Polyamide	R412005095
G 1/4	Ø 4	10	Polyamide	2122004140
G 1/4	Ø 6	10	Polyamide	2122006140
G 1/4	Ø 8	10	Polyamide	2122008140
G 1/4	Ø 10	10	Polyamide	2122010140
G 1/4	Ø 12	10	Polyamide	2122012140
G 3/8	Ø 6	10	Polyamide	R412005092
G 3/8	Ø 8	10	Polyamide	2122008380
G 3/8	Ø 10	10	Polyamide	2122010380
G 3/8	Ø 12	10	Polyamide	2122012380
G 3/8	Ø 14	5	Polyamide	2122014380
G 3/8	Ø 16	5	Polyamide	R412005097
G 1/2	Ø 8	10	Polyamide	R412005093
G 1/2	Ø 10	10	Polyamide	2122010120
G 1/2	Ø 12	10	Polyamide	2122012120
G 1/2	Ø 14	5	Polyamide	2122014120
G 1/2	Ø 16	5	Polyamide	R412005098

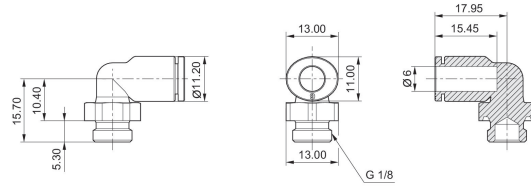
**2122004180**

Dimensions in mm



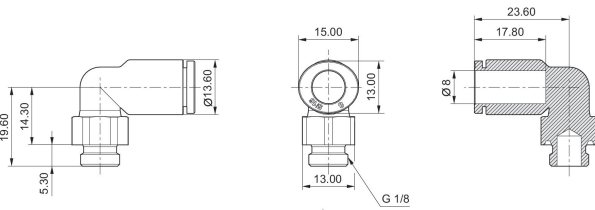
**2122006180**

Dimensions in mm



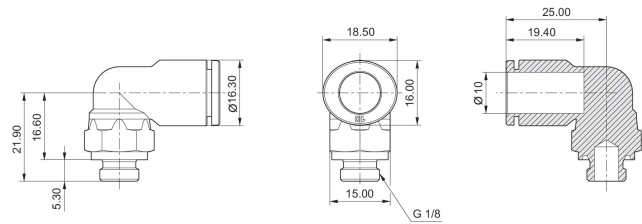
**2122008180**

Dimensions in mm



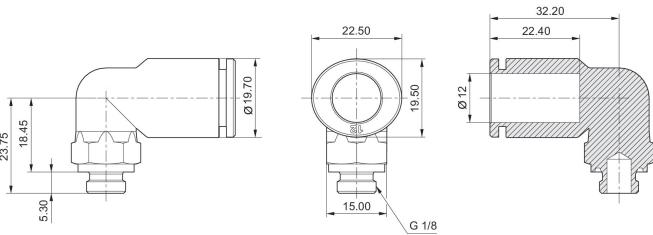
**R412005094**

Dimensions in mm



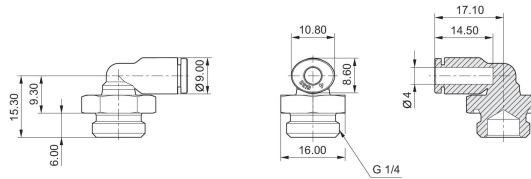
**R412005095**

Dimensions in mm



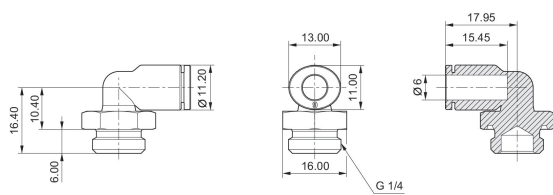
**2122004140**

Dimensions in mm



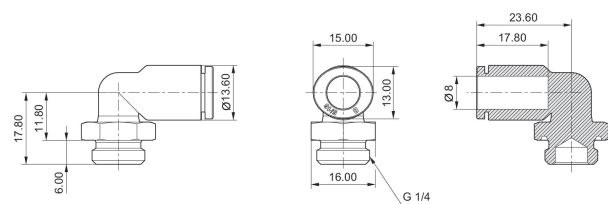
**2122006140**

Dimensions in mm



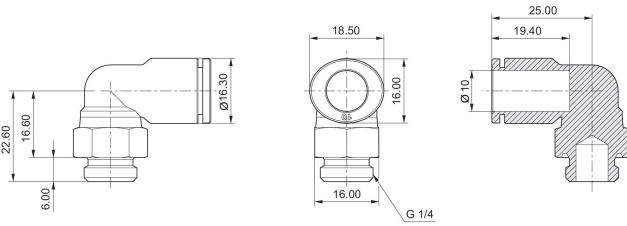
**2122008140**

Dimensions in mm



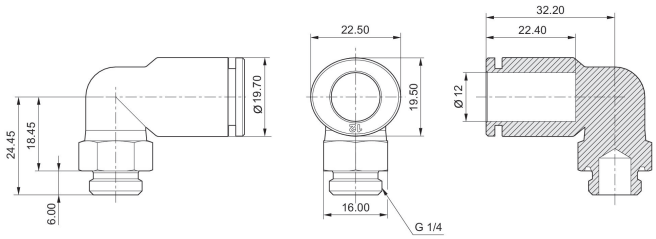
**2122010140**

Dimensions in mm



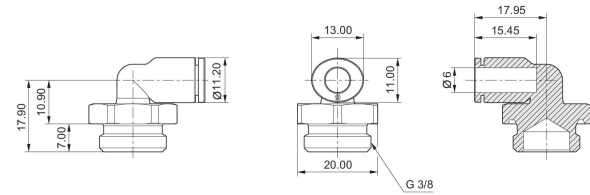
