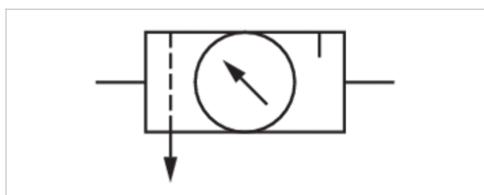


# Maintenance unit, 2-part, Series NL6-ACD

- G 3/4, G 1
- 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               | 13.72 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       | 4.23 fl.oz.                           |
| Filter element                | exchangeable                          |
| Condensate drain              | See table below                       |
| Lubricator reservoir volume   | 15.22 fl.oz.                          |
| Type of filling               | Manual oil filling                    |
| Max. Internal air consumption | 0 Cv                                  |
| Weight                        | See table below                       |

## Technical data

| Part No.   | Port  | Flow     | Condensate drain                       | Reservoir     |
|------------|-------|----------|----------------------------------------|---------------|
|            |       | Qn       |                                        |               |
| 0821300871 | G 3/4 | 13.72 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300872 | G 3/4 | 13.72 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300873 | G 3/4 | 13.72 Cv | semi-automatic, open without pressure  | Die cast zinc |
| 0821300874 | G 3/4 | 13.72 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300875 | G 3/4 | 13.72 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300876 | G 3/4 | 13.72 Cv | fully automatic, open without pressure | Die cast zinc |
| 0821300877 | G 1   | 13.72 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300878 | G 1   | 13.72 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300879 | G 1   | 13.72 Cv | semi-automatic, open without pressure  | Die cast zinc |
| 0821300880 | G 1   | 13.72 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300881 | G 1   | 13.72 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300882 | G 1   | 13.72 Cv | fully automatic, open without pressure | Die cast zinc |

| Part No.   | Protective guard | Weight   |
|------------|------------------|----------|
| 0821300871 | -                | 8.44 lbs |
| 0821300872 | Steel            | 8.66 lbs |
| 0821300873 | -                | 9.1 lbs  |

| Part No.   | Protective guard | Weight   |
|------------|------------------|----------|
| 0821300874 | -                | 8.51 lbs |
| 0821300875 | Steel            | 8.73 lbs |
| 0821300876 | -                | 9.17 lbs |
| 0821300877 | -                | 8.44 lbs |
| 0821300878 | Steel            | 8.66 lbs |
| 0821300879 | -                | 9.1 lbs  |
| 0821300880 | -                | 8.51 lbs |
| 0821300881 | Steel            | 8.73 lbs |
| 0821300882 | -                | 9.17 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

## 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.

Oil dosing at 1 Cv 1-2 drops

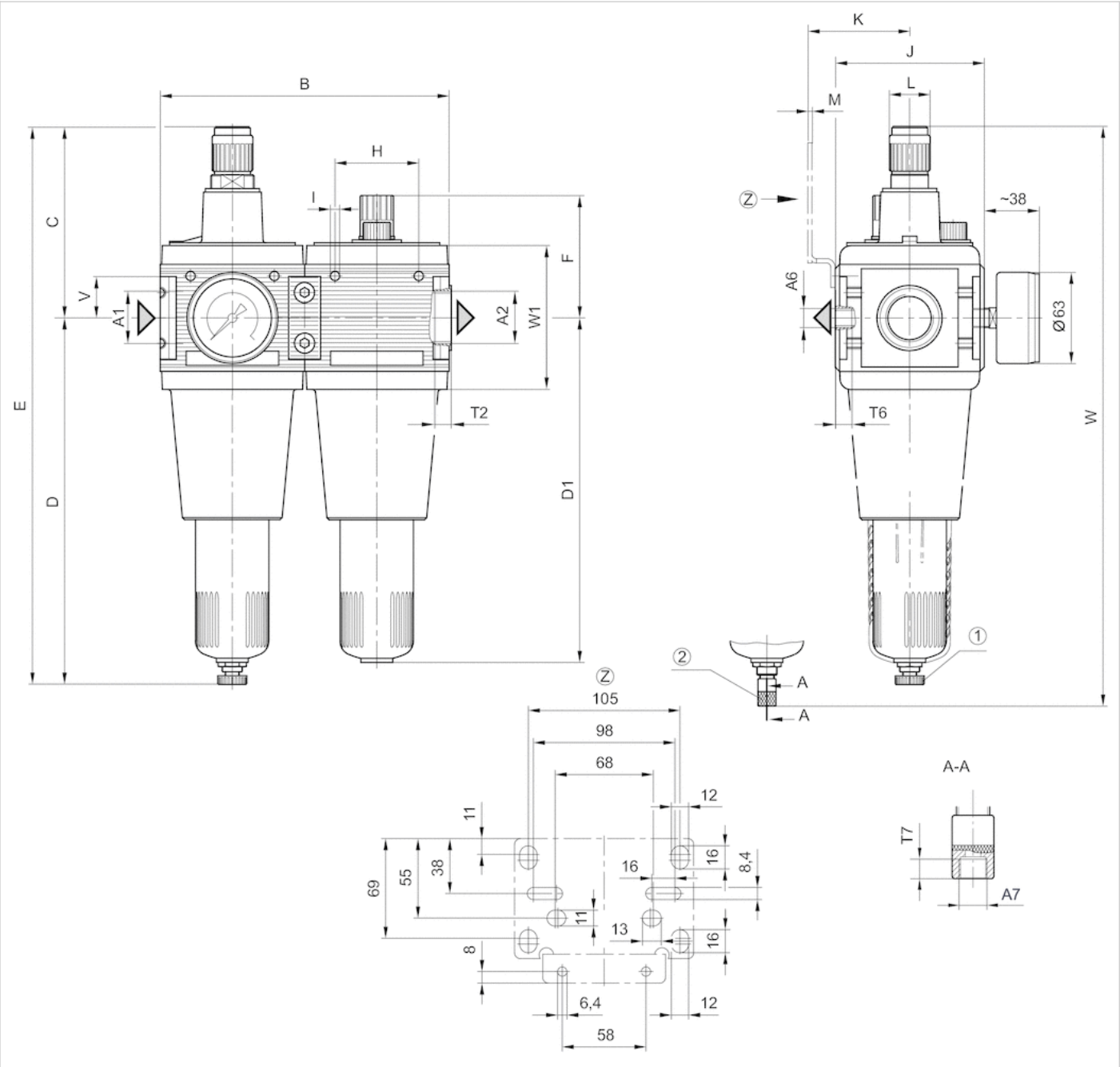
Compressed air class 7 : 7 : -

## Technical information

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

Dimensions

Dimensions



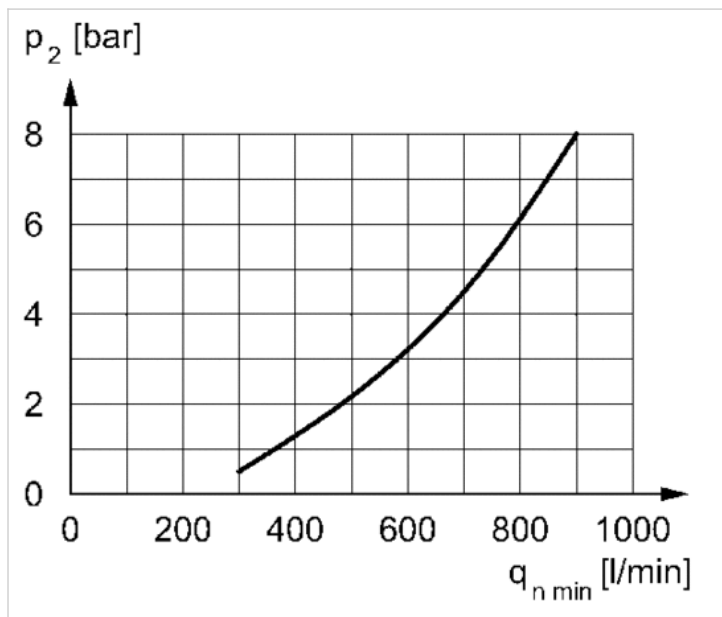
- A1 = input
- A2 = output
- A6 = output
- 1) Semi-automatic condensate drain
- 2) fully automatic condensate drain

Dimensions in mm

| A1    | A2    | A6    | A7    | B   | C   | D   | D1  | E   | F  | H  | I  | J   | K    | L  | M | T2 | T6 | T7  | V  | W   | W1    |
|-------|-------|-------|-------|-----|-----|-----|-----|-----|----|----|----|-----|------|----|---|----|----|-----|----|-----|-------|
| G 3/4 | G 3/4 | G 1/4 | G 1/8 | 200 | 132 | 253 | 236 | 385 | 84 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 8.5 | 29 | 403 | 101.5 |
| G 1   | G 1   | G 1/4 | G 1/8 | 200 | 132 | 253 | 236 | 385 | 84 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 8.5 | 29 | 403 | 101.5 |

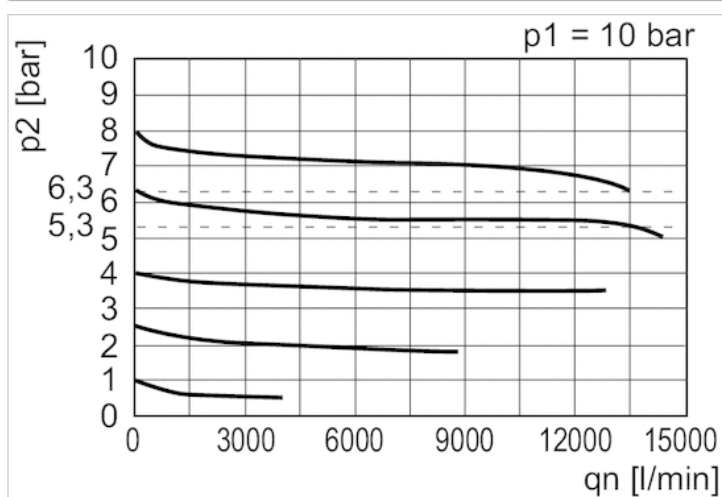
## Diagrams

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



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

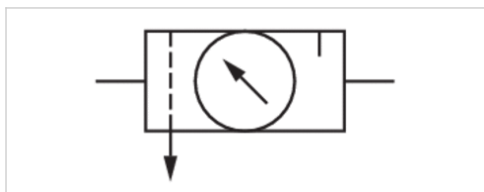
## Flow rate characteristic



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

# Maintenance unit, 3-part, Series NL6- ACT

- G 3/4, G 1
- 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               | 12.2 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       | 4.23 fl.oz.                            |
| Filter element                | exchangeable                           |
| Condensate drain              | See table below                        |
| Lubricator reservoir volume   | 15.22 fl.oz.                           |
| Type of filling               | Manual oil filling                     |
| Max. Internal air consumption | 0 Cv                                   |
| Weight                        | See table below                        |

## Technical data

| Part No.   | Port  | Flow    | Condensate drain                       | Reservoir     |
|------------|-------|---------|----------------------------------------|---------------|
|            |       | Qn      |                                        |               |
| 0821300886 | G 3/4 | 12.2 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300887 | G 3/4 | 12.2 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300888 | G 3/4 | 12.2 Cv | semi-automatic, open without pressure  | Die cast zinc |
| 0821300889 | G 3/4 | 12.2 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300890 | G 3/4 | 12.2 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300891 | G 3/4 | 12.2 Cv | fully automatic, open without pressure | Die cast zinc |
| 0821300892 | G 1   | 12.2 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300893 | G 1   | 12.2 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300894 | G 1   | 12.2 Cv | semi-automatic, open without pressure  | Die cast zinc |
| 0821300895 | G 1   | 12.2 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300896 | G 1   | 12.2 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300897 | G 1   | 12.2 Cv | fully automatic, open without pressure | Die cast zinc |

| Part No.   | Protective guard | Weight    |
|------------|------------------|-----------|
| 0821300886 | -                | 11.46 lbs |
| 0821300887 | Steel            | 11.68 lbs |
| 0821300888 | -                | 12.13 lbs |

| Part No.   | Protective guard | Weight    |
|------------|------------------|-----------|
| 0821300889 | -                | 11.53 lbs |
| 0821300890 | Steel            | 11.75 lbs |
| 0821300891 | -                | 12.19 lbs |
| 0821300892 | -                | 11.46 lbs |
| 0821300893 | Steel            | 8.66 lbs  |
| 0821300894 | -                | 12.13 lbs |
| 0821300895 | -                | 11.53 lbs |
| 0821300896 | Steel            | 11.75 lbs |
| 0821300897 | -                | 12.19 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

