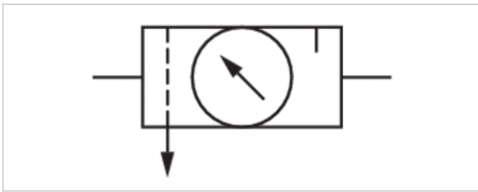


# Maintenance unit, 2-part, Series NL4-ACD

- G 1/2, G 3/4
- with pressure gauge
- suitable for ATEX



Version	2-in-1, Can be assembled into blocks
Parts	Filter pressure regulator, Lubricator
Mounting orientation	vertical
Certificates	suitable for ATEX
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	5.08 Cv
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	8 ... 145 psi
Pressure supply	single
Filter reservoir volume	1.69 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Lubricator reservoir volume	4.23 fl.oz.
Type of filling	Manual oil filling
Weight	See table below

## Technical data

Part No.	Port	Flow Qn	Condensate drain		Reservoir
0821300500	G 1/2	5.08 Cv	semi-automatic, open without pressure		Polycarbonate
0821300503	G 1/2	5.08 Cv	fully automatic, open without pressure		Polycarbonate
0821300501	G 1/2	5.08 Cv	semi-automatic, open without pressure		Polycarbonate
0821300504	G 1/2	5.08 Cv	fully automatic, open without pressure		Polycarbonate
0821300502	G 1/2	5.08 Cv	semi-automatic, open without pressure		Die cast zinc
0821300505	G 1/2	5.08 Cv	fully automatic, open without pressure		Die cast zinc
0821300530	G 3/4	5.08 Cv	semi-automatic, open without pressure		Polycarbonate
0821300533	G 3/4	5.08 Cv	fully automatic, open without pressure		Polycarbonate
0821300531	G 3/4	5.08 Cv	semi-automatic, open without pressure		Polycarbonate
0821300534	G 3/4	5.08 Cv	fully automatic, open without pressure		Polycarbonate
0821300532	G 3/4	5.08 Cv	semi-automatic, open without pressure		Die cast zinc
0821300535	G 3/4	5.08 Cv	fully automatic, open without pressure		Die cast zinc

Part No.	Protective guard	Weight
0821300500	-	3.81 lbs
0821300503	-	3.95 lbs
0821300501	Steel	4.21 lbs
0821300504	Steel	4.36 lbs

Part No.	Protective guard	Weight
0821300502	-	5.16 lbs
0821300505	-	5.31 lbs
0821300530	-	3.81 lbs
0821300533	-	3.95 lbs
0821300531	Steel	4.21 lbs
0821300534	Steel	4.36 lbs
0821300532	-	5.16 lbs
0821300535	-	5.31 lbs

Nominal flow  $Q_n$  with secondary pressure  $p_2 = 87$  psi at  $\Delta p = 14.5$  psi

Suitable for use in Ex zones 1, 2, 21, 22, Metal protective guard can be retrofitted for all polycarbonate reservoirs

## Technical information

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

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

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

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

Also suitable for separation of fluid oil or water due to the design.

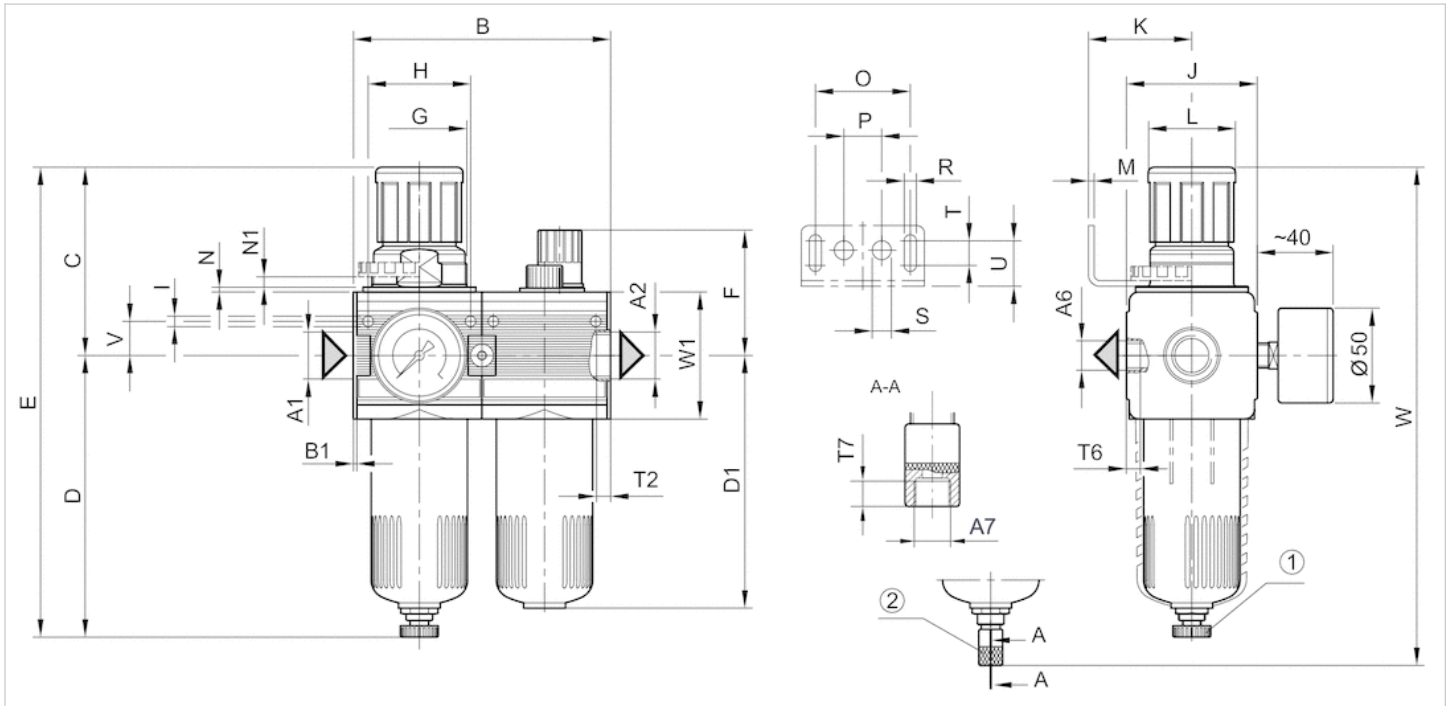
Compressed air class 6 : 7 : -

## Technical information

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

# Dimensions

## Dimensions



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

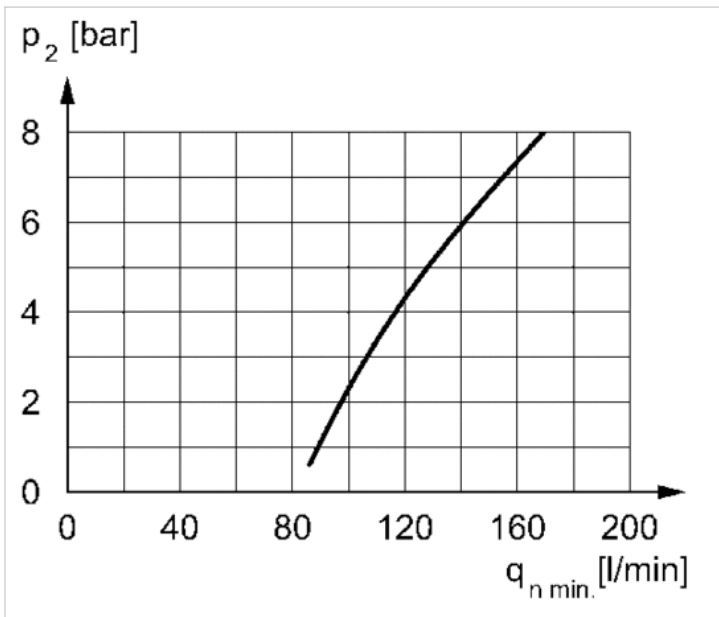
## Dimensions in mm

A1	A2	A6	A7	B	B1	C	D	D1	E	F	G	H	I	J	K	L	M	N	N1	O
G 1/2	G 1/2	G 1/4	G 1/8	135.6	1.8	100.5	147	132	247.5	65	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50
G 3/4	G 3/4	G 1/4	G 1/8	135.6	1.8	100.5	147	132	247.5	65	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50

P	R	S	T	T2	T6	T7	U	V	W	W1
20	6.4	10	13	13	7	8.5	24	18	262.5	67
20	6.4	10	13	13	7	8.5	24	18	262.5	67

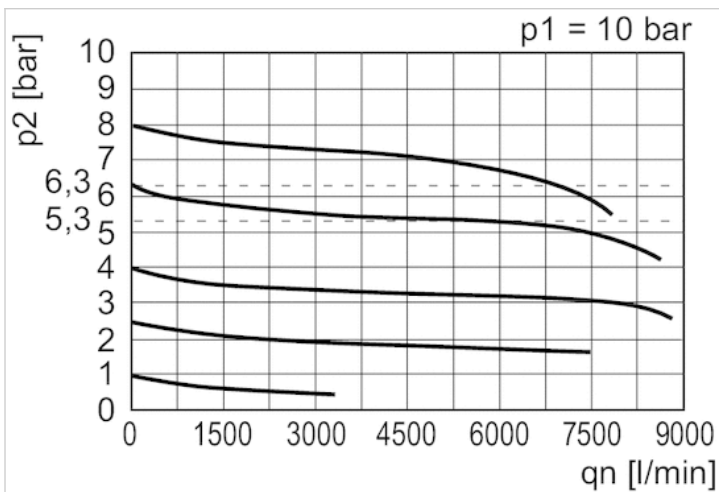
## Diagrams

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



$p_1$  = operating pressure  
 $p_2$  = secondary pressure  
 $q_n$  = nominal flow  
 $q_{n \text{ min.}}$  = min. nominal flow

## Flow rate characteristic



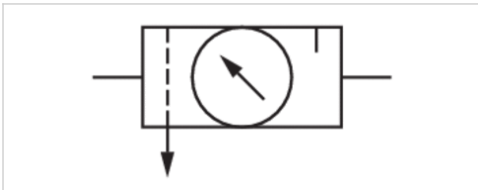
$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

# Maintenance unit, 3-part, Series NL4-ACT

- G 1/2, G 3/4

- with pressure gauge

- suitable for ATEX



Version	3-part, Can be assembled into blocks
Parts	Pressure regulator, Filter, Lubricator
Mounting orientation	vertical
Certificates	suitable for ATEX
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	5.08 Cv
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	8 ... 145 psi
Pressure supply	single
Filter reservoir volume	1.69 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Lubricator reservoir volume	4.23 fl.oz.
Type of filling	Manual oil filling
Weight	See table below

## Technical data

Part No.	Port	Flow Qn	Condensate drain		Reservoir
0821300550	G 1/2	5.08 Cv	semi-automatic, open without pressure		Polycarbonate
0821300553	G 1/2	5.08 Cv	fully automatic, open without pressure		Polycarbonate
0821300551	G 1/2	5.08 Cv	semi-automatic, open without pressure		Polycarbonate
0821300554	G 1/2	5.08 Cv	fully automatic, open without pressure		Polycarbonate
0821300552	G 1/2	5.08 Cv	semi-automatic, open without pressure		Die cast zinc
0821300555	G 1/2	5.08 Cv	fully automatic, open without pressure		Die cast zinc
0821300580	G 3/4	5.08 Cv	semi-automatic, open without pressure		Polycarbonate
0821300583	G 3/4	5.08 Cv	fully automatic, open without pressure		Polycarbonate
0821300581	G 3/4	5.08 Cv	semi-automatic, open without pressure		Polycarbonate
0821300584	G 3/4	5.08 Cv	fully automatic, open without pressure		Polycarbonate
0821300582	G 3/4	5.08 Cv	semi-automatic, open without pressure		Die cast zinc
0821300585	G 3/4	5.08 Cv	fully automatic, open without pressure		Die cast zinc

Part No.	Protective guard	Weight
0821300550	-	5.22 lbs
0821300553	-	5.37 lbs
0821300551	Steel	5.63 lbs
0821300554	Steel	5.78 lbs

Part No.	Protective guard	Weight
0821300552	-	6.18 lbs
0821300555	-	6.32 lbs
0821300580	-	5.22 lbs
0821300583	-	5.37 lbs
0821300581	Steel	5.63 lbs
0821300584	Steel	5.78 lbs
0821300582	-	6.18 lbs
0821300585	-	6.18 lbs

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

Suitable for use in Ex zones 1, 2, 21, 22, Metal protective guard can be retrofitted for all polycarbonate reservoirs

## Technical information

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

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

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

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

Also suitable for separation of fluid oil or water due to the design.

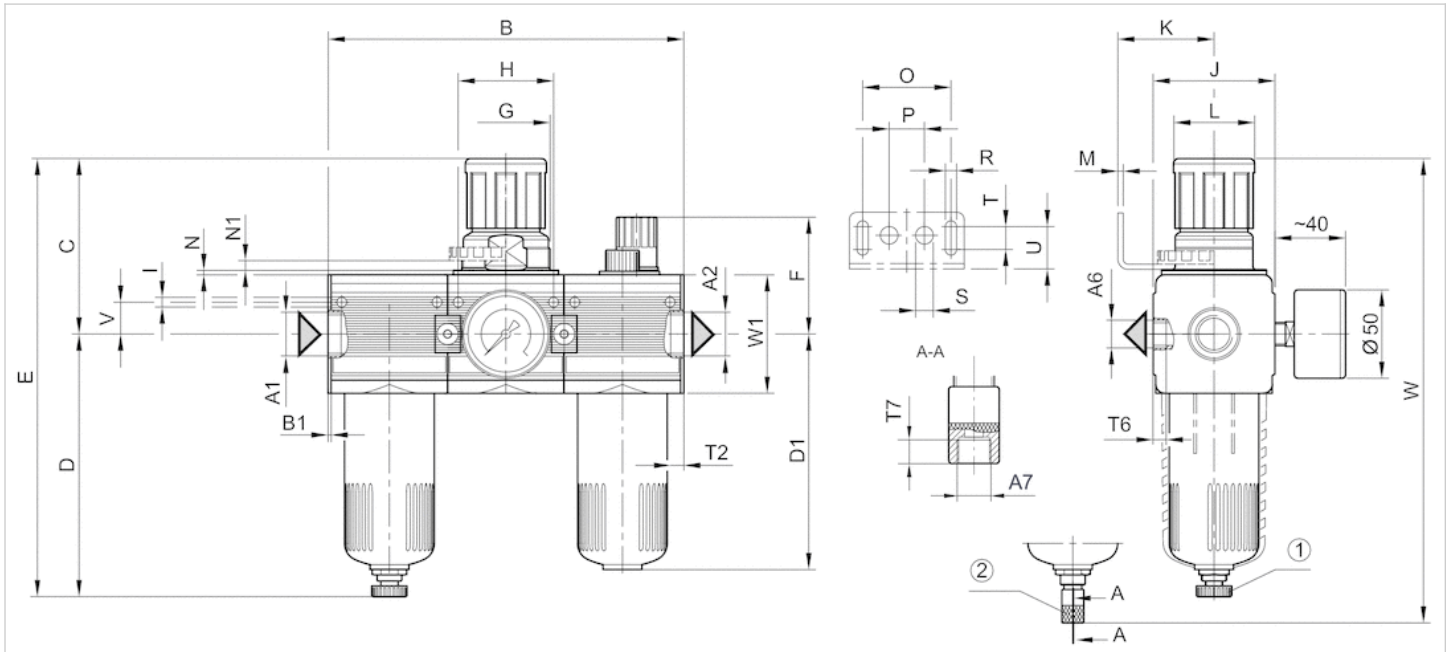
Compressed air class 6 : 7 : -

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate, Die cast zinc
Protective guard	Steel
Filter insert	Polyethylene

# Dimensions

## Dimensions



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

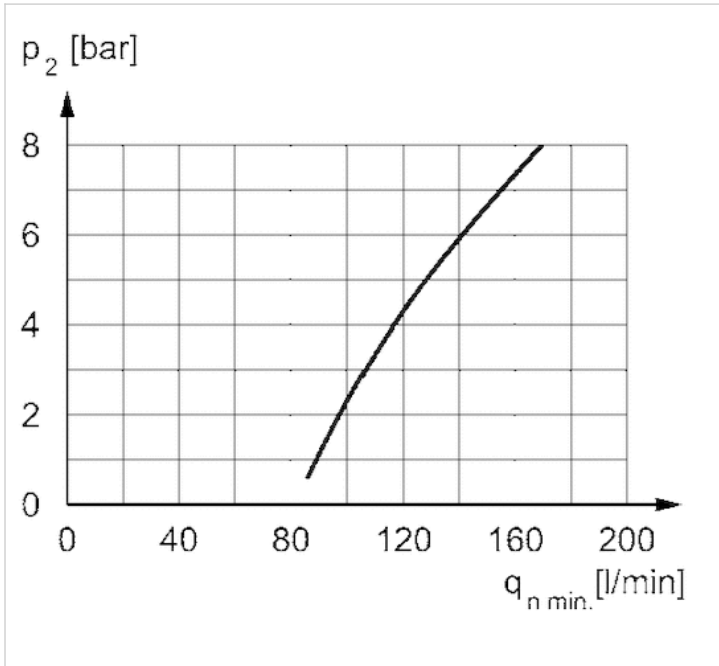
## Dimensions in mm

A1	A2	A6	A7	B	B1	C	D	D1	E	F	G	H	I	J	K	L	M	N	N1	O
G 1/2	G 1/2	G 1/4	G 1/8	201.6	1.8	100.5	147	132	247.5	65	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50
G 1/2	G 1/2	G 1/4	G 1/8	201.6	1.8	100.5	147	132	247.5	65	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50
G 3/4	G 3/4	G 1/4	G 1/8	201.6	1.8	100.5	147	132	247.5	65	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50

P	R	S	T	T2	T6	T7	U	V	W	W1
20	6.4	10	13	13	7	8.5	24	18	262.5	67
20	6.4	10	10	13	13	7	8.5	24	18	262.5
20	6.4	10	10	13	13	7	8.5	24	18	262.5

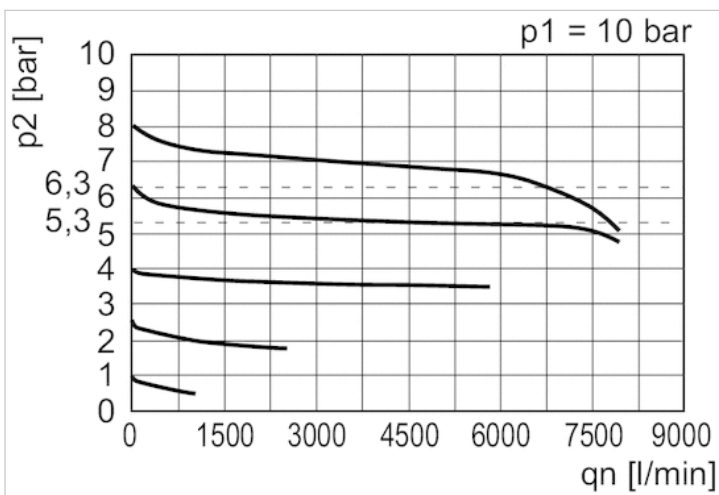
## Diagrams

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



$p_1$  = operating pressure  
 $p_2$  = secondary pressure  
 $q_n$  = nominal flow  
 $q_{n \text{ min.}}$  = min. nominal flow

## Flow rate characteristic



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



# Pressure regulator, Series NL4-RGS

- G 1/2, G 3/4
- Qn = 9.65 Cv
- Standard pressure regulator
- Activation Mechanical
- suitable for ATEX



Parts	Pressure regulator
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	See table below
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	single
Activation	Mechanical
Weight	See table below

## Technical data

Part No.	Diagram	Symbol	Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
0821302505			G 1/2	9.65 Cv	8 ... 145 psi	2 ... 43 psi
0821302580			G 1/2	9.65 Cv	8 ... 232 psi	3 ... 87 psi
0821302500			G 1/2	9.65 Cv	8 ... 232 psi	8 ... 145 psi
0821302504		—	G 1/2	9.65 Cv	8 ... 145 psi	2 ... 43 psi
0821302506		—	G 1/2	9.65 Cv	8 ... 145 psi	3 ... 87 psi
0821302501		—	G 1/2	9.65 Cv	8 ... 232 psi	8 ... 145 psi
0821302544			G 3/4	9.65 Cv	8 ... 232 psi	2 ... 43 psi
0821302545			G 3/4	9.65 Cv	8 ... 232 psi	3 ... 87 psi
0821302540			G 3/4	9.65 Cv	8 ... 232 psi	8 ... 145 psi
0821302546		—	G 3/4	9.65 Cv	8 ... 232 psi	2 ... 43 psi
0821302547		—	G 3/4	9.65 Cv	8 ... 232 psi	3 ... 87 psi
0821302541		—	G 3/4	9.65 Cv	8 ... 232 psi	8 ... 145 psi

Part No.	Pressure gauge	Weight
0821302505	with pressure gauge	2.06 lbs
0821302580	with pressure gauge	2.06 lbs
0821302500	with pressure gauge	2.06 lbs
0821302504	-	1.87 lbs
0821302506	-	1.87 lbs
0821302501	-	1.87 lbs
0821302544	with pressure gauge	2.06 lbs
0821302545	with pressure gauge	2.06 lbs
0821302540	with pressure gauge	2.06 lbs

Part No.	Pressure gauge	Weight
0821302546	-	1.87 lbs
0821302547	-	1.87 lbs
0821302541	-	1.87 lbs

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

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

## Technical information

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

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

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

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

Relieving exhaust (≤ 4.35 psi over set pressure)

With rear exhaust (> 43.5 psi )

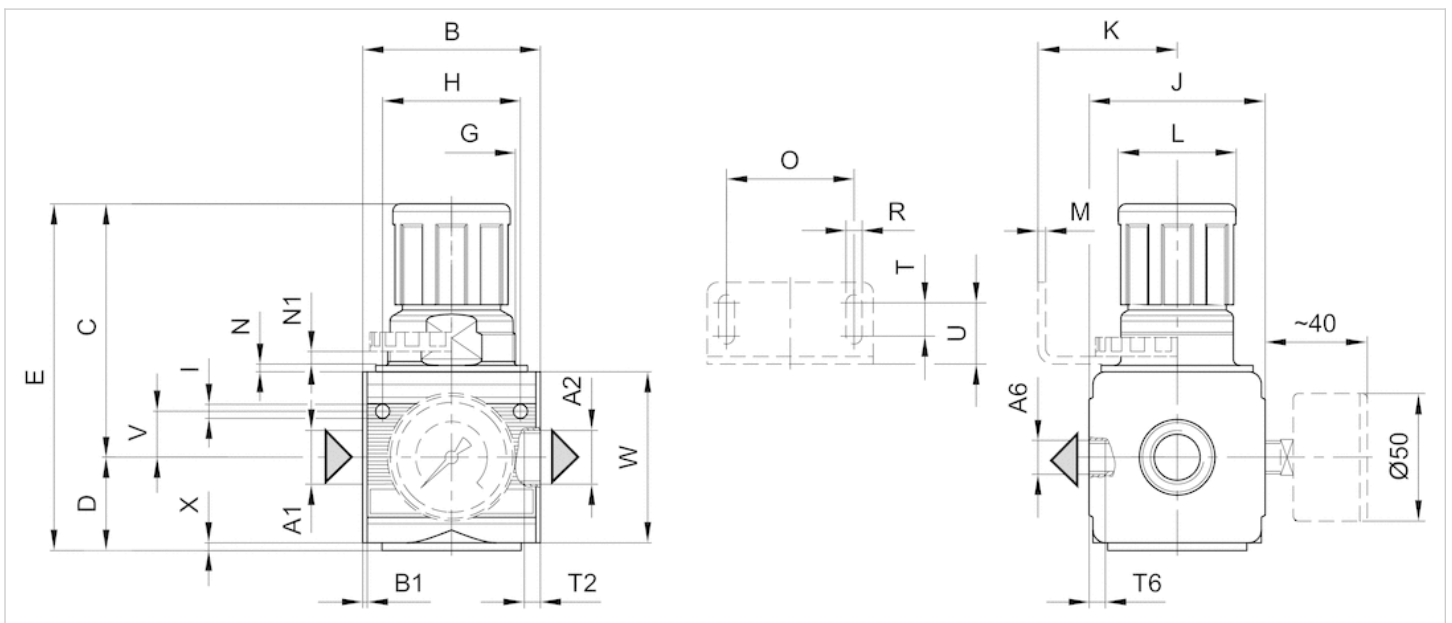
Recommended pre-filtering 5 μm

## Technical information

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

## Dimensions

### Dimensions



A1 = input

A2 = output  
A6 = output

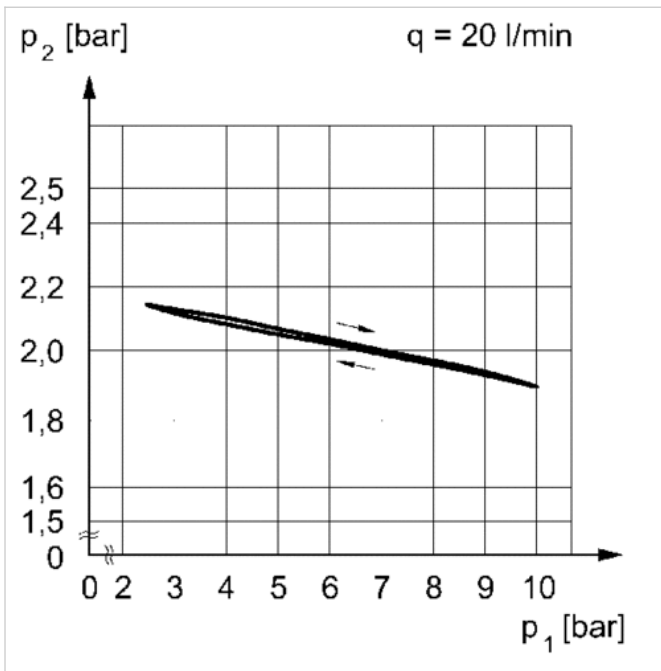
Dimensions in mm

A1	A2	A6	B	B1	C	D	E	G	H	I	J	K	L	M	N	N1	O	R	S	T	T2	T6
G 1/2	G 1/4	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50	6.4	10	13	13	10
G 3/4	G 1/4	G 1/4	69.5	1.8	97	35.5	132.5	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50	6.4	10	13	13	10

U		V		W		X	
24		18		67		2	
24		18		67		2	

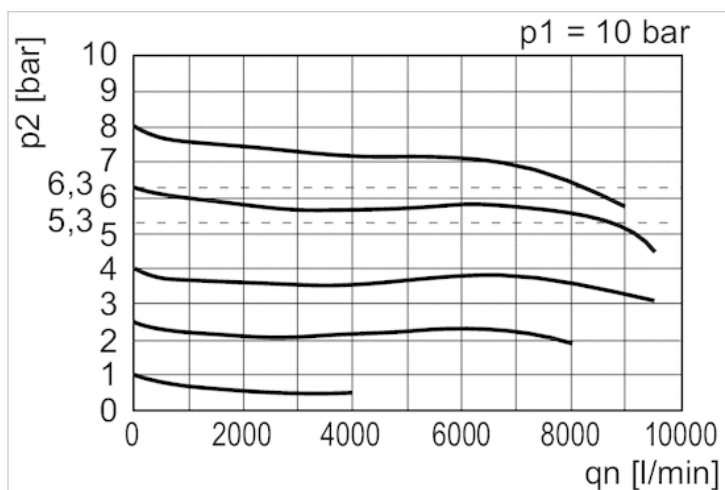
Diagrams

Pressure characteristics curve



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

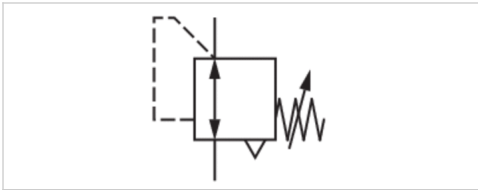
Flow rate characteristic (setting range p2: 0.5 - 10 bar)



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

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

- G 1/2
- Qn = 9.65 Cv
- Standard pressure regulator
- Activation Mechanical
- with continuous pressure supply
- suitable for ATEX



## Parts

Mounting orientation

Certificates

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Pressure supply

Activation

Weight

Pressure regulator with continuous pressure supply

Any

suitable for ATEX

8 ... 232 psi

14 ... 140 °F

14 ... 140 °F

Compressed air, Neutral gases

Diaphragm-type pressure regulator, Can be assembled into blocks with relieving air exhaust

See table below

double

Mechanical

1.91 lbs

## Technical data

Part No.	Port	Flow	Adjustment range min./max.	Max. pressure gauge Ø in blocked state
		Qn		
0821302509	G 1/2	9.65 Cv	2 ... 43 psi	63 mm
0821302508	G 1/2	9.65 Cv	3 ... 87 psi	63 mm
0821302507	G 1/2	9.65 Cv	8 ... 145 psi	63 mm

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

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

## Technical information

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

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

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

Relieving exhaust (≤ 4.35 psi over set pressure)

With rear exhaust (> 43.5 psi )

Recommended pre-filtering 5 μm

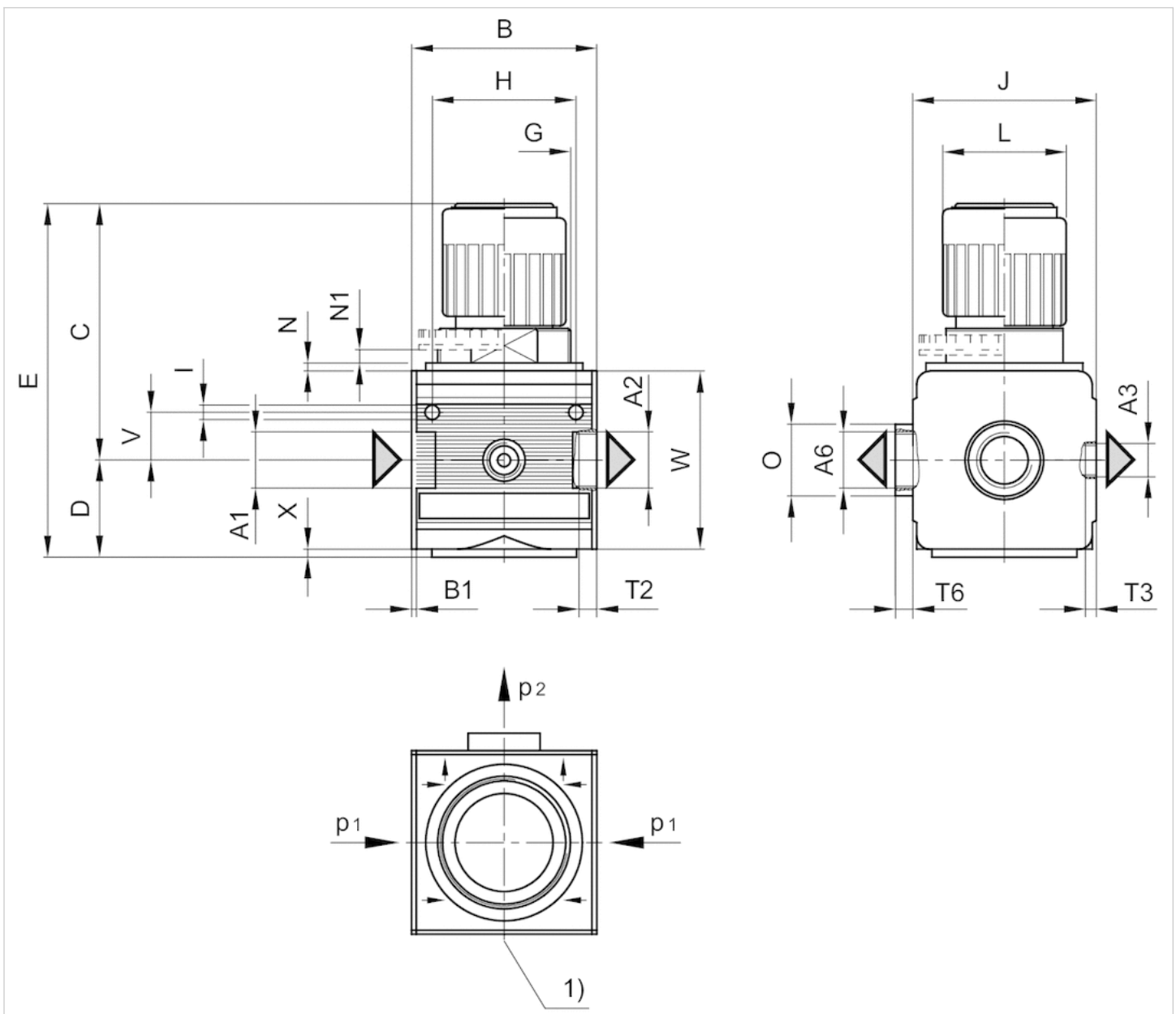
## Technical information

### Material

Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

## Dimensions

### Dimensions



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

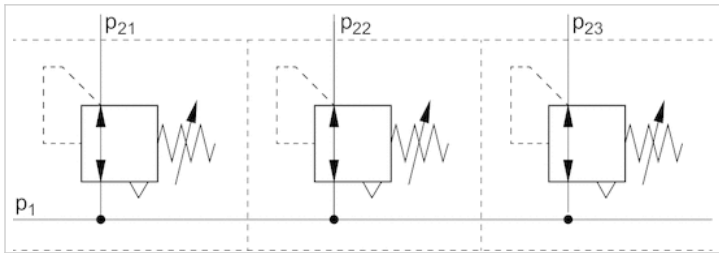
p2 = secondary pressure

Dimensions in mm

A1	A2	A3	A6	B	B1	C	D	E	G	H	I	J	L	N	N1	O	T2	T3	T6	V	W	X
G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5	M50x1,5	54	5.5	69	46	3	5.5	27	13	7	6	18	67	2

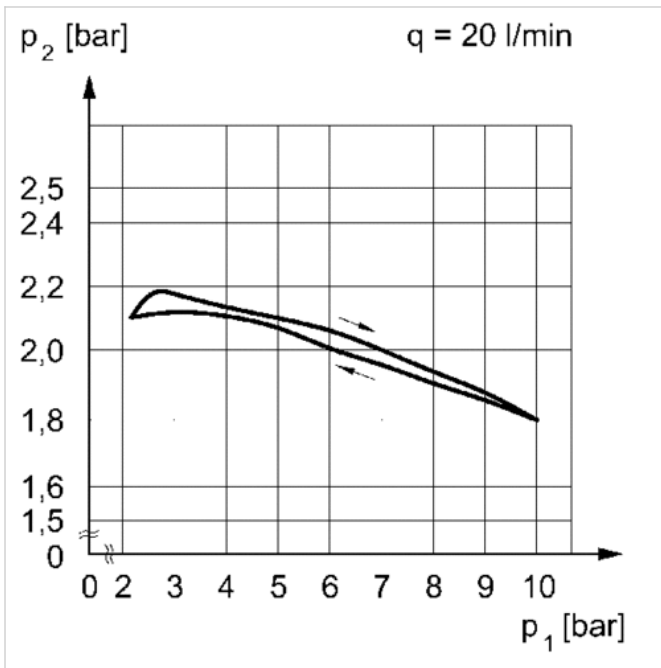
Diagrams

Application example



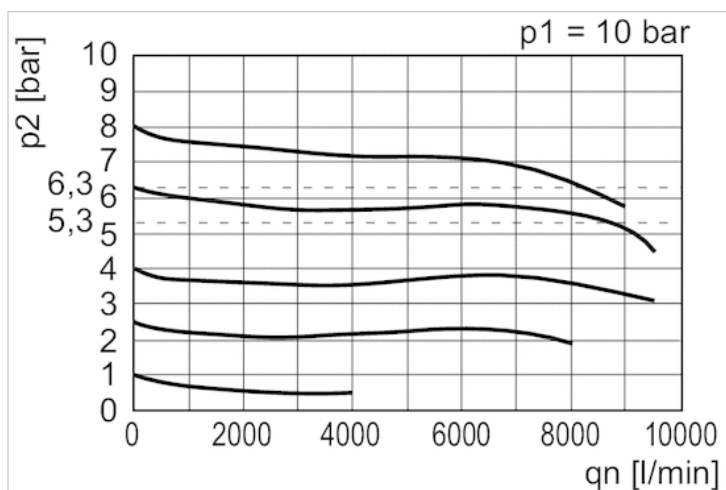
p1 = working pressure

Pressure characteristics curve



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

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



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



# Pressure regulator, Series NL4-RGS

- G 1/2, G 3/4
- Qn = 9.65 Cv
- Standard pressure regulator
- Activation Mechanical
- lockable
- with key
- suitable for ATEX



Parts	Pressure regulator
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	8 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Lock type	with key
Pressure supply	single
Activation	Mechanical
Weight	See table below

## Technical data

Part No.	Symbol	Symbol	Port	Flow	Adjustment range min./max.	Pressure gauge	Weight
				Qn			
0821302581			G 1/2	9.65 Cv	2 ... 43 psi	with pressure gauge	2.06 lbs
0821302582			G 1/2	9.65 Cv	3 ... 87 psi	with pressure gauge	2.06 lbs
0821302502			G 1/2	9.65 Cv	8 ... 145 psi	with pressure gauge	2.06 lbs
0821302583		—	G 1/2	9.65 Cv	2 ... 43 psi	-	1.87 lbs
0821302584		—	G 1/2	9.65 Cv	3 ... 87 psi	-	1.87 lbs
0821302503		—	G 1/2	9.65 Cv	8 ... 145 psi	-	1.87 lbs
0821302548			G 3/4	9.65 Cv	2 ... 43 psi	with pressure gauge	2.06 lbs
0821302549			G 3/4	9.65 Cv	3 ... 87 psi	with pressure gauge	2.06 lbs
0821302542			G 3/4	9.65 Cv	8 ... 145 psi	with pressure gauge	2.06 lbs
0821302550		—	G 3/4	9.65 Cv	2 ... 43 psi	-	1.87 lbs
0821302551		—	G 3/4	9.65 Cv	3 ... 87 psi	-	1.87 lbs
0821302543		—	G 3/4	9.65 Cv	8 ... 145 psi	-	1.87 lbs

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

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

## Technical information

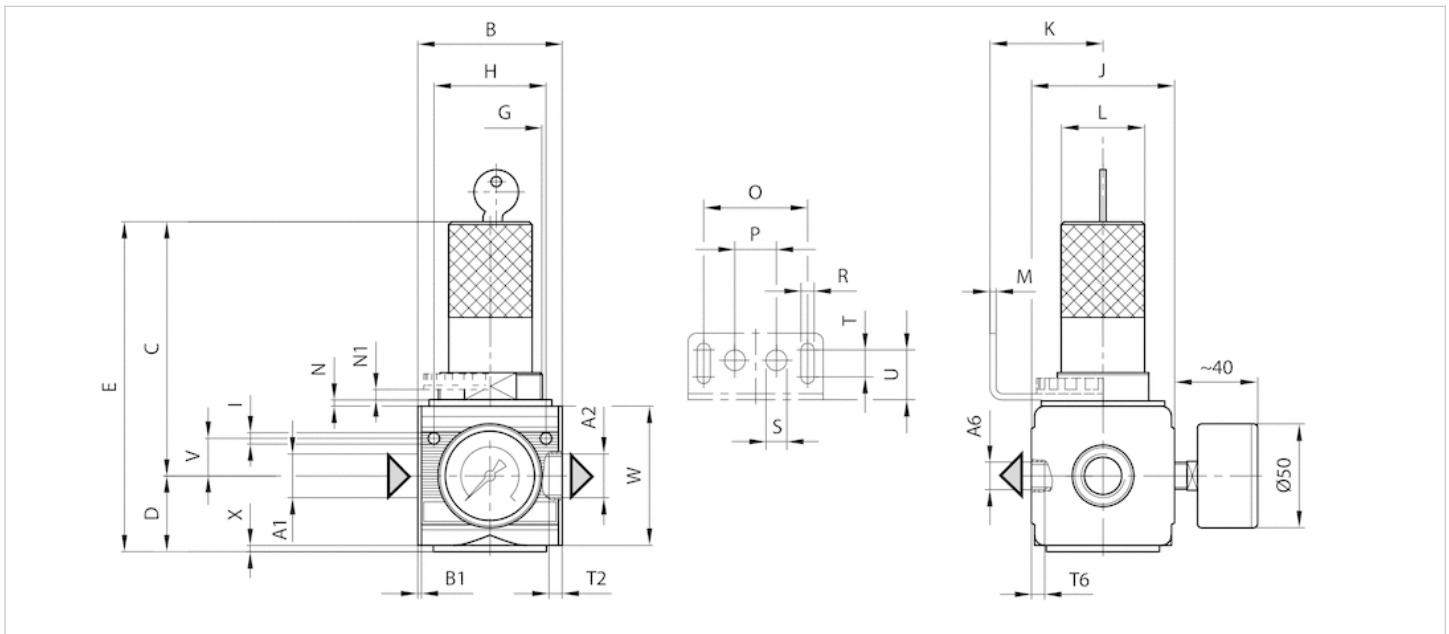
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .  
 The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).  
 Suitable for use in Ex zones 1, 2, 21, 22  
 A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.  
 Relieving exhaust ( $\leq 4.35$  psi over set pressure)  
 With rear exhaust ( $> 43.5$  psi )  
 Recommended pre-filtering 5  $\mu$ m

## Technical information

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

## Dimensions

### Dimensions



A1 = input  
 A2 = output  
 A6 = output

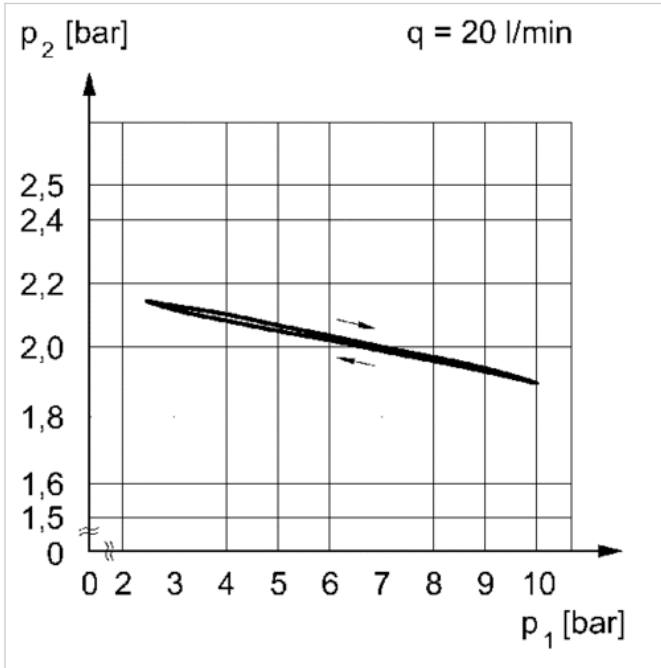
### Dimensions in mm

A1	A2	A6	B	B1	C	D	E	G	H	I	J	K	L	M	N	N1	O	P	R	S	T	T2
G 1/2	G 1/2	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5	54	5.5	67	54.5	46	3	3	5.5	50	20	6.4	10	13	13
G 3/4	G 3/4	G 1/4	69.5	1.8	122	35.5	157.5	M50x1,5	54	5.5	67	54.5	46	3	3	5.5	50	20	6.4	10	13	13

T6	U	V	W	X
7	24	18	67	2
7	24	18	67	2

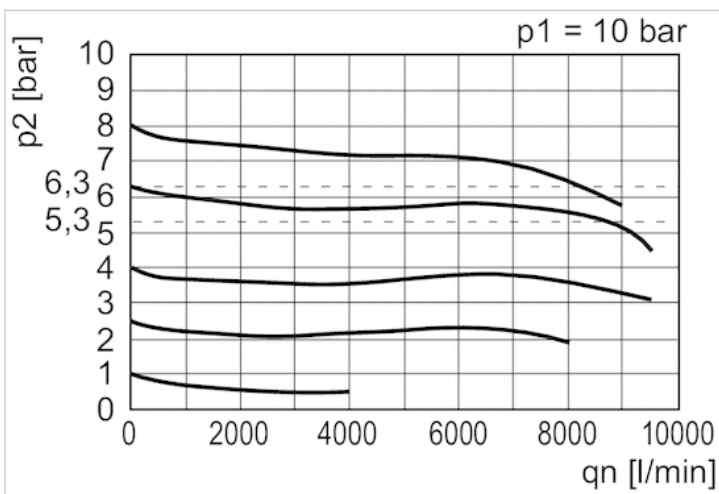
## Diagrams

### Pressure characteristics curve



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

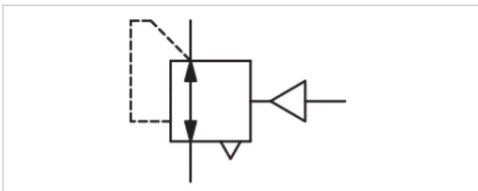
### Flow rate characteristic (setting range $p_2$ : 0.5 - 10 bar)



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

# Pressure regulator, Series NL4-RGS

- G 1/2, G 3/4
- $Q_n = 9.65 \text{ Cv}$
- Standard pressure regulator
- Activation Pneumatically
- suitable for ATEX



Parts	Pressure regulator
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	8 ... 232 psi
Control pressure max.	145 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks with relieving air exhaust
Regulator function	
Adjustment range min./max.	8 ... 145 psi
Pressure supply	single
Activation	Pneumatically
Weight	1.87 lbs

## Technical data

Part No.	Port	Flow
		$Q_n$
R412004952	G 1/2	9.65 Cv
R412007667	G 3/4	9.65 Cv

Nominal flow  $Q_n$  with secondary pressure  $p_2 = 87 \text{ psi}$  at  $\Delta p = 14.5 \text{ psi}$

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

## Technical information

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

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

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

Relieving exhaust ( $\leq 4.35 \text{ psi}$  over set pressure)

With rear exhaust ( $> 43.5 \text{ psi}$  )

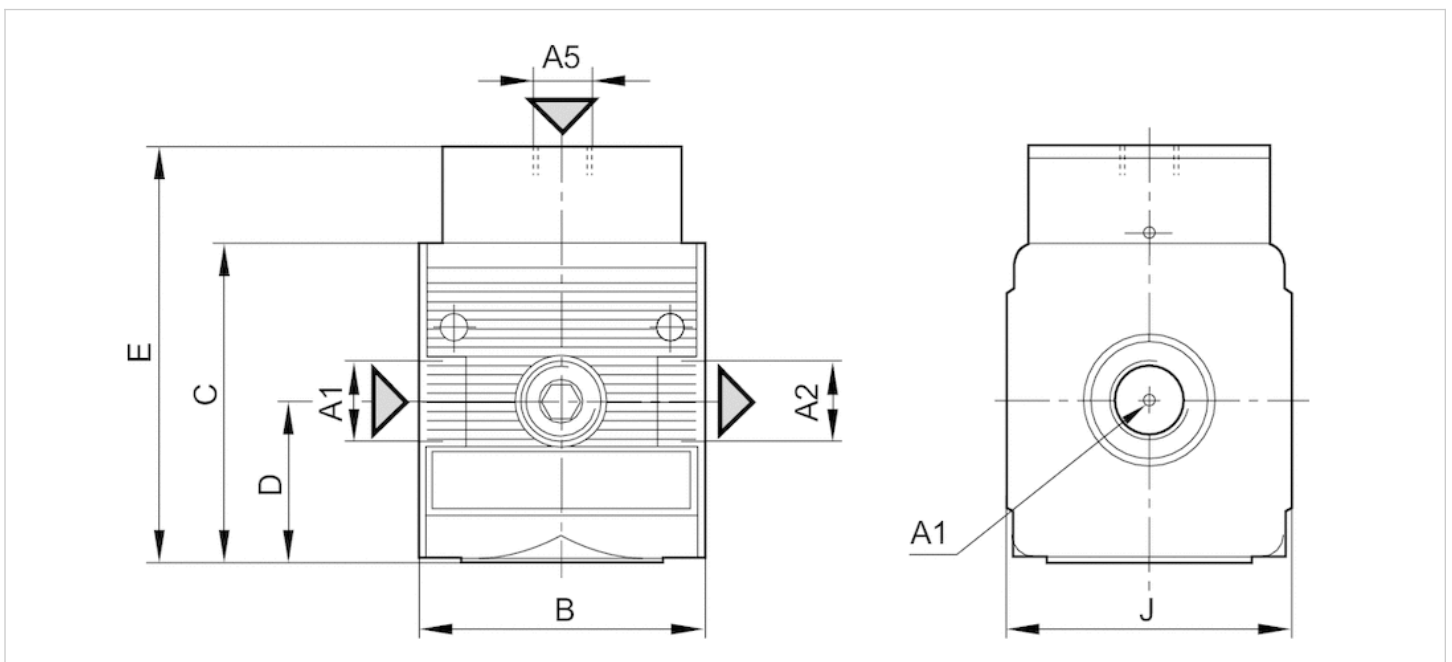
Recommended pre-filtering 5  $\mu\text{m}$

## Technical information

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

## Dimensions

### Dimensions



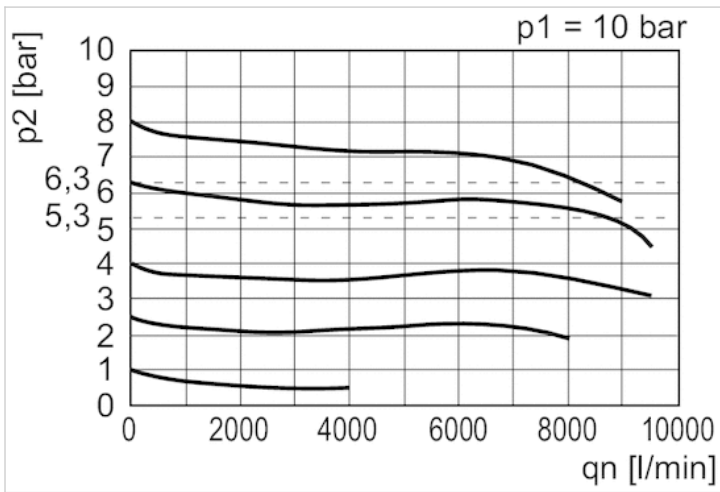
- A1 = input
- A2 = output
- A5 = control pressure connection

### 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

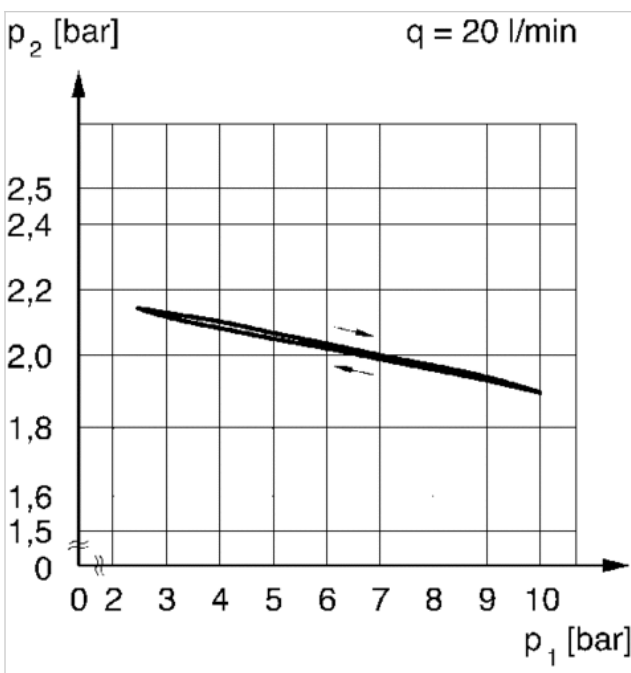
## Diagrams

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



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

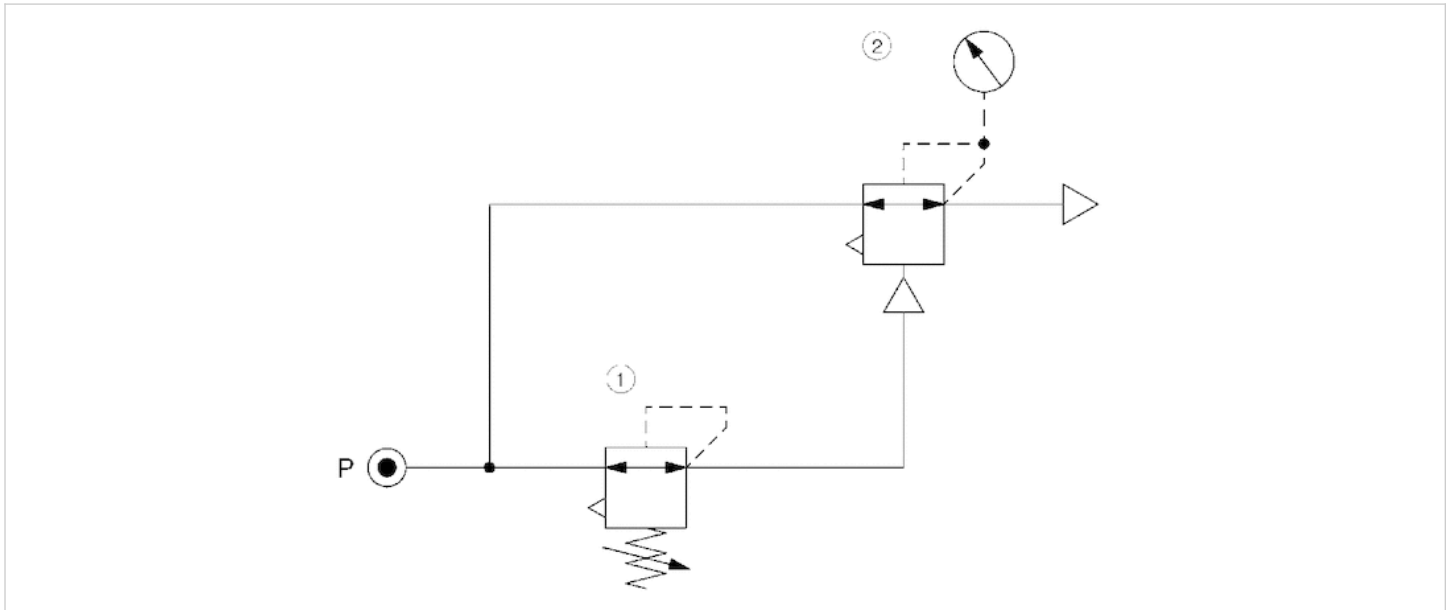
### Pressure characteristics curve



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

## Circuit diagram

### Application example

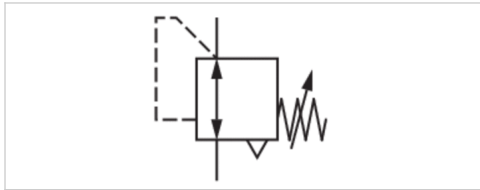


1) precision pressure regulator

2) pressure regulator valve, pneumatically operated

# Precision pressure regulator, Series NL4-RGP

- G 1/2
- Qn = 6.1 Cv
- Precision pressure regulator
- Activation Mechanical
- suitable for ATEX



Parts	Precision pressure regulator
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	8 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Regulator type	Diaphragm-type pressure regulator, Can be assembled into blocks with relieving air exhaust
Regulator function	See table below
Adjustment range min./max.	single
Pressure supply	Mechanical
Activation	0 Cv
Internal air consumption q,max.	1.91 lbs
Weight	

## Technical data

Part No.	Port	Flow	Adjustment range min./max.
		Qn	
0821302511	G 1/2	6.1 Cv	2 ... 43 psi
0821302512	G 1/2	6.1 Cv	3 ... 87 psi
0821302513	G 1/2	6.1 Cv	8 ... 145 psi

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

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

## Technical information

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

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

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

Recommended pre-filtering 5 μm

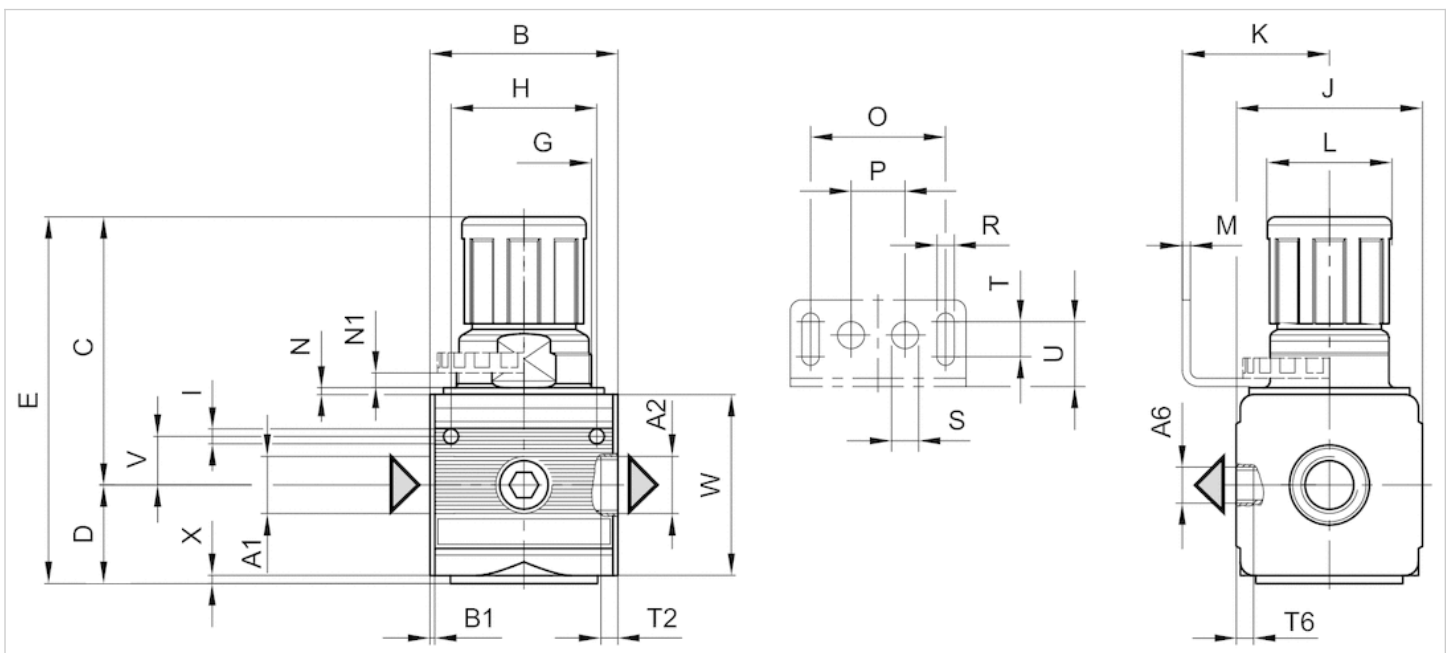


## Technical information

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

## Dimensions

### Dimensions



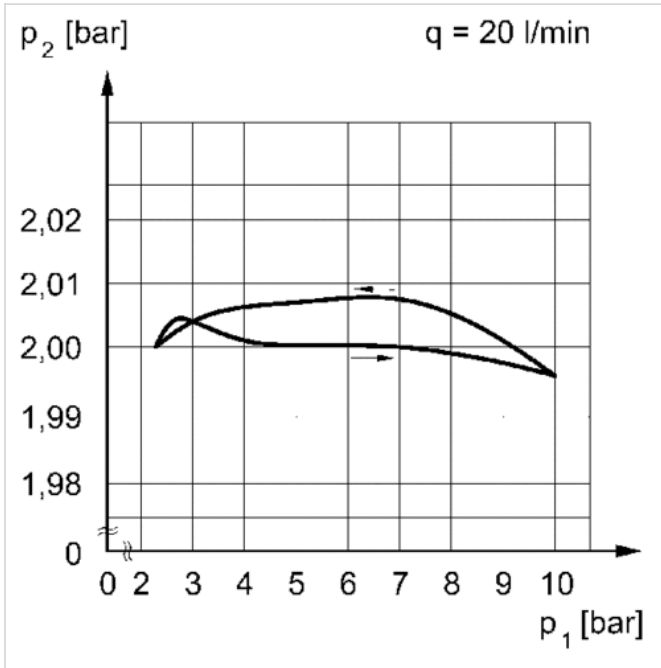
A1 = input  
 A2 = output  
 A6 = output

### Dimensions in mm

A1	A2	A6	B	B1	C	D	E	G	H	I	J	K	L	M	N	N1	O	P	R	S	T	T2
G 1/2	G 1/2	G 1/2	69.6	1.8	97	35.5	132.5	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50	20	6.4	10	13	13
T6			U			V			W			X										
7			24			18			67			2										

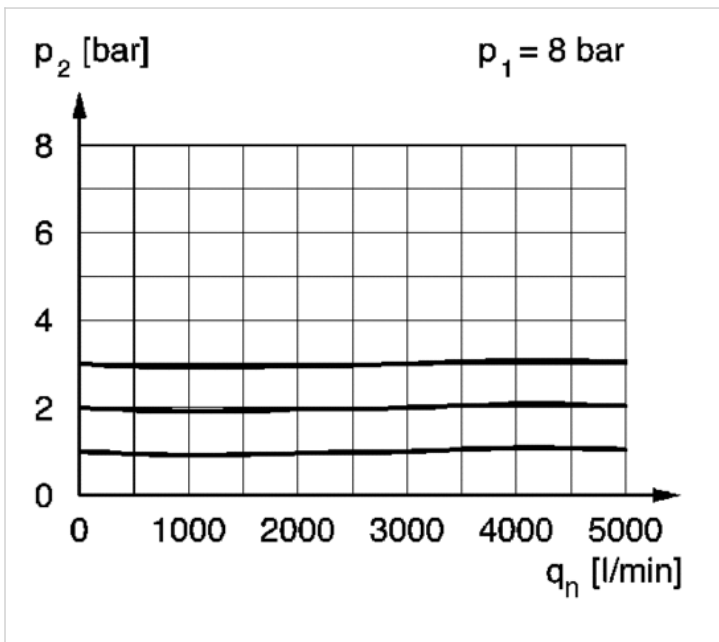
## Diagrams

### Pressure characteristics curve



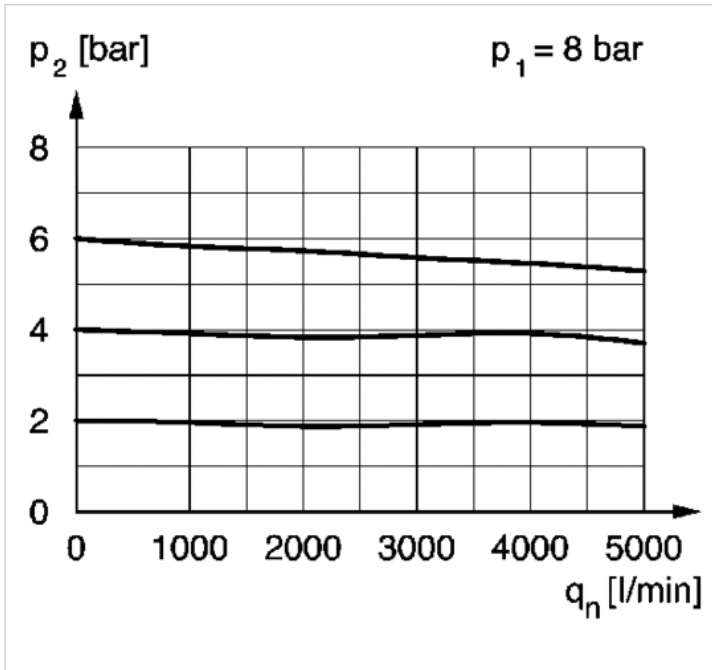
$p_1$  = working pressure  
 $p_2$  = secondary pressure  
 $q$  = flow rate

### Flow rate characteristic



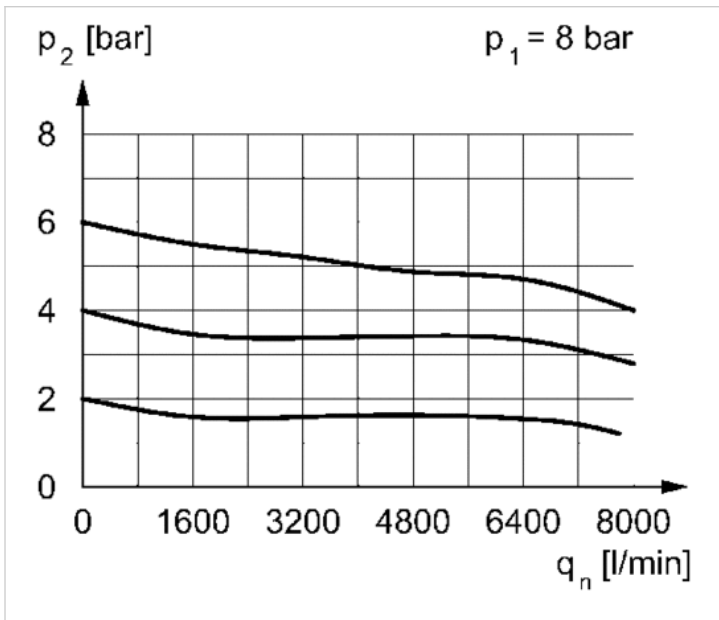
$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow  
 $p_2 = 0,1 - 3$  bar

Flow rate characteristic



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow  
 p2 = 0,2 - 6 bar

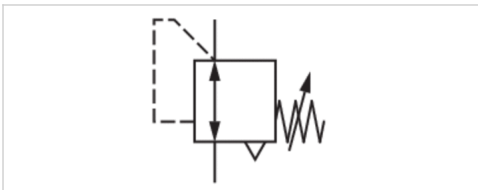
Flow rate characteristic



p1 = Working pressure  
 p2 = Secondary pressure  
 qn = Nominal flow  
 p2 = 0,5 - 10 bar

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

- G 1/2
- Qn = 5.69 Cv
- Precision pressure regulator
- Activation Mechanical
- with continuous pressure supply
- suitable for ATEX



## Parts

Mounting orientation

Certificates

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Pressure supply

Activation

Internal air consumption q,max.