**2122012140**

Dimensions in mm



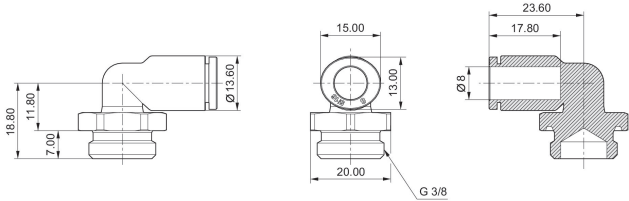
**R412005092**

Dimensions in mm



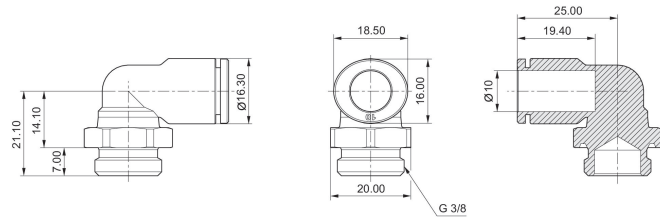
**2122008380**

Dimensions in mm



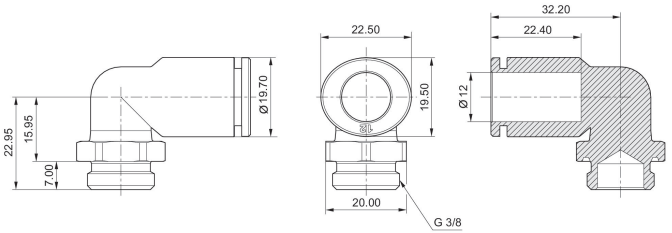
**2122010380**

Dimensions in mm



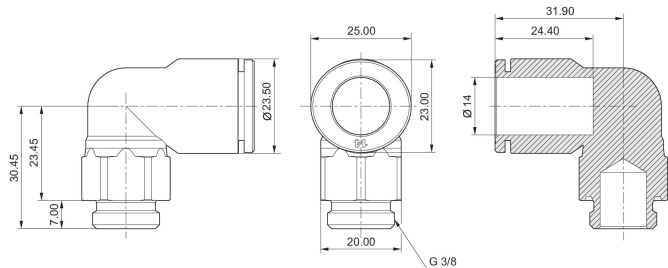
**2122012380**

Dimensions in mm



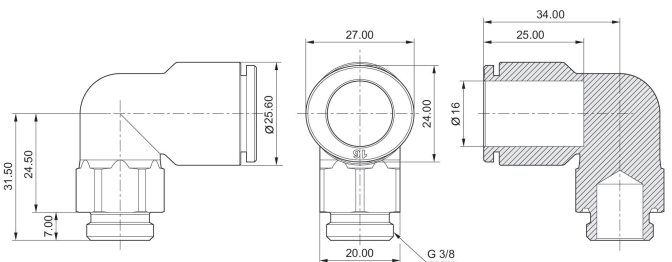
**2122014380**

Dimensions in mm



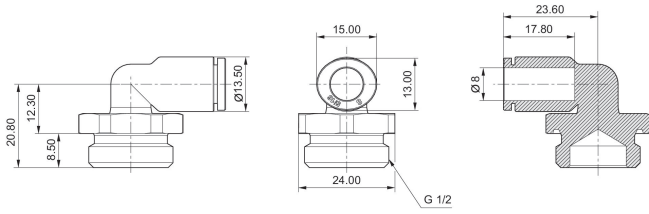
**R412005097**

Dimensions in mm



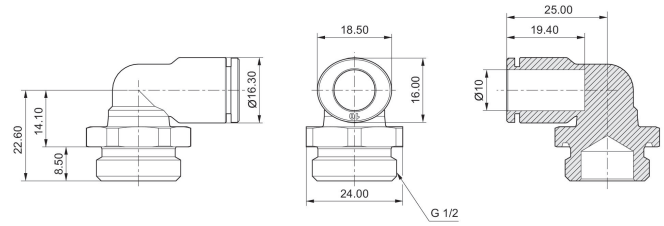
**R412005093**

Dimensions in mm



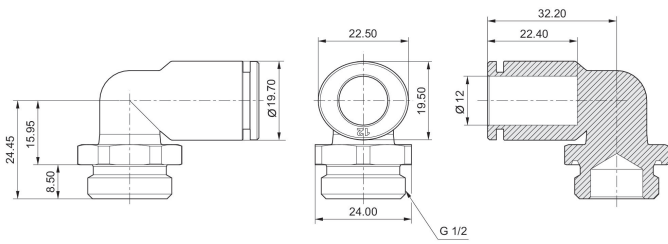
**2122010120**

Dimensions in mm



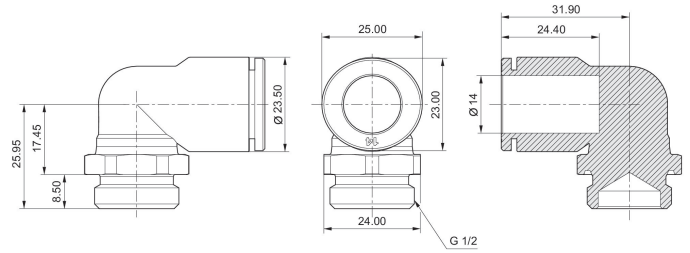
**2122012120**

Dimensions in mm



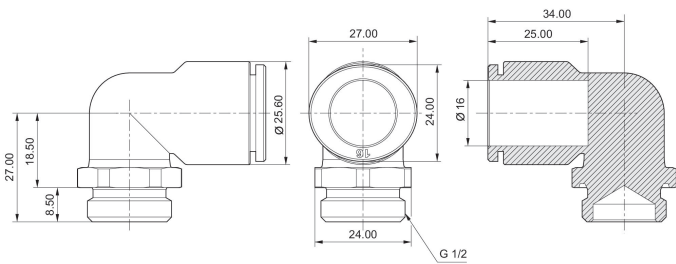
**2122014120**

Dimensions in mm



**R412005098**

Dimensions in mm



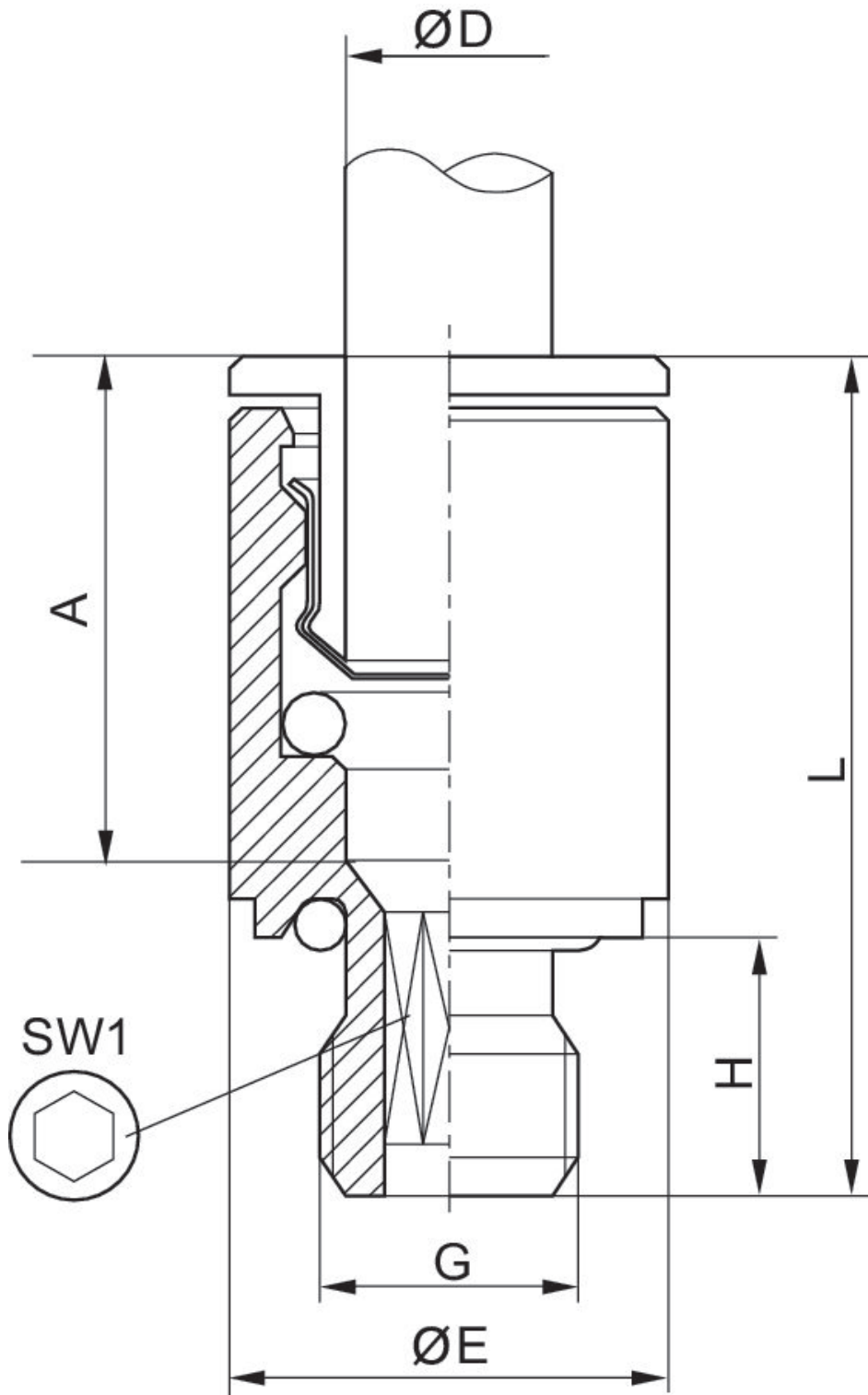
**Series QR2-S-RPN standard**

Fitting type: Straight fitting  
 Compressed air connection type: External thread  
 Compressed air connection 2: Push-in fitting  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Working pressure min./max.: -0.95 bar ... 16 bar



G	Ø D	Delivery unit [piece]	Material	Part No.
G 1/4	Ø 4	25	Brass	1823373045
G 1/4	Ø 5	10	Brass	1823373046
G 1/4	Ø 6	25	Brass	1823373047
G 1/4	Ø 8	10	Brass	1823373048