## 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.

Oil dosing at 1 Cv 1-2 drops

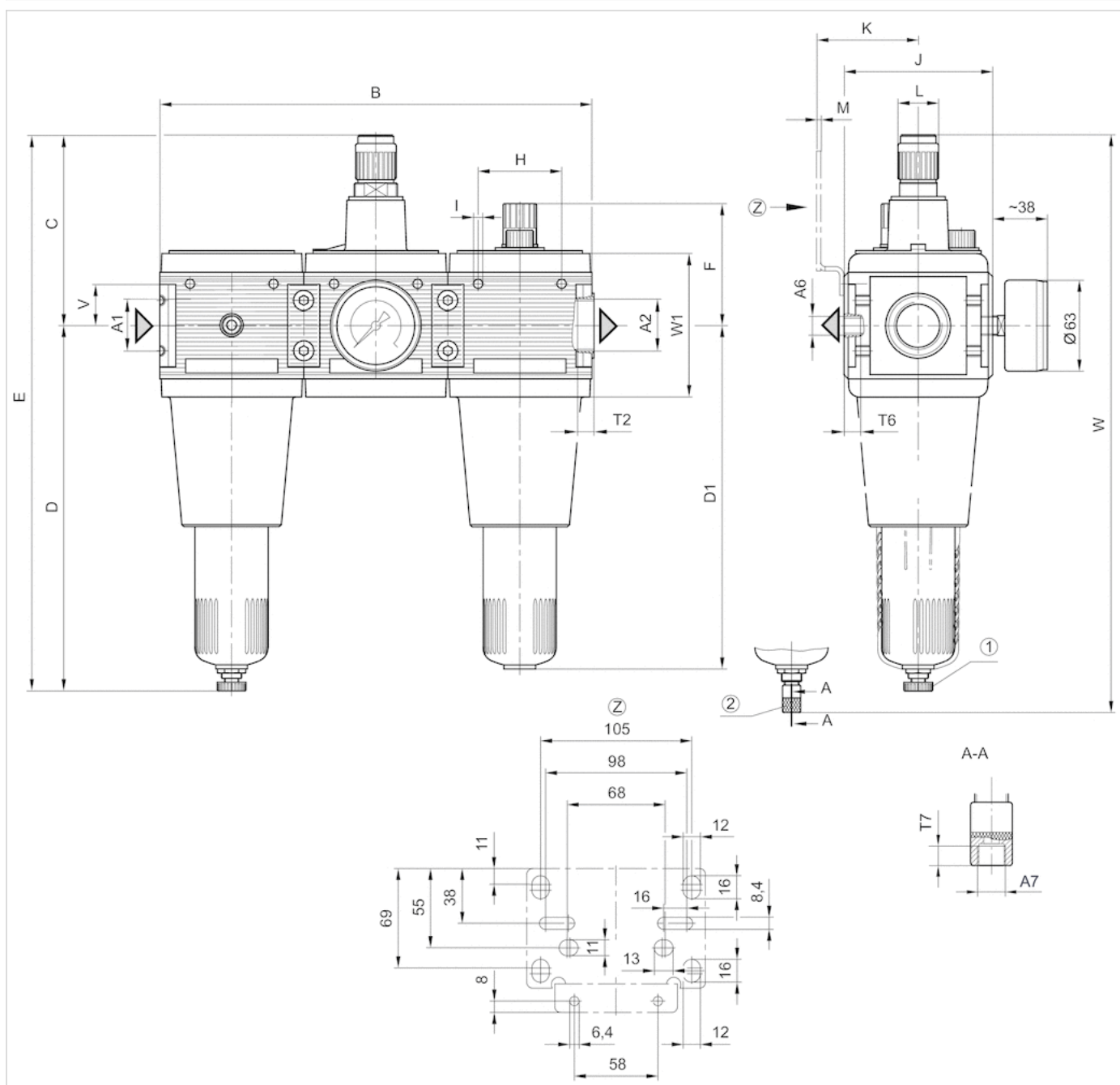
Compressed air class 7 : 7 : -

## Technical information

| Material         |                                 |
|------------------|---------------------------------|
| Housing          | Die-cast aluminum               |
| 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

A6 = output

A7 = condensate drain

1) Semi-automatic condensate drain

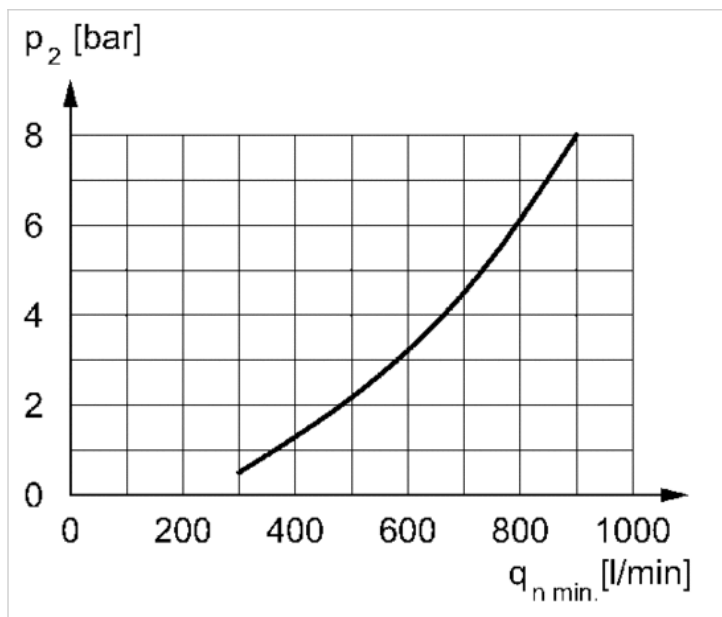
2) fully automatic condensate drain

### Dimensions in mm

| A1    | A2    | A6    | A7    | B   | C   | D   | D1  | E   | F  | H  | I  | J   | K    | L  | M | T2 | T6 | T7  | V  | W   | W1    |
|-------|-------|-------|-------|-----|-----|-----|-----|-----|----|----|----|-----|------|----|---|----|----|-----|----|-----|-------|
| G 3/4 | G 3/4 | G 1/4 | G 1/8 | 300 | 132 | 253 | 236 | 385 | 84 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 8.5 | 29 | 403 | 101.5 |
| G 1   | G 1   | G 1/4 | G 1/8 | 300 | 132 | 253 | 236 | 385 | 84 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 8.5 | 29 | 403 | 101.5 |

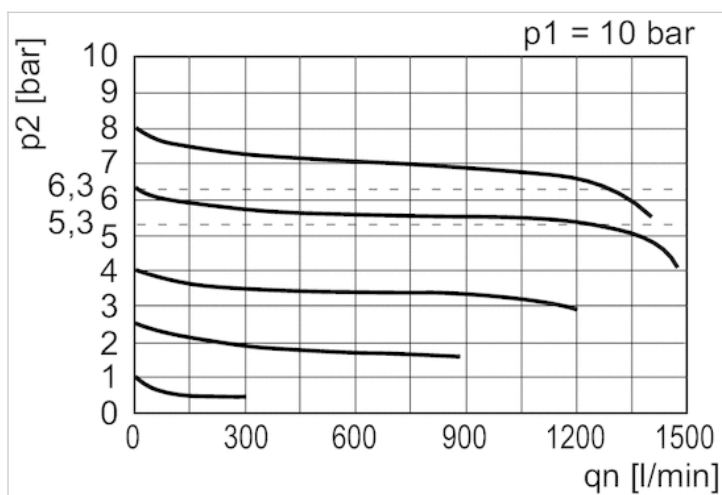
## Diagrams

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



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

## Flow rate characteristic



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

# Pressure regulator, Series NL6-RGS

- G 3/4, G 1
- Qn = 15.24 Cv
- Standard pressure regulator
- Activation Mechanical
- suitable for ATEX



|                                 |                                                                 |
|---------------------------------|-----------------------------------------------------------------|
| Parts                           | Pressure regulator                                              |
| Mounting orientation            | Any                                                             |
| Certificates                    | suitable for ATEX                                               |
| Working pressure min./max.      | 8 ... 290 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.      | 8 ... 145 psi                                                   |
| Pressure supply                 | single                                                          |
| Activation                      | Mechanical                                                      |
| Internal air consumption q,max. | 0 Cv                                                            |
| Weight                          | See table below                                                 |

## Technical data

| Part No.   |                                                                                     |                                                                                     | Port  | Flow     | Pressure gauge      | Weight   |    |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|----------|---------------------|----------|----|
|            |                                                                                     |                                                                                     |       | Qn       |                     |          |    |
| 0821302801 |  | —                                                                                   | G 3/4 | 15.24 Cv | -                   | 3.22 lbs | 1) |
| 0821302803 |  |  | G 3/4 | 15.24 Cv | with pressure gauge | 3.43 lbs | 2) |
| 0821302802 |  | —                                                                                   | G 1   | 15.24 Cv | -                   | 3.22 lbs | 1) |
| 0821302804 |  |  | G 1   | 15.24 Cv | with pressure gauge | 3.43 lbs | 2) |

- Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi
- 1) Order pressure gauge separately, Suitable for use in Ex zones 1, 2, 21, 22
- 2) Pressure gauge enclosed 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 .

Mounting: mounting bracket 1821336017 / block assembly kit 1827009593

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

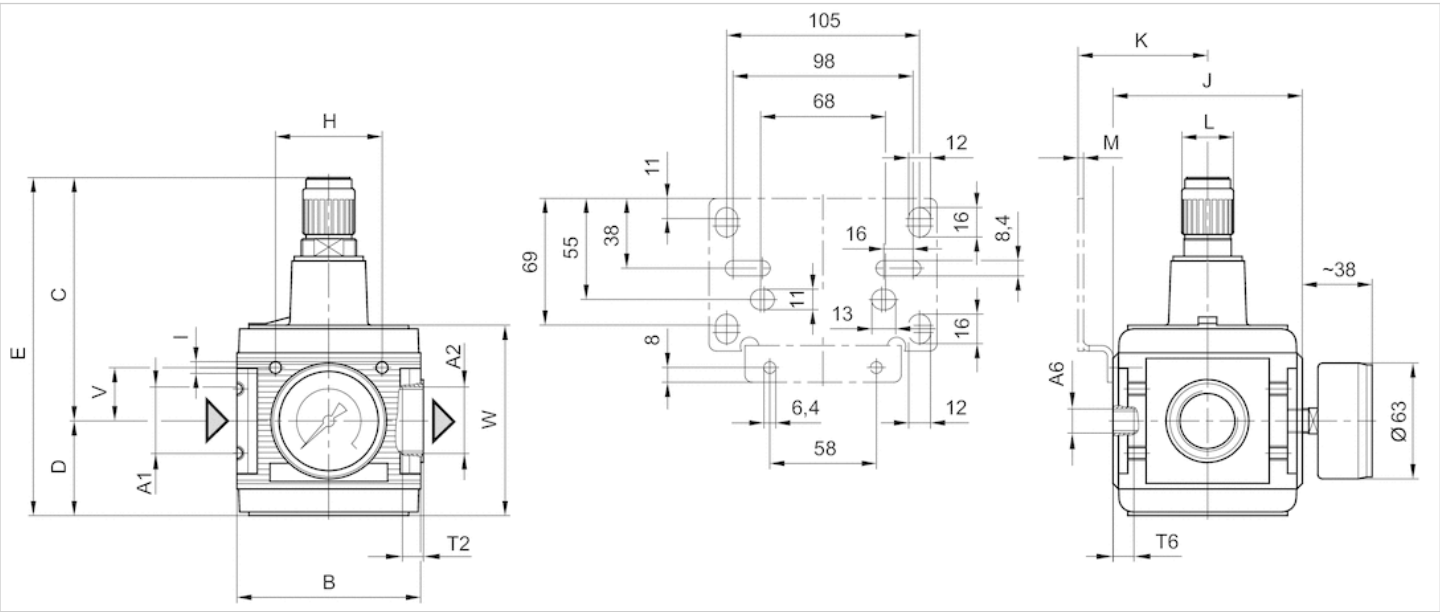
Technical information

Material

|             |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |
| Seals       | Acrylonitrile butadiene rubber  |

Dimensions

Dimensions



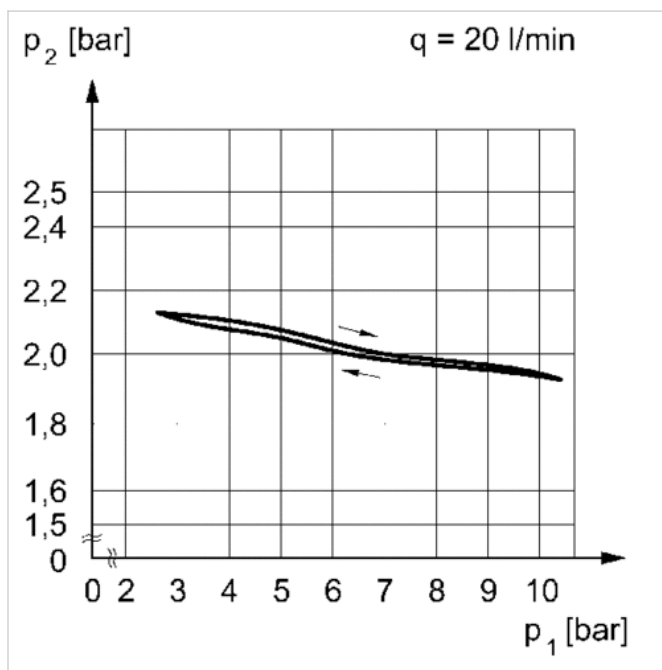
A1 = input  
 A2 = output  
 A6 = output

Dimensions in mm

| A1    | A2    | A6    | B   | C   | D    | E     | H  | I  | J   | K    | L  | M | T2 | T6 | V  | W     |
|-------|-------|-------|-----|-----|------|-------|----|----|-----|------|----|---|----|----|----|-------|
| G 3/4 | G 3/4 | G 1/4 | 100 | 132 | 51.5 | 183.5 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 29 | 103.5 |
| G 1   | G 1   | G 1/4 | 100 | 132 | 51.5 | 183.5 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 29 | 103.5 |