Weight

Precision pressure regulator with continuous pressure supply

Any

suitable for ATEX

8 ... 232 psi

14 ... 140 °F

14 ... 140 °F

Compressed air, Neutral gases

Diaphragm-type pressure regulator, Can be assembled into blocks with relieving air exhaust

See table below

double

Mechanical

0 Cv

1.91 lbs

## Technical data

Part No.	Port	Flow	Adjustment range min./max.	Max. pressure gauge Ø in blocked state
		Qn		
0821302524	G 1/2	5.69 Cv	2 ... 43 psi	40 mm
0821302525	G 1/2	5.69 Cv	3 ... 87 psi	40 mm
0821302526	G 1/2	5.69 Cv	8 ... 145 psi	40 mm

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

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

## Technical information

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

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

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

Recommended pre-filtering 5 μm

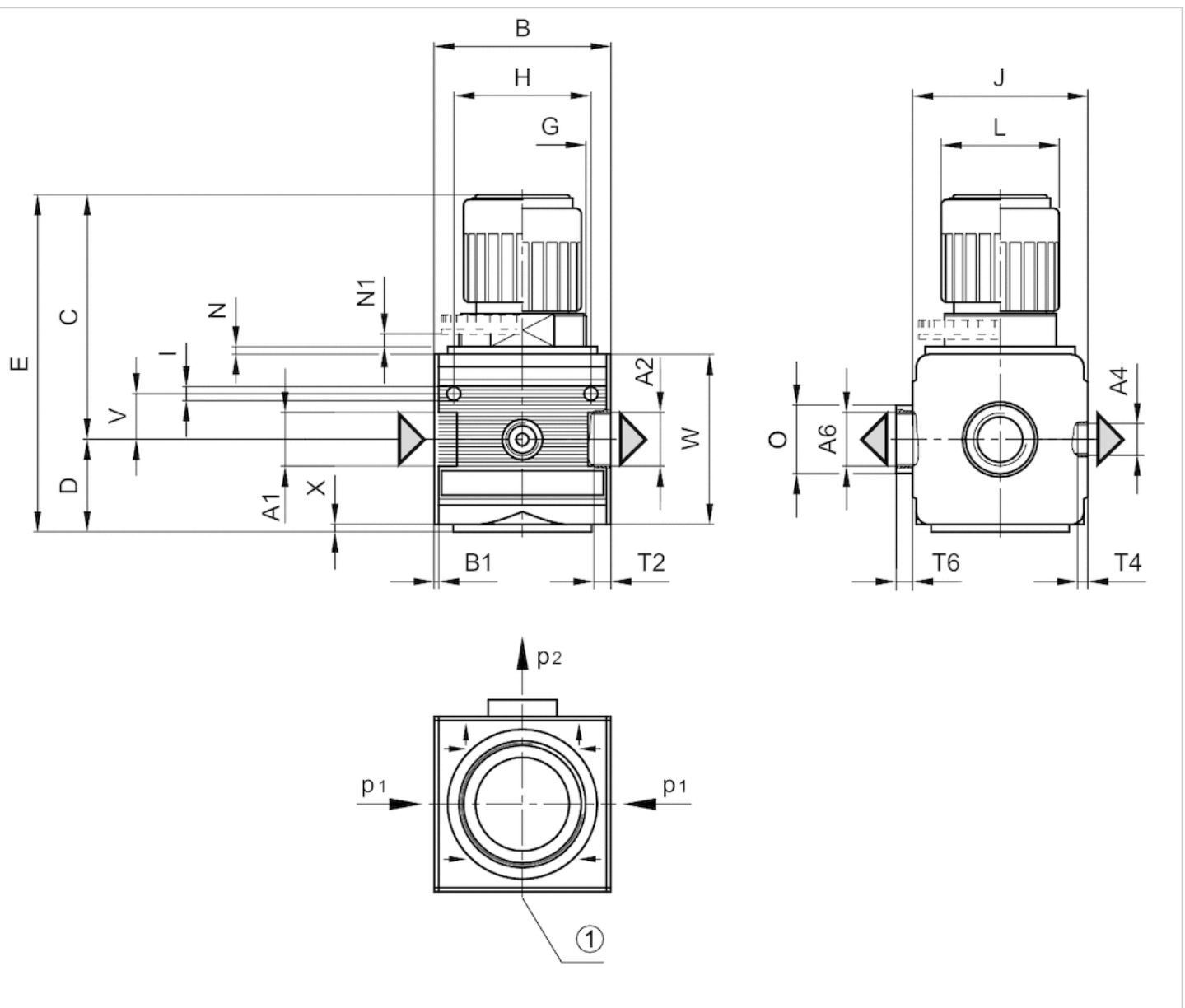
## Technical information

### Material

Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

## Dimensions

### Dimensions



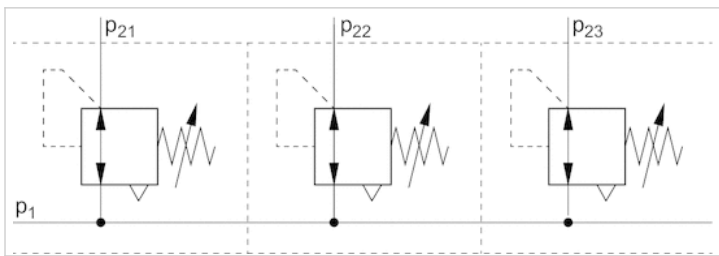
- A1 = input
- A2 = output
- A4 = output
- A6 = output
- 1) pressure gauge connection
- p1 = working pressure
- p2 = secondary pressure

Dimensions in mm

A1	A2	A4	A6	B	B1	C	D	E	G	H	I	J	L	N	N1	O	T2	T4	T6	V	W	X
G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5	M50x1,5	54	5.5	69	46	3	5.5	27	13	7	6	18	67	2

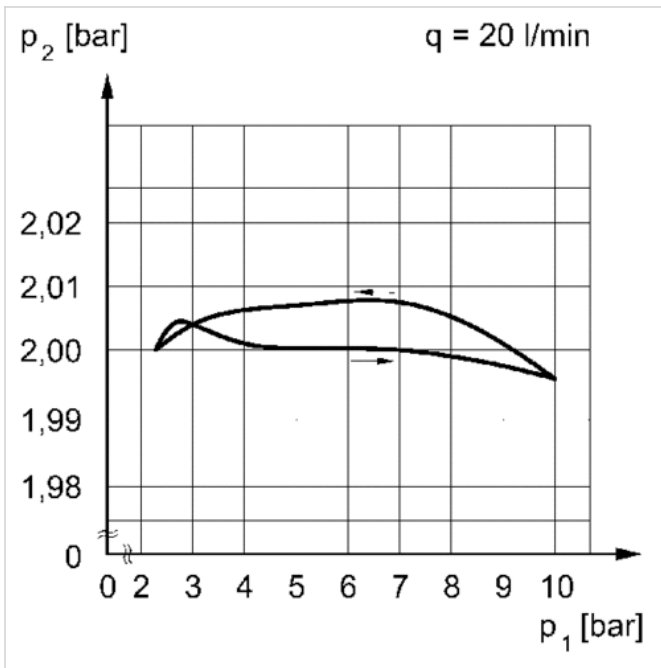
Diagrams

Application example



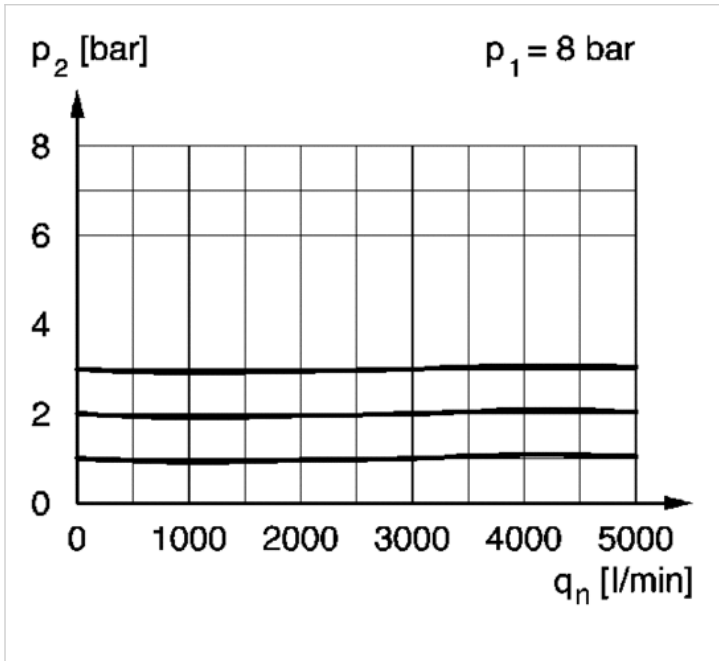
p1 = working pressure

Pressure characteristics curve



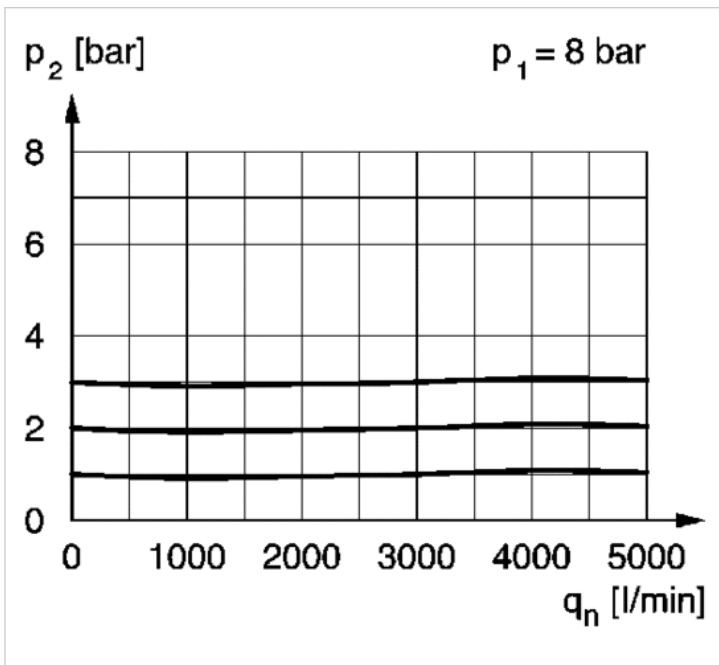
p1 = working pressure  
 p2 = secondary pressure  
 q = flow rate

Flow rate characteristic



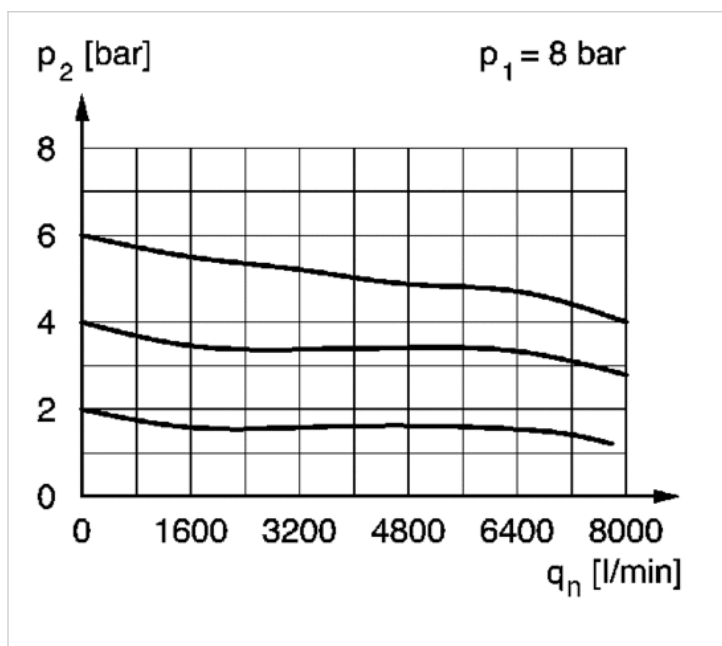
$p_2 = 0,1 - 3 \text{ bar}$   
 $p_1 = \text{Working pressure}$   
 $p_2 = \text{Secondary pressure}$   
 $q_n = \text{Nominal flow}$

Flow rate characteristic



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

## Flow rate characteristic



$p_2 = 0,5 - 10$  bar

$p_1 =$  Working pressure

$p_2 =$  Secondary pressure

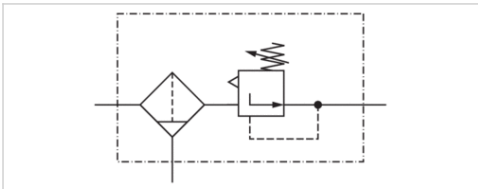
$q_n =$  Nominal flow



# Filter pressure regulator, Series NL4-FRE

- G 1/2

- suitable for ATEX



Version	1-in-1, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Certificates	suitable for ATEX
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	7.01 Cv
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	8 ... 145 psi
Pressure supply	single
Filter reservoir volume	1.69 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

## Technical data

Part No.	Port	Flow Qn	Condensate drain		Reservoir	Weight
0821300364	G 1/2	7.01 Cv	semi-automatic, open without pressure		Polycarbonate	2.62 lbs
0821300367	G 1/2	7.01 Cv	fully automatic, open without pressure		Polycarbonate	2.77 lbs
0821300281	G 1/2	7.01 Cv	fully automatic, open without pressure		Die cast zinc	3.25 lbs

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

Suitable for use in Ex zones 1, 2, 21, 22, Metal protective guard can be retrofitted for all polycarbonate reservoirs, Order pressure gauge separately

## Technical information

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

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

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

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

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

Also suitable for separation of fluid oil or water due to the design.

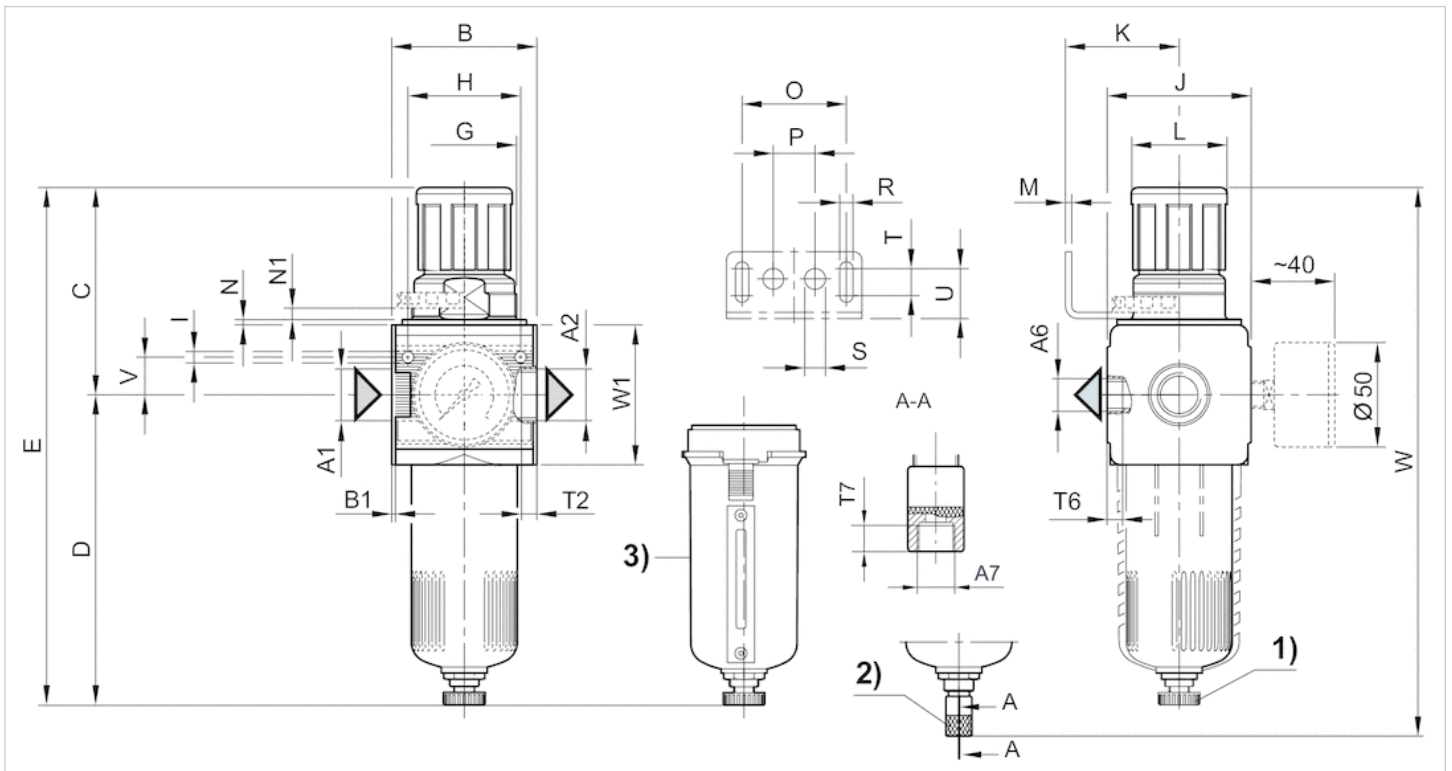
Compressed air class 6 : 7 : -

## Technical information

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

## Dimensions

### Dimensions



A1 = input

A2 = output

A6 = output

1) Semi-automatic condensate drain

2) fully automatic condensate drain

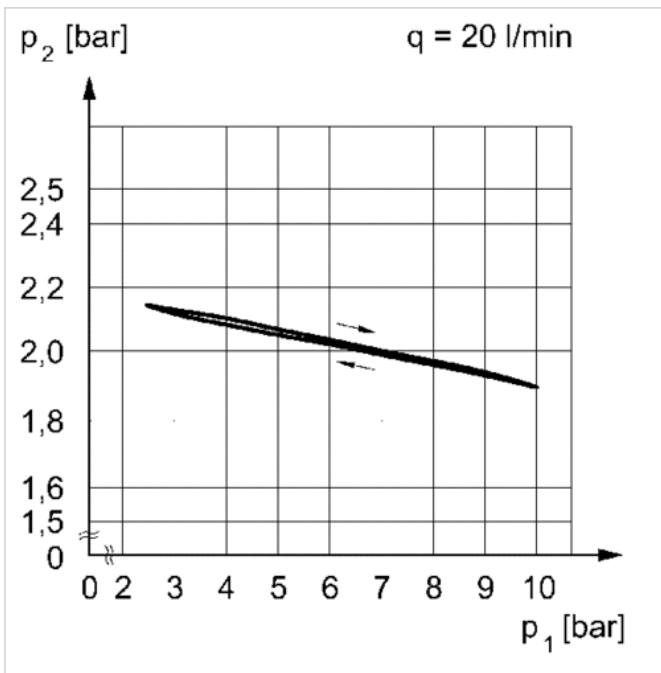
3) Metal reservoir with level indicator

Dimensions in mm

A1	A2	A6	A7	B	B1	C	D	E	G	H	I	J	K	L	M	N	N1	O	P	R
G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50	20	6.4
S	T	T2	T6	T7	U	V	W	W1												
10	13	13	7	8.5	24	18	262.8	67												

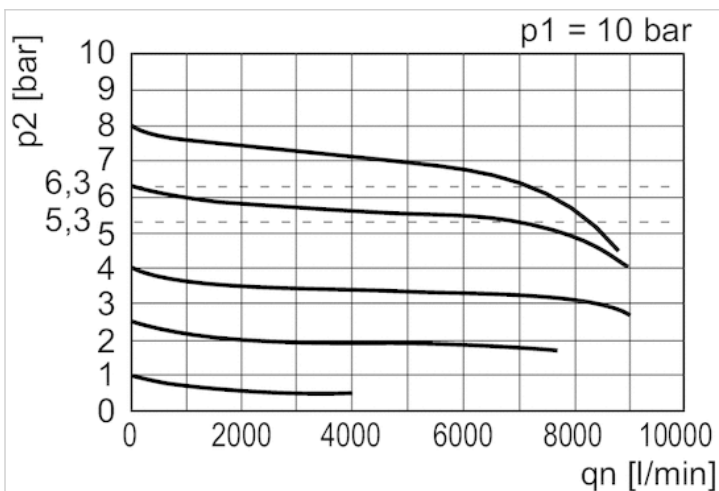
Diagrams

Pressure characteristics curve



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

Flow rate characteristic



$p_1$  = Working pressure  
 $p_2$  = Secondary pressure

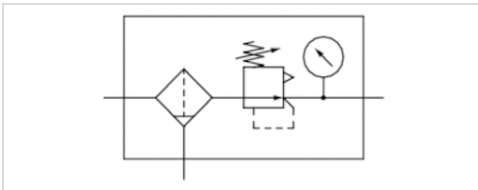
$q_n$  = Nominal flow

# Filter pressure regulator, Series NL4-FRE

- G 1/2, G 3/4













- with pressure gauge

- suitable for ATEX



Version	1-in-1, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Certificates	suitable for ATEX
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	7.01 Cv
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	8 ... 145 psi
Pressure supply	single
Filter reservoir volume	1.69 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

## Technical data

Part No.		Port	Flow	Condensate drain	Reservoir
			Qn		
0821300350		G 1/2	7.01 Cv	semi-automatic, open without pressure	Polycarbonate
0821300351		G 1/2	7.01 Cv	semi-automatic, open without pressure	Polycarbonate
0821300352		G 1/2	7.01 Cv	semi-automatic, open without pressure	Die cast zinc
0821300353		G 1/2	7.01 Cv	fully automatic, open without pressure	Polycarbonate
0821300354		G 1/2	7.01 Cv	fully automatic, open without pressure	Polycarbonate
0821300355		G 1/2	7.01 Cv	fully automatic, open without pressure	Die cast zinc
0821300380		G 3/4	7.01 Cv	semi-automatic, open without pressure	Polycarbonate
0821300381		G 3/4	7.01 Cv	semi-automatic, open without pressure	Polycarbonate
0821300382		G 3/4	7.01 Cv	semi-automatic, open without pressure	Die cast zinc
0821300383		G 3/4	7.01 Cv	fully automatic, open without pressure	Polycarbonate
0821300384		G 3/4	7.01 Cv	fully automatic, open without pressure	Polycarbonate
0821300385		G 3/4	7.01 Cv	fully automatic, open without pressure	Die cast zinc

Part No.	Protective guard	Weight
0821300350	-	2.62 lbs
0821300351	Steel	2.83 lbs
0821300352	-	3.1 lbs
0821300353	-	2.77 lbs
0821300354	Steel	2.97 lbs
0821300355	-	3.25 lbs

Part No.	Protective guard	Weight
0821300380	-	2.62 lbs
0821300381	Steel	2.83 lbs
0821300382	-	3.1 lbs
0821300383	-	2.77 lbs
0821300384	Steel	2.97 lbs
0821300385	-	3.25 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at  $\Delta p = 14.5$  psi

Suitable for use in Ex zones 1, 2, 21, 22, Metal protective guard can be retrofitted for all polycarbonate reservoirs, Pressure gauge enclosed separately

## Technical information

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

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

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

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

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

Also suitable for separation of fluid oil or water due to the design.

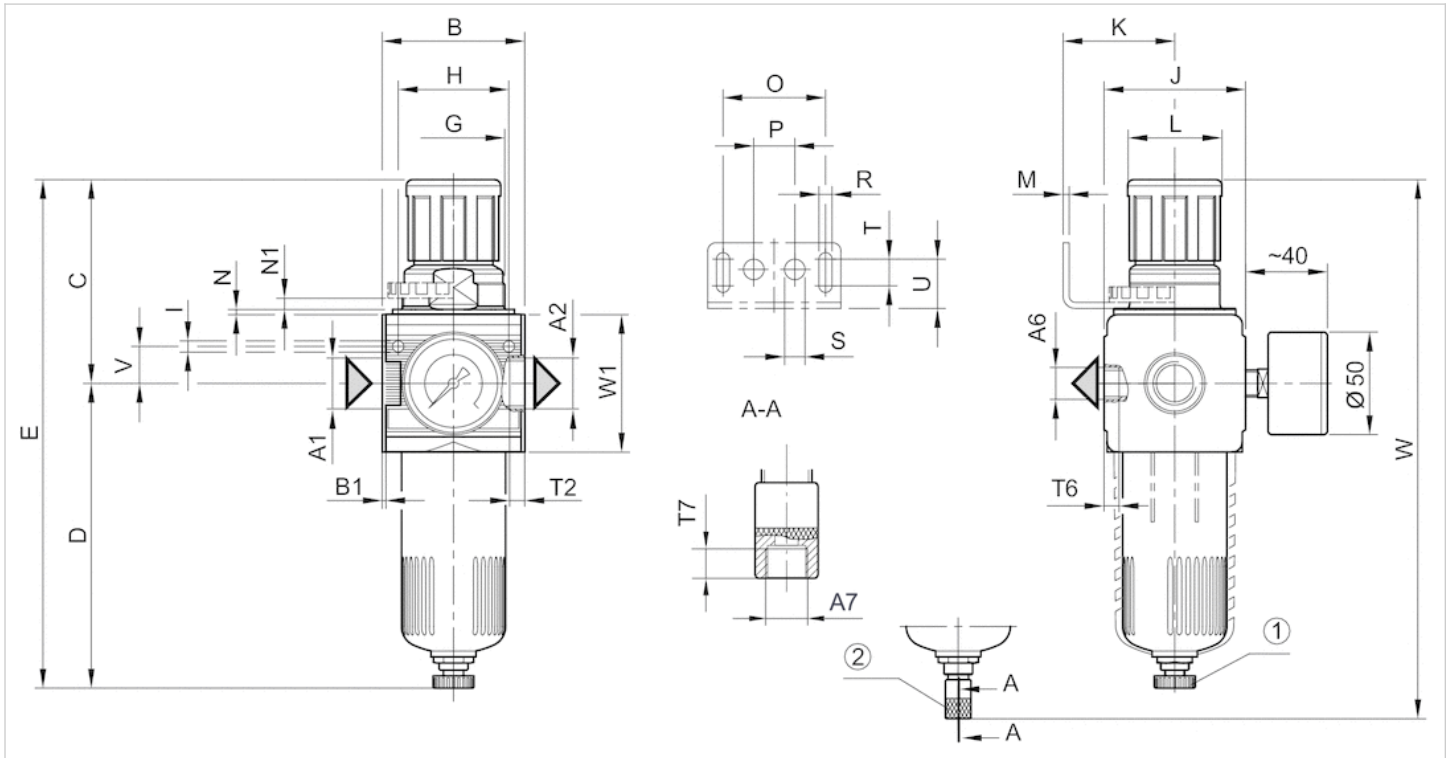
Compressed air class 6 : 7 : -

## Technical information

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

# Dimensions

## Dimensions



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

## Dimensions in mm

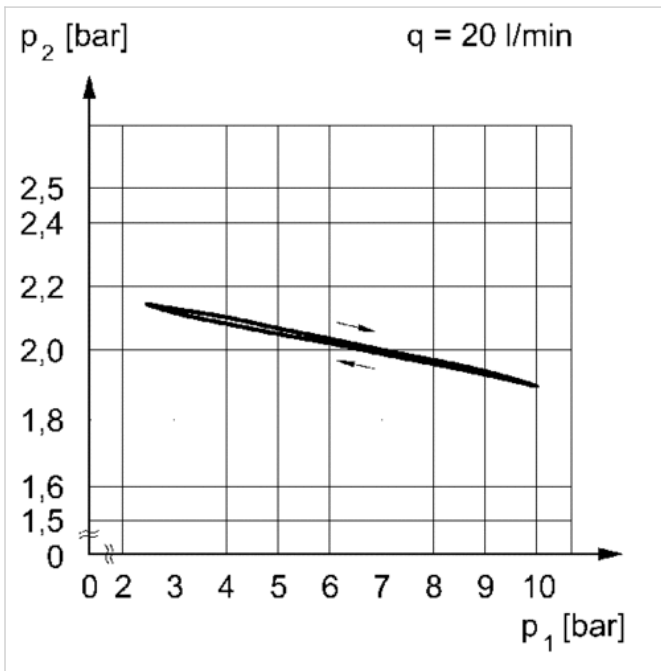
A1	A2	A6	A7	B	B1	C	D	E	G	H	I	J	K	L	M	N	N1	O	P	R
G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50	20	6.4
G 3/4	G 3/4	G 1/4	G 1/8	69.6	1.8	98.3	146.5	244.8	M50x1,5	54	5.5	69	54.5	46	3	3	5.5	50	20	6.4

S	T	T2	T6	T7	U	V	W	W1
10	13	13	7	8.5	24	18	262.8	67
10	13	13	7	8.5	24	18	262.8	67

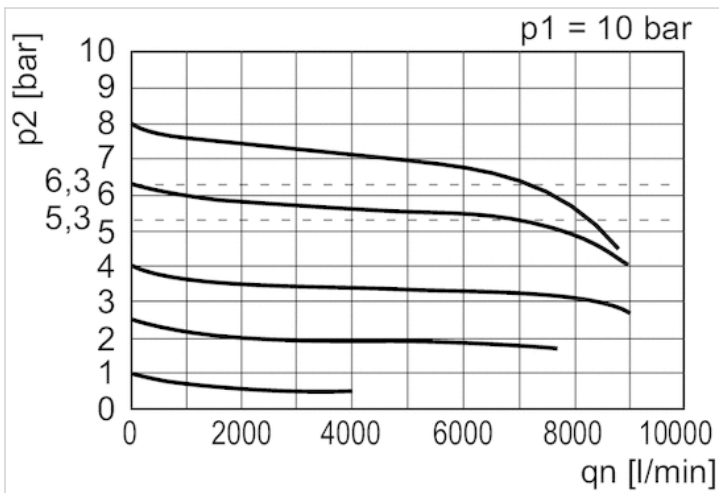
## Diagrams

### Pressure characteristics curve



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

### Flow rate characteristic

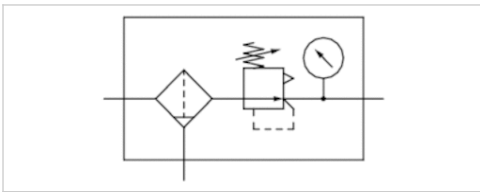


$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow



# Filter pressure regulator, Series NL4-FRE

- G 1/2, G 3/4
- lockable
- with key
- with pressure gauge
- suitable for ATEX



Version	1-in-1, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Certificates	suitable for ATEX
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Nominal flow Qn	7.01 Cv
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	8 ... 145 psi
Pressure supply	single
Filter reservoir volume	1.69 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

## Technical data

Part No.	Port	Flow Qn	Condensate drain		Reservoir
0821300356	G 1/2	7.01 Cv	semi-automatic, open without pressure		Polycarbonate
0821300236	G 1/2	7.01 Cv	fully automatic, open without pressure		Polycarbonate
0821300234	G 1/2	7.01 Cv	semi-automatic, open without pressure		Polycarbonate
0821300237	G 1/2	7.01 Cv	fully automatic, open without pressure		Polycarbonate
0821300235	G 1/2	7.01 Cv	semi-automatic, open without pressure		Die cast zinc
0821300238	G 1/2	7.01 Cv	fully automatic, open without pressure		Die cast zinc
0821300386	G 3/4	7.01 Cv	semi-automatic, open without pressure		Polycarbonate
0821300239	G 3/4	7.01 Cv	semi-automatic, open without pressure		Polycarbonate
0821300240	G 3/4	7.01 Cv	semi-automatic, open without pressure		Die cast zinc
0821300241	G 3/4	7.01 Cv	fully automatic, open without pressure		Polycarbonate
0821300243	G 3/4	7.01 Cv	fully automatic, open without pressure		Die cast zinc

Part No.	Protective guard	Weight
0821300356	-	4.43 lbs
0821300236	-	4.58 lbs
0821300234	Steel	4.63 lbs
0821300237	Steel	4.78 lbs
0821300235	-	4.91 lbs

Part No.	Protective guard	Weight
0821300238	-	5.05 lbs
0821300386	-	4.43 lbs
0821300239	Steel	4.63 lbs
0821300240	-	4.91 lbs
0821300241	-	4.58 lbs
0821300243	-	5.05 lbs

Nominal flow Qn with secondary pressure p2 = 87 psi at  $\Delta p = 14.5$  psi

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

## Technical information

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

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

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

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

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

Also suitable for separation of fluid oil or water due to the design.

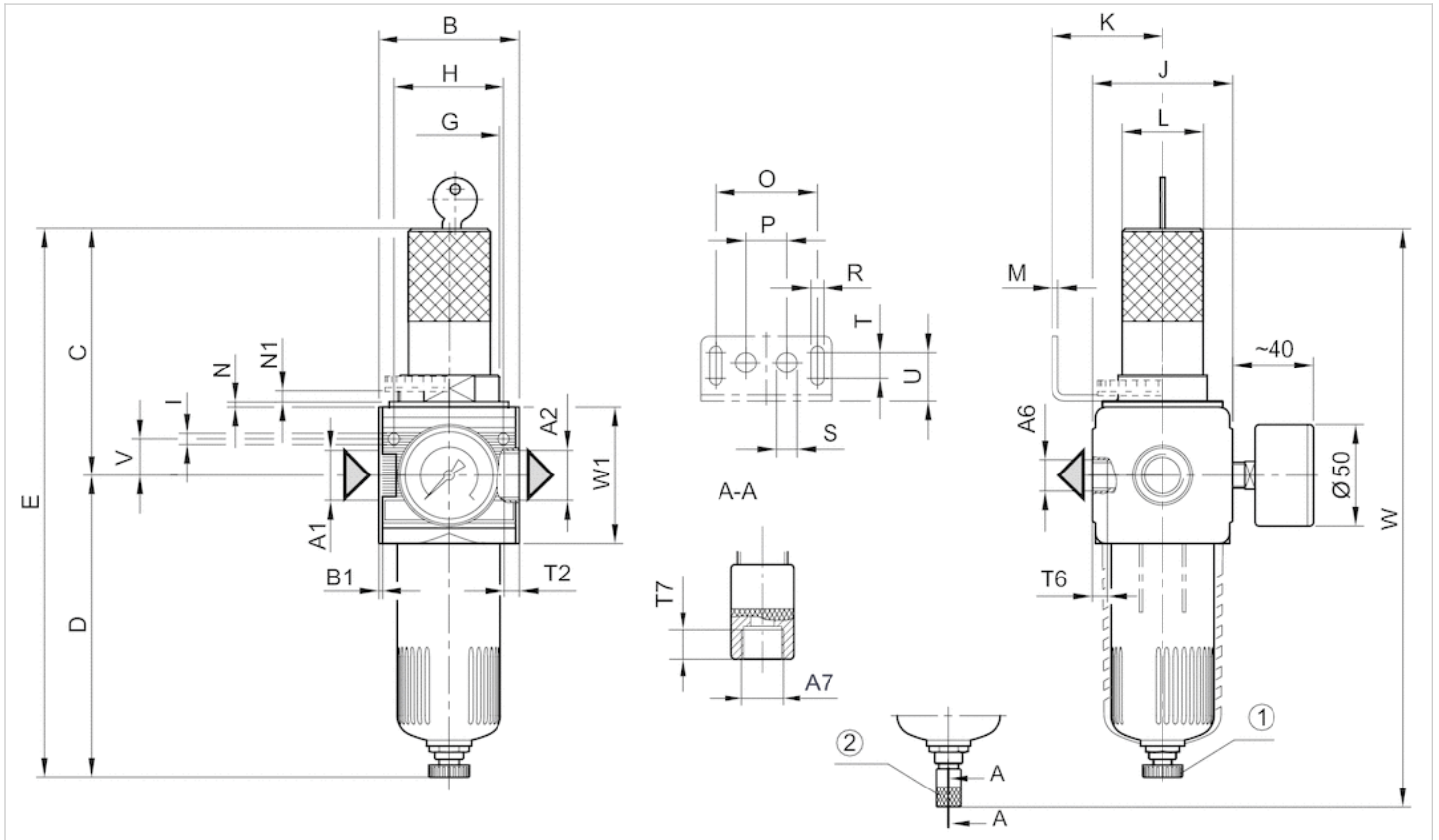
Compressed air class 6 : 7 : -

## Technical information

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

# Dimensions

## Dimensions



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

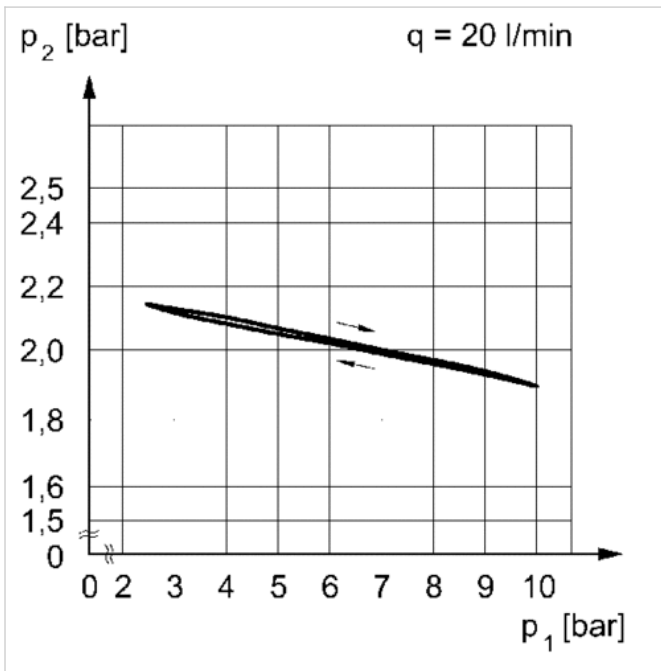
## Dimensions in mm

A1	A2	A6	A7	B	B1	C	D	E	G	H	I	J	K	L	M	N1	O	P	R	S
G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	122	146.5	268.5	M50x1,5	54	5.5	69	54.5	46	3	5.5	50	20	6.4	10
G 1/2	G 1/2	G 1/4	G 1/8	69.6	1.8	122	146.5	268.5	M50x1,5	54	5.5	69	54.5	46	3	50	20	6.4	10	13
G 3/4	G 3/4	G 1/4	G 1/8	69.6	1.8	122	146.5	268.5	M50x1,5	54	5.5	69	54.5	46	3	5.5	50	20	6.4	10

T	T2	T6	T7	U	V	W	W1
13	13	7	8.5	24	18	286.5	67
13	7	8.5	24	18	286.5	67	-
13	13	7	8.5	24	18	286.5	67

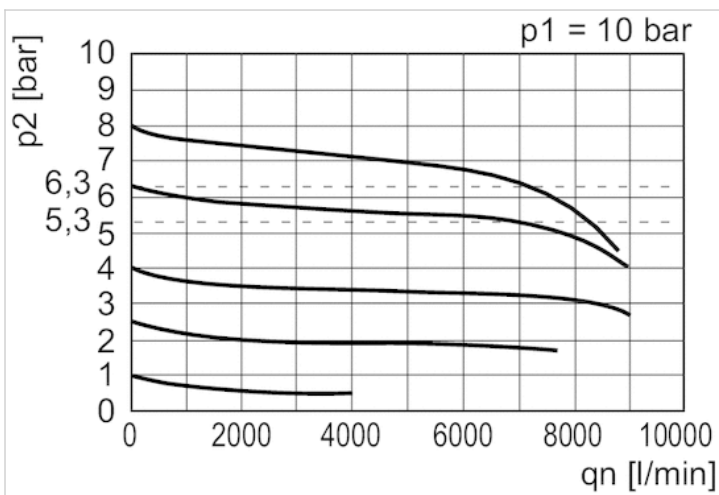
## Diagrams

### Pressure characteristics curve



p<sub>1</sub> = working pressure  
 p<sub>2</sub> = secondary pressure  
 q = flow rate

### Flow rate characteristic

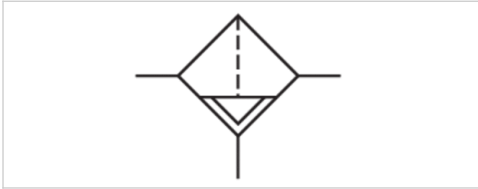


p<sub>1</sub> = Working pressure  
 p<sub>2</sub> = Secondary pressure  
 q<sub>n</sub> = Nominal flow

# Filter, Series NL4-FLS

- G 1/2, G 3/4

- suitable for ATEX



Version	Standard filter, Can be assembled into blocks
Parts	Filter
Mounting orientation	vertical
Certificates	suitable for ATEX
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	1.69 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below

## Technical data

Part No.	Port	Qn	Condensate drain
0821303500	G 1/2	4.07 Cv	semi-automatic, open without pressure
0821303501	G 1/2	4.07 Cv	semi-automatic, open without pressure
0821303503	G 1/2	4.07 Cv	fully automatic, open without pressure
0821303504	G 1/2	4.07 Cv	fully automatic, open without pressure
0821303502	G 1/2	4.07 Cv	semi-automatic, open without pressure
0821303505	G 1/2	4.07 Cv	fully automatic, open without pressure
0821303559	G 1/2	4.07 Cv	fully automatic, open without pressure
0821303540	G 3/4	4.07 Cv	semi-automatic, open without pressure
0821303541	G 3/4	4.07 Cv	semi-automatic, open without pressure
0821303543	G 3/4	4.07 Cv	fully automatic, open without pressure
0821303558	G 3/4	4.07 Cv	semi-automatic, open without pressure
0821303544	G 3/4	4.07 Cv	fully automatic, open without pressure
0821303545	G 3/4	4.07 Cv	fully automatic, open without pressure
0821303542	G 3/4	4.07 Cv	semi-automatic, open without pressure

Part No.	Reservoir	Protective guard	Weight
0821303500	Polycarbonate	-	1.76 lbs
0821303501	Polycarbonate	Steel	1.96 lbs
0821303503	Polycarbonate	-	1.9 lbs
0821303504	Polycarbonate	Steel	2.11 lbs
0821303502	Die cast zinc, with window	-	2.7 lbs
0821303505	Die cast zinc, with window	-	2.85 lbs

Part No.	Reservoir	Protective guard	Weight
0821303559	Die cast zinc, with window	-	2.85 lbs
0821303540	Polycarbonate	-	1.76 lbs
0821303541	Polycarbonate	Steel	1.96 lbs
0821303543	Polycarbonate	-	1.9 lbs
0821303558	Polycarbonate	-	1.76 lbs
0821303544	Polycarbonate	Steel	2.11 lbs
0821303545	Die cast zinc, with window	-	2.85 lbs
0821303542	Die cast zinc, with window	-	2.7 lbs

Nominal flow  $Q_n$  with secondary pressure  $p_2 = 87$  psi at  $\Delta p = 14.5$  psi

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

## Technical information

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

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

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

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

Also suitable for separation of fluid oil or water due to the design.

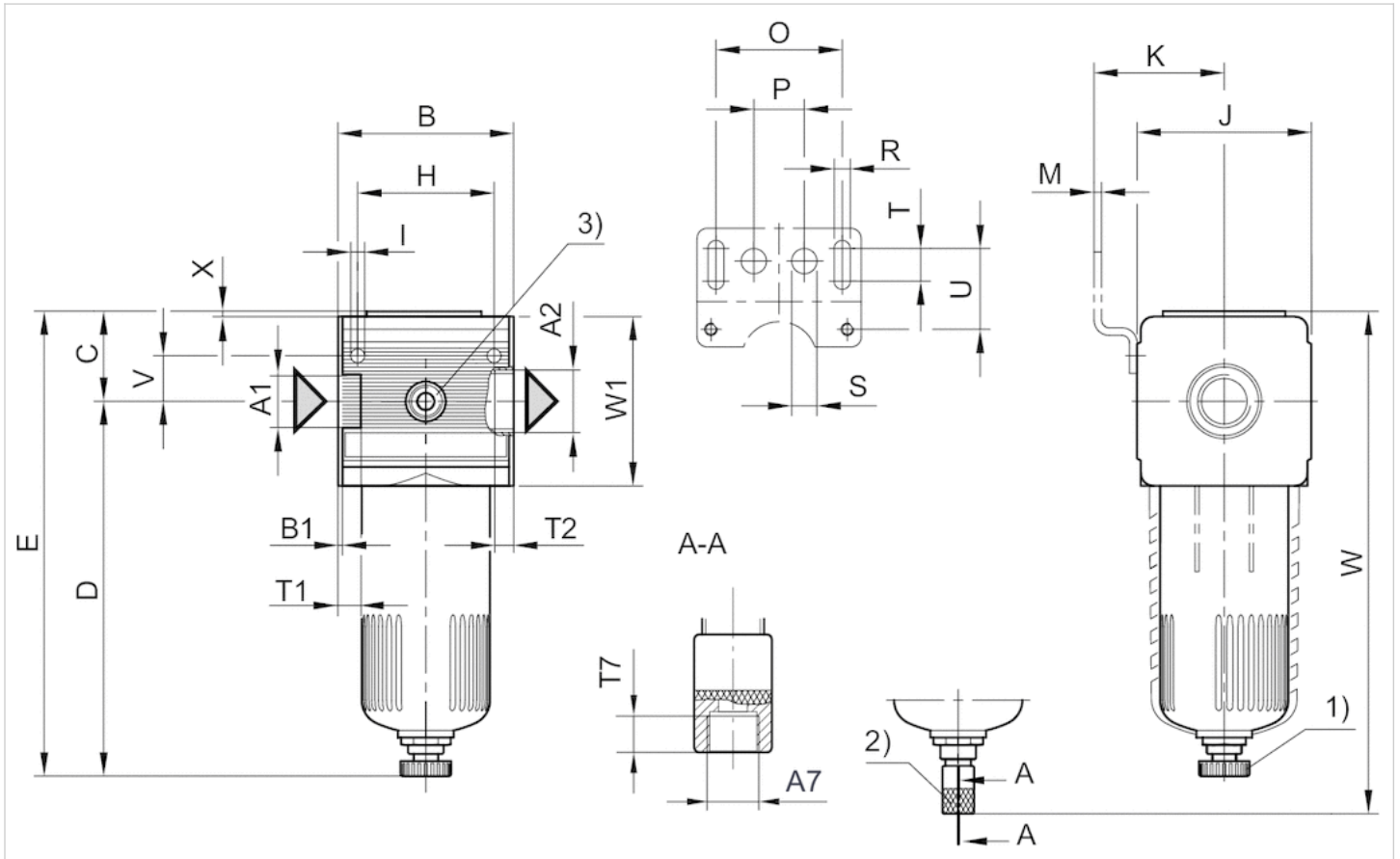
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

## Technical information

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

## Dimensions

### 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

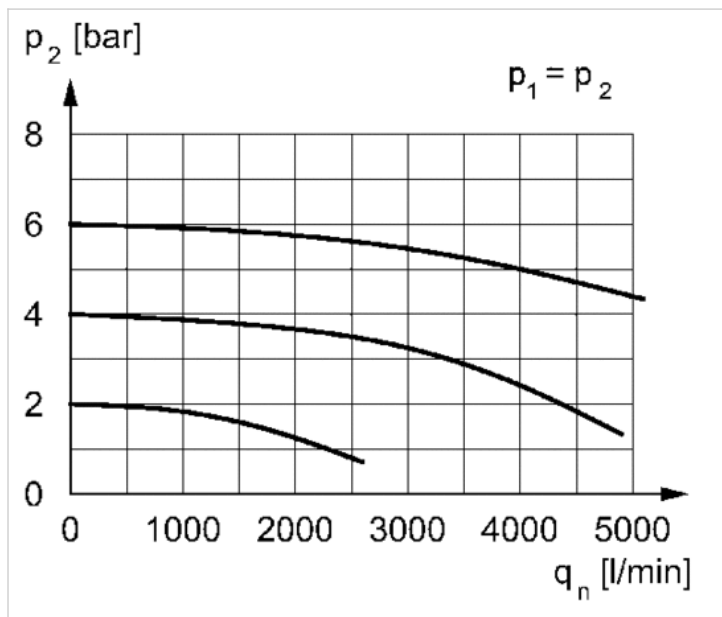
### Dimensions in mm

A1	A2	A7	B	B1	C	D	E	H	I	J	K	M	O	P	R	S	T	T1	T2	T7	U	V	W
G 1/2	G 1/2	G 1/8	69.6	1.8	36.5	146.5	183	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	199
G 3/4	G 3/4	G 1/8	69.6	1.8	36.5	146.5	183	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	199

W1	X
67	3
67	3

## Diagrams

## Flow rate characteristic



$p_2$  = secondary pressure

$q_n$  = nominal flow

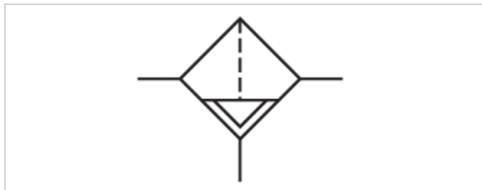


# Pre-filter, Series NL4-FLP

- G 1/4, G 1/2



Version	Pre-filter, Can be assembled into blocks
Parts	Pre-filter
Mounting orientation	vertical
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.85 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below



## Technical data

Part No.	Port	Qn	Condensate drain	Reservoir
0821303302	G 1/4	1.02 Cv	fully automatic, open without pressure	Die cast zinc
0821303303	G 1/4	2.54 Cv	fully automatic, open without pressure	Die cast zinc
0821303515	G 1/2	2.54 Cv	fully automatic, open without pressure	Die cast zinc
0821303529	G 1/2	1.02 Cv	semi-automatic, open without pressure	Polycarbonate

Part No.	ATEX	Weight	
0821303302	-	1.06 lbs	-
0821303303	-	1.95 lbs	-
0821303515	suitable for ATEX	2.85 lbs	1)
0821303529	suitable for ATEX	1.76 lbs	1)

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

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

## Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .  
 Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".  
 A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.  
 Also suitable for separation of fluid oil or water due to the design.