G 1/4	Ø 10	10	Brass	1823373049
G 1/4	Ø 12	10	Brass	1823391809
G 1/4	Ø 12	10	Brass	R412004708
G 3/8	Ø 8	10	Brass	1823373050
G 3/8	Ø 10	10	Brass	1823373051
G 3/8	Ø 12	5	Brass	1823373052
G 3/8	Ø 14	5	Brass	1823373053
G 1/2	Ø 12	5	Brass	1823373054
G 1/2	Ø 14	5	Brass	1823373055
G 1/2	Ø16	1	Brass	R412007955

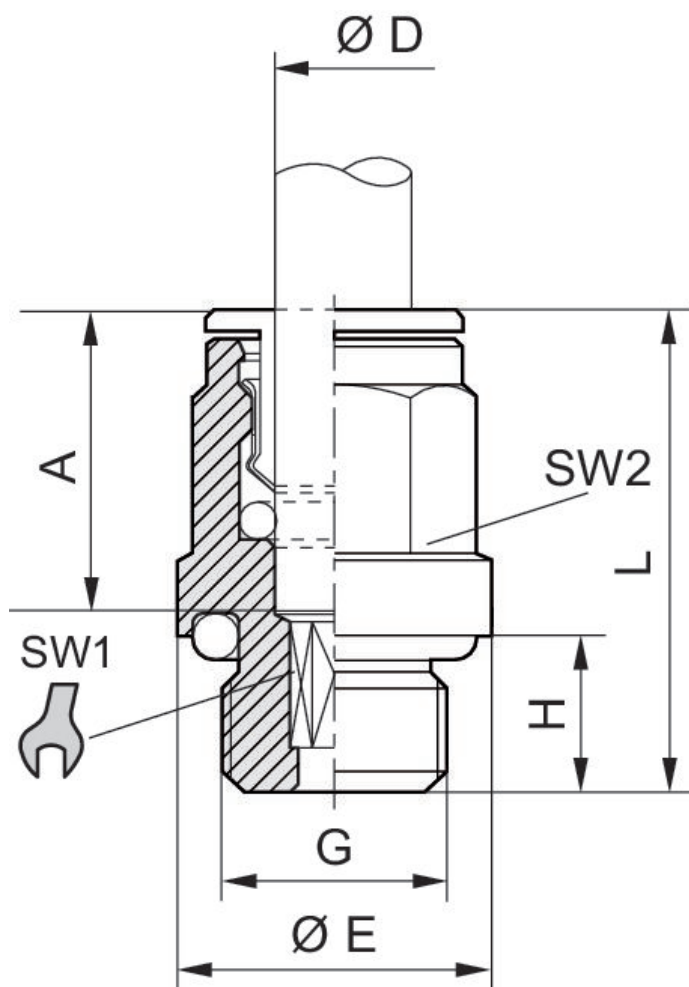
Dimensions



Part No.	Port D	Port G	Ø E	H	L	A Insertion depth	SW 1	SW 2
1823373038	Ø 4	M5	9	4	20.5	15	2.5	–
1823373039	Ø 5	M5	9.5	4	22	16	2.5	–
1823373040	Ø 6	M5	10.5	4	22	16	2.5	–
1823373100	Ø 4	M7	10.8	6	22	15	2.5	9
1823373088	Ø 6	M7	10.5	6	24	16	3.5	–
1823373041	Ø 4	G 1/8	13.5	6	20	15	2.5	9
1823373042	Ø 5	G 1/8	13.5	6	22	16	4	10
1823373043	Ø 6	G 1/8	13.5	6	24	16	4	11
1823373044	Ø 8	G 1/8	13	6	26.5	18	5	13
1823373045	Ø 4	G 1/4	17	8	21	15	2.5	9
1823373046	Ø 5	G 1/4	17	8	22	16	4	10
1823373047	Ø 6	G 1/4	17	6.5	22.5	16	4	11
1823373048	Ø 8	G 1/4	17	8	25	18	6	13
1823373049	Ø 10	G 1/4	16	8	29.5	19	7	16
1823391809	Ø 12	G 1/4	16	6.5	30	20	7	18
R412004708	Ø 12	G 1/4	17	8.3	31		7	–
1823373050	Ø 8	G 3/8	20	9	25	18	6	13
1823373051	Ø 10	G 3/8	21	9	29.5	19	8	16
1823373052	Ø 12	G 3/8	21	9	31	20	10	18
1823373053	Ø 14	G 3/8	21	9	34	22	10	21
1823373054	Ø 12	G 1/2	24	11	31	20	10	18
1823373055	Ø 14	G 1/2	24	11	34	22	12	21
R412007955	Ø16	G 1/2	24	11	37		12	24