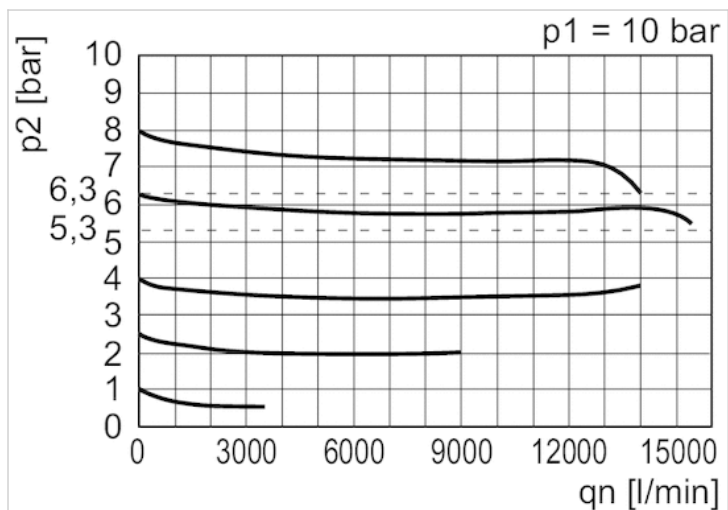
## Diagrams

### Pressure characteristics curve



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

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



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

# Pressure regulator, Series NL6-RGS

- G 3/4, G 1
- Qn = 15.24 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 ... 290 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.      | 8 ... 145 psi                                                   |
| Lock type                       | with key                                                        |
| Pressure supply                 | single                                                          |
| Activation                      | Mechanical                                                      |
| Internal air consumption q,max. | 0 Cv                                                            |
| Weight                          | See table below                                                 |

## Technical data

| Part No.   |                                                                                     |                                                                                     | Port  | Flow     | Pressure gauge      | Weight   |    |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|----------|---------------------|----------|----|
|            |                                                                                     |                                                                                     |       | Qn       |                     |          |    |
| 0821302805 |  | —                                                                                   | G 3/4 | 15.24 Cv | -                   | 3.46 lbs | 1) |
| 0821302807 |  |  | G 3/4 | 15.24 Cv | with pressure gauge | 3.67 lbs | 2) |
| 0821302806 |  | —                                                                                   | G 1   | 15.24 Cv | -                   | 3.46 lbs | 1) |
| 0821302808 |  |  | G 1   | 15.24 Cv | with pressure gauge | 3.62 lbs | 2) |

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

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

2) Pressure gauge enclosed 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

Mounting: mounting bracket 1821336017 / block assembly kit 1827009593

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).

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)

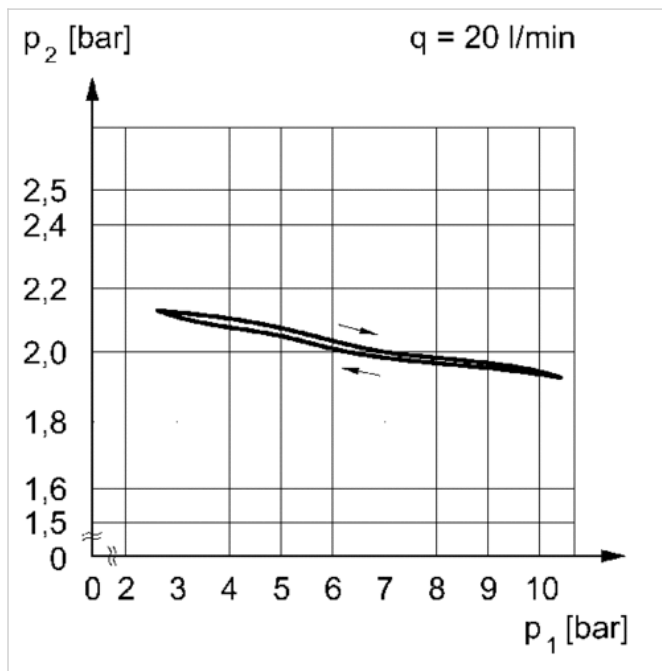
With rear exhaust (> 43.5 psi )

Recommended pre-filtering 5 μm



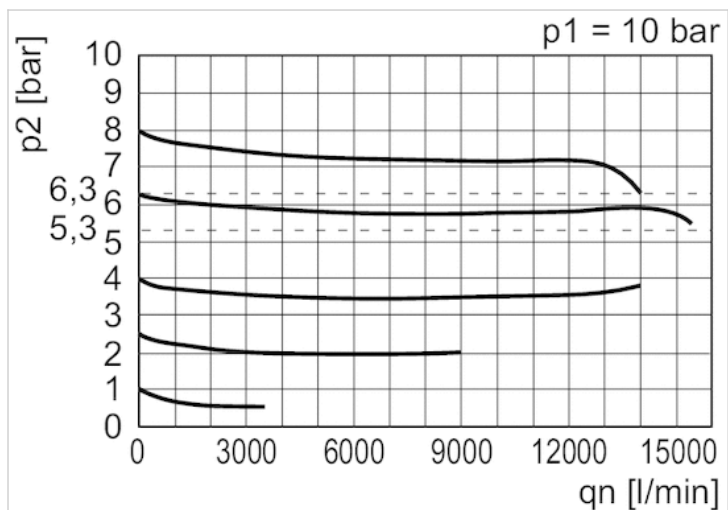
## Diagrams

### Pressure characteristics curve



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

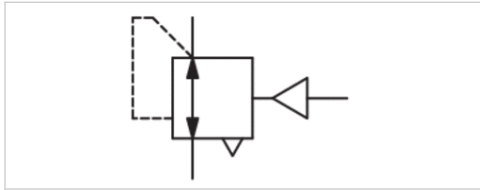
### Flow rate characteristic (secondary range $p_2$ : 0.5 - 10 bar)



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

# Pressure regulator, Series NL6-RGS

- G 3/4, G 1
- $Q_n = 15.24 \text{ Cv}$
- Standard pressure regulator
- Activation Pneumatically
- suitable for ATEX



|                               |                                                                                            |
|-------------------------------|--------------------------------------------------------------------------------------------|
| Parts                         | Pressure regulator                                                                         |
| Mounting orientation          | Any                                                                                        |
| Certificates                  | suitable for ATEX                                                                          |
| Working pressure min./max.    | 8 ... 290 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                        | 2.97 lbs                                                                                   |

## Technical data

| Part No.   | Port  | Flow     |
|------------|-------|----------|
|            |       | $Q_n$    |
| 0821302809 | G 3/4 | 15.24 Cv |
| 0821302810 | G 1   | 15.24 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

Mounting: mounting bracket 1821336017 / block assembly kit 1827009593

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).

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  $\mu\text{m}$

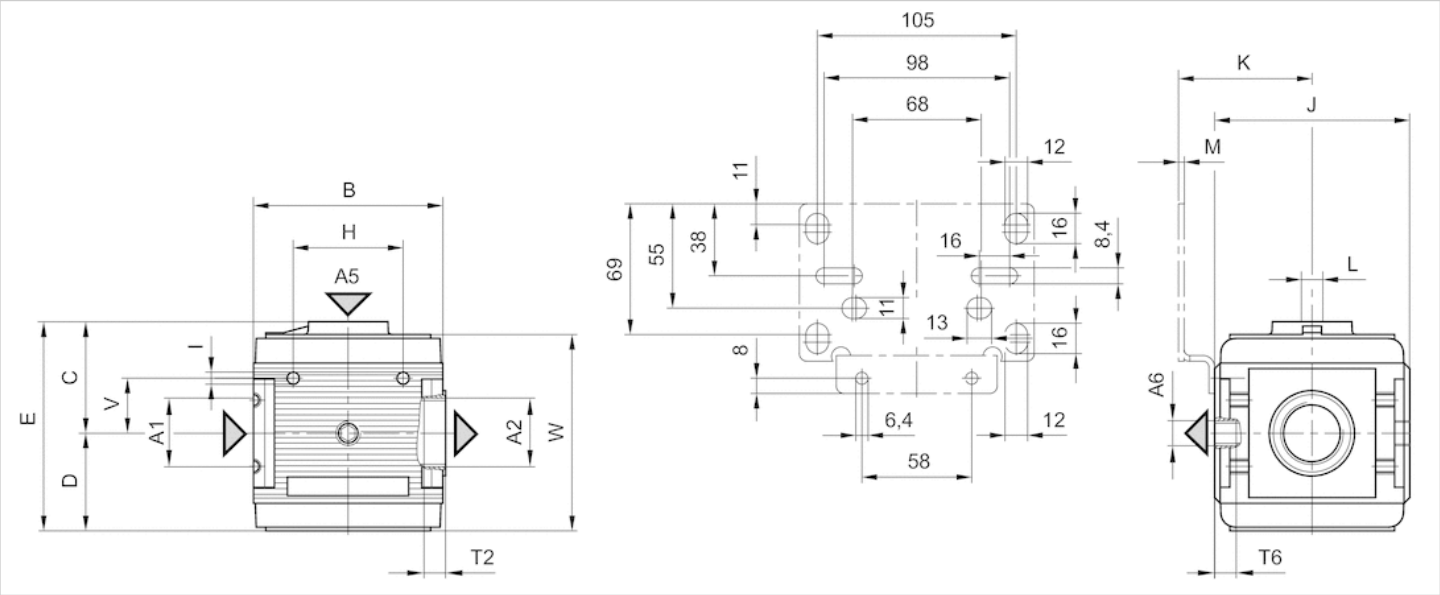
Technical information

Material

|             |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |
| Seals       | Acrylonitrile butadiene rubber  |

Dimensions

Dimensions



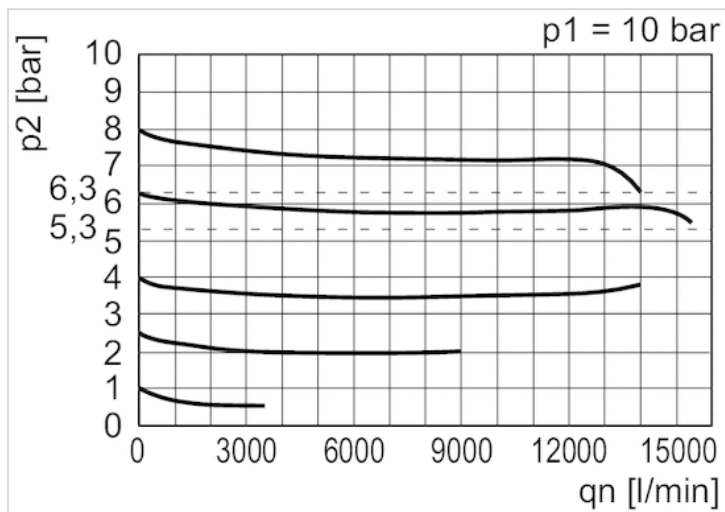
- A1 = input
- A2 = output
- A5 = control pressure connection
- A6 = ventilation port

Dimensions in mm

| A1    | A2    | A5    | A6    | B   | C  | D    | E     | H  | I  | J   | K    | L     | M | N | T2  | T6 | V  | W     |
|-------|-------|-------|-------|-----|----|------|-------|----|----|-----|------|-------|---|---|-----|----|----|-------|
| G 3/4 | G 3/4 | G 1/8 | G 1/4 | 100 | 61 | 51.5 | 112.5 | 58 | M6 | 103 | 70.5 | G 1/4 | 3 | 7 | 9.5 | 7  | 29 | 103.5 |
| G 1   | G 1   | G 1/8 | G 1/4 | 100 | 61 | 51.5 | 112.5 | 58 | M6 | 103 | 70.5 | G 1/4 | 3 | 7 | 18  | 7  | 29 | 103.5 |

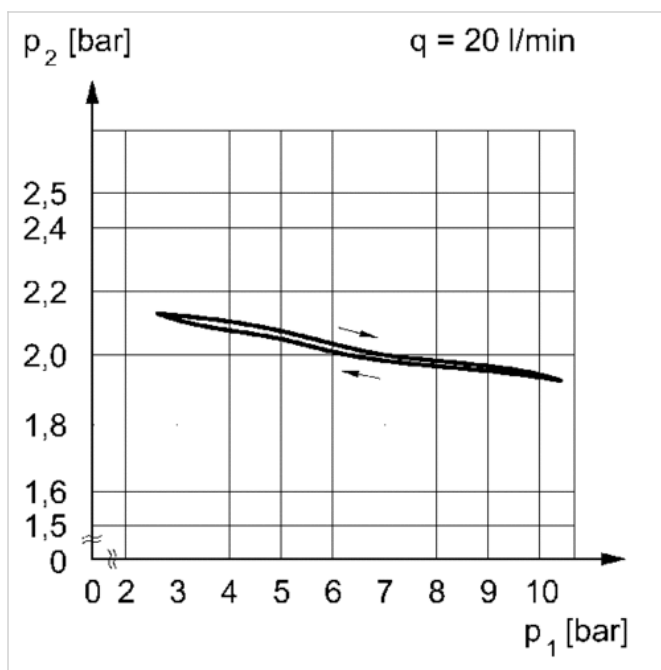
## Diagrams

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



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

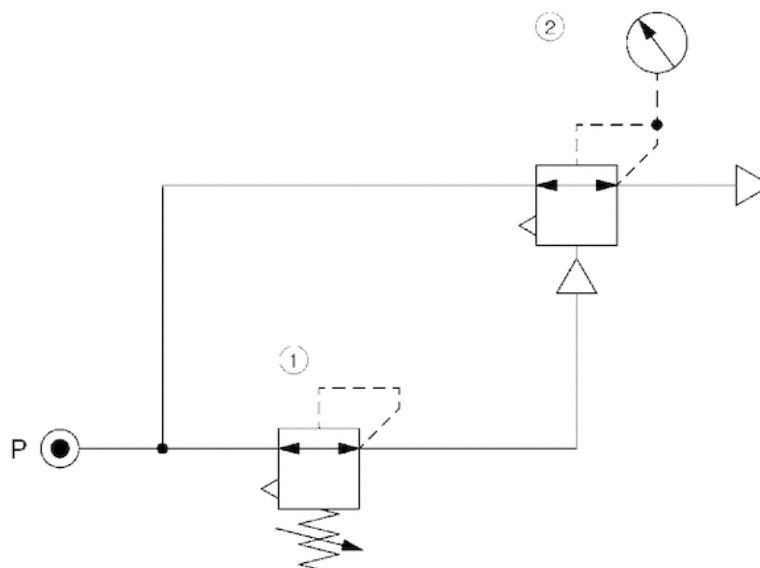
### Pressure characteristics curve



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

## Circuit diagram

### Application example



1) precision pressure regulator

2) pressure regulator valve, pneumatically operated

# Filter pressure regulator, Series NL6-FRE

- G 1
- 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               | 15.24 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       | 4.23 fl.oz.                          |
| Filter element                | exchangeable                         |
| Condensate drain              | See table below                      |
| Max. Internal air consumption | 0 Cv                                 |
| Weight                        | See table below                      |

## Technical data

| Part No.   | Port | Flow     | Condensate drain                       | Reservoir     |
|------------|------|----------|----------------------------------------|---------------|
|            |      | Qn       |                                        |               |
| 0821300132 | G 1  | 15.24 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300864 | G 1  | 15.24 Cv | fully automatic, open without pressure | Die cast zinc |

| Part No.   | Protective guard | Weight   |
|------------|------------------|----------|
| 0821300132 | Steel            | 4.96 lbs |
| 0821300864 | -                | 5.47 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, 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 .