Recommended pre-filtering 5 μm

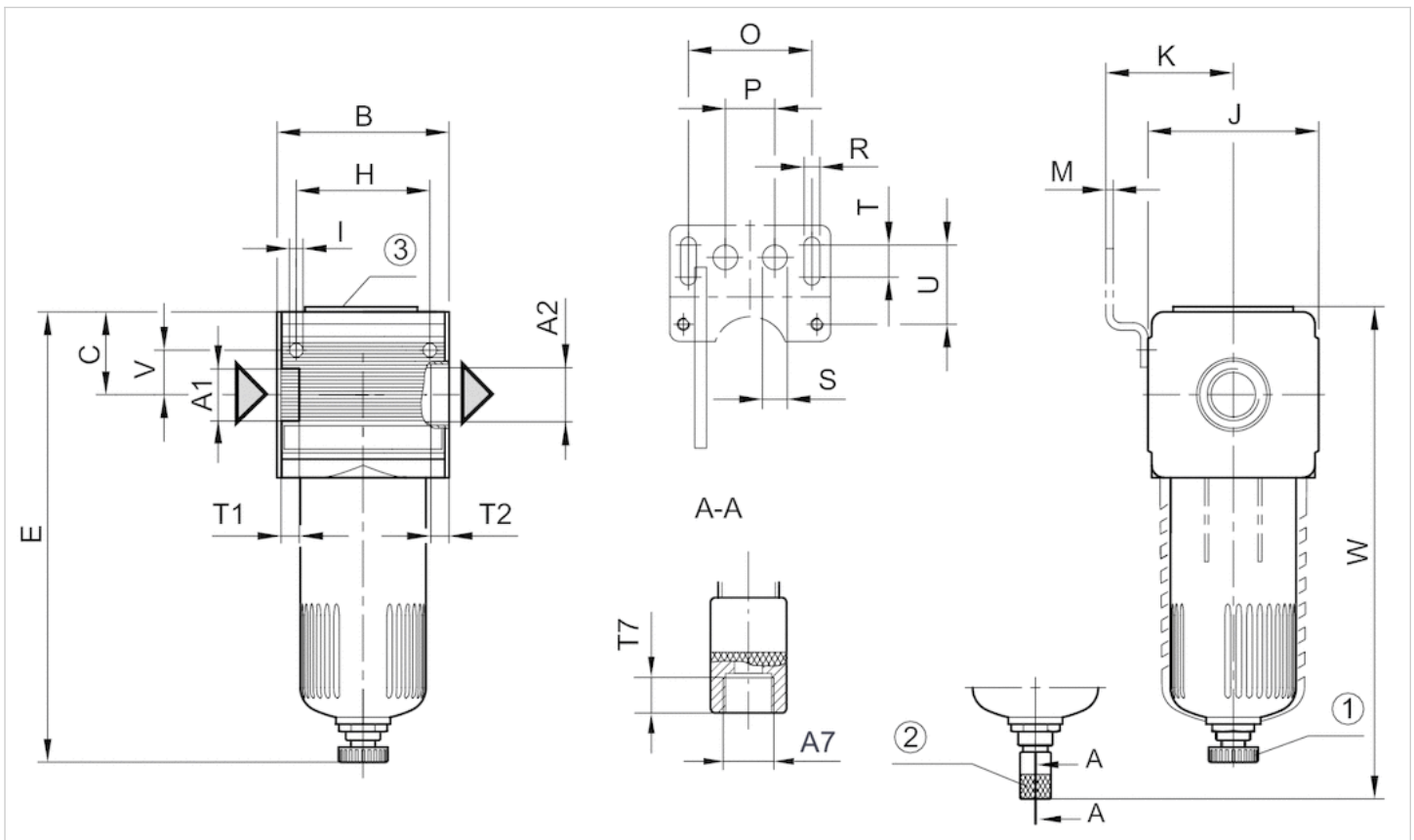
Max. achievable compressed air class acc. to ISO 8573-1:2010 2 : - : 3

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Die cast zinc, Polycarbonate
Filter insert	Impregnated paper

## Dimensions

### Dimensions



- A1 = input
- A2 = output
- A7 = condensate drain
- 1) semi-automatic condensate drain
- 2) fully automatic condensate drain
- 3) differential pressure gauge connection

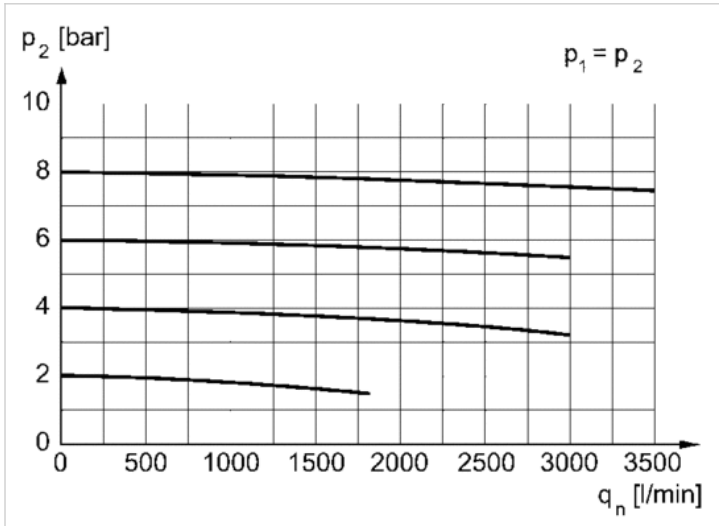
### Dimensions in mm

A1	A2	A7	B	C	E	H	I	J	K	M	O	P	R	S	T	T1	T2	T7	U	V	W
G 1/4	G 1/4	G 1/8	69.6	38.5	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	203
G 1/4	G 1/4	G 1/8	69.6	38.5	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	232
G 1/2	G 1/2	G 1/8	69.6	38.5	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	317

A1	A2	A7	B	C	E	H	I	J	K	M	O	P	R	S	T	T1	T2	T7	U	V	W
G 1/2	G 1/2	G 1/8	69.6	38.5	185	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	-

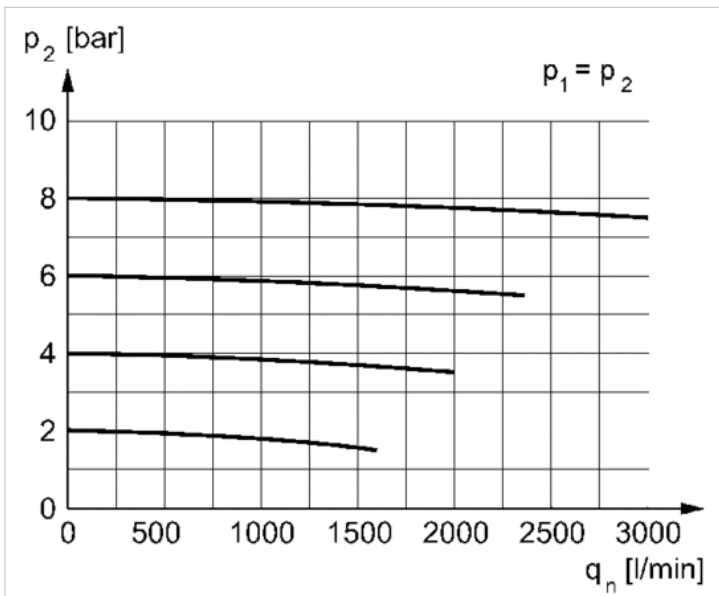
## Diagrams

Flow rate characteristic Fig. 1



p2 = secondary pressure  
qn = nominal flow

Flow rate characteristic Fig. 2



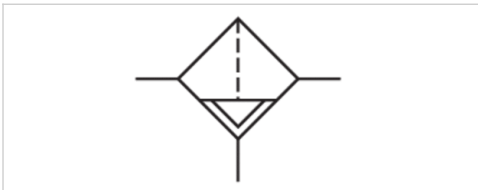
p2 = secondary pressure  
qn = nominal flow

# Microfilter, Series NL4-FLC

- G 1/4, G 1/2



Version	Microfilter, Can be assembled into blocks
Parts	Microfilter
Mounting orientation	vertical
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	0.85 fl.oz.
Filter element	exchangeable
Condensate drain	See table below
Weight	See table below



## Technical data

Part No.	Port	Qn	Condensate drain
0821303418	G 1/4	0.732 Cv	fully automatic, open without pressure
0821303419	G 1/4	0.732 Cv	fully automatic, open without pressure
0821303514	G 1/2	0.732 Cv	semi-automatic, open without pressure
0821303516	G 1/2	1.22 Cv	fully automatic, open without pressure
R412010794	G 1/2	0.732 Cv	semi-automatic, open without pressure
R412010795	G 1/2	0.732 Cv	semi-automatic, open without pressure
0821303571	G 1/2	0.732 Cv	fully automatic, open without pressure
R412010796	G 1/2	0.732 Cv	fully automatic, open without pressure
R412010797	G 1/2	0.732 Cv	fully automatic, open without pressure

Part No.	Reservoir	Protective guard	ATEX	Weight	
0821303418	Die cast zinc, with window	-	-	1.95 lbs	-
0821303419	Die cast zinc	-	-	1.95 lbs	-
0821303514	Polycarbonate	-	suitable for ATEX	2.7 lbs	1)
0821303516	Die cast zinc, with window	-	suitable for ATEX	3.6 lbs	1)
R412010794	Polycarbonate	Steel	suitable for ATEX	2.7 lbs	1)
R412010795	Die cast zinc, with window	-	suitable for ATEX	2.7 lbs	1)
0821303571	Polycarbonate	-	suitable for ATEX	2.85 lbs	1)
R412010796	Polycarbonate	Steel	suitable for ATEX	2.85 lbs	1)
R412010797	Die cast zinc, with window	-	suitable for ATEX	2.85 lbs	1)

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

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

## Technical information

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

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

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

Also suitable for separation of fluid oil or water due to the design.

Recommended pre-filtering 0.3 µm

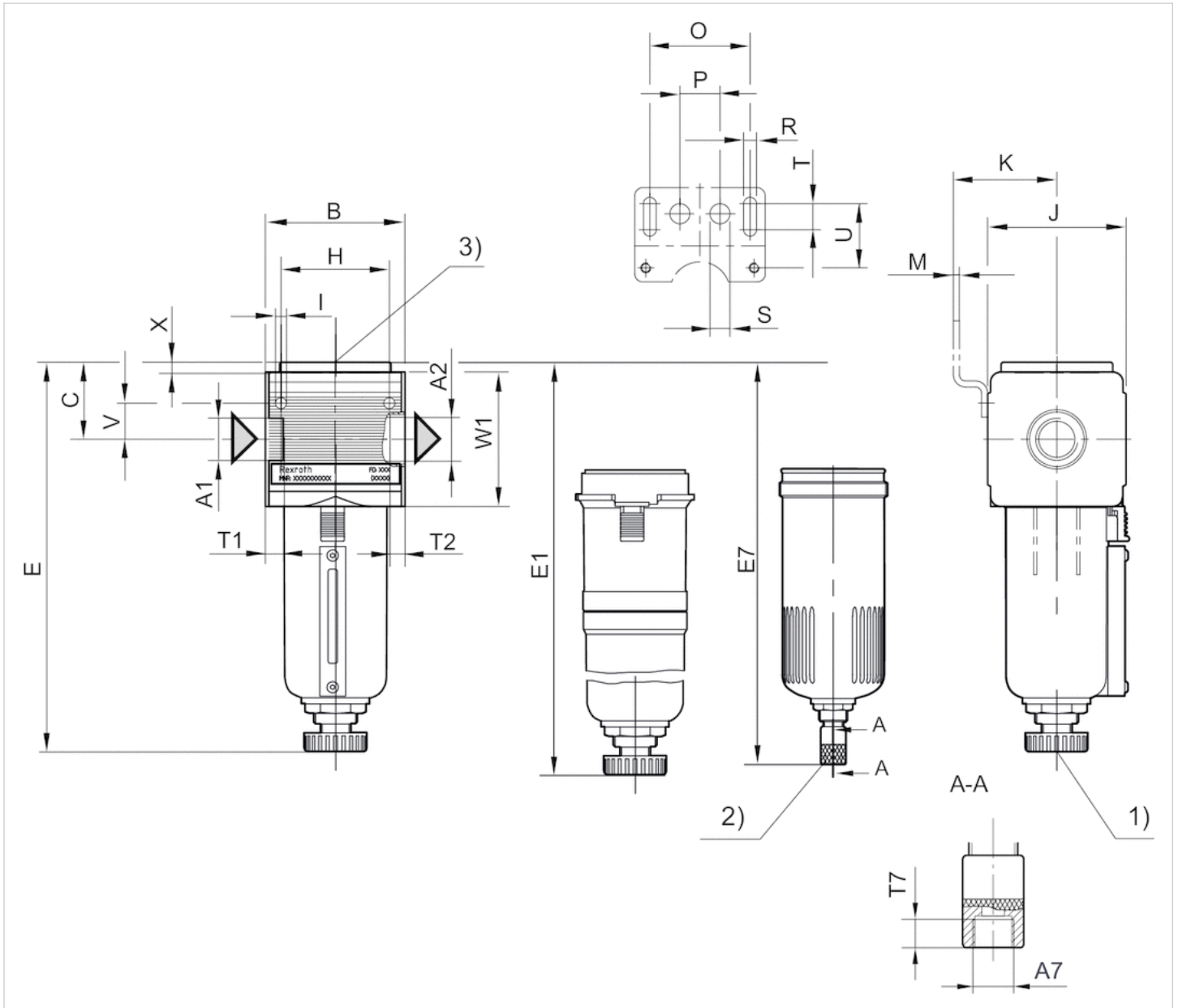
Max. achievable compressed air class acc. to ISO 8573-1:2010 1 : - : 2

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Die cast zinc, Polycarbonate
Protective guard	Steel
Filter insert	Borosilicate glass fiber

# Dimensions

## Dimensions



- A1 = input
- A2 = output
- A7 = condensate drain
- 1) semi-automatic condensate drain
- 2) fully automatic condensate drain
- 3) differential pressure gauge connection

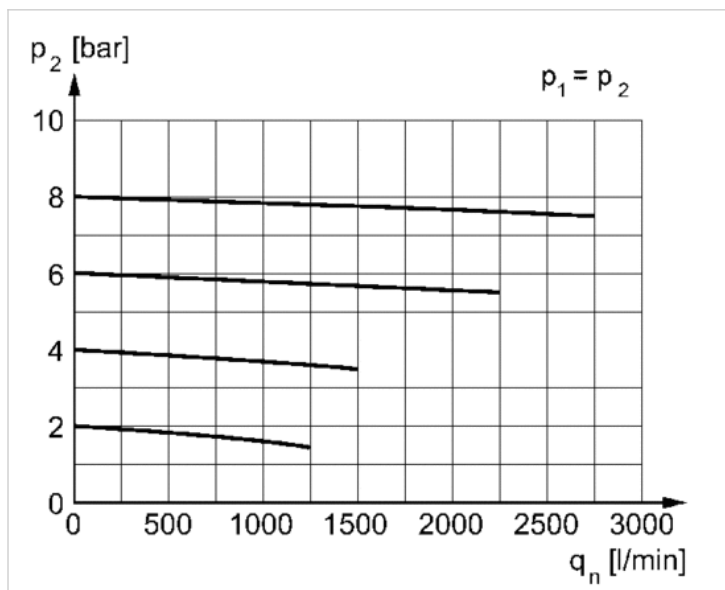
## Dimensions in mm

A1	A2	A7	B	C	E	E1	E7	H	I	J	K	M	O	P	R	S	T	T1	T2	T7	U	V	W1	X
G 1/4	G 1/4	G 1/8	69.6	38.5	202	-	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	67	5
G 1/4	G 1/4	G 1/8	69.6	-	-	249	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	67	-
G 1/2	G 1/2	G 1/8	69.6	39.5	186	-	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	67	-
G 1/2	G 1/2	G 1/8	69.6	38.5	-	335	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	67	5

A1	A2	A7	B	C	E	E1	E7	H	I	J	K	M	O	P	R	S	T	T1	T2	T7	U	V	W1	X
G 1/2	G 1/2	G 1/8	69.6	38.5	-	186	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	67	-
G 1/2	G 1/2	G 1/8	69.6	38.5	186	-	-	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	67	-
G 1/2	G 1/2	G 1/8	69.6	38.5	-	-	201	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	8.5	33	18	67	-

## Diagrams

### Flow rate characteristic



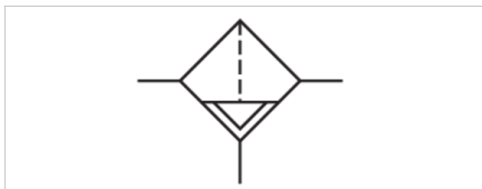
$p_2$  = secondary pressure  
 $q_n$  = nominal flow

# Active carbon filter, Series NL4-FLA

- G 1/4, G 1/2



Version	Active carbon filter, Can be assembled into blocks
Parts	Active carbon filter
Mounting orientation	vertical
Working pressure min./max.	8 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Filter reservoir volume	1.69 fl.oz.
Filter element	exchangeable
Condensate drain	without
Weight	See table below



## Technical data

Part No.	Port	Qn	Reservoir	Weight	
0821303300	G 1/4	2.29 Cv	Polycarbonate	1.84 lbs	1)
0821303301	G 1/4	2.29 Cv	Die cast zinc	1.84 lbs	1)
0821303517	G 1/2	2.29 Cv	Die cast zinc	3.49 lbs	2)

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

1) Metal protective guard can be retrofitted for all polycarbonate reservoirs

2) Metal protective guard can be retrofitted for all polycarbonate reservoirs, Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

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

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

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

Recommended pre-filtering 0.01 μm

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

## Technical information

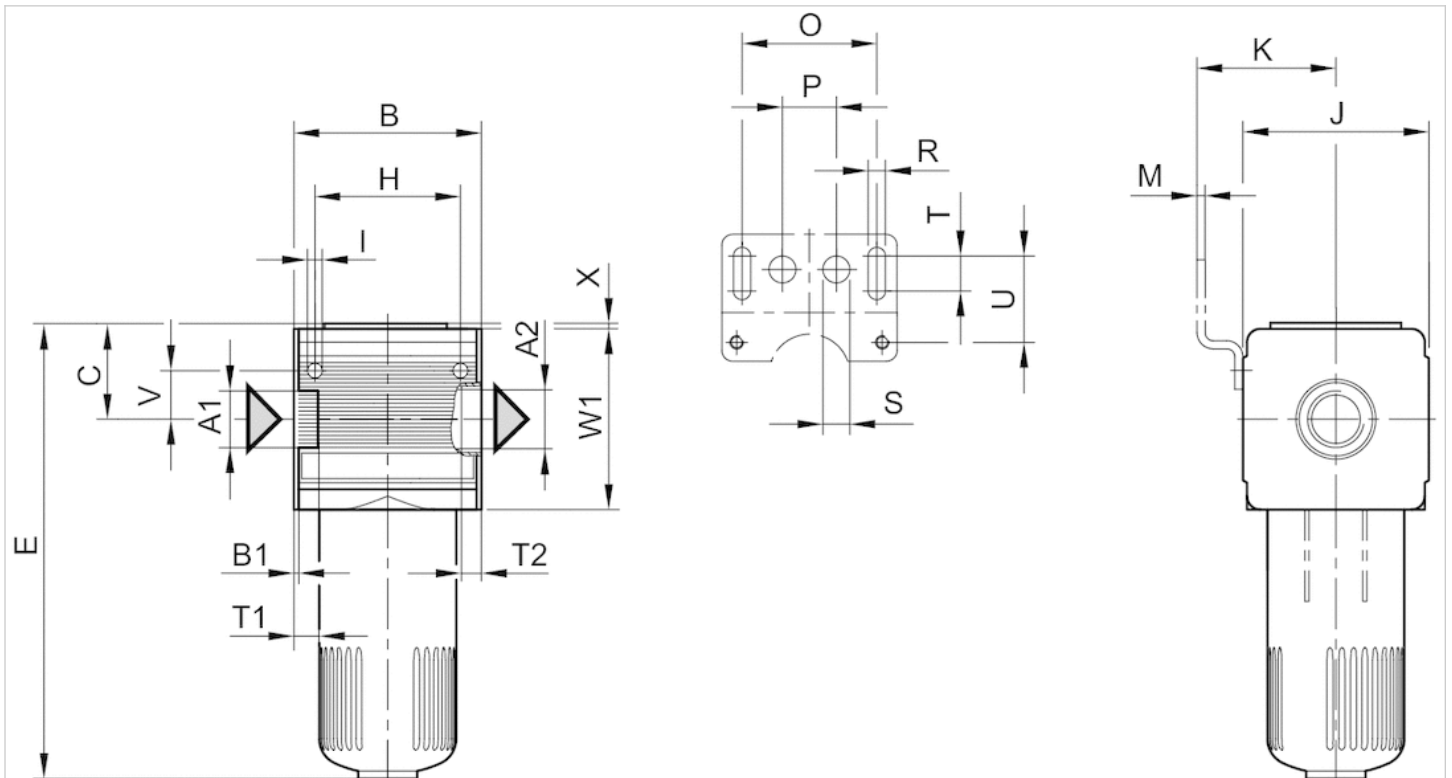
Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene



Material	
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate, Die cast zinc
Filter insert	Active carbon

## Dimensions

### Dimensions



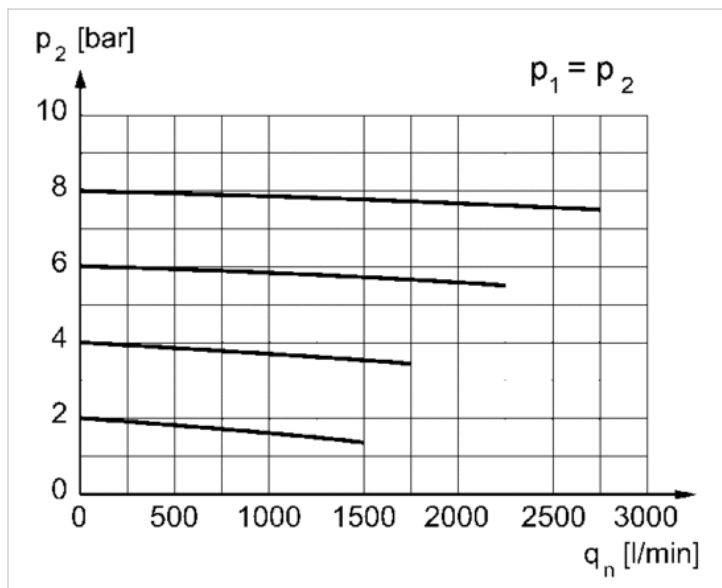
A1 = input  
A2 = output

### Dimensions in mm

A1	A2	B	B1	C	D	E	H	I	J	K	M	O	P	R	S	T	T1	T2	U	V	W1	X
G 1/4	G 1/4	69.6	1.8	34.5	-	170	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	33	18	67	1
G 1/4	G 1/4	69.6	1.8	34.5	-	222	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	33	18	67	1
G 1/2	G 1/2	69.6	1.8	34.5	-	308	54	5.5	69	54.5	3	50	20	6.4	10	13	13	13	33	18	67	1

## Diagrams

### Flow rate characteristic



$p_2$  = secondary pressure

$q_n$  = nominal flow

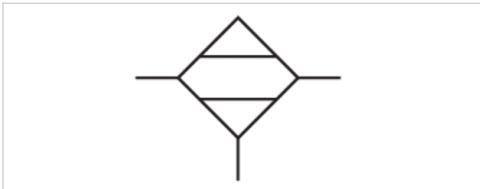
# Diaphragm-type dryer, Series NL4-ADD

- G 1/2

- suitable for ATEX



Version	Diaphragm-type dryer
Parts	Diaphragm-type dryer
Mounting orientation	vertical
Certificates	suitable for ATEX
Working pressure min./max.	58 ... 181 psi
Ambient temperature min./max.	36 ... 140 °F
Medium temperature min./max.	36 ... 140 °F
Medium	Compressed air, Neutral gases
Filter element	not exchangeable
Lowering pressure dew point	68 °F
Weight	See table below



## Technical data

Part No.	Port	Flow	Reservoir	Weight	
		Qn			
R412007606	G 1/2	0.508 Cv	Aluminum	9.77 lbs	1)
R412007607	G 1/2	0.66 Cv	Aluminum	10.03 lbs	2)
R412007608	G 1/2	0.965 Cv	Aluminum	10.25 lbs	1)

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

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

## Technical information

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

Notice: air may not contain condensate  
purge air approx. 12% of nominal flow Qn

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

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

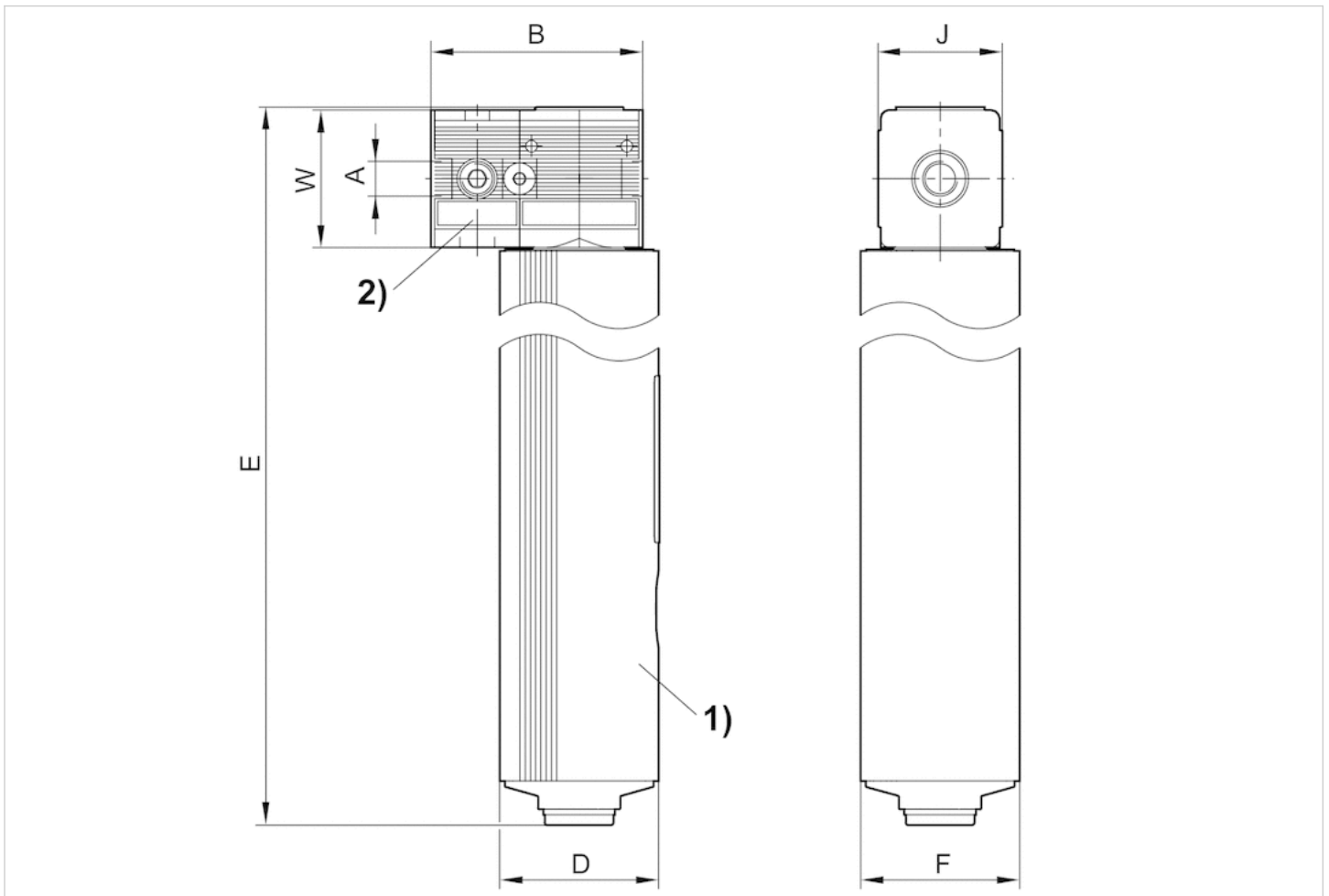
Recommended pre-filtering,  $\mu\text{m}$  5  
0.01  $\mu\text{m}$

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seal	Acrylonitrile butadiene rubber
Reservoir	Aluminum

## Dimensions

### Dimensions



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

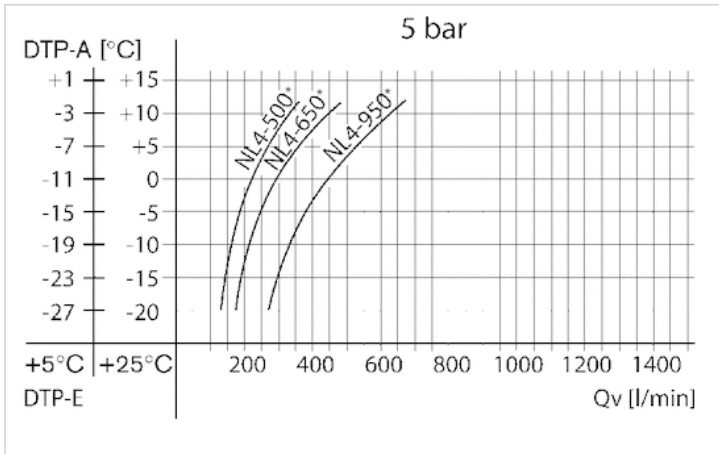
### Dimensions in mm

A	1)	B	D	E	F	J
G 1/2	13	106	80	518	80	69
G 1/2	13	106	80	569	80	69
G 1/2	13	106	80	638	80	69

1) Min. usable thread depth

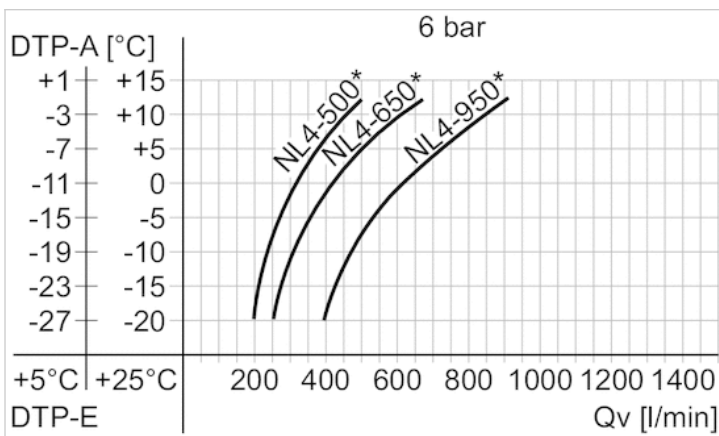
## Diagrams

### performance charts



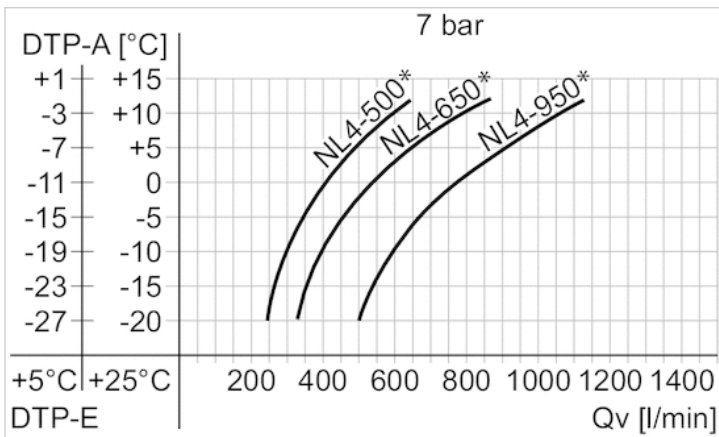
DTP-E: pressure dew point input  
 DTP-A: pressure dew point output  
 Qv: input flow rate (nominal flow rate Qn + purge air)  
 For different conditions, please contact the nearest AVENTICS sales office.  
 \* Nominal flow Qn

### performance charts



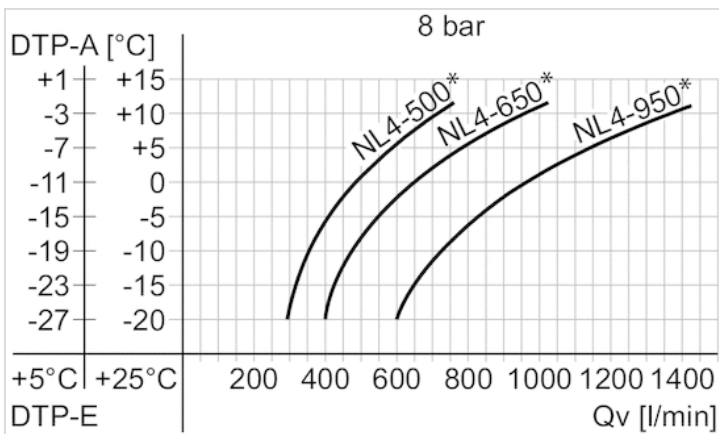
DTP-E: pressure dew point input  
 DTP-A: pressure dew point output  
 Qv: input flow rate (nominal flow rate Qn + purge air)  
 For different conditions, please contact the nearest AVENTICS sales office.  
 \* Nominal flow Qn

performance charts



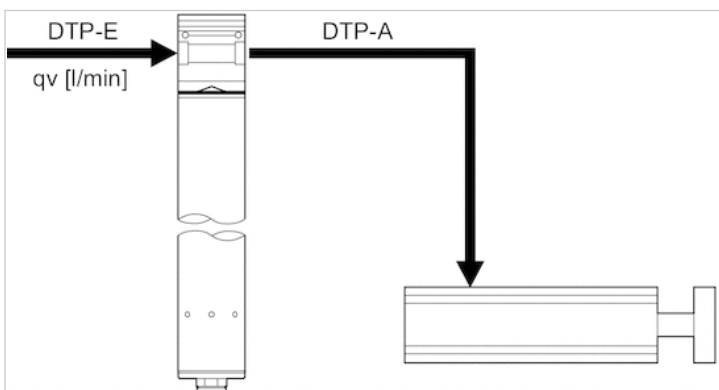
DTP-E: pressure dew point input  
 DTP-A: pressure dew point output  
 Qv: input flow rate (nominal flow rate Qn + purge air)  
 For different conditions, please contact the nearest AVENTICS sales office.  
 \* Nominal flow Qn

performance charts

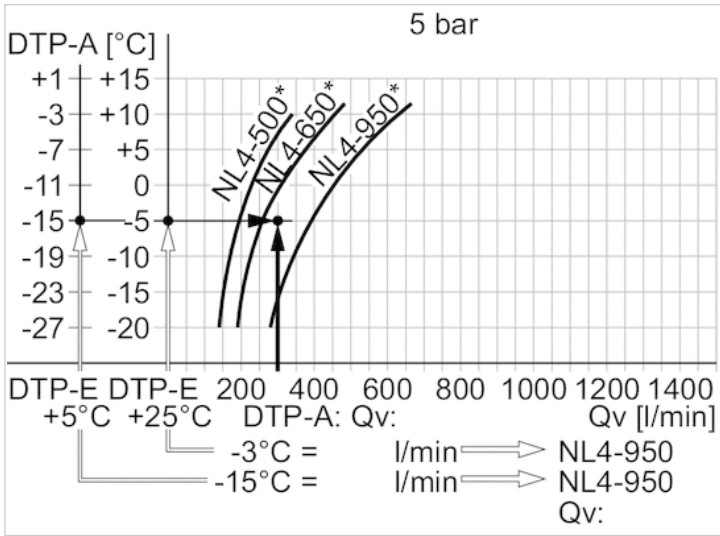


DTP-E: pressure dew point input  
 DTP-A: pressure dew point output  
 Qv: input flow rate (nominal flow rate Qn + purge air)  
 For different conditions, please contact the nearest AVENTICS sales office.  
 \* Nominal flow Qn

Example



Example



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

\* Nominal flow Qn

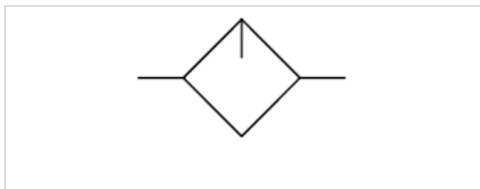
# Standard oil-mist lubricator, Series NL4-LBS

- G 1/2, G 3/4

- suitable for ATEX



Version	Oil-mist lubricator, Can be assembled into blocks
Parts	Standard oil-mist lubricator
Mounting orientation	vertical
Working pressure min./max.	8 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Type of filling	Manual oil filling
Weight	See table below



## Technical data

Part No.	Port	Nominal flow Qn	Lubricator reservoir volume	Reservoir	Protective guard
0821301500	G 1/2	6.1 Cv	4.23 fl.oz.	Polycarbonate	-
0821301501	G 1/2	6.1 Cv	4.23 fl.oz.	Polycarbonate	Steel
0821301515	G 1/2	6.1 Cv	3.92 fl.oz.	Polycarbonate	-
0821301502	G 1/2	6.1 Cv	4.23 fl.oz.	Die cast zinc, with window	-
0821301540	G 3/4	6.1 Cv	4.23 fl.oz.	Polycarbonate	-
0821301541	G 3/4	6.1 Cv	4.23 fl.oz.	Polycarbonate	Steel
0821301545	G 3/4	6.1 Cv	3.92 fl.oz.	Polycarbonate	-
0821301542	G 3/4	6.1 Cv	4.23 fl.oz.	Die cast zinc, with window	-

Part No.	Electrical level indicator	Weight	
0821301500	-	1.51 lbs	1)
0821301501	-	1.71 lbs	1)
0821301515	with internal query	1.6 lbs	-
0821301502	-	1.98 lbs	1)
0821301540	-	1.51 lbs	1)
0821301541	-	1.71 lbs	1)
0821301545	with internal query	1.6 lbs	-
0821301542	-	1.98 lbs	1)

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

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



## Technical information

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

The entire preset drip quantity enters the pressure system

Manual oil filling possible during operation

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

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

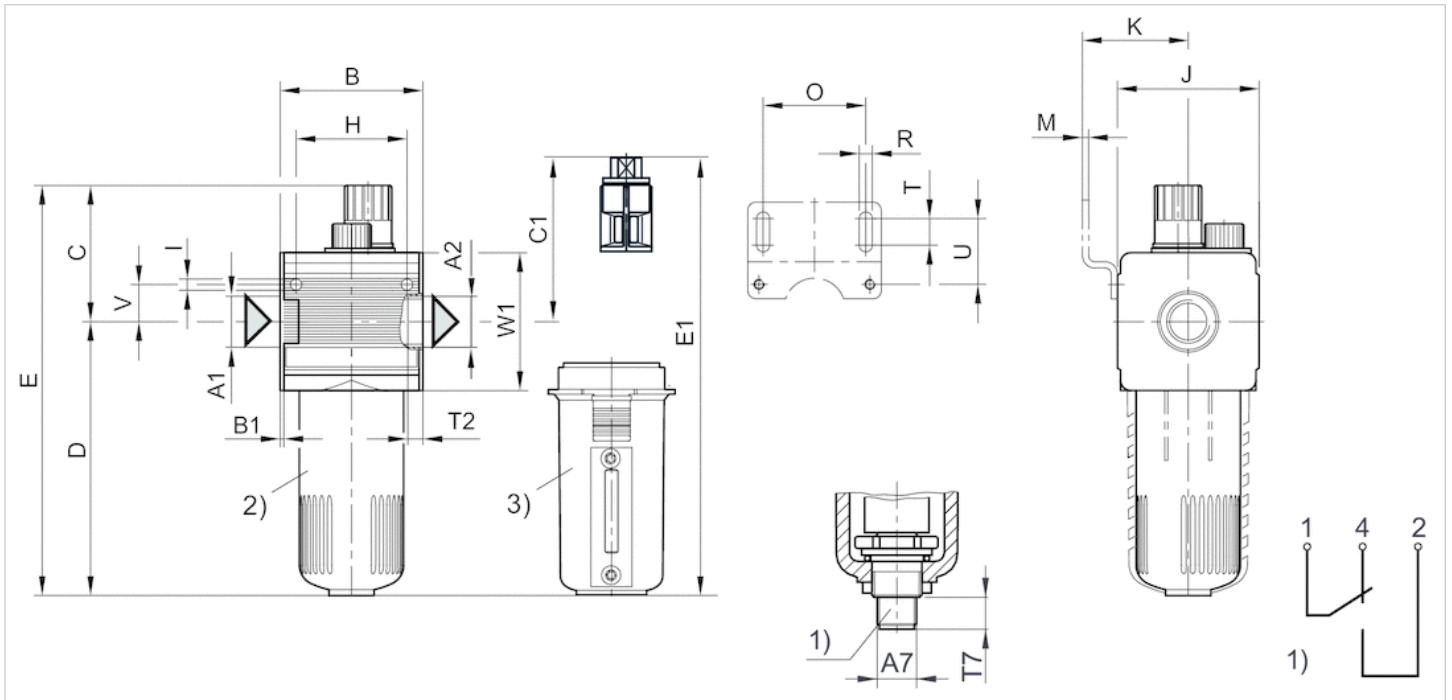
Oil dosing at 1 Cv 1-2 drops

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate, Die cast zinc
Protective guard	Steel

## Dimensions

### 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

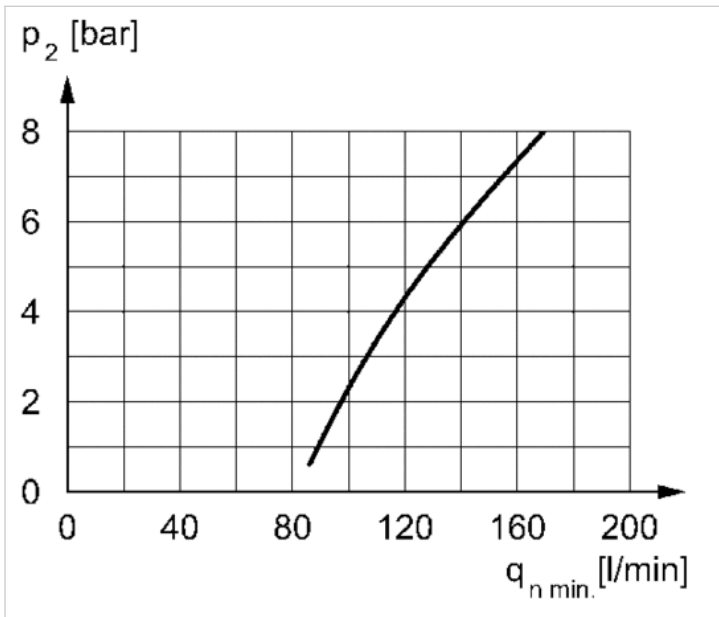
Dimensions in mm

A1	A2	A7	B	B1	C	C1	D	D2	E	E1	F	H	I	J	K	M	O	P	R	S	T	T2	T7
G 1/2	G 1/2	M12x1	69.5	1.8	65	-	132	12	197	-	M12x1	54	5.5	67	54.5	3	50	20	6.4	10	13	13	12
G 1/2	G 1/2	M12x1	69.5	1.8	65	81	132	12	197	212	M12x1	54	5.5	67	54.5	3	50	20	6.4	10	13	13	12
G 3/4	G 3/4	M12x1	69.5	1.8	65	-	132	12	197	-	M12x1	54	5.5	67	54.5	3	50	20	6.4	10	13	13	12
G 3/4	G 3/4	M12x1	69.5	1.8	65	81	132	12	197	212	M12x1	54	5.5	67	54.5	3	50	20	6.4	10	13	13	12

U	V	W1
33	18	67
33	18	67
33	18	67
33	18	67

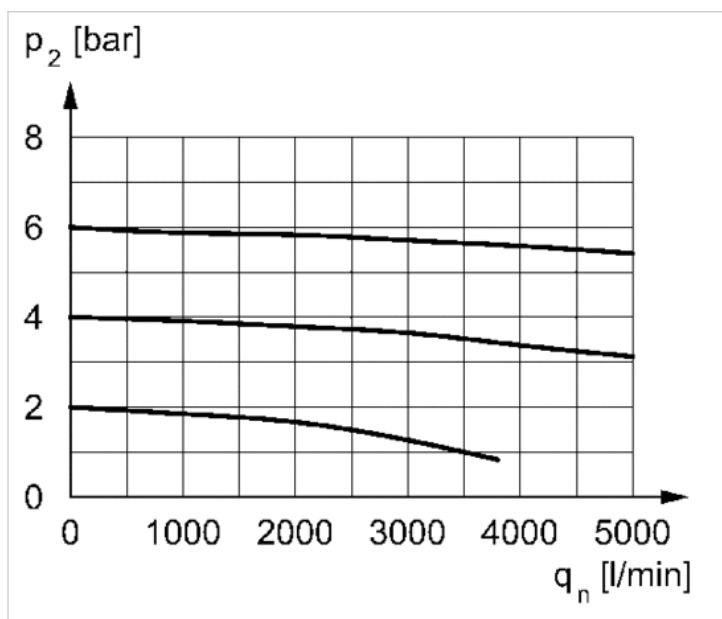
Diagrams

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



p2 = secondary pressure  
qnmin. = min. nominal flow

## Flow rate characteristic



$p_2$  = secondary pressure

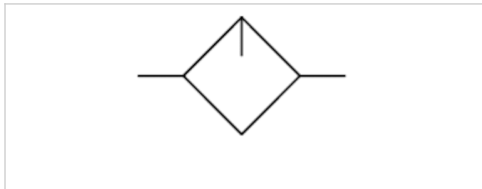
$q_n$  = nominal flow

# Micro oil-mist lubricator, Series NL4-LBM

- G 1/2



Version	Micro oil-mist lubricator, Can be assembled into blocks
Parts	Micro oil-mist lubricator
Mounting orientation	vertical
Compressed air connection	G 1/2
Working pressure min./max.	8 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Type of filling	Manual oil filling



## Technical data

Part No.	Port	Nominal flow Qn	Lubricator reservoir volume	Reservoir	Protective guard
R412007655	G 1/2	4.78 Cv	4.23 fl.oz.	Polycarbonate	Steel
R412007654	G 1/2	4.78 Cv	4.23 fl.oz.	Polycarbonate	-
R412007656	G 1/2	4.78 Cv	4.23 fl.oz.	Die cast zinc, with window	-
R412007657	G 1/2	4.78 Cv	4.23 fl.oz.	Polycarbonate	-
R412007658	G 1/2	4.78 Cv	33.81 fl.oz.	Die cast zinc, with window	-
R412007659	G 1/2	4.78 Cv	50.72 fl.oz.	Die cast zinc, with window	-

Part No.	Electrical level indicator
R412007655	-
R412007654	-
R412007656	-
R412007657	with internal query
R412007658	with internal query
R412007659	with internal query

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

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

## Technical information

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

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

oil filling not possible during operation

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

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

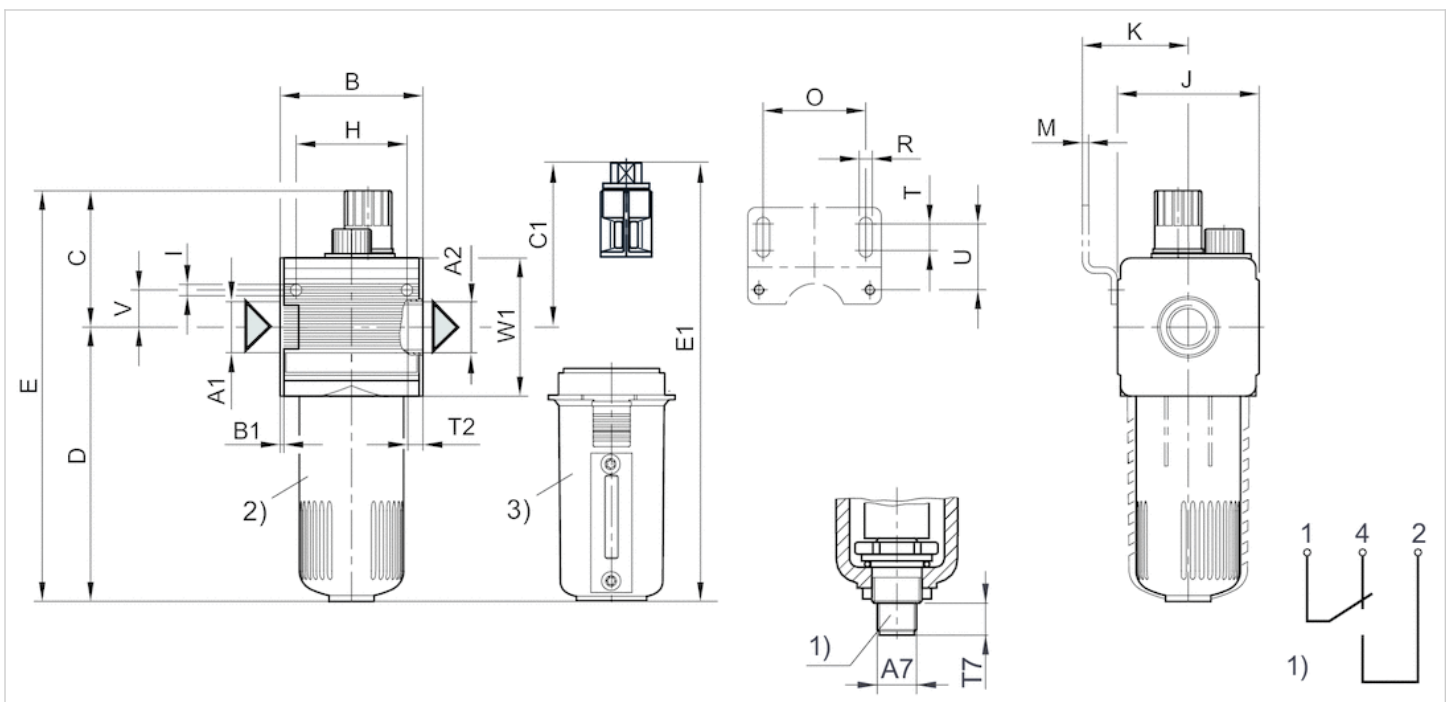
Oil dosing at 1 Cv 10-20 drops

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate, Die cast zinc
Protective guard	Steel

## Dimensions

### 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

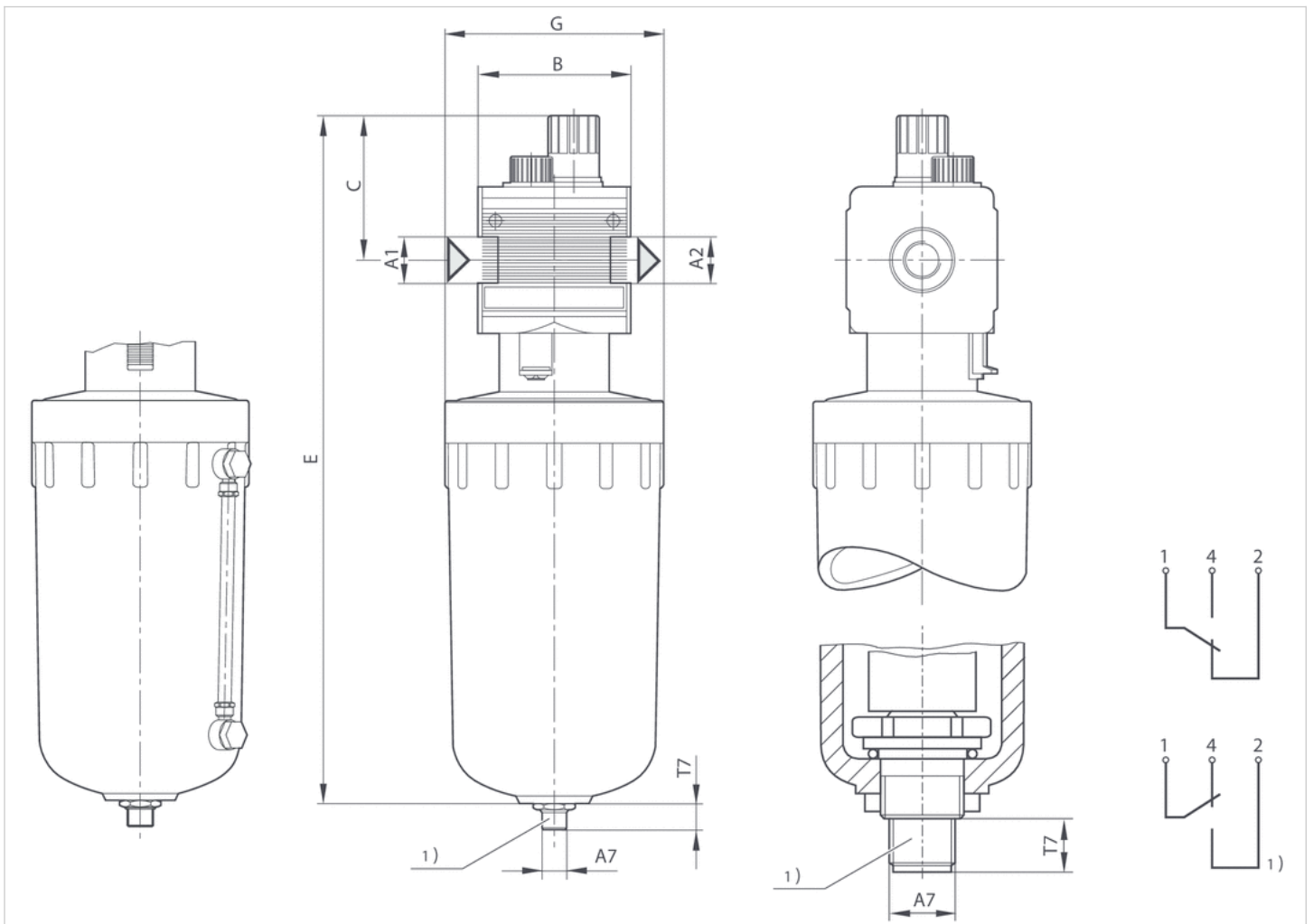
3) Metal reservoir with level indicator

Dimensions in mm

A1	A2	A7	B	B1	C	C1	D	E	E1	H	I	J	K	M	O	P	R	S	T	T2	T7	U	V	W1
G 1/2	G 1/2	M12x1	69.5	1.8	65	81	132	197	212	54	5.5	67	54.5	3	50	20	6.4	10	13	13	12	33	18	67
G 1/2	G 1/2	M12x1	69.5	1.8	65	-	132	197	-	54	5.5	67	54.5	3	50	20	6.4	10	13	13	12	33	18	67

Dimensions

Dimensions Metal reservoir



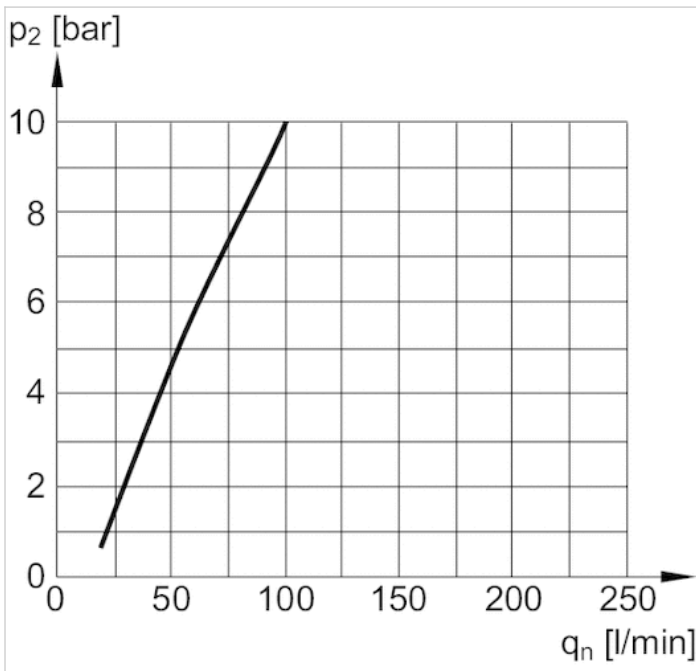
- A1 = input
  - A2 = output
  - 1) electrical level indicator
    - connection: 4-pin, M12x1
    - contact load: 50 V AC/0.5 A/5 W
    - type: 1 change-over contact (make contact/break contact) for min. fluid level
- Order valve plug connector (M12x1) separately

Dimensions in mm

A1		A2	A7	B ±5	C ±5	E	G ±5	T7
G 1/2	1 L	G 1/2	M12x1	69.6	66	315	Ø 100	12
G 1/2	1,5 L	G 1/2	M12x1	69.6	66	415	Ø 100	12

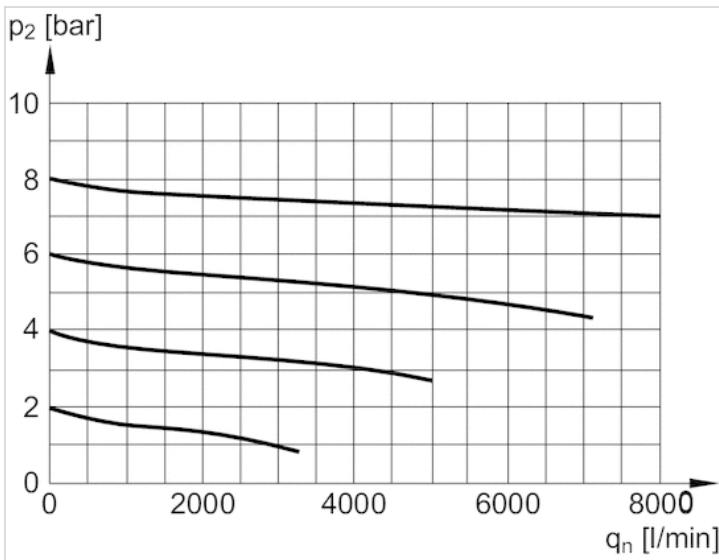
## Diagrams

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 = secondary pressure  
qn = nominal flow









# Filling unit, electrically operated, Series NL4-SSU

- ATEX optional
- Compressed air connection G 1/2
- Pipe connection
- Electrical connection: Plug, ISO 6952, form B



Version	Poppet valve, Can be assembled into blocks
Parts	Filling valve, 3/2-directional valve, electrically operated
Nominal flow 1 ▶ 2	2.54 Cv
Nominal flow 2 ▶ 3	1.63 Cv
Working pressure min./max.	37 ... 145 psi
Medium	Compressed air, Neutral gases
Medium temperature min./max.	14 ... 140 °F
Ambient temperature min./max.	14 ... 140 °F
Pilot	Internal
Sealing principle	Soft sealing
Max. particle size	5 µm
Protection class acc. to DIN EN 61140, with plug	IP65
Duty cycle	100 %
Weight	See table below

## Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
0821300950		—	G 1/2	G 1/2	G 1/2
0821300951		—	G 1/2	G 1/2	G 1/2
0821300952		—	G 1/2	G 1/2	G 1/2
0821300953			G 1/2	G 1/2	G 1/2
0821300955		—	G 1/2	G 1/2	G 1/2
0821300956		—	G 1/2	G 1/2	G 1/2
0821300957		—	G 1/2	G 1/2	G 1/2

Part No.	Operational voltage		Operational voltage
	DC	AC 50 Hz	AC 60 Hz
0821300950	24 V	-	-
0821300951	-	230 V	230 V
0821300952	-	-	-
0821300953	-	-	-
0821300955	24 V	-	-
0821300956	-	230 V	230 V
0821300957	-	-	-



Part No.	Power consumption	Holding power	Switch-on power	Manual override
	DC	AC 50 Hz	AC 50 Hz	
0821300950	4.8 W	-	-	-
0821300951	-	8.5 VA	11.8 VA	-
0821300952	-	-	-	-
0821300953	-	-	-	with detent
0821300955	4.8 W	-	-	-
0821300956	-	8.5 VA	11.8 VA	-
0821300957	-	-	-	-

Part No.	Electrical connection	Connector standard	basic valve with electrical connector
	Pilot valve		
0821300950	Plug, ISO 6952, form B	ISO 6952	-
0821300951	Plug, ISO 6952, form B	ISO 6952	-
0821300952	Plug, ISO 6952, form B	-	pilot valve without coil
0821300953	Plug, ISO 6952, form B	-	pilot valve without coil
0821300955	Plug, ISO 6952, form B	ISO 6952	-
0821300956	Plug, ISO 6952, form B	ISO 6952	-
0821300957	Plug, ISO 6952, form B	-	pilot valve without coil

Part No.	Reverse polarity protection	Weight	
0821300950	Protected against polarity reversal	3.82 lbs	1)
0821300951	Protected against polarity reversal	3.82 lbs	1)
0821300952	Protected against polarity reversal	3.74 lbs	1)
0821300953	Protected against polarity reversal	4.06 lbs	1)
0821300955	Protected against polarity reversal	3.82 lbs	2)
0821300956	Protected against polarity reversal	3.82 lbs	2)
0821300957	Protected against polarity reversal	3.74 lbs	2)

Nominal flow  $Q_n$  with secondary pressure  $p_2 = 87$  psi at  $\Delta p = 14.5$  psi

1) adjustable filling

2) Filling with fixed diaphragm

## Technical information

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

Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.