1823373045, 1823373046, 1823373047, 1823373048, 1823373049, 1823391809, 1823373050, 1823373051,  
1823373052, 1823373053, 1823373054, 1823373055, R412007955

Dimensions



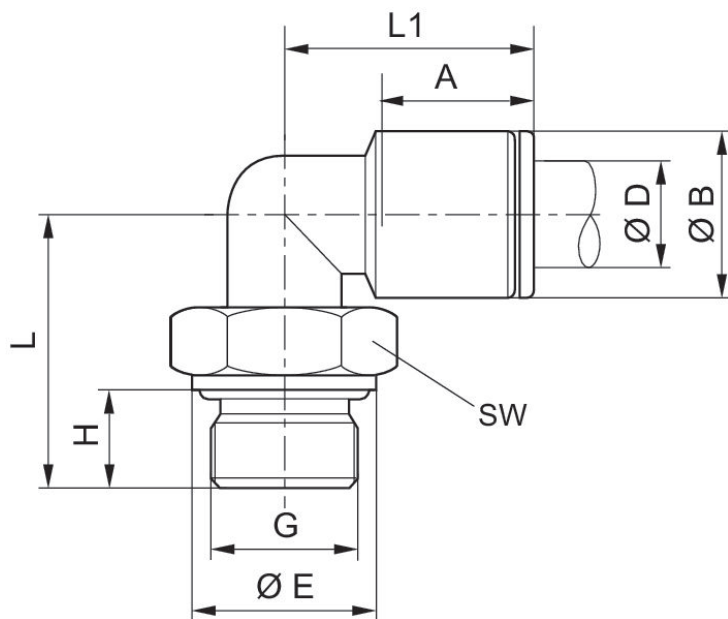
**Series QR2-S-RVT standard**

Fitting type: Elbow fitting, rotatable  
 Compressed air connection type: External thread  
 Compressed air connection 2: Push-in fitting  
 Ambient temperature min./max.: -20 °C ... 80 °C  
 Working pressure min./max.: -0.95 bar ... 16 bar



G	Ø D	Delivery unit [piece]	Material	Part No.
G 1/4	Ø 4	10	Brass	1823391713
G 1/4	Ø 6	10	Brass	1823391714
G 1/4	Ø 8	10	Brass	1823391715
G 1/4	Ø 10	5	Brass	1823391718
G 1/4	Ø 12	5	Brass	1823391843
G 3/8	Ø 8	5	Brass	1823391716
G 3/8	Ø 10	5	Brass	1823391717
G 3/8	Ø 12	5	Brass	1823391838
G 3/8	Ø 14	5	Brass	1823391839
G 3/8	Ø 16	1	Brass	R412010182
G 1/2	Ø 10	5	Brass	R412007589
G 1/2	Ø 12	5	Brass	1823391840
G 1/2	Ø 14	5	Brass	1823391841
G 1/2	Ø 16	1	Brass	R412007956

Dimensions



Part No.	Port D	Port G	ØB	ØE	H	L	L1	A Insertion depth	SW
1823391709	Ø 4	M5	9	8	4	14.5	19	14	9
1823391889	Ø 6	M5	11	8	4	14.5	21	16	9
1823391886	Ø 6	M7	11	10	6	16.5	19.5	16	9
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
1823391716	Ø 8	G 3/8	13	20	9	25.5	24	18	13
1823391717	Ø 10	G 3/8	15	20	9	28	27	19	16
1823391838	Ø 12	G 3/8	17	20	9	28.5	28	20	20
1823391839	Ø 14	G 3/8	20	20	9	28.5	31	22	20
R412010182	Ø16	G 3/8	23	20	9	33.5	33	23.5	20
R412007589	Ø 10	G 1/2	15	25	11	30	27	19	16
1823391840	Ø 12	G 1/2	17	25	11	33.5	28	20	20
1823391841	Ø 14	G 1/2	20	25	11	33.5	31	22	20
R412007956	Ø16	G 1/2	23	25	11	38	33	23.5	20

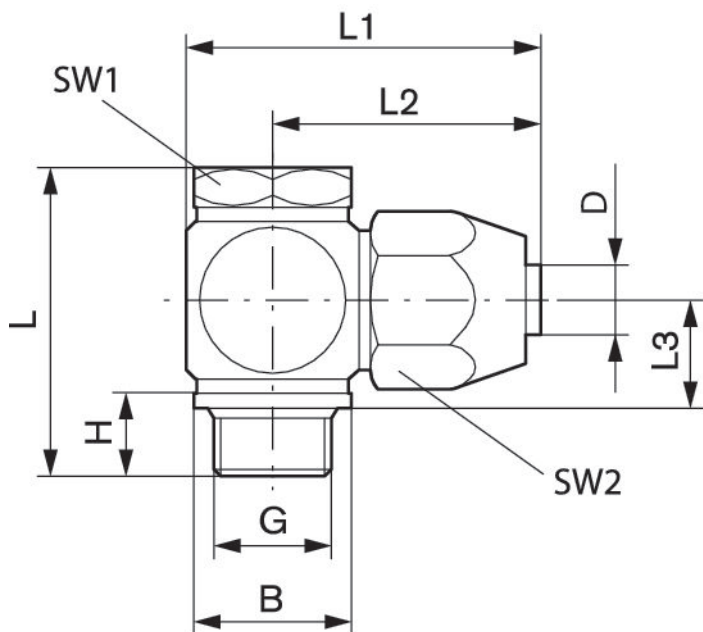
**Series NU2**

Compressed air connection type: External thread  
 Compressed air connection type 2: plug-in with tube nut  
 Ambient temperature min./max.: -10 °C ... 60 °C  
 Working pressure min./max.: -0.95 bar ... 10 bar