Mounting: mounting bracket 1821336017 / block assembly kit 1827009593

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.

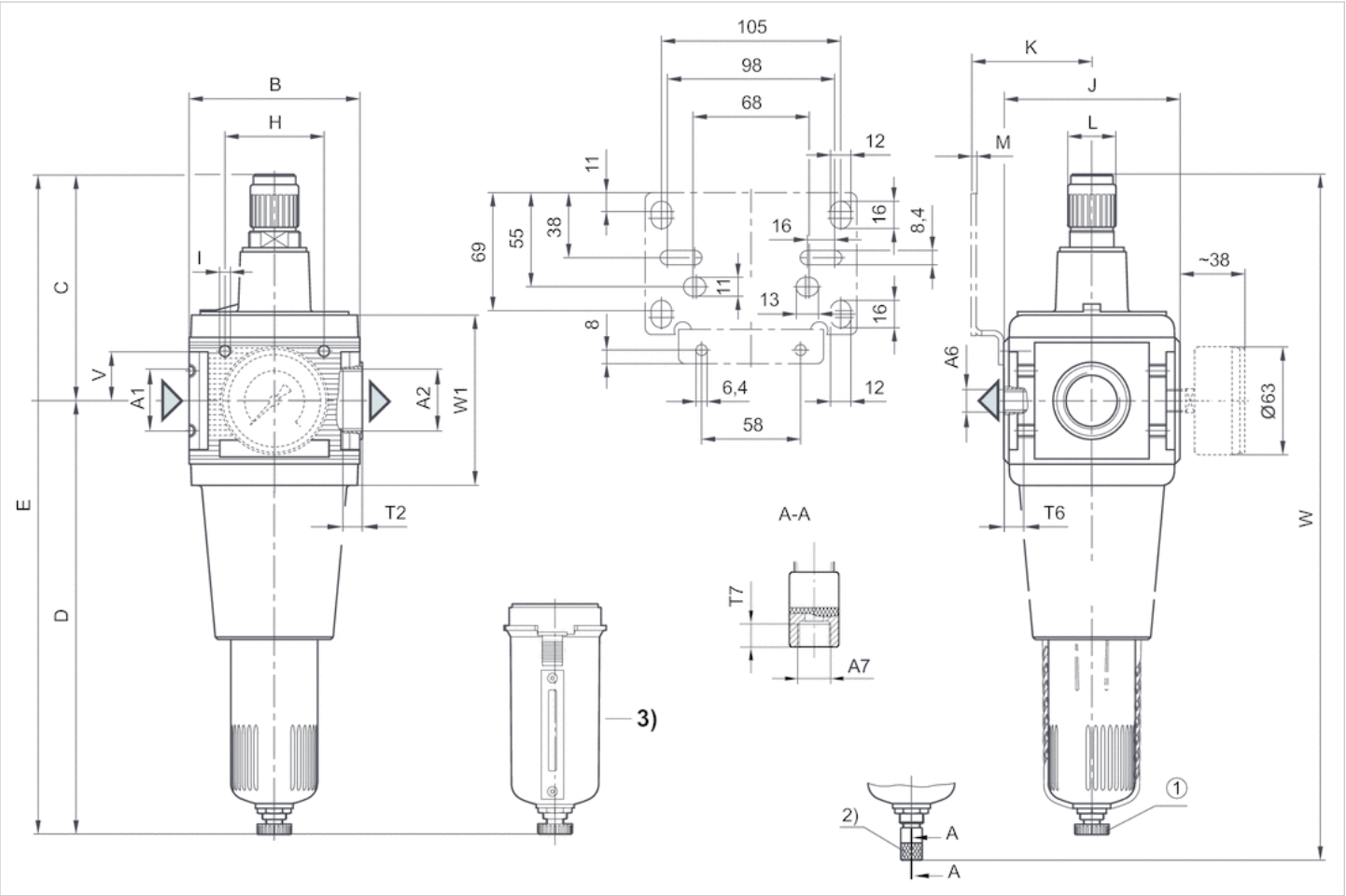
Compressed air class 6 : 7 : -

## Technical information

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

Dimensions

Dimensions



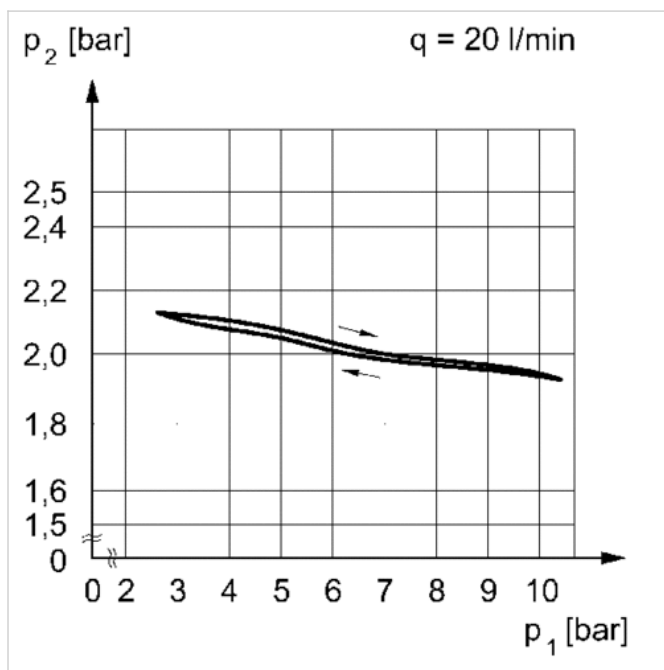
- A1 = input
- A2 = output
- A6 = output
- A7 = condensate drain
- 1) Semi-automatic condensate drain
- 2) fully automatic condensate drain
- 3) Metal reservoir with level indicator

Dimensions in mm

| A1  | A2  | A6    | A7    | B   | C   | D   | E   | H  | I  | J   | K    | L  | M | T2 | T6 | T7  | V  | W   | W1    |
|-----|-----|-------|-------|-----|-----|-----|-----|----|----|-----|------|----|---|----|----|-----|----|-----|-------|
| G 1 | G 1 | G 1/4 | G 1/8 | 100 | 132 | 253 | 385 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 8.5 | 29 | 397 | 101.5 |

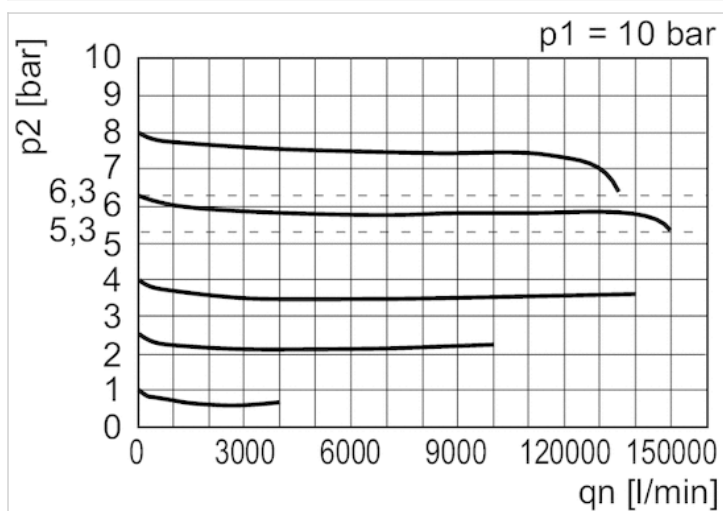
## Diagrams

### Pressure characteristics curve



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

### Flow rate characteristic



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

# Filter pressure regulator, Series NL6-FRE

- G 1

- 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               | 15.24 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       | 4.23 fl.oz.                            |
| Filter element                | exchangeable                           |
| Condensate drain              | fully automatic, open without pressure |
| Max. Internal air consumption | 0 Cv                                   |
| Weight                        | See table below                        |

## Technical data

| Part No.   | Port | Flow     | Condensate drain                       | Reservoir     | Weight   |
|------------|------|----------|----------------------------------------|---------------|----------|
|            |      | Qn       |                                        |               |          |
| 0821300885 | G 1  | 15.24 Cv | fully automatic, open without pressure | Polycarbonate | 4.81 lbs |
| 0821300865 | G 1  | 15.24 Cv | fully automatic, open without pressure | Die cast zinc | 5.47 lbs |

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, 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 .

Mounting: mounting bracket 1821336017 / block assembly kit 1827009593

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.

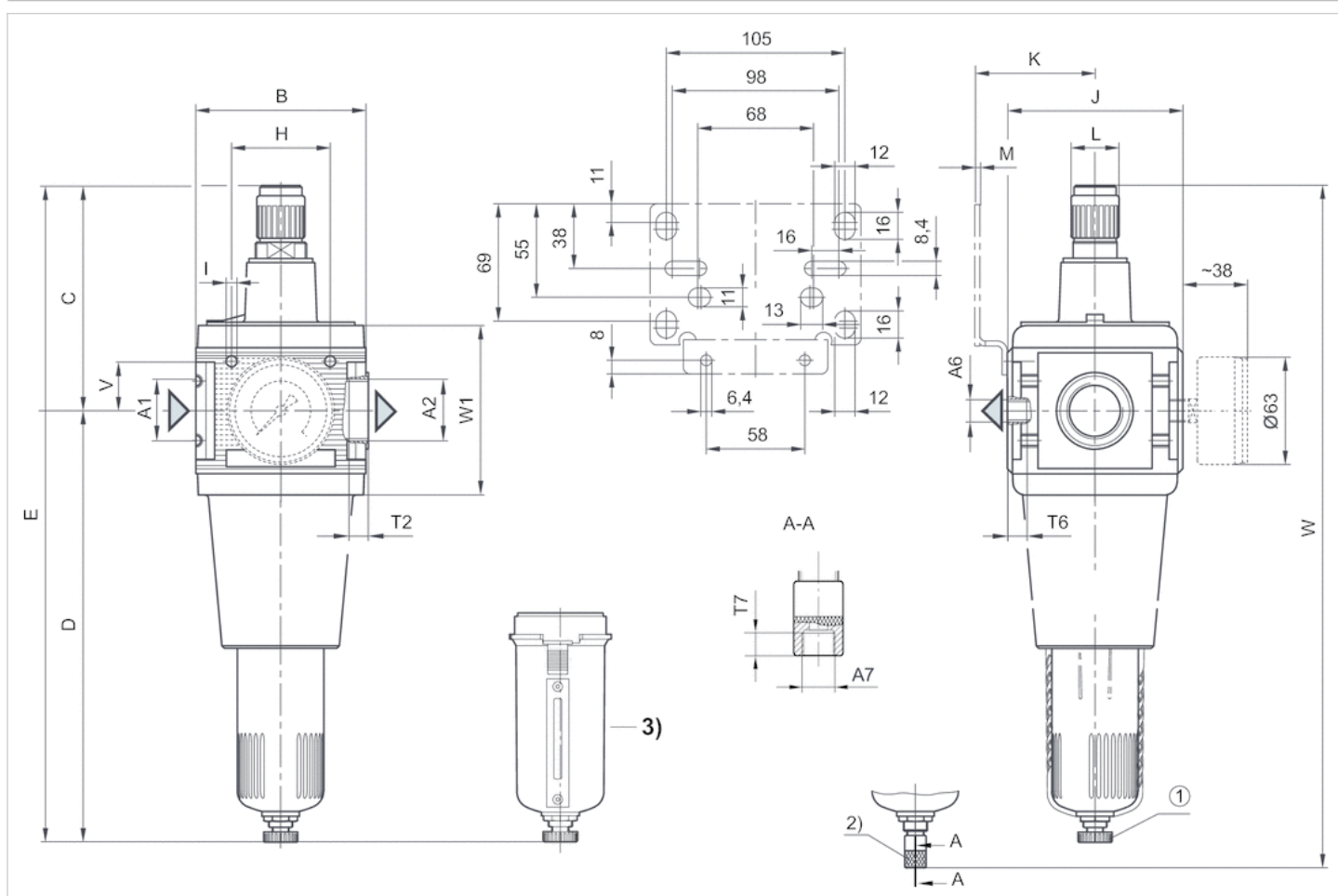
Compressed air class 6 : 7 : -

## Technical information

| Material      |                                 |
|---------------|---------------------------------|
| Housing       | Die-cast aluminum               |
| Front plate   | Acrylonitrile butadiene styrene |
| Seals         | Acrylonitrile butadiene rubber  |
| Reservoir     | Polycarbonate, Die cast zinc    |
| Filter insert | Polyethylene                    |