ATEX optional: The ATEX ID depends on the selected ATEX coil.

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

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

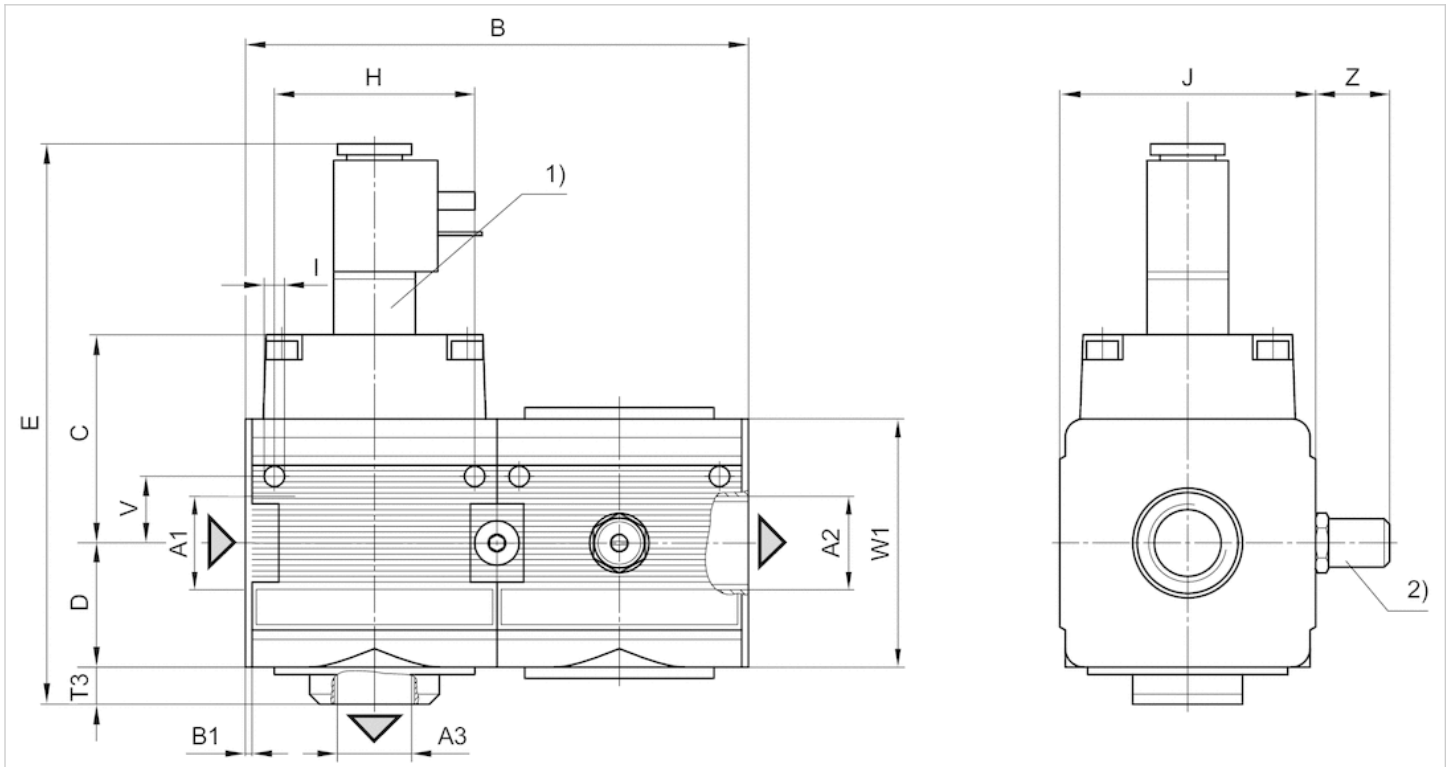
## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene styrene

Material	
Threaded bushing	Die cast zinc

## Dimensions

### Dimensions



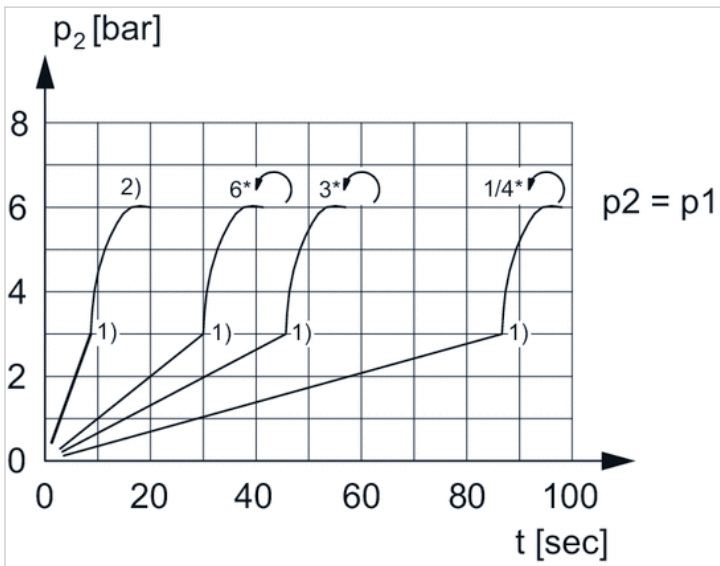
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) electrically operated
- 2) Adjustment screw for filling time

### Dimensions in mm

A1	A2	A3	B	B1	C	D	E	H	I	J	T3	W1	Z
G 1/2	G 1/2	G 1/2	135.6	1.8	56.5	33.5	151	54	5.5	69	10	52	20
G 1/2	G 1/2	G 1/2	135.6	1.8	56.5	33.5	151	54	5.5	69	10	52	-

## Diagrams

### Secondary pressure while filling



$p_1$  = working pressure

$p_2$  = secondary pressure

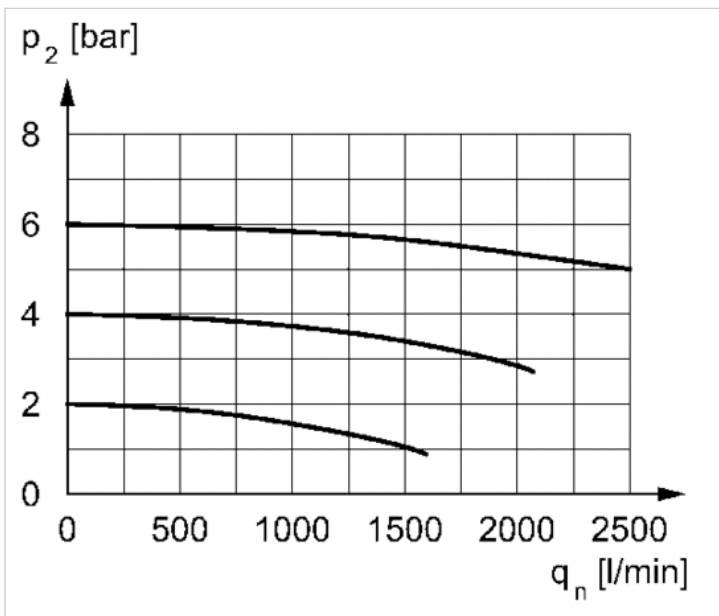
$t$  = filling time, adjustable via adjustment screw (throttle)

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



$p_2$  = secondary pressure

$q_n$  = nominal flow

# Filling unit, pneumatically operated, Series NL4-SSU

- Compressed air connection G 1/2
- Pipe connection
- suitable for ATEX



Version	Poppet valve, Can be assembled into blocks
Pilot	Internal
Sealing principle	Soft sealing
Certificates	suitable for ATEX
Working pressure min./max.	0 ... 232 psi
Control pressure min./max.	37 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Max. particle size	5 µm
Weight	3.71 lbs

## Technical data

Part No.	Port	Exhaust	Flow		
			Qn 1►2	Qn 2►3	
0821300949	G 1/2	G 1/2	2.54 Cv	1.63 Cv	1)
0821300954	G 1/2	G 1/2	2.54 Cv	1.63 Cv	2)

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

- 1) Suitable for use in Ex zones 1, 2, 21, 22, adjustable filling
- 2) Suitable for use in Ex zones 1, 2, 21, 22, Filling with fixed diaphragm

## Technical information

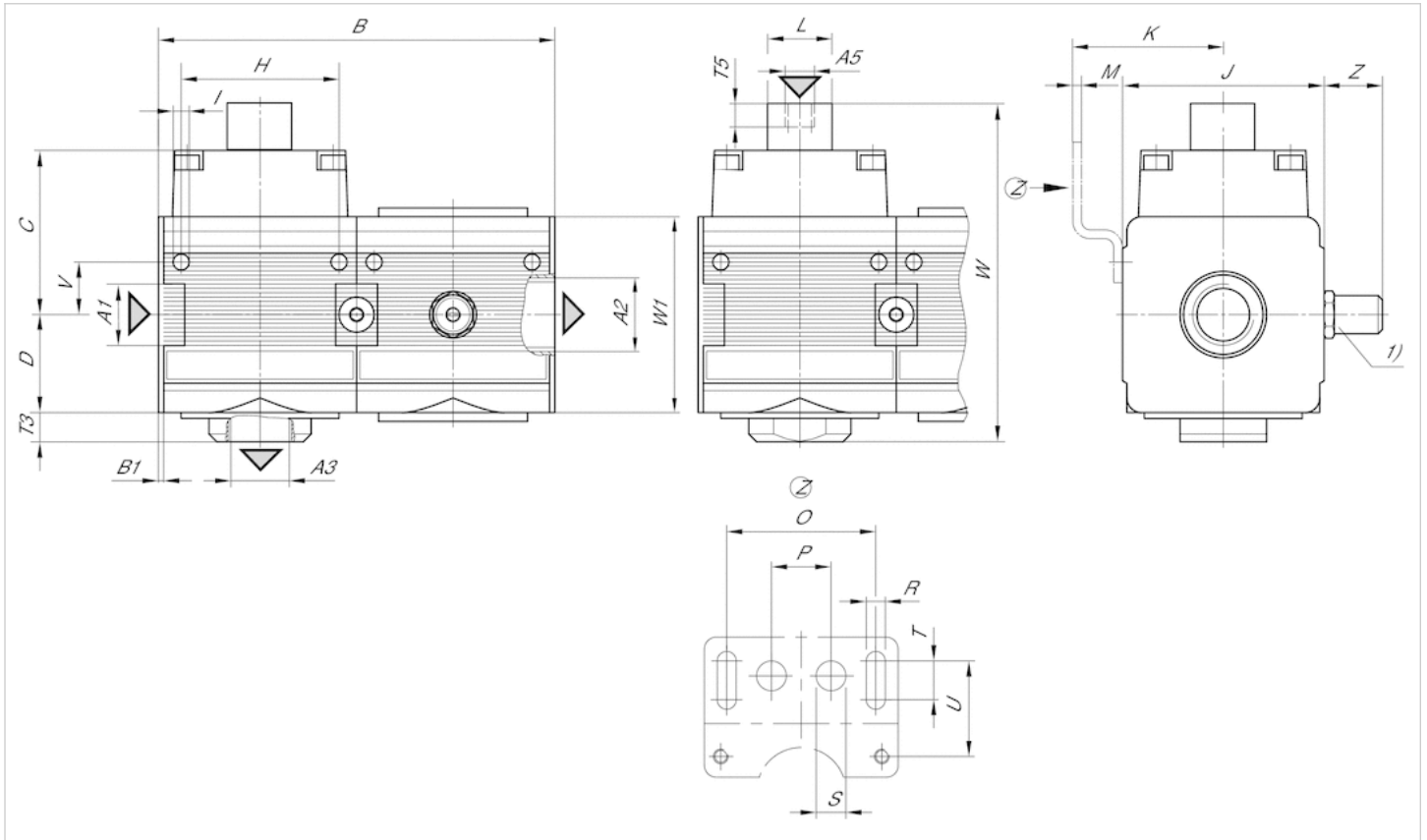
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .  
Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.  
Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.  
Suitable for use in Ex zones 1, 2, 21, 22  
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

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

## Dimensions

### Dimensions



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

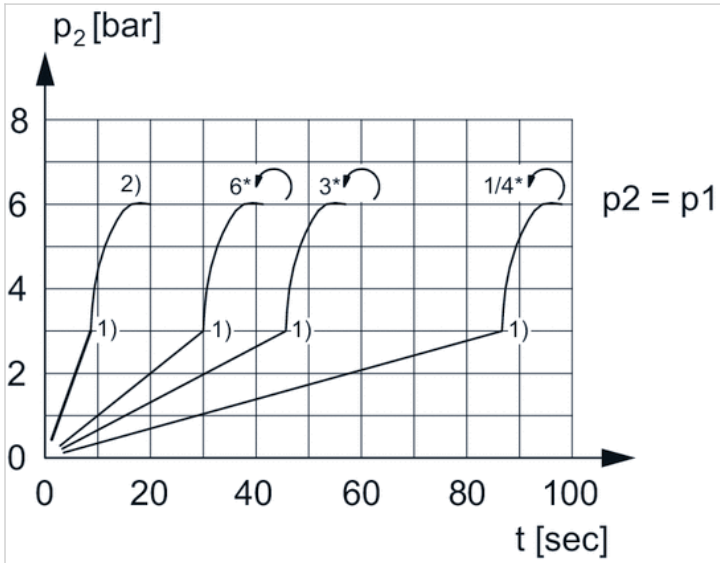
### Dimensions in mm

A1	A2	A3	A5	B	B1	C	D	H	I	J	K	L	M	O	P	R	S	T	T3	T5	U	V
G 1/2	G 1/2	G 1/2	G 1/8	135.6	1.8	56.5	33.5	54	5.5	69	54.5	22	3	50	20	6.4	20	10	10	13	27.5	12.3
G 1/2	G 1/2	G 1/2	G 1/8	135.6	1.8	56.5	33.5	54	5.5	69	54.5	22	3	50	20	6.4	20	10	10	13	27.5	12.3

W	W1	Z
96	52	20
96	52	-

## Diagrams

### secondary pressure while filling



$p_1$  = working pressure

$p_2$  = secondary pressure

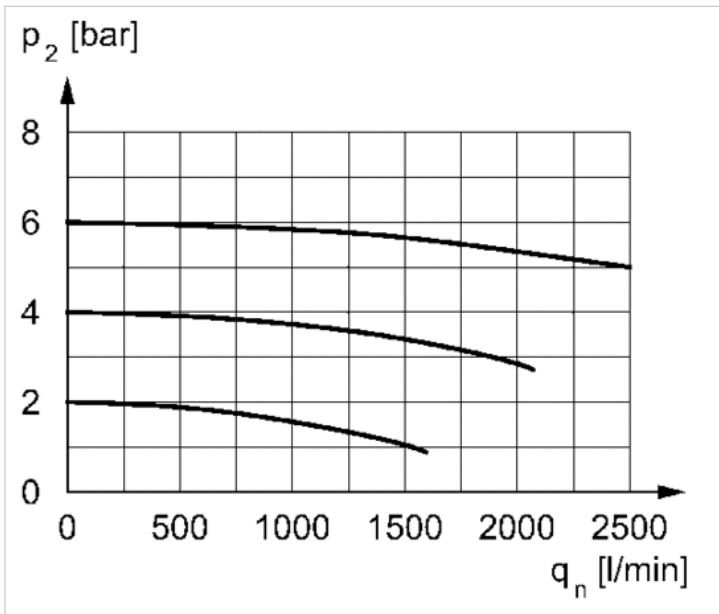
$t$  = filling time, adjustable via adjustment screw (throttle)

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



$p_2$  = secondary pressure

$q_n$  = nominal flow



# Filling valve, pneumatically operated, Series NL4-SSV

- Compressed air connection G 1/2
- Pipe connection
- suitable for ATEX



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Certificates	suitable for ATEX
Working pressure min./max.	0 ... 232 psi
Control pressure min./max.	37 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Max. particle size	5 µm
Weight	See table below

## Technical data

Part No.		Port	Flow	Weight	
			Qn		
0821300936		G 1/2	4.07 Cv	1.68 lbs	1)
0821300935		G 1/2	4.07 Cv	1.51 lbs	2)

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

- adjustable filling, Suitable for use in Ex zones 1, 2, 21, 22
- Filling with fixed diaphragm, Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

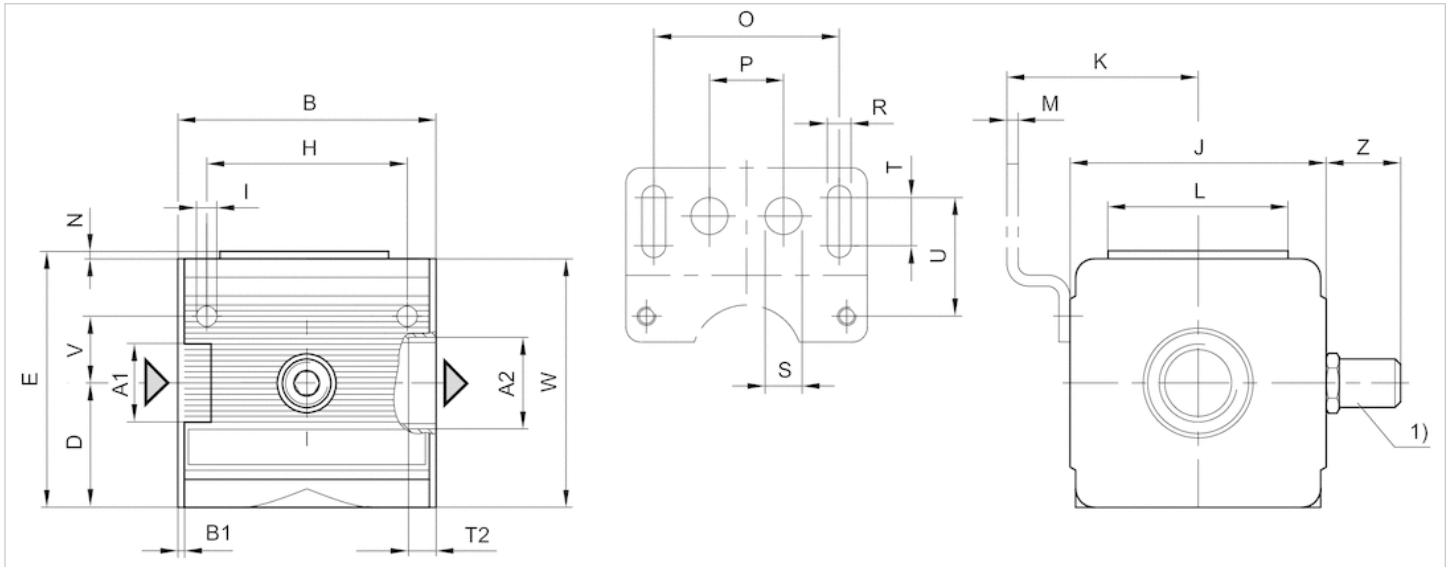
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .  
Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.  
Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.  
Suitable for use in Ex zones 1, 2, 21, 22  
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

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

## Dimensions

### Dimensions



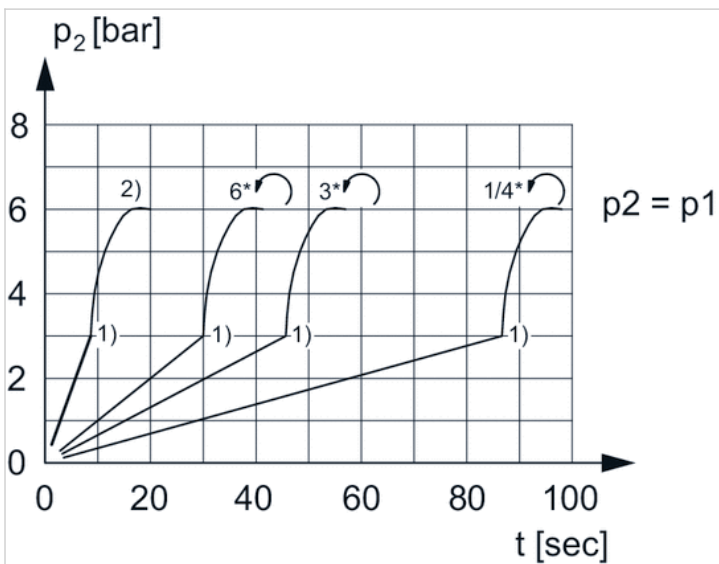
- A1 = input
- A2 = output
- 1) Adjustment screw for filling time

### Dimensions in mm

A1	A2	B	B1	D	E	H	I	J	K	L	M	N	O	P	R	S	T	T2	U	V	W	Z
G 1/2	G 1/2	69.6	1.8	36.5	73	54	5.4	69	54.5	48	3	3	50	20	6.4	10	13	13	33	18	67	20
G 1/2	G 1/2	69.6	1.8	36.5	73	54	5.4	69	54.5	48	3	3	50	20	6.4	10	13	13	33	18	67	-

## Diagrams

### secondary pressure while filling



- $p_1$  = working pressure
- $p_2$  = secondary pressure



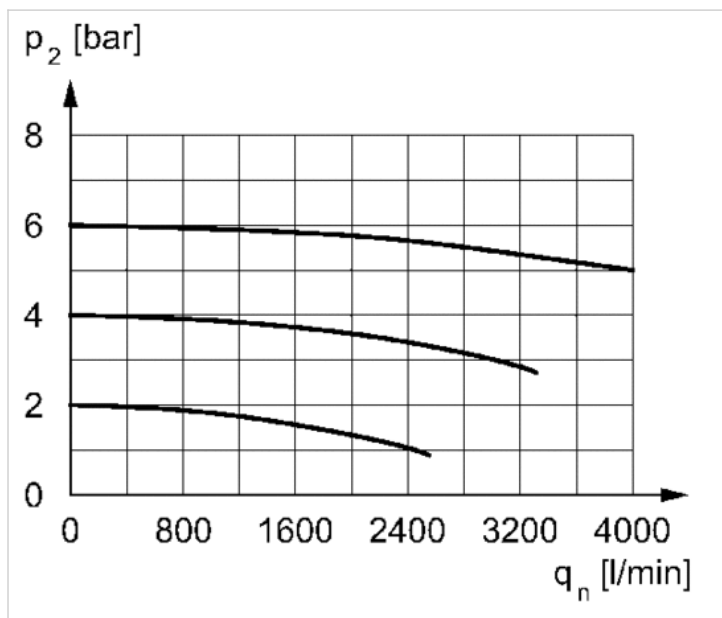
t = filling time, adjustable via adjustment screw (throttle)

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



$p_2$  = secondary pressure

$q_n$  = nominal flow

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

- ATEX optional
- Compressed air connection G 1/2
- Pipe connection
- Electrical connection: Plug, ISO 6952, form B



Version	Poppet valve, Can be assembled into blocks
Parts	3/2-directional valve, electrically operated
Nominal flow 1 ▶ 2	4.07 Cv
Nominal flow 2 ▶ 3	1.63 Cv
Working pressure min./max.	37 ... 145 psi
Medium	Compressed air, Neutral gases
Medium temperature min./max.	14 ... 140 °F
Ambient temperature min./max.	14 ... 140 °F
Pilot	Internal
Sealing principle	Soft sealing
Max. particle size	5 µm
Protection class acc. to DIN EN 61140,with plug	IP65
Duty cycle	100 %
Weight	See table below

## Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
0821300932		—	G 1/2	G 1/2	G 1/2
0821300933		—	G 1/2	G 1/2	G 1/2
0821300934		—	G 1/2	G 1/2	G 1/2
0821300937			G 1/2	G 1/2	G 1/2

Part No.	Operational voltage		Operational voltage
	DC	AC 50 Hz	AC 60 Hz
0821300932	24 V	-	-
0821300933	-	230 V	230 V
0821300934	-	-	-
0821300937	-	-	-

Part No.	Power consumption	Holding power	Switch-on power	Manual override
	DC	AC 50 Hz	AC 50 Hz	
0821300932	4.8 W	-	-	-
0821300933	-	8.5 VA	11.8 VA	-
0821300934	-	-	-	-
0821300937	-	-	-	with detent

Part No.	Electrical connection	Connector standard	basic valve with electrical connector
	Pilot valve		
0821300932	Plug, ISO 6952, form B	ISO 6952	-

Part No.	Electrical connection	Connector standard	basic valve with electrical connector
	Pilot valve		
0821300933	Plug, ISO 6952, form B	ISO 6952	-
0821300934	Plug, ISO 6952, form B	-	pilot valve without coil
0821300937	Plug, ISO 6952, form B	-	pilot valve without coil

Part No.	Reverse polarity protection	Weight
0821300932	Protected against polarity reversal	2.31 lbs
0821300933	Protected against polarity reversal	2.31 lbs
0821300934	Protected against polarity reversal	2.4 lbs
0821300937	Protected against polarity reversal	2.31 lbs

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

## Technical information

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

ATEX optional: The ATEX ID depends on the selected ATEX coil.

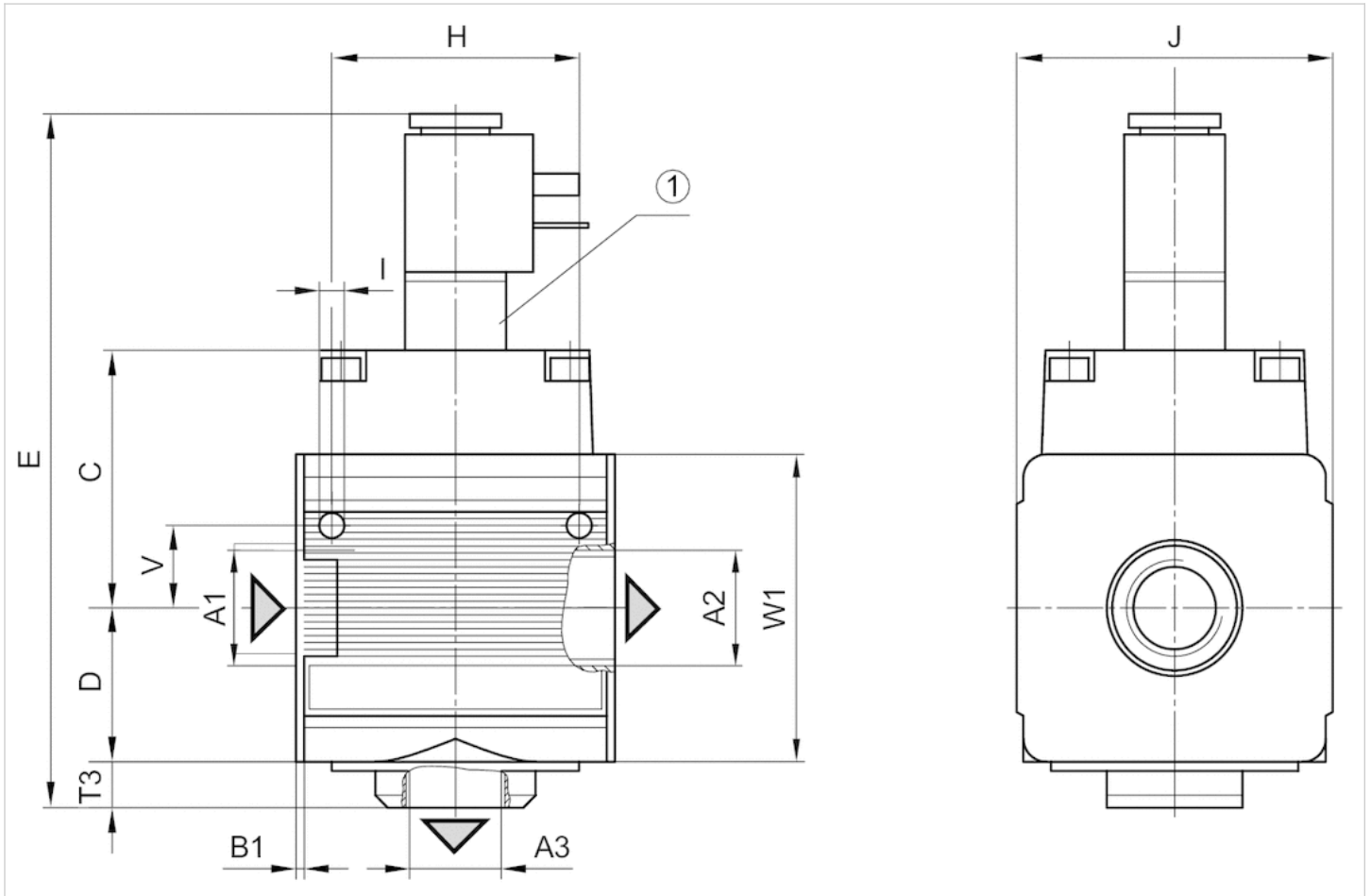
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene styrene

## Dimensions

### Dimensions



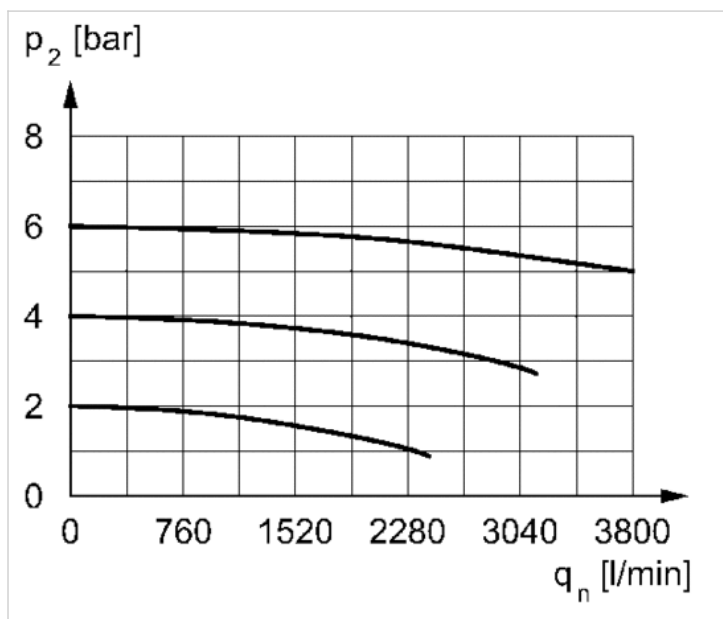
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) electrically operated

### Dimensions in mm

A1	A2	A3	B1	C	D	E	H	I	J	T3	W1
G 1/2	G 1/2	G 1/2	1.8	56.5	33.5	151	54	5.5	69	10	67

## Diagrams

### Flow rate characteristic



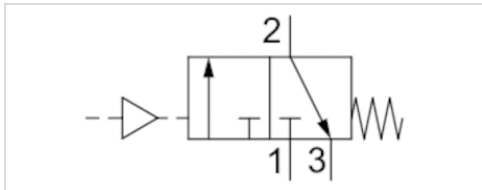
$p_2$  = secondary pressure  
 $q_n$  = nominal flow

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

- Compressed air connection G 1/2
- Pipe connection
- suitable for ATEX



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Certificates	suitable for ATEX
Working pressure min./max.	0 ... 232 psi
Control pressure min./max.	37 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Weight	2.2 lbs



## Technical data

Part No.	Port	Exhaust	Flow	Flow
			Qn 1>2	Qn 2>3
0821300931	G 1/2	G 1/2	4.07 Cv	1.63 Cv

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi  
 Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

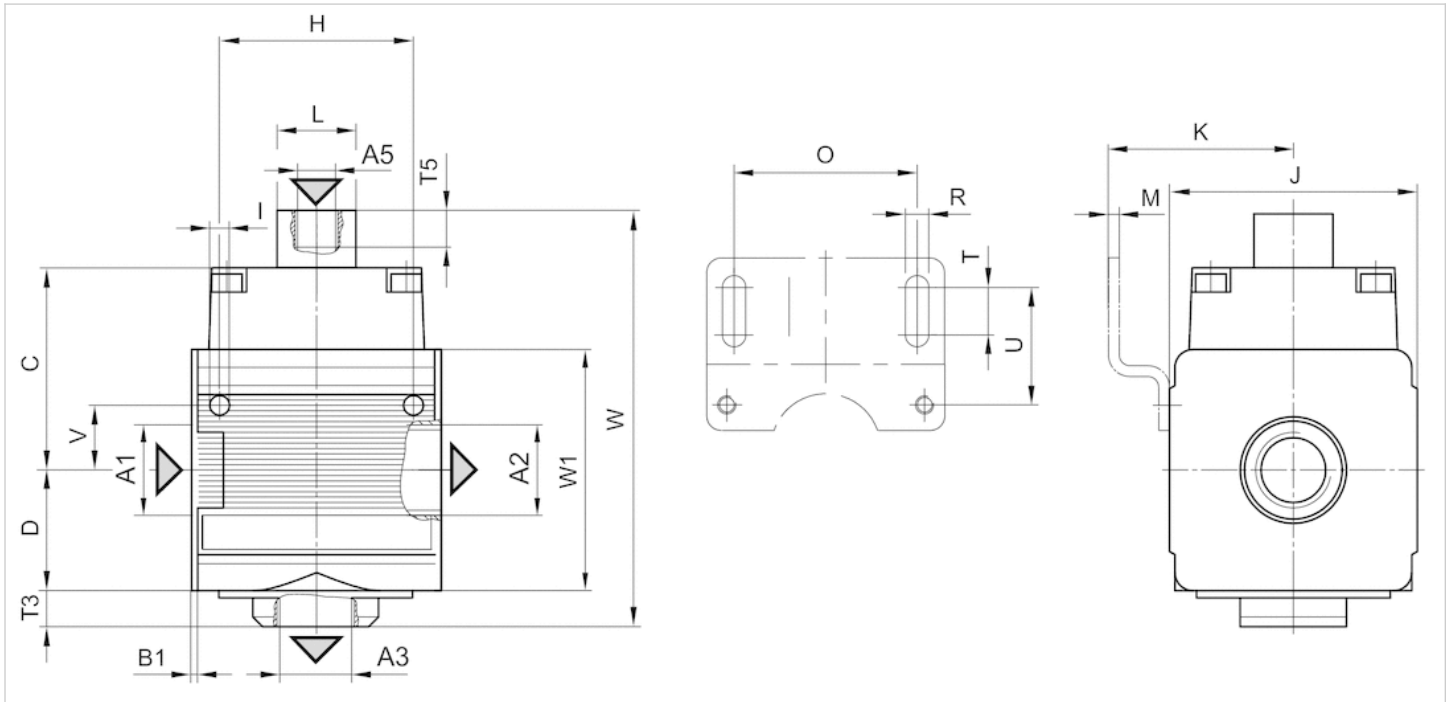
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .  
 Suitable for use in Ex zones 1, 2, 21, 22  
 A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

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

## Dimensions

### Dimensions



- A1 = input
- A2 = output
- A3 = ventilation port
- A5 = control pressure connection

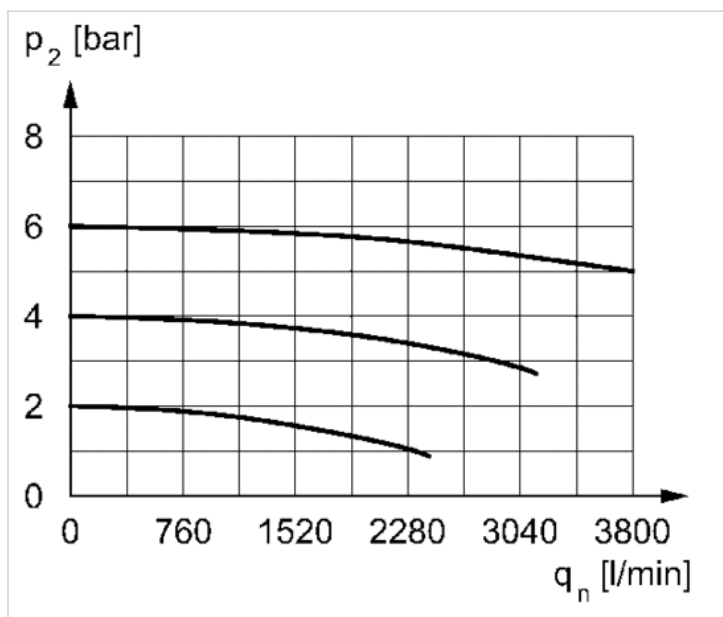
### Dimensions in mm

Part No.	A1	A2	A3	A5	B1	C	D	F	H	I	J	K	L	M	O	R	T	T1	T5	U	V
0821300931	G 1/2	G 1/2	G 1/2	G 1/8	1.8	56.5	33.5	10	54	5.5	69	54.4	22	3	50	6.4	13	1.8	13	33	18

W	W1
116	67

## Diagrams

## Flow rate characteristic



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



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

- G 1/2, G 3/4

- lockable

- suitable for ATEX



Version

Activation

Lock type

Sealing principle

Certificates

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Weight

Ball valve

Mechanical

lockable

metal/metal sealing

suitable for ATEX

0 ... 232 psi

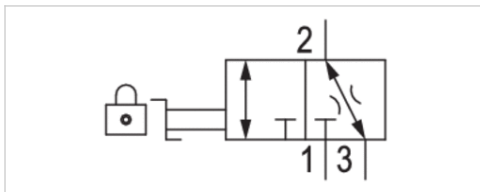
14 ... 140 °F

14 ... 140 °F

Compressed air, Neutral gases

1.81 lbs

The delivered product may vary from that in the illustration.



## Technical data

Part No.	Actuating element	Version	Compressed air connection	
			Input	Output
0821300911	rotary switch	3/2	G 1/2	G 1/2
0821300913	rotary switch	3/2	G 3/4	G 3/4
0821300982	Rotary knob	3/2	G 1/2	G 1/2
0821300983	Rotary knob	3/2	G 3/4	G 3/4

Part No.	Compressed air connection		Flow Qn 1 → 2	Flow Qn 2 → 3	Lock type	Fig.
	Exhaust					
0821300911	G 1/2		11.18 Cv	0.112 Cv	for padlocks	Fig. 1
0821300913	G 1/2		11.18 Cv	0.112 Cv	for padlocks	Fig. 1
0821300982	G 1/2		11.18 Cv	0.112 Cv	with key	Fig. 2
0821300983	G 1/2		11.18 Cv	0.112 Cv	with key	Fig. 2

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

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

## Technical information

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

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

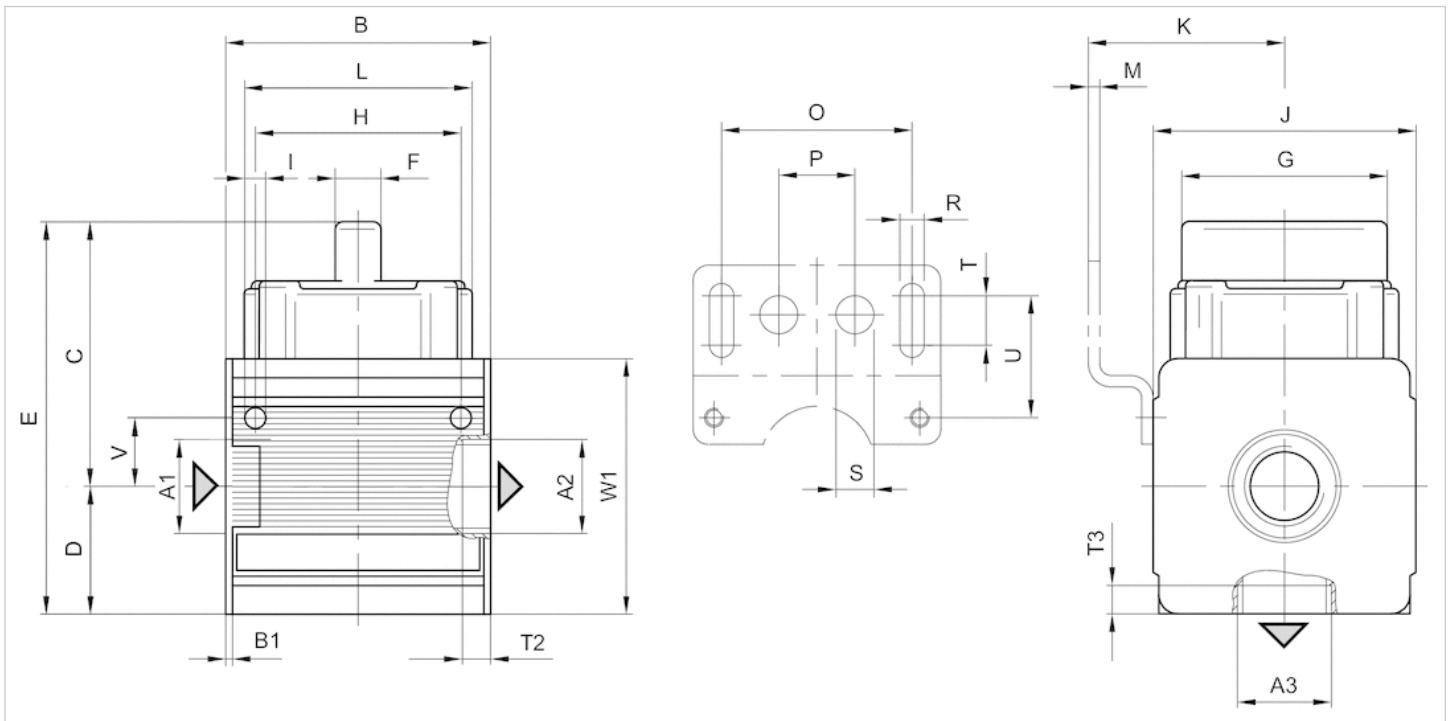
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Actuating element	Polyoxymethylene

## Dimensions

Fig. 1



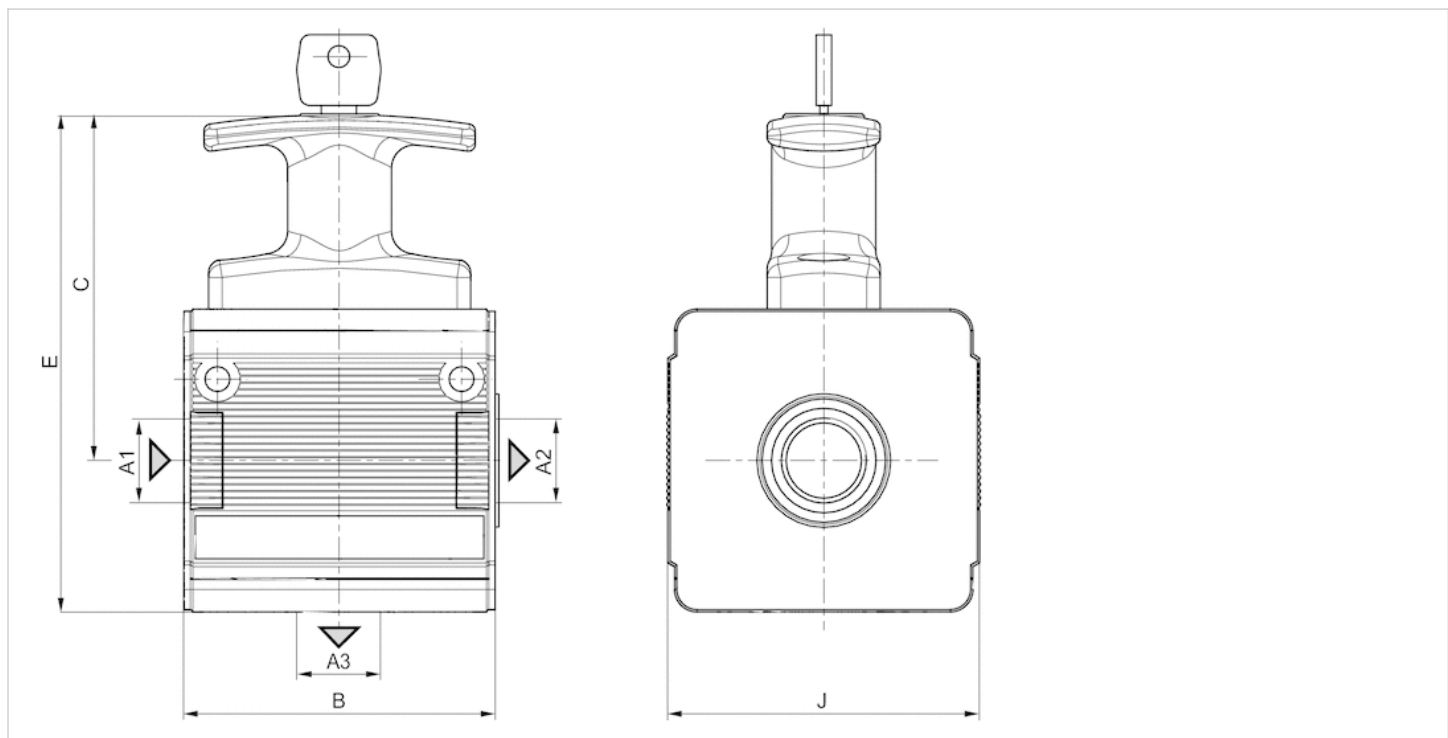
A1 = input  
 A2 = output  
 A3 = ventilation port

### Dimensions in mm

A2	A3	B	B1	C	D	E	F	H	G	I	J	K	L	M	O	P	R	S	T	T2	T3	U	V	W1
G 1/2	G 1/2	69.6	1.8	69.5	33.5	103	12	54	60	5.5	69	54.5	60	3	38	20	6.4	10	13	10.5	10.5	33	18	67
G 3/4	G 1/2	69.6	1.8	69.5	33.5	103	12	54	60	5.5	69	54.5	60	3	50	20	6.4	10	13	10.5	10.5	33	18	67

# Dimensions

Fig. 2



A1 = input  
 A2 = output

## Dimensions in mm

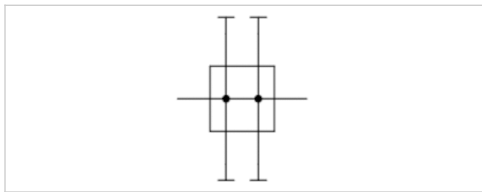
A2	B	C	E	J
G 1/2	69.6	78	111,5	69
G 3/4	69.6	78	111,5	69

# Distributor, Series NL4-DIL

- G 1/2
- Distributor 4x
- Narrow distributor
- suitable for ATEX



Version	Narrow distributor, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	0 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Weight	0.882 lbs



## Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow	Nominal flow	Nominal flow
		Qn 1►2	Qn 1►3	Qn 1►4	Qn 1►5	Qn 1►6
0821300930	G 1/2	11.18 Cv	8.89 Cv	1.36 Cv	8.89 Cv	1.36 Cv

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

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

## Technical information

Suitable for direct mounting of a PE1 and PM1 series pressure sensor (flange version)

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

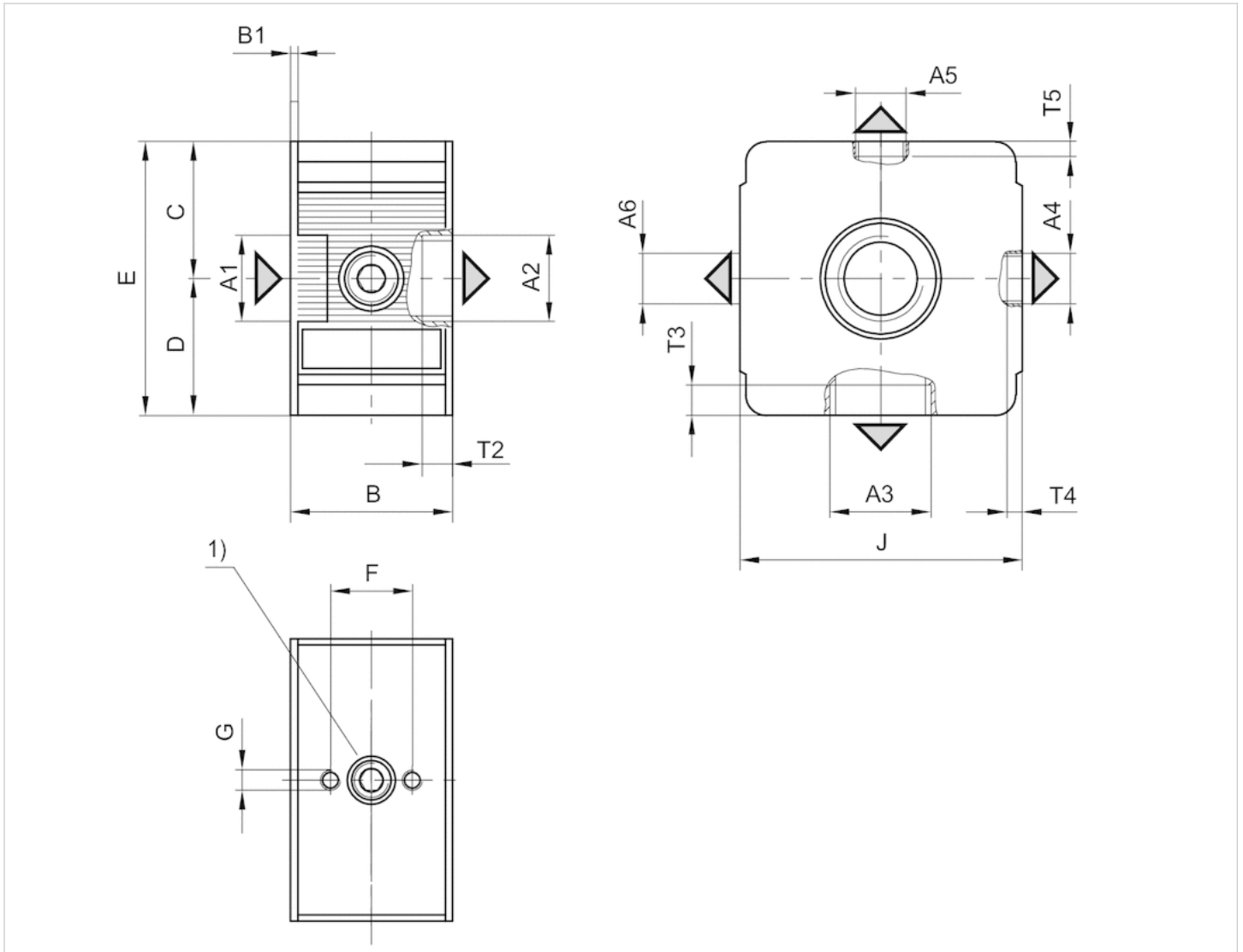
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene

## Dimensions

### Dimensions



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

### Dimensions in mm

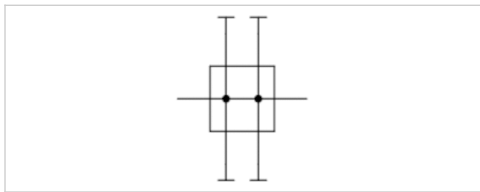
A1	A2	A3	A4	A5	A6	B	B1	C	D	E	F	G	J	T2	T3	T4	T5
G 1/2	G 1/2	G 3/8	G 1/4	G 1/8	G 1/4	39.6	1.8	33.5	33.5	67	20	M5	69	14	10.5	7	8

# Distributor, Series NL4-DIS

- G 1/2, G 3/4
- Distributor 4x
- Distributor
- suitable for ATEX



Version	Distributor, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	0 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Weight	1.5 lbs



## Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow	Nominal flow	Nominal flow
		Qn 1►2	Qn 1►3	Qn 1►4	Qn 1►5	Qn 1►6
0821300917	G 1/2	11.18 Cv	8.89 Cv	1.36 Cv	8.89 Cv	1.36 Cv
0821300919	G 3/4	11.18 Cv	8.89 Cv	1.36 Cv	8.89 Cv	1.36 Cv

Nominal flow Qn with secondary pressure p2 = 87 psi at  $\Delta p = 14.5$  psi

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

## Technical information

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

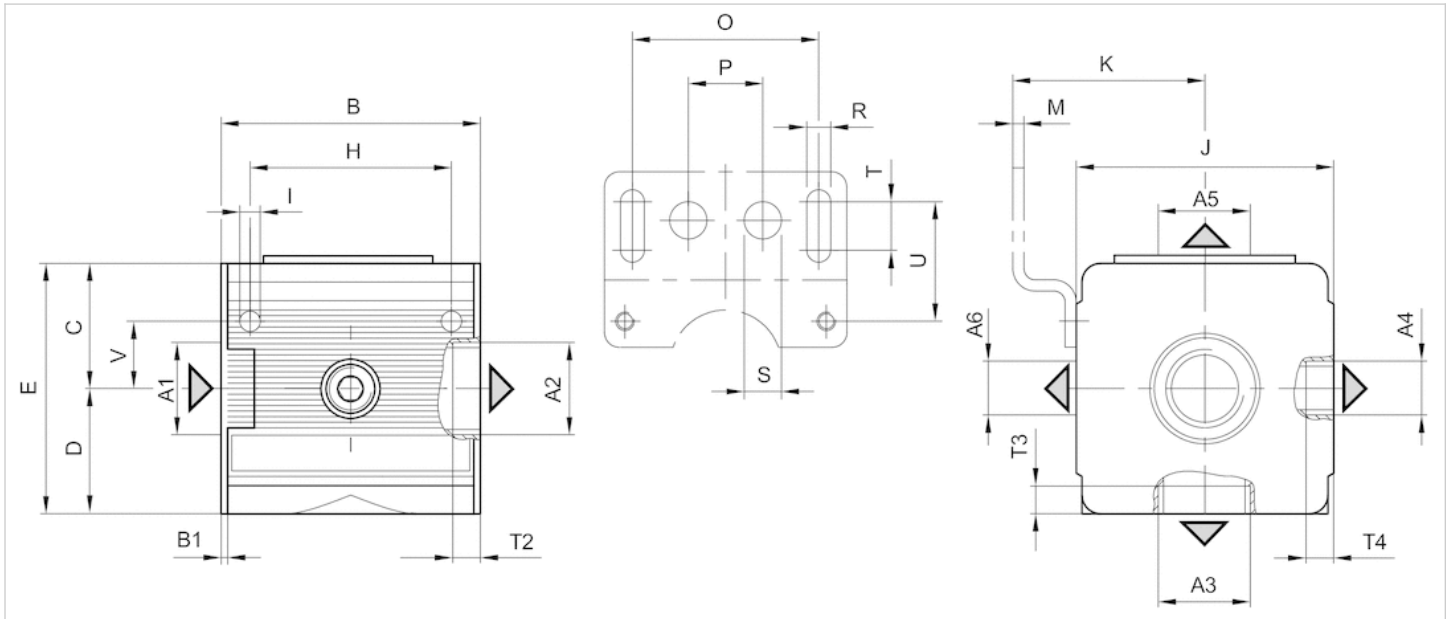
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene

# Dimensions

## Dimensions



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

## Dimensions in mm

A1	A2	A3	A4	A5	A6	B	B1	C	D	E	H	I	J	K	M	O	P	R	S	T	T2
G 1/2	G 1/2	G 1/2	G 1/4	G 1/2	G 1/4	69.6	1.8	33.5	33.5	67	54	5.5	69	54.5	3	50	20	6.4	10	13	13
G 3/4	G 3/4	G 1/2	G 1/4	G 1/2	G 1/4	69.6	1.8	33.5	33.5	67	54	5.5	69	54.5	3	50	20	6.4	10	13	13

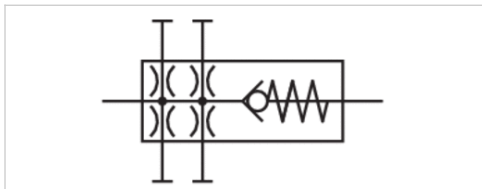
T3	T4	U	V
7.5	9	33	18
7.5	9	33	18

# Distributor, Series NL4-DIN

- G 1/2, G 3/4
- Distributor 4x
- Non-return valve



Version	Non-return valve, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	2 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Weight	1.5 lbs



## Technical data

Part No.	Port	Nominal flow				
		Qn 1►2	Qn 1►3	Qn 1►4	Qn 1►5	Qn 1►6
0821300914	G 1/2	2.44 Cv	2.44 Cv	1.04 Cv	2.44 Cv	1.04 Cv
0821300916	G 3/4	2.44 Cv	2.44 Cv	1.04 Cv	2.44 Cv	1.04 Cv

Part No.	ATEX	
0821300914	-	-
0821300916	suitable for ATEX	1)