G	Ø D	Delivery unit [piece]	Material	Part No.
G 3/8	Ø 8	2	Aluminum	1823391296
G 3/8	Ø 13	2	Aluminum	R412007839
G 1/2	Ø 13	2	Aluminum	R412007838

Dimensions



for fabric-reinforced plastic tubing

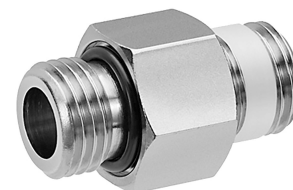
Part No.	Port D	Port G	B	H	L	L1	L2	L3	SW1
1823391293	Ø 4	G 1/8	14	10	32.5	34	26.5	13.7	14
1823391294	Ø 6	G 1/4	18	12.5	39	39.5	30	14.5	17
1823391295	Ø 8	G 1/4	18	12.5	42	42	32.5	16	17
1823391296	Ø 8	G 3/8	21	12.5	43	47	35	15.5	22
R412010658	Ø 9	G 1/4	18.9	7.9	40	42	32.5	15.6	17
R412007838	Ø 13	G 1/2	22.9	14	49.5	55	40	18.5	27
R412007839	Ø 13	G 3/8	22.9	12.5	47	49	37	18.5	22
1823391807	Ø 18	G 3/4	33	18.5	66	69	51	25	32
1823391808	Ø 18	G 1	40	20.5	70	77	55	25	41

Part No.	SW2
1823391293	17
1823391294	19
1823391295	22
1823391296	22
R412010658	24
R412007838	30
R412007839	30
1823391807	41
1823391808	41

Connection D = inside diameter of the tubing to be used

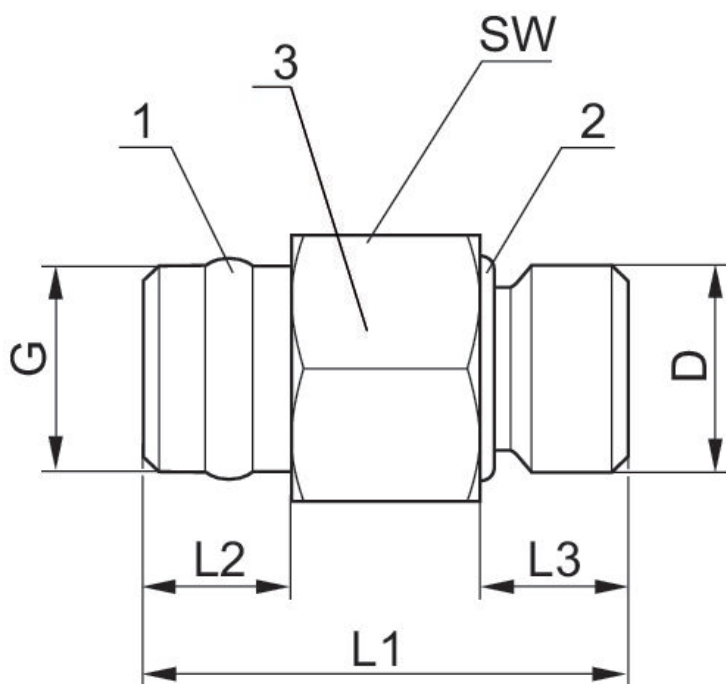
### Double nipple, Series PE5

Compressed air connection type: External thread  
Compressed air connection type 2: External thread



G	Ø D	Delivery unit [piece]	Weight [kg]	Part No.
G 1/4	G 1/8	2	0.04	R412010015
G 1/4	G 1/4	2	0.04	R412010016

Dimensions



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

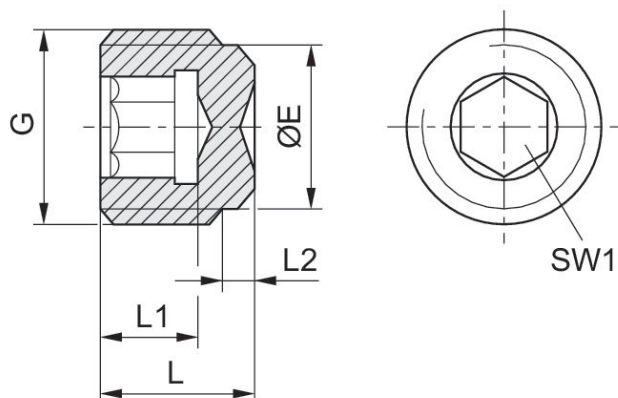
Part No.	Port G	Port D	L1	L2	L3	SW
R412010015	G 1/4	G 1/8	30	10	8.5	17
R412010016	G 1/4	G 1/4	30	10	8.5	17

Blanking screw, Brass



G	Delivery unit [piece]	Part No.
G 1/8	10	1823462004
G 1/4	10	1823462003

Dimensions



Dimensions in mm

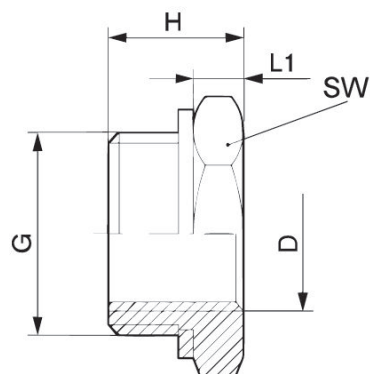
Part No.	Port G	ØE	L	L1	L2	SW1
1823462004	G 1/8	8	8	5	2	5
1823462003	G 1/4	11	11	7	3.5	6

Reducing nipple



G	Ø D	Delivery unit [piece]	Part No.
G 1/2	G 1/4	5	1823391300
G 1/2	G 3/8	5	1823391014
G 3/4	G 1/2	5	1823391028

Dimensions



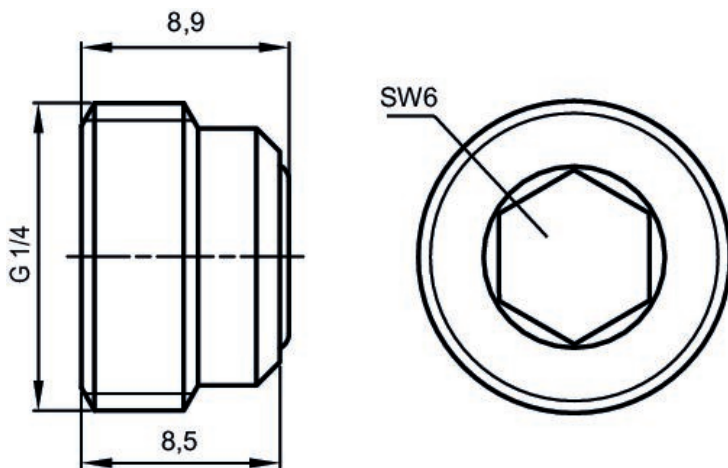
Part No.	Port D	Port G	H	L1	SW
1823391080	M5	G 1/8	10.5	4.5	14
1823391012	G 1/8	G 1/4	13	4	17
1823391298	G 1/8	G 3/8	14	5	19
1823391013	G 1/4	G 3/8	15	5	19
1823391299	G 1/8	G 1/2	15.5	5.5	24
1823391300	G 1/4	G 1/2	15.5	5.5	24
1823391014	G 3/8	G 1/2	15.5	5.5	24
1823391301	G 1/4	G 3/4	19	7	32
1823391302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