## Dimensions

## Dimensions



A1 = input

A2 = output

A6 = output

A7 = condensate drain

1) Semi-automatic condensate drain

2) fully automatic condensate drain

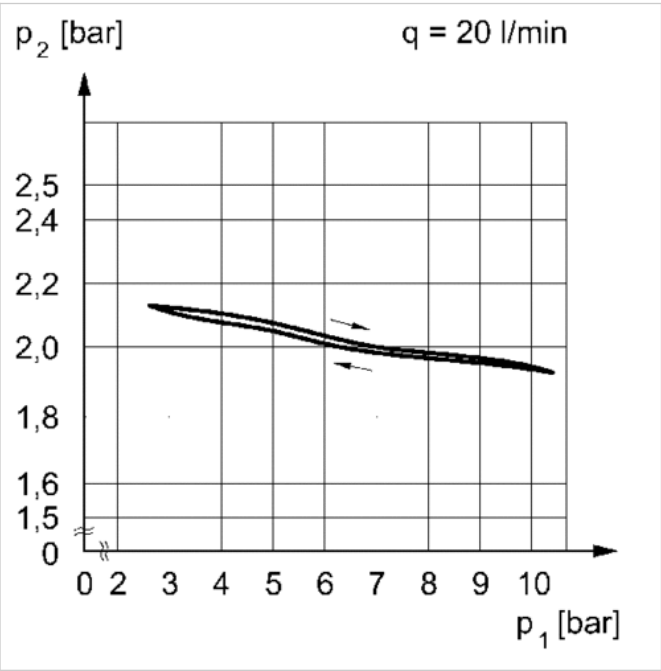
3) Metal reservoir with level indicator

Dimensions in mm

| A1  | A2  | A6    | A7    | B   | C   | D   | E   | H  | I  | J   | K    | L  | M | T2 | T6 | T7  | V  | W   | W1    |
|-----|-----|-------|-------|-----|-----|-----|-----|----|----|-----|------|----|---|----|----|-----|----|-----|-------|
| G 1 | G 1 | G 1/4 | G 1/8 | 100 | 132 | 253 | 385 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 8.5 | 29 | 397 | 101.5 |

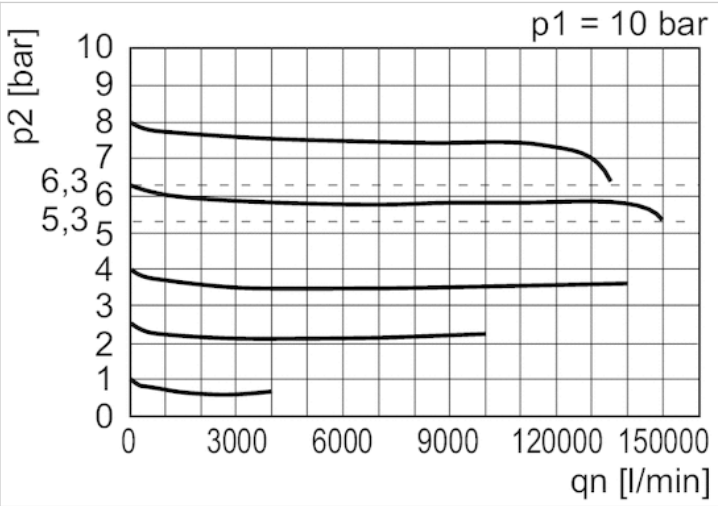
Diagrams

Pressure characteristics curve



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

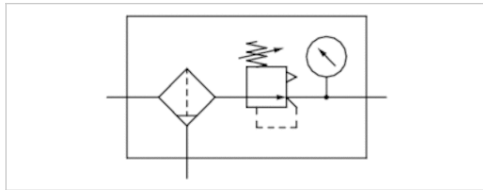
Flow rate characteristic



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

# Filter pressure regulator, Series NL6-FRE

- G 3/4, G 1
- 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               | 15.24 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       | 4.23 fl.oz.                          |
| Filter element                | exchangeable                         |
| Condensate drain              | See table below                      |
| Max. Internal air consumption | 0 Cv                                 |
| Weight                        | See table below                      |

## Technical data

| Part No.   | Port  | Flow     | Condensate drain                       | Reservoir     |
|------------|-------|----------|----------------------------------------|---------------|
|            |       | Qn       |                                        |               |
| 0821300850 | G 3/4 | 15.24 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300851 | G 3/4 | 15.24 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300852 | G 3/4 | 15.24 Cv | semi-automatic, open without pressure  | Die cast zinc |
| 0821300853 | G 3/4 | 15.24 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300854 | G 3/4 | 15.24 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300855 | G 3/4 | 15.24 Cv | fully automatic, open without pressure | Die cast zinc |
| 0821300856 | G 1   | 15.24 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300857 | G 1   | 15.24 Cv | semi-automatic, open without pressure  | Polycarbonate |
| 0821300858 | G 1   | 15.24 Cv | semi-automatic, open without pressure  | Die cast zinc |
| 0821300859 | G 1   | 15.24 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300860 | G 1   | 15.24 Cv | fully automatic, open without pressure | Polycarbonate |
| 0821300861 | G 1   | 15.24 Cv | fully automatic, open without pressure | Die cast zinc |

| Part No.   | Protective guard | Weight    |
|------------|------------------|-----------|
| 0821300850 | -                | 4.74 lbs  |
| 0821300851 | Steel            | 11.68 lbs |
| 0821300852 | -                | 5.4 lbs   |
| 0821300853 | -                | 4.81 lbs  |
| 0821300854 | Steel            | 5.03 lbs  |

| Part No.   | Protective guard | Weight   |
|------------|------------------|----------|
| 0821300855 | -                | 5.47 lbs |
| 0821300856 | -                | 4.74 lbs |
| 0821300857 | Steel            | 4.96 lbs |
| 0821300858 | -                | 5.4 lbs  |
| 0821300859 | -                | 4.81 lbs |
| 0821300860 | Steel            | 5.03 lbs |
| 0821300861 | -                | 5.47 lbs |

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

Pressure gauge enclosed separately, 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 .

Mounting: mounting bracket 1821336017 / block assembly kit 1827009593

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 7 : 7 : -

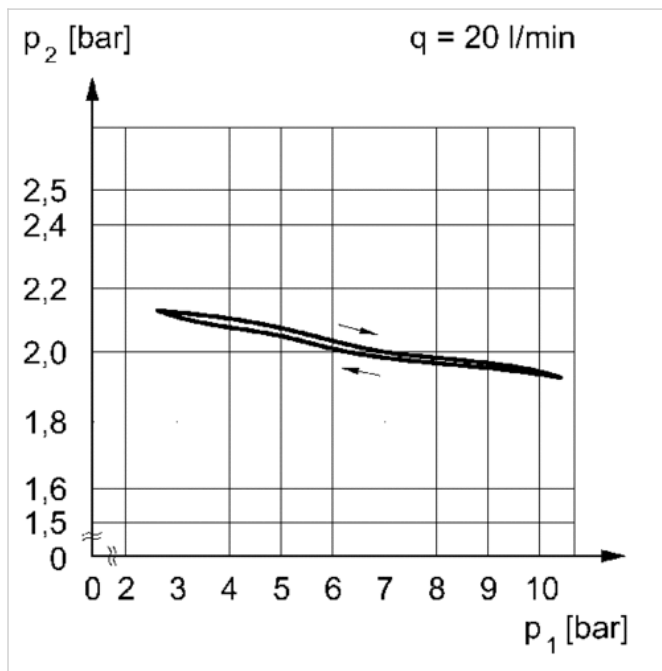
## Technical information

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



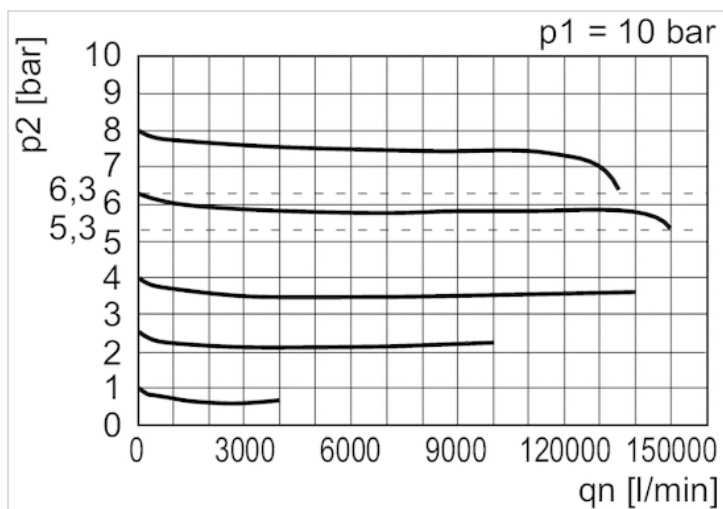
## Diagrams

### Pressure characteristics curve



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

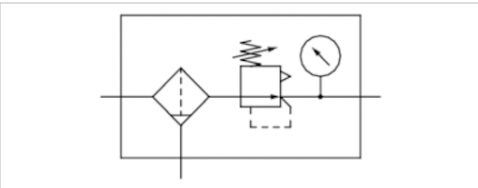
### Flow rate characteristic



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

# Filter pressure regulator, Series NL6-FRE

- G 3/4, G 1
- 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               | 15.24 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       | 4.23 fl.oz.                           |
| Filter element                | exchangeable                          |
| Condensate drain              | semi-automatic, open without pressure |
| Max. Internal air consumption | 0 Cv                                  |
| Weight                        | 4.98 lbs                              |

## Technical data

| Part No.   |                                                                                     | Port  | Flow     | Condensate drain                      |
|------------|-------------------------------------------------------------------------------------|-------|----------|---------------------------------------|
|            |                                                                                     |       | Qn       |                                       |
| 0821300862 |  | G 3/4 | 15.24 Cv | semi-automatic, open without pressure |
| 0821300863 |  | G 1   | 15.24 Cv | semi-automatic, open without pressure |

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

Pressure gauge enclosed separately, 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 .

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.

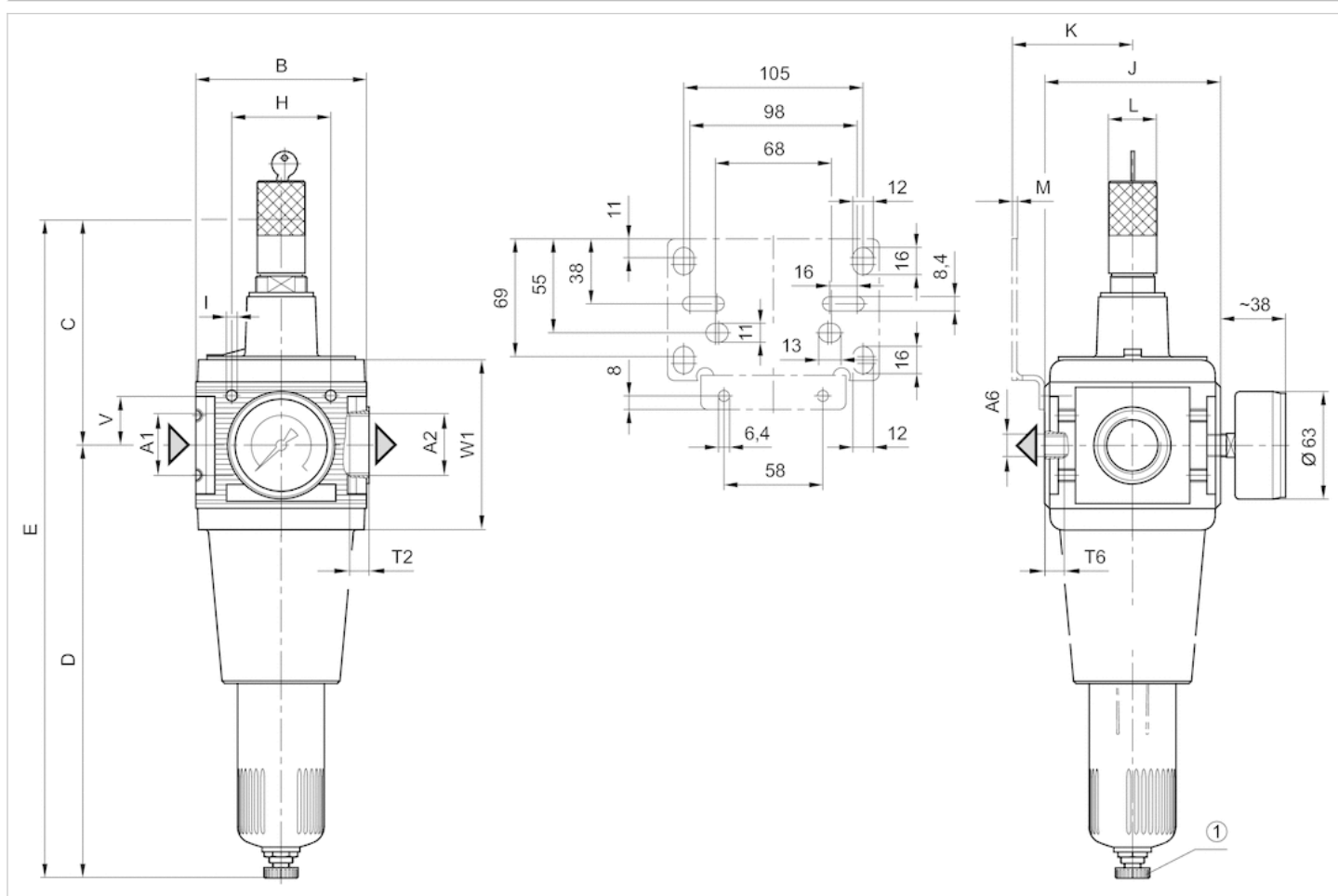
Compressed air class 7 : 7 : -

## Technical information

| Material      |                                 |
|---------------|---------------------------------|
| Housing       | Die-cast aluminum               |
| Front plate   | Acrylonitrile butadiene styrene |
| Seals         | Acrylonitrile butadiene rubber  |
| Reservoir     | Polycarbonate                   |
| Filter insert | Polyethylene                    |