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

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

## Technical information

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

## Technical information

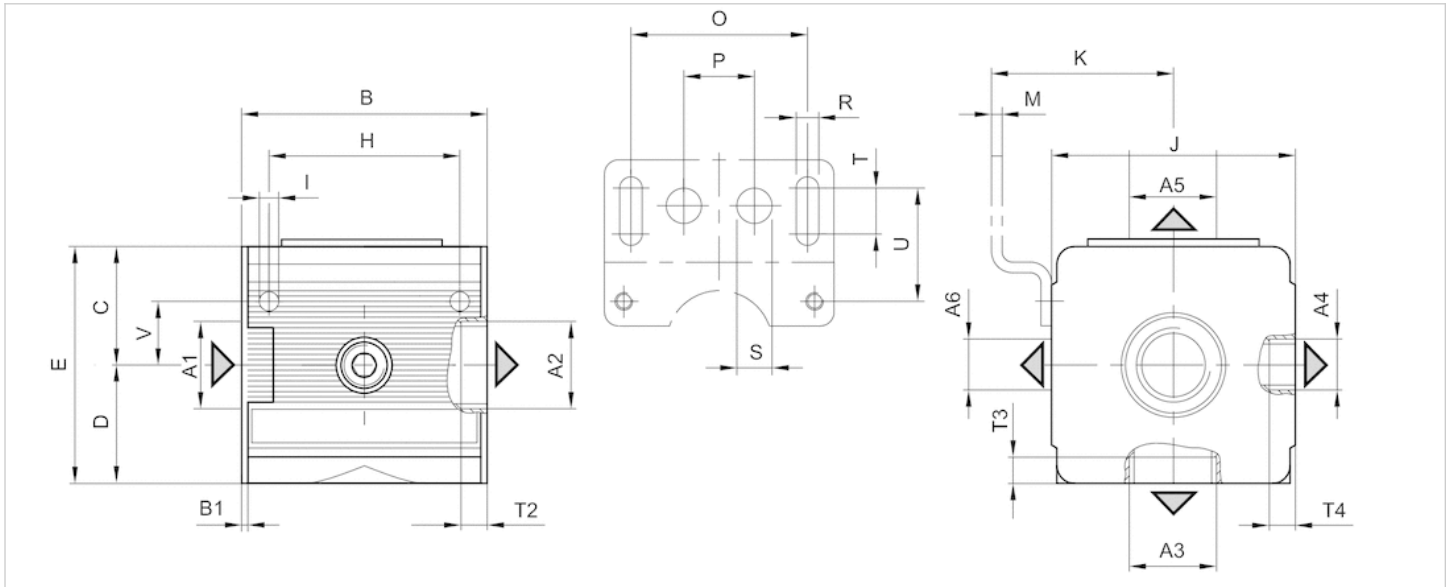
Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene



Material	
Seals	Acrylonitrile butadiene rubber

## Dimensions

### Dimensions



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

### Dimensions in mm

A1	A2	A3	A4	A5	A6	B	B1	C	D	E	H	I	J	K	M	O	P	R	S	T	T2
G 1/2	G 1/2	G 1/2	G 1/4	G 1/2	G 1/4	69.6	1.8	33.5	33.5	67	54	5.5	69	54.5	3	50	20	6.4	10	13	13
G 3/4	G 3/4	G 1/2	G 1/4	G 1/2	G 1/4	69.6	1.8	33.5	33.5	67	54	5.5	69	54.5	3	50	20	6.4	10	13	13

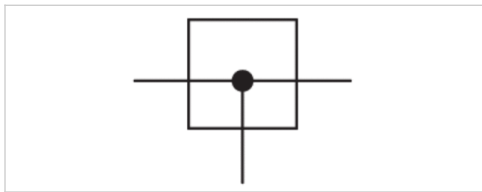
T3		T4		U		V	
7.5		9		33		18	
7.5		9		33		18	

# Distributor, Series NL4-DIC

- G 3/4
- Distributor 1x
- Center infeed
- suitable for ATEX



Version	Center infeed, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Certificates	suitable for ATEX
Working pressure min./max.	0 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air, Neutral gases
Weight	1.31 lbs



## Technical data

Part No.	Port	Nominal flow	
		Qn 1>2	Qn 1>3
0821300928	G 3/4	11.18 Cv	11.18 Cv

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

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

## Technical information

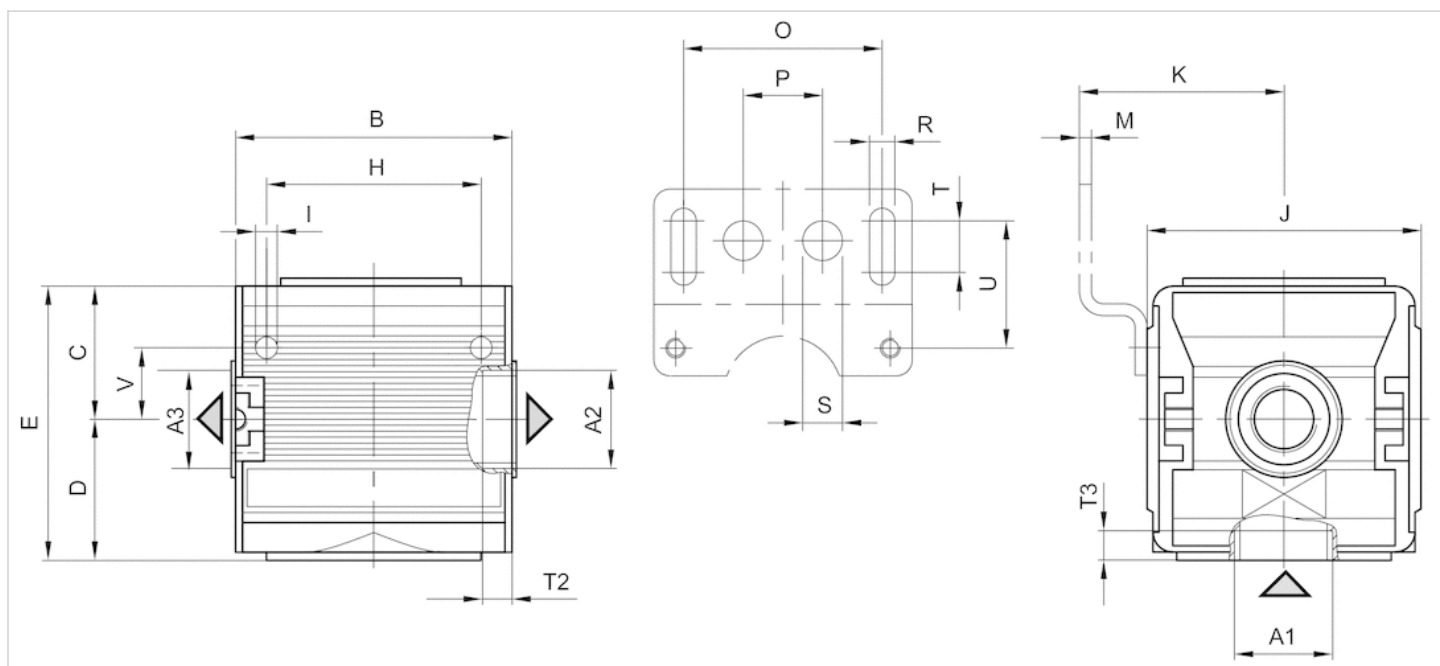
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene

## Dimensions

### Dimensions



A1 = input  
 A2 = output  
 A3 = output

### Dimensions in mm

A1	A2	A3	B	C	D	E	H	I	J	K	M	O	P	R	S	T	T2	T3	U	V
G 3/4	G 1/2	G 1/2	66	35.5	35.5	71	54	5.5	69	54.5	3	50	20	6.4	10	13	13	10.5	33	18

# Reservoir, Series NL4-CLS, NL6-CLS

- For filter - filter pressure regulator
- Material Polycarbonate, Die cast zinc



Version	Reservoir
Certificates	suitable for ATEX
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Medium	Compressed air
Filter reservoir volume	1.69 fl.oz.
Weight	See table below

## Technical data

Part No.	Condensate drain	Reservoir	Weight
1827009337	semi-automatic, open without pressure	Polycarbonate	0.375 lbs
1827009343	semi-automatic, open without pressure	Die cast zinc, with window	1.21 lbs
1827009338	fully automatic, open without pressure	Polycarbonate	0.441 lbs
1827009344	fully automatic, open without pressure	Die cast zinc, with window	1.23 lbs

Part No.	Fig.
1827009337	Fig. 1
1827009343	Fig. 2
1827009338	Fig. 3
1827009344	Fig. 4

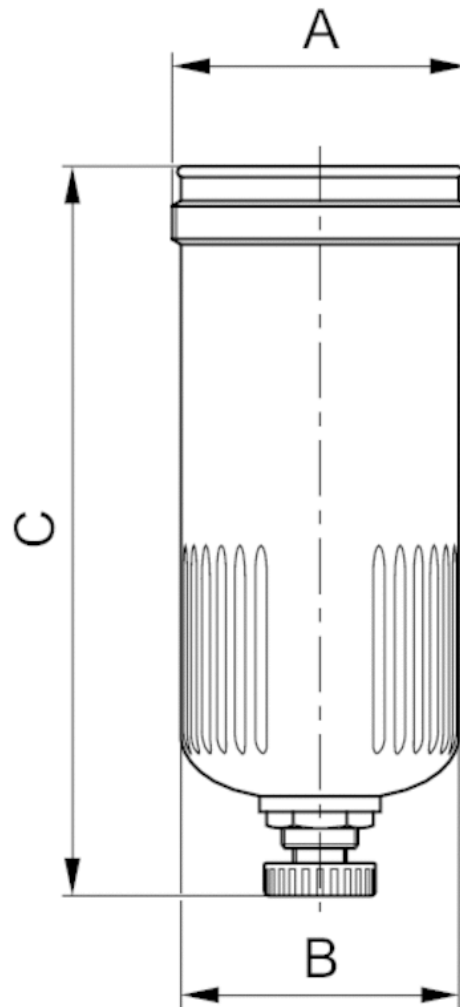
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

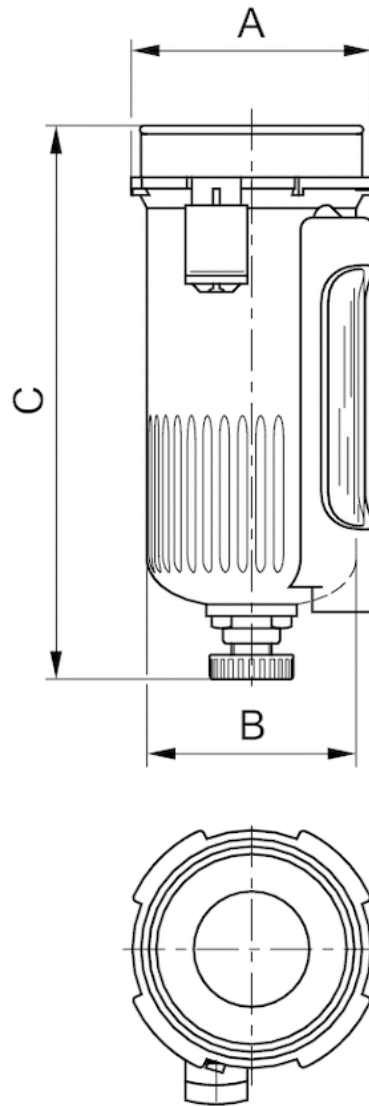
Material	
Reservoir	Polycarbonate, Die cast zinc
Seal	Acrylonitrile butadiene rubber

## Dimensions

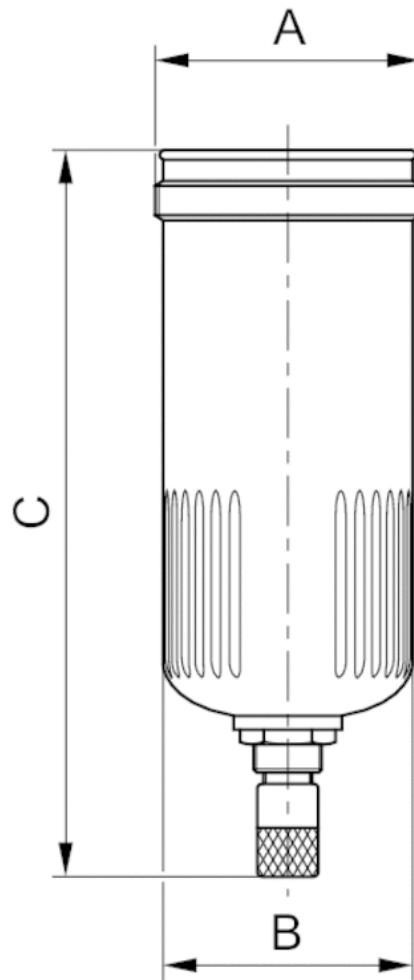
Dimensions Fig. 1



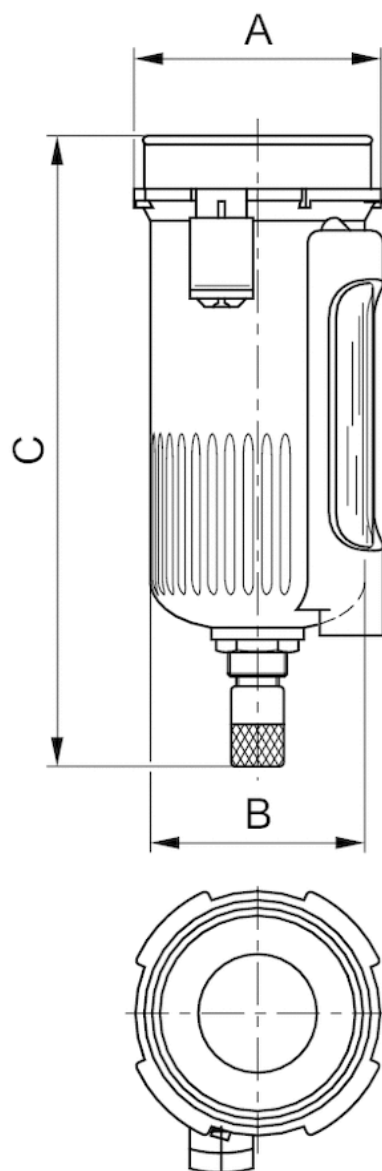
Dimensions Fig. 2



Dimensions Fig. 3



Dimensions Fig. 4



Dimensions in mm

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



# Reservoir, Series NL4-CLC

- for prefilters and microfilters
- Material Die cast zinc



Version	Reservoir
Version	Metal reservoir without window
Certificates	suitable for ATEX
Working pressure min./max.	22 ... 232 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Filter reservoir volume	1.69 fl.oz.
Weight	See table below

## Technical data

Part No.	Condensate drain	Weight
1827009602	fully automatic, open without pressure	1.19 lbs
1827009603	fully automatic, open without pressure	1.44 lbs

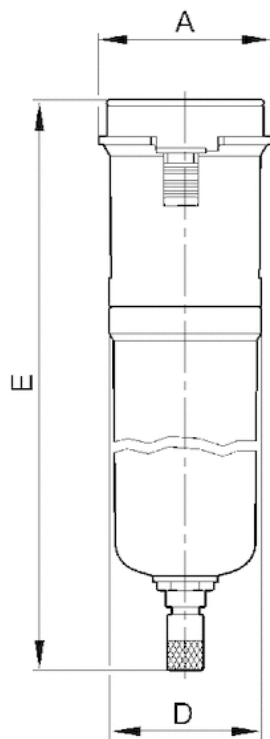
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

Material	
Reservoir	Die cast zinc
Seal	Acrylonitrile butadiene rubber

## Dimensions

### Dimensions



### Dimensions in mm

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

# Reservoir, Series NL4-CLA

- for active carbon filter
- Material Die cast zinc



Version

Version

Certificates

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Filter reservoir volume

Weight

Reservoir

Metal reservoir without window  
suitable for ATEX

232 psi

14 ... 122 °F

14 ... 122 °F

Compressed air

1.69 fl.oz.

See table below

## Technical data

Part No.	Condensate drain	Weight
1827009608	semi-automatic, open without pressure	1.12 lbs
1827009609	semi-automatic, open without pressure	1.34 lbs

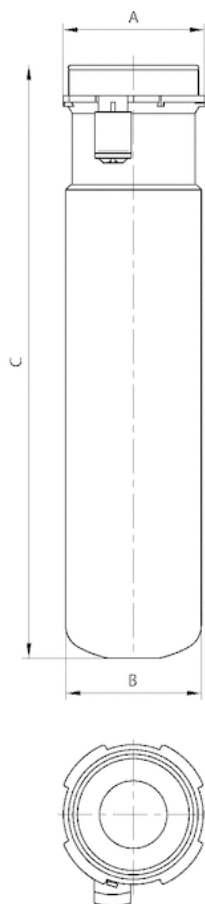
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

Material	
Reservoir	Die cast zinc
Seal	Acrylonitrile butadiene rubber

## Dimensions

### 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

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



Version	Reservoir
Certificates	suitable for ATEX
Working pressure min./max.	232 psi
Ambient temperature min./max.	14 ... 140 °F
Medium temperature min./max.	14 ... 140 °F
Lubricator reservoir volume	4.23 fl.oz.
Weight	See table below

## Technical data

Part No.	Electrical level indicator	Reservoir	Weight	Fig.
R412003757	with internal query	Polycarbonate	0.397 lbs	Fig. 1
1827009336	-	Polycarbonate	0.331 lbs	Fig. 2
1827009342	-	Die cast zinc, with window	1.21 lbs	Fig. 3

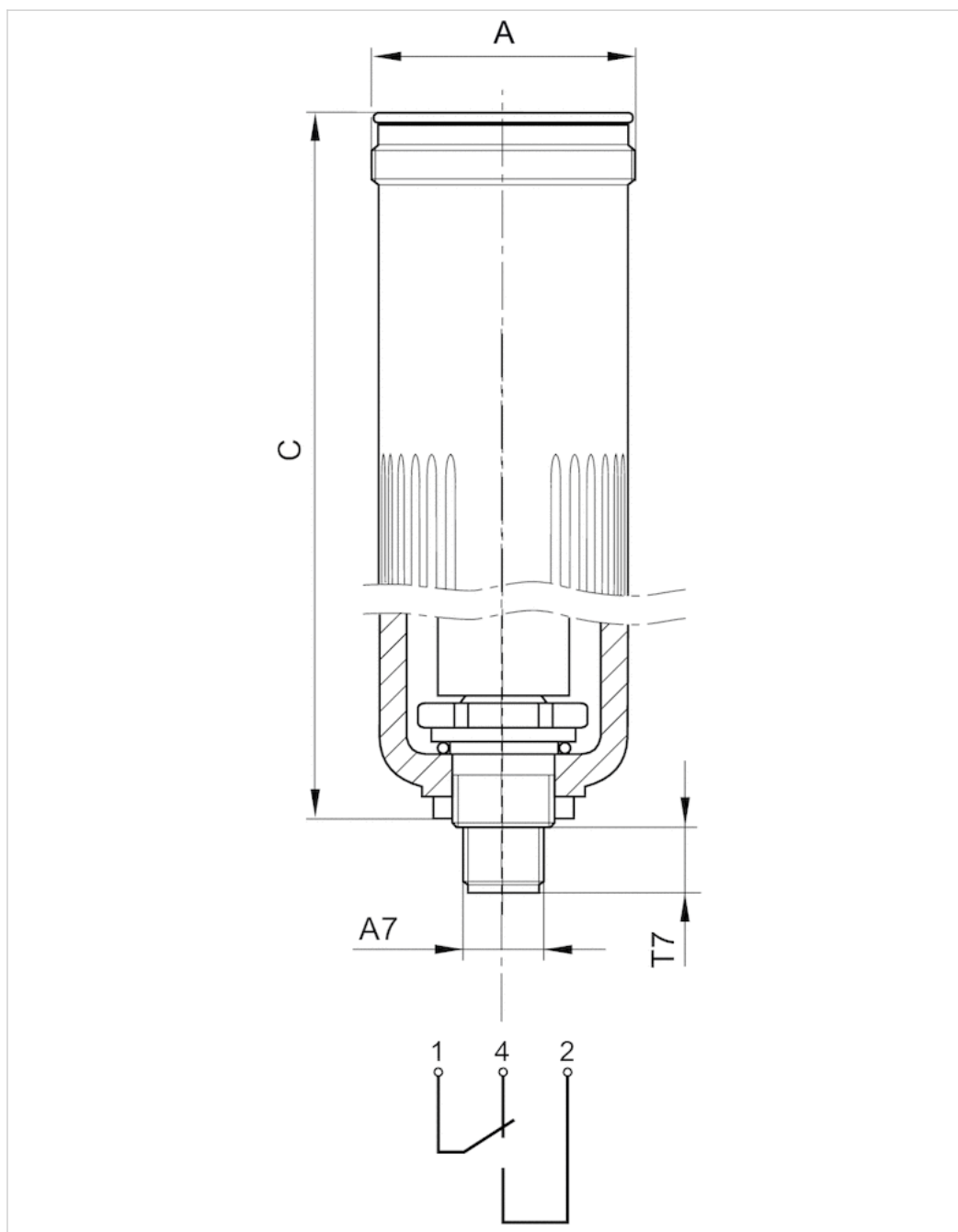
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

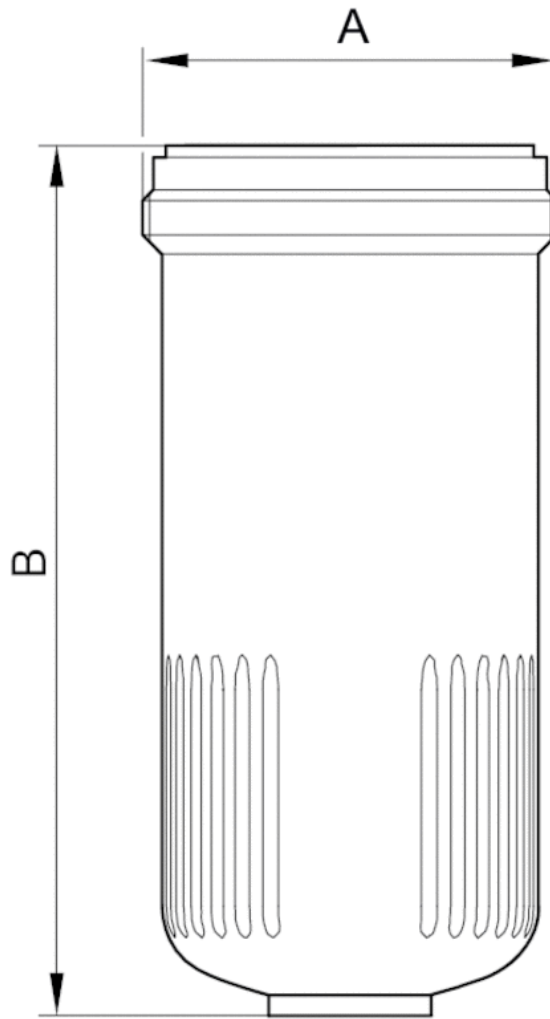
Material	
Reservoir	Polycarbonate, Die cast zinc
Seal	Acrylonitrile butadiene rubber

## Dimensions

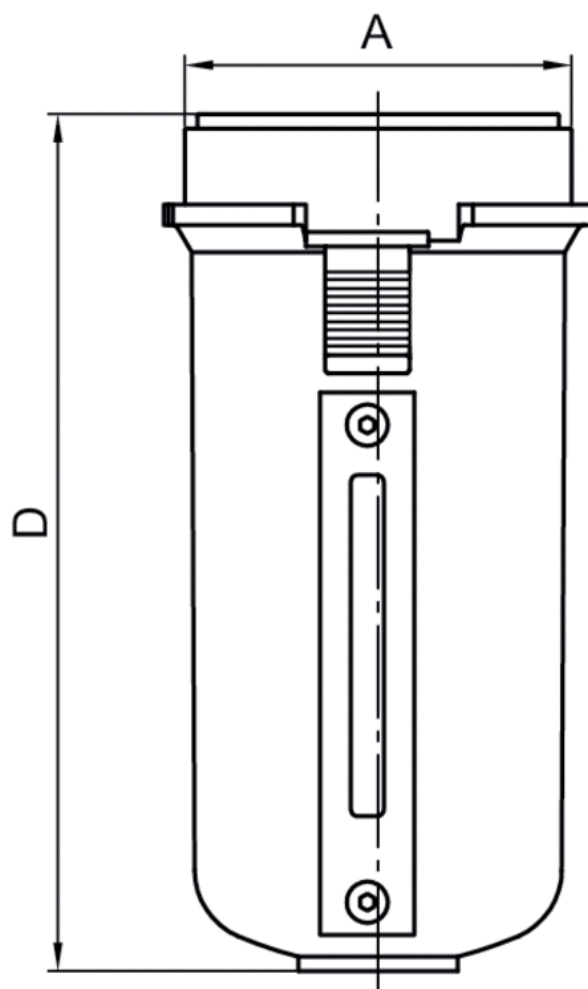
Dimensions Fig. 1



Dimensions Fig. 2



Dimensions Fig. 3



Dimensions in mm

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



# Protective guard

- NL4, NL6
- Filter, Lubricator



Weight

0.309 lbs

## Technical data

Part No.	Type
1820507001	NL4

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

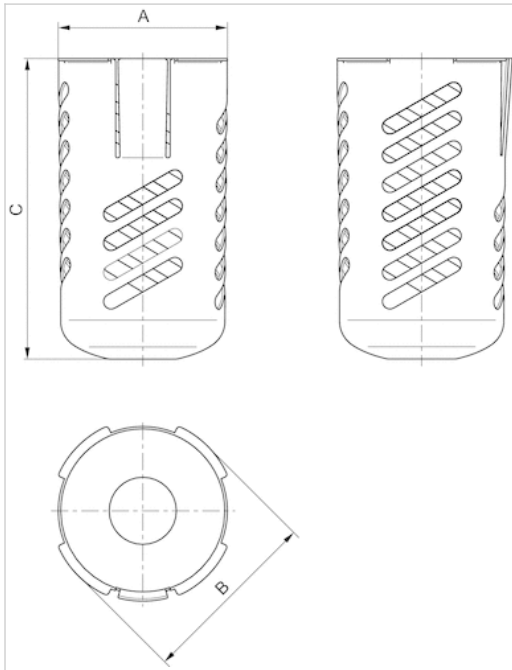
## Technical information

Can be retrofitted for PC reservoir

## Technical information

Material	
Material	Steel, black oxidized

## Dimensions



## Dimensions

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

# Mounting plate



Ambient temperature min./max. -40 ... 140 °F  
 Weight 0.22 lbs

## Technical data

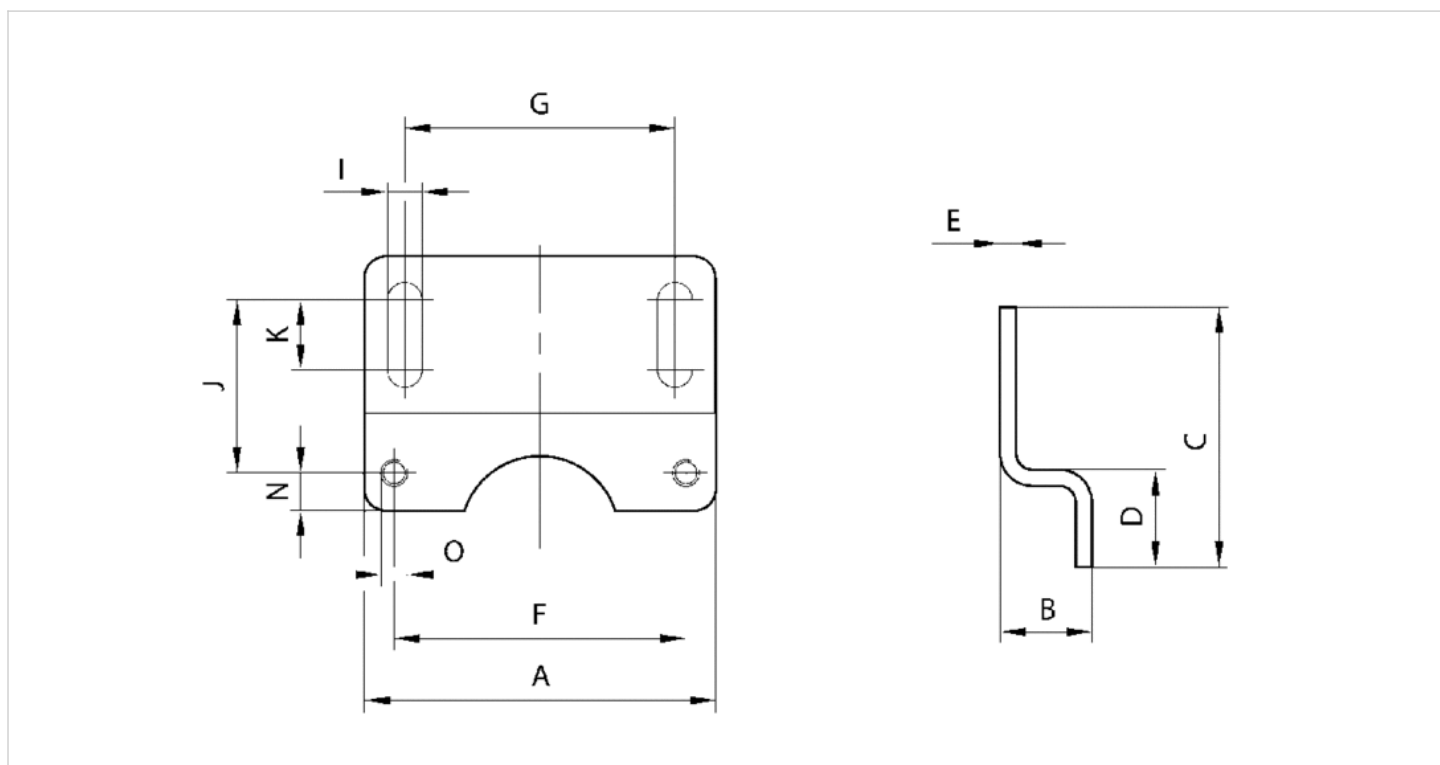
Part No.
1821336007

Scope of delivery incl. mounting screws

## Technical information

Material	
Housing	Steel, galvanized

## Dimensions



## Dimensions

Part No.	A	B	C	D	E	F	G	I	J	K	N	O
1821336007	65	20	48	18	3	54	50	6.4	33	13	7	M5

# Mounting bracket

- NL4-MBR-...-W02

- for NL4



Weight

0.22 lbs

## Technical data

Part No.

1821331014

## Technical information

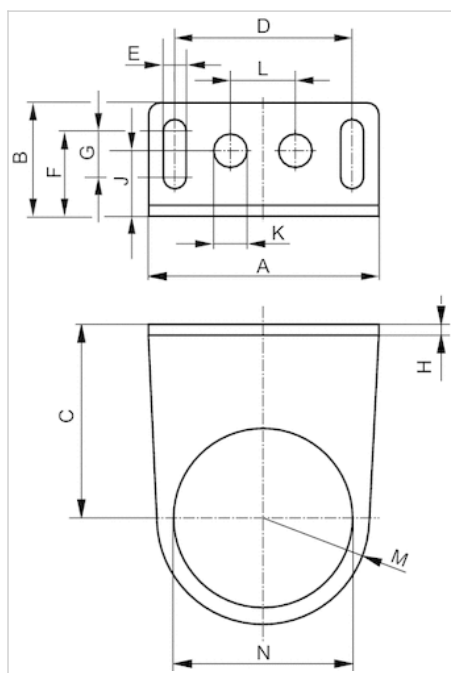
Material

Housing

Steel, galvanized

## Dimensions

### Dimensions



## Dimensions

Part No.	A	B	C	D	E	F	G	H	J	K	L	M	N
1821331014	65	32	54.5	50	6.4	24	13	3	19	10	20	30	50.5

# Block assembly kit, Series NL4-W04



Weight

0.055 lbs

## Technical data

Part No.

1827009360

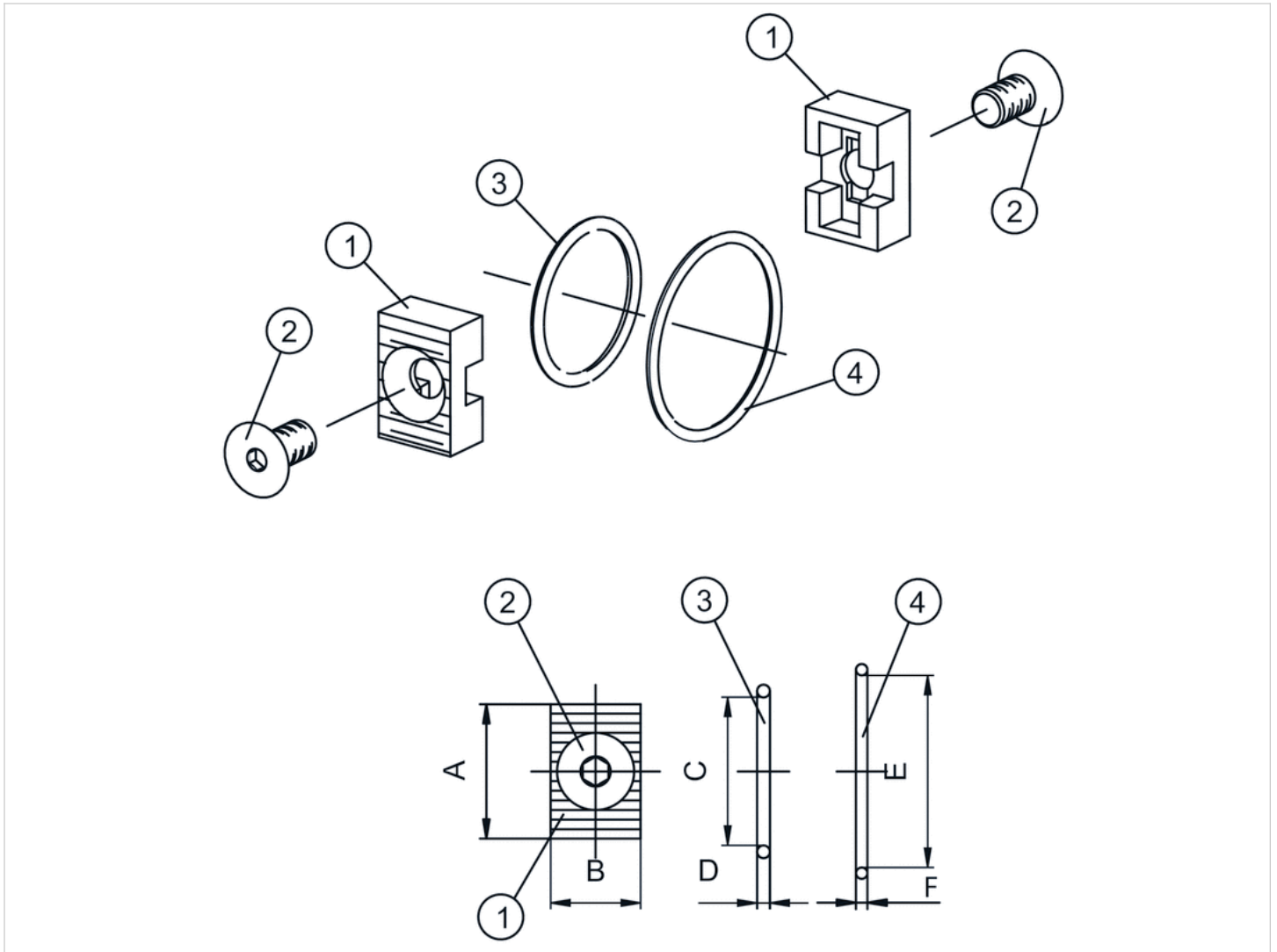
Scope of delivery: 2 clamp mountings, 2 screws ISO 10642 M6x10-8.8, 2 O-rings

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

## Technical information

to assemble two modules into blocks

## Dimensions



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

## Dimensions

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



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

- for AS5, NL4



Weight

0.02 lbs

The delivered product may vary from that in the illustration.

## Technical data

Part No.	Port	Scope of delivery
1829234071	M50x1.5	2 piece

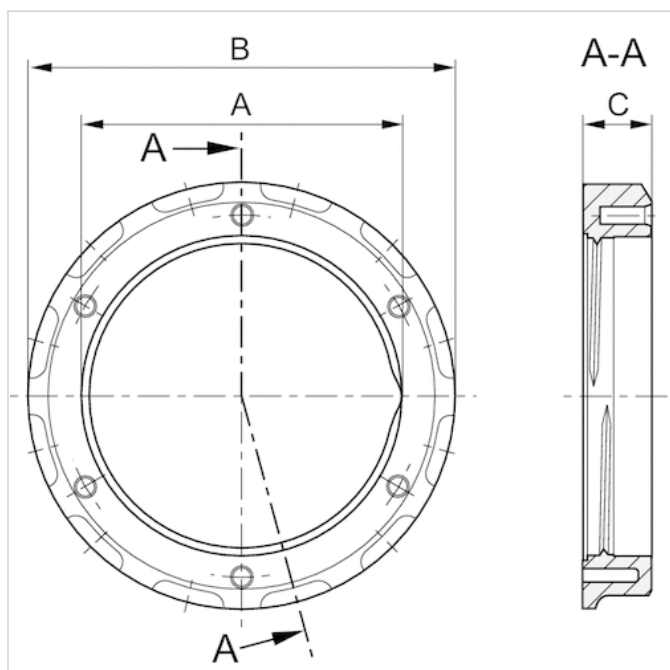
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

Material	
Housing	Plastic

## Dimensions

### Dimensions



## Dimensions

Part No.	For series	A	B	C
1829234071	AS5, NL4	M50x1,5	64	7.5

# Mounting screws for wall mounting, Series NL2, NL4



Weight

See table below

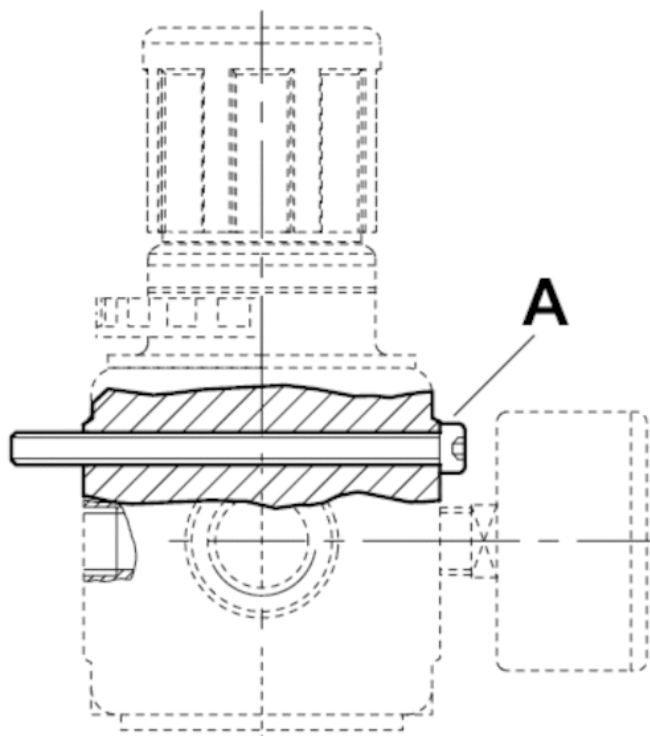
## Technical data

Part No.	Type	Type	Delivery unit	Weight
1823414009	DIN 912 - M4x60	NL2	10 piece	0.013 lbs
1823414014	DIN 912 - M5x85	NL4	10 piece	0.015 lbs

## Technical information

Material	
Material	Steel, galvanized

## Dimensions

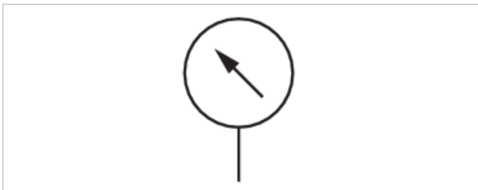


## Dimensions

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

# Pressure gauge, Series PG1-SNL

- For panel installation
- Background color Black
- Scale color Green, White
- Viewing window Polystyrene
- Units bar
- Units psi



Version	Bourdon tube pressure gauge
Mounting	with U-clip
Seal	Axial
Standardization	EN 837-1
Class	1,6
Ambient temperature min./max.	-40 ... 140 °F
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	Green
Secondary scale unit (inside)	psi
Secondary scale color (inside)	White
Background color	Black
Pointer color	White
Weight	See table below

## Technical data

Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value	Weight
1827231032	G 1/4	1.97 inch	0 ... 2	0 ... 2.5	0 ... 36 psi	0.1	0.326 lbs
1827231036	G 1/4	2.48 inch	0 ... 2	0 ... 2.5	0 ... 36 psi	0.1	0.419 lbs
1827231033	G 1/4	1.97 inch	0 ... 4	0 ... 6	0 ... 87 psi	0.2	0.326 lbs
1827231037	G 1/4	2.48 inch	0 ... 4	0 ... 6	0 ... 87 psi	0.2	0.419 lbs
1827231034	G 1/4	1.97 inch	0 ... 8	0 ... 10	0 ... 145 psi	0.5	0.326 lbs
1827231038	G 1/4	2.48 inch	0 ... 8	0 ... 10	0 ... 145 psi	0.5	0.419 lbs
1827231035	G 1/4	1.97 inch	0 ... 12	0 ... 16	0 ... 232 psi	0.5	0.326 lbs
1827231039	G 1/4	2.48 inch	0 ... 12	0 ... 16	0 ... 232 psi	0.5	0.419 lbs

## Technical information

To set the operating range, the cover (inspection glass) must be removed. To do this, carefully lift the inspection glass by inserting a pointed or flat object in the slot provided for this purpose on the housing circumference.

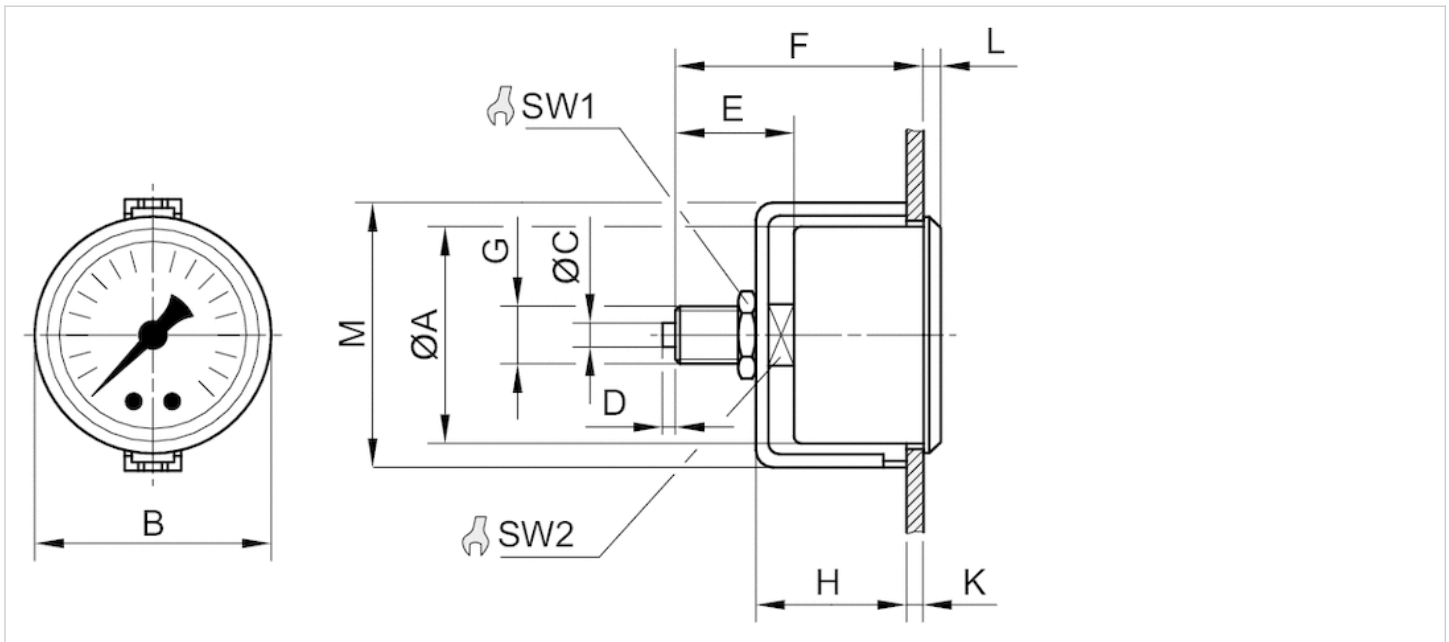
Order axial seal separately

## Technical information

Material	
Housing	Steel
Thread	Brass
Front ring	Steel, chrome-plated
Viewing window	Polystyrene

## Dimensions

### Dimensions



### Dimensions in mm

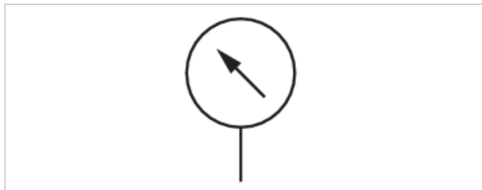
Compressed air connection	Nominal diameter	Ø A	B	C	D	E	F	H	K	L	M	SW1
G 1/4	1.97 inch	50	54	5	3	29.5	51.5	34.5	3	4.5	61	17
G 1/4	2.48 inch	62	67	5	3	27	53	36.3	4.2	5.5	75	17
G 1/4	1.97 inch	50	54	5	3	29.5	51.5	34.5	3	4.5	61	17
G 1/4	2.48 inch	62	67	5	3	27	53	36.3	4.2	5.5	75	17
G 1/4	1.97 inch	50	54	5	3	29.5	51.5	34.5	3	4.5	61	17
G 1/4	2.48 inch	62	67	5	3	27	53	36.3	4.2	5.5	75	17
G 1/4	1.97 inch	50	54	5	3	29.5	51.5	34.5	3	4.5	61	17
G 1/4	2.48 inch	62	67	5	3	27	53	36.3	4.2	5.5	75	17

SW2
14
14
14
14
14

	SW2
	14
	14
	14

# Pressure gauge, Series PG1-SNL

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



Version	Bourdon tube pressure gauge
Seal	Axial
Standardization	EN 837-1
Class	1,6
Ambient temperature min./max.	-40 ... 140 °F
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	Green
Secondary scale unit (inside)	psi
Secondary scale color (inside)	White
Background color	Black
Pointer color	White
Weight	See table below

## Technical data

Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value	Weight
1827231057	G 1/4	1.57 inch	-0.8 ... 0	-1 ... 0	-14 ... 0 psi	0.1	0.132 lbs
1827231047	G 1/4	1.57 inch	0 ... 10	0 ... 16	0 ... 232 psi	0.5	0.132 lbs
1827231059	G 1/4	1.57 inch	0 ... 4	0 ... 6	0 ... 87 psi	0.2	0.132 lbs
1827231060	G 1/4	1.57 inch	0 ... 8	0 ... 10	0 ... 145 psi	0.5	0.132 lbs
1827231054	G 1/4	1.97 inch	-0.8 ... 0	-1 ... 0	-14 ... 0 psi	0.1	0.198 lbs
1827231012	G 1/4	1.97 inch	0 ... 2	0 ... 2.5	0 ... 36 psi	0.1	0.198 lbs
1827231016	G 1/4	1.97 inch	0 ... 4	0 ... 6	0 ... 87 psi	0.2	0.198 lbs
1827231015	G 1/4	1.97 inch	0 ... 8	0 ... 10	0 ... 145 psi	0.5	0.198 lbs
1827231010	G 1/4	1.97 inch	0 ... 12	0 ... 16	0 ... 232 psi	0.5	0.198 lbs
1827231055	G 1/4	2.48 inch	-0.8 ... 0	-1 ... 0	-14 ... 0 psi	0.1	0.22 lbs
1827231011	G 1/4	2.48 inch	0 ... 12	0 ... 16	0 ... 232 psi	0.5	0.22 lbs

Part No.	
1827231057	-
1827231047	1)
1827231059	-
1827231060	1)
1827231054	-



Part No.	
1827231012	-
1827231016	1)
1827231015	1)
1827231010	1)
1827231055	-
1827231011	1)

Order seal 1829202004 separately

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

## Technical information

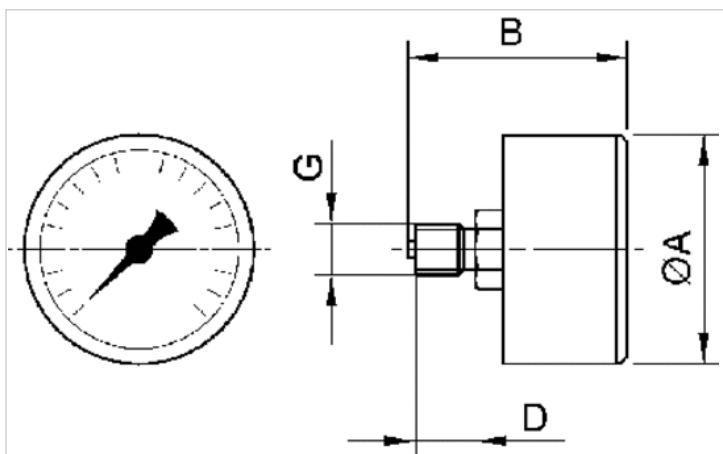
Order axial seal separately

## Technical information

Material	
Housing	Acrylonitrile butadiene styrene
Thread	Brass
Viewing window	Polystyrene

## Dimensions

### Dimensions

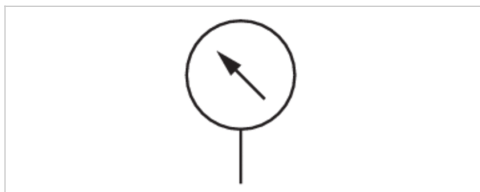


### Dimensions in mm

G	Nominal diameter	Ø A	B	D
G 1/4	1.57 inch	41	41.5	10
G 1/4	1.97 inch	49	47.5	13
G 1/4	2.48 inch	63	48.3	13

# Pressure gauge, Series PG1-SNL-ADJ

- Back port
- with adjustable work area display
- Background color White
- Scale color Black
- Viewing window Polystyrene
- Units bar



Version	Bourdon tube pressure gauge with adjustable work area display
Version	Axial
Seal	EN 837-1
Standardization	2,5
Class	-40 ... 140 °F
Ambient temperature min./max.	Compressed air
Medium	adjustable work area display
Work area	Red, Green
Work Area Display, Color	bar
Main scale unit (outside)	Black
Main scale color (outside)	White
Background color	Black
Pointer color	Black
Weight	0.198 lbs

## Technical data

Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value
R412003474	G 1/4	1.97 inch	0 bar ... 1.2	0 bar ... 1.6	0 ... 23 psi	0.05
R412003475	G 1/4	1.97 inch	0 bar ... 2	0 bar ... 2.5	0 ... 36 psi	0.1
R412003476	G 1/4	1.97 inch	0 bar ... 3.2	0 bar ... 4	0 ... 58 psi	0.2
R412003477	G 1/4	1.97 inch	0 bar ... 4	0 bar ... 6	0 ... 87 psi	0.2
R412003478	G 1/4	1.97 inch	0 bar ... 8	0 bar ... 10	0 ... 145 psi	0.5
R412003479	G 1/4	1.97 inch	0 bar ... 12	0 bar ... 16	0 ... 232 psi	0.5

## Technical information

To set the operating range, the cover (inspection glass) must be removed. To do this, carefully lift the inspection glass by inserting a pointed or flat object in the slot provided for this purpose on the housing circumference.  
Order axial seal separately

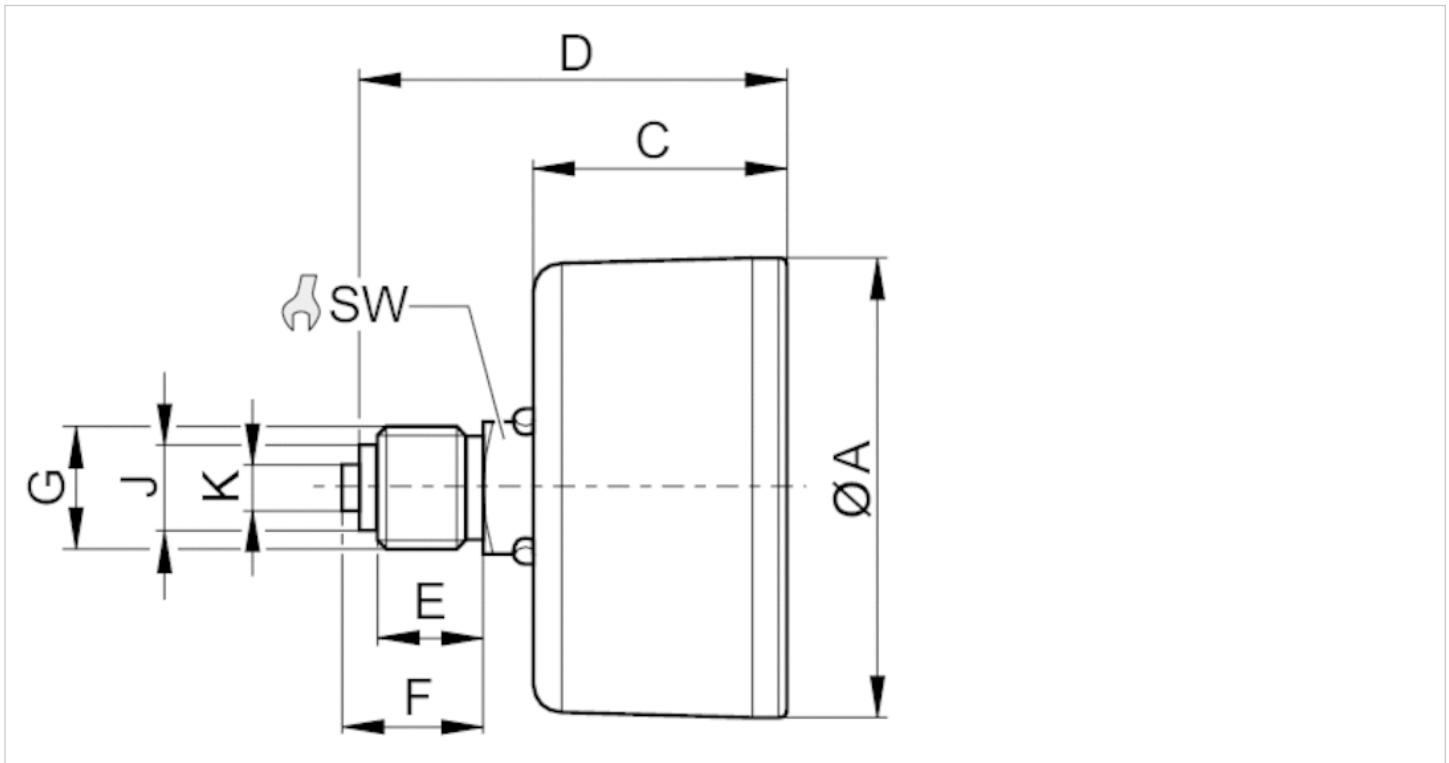
## Technical information

Material	
Housing	Acrylonitrile butadiene styrene
Thread	Brass

Material	
Viewing window	Polystyrene

## Dimensions

### Dimensions

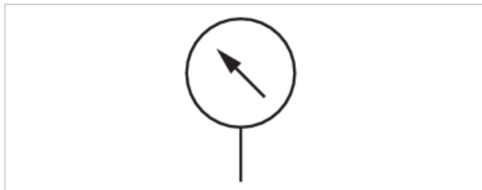


### Dimensions

Compressed air connection	Nominal diameter	Ø A	C	D	E	F	J	K	SW
G 1/4	1.97 inch	49	26.5	44.5	11	15	9.5	5	14

# Pressure gauge, Series PG1-SNL

- Back port
- Background color Black
- Scale color Green, White
- Viewing window Mineral glass
- Units bar
- Units psi



Version	Bourdon tube pressure gauge
Seal	Axial
Standardization	EN 837-1
Class	1,6
Ambient temperature min./max.	-40 ... 140 °F
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	Green
Secondary scale unit (inside)	psi
Secondary scale color (inside)	White
Background color	Black
Pointer color	White
Weight	0.198 lbs

## Technical data

Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value
R412004987	G 1/4	1.97 inch	0 ... 12 bar	0 ... 16 bar	0 ... 232 psi	0.5

## Technical information

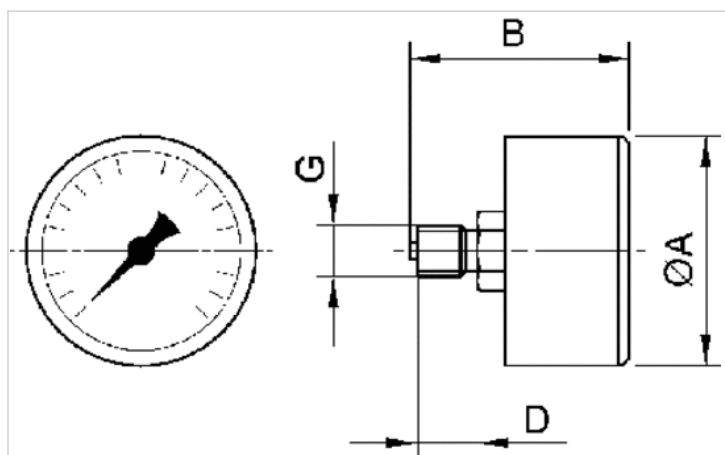
Suitable for use in Ex zones 1, 2, 21, 22  
 Order axial seal separately

## Technical information

Material	
Housing	Acrylonitrile butadiene styrene
Thread	Brass
Viewing window	Mineral glass

## Dimensions

### Dimensions

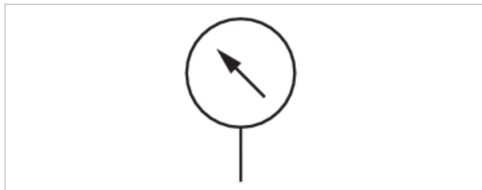


### Dimensions in mm

G	Nominal diameter	Ø A	B	D
G 1/4	1.97 inch	49	47.5	13

# Pressure gauge, Series PG1-SNL

- Back port
- Background color Black
- Scale color Green, White
- Viewing window Polystyrene
- Units bar
- Units psi
- suitable for ATEX



Version	Bourdon tube pressure gauge
Seal	Axial
Standardization	EN 837-1
Class	1,6
Ambient temperature min./max.	-40 ... 140 °F
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	Green
Secondary scale unit (inside)	psi
Secondary scale color (inside)	White
Background color	Black
Pointer color	White
Weight	0.198 lbs

## Technical data

Part No.	Compressed air connection	Range of application	Display range	Operating pressure	Scale value
1827231023	G 1/4	0 ... 1.2	0 ... 1.6	0 psi	0.05

Order seal 1829202004 separately

## Technical information

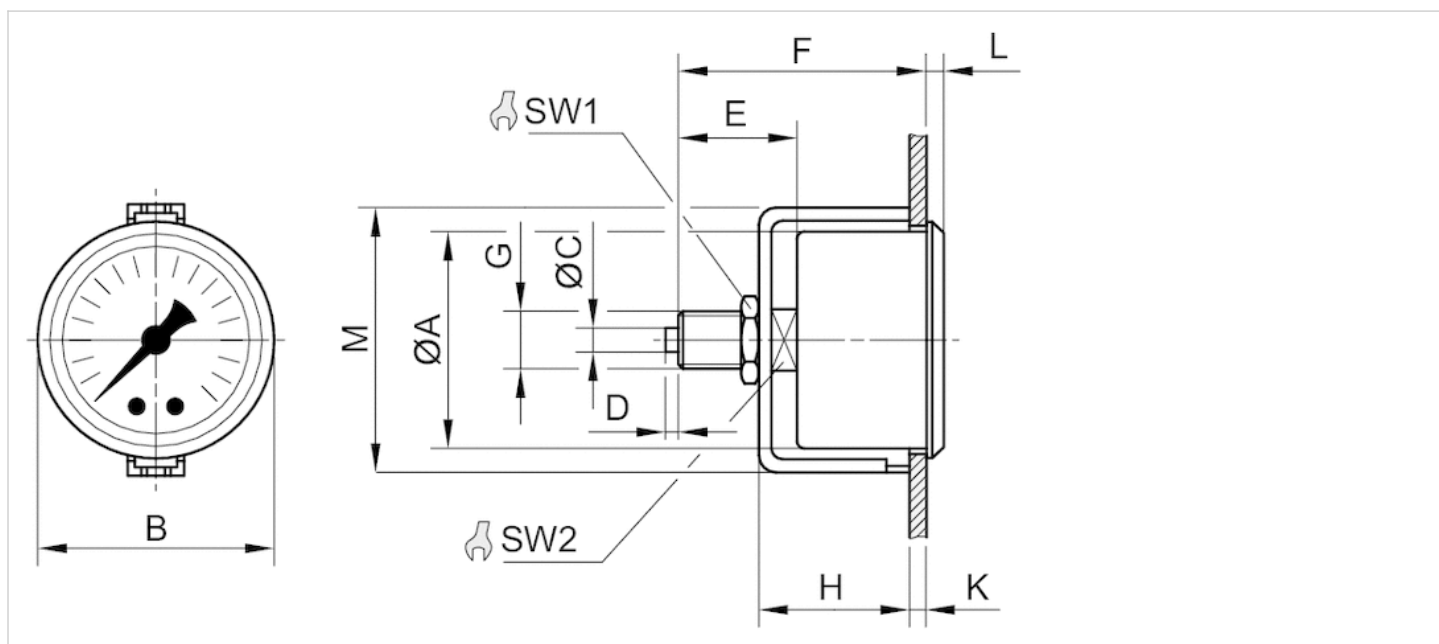
Order axial seal separately

## Technical information

Material	
Housing	Acrylonitrile butadiene styrene
Thread	Brass
Front ring	Steel, chrome-plated
Viewing window	Polystyrene

## Dimensions

### Dimensions



### Dimensions in mm

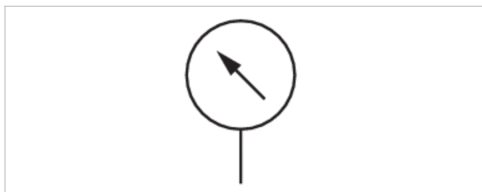
Compressed air connection	$\varnothing A$	B	C	D	E	F	H	K	L	M	SW1	SW2
G 1/4	50	54	5	3	29.5	51.5	34.5	3	4.5	61	17	14

# Pressure gauge, Series PG1-DIM

- for differential pressure measurement for prefilters and microfilters
- flange version
- Background color White
- Scale color Black
- Viewing window Polystyrene
- Units bar
- suitable for ATEX



Version	Diaphragm pressure gauge
Mounting orientation	vertical
Ambient temperature min./max.	32 ... 140 °F
Medium	Compressed air
Color for differential pressure range	Green, Red
Main scale unit (outside)	bar
Main scale color (outside)	Black
Background color	White
Pointer color	Black
Weight	0.28 lbs



## Technical data

Part No.	Range of application	Display range	Operating pressure	Scale value
1827231072	0 ... 0.5 bar	0 ... 0.5 bar	0 ... 232 psi	0.1

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

## Technical information

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

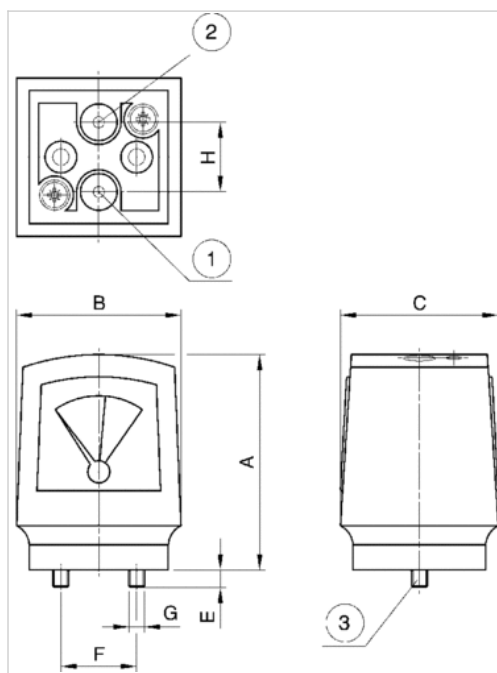
## Technical information

Material	
Housing	Polyamide, fiber-glass reinforced
Viewing window	Polystyrene
Seal	Acrylonitrile butadiene styrene



## Dimensions

### Dimensions



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

### Dimensions in mm

A	B	C	E	F	G	H
68	52	50	6	24	M5	22

# contamination display

- for prefilters and microfilters



Weight

0.055 lbs

## Technical data

Part No.