Orifice plugs



Type	Delivery unit [piece]	Material	Part No.
Orifice plugs	10	Polyamide	R412010124

Dimensions

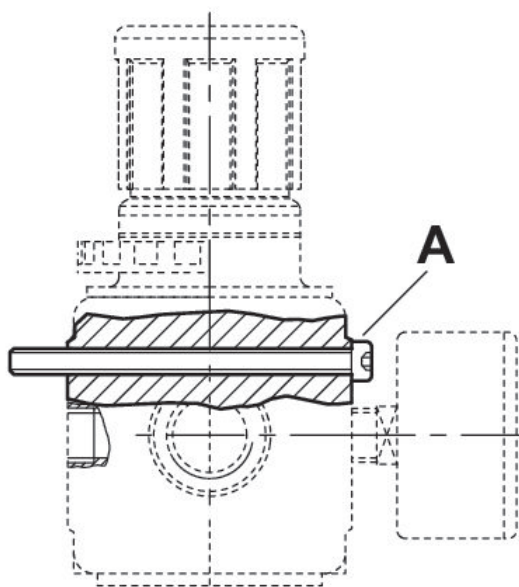


Mounting screws for wall mounting, Series NL2, NL4



Type	Delivery unit [piece]	Material	Weight [kg]	Part No.
DIN 912 - M4x60	10	Steel, chrome-plated	0.006	1823414009
DIN 912 - M5x85	10	Steel, chrome-plated	0.007	1823414014

Dimensions

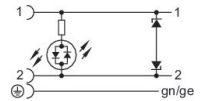


Dimensions in mm

Part No.	usage Series	A
1823414009	NL2	M4x60
1823414014	NL3	M5x85
1823414034	NL4	M4x70

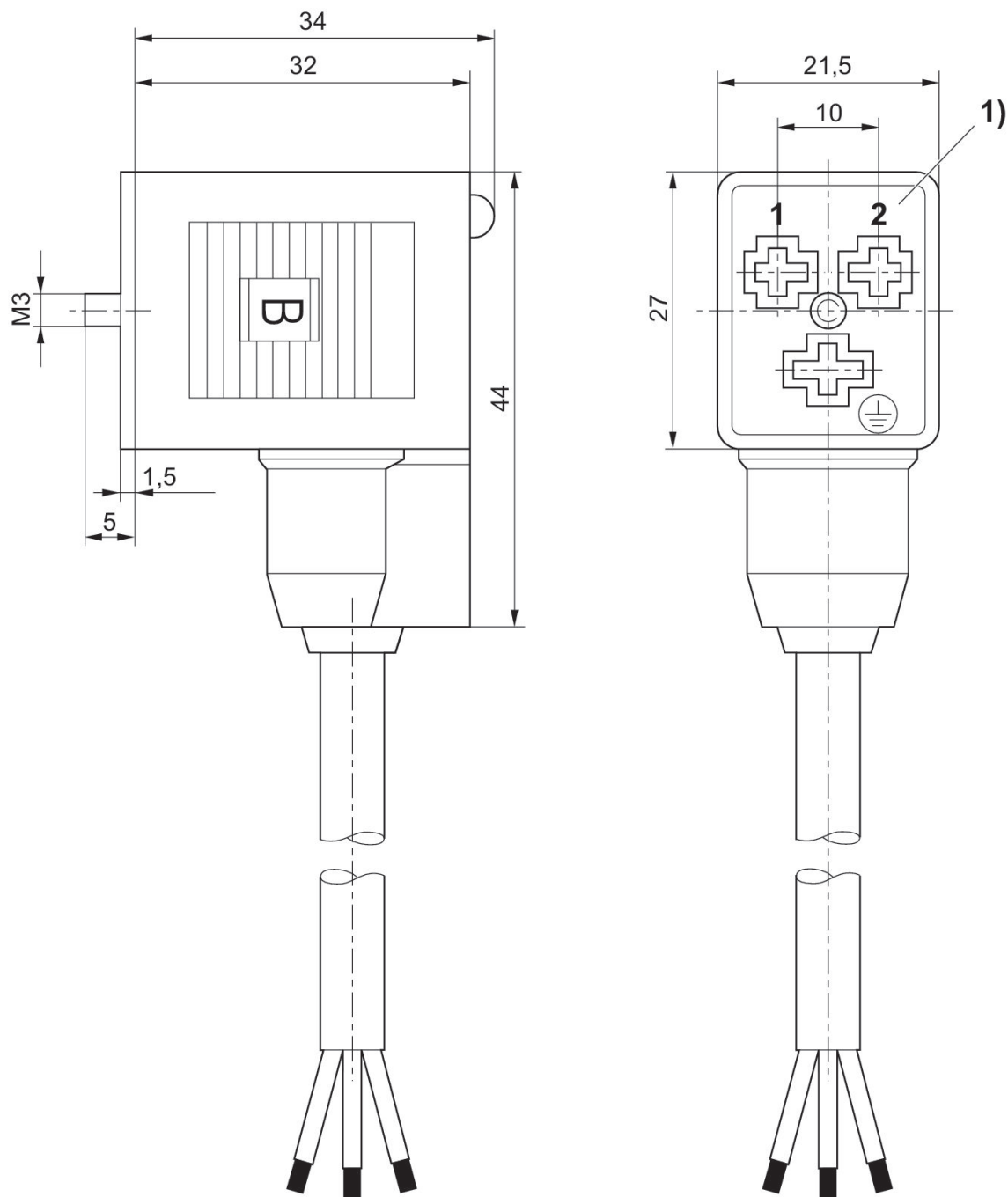
**Valve plug connector with cable series CON-VP, Form B, 0° female insert**

Electrical connection 1: Socket ... Form B ... 2+E ... angled 90°  
 Electrical connection 2: open cable ends ... 3-pin  
 Protective circuit: Z-diode  
 Ambient temperature min./max.: -20 °C ... 80 °C