## Dimensions

### Dimensions



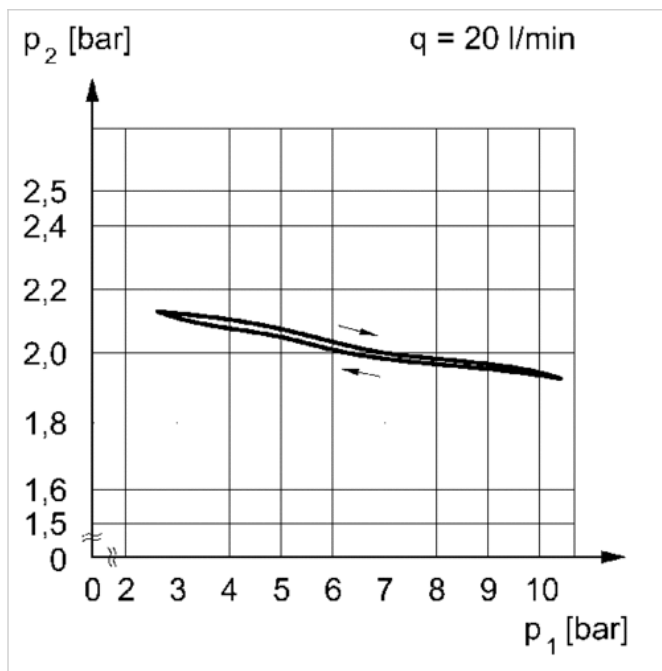
A1 = input  
 A2 = output  
 A6 = output  
 1) semi-automatic condensate drain

### Dimensions in mm

| A1    | A2    | A6    | B   | C   | D   | E   | H  | I  | J   | K    | L  | M | T2 | T6 | V  | W1    |
|-------|-------|-------|-----|-----|-----|-----|----|----|-----|------|----|---|----|----|----|-------|
| G 3/4 | G 3/4 | G 1/4 | 100 | 157 | 253 | 410 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 29 | 101.5 |
| G 1   | G 1   | G 1/4 | 100 | 157 | 253 | 410 | 58 | M6 | 103 | 70.5 | 28 | 3 | 18 | 7  | 29 | 101.5 |

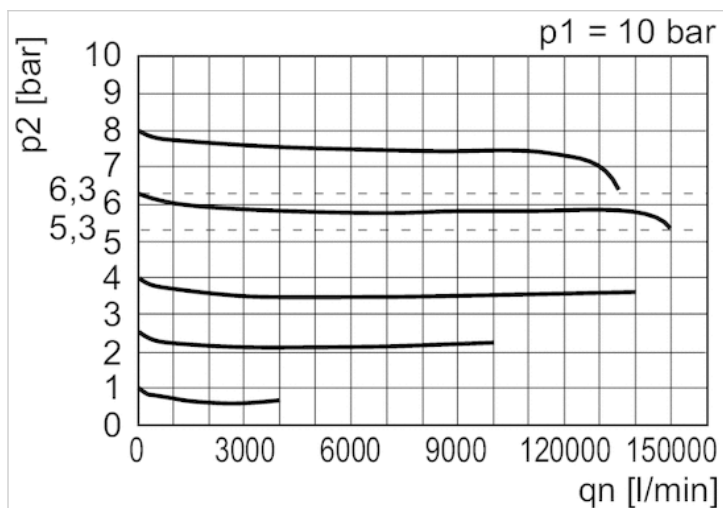
## Diagrams

### Pressure characteristics curve



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

### Flow rate characteristic

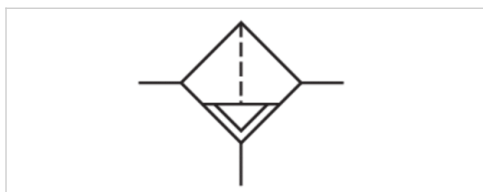


$p_1$  = Working pressure  
 $p_2$  = Secondary pressure  
 $q_n$  = Nominal flow

# Filter, Series NL6-FLS

- G 1

- suitable for ATEX



## Version

### Parts

Mounting orientation

Certificates

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Filter reservoir volume

Filter element

Condensate drain

Weight

Standard filter, Can be assembled into blocks

Filter

vertical

suitable for ATEX

22 ... 232 psi

14 ... 140 °F

14 ... 140 °F

Compressed air, Neutral gases

4.23 fl.oz.

exchangeable

fully automatic, open without pressure

See table below

## Technical data

| Part No.   | Port | Qn      | Protective guard | Weight   |
|------------|------|---------|------------------|----------|
| 0821303820 | G 1  | 7.32 Cv | -                | 4.34 lbs |
| 0821303821 | G 1  | 7.32 Cv | Steel            | 4.39 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

## Technical information

Mounting with mounting bracket 1821336017

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 : -

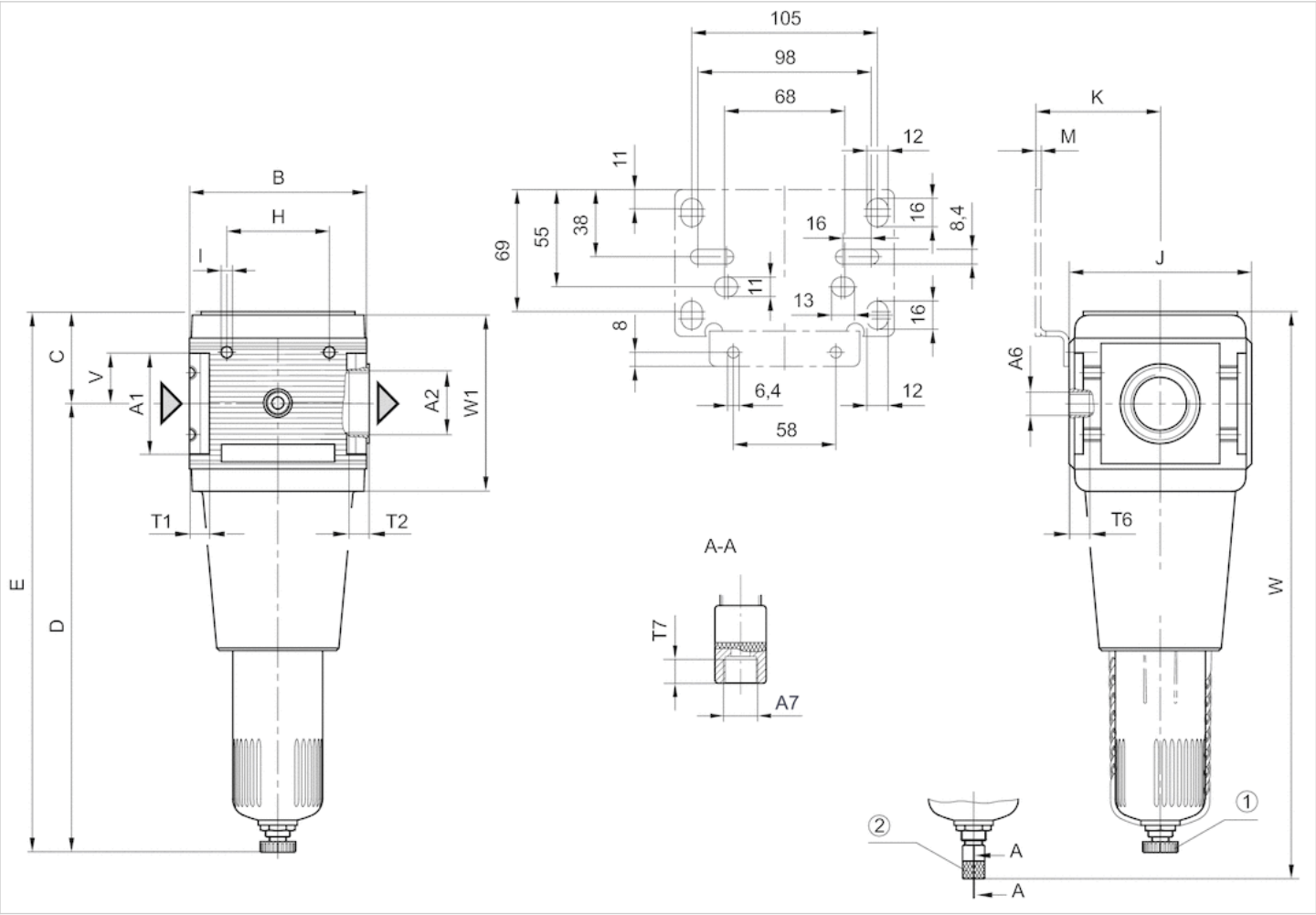
## Technical information

| Material    |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |

| Material         |                                |
|------------------|--------------------------------|
| Seals            | Acrylonitrile butadiene rubber |
| Reservoir        | Polycarbonate                  |
| Protective guard | Steel                          |
| Filter insert    | Polyethylene                   |

Dimensions

Dimensions



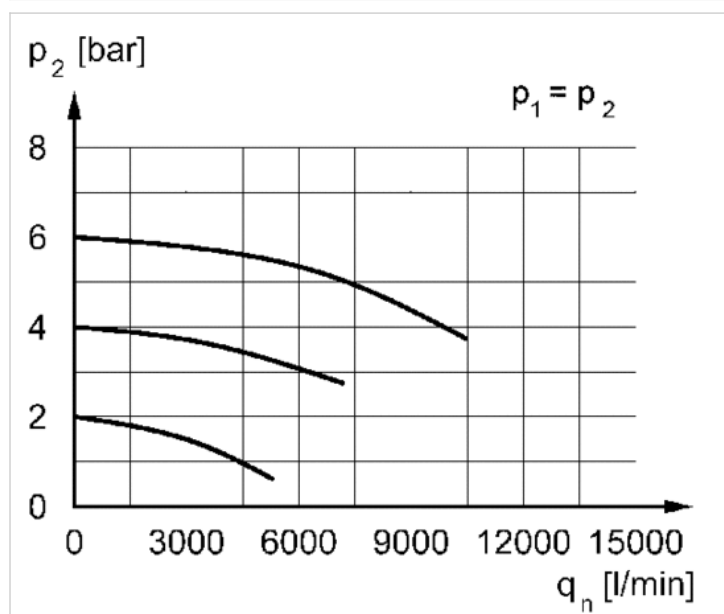
- A1 = input  
A2 = output  
A6 = output  
A7 = condensate drain  
1) Semi-automatic condensate drain  
2) fully automatic condensate drain

Dimensions in mm

| A1  | A2  | A6    | A7    | B   | C  | D   | E   | H  | I  | J   | K    | M | T1 | T2 | T6 | T7  | V  | W   | W1    |
|-----|-----|-------|-------|-----|----|-----|-----|----|----|-----|------|---|----|----|----|-----|----|-----|-------|
| G 1 | G 1 | G 1/4 | G 1/8 | 100 | 52 | 254 | 306 | 58 | M6 | 103 | 70.5 | 3 | 18 | 18 | 7  | 8.5 | 29 | 321 | 101.5 |

## Diagrams

### Flow rate characteristic

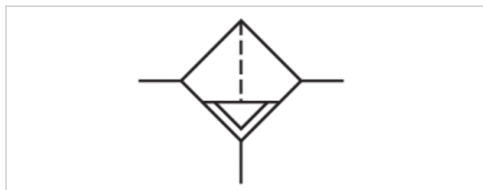


$p_2$  = secondary pressure  
 $q_n$  = nominal flow

# Filter, Series NL6-FLS

- G 3/4, G 1

- suitable for ATEX



## Version

### Parts

Mounting orientation

Certificates

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Filter reservoir volume

Filter element

Condensate drain

Weight

Standard filter, Can be assembled into blocks

Filter

vertical

suitable for ATEX

See table below

14 ... 140 °F

14 ... 140 °F

Compressed air, Neutral gases

4.23 fl.oz.