R412006363

2 mounting screws and 2 O-rings supplied loose, Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

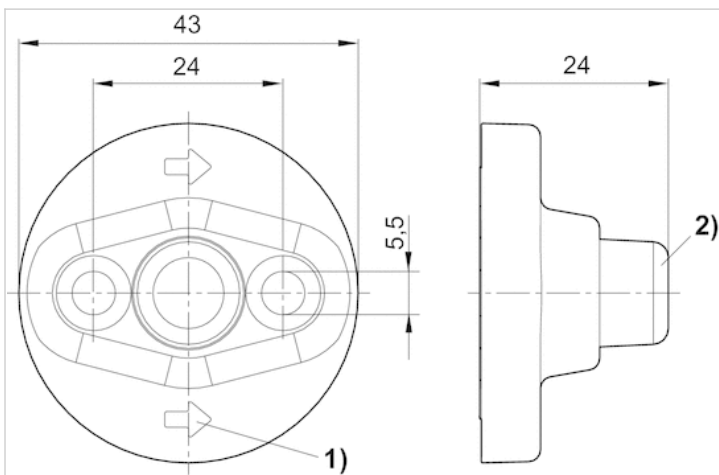
Material

Material

Polyamide

## Dimensions

### Dimensions



1) Flow direction

2) Display in initial state: green (=  $\Delta p$  0.35 bar )

Display turns red on contamination of the filter element (=  $\Delta p \geq 0.35$  bar ).

## Dimensions in mm

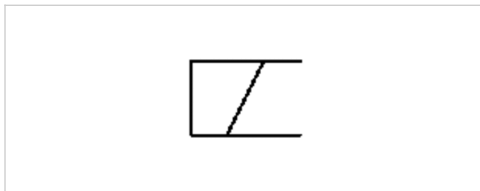
Part No.	A	B	C	D
R412006363	43	24	5.5	24

# Coil, Series C01

- form B
- Coil width 0.87 inch
- Power consumption,DC 4.8-5.9 W
- Holding power,AC 7.7-9.7 VA
- Switch-on power,AC 10.5-12.6 VA



Connector standard	EN 175301-803, form B
electrical connections	Plug, 3-pin
Ambient temperature min./max.	122 °F
Protection class,With valve plug connector/plug	IP65
Duty cycle ED	100 %
Compatibility index	14
Weight	0.154 lbs



## Technical data

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
1824210239	12 V	24 V	24 V
1824210243	24 V	48 V	48 V
1824210241	48 V	-	-
1824210237	60 V	110 V	110 V
1824210235	110 V	220 V	230 V

Part No.	Voltage tolerance	Voltage tolerance	Voltage tolerance	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
1824210239	-10% / +10%	-10% / +10%	-10% / +10%	5.5 W
1824210243	-10% / +10%	-10% / +10%	-10% / +10%	4.8 W
1824210241	-10% / +10%	-10% / +10%	-10% / +10%	5 W
1824210237	-10% / +10%	-10% / +10%	-10% / +10%	5.9 W
1824210235	-10% / +10%	-10% / +10%	-10% / +10%	4.9 W

Part No.	Holding power	Holding power	Switch-on power	Switch-on power
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
1824210239	8.9 VA	7.3 VA	12 VA	9.9 VA
1824210243	7.7 VA	6.2 VA	10.5 VA	9.4 VA
1824210241	-	-	-	-
1824210237	8.4 VA	6.8 VA	11 VA	9.4 VA

Part No.	Holding power		Switch-on power	
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
1824210235	9.7 VA	7.9 VA	12.6 VA	10.2 VA

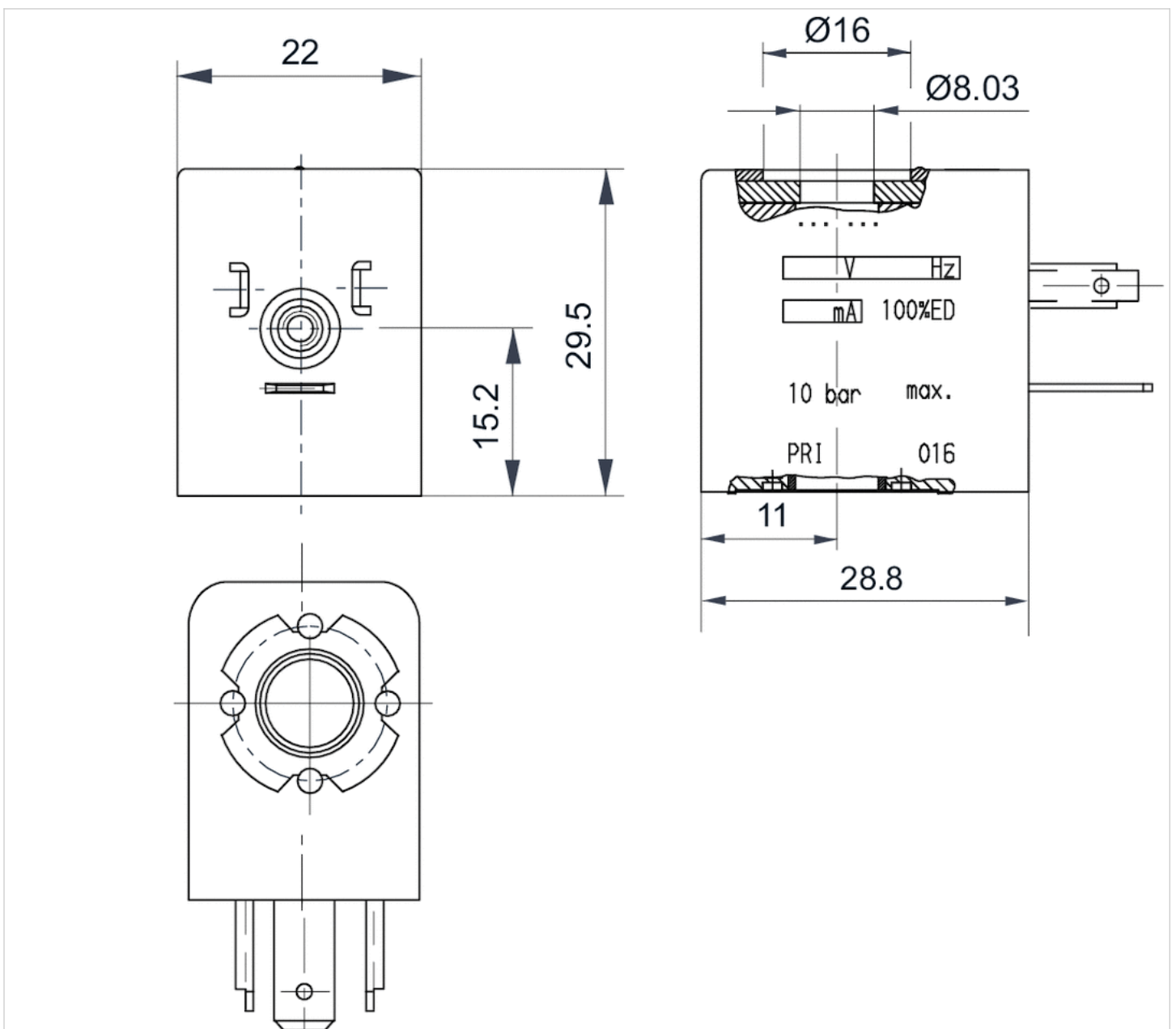
## Technical information

### Material

Housing Thermoplastic elastomer

## Dimensions

### Dimensions

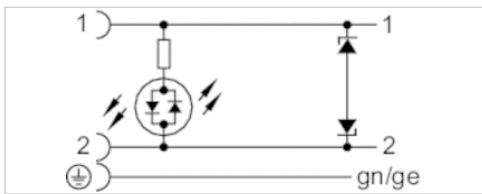


# Valve plug connector, series CON-VP

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



Ambient temperature min./max.	-4 ... 176 °F
Operational voltage	24 V, AC/DC
Protection class	IP67
Protective circuit	Z-diode
Wire cross-section	0.001 in <sup>2</sup>
Mounting screw tightening torque	0.3 ft./lbs.
Weight	See table below



## Technical data

Part No.	Max. current	Contact assignment	LED status display	Number of wires	Cable length	Weight	Fig.
1834484153	10 A	2+E	Yellow	3	9.84 ft.	0.441 lbs	Fig. 2
1834484155	10 A	2+E	Yellow	3	16.4 ft.	0.683 lbs	Fig. 2

Scope of delivery incl. flat gasket

## Technical information

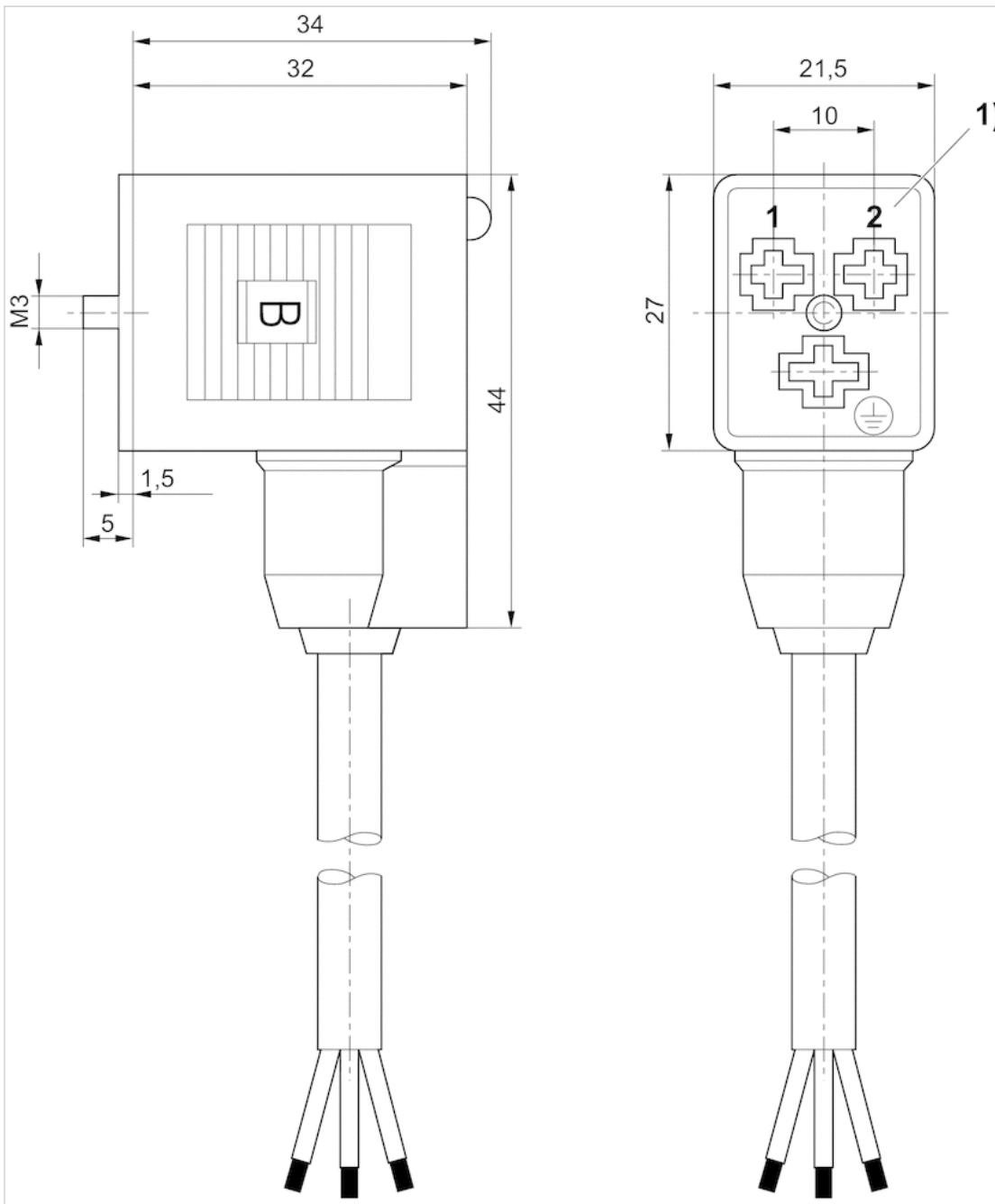
The specified protection class is only valid in assembled and tested state.

## Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc
Cable sheath	Polyvinyl chloride

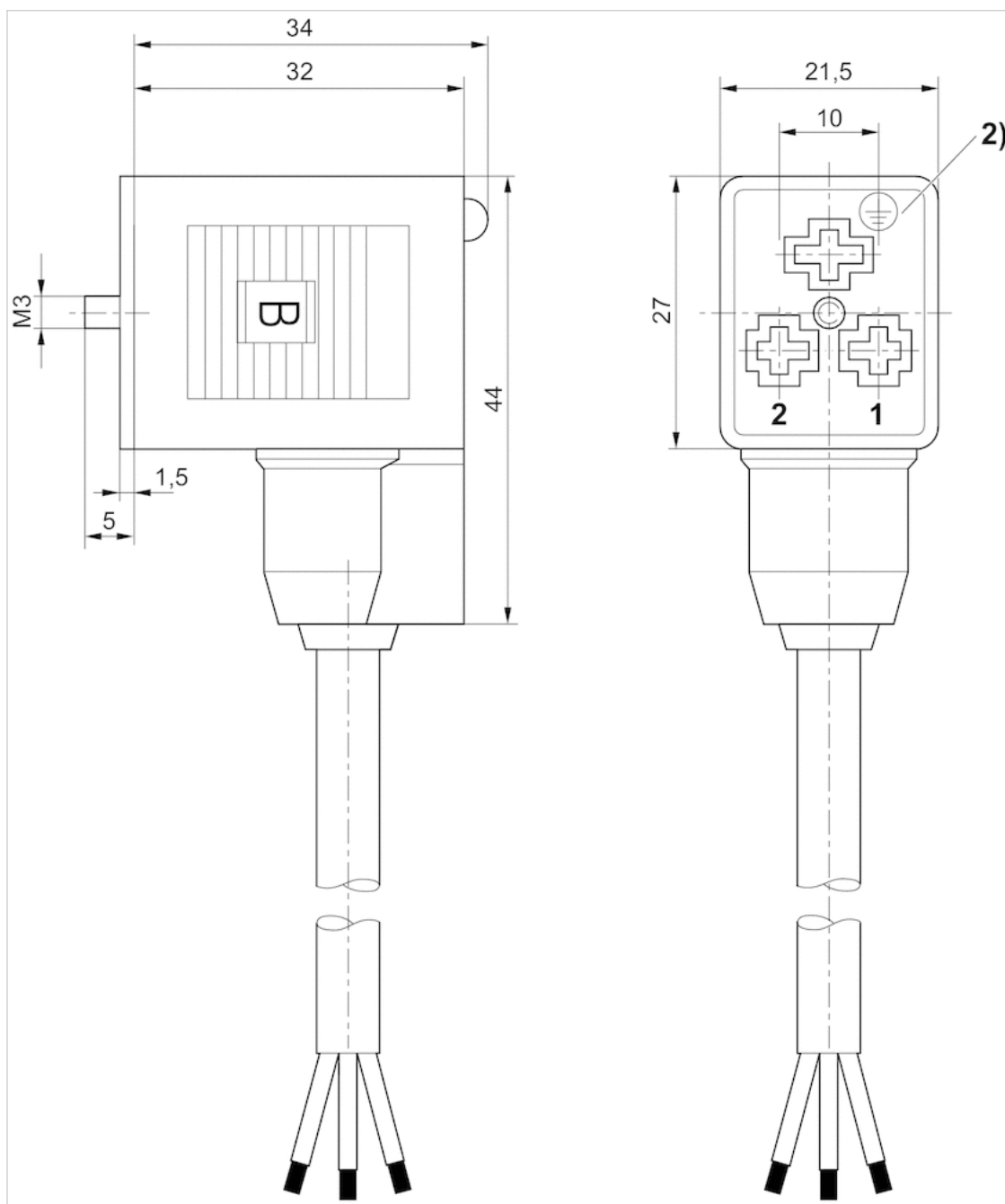
# Dimensions

Fig. 1



1) 0° female insert

Fig. 2



2) 180° female insert



# Valve plug connector, series CON-VP

- Socket, form B, 2+E, angled, 90°
- ISO 6952
- unshielded
- with LED Yellow, Red, Red



Connection type	Screws
Ambient temperature min./max.	-13 ... 122 °F
Operational voltage	See table below
Protection class	IP65
Mounting screw tightening torque	0.3 ft./lbs.
Weight	0.044 lbs

## Technical data

Part No.		Operational voltage	Protective circuit	Contact assignment
1834484104		24 V, AC/DC	Z-diode	2+E
1834484105		110 V, AC	Varistor	2+E
1834484106		230 V, AC	Varistor	2+E

Part No.	LED status display	suitable cable-Ø min./max	Fig.
1834484104	Yellow	0.24 / 0.31 inch	Fig. 2
1834484105	Red, Red	0.24 / 0.31 inch	Fig. 2
1834484106	Red, Red	0.24 / 0.31 inch	Fig. 2

Profile seal, Flat gasket

## Technical information

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

## Technical information

Material	
Seals	Silicone caoutchouc

## Dimensions

Fig. 1

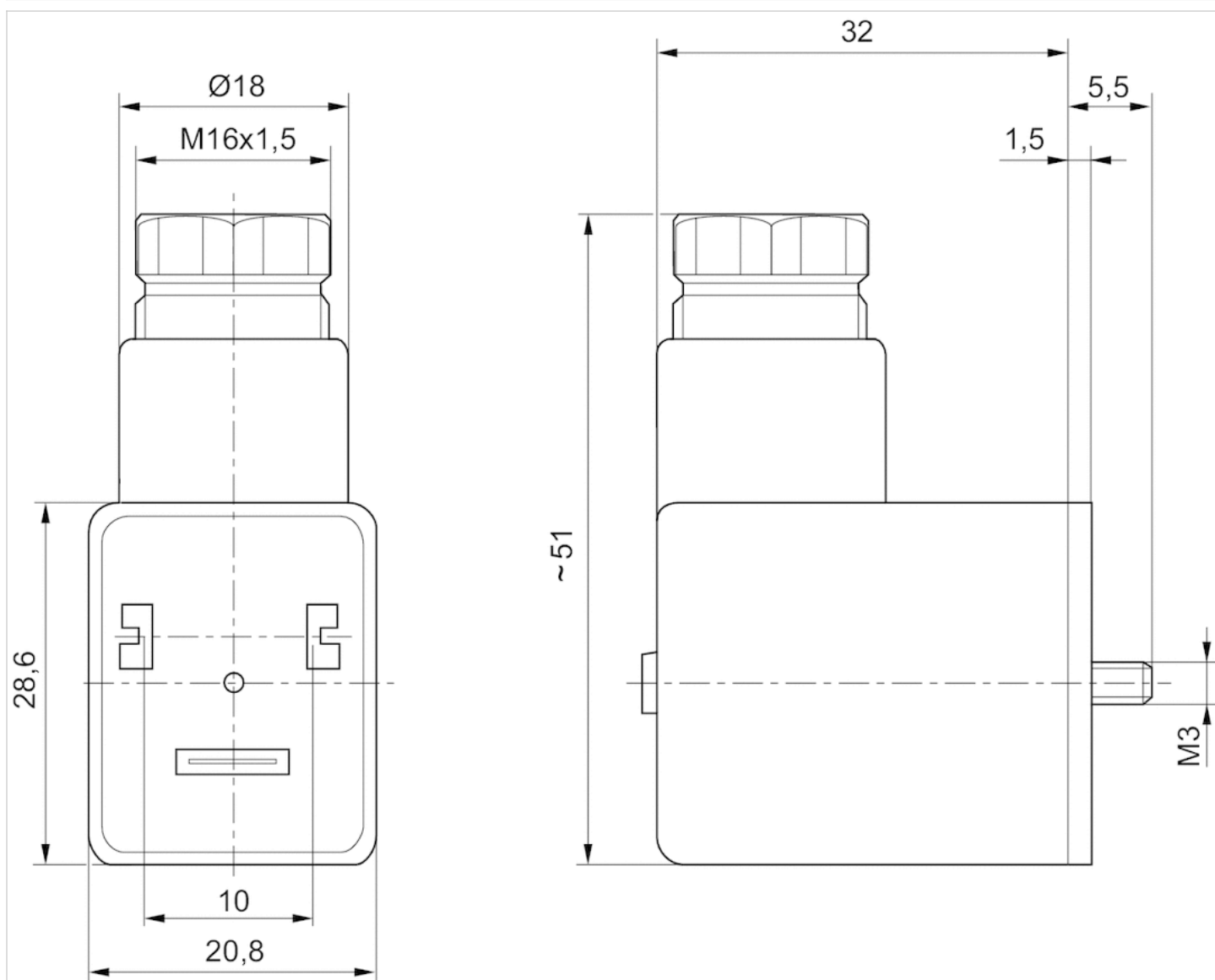
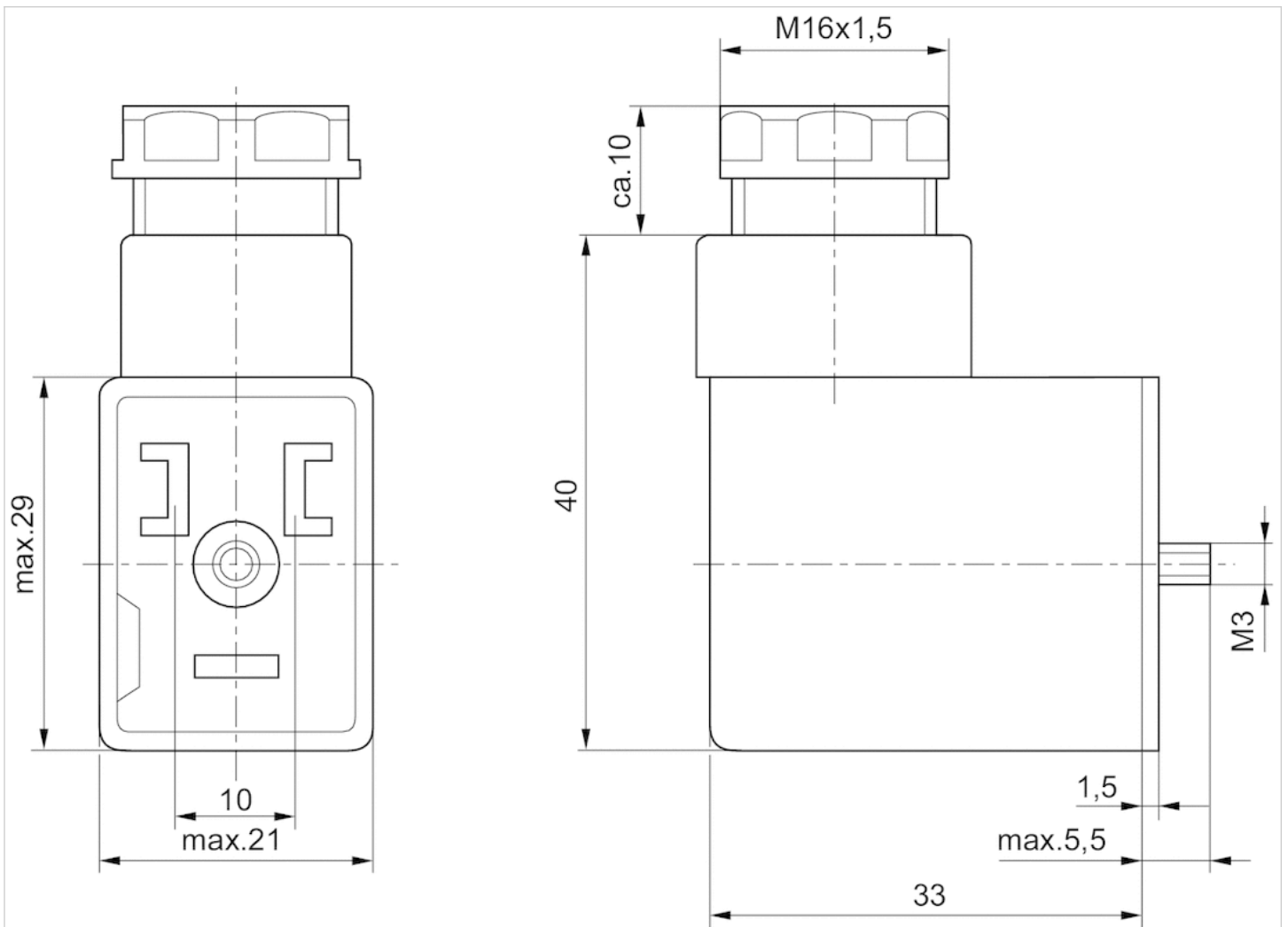


Fig. 2
















# Pressure sensor, Series PE5

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



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

## Technical data

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

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

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

## Technical information

Alternative pressure connection (G1/4) on the rear side (closed with plug)

Display color selectable, red or green

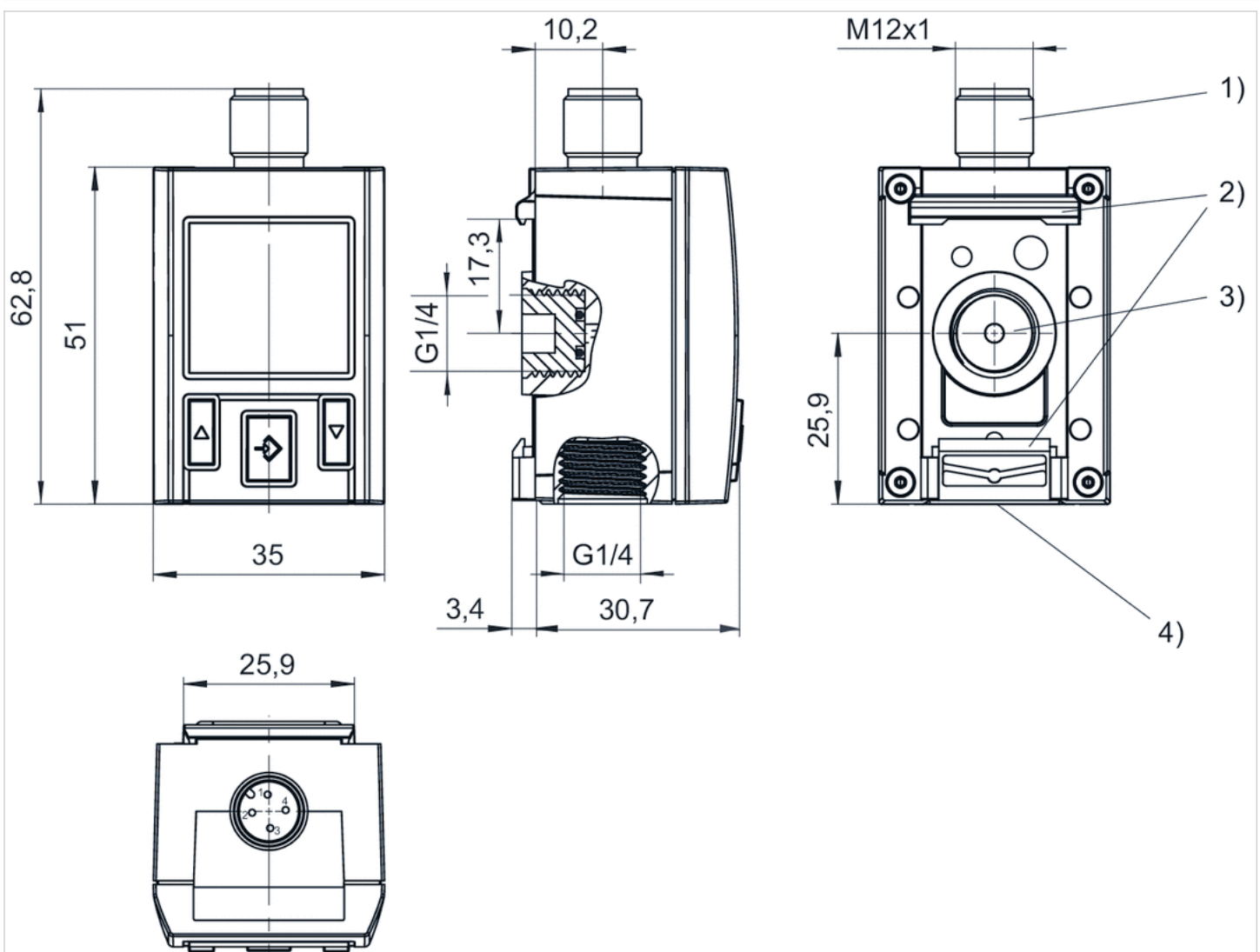
The IO-Link device description (IODD) for the PE5 pressure sensor is available for download in the Media Centre.

## Technical information

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

## Dimensions

Fig. 1

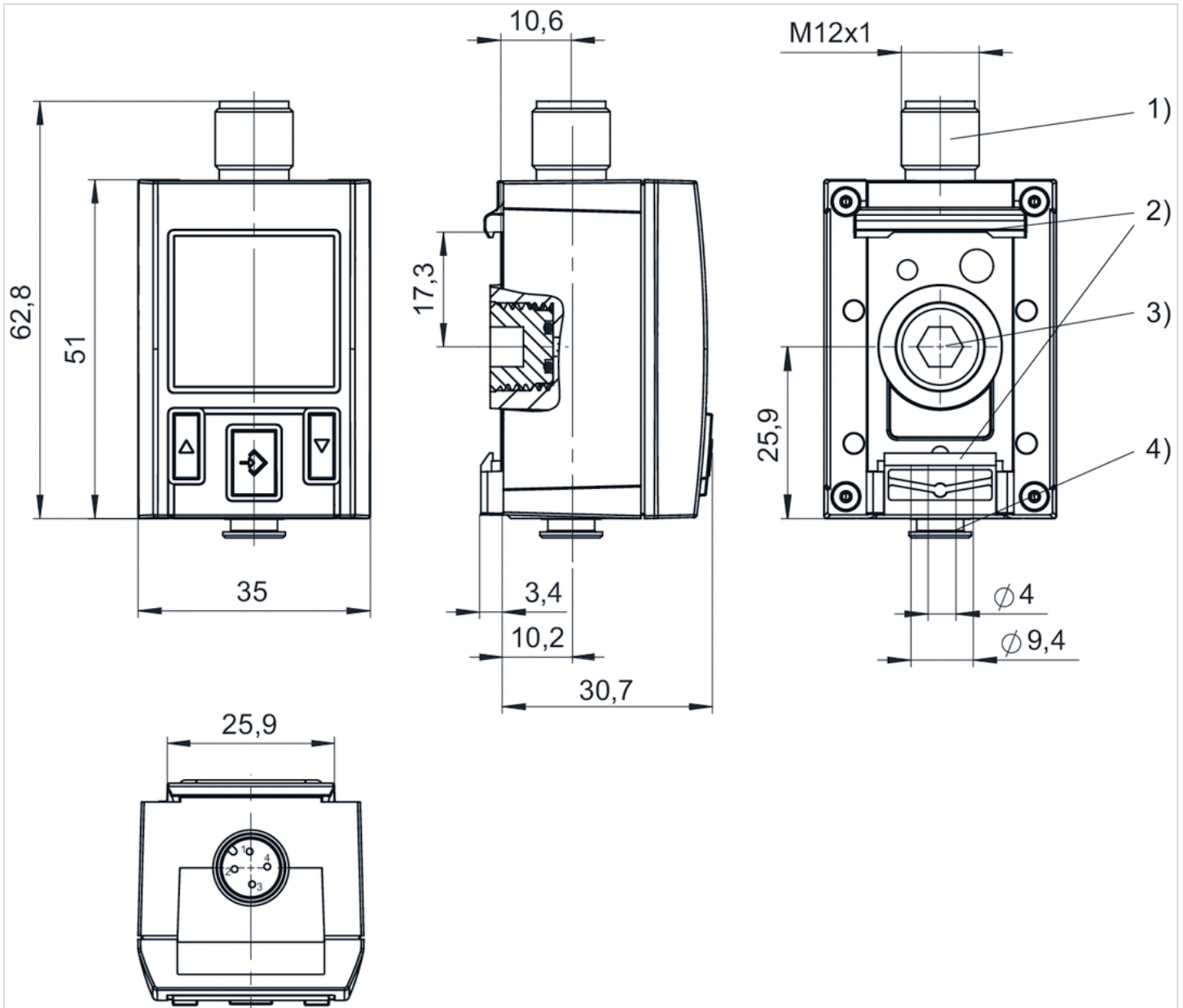


1) M12x1 electrical connection

2) Mounting for hat rail and wall mounting

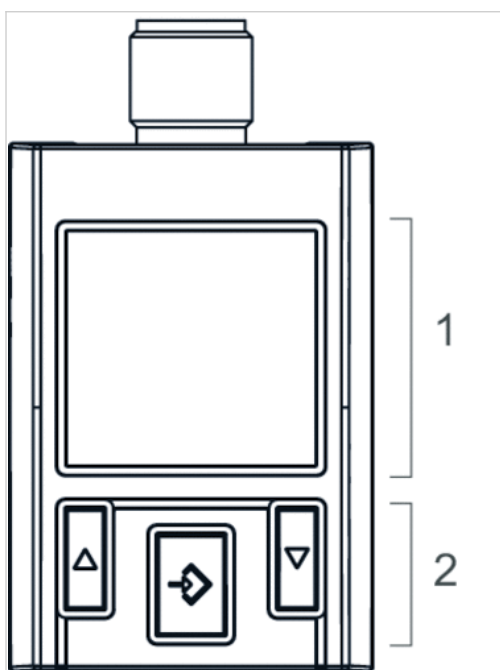
- 3) Alternative pressure connection (G1/4) closed with plug
- 4) Pressure connection G1/4

Fig. 2



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

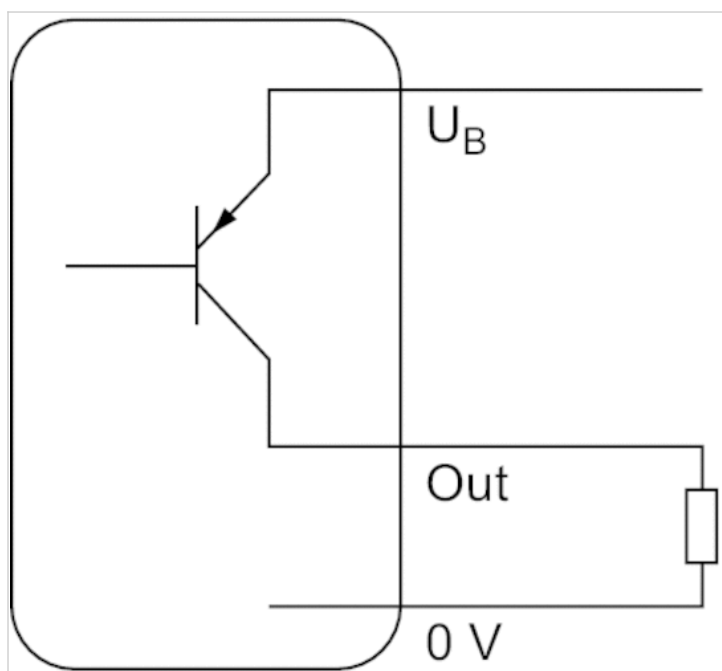
## Display and operation area



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

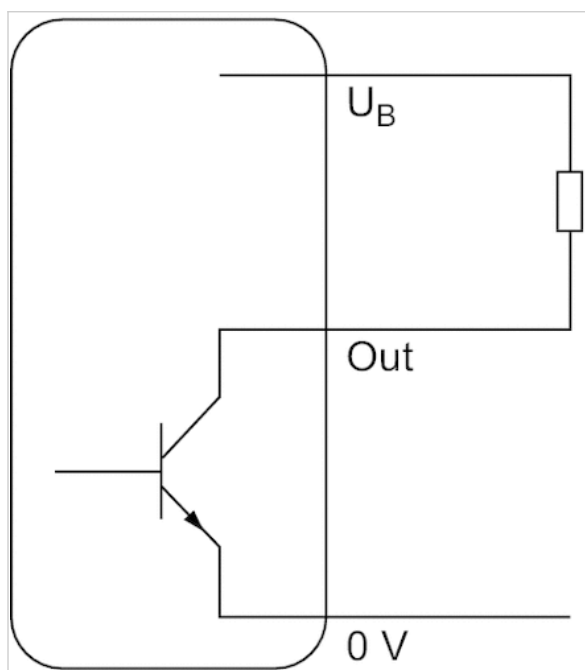
## Diagrams

## Operating mode PNP

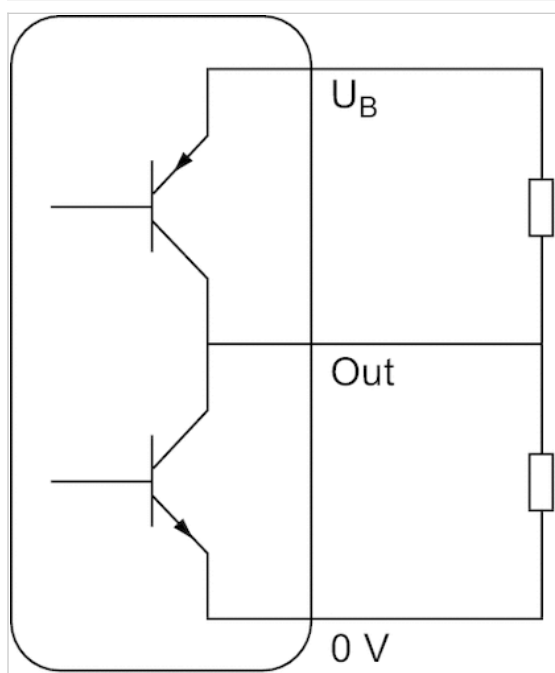




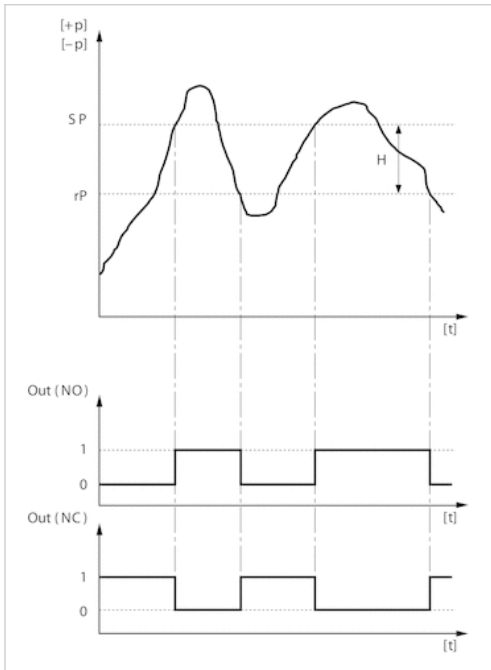
## Operating mode NPN



## Operating mode Push-pull

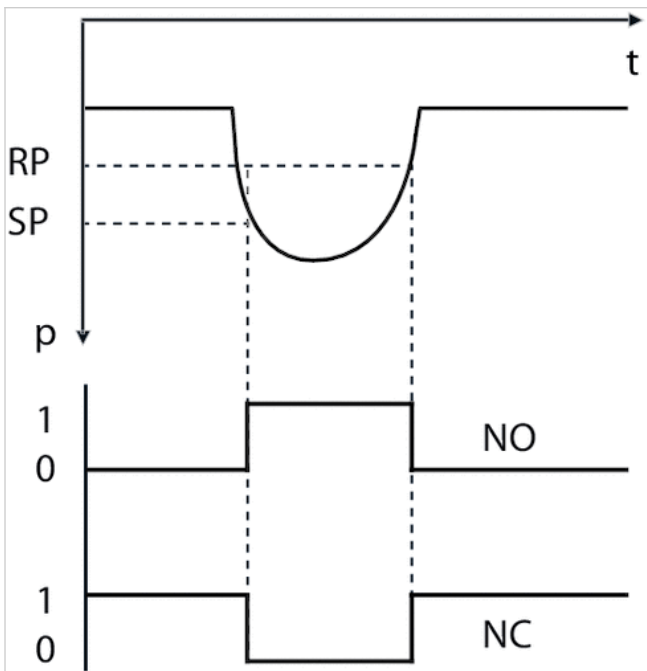


Hysteresis function: switching and resetting behavior dependent on pressure p and time t In case

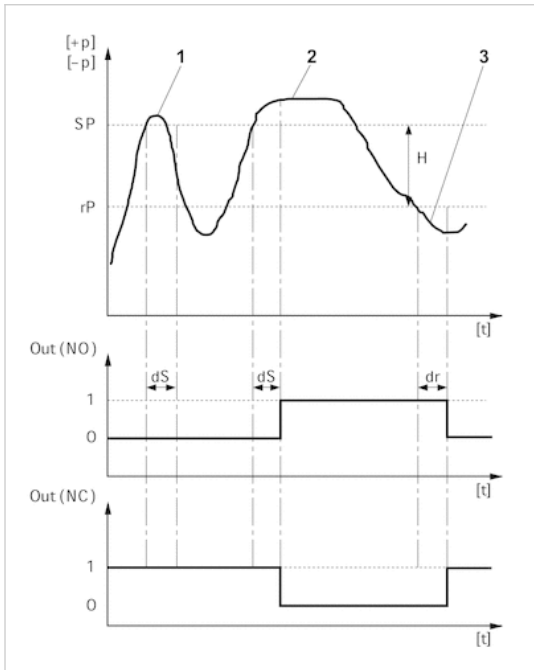


H: Hysteresis  
 SP = switching point  
 RP = resetting point  
 Out (NC): switch output, break contact  
 Out (NO): switch output, make contact

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

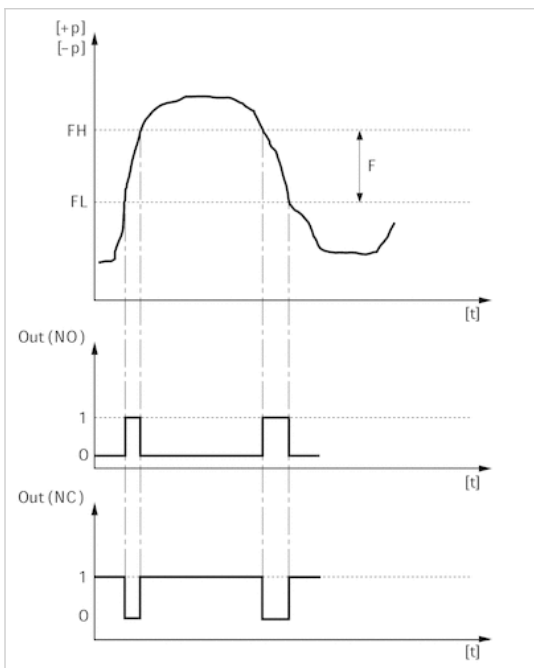


Delayed hysteresis function: switching and resetting behavior depending on pressure p and time



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

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

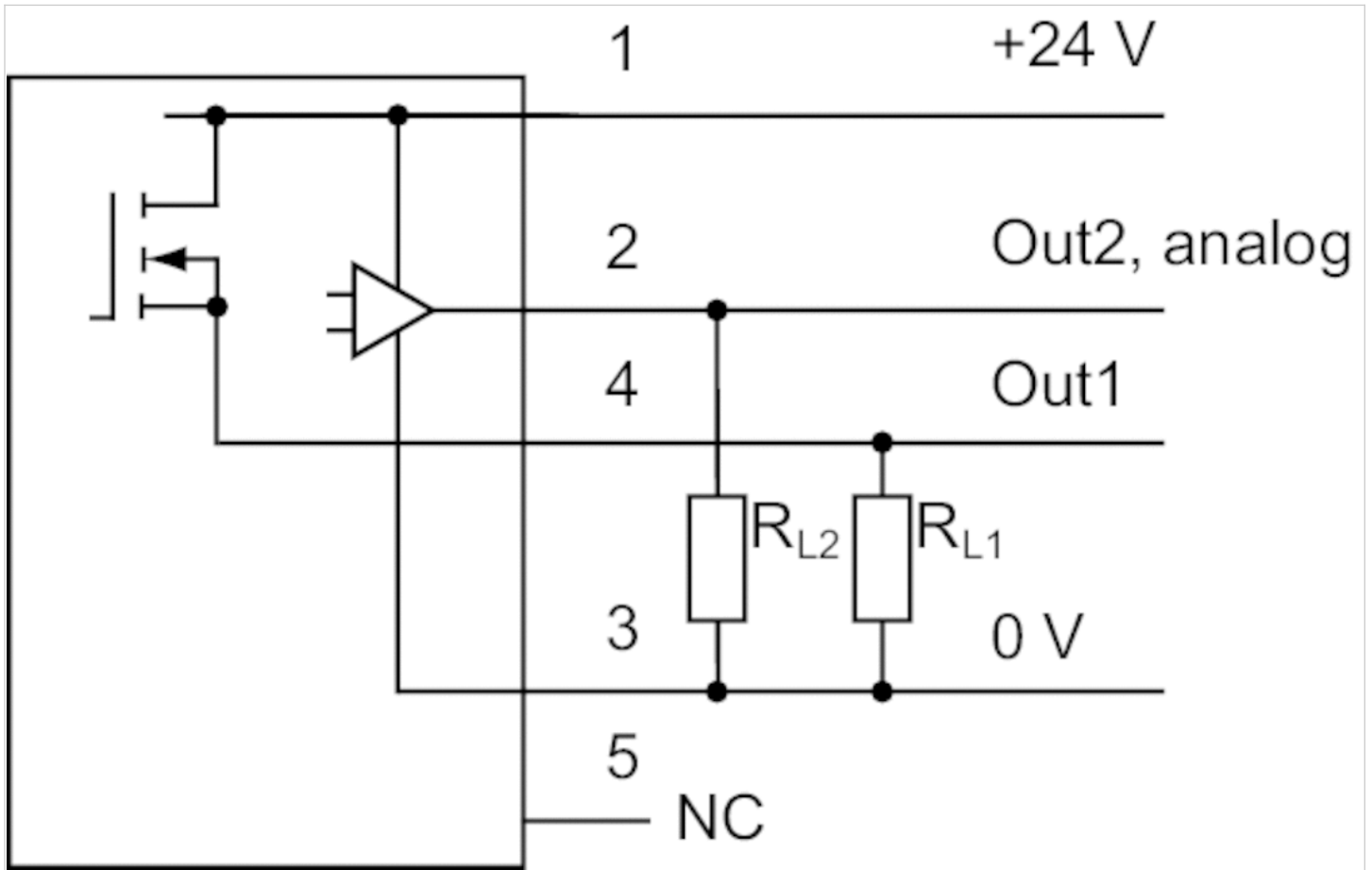


- FH: pressure band, upper value
- FL: pressure band, lower value
- Out (NC): switch output, break contact

Out (NO): switch output, make contact

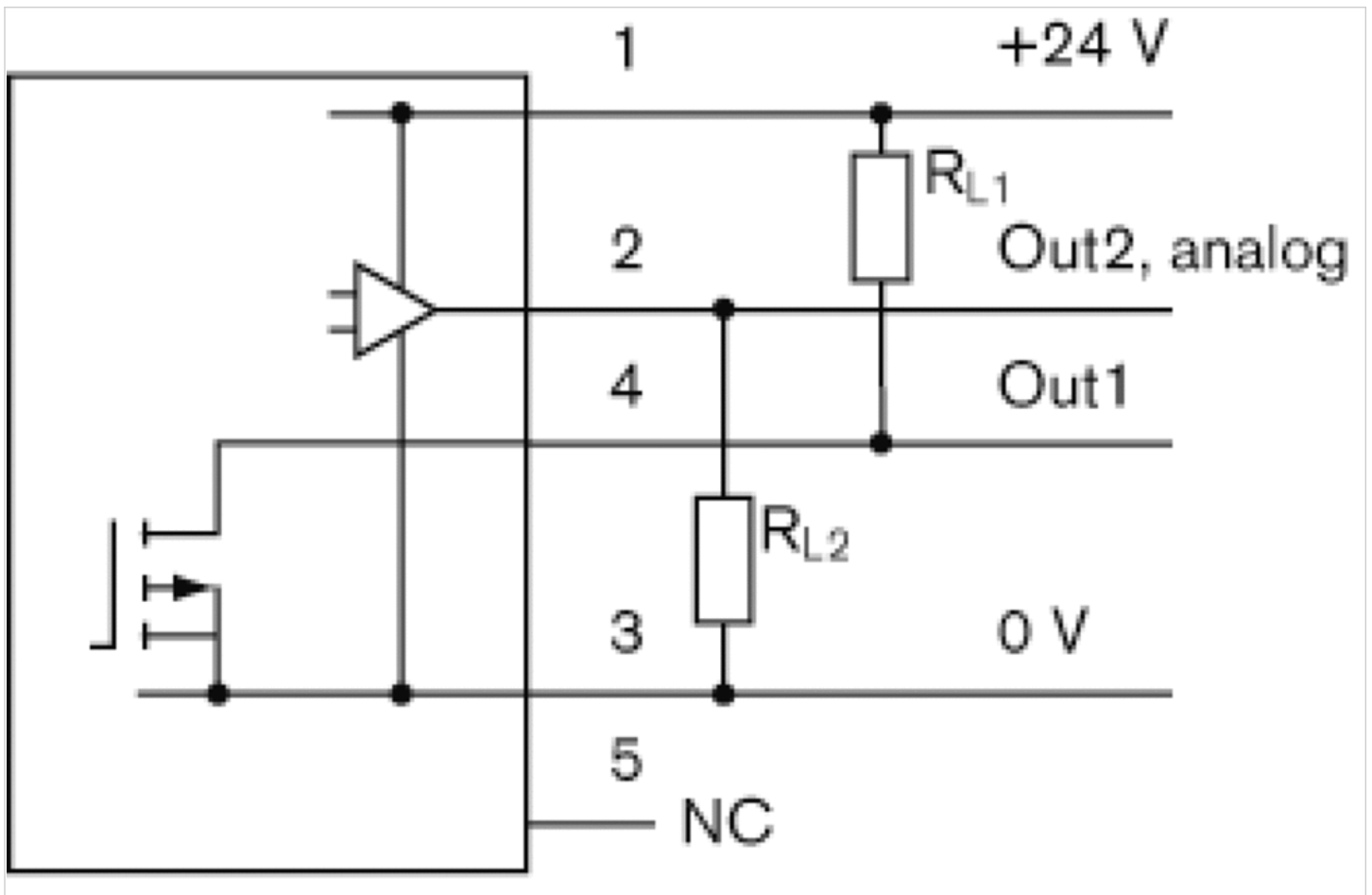
### Circuit diagram

### Block diagram 1x PNP and 1x analog



RL = storable position

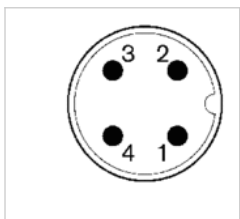
Block diagram 1x NPN and 1x analog



RL = storable position

Pin assignments

Pin assignments M12x1



operational voltage + UB

Pin 2: switch output Out2, analog: A or V, digital: PNP, NPN, push-pull

Pin 3: 0 V

Pin 4: switch output Out1, digital: PNP, NPN, push-pull











# Pressure sensor, Series PE2

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



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

## Technical data

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

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

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

## Technical information

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

## Technical information

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

## Dimensions

Fig. 1

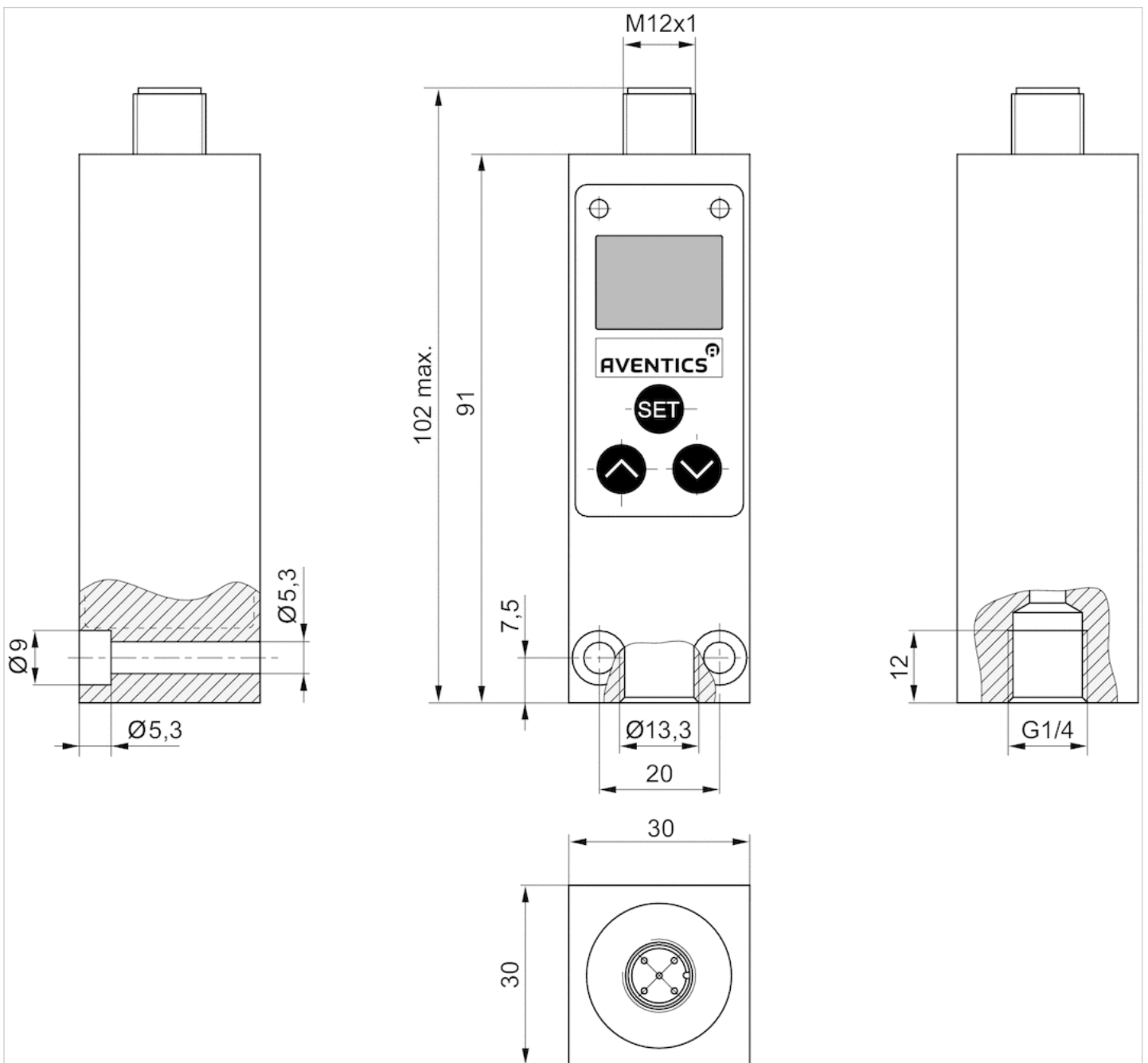
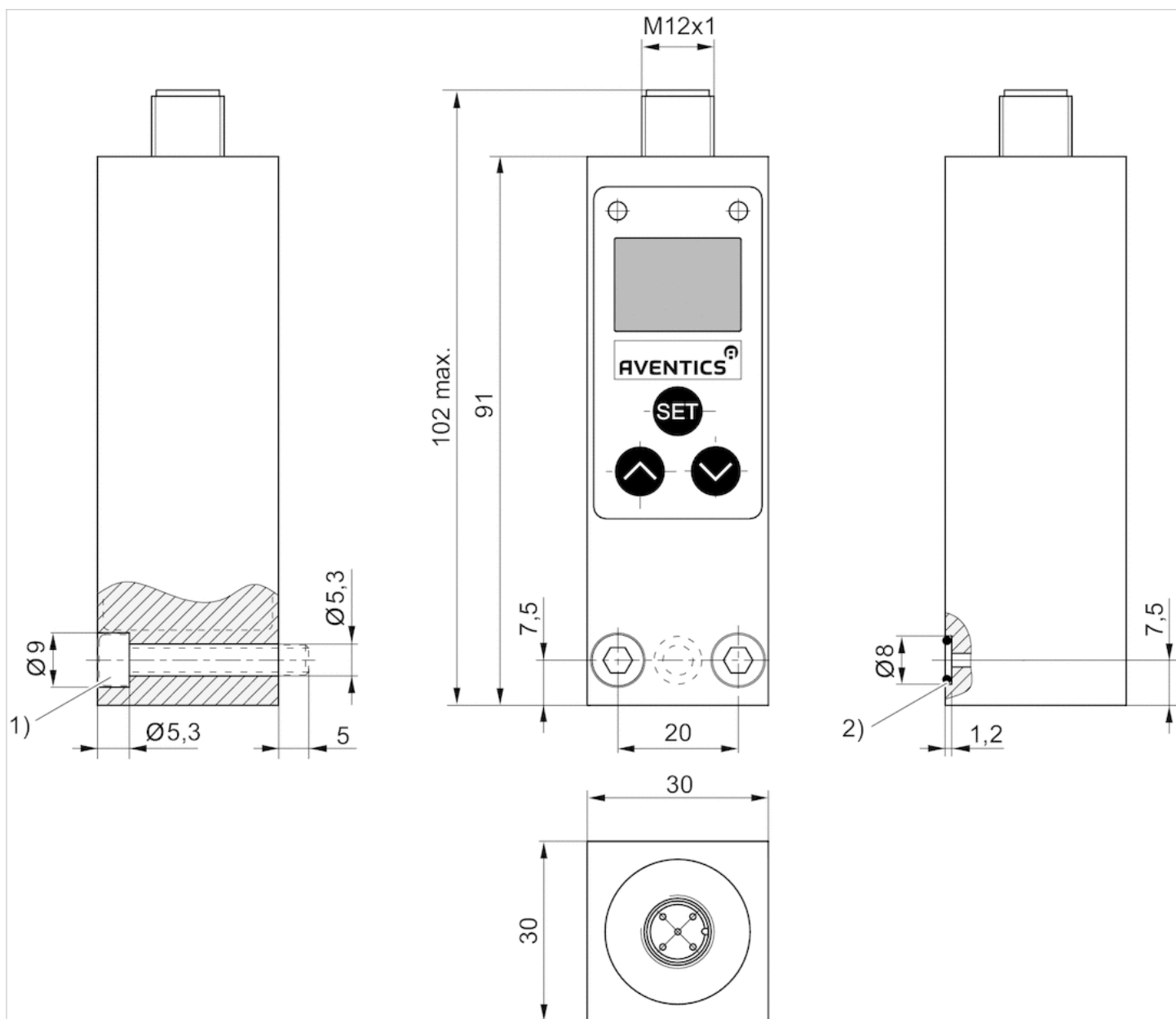