Operational voltage	Protective circuit	Max. current [A]	Contact assignment	LED status display	Cable-Ø [mm]	Cable length [m]	Part No.
24 V AC/DC	Z-diode	10	2+E	Yellow	5.9	3	1834484153
24 V AC/DC	Z-diode	10	2+E	Yellow	5.9	5	1834484155

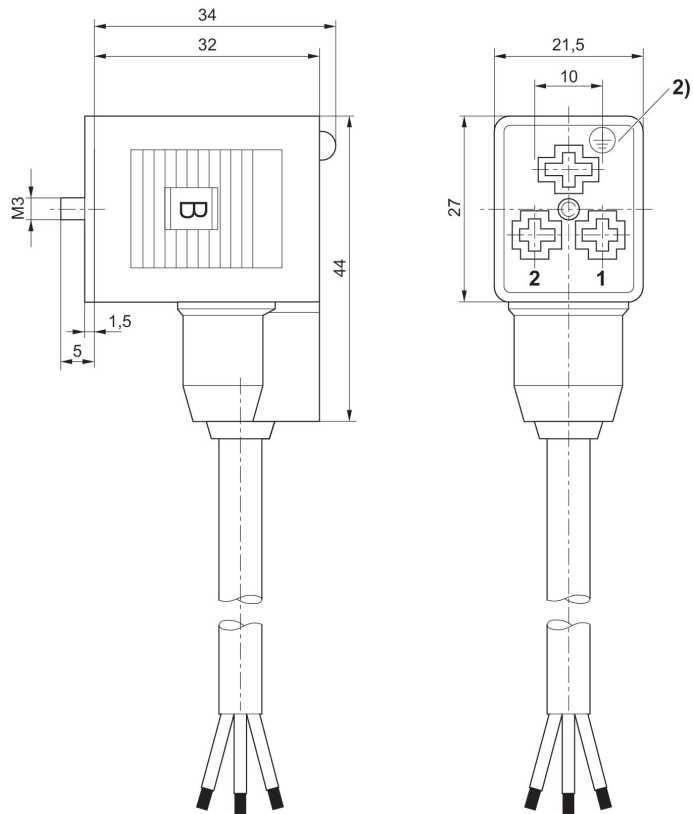
Dimensions



1) 0° female insert

1834484153, 1834484155

Dimensions



2) 180° female insert

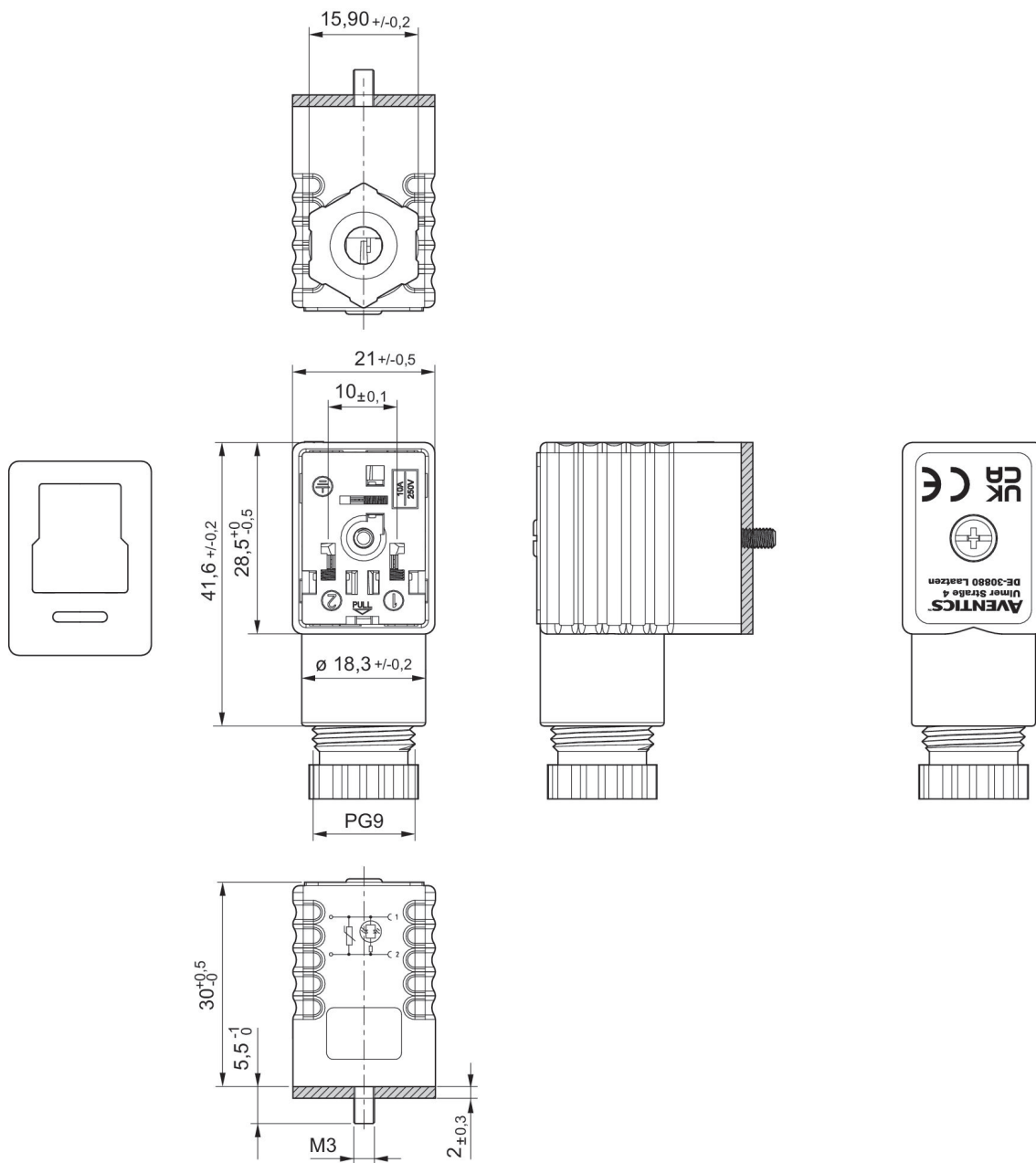
**Valve plug connector, series CON-VPP, Form B, 115/230 V AC/DC, LED**

Electrical connection 1: EN 175301-803, form B  
Ambient temperature min./max.: -40 °C ... 90 °C



	Operational voltage	Protective circuit	Max. current [A]	Contact assignment	LED status display	min. suitable cable Ø [mm]	max. suitable cable Ø [mm]	Part No.
	24 V AC/DC	2 Z-diodes	1.5	2+E	Yellow	4	8	1834484104
	115 V AC/DC	Varistor	1.5	2+E	Red	4	8	1834484105
	230 V AC/DC	Varistor	1.5	2+E	Red	4	8	1834484106