exchangeable

See table below

See table below

## Technical data

| Part No.   | Port  | Qn      | Working pressure min./max. | Condensate drain                       |
|------------|-------|---------|----------------------------|----------------------------------------|
| 0821303801 | G 3/4 | 7.32 Cv | 22 ... 232 psi             | semi-automatic, open without pressure  |
| 0821303802 | G 3/4 | 7.32 Cv | 22 ... 232 psi             | semi-automatic, open without pressure  |
| 0821303803 | G 3/4 | 7.32 Cv | 22 ... 290 psi             | semi-automatic, open without pressure  |
| 0821303804 | G 3/4 | 7.32 Cv | 22 ... 232 psi             | fully automatic, open without pressure |
| 0821303805 | G 3/4 | 7.32 Cv | 22 ... 232 psi             | fully automatic, open without pressure |
| 0821303806 | G 3/4 | 7.32 Cv | 22 ... 290 psi             | fully automatic, open without pressure |
| 0821303807 | G 1   | 7.32 Cv | 22 ... 232 psi             | semi-automatic, open without pressure  |
| 0821303808 | G 1   | 7.32 Cv | 22 ... 232 psi             | semi-automatic, open without pressure  |
| 0821303809 | G 1   | 7.32 Cv | 22 ... 290 psi             | semi-automatic, open without pressure  |
| 0821303810 | G 1   | 7.32 Cv | 22 ... 232 psi             | fully automatic, open without pressure |
| 0821303811 | G 1   | 7.32 Cv | 22 ... 232 psi             | fully automatic, open without pressure |
| 0821303812 | G 1   | 7.32 Cv | 22 ... 290 psi             | fully automatic, open without pressure |

| Part No.   | Reservoir                  | Protective guard | Weight   |
|------------|----------------------------|------------------|----------|
| 0821303801 | Polycarbonate              | -                | 3.64 lbs |
| 0821303802 | Polycarbonate              | Steel            | 3.86 lbs |
| 0821303803 | Die cast zinc, with window | -                | 4.3 lbs  |
| 0821303804 | Polycarbonate              | -                | 3.7 lbs  |
| 0821303805 | Polycarbonate              | Steel            | 3.92 lbs |
| 0821303806 | Die cast zinc, with window | -                | 4.37 lbs |
| 0821303807 | Polycarbonate              | -                | 3.64 lbs |
| 0821303808 | Polycarbonate              | Steel            | 3.86 lbs |

| Part No.   | Reservoir                  | Protective guard | Weight   |
|------------|----------------------------|------------------|----------|
| 0821303809 | Die cast zinc, with window | -                | 4.3 lbs  |
| 0821303810 | Polycarbonate              | -                | 3.7 lbs  |
| 0821303811 | Polycarbonate              | Steel            | 3.92 lbs |
| 0821303812 | Die cast zinc, with window | -                | 4.37 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

Mounting with mounting bracket 1821336017

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.

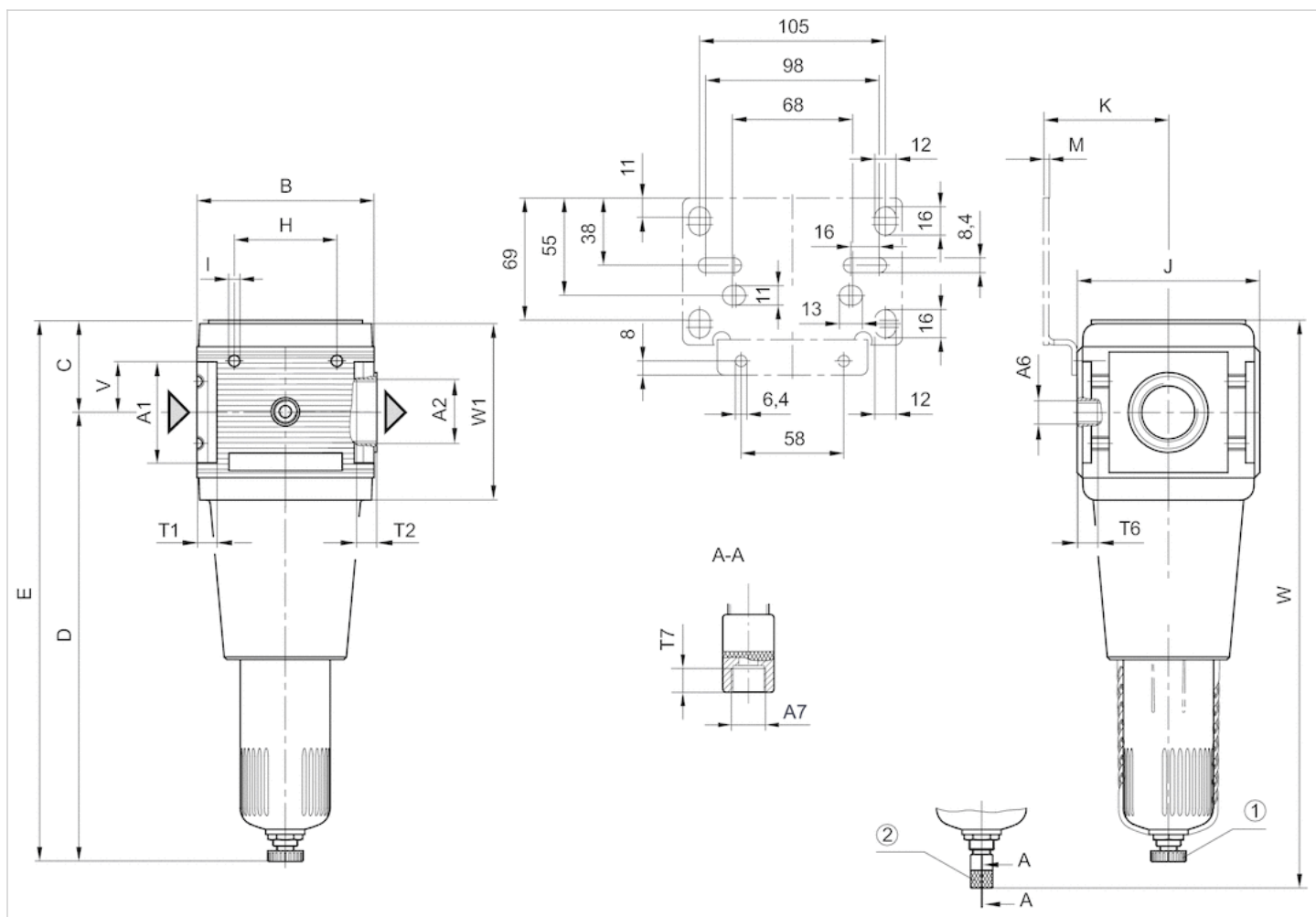
Max. achievable compressed air class acc. to ISO 8573-1:2010 7 : 7 : -

## Technical information

| Material         |                                 |
|------------------|---------------------------------|
| Housing          | Die-cast aluminum               |
| 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

A6 = output

A7 = condensate drain

1) Semi-automatic condensate drain

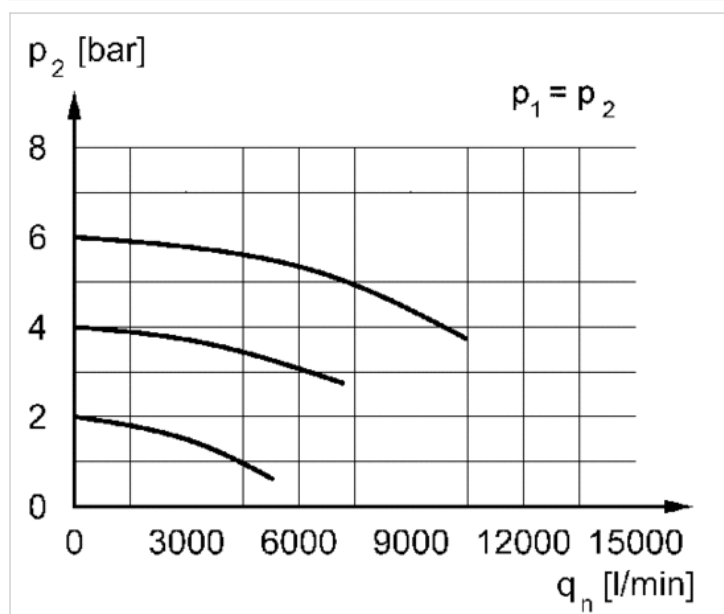
2) fully automatic condensate drain

### Dimensions in mm

| A1    | A2    | A6    | A7    | B   | C  | D   | E   | H  | I  | J   | K    | M | T1 | T2 | T6 | T7  | V  | W   | W1    |
|-------|-------|-------|-------|-----|----|-----|-----|----|----|-----|------|---|----|----|----|-----|----|-----|-------|
| G 3/4 | G 3/4 | G 1/4 | G 1/8 | 100 | 52 | 254 | 306 | 58 | M6 | 103 | 70.5 | 3 | 18 | 18 | 7  | 8.5 | 29 | 321 | 101.5 |
| G 1   | G 1   | G 1/4 | G 1/8 | 100 | 52 | 254 | 306 | 58 | M6 | 103 | 70.5 | 3 | 18 | 18 | 7  | 8.5 | 29 | 321 | 101.5 |

## Diagrams

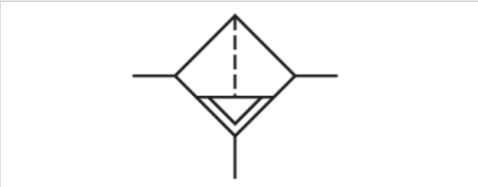
### Flow rate characteristic



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

# Pre-filter, Series NL6-FLP

- G 3/4, G 1
- suitable for ATEX



|                               |                                          |
|-------------------------------|------------------------------------------|
| Version                       | Pre-filter, Can be assembled into blocks |
| Parts                         | Pre-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       | 5.07 fl.oz.                              |
| Filter element                | exchangeable                             |
| Condensate drain              | fully automatic, open without pressure   |
| Weight                        | See table below                          |

## Technical data

| Part No.   | Port  | Qn      | Weight   |
|------------|-------|---------|----------|
| 0821303818 | G 3/4 | 1.63 Cv | 3.66 lbs |
| 0821303816 | G 1   | 1.63 Cv | 4.34 lbs |

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

Suitable for use in Ex zones 1, 2, 21, 22, Dust separation = 99.99%, Differential pressure gauge can be retrofitted to monitor the filter

## Technical information

Mounting: mounting bracket 1821336017 / block assembly kit 1827009593

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.

Recommended pre-filtering 5 μm

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

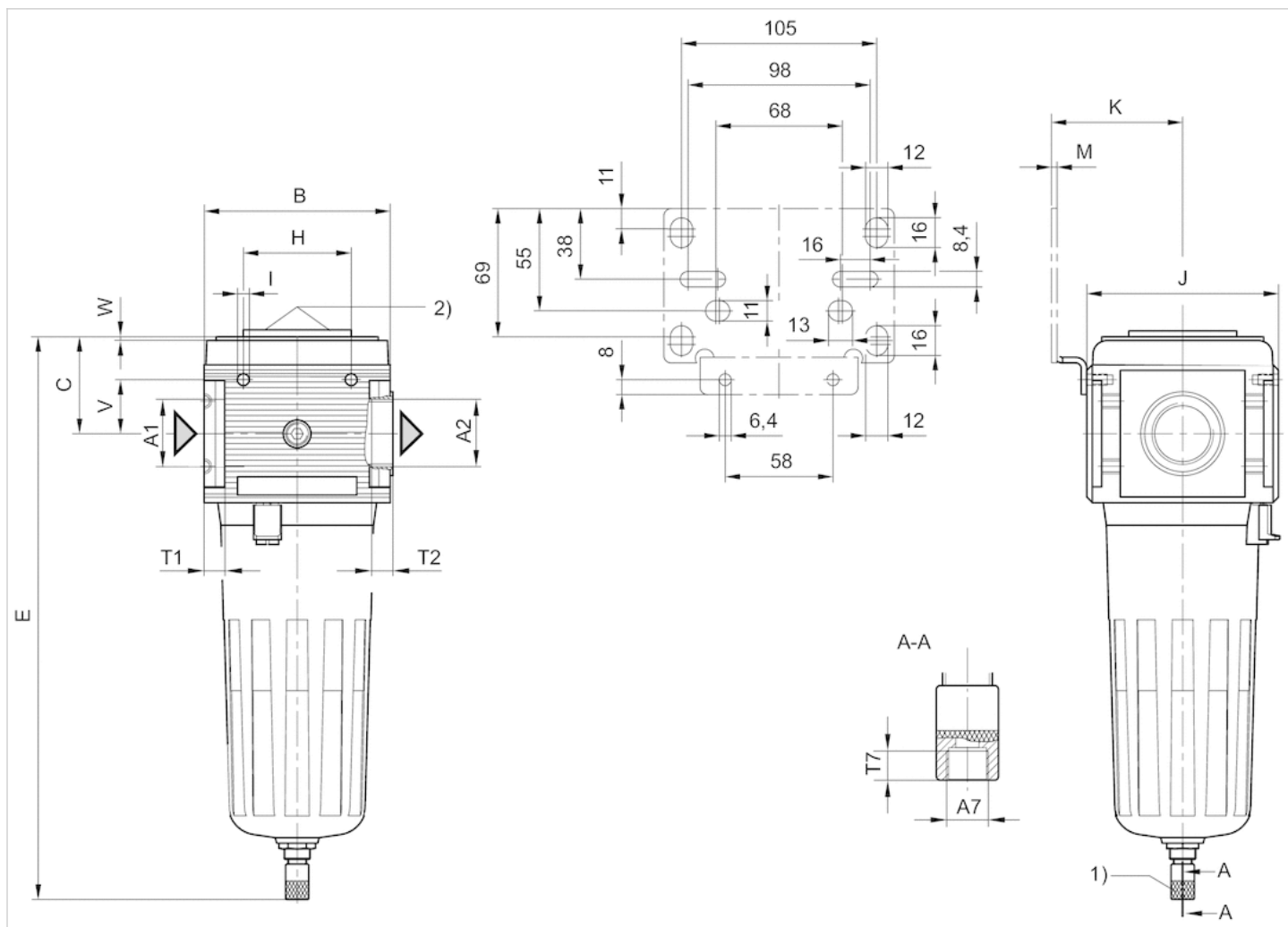
## Technical information

| Material    |                                 |
|-------------|---------------------------------|
| Housing     | Die cast zinc                   |
| Front plate | Acrylonitrile butadiene styrene |

|               |                                |
|---------------|--------------------------------|
| Material      |                                |
| Seals         | Acrylonitrile butadiene rubber |
| Reservoir     | Die cast zinc                  |
| Filter insert | Impregnated paper              |