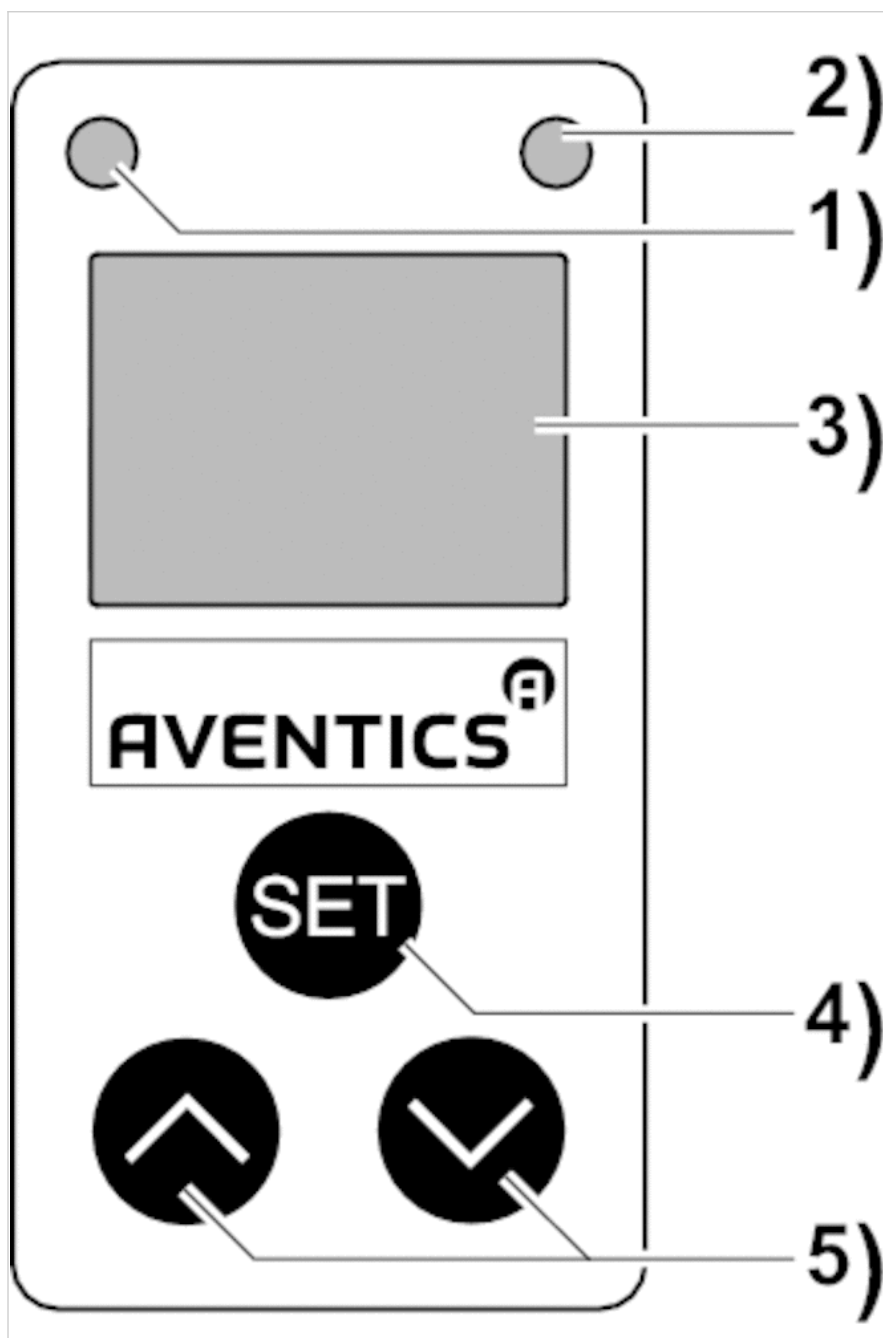
Fig. 2



1) cylinder screw M5x35 (included in scope of delivery)

2) O-ring  $\varnothing 5 \times 1,5$  (included)

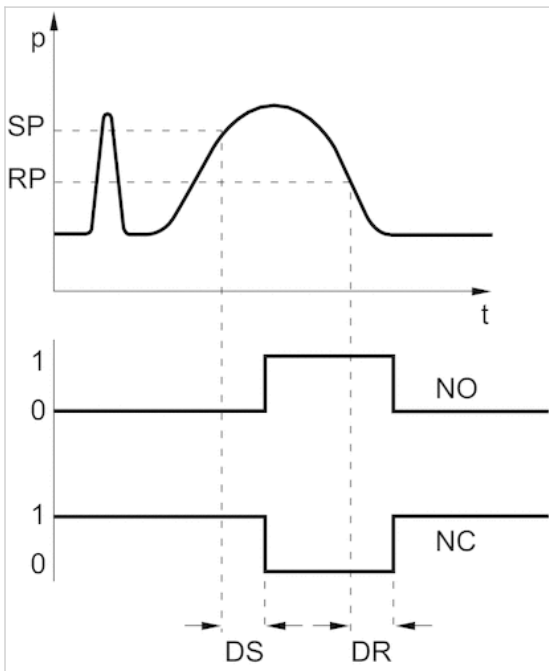
## Display and operation area



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

## Diagrams

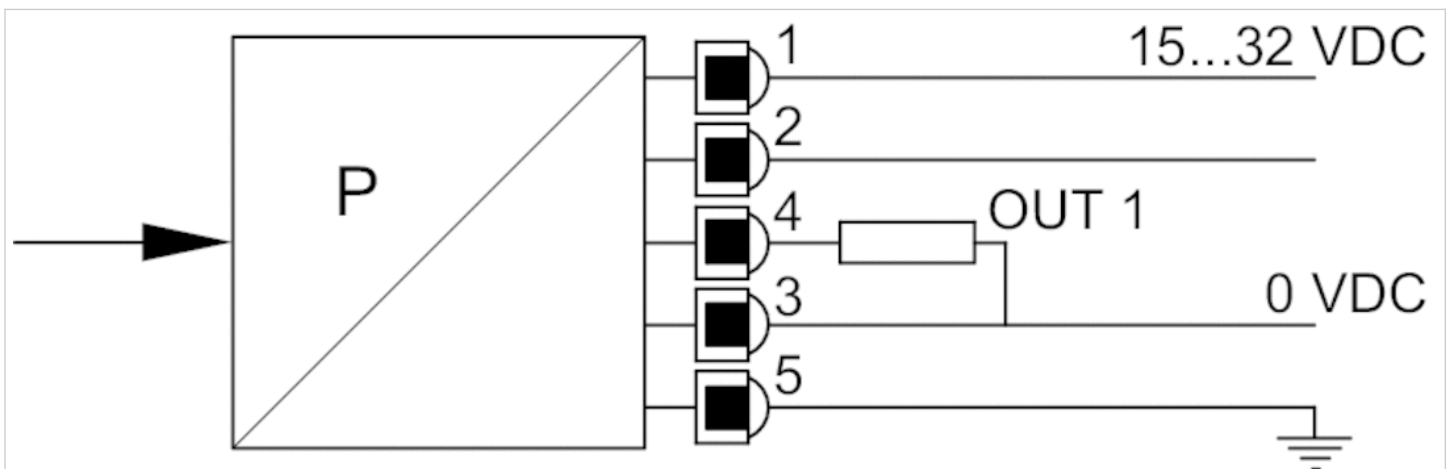
### Pressure-voltage characteristics curve



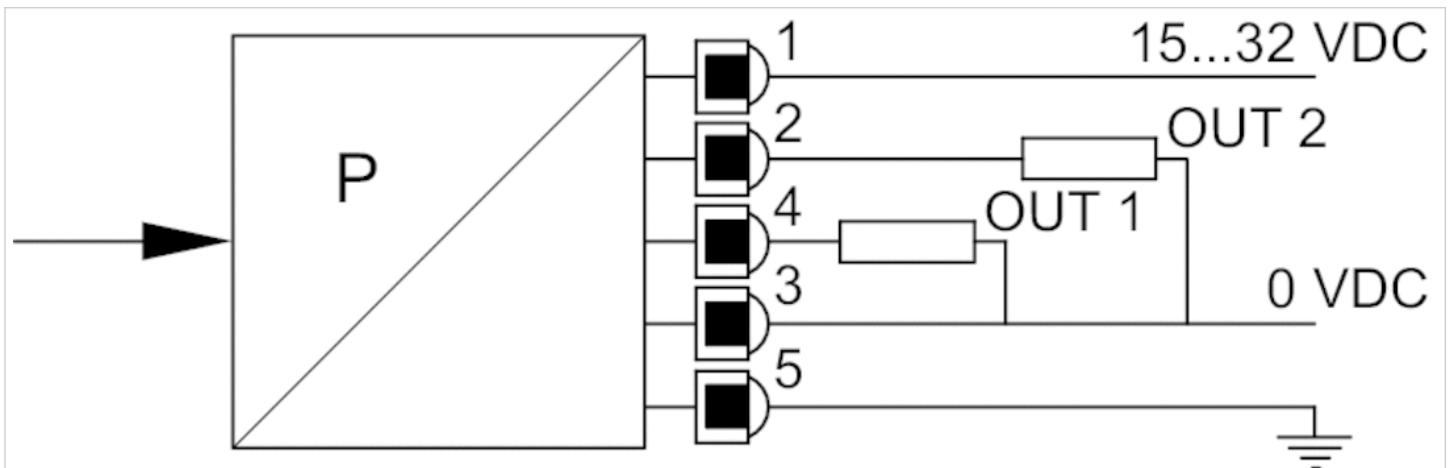
- SP = switching point
- RP = resetting point
- NO = Switching function open
- NC = Switching function closed without current
- DS = Delay for the switching point
- DR = Delay for the resetting point

## Circuit diagram

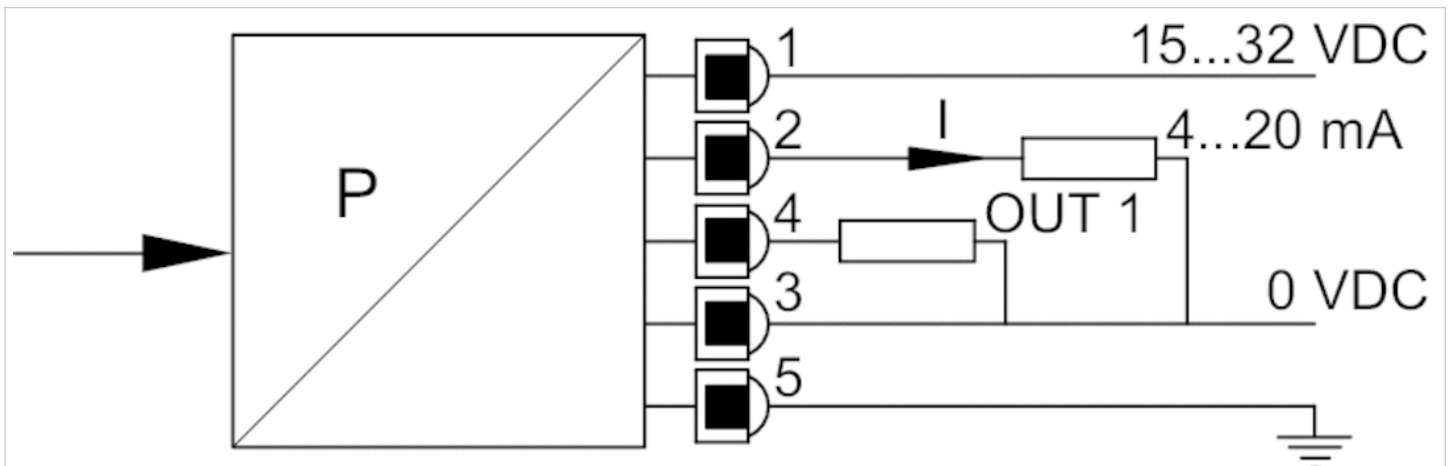
### Block diagram 1 x PNP



Block diagram 2 x PNP

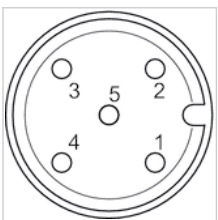


Block diagram 1x PNP and 1x analog



Pin assignments

Pin assignments



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








# Pressure Switches, Series PM1

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



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

## Technical data

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

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

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

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

## Technical information

Switching function increasing pressure: contact switches from 1-2 to 1-3.

Switching function decreasing pressure: contact switches from 1-3 to 1-2.

Notice: Too-high currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching!

The microswitch has silver-plated contacts.

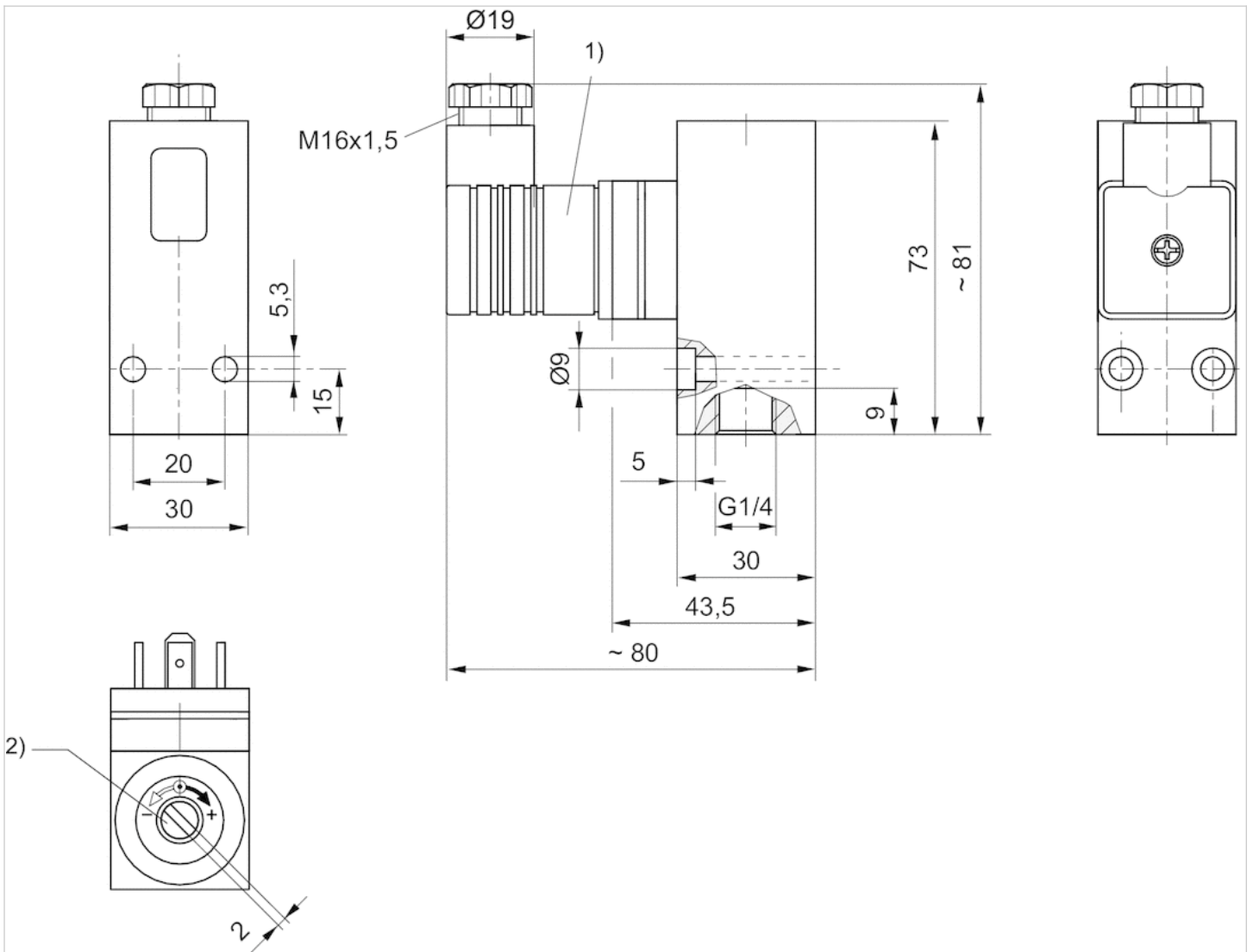
Please observe the pin assignment when selecting plug connectors.

## Technical information

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

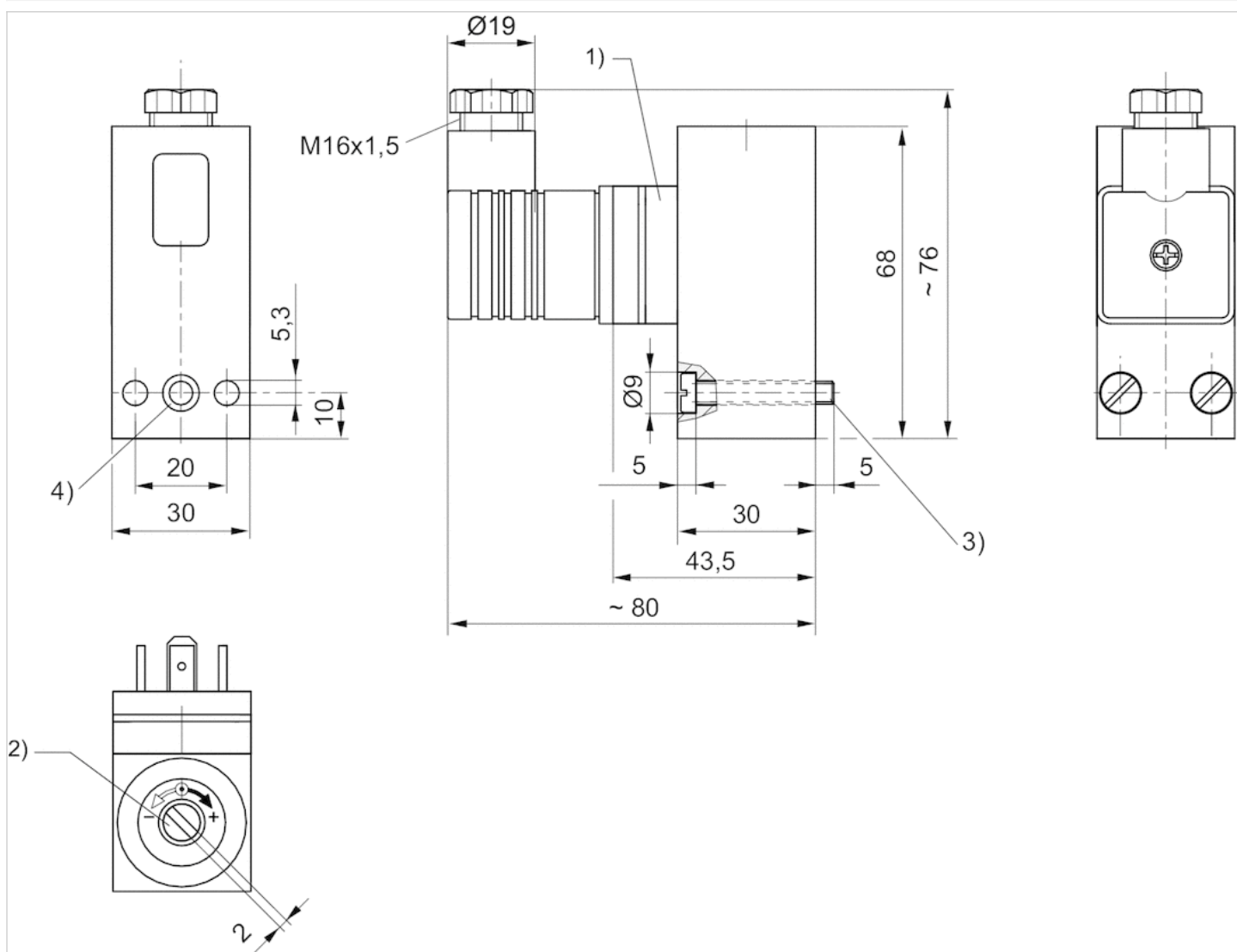
# Dimensions

Fig. 1



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

Fig. 2

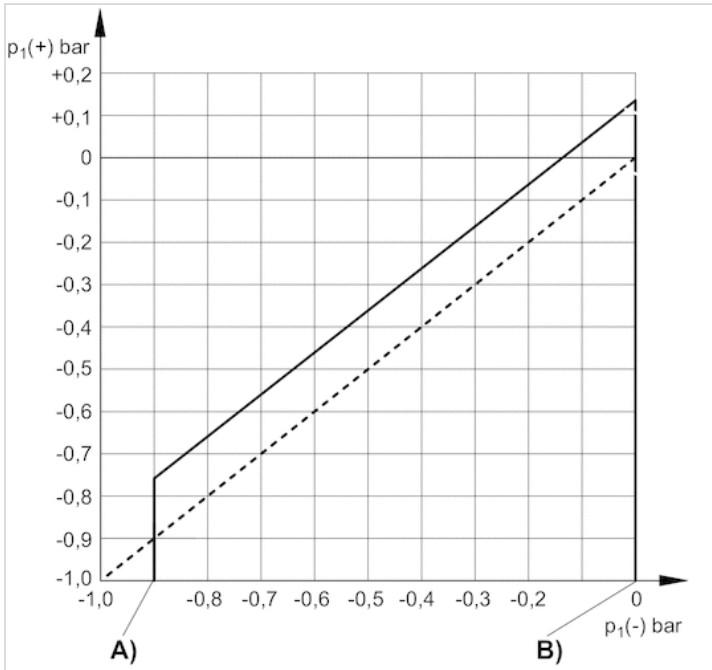


- 1) Valve plug connector
- 2) Adjustment screw, self-holding
- 3) cylinder screw M5x30 (included in scope of delivery)
- 4) O-ring  $\text{Ø}5 \times 1,5$  (included)



## Diagrams

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



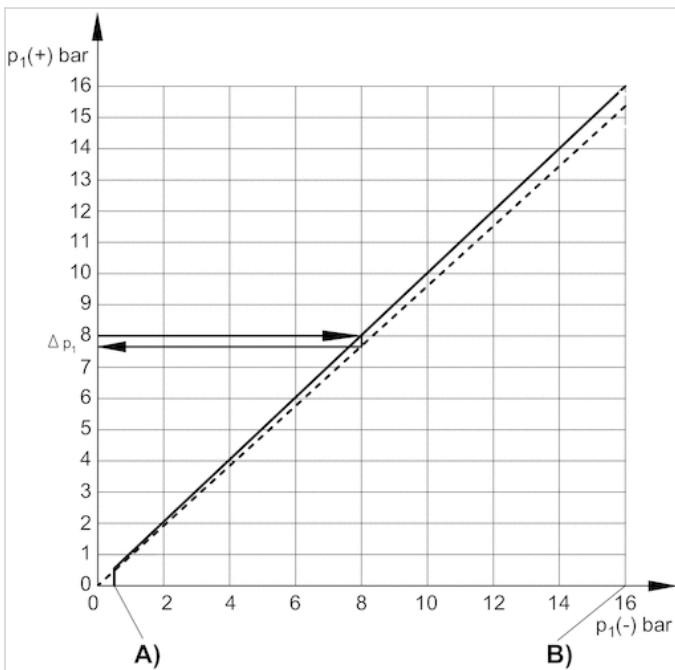
A)  $p_1(-)$ , min.

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 (02 - 16 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

$\Delta p_1$  = max. operating pressure difference or hysteresis

Example:

$p_1 (+) = 8 \text{ bar} > p_1 (-) = 7.6 \text{ bar}$   
 $\Delta p_1 = 0.4 \text{ bar}$

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

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

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

- 1) AC
- 2) DC

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

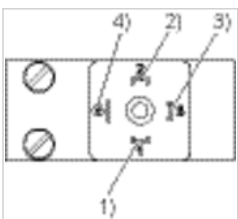
U [V]	I [A] 1) 3)	I [A] 2) 4)
30	3	2
48	3	0.55
60	3	0.4
125	3	0.15
250	3	-

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

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

Pin assignments

PIN assignment for valve plug connectors



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





# Pressure Switches, Series PM1

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



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

## Technical data

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

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

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

## Technical information

Switching function increasing pressure: contact switches from 1-2 to 1-3.

Switching function decreasing pressure: contact switches from 1-3 to 1-2.

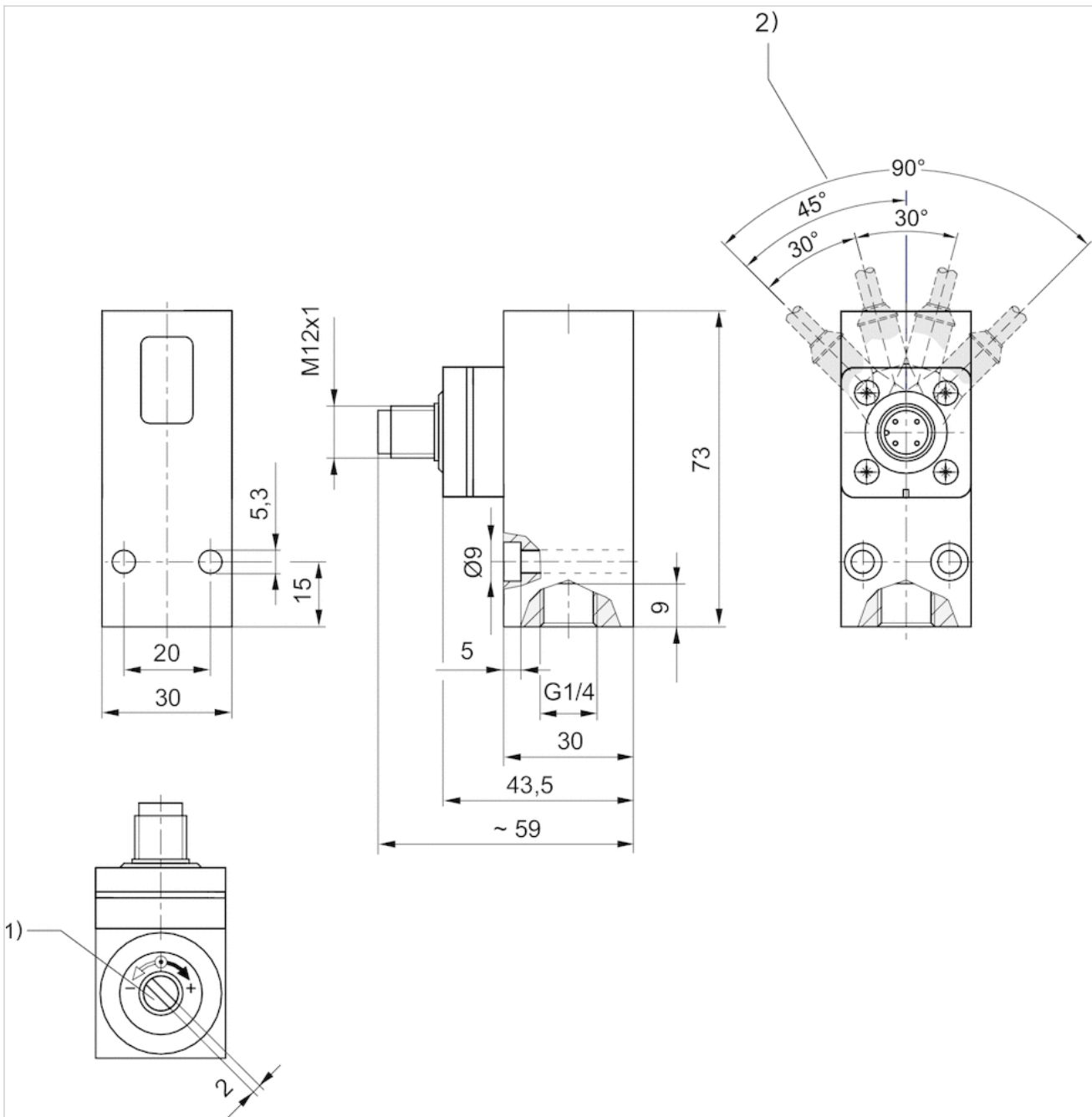
Notice: Too-high currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching!  
The microswitch has silver-plated contacts.

## Technical information

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

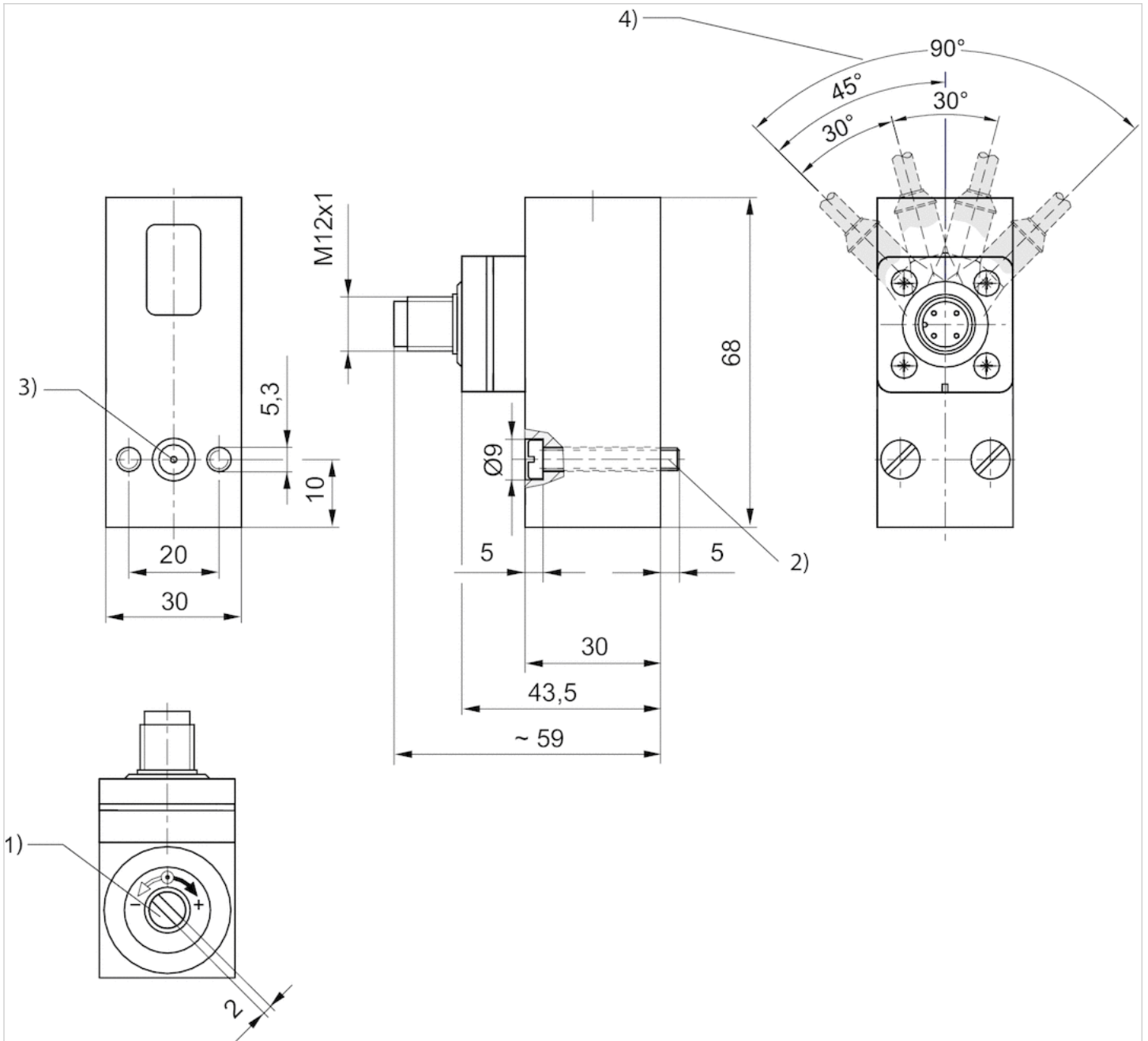
# Dimensions

Fig. 1



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

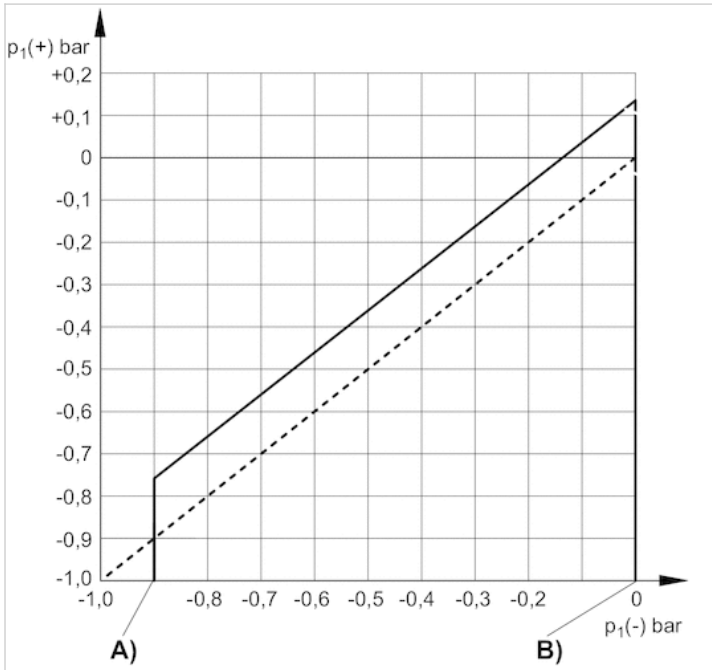
Fig. 2



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

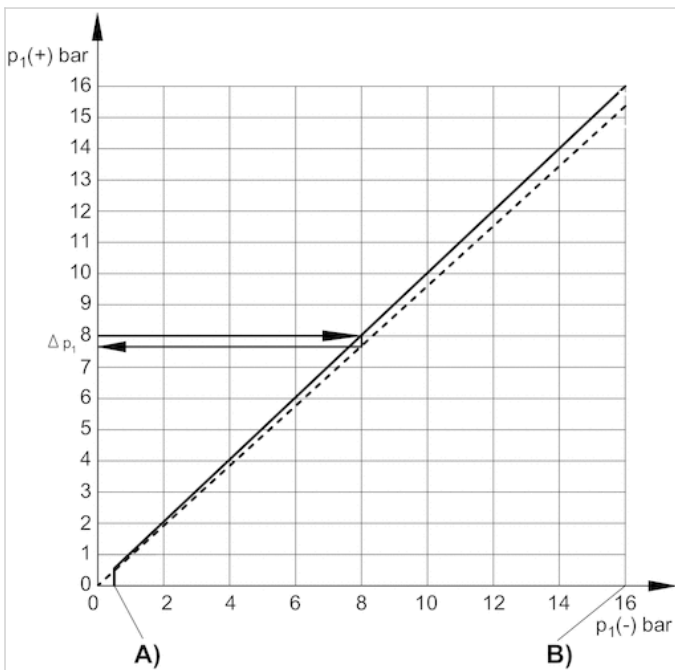
# Diagrams

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



A)  $p_1(-)$ , 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 (02 - 16 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  
 $\Delta p_1$  = max. operating pressure difference or hysteresis  
 Example:

$p_1 (+) = 8 \text{ bar} > p_1 (-) = 7.6 \text{ bar}$   
 $\Delta p_1 = 0.4 \text{ bar}$

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

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

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

- 1) AC
- 2) DC

max. permissible continuous current  $I_{max}$  [A] with inductive load

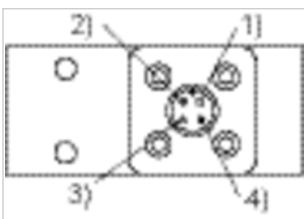
U [V]	I [A] 1) 3)	I [A] 2) 4)
30-250	3A	
30 / 48 / 60 / 125		2 / 0,55 / 0,4 / 0,2

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

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

Pin assignments

Pin assignments



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



## Series QR2-S, standard

- Straight fitting
- External thread
- G 1/4, G 3/8, G 1/2
- push-in fitting
- Ø 4, Ø 5, Ø 6, Ø 8, Ø 10, Ø 12, Ø 14, Ø 16
- QR2-S-RPN



Working pressure min./max.

-13 ... 232 psi

Ambient temperature min./max.

-4 ... 176 °F

Weight

See table below

### Technical data

Part No.	Port G	Port D	Delivery unit	Weight	Fig.
1823373045	G 1/4	Ø 4	25 piece	0.026 lbs	Fig. 1
1823373046	G 1/4	Ø 5	10 piece	0.029 lbs	Fig. 1
1823373047	G 1/4	Ø 6	25 piece	0.033 lbs	Fig. 1
1823373048	G 1/4	Ø 8	10 piece	0.035 lbs	Fig. 1
1823373049	G 1/4	Ø 10	10 piece	0.057 lbs	Fig. 1
1823391809	G 1/4	Ø 12	10 piece	0.068 lbs	Fig. 1
R412004708	G 1/4	Ø 12	10 piece	0.048 lbs	Fig. 2
1823373050	G 3/8	Ø 8	10 piece	0.046 lbs	Fig. 1
1823373051	G 3/8	Ø 10	10 piece	0.062 lbs	Fig. 1
1823373052	G 3/8	Ø 12	5 piece	0.084 lbs	Fig. 1
1823373053	G 3/8	Ø 14	5 piece	0.13 lbs	Fig. 1
1823373054	G 1/2	Ø 12	5 piece	0.106 lbs	Fig. 1
1823373055	G 1/2	Ø 14	5 piece	0.141 lbs	Fig. 1
R412007955	G 1/2	Ø 16	1 piece	0.159 lbs	Fig. 1

Weight per piece

### Technical information

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

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

## Technical information

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

## Dimensions

Fig. 1

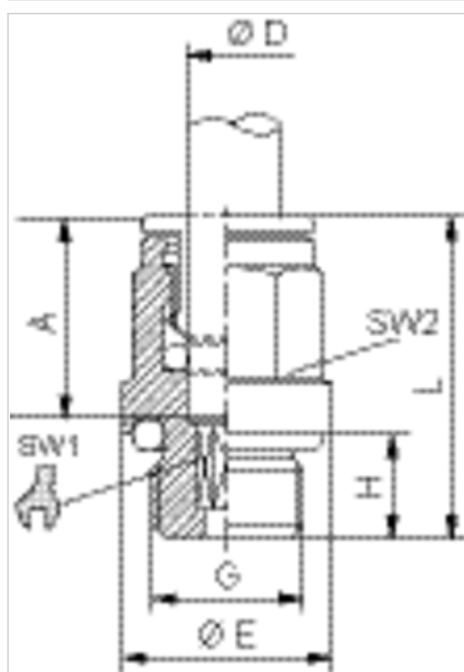
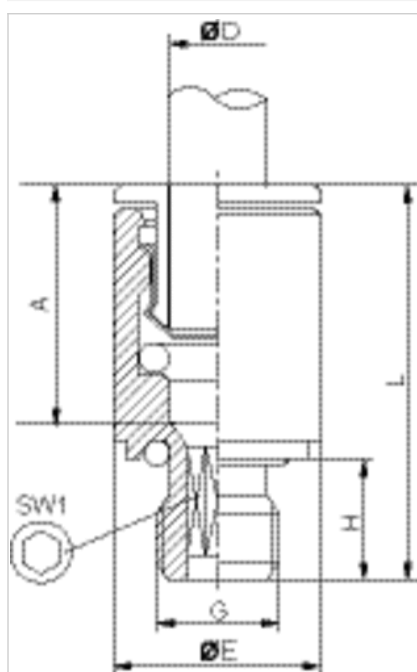


Fig. 2



## Dimensions

Part No.	Port D	Port G	Ø E	H	L	A*	SW 1	SW 2	Fig.
1823373045	Ø 4	G 1/4	17	8	21	15	2.5	9	Fig. 1
1823373046	Ø 5	G 1/4	17	8	22	16	4	10	Fig. 1
1823373047	Ø 6	G 1/4	17	6.5	22.5	16	4	11	Fig. 1
1823373048	Ø 8	G 1/4	17	8	25	18	6	13	Fig. 1
1823373049	Ø 10	G 1/4	16	8	29.5	19	7	16	Fig. 1
1823391809	Ø 12	G 1/4	16	6.5	30	20	7	18	Fig. 1
R412004708	Ø 12	G 1/4	17	8.3	31	7	-	-	Fig. 2
1823373050	Ø 8	G 3/8	20	9	25	18	6	13	Fig. 1
1823373051	Ø 10	G 3/8	21	9	29.5	19	8	16	Fig. 1
1823373052	Ø 12	G 3/8	21	9	31	20	10	18	Fig. 1
1823373053	Ø 14	G 3/8	21	9	34	22	10	21	Fig. 1
1823373054	Ø 12	G 1/2	24	11	31	20	10	18	Fig. 1
1823373055	Ø 14	G 1/2	24	11	34	22	12	21	Fig. 1
R412007955	Ø16	G 1/2	24	11	37	12	24	-	Fig. 1

\* Insertion depth

## QR1-S standard series

- Straight fitting
- External thread
- G 1/4, G 3/8, G 1/2
- push-in fitting
- Ø 4, Ø 6, Ø 8, Ø 10, Ø 12, Ø 14, Ø 16
- QR1-S-RPN



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

### Technical data

Part No.	Port G	Port D	Delivery unit	Weight
2121004140	G 1/4	Ø 4	10 piece	0.044 lbs
2121006140	G 1/4	Ø 6	10 piece	0.047 lbs
2121008140	G 1/4	Ø 8	10 piece	0.053 lbs
2121010140	G 1/4	Ø 10	10 piece	0.058 lbs
2121012140	G 1/4	Ø 12	10 piece	0.087 lbs
R412005000	G 3/8	Ø 6	10 piece	0.071 lbs
2121008380	G 3/8	Ø 8	10 piece	0.078 lbs
2121010380	G 3/8	Ø 10	10 piece	0.092 lbs
2121012380	G 3/8	Ø 12	10 piece	0.099 lbs
2121014380	G 3/8	Ø 14	10 piece	0.1 lbs
R412005005	G 3/8	Ø 16	10 piece	0.128 lbs
R412005001	G 1/2	Ø 8	10 piece	0.114 lbs
2121010120	G 1/2	Ø 10	10 piece	0.128 lbs
2121012120	G 1/2	Ø 12	10 piece	0.125 lbs
R412005006	G 1/2	Ø 16	10 piece	0.147 lbs
2121014120	G 1/2	Ø 14	10 piece	0.141 lbs

### Technical information

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

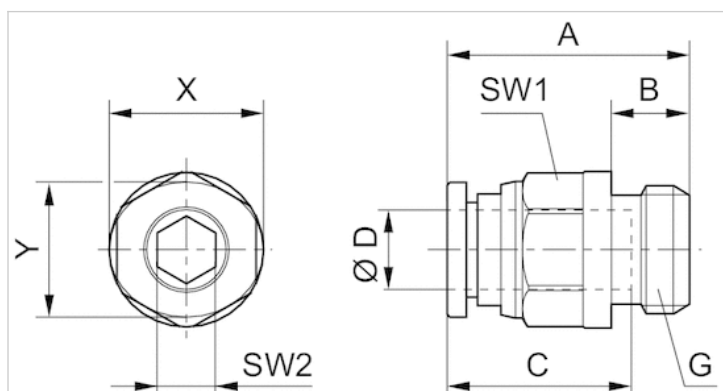
For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

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

## Dimensions

### Dimensions



### Dimensions

Part No.	Port D	Port G	A	B	C	SW1	SW2	X	Y
2121004140	Ø 4	G 1/4	19.1	6	16	10	3	12	10
2121006140	Ø 6	G 1/4	21.6	6	17	12	4	14	12
2121008140	Ø 8	G 1/4	22.4	6	18.5	14	6	16	14
2121010140	Ø 10	G 1/4	29.9	6	21	17	7	19	17
2121012140	Ø 12	G 1/4	33.4	6	22.5	21	7	23	21
R412005000	Ø 6	G 3/8	21.6	7	17	12	4	14	12
2121008380	Ø 8	G 3/8	23.2	7	18.5	14	6	16	14
2121010380	Ø 10	G 3/8	25.9	7	21	17	8	19	17
2121012380	Ø 12	G 3/8	33.5	7	23	21	9	23	21
2121014380	Ø 14	G 3/8	30.1	7	24.6	22	9	25	23
R412005005	Ø 16	G 3/8	35.3	7	25.5	24	8	27	24
R412005001	Ø 8	G 1/2	25.7	8.5	18.5	14	6	16	14
2121010120	Ø 10	G 1/2	27.4	8.5	21	17	8	19	17
2121012120	Ø 12	G 1/2	29.5	8.5	23	21	10	23	21
R412005006	Ø 16	G 1/2	36.3	8.5	25.5	24	10	27	24
2121014120	Ø 14	G 1/2	25.6	8.5	24.6	24	11	25	23

## QR1-S standard series

- Elbow fitting
- External thread
- G 1/4, G 3/8, G 1/2
- push-in fitting
- Ø 4, Ø 6, Ø 8, Ø 10, Ø 12, Ø 14, Ø 16
- QR1-S-RVT



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

### Technical data

Part No.	Port G	Port D	Delivery unit	Weight
2122004140	G 1/4	Ø 4	10 piece	0.038 lbs
2122006140	G 1/4	Ø 6	10 piece	0.042 lbs
2122008140	G 1/4	Ø 8	10 piece	0.051 lbs
2122010140	G 1/4	Ø 10	10 piece	0.063 lbs
2122012140	G 1/4	Ø 12	10 piece	0.093 lbs
R412005092	G 3/8	Ø 6	10 piece	0.068 lbs
2122008380	G 3/8	Ø 8	10 piece	0.072 lbs
2122010380	G 3/8	Ø 10	10 piece	0.088 lbs
2122012380	G 3/8	Ø 12	10 piece	0.096 lbs
2122014380	G 3/8	Ø 14	5 piece	0.106 lbs
R412005097	G 3/8	Ø 16	5 piece	0.135 lbs
R412005093	G 1/2	Ø 8	10 piece	0.108 lbs
2122010120	G 1/2	Ø 10	10 piece	0.111 lbs
2122012120	G 1/2	Ø 12	10 piece	0.124 lbs
2122014120	G 1/2	Ø 14	5 piece	0.146 lbs
R412005098	G 1/2	Ø 16	5 piece	0.168 lbs

Weight per piece

### Technical information

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

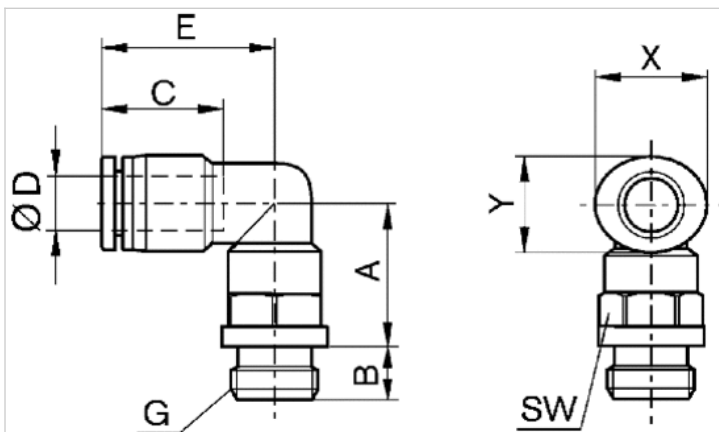
For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

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

## Dimensions

### Dimensions



### Dimensions

Part No.	Port D	Port G	A	B	C	E	SW	X	Y
2122004140	Ø 4	G 1/4	9.5	6	16	18.5	16	12	10
2122006140	Ø 6	G 1/4	10.7	6	17	20.3	16	14	12
2122008140	Ø 8	G 1/4	11.5	6	18.5	22.6	16	16	14
2122010140	Ø 10	G 1/4	16.5	6	21	27	16	19	17
2122012140	Ø 12	G 1/4	18.3	6	22.5	29.2	16	23	21
R412005092	Ø 6	G 3/8	11.2	7	17	20.3	20	14	12
2122008380	Ø 8	G 3/8	11.5	7	18.5	22.6	20	16	14
2122010380	Ø 10	G 3/8	13.6	7	21	27	20	19	16
2122012380	Ø 12	G 3/8	15.3	7	22.5	29.2	20	23	21
2122014380	Ø 14	G 3/8	23.1	7	24.6	32.1	20	25	23
R412005097	Ø16	G 3/8	24.2	7	24.8	33.3	20	27	24
R412005093	Ø 8	G 1/2	12.5	8.5	18.5	22.6	24	16	14
2122010120	Ø 10	G 1/2	14.1	8.5	21	27	24	19	14
2122012120	Ø 12	G 1/2	15.8	8.5	22.5	29.2	24	23	21

Part No.	Port D	Port G	A	B	C	E	SW	X	Y
2122014120	Ø 14	G 1/2	17.1	8.5	24.6	32.1	24	25	23
R412005098	Ø16	G 1/2	18.2	8.5	24.8	33.3	24	27	24



## Series QR2-S, standard

- Elbow fitting, rotatable
- External thread
- G 1/4, G 3/8, G 1/2
- push-in fitting
- Ø 4, Ø 6, Ø 8, Ø 10, Ø 12, Ø 14, Ø 16
- QR2-S-RVT



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

### Technical data

Part No.	Port G	Port D	Delivery unit	Weight
1823391713	G 1/4	Ø 4	10 piece	0.053 lbs
1823391714	G 1/4	Ø 6	10 piece	0.055 lbs
1823391715	G 1/4	Ø 8	10 piece	0.06 lbs
1823391718	G 1/4	Ø 10	5 piece	0.068 lbs
1823391843	G 1/4	Ø 12	5 piece	0.092 lbs
1823391716	G 3/8	Ø 8	5 piece	0.092 lbs
1823391717	G 3/8	Ø 10	5 piece	0.092 lbs
1823391838	G 3/8	Ø 12	5 piece	0.099 lbs
1823391839	G 3/8	Ø 14	5 piece	0.137 lbs
R412010182	G 3/8	Ø 16	1 piece	0.159 lbs
R412007589	G 1/2	Ø 10	5 piece	0.101 lbs
1823391840	G 1/2	Ø 12	5 piece	0.143 lbs
1823391841	G 1/2	Ø 14	5 piece	0.154 lbs
R412007956	G 1/2	Ø 16	1 piece	0.185 lbs

Weight per piece

### Technical information

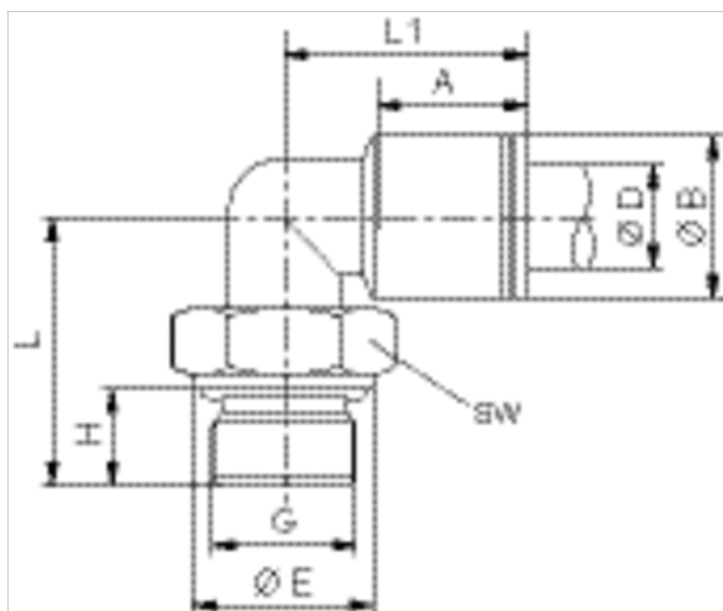
The series QR1 (plastic) and QR2 (metal) can not be combined  
Thread seal with captive O-ring

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

## Technical information

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

## Dimensions



## Dimensions

Part No.	Port D	Port G	ØB	ØE	H	L	L1	A*	SW
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

\* Insertion depth

## Series NU2

- Swivel banjo connection 1-fold
- External thread
- G 3/8, G 1/2
- plug-in with tube nut
- Ø 8, Ø 13
- NU2-S-RW1



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

### Technical data

Part No.	Port G	Port D	Delivery unit	Weight
1823391296	G 3/8	Ø 8	2 piece	0.123 lbs
R412007839	G 3/8	Ø 13	2 piece	0.174 lbs
R412007838	G 1/2	Ø 13	2 piece	0.216 lbs

Weight per piece

### Technical information

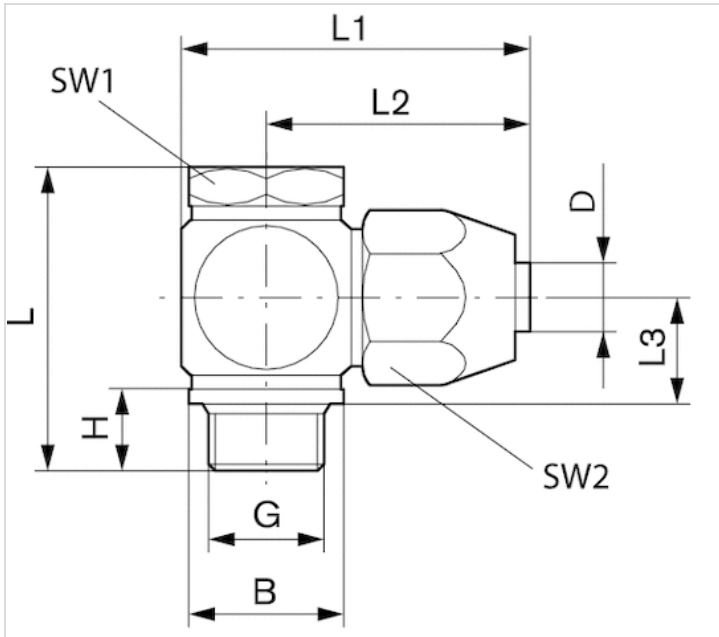
For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

### Technical information

Material	
Housing	Aluminum, anodized
Seal	Polyvinyl chloride

## Dimensions

### Dimensions



for fabric-reinforced plastic tubing

## Dimensions

Part No.	Port D	Port G	B	H	L	L1	L2	L3	SW1	SW2
1823391296	Ø 8	G 3/8	21	12.5	43	47	35	15.5	22	22
R412007839	Ø 13	G 3/8	22.9	12.5	47	49	37	18.5	22	30
R412007838	Ø 13	G 1/2	22.9	14	49.5	55	40	18.5	27	30

Connection D = inside diameter of the tubing to be used

# Double nipple, Series PE5

- External thread



Weight

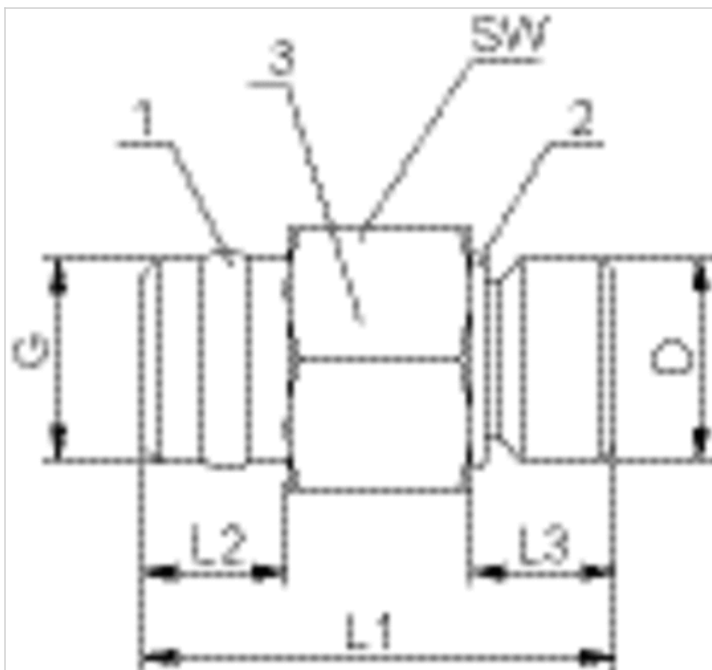
0.088 lbs

## Technical data

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

## Dimensions

### Dimensions



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

## Dimensions

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

# Blanking screw

- External thread
- G 1/8, G 1/4
- FPT-S-RIO



Working pressure min./max.