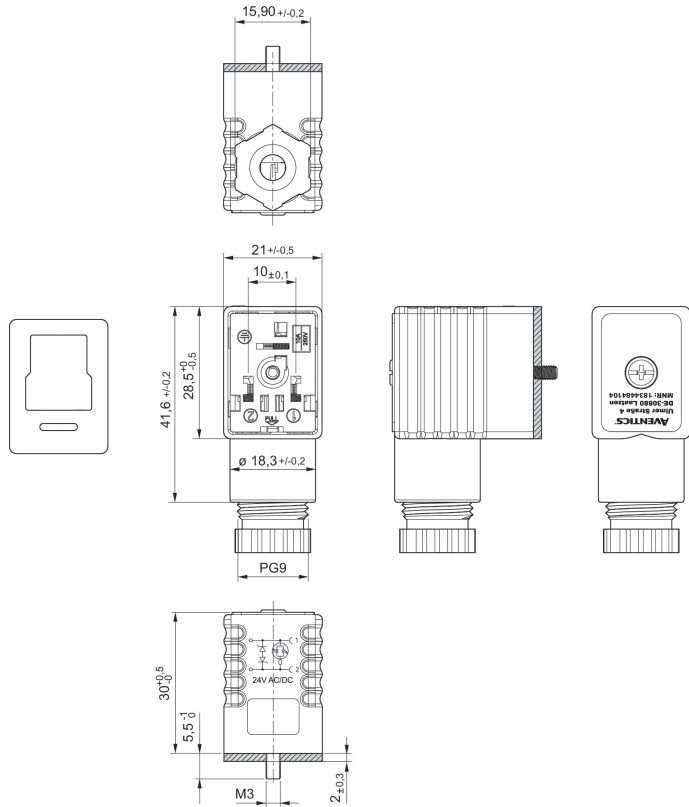
Dimensions



Profile seal

1834484104

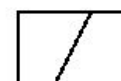
Dimensions



Profile seal

**Coil, Series CO1**

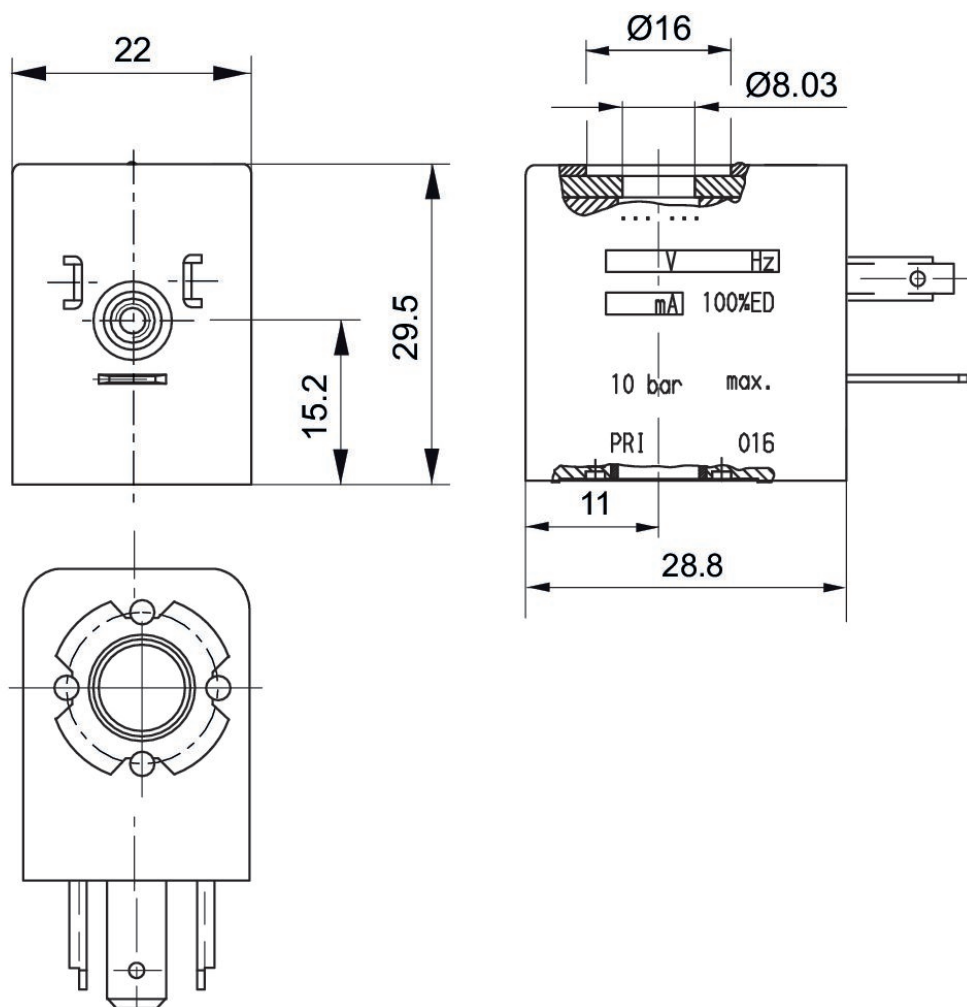
Coil width: 22 mm  
Duty cycle: 100 %  
Ambient temperature min./max.: 50 °C



Operational voltage DC	Number of poles	Operational voltage AC at 50 Hz	Operational voltage AC at 60 Hz	Voltage tolerance DC	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz	Power consumption DC [W]	Part No.
12 V	3-pin	24 V	24 V	-10 % / +10 %	-10 % / +10 %	-10 % / +10 %	5.5	1824210239
24 V	3-pin	48 V	48 V	-10 % / +10 %	-10 % / +10 %	-10 % / +10 %	4.8	1824210243
48 V	3-pin			-10 % / +10 %	-10 % / +10 %	-10 % / +10 %	5	1824210241
60 V	3-pin	110 V	110 V	-10 % / +10 %	-10 % / +10 %	-10 % / +10 %	5.9	1824210237
110 V	3-pin	220 V	230 V	-10 % / +10 %	-10 % / +10 %	-10 % / +10 %	4.9	1824210235

Holding power AC 50 Hz [VA]	Switch-on power AC 50 Hz [VA]	Compatibility index	Part No.
8.9	12	14	1824210239
7.7	10.5	14	1824210243
		14	1824210241
8.4	11	14	1824210237
9.7	12.6	14	1824210235





Dimensions



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air supply management, proportional pressure  
control valves



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