0 ... 232 psi

Ambient temperature min./max.

-4 ... 176 °F

## Technical data

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

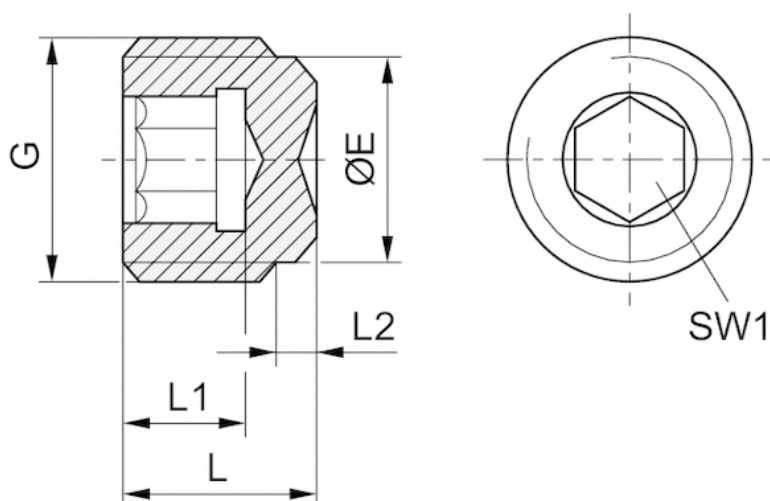
## Technical information

Material

Material	Brass
----------	-------

## Dimensions

Dimensions





## Dimensions

Port G	ØE	L	L1	L2	SW1
G 1/8	8	8	5	2	5
G 1/4	11	11	7	3.5	6

# plugs



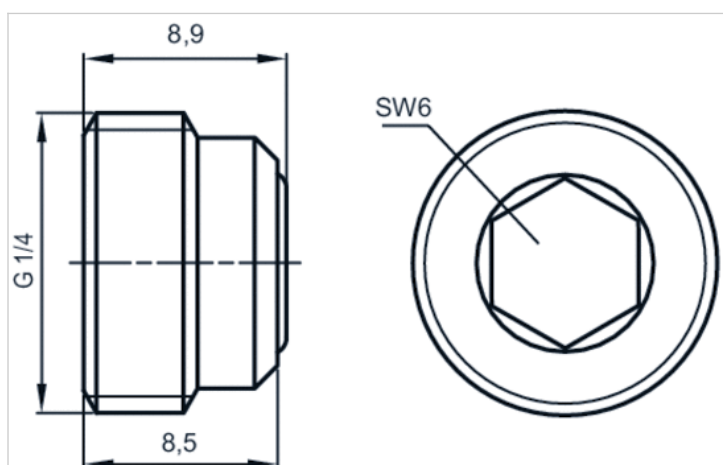
## Technical data

Part No.	Type	Suitable for	Delivery unit
R412010124	plugs	Pressure gauge connection: G 1/4	10 piece

## Technical information

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber

## Dimensions



# Reducing nipple

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



Working pressure min./max.

0 ... 870 psi

Ambient temperature min./max.

-4 ... 158 °F

## Technical data

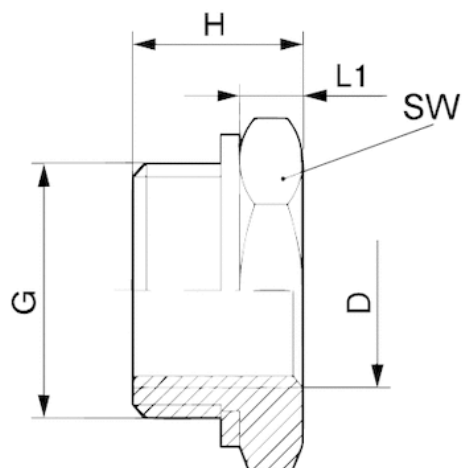
Part No.	Port G	Port D	Delivery unit
1823391300	G 1/2	G 1/4	5 piece
1823391014	G 1/2	G 3/8	5 piece
1823391028	G 3/4	G 1/2	5 piece

## Technical information

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

## Dimensions

### Dimensions



## Dimensions

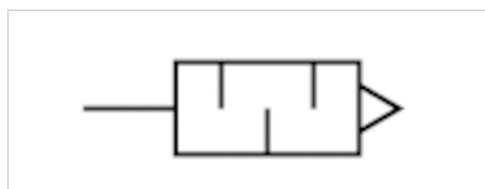
Part No.	Port D	Port G	H	L1	SW
1823391300	G 1/4	G 1/2	15.5	5.5	24
1823391014	G 3/8	G 1/2	15.5	5.5	24
1823391028	G 1/2	G 3/4	19	7	32

# Silencers, series SI1

- Sintered bronze



Working pressure min./max.	0 ... 145 psi
Ambient temperature min./max.	-13 ... 176 °F
Medium	Compressed air
Sound pressure level	90 dB
Weight	0.176 lbs
Comment	Flow characteristic curves can be found under "Diagrams".



## Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
1827000003	G 1/2	7.1 Cv	2 piece

Weight per piece

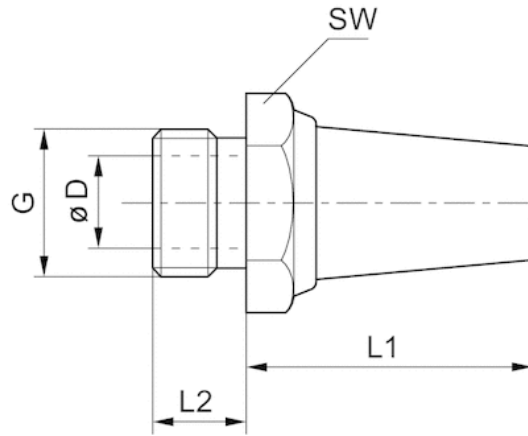
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

## Technical information

Material	
Silencers	Sintered bronze
Thread	Brass

## Dimensions

### Dimensions

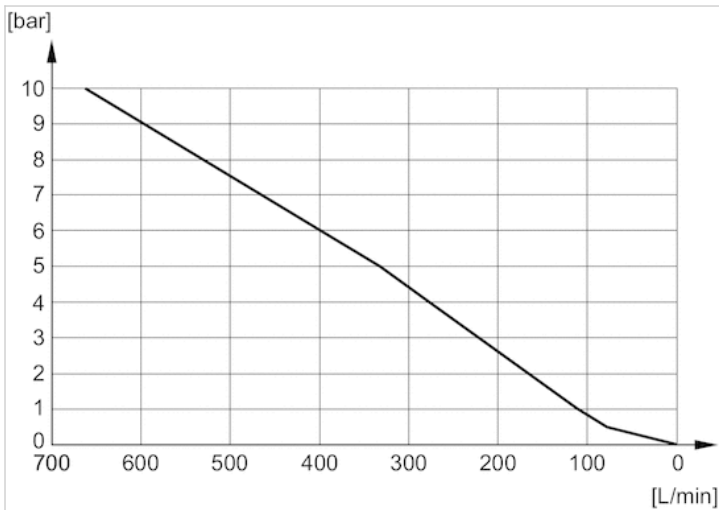


## Dimensions

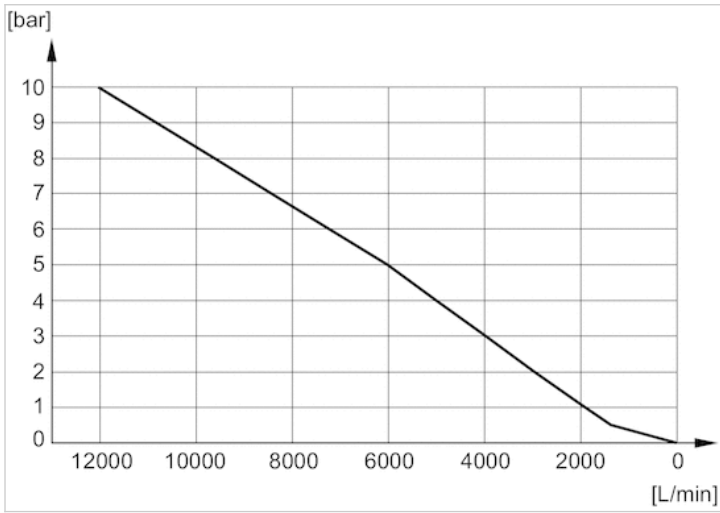
Part No.	Port G	SW	ø D	L1	L2
1827000003	G 1/2	27	14.5	44	12

## Diagrams

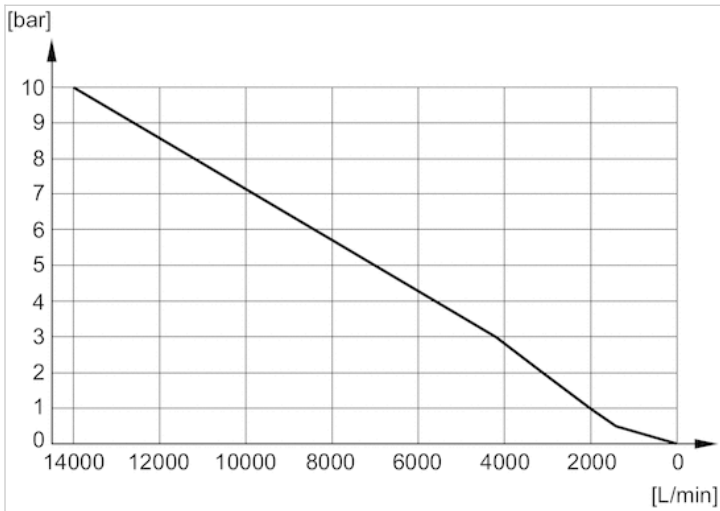
### Flow diagram 1827000006



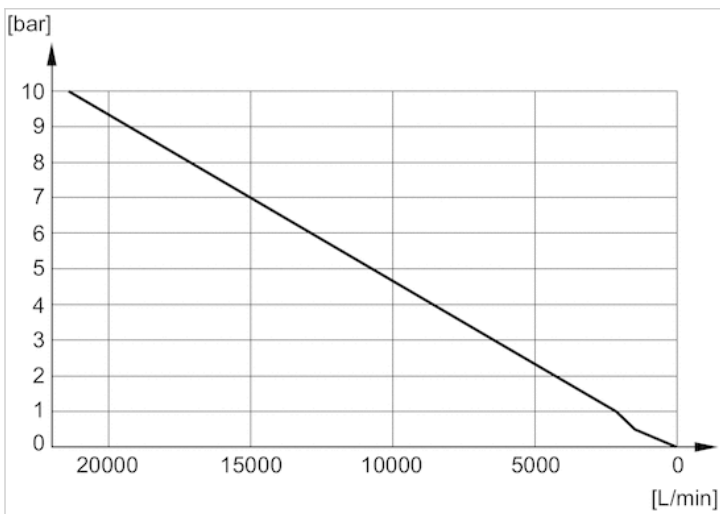
Flow diagram 1827000003



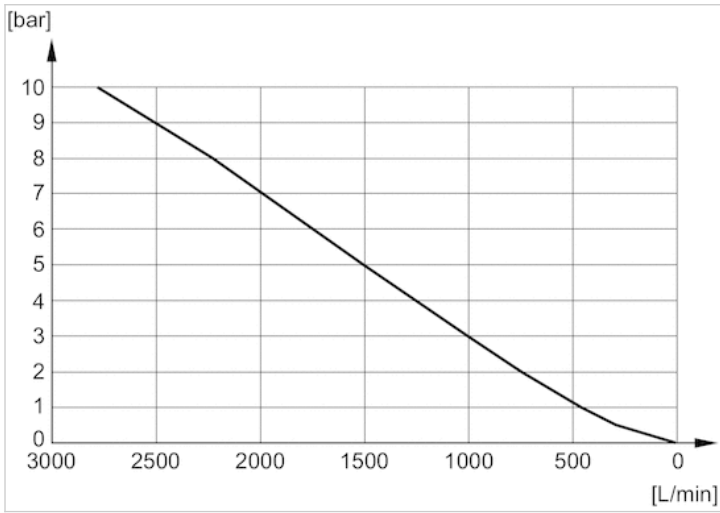
Flow diagram 1827000004



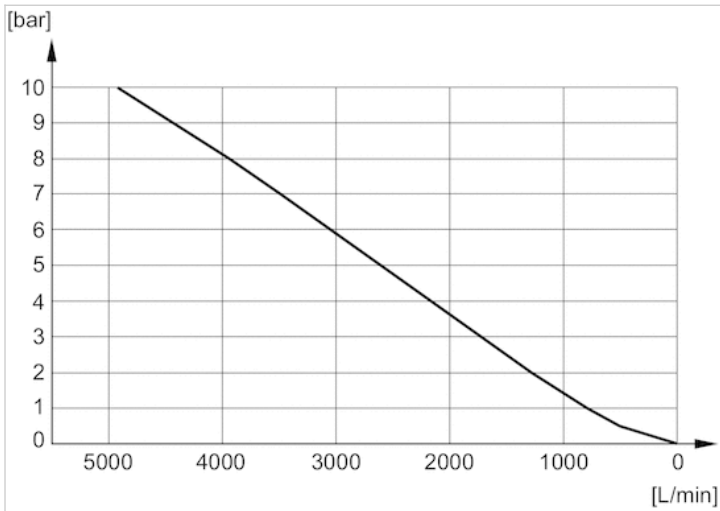
Flow diagram 1827000005



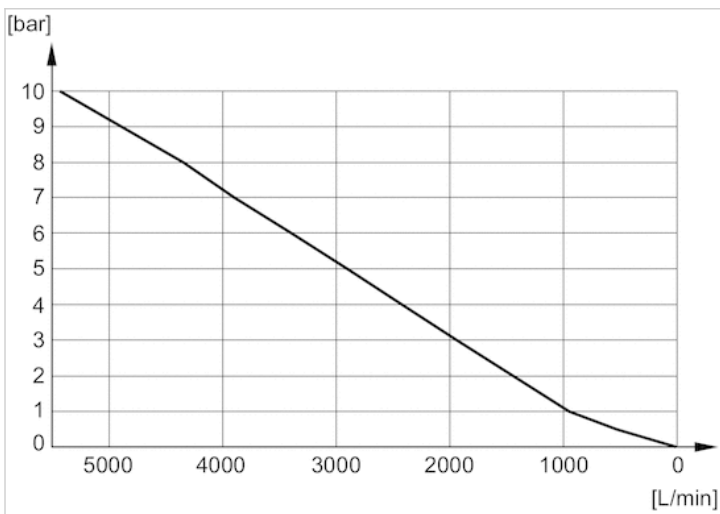
Flow diagram 5324001110



Flow diagram 5324001170

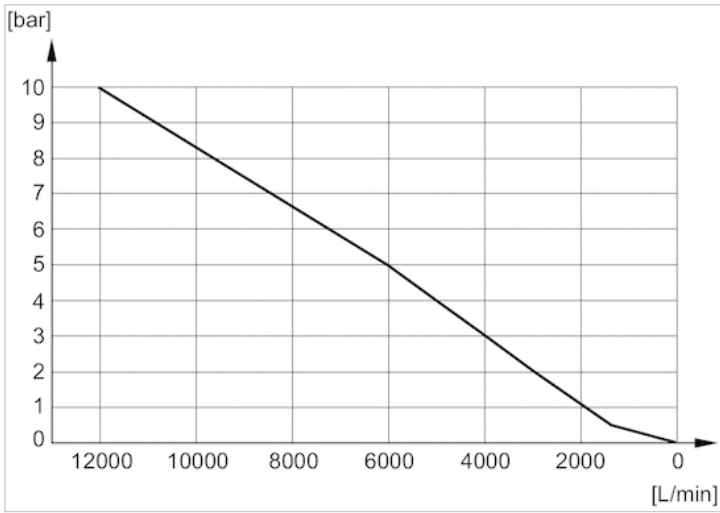


Flow diagram 5324001120

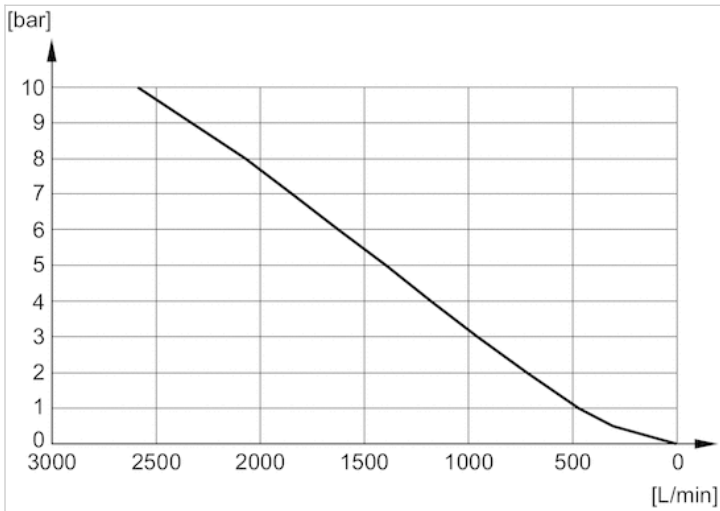




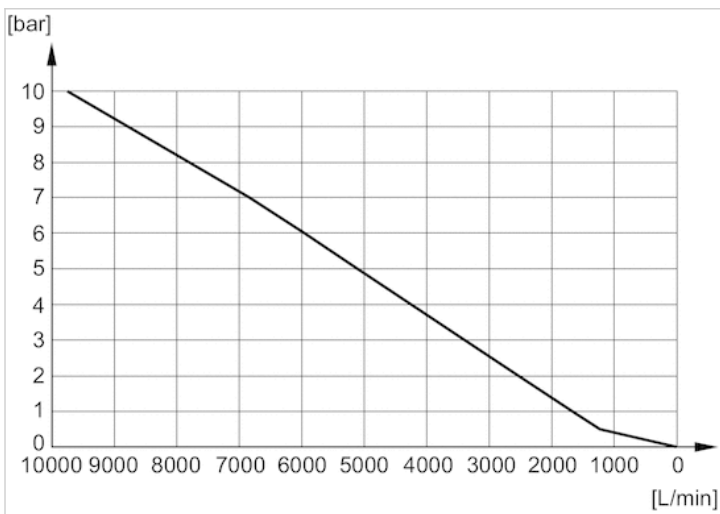
Flow diagram 5324001140



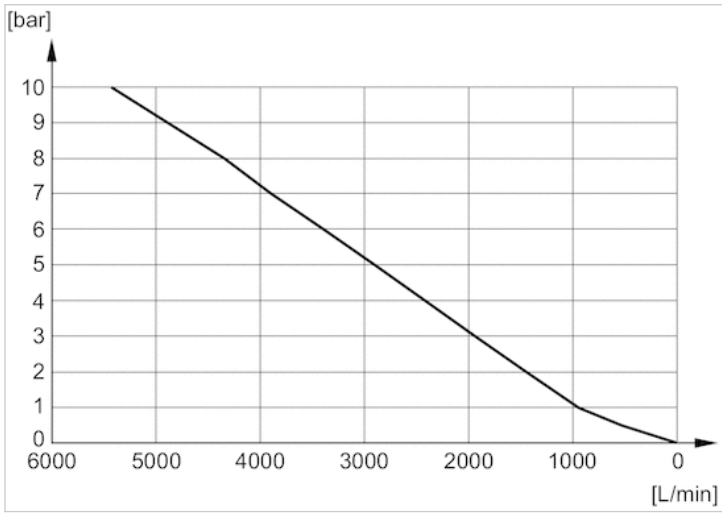
Flow diagram 1827000000



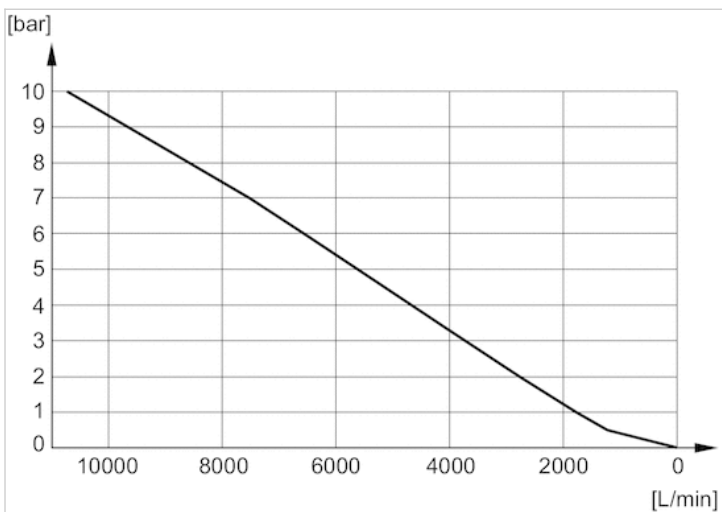
Flow diagram R412004817



Flow diagram 1827000001



Flow diagram 1827000002

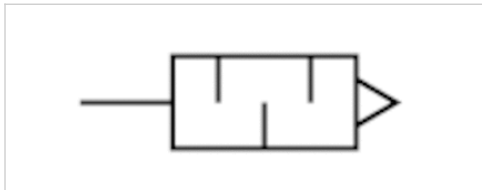


# Silencers, series SI1

- Stainless steel



Working pressure min./max.	0 ... 174 psi
Ambient temperature min./max.	-4 ... 302 °F
Medium	Compressed air
Sound pressure level	95 dB
Weight	0.106 lbs
Comment	Flow characteristic curves can be found under "Diagrams".



## Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
R412010084	G 1/2	1.92 Cv	1 piece

Weight per piece

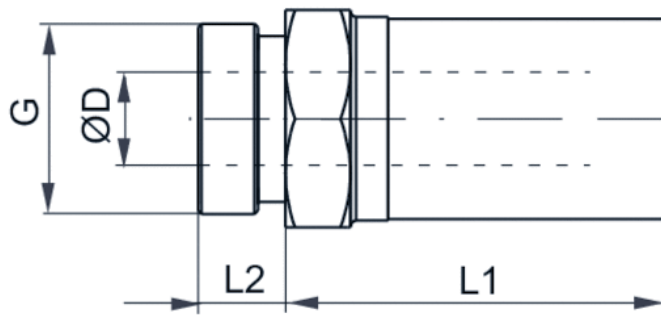
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

## Technical information

Material	
Silencers	Stainless steel
Thread	Stainless steel

## Dimensions

### Dimensions

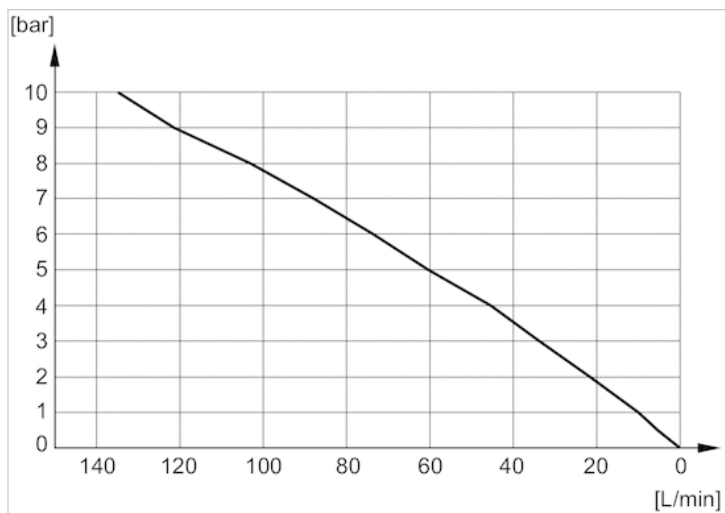


## Dimensions

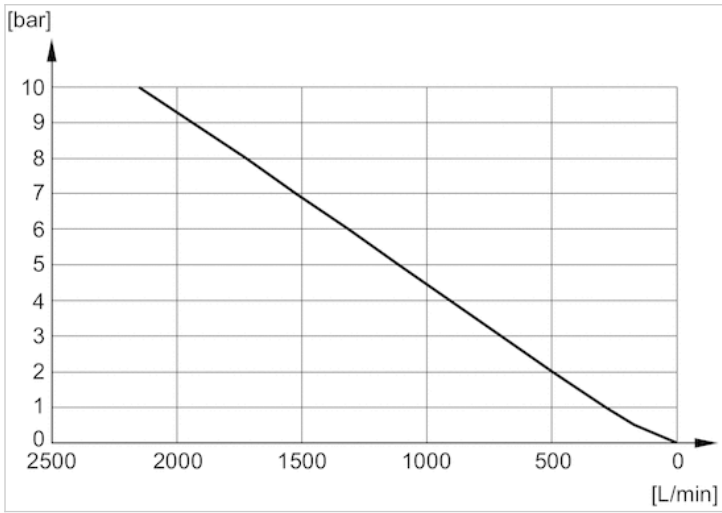
Part No.	Port G	SW	Ø D	L1	L2
R412010084	G 1/2	24	15.3	39.5	9.5

## Diagrams

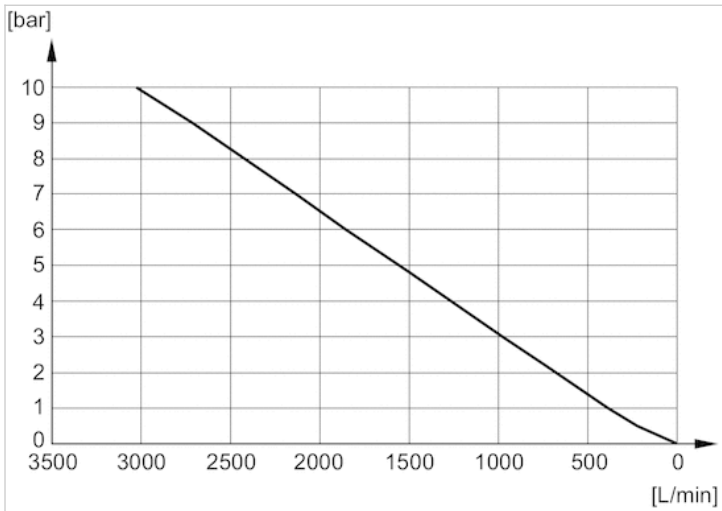
### Flow diagram R412010090



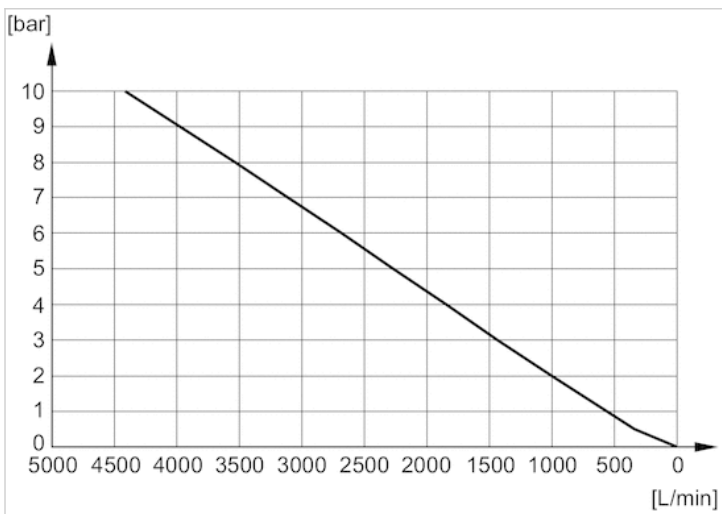
Flow diagram R412010081



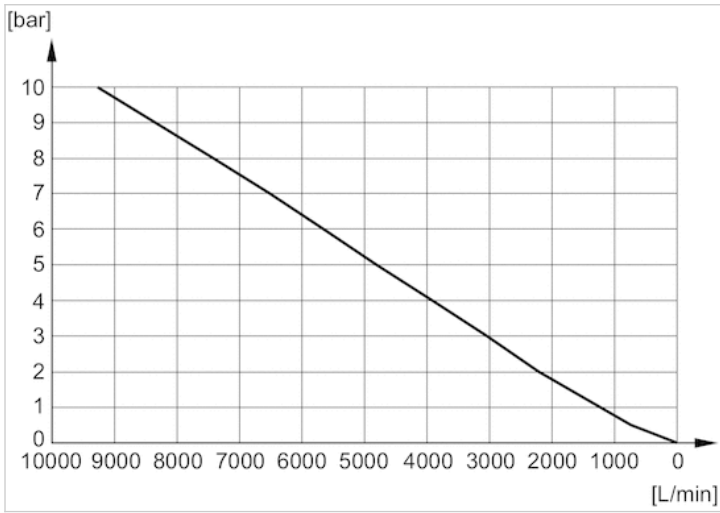
Flow diagram R412010082



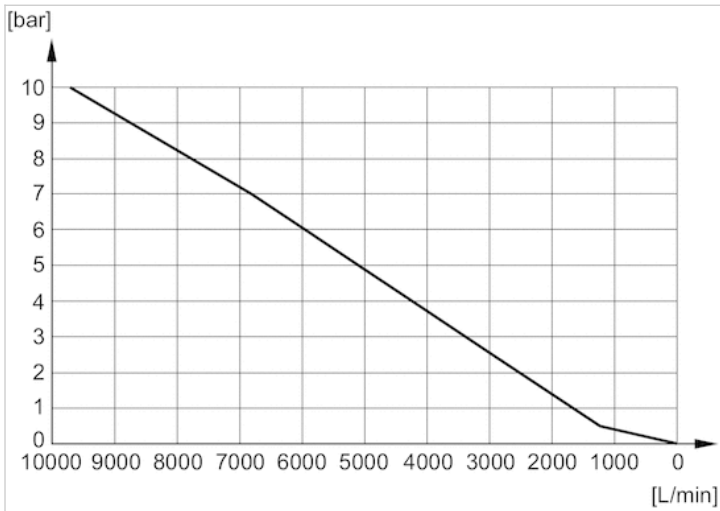
Flow diagram R412010083



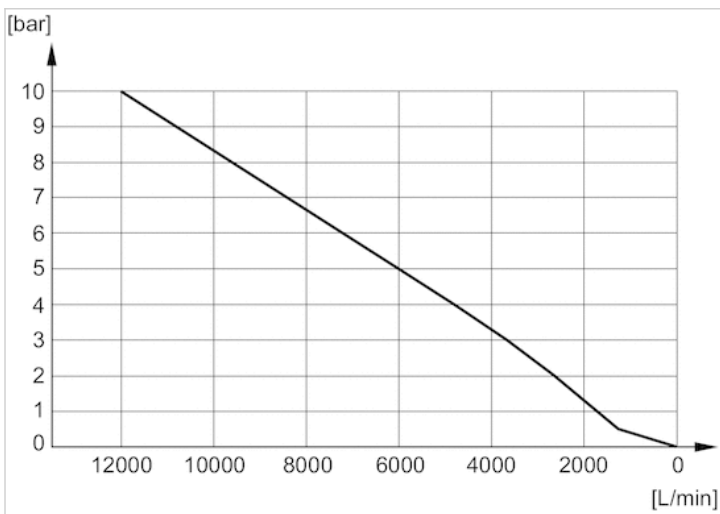
Flow diagram R412010084



Flow diagram R412010085



Flow diagram R412010086

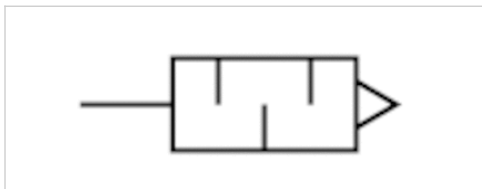


# Silencers, series SI1

- Sintered bronze



Working pressure min./max.	0 ... 145 psi
Ambient temperature min./max.	-13 ... 176 °F
Medium	Compressed air
Sound pressure level	85 dB
Weight	0.077 lbs
Comment	Flow characteristic curves can be found under "Diagrams".



## Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
1827000035	G 1/2	2 Cv	2 piece

Weight per piece

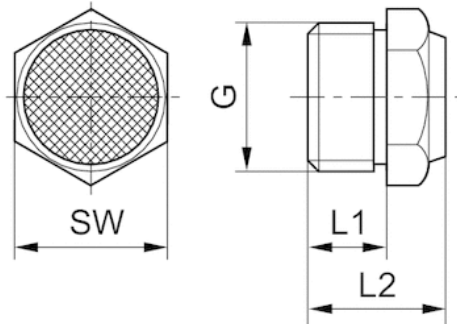
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

## Technical information

Material	
Silencers	Sintered bronze
Thread	Brass

## Dimensions

### Dimensions



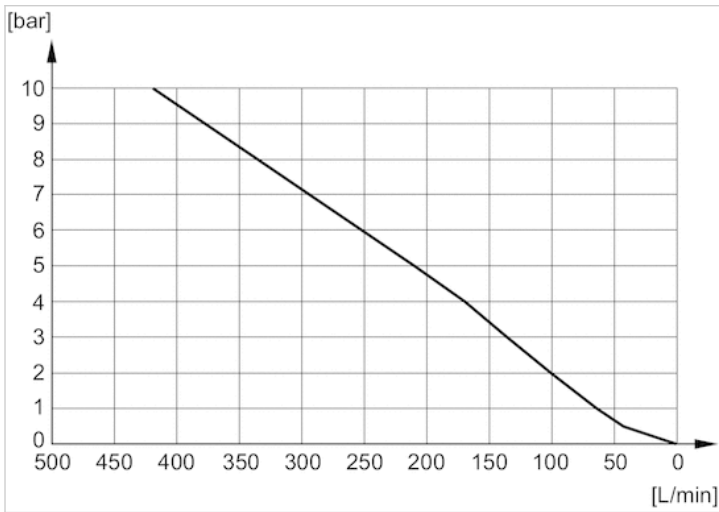
## Dimensions

Part No.	Port G	L1	L2	SW
1827000035	G 1/2	12	19.5	27

Sound pressure level measured at 6 bar at 1 m distance

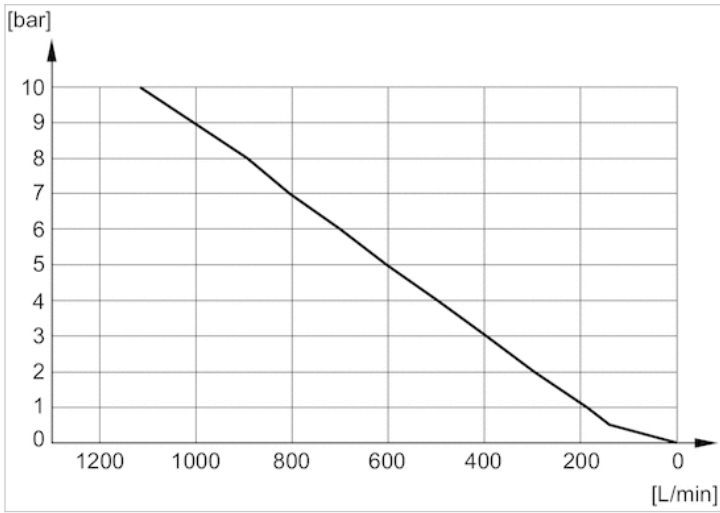
## Diagrams

### Flow diagram 1827000032

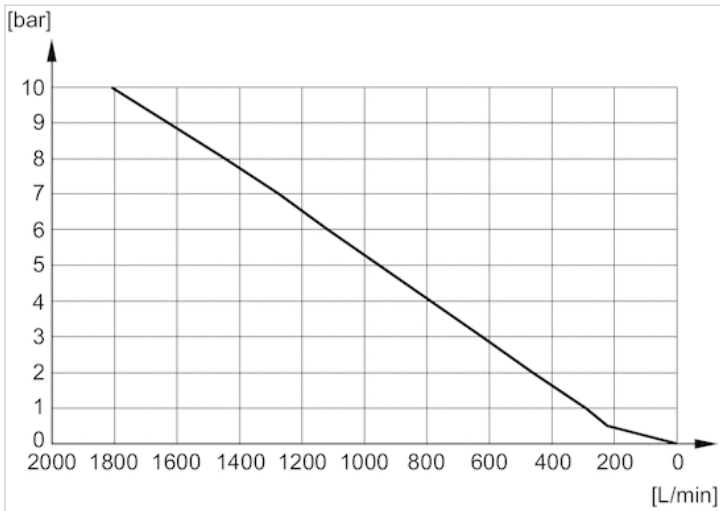




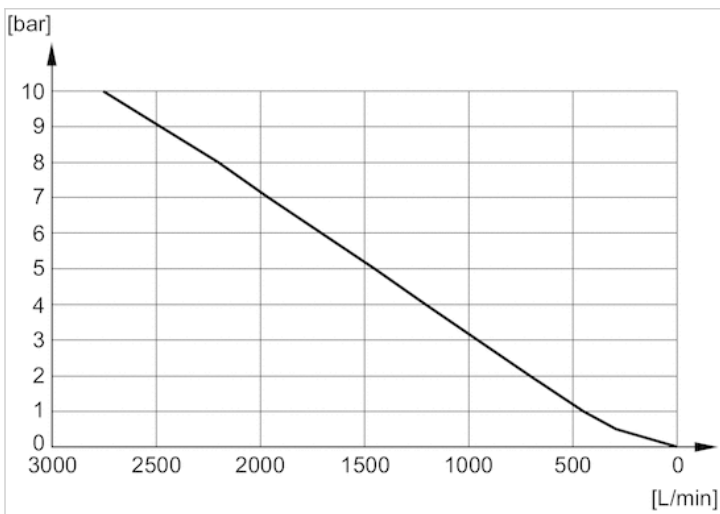
Flow diagram 1827000031



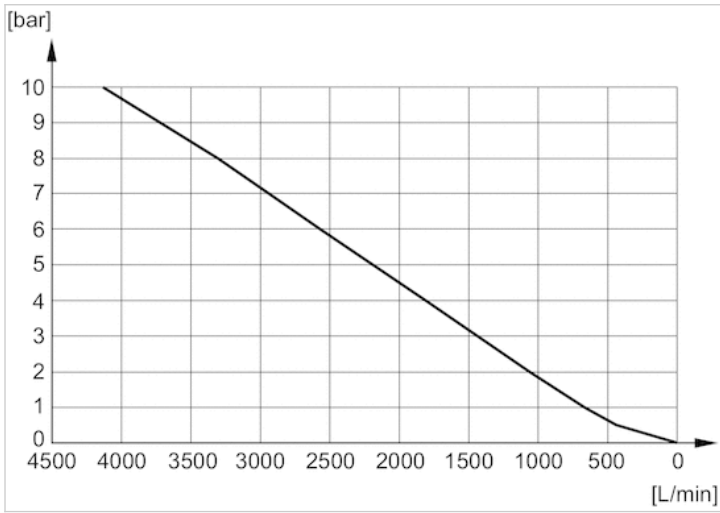
Flow diagram 1827000033



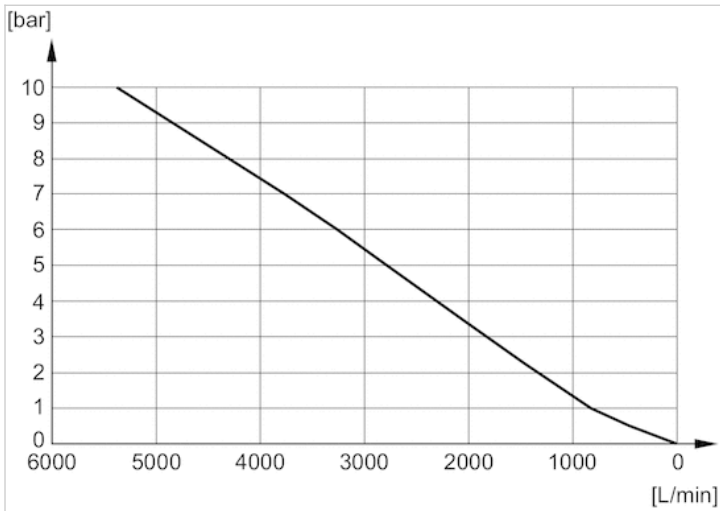
Flow diagram 1827000034



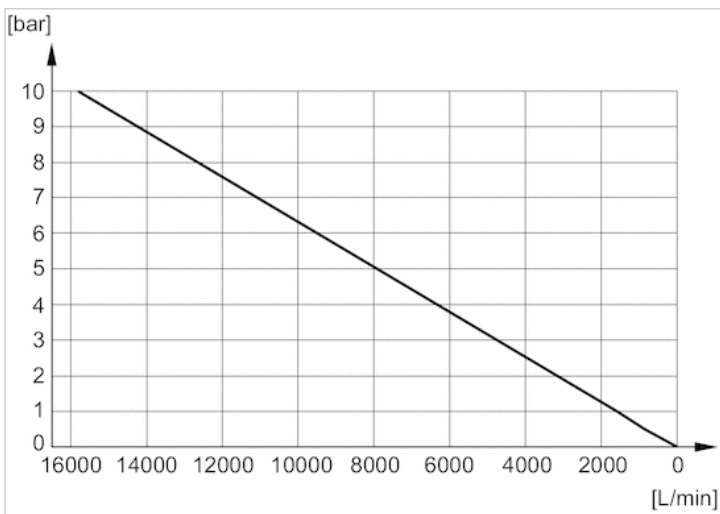
Flow diagram 1827000035



Flow diagram 8145003400



Flow diagram 8145001000

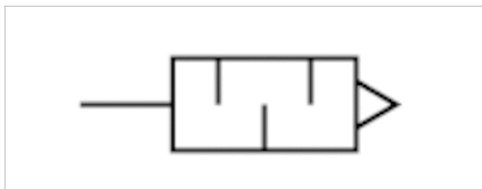


# Silencers, series SI1

- Polyethylene



Working pressure min./max.	0 ... 145 psi
Ambient temperature min./max.	-13 ... 176 °F
Medium	Compressed air
Sound pressure level	88 dB
Weight	0.029 lbs
Comment	Flow characteristic curves can be found under "Diagrams".



## Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
1827000022	G 1/2	7 Cv	1 piece

Weight per piece

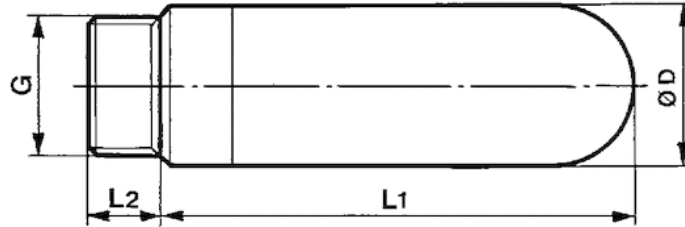
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

## Technical information

Material	
Silencers	Polyethylene
Thread	Polyethylene

## Dimensions

### Dimensions

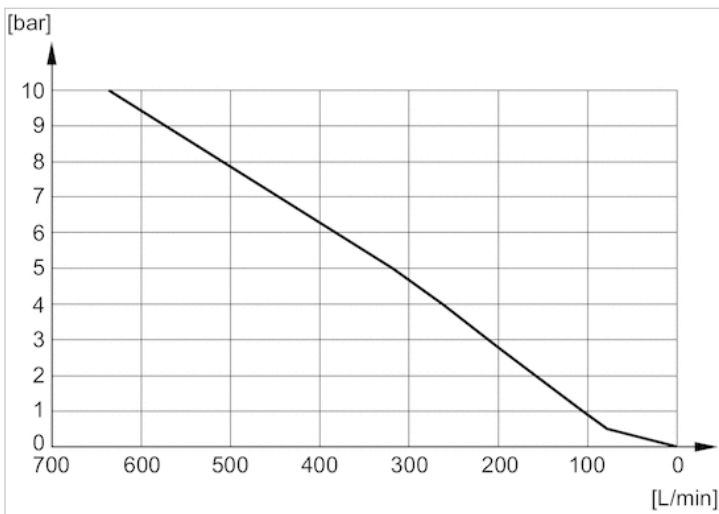


## Dimensions

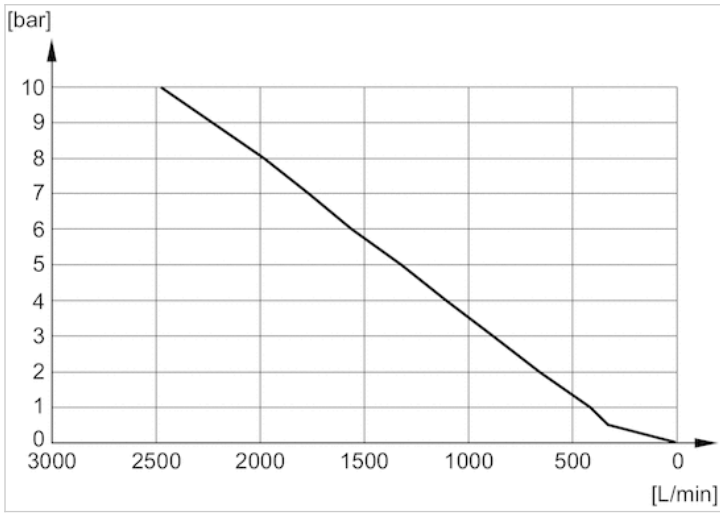
Part No.	Port G	Ø D	L1	L2
1827000022	G 1/2	23.3	66.5	11

## Diagrams

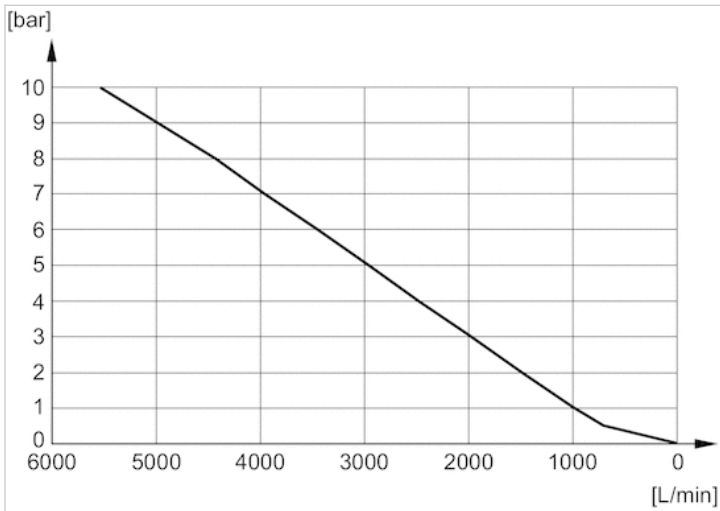
### Flow diagram 1827000018



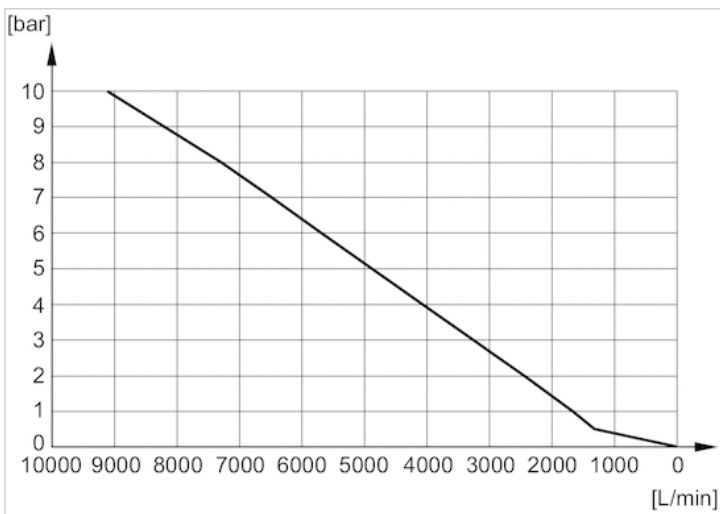
Flow diagram 1827000019



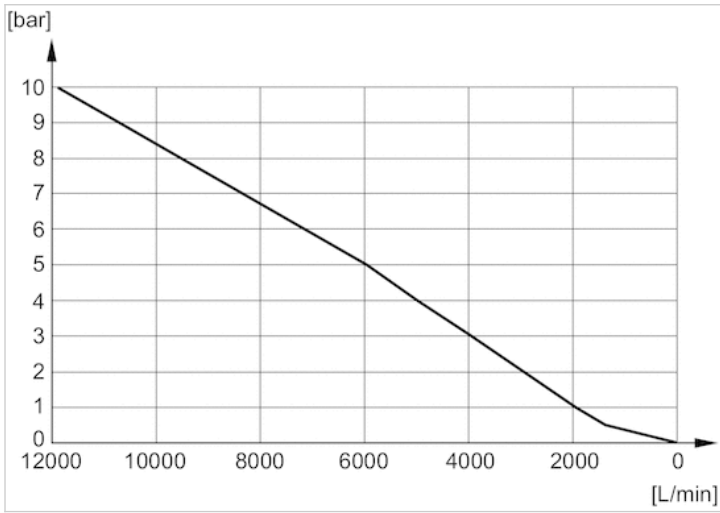
Flow diagram 1827000020



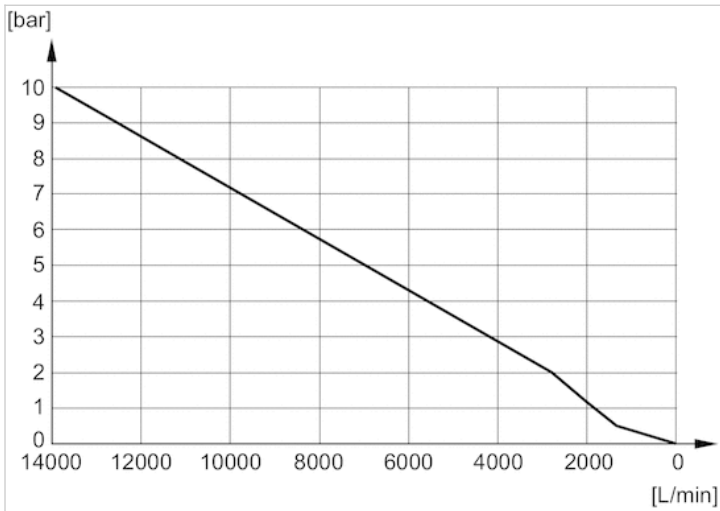
Flow diagram 1827000021



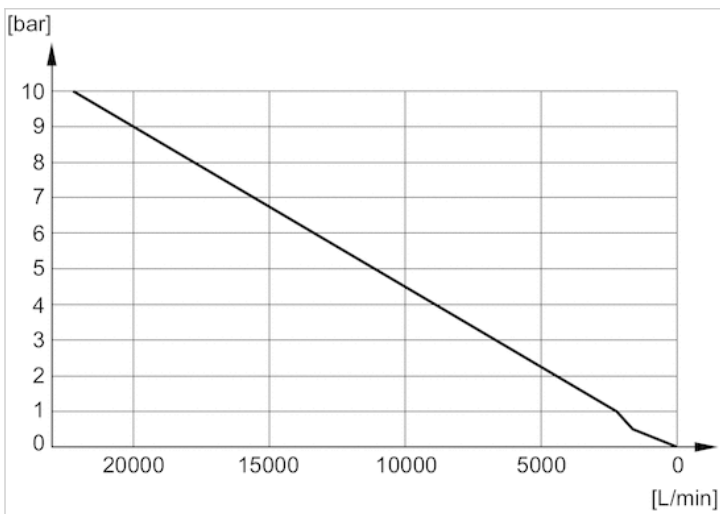
Flow diagram 1827000022



Flow diagram 1827000023



Flow diagram 1827000024



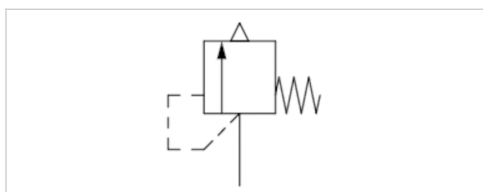
# Series RV1

- Qn 1►2 = 0.687-16.3 Cv
- thread-in
- External thread
- G 1/4, G 3/8, G 1/2
- Uncollected



Version  
 Certificates  
 Working pressure min./max.  
 Opening pressure of valve  
 Ambient temperature min./max.  
 Medium

Poppet valve  
 CE declaration of conformity  
 0 ... 290 psi  
 See table below  
 -4 ... 212 °F  
 Compressed air



## Technical data

Part No.	Port 1	Opening pressure of valve	Flow
			Qn 1►2
R412007521	G 1/4	0.8 bar	0.687 Cv
R412007522	G 1/4	1.5 bar	1.01 Cv
R412007523	G 1/4	2 bar	1.24 Cv
R412007524	G 1/4	3.5 bar	1.9 Cv
R412007525	G 1/4	4 bar	2.12 Cv
R412007526	G 1/4	4.8 bar	2.46 Cv
R412007527	G 1/4	6 bar	2.98 Cv
R412007528	G 1/4	8 bar	3.84 Cv
R412007529	G 1/4	10 bar	4.71 Cv
R412007530	G 1/4	11 bar	5.14 Cv
R412007531	G 1/4	15 bar	6.86 Cv
R412007532	G 1/4	16 bar	7.3 Cv
R412007533	G 3/8	2 bar	2.23 Cv
R412007534	G 3/8	3.7 bar	3.63 Cv
R412007535	G 3/8	4 bar	3.86 Cv
R412007721	G 3/8	5 bar	4.65 Cv
R412007536	G 3/8	6 bar	5.43 Cv
R412007537	G 3/8	6.8 bar	6.06 Cv
R412007538	G 3/8	8 bar	7.01 Cv
R412007539	G 3/8	10 bar	8.58 Cv

Part No.	Port 1	Opening pressure of valve	Flow
			Qn 1►2
R412007540	G 3/8	11 bar	9.37 Cv
R412007541	G 3/8	16 bar	13.3 Cv
R412007542	G 1/2	0.4 bar	1.13 Cv
R412007720	G 1/2	2.9 bar	3.67 Cv
R412007690	G 1/2	3.5 bar	4.25 Cv
R412007691	G 1/2	4 bar	4.73 Cv
R412007692	G 1/2	5 bar	5.7 Cv
R412007699	G 1/2	5.5 bar	6.24 Cv
R412007696	G 1/2	6 bar	6.66 Cv
R412007702	G 1/2	6.5 bar	7.22 Cv
R412007698	G 1/2	7 bar	7.62 Cv
R412007697	G 1/2	8 bar	8.59 Cv
R412007693	G 1/2	8.5 bar	9.16 Cv
R412007694	G 1/2	9 bar	9.55 Cv
R412007700	G 1/2	10 bar	10.51 Cv
R412007701	G 1/2	10.5 bar	11.11 Cv
R412007695	G 1/2	11 bar	11.48 Cv
R412007703	G 1/2	12 bar	12.44 Cv
R412007543	G 1/2	16 bar	16.3 Cv

## Technical information

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

## Technical information

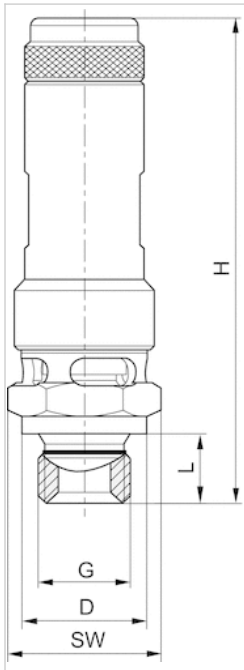
### Material

Housing	Brass
Seals	Fluorocaoutchouc



## Dimensions

### Dimensions



G = connection 1

## Dimensions

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

Part No.	Port G	Ø D	H	L	SW	T [Nm]	NW
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

T = maximum torque

NW = nominal width