## Dimensions

### Dimensions



A1 = input

A2 = output

A7 = condensate drain

1) Fully automatic condensate drain

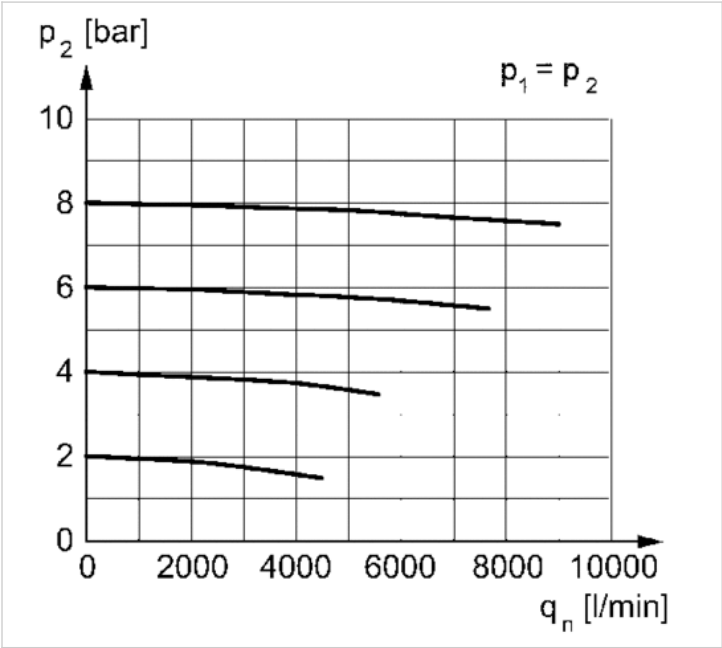
2) Differential pressure gauge connection

### Dimensions in mm

| A1    | A2    | A7    | B   | C  | E   | H  | I  | J   | K    | M | T1 | T2 | T7  | V  | W |
|-------|-------|-------|-----|----|-----|----|----|-----|------|---|----|----|-----|----|---|
| G 3/4 | G 3/4 | G 1/8 | 100 | 52 | 301 | 58 | M6 | 103 | 70.5 | 3 | 16 | 16 | 8.5 | 29 | 5 |
| G 1   | G 1   | G 1/8 | 100 | 52 | 401 | 58 | M6 | 103 | 70.5 | 3 | 16 | 16 | 8.5 | 29 | 5 |

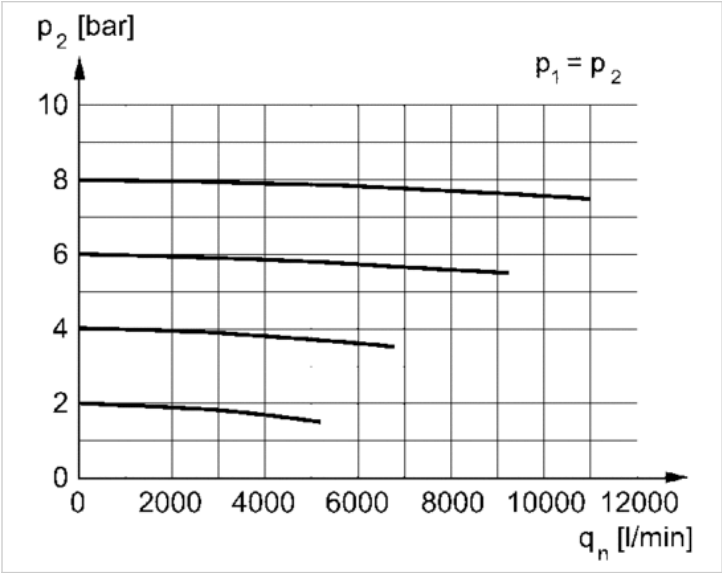
Diagrams

Flow rate characteristic 0821303818



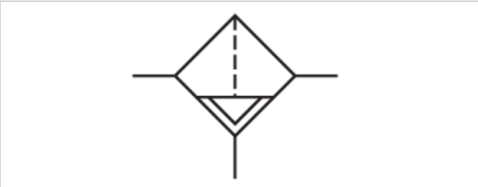
$p_2$  = secondary pressure  
 $q_n$  = nominal flow

Flow rate characteristic 0821303816



# Microfilter, Series NL6-FLC

- G 3/4, G 1
- suitable for ATEX



|                               |                                           |
|-------------------------------|-------------------------------------------|
| Version                       | Microfilter, Can be assembled into blocks |
| Parts                         | Microfilter                               |
| 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       | 5.07 fl.oz.                               |
| Filter element                | exchangeable                              |
| Condensate drain              | fully automatic, open without pressure    |
| Weight                        | See table below                           |

## Technical data

| Part No.   | Port  | Qn      | Weight   |
|------------|-------|---------|----------|
| 0821303819 | G 3/4 | 2.64 Cv | 3.66 lbs |
| 0821303814 | G 1   | 4.27 Cv | 4.34 lbs |

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

Suitable for use in Ex zones 1, 2, 21, 22, Differential pressure gauge can be retrofitted to monitor the filter

## Technical information

Reservoir: metal, with bayonet catch

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

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

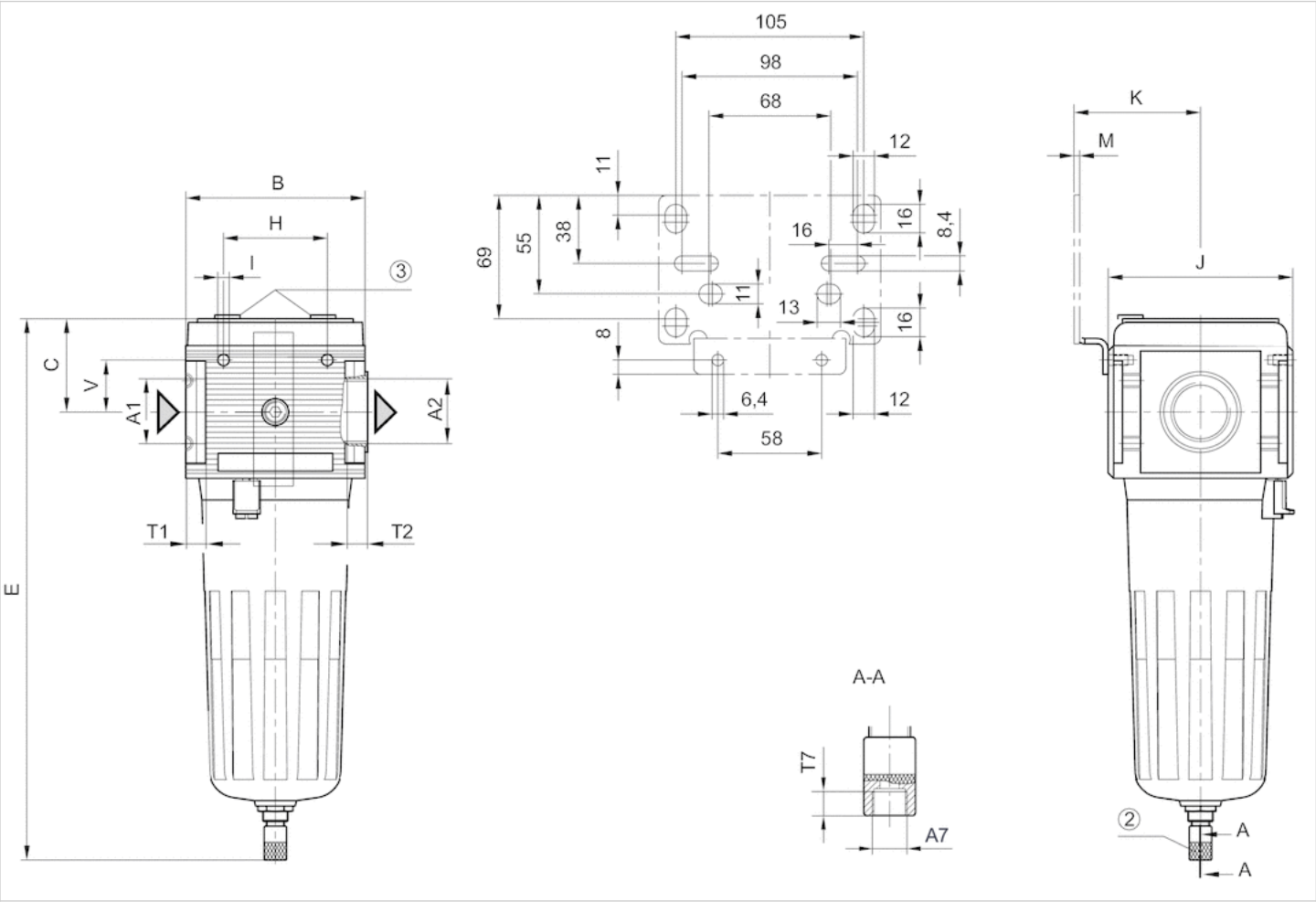
Max. achievable compressed air class acc. to ISO 8573-1:2010 1 : - : 2

Technical information

| Material      |                                 |
|---------------|---------------------------------|
| Housing       | Die cast zinc                   |
| Front plate   | Acrylonitrile butadiene styrene |
| Seals         | Acrylonitrile butadiene rubber  |
| Reservoir     | Die cast zinc                   |
| Filter insert | Borosilicate glass fiber        |

Dimensions

Dimensions



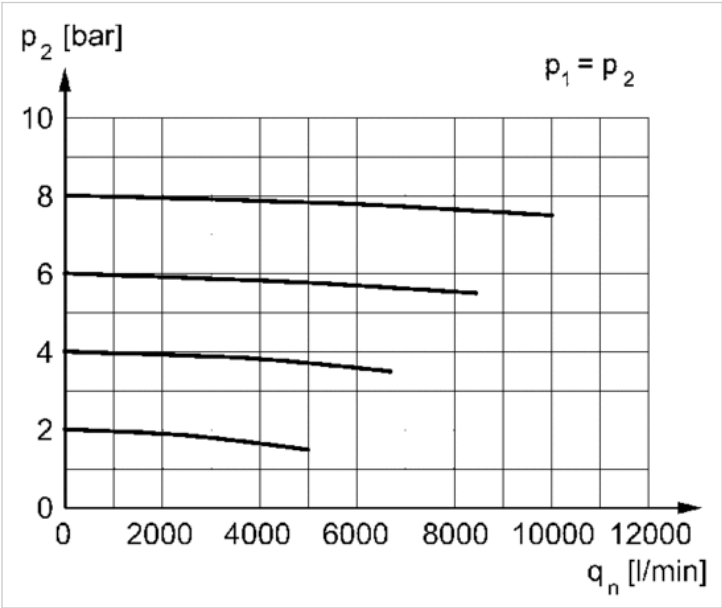
- A1 = input  
 A2 = output  
 A7 = condensate drain  
 1) Fully automatic condensate drain  
 2) Differential pressure gauge connection

Dimensions in mm

| A1    | A2    | A7    | B   | C  | E   | H  | I  | J   | K    | M | T1 | T2 | T7  | V  |
|-------|-------|-------|-----|----|-----|----|----|-----|------|---|----|----|-----|----|
| G 3/4 | G 3/4 | G 1/8 | 100 | 54 | 307 | 58 | M6 | 103 | 70.5 | 3 | 16 | 16 | 8.5 | 29 |
| G 1   | G 1   | G 1/8 | 100 | 54 | 407 | 58 | M6 | 103 | 70.5 | 3 | 16 | 16 | 8.5 | 29 |

Diagrams

Flow rate characteristic

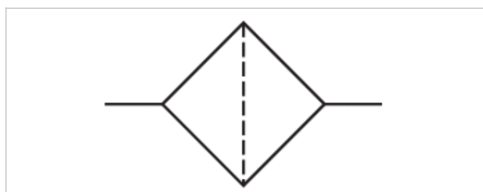


$p_2$  = secondary pressure  
 $q_n$  = nominal flow

# Active carbon filter, Series NL6-FLA

- G 3/4, G 1

- suitable for ATEX



|                               |                                                    |
|-------------------------------|----------------------------------------------------|
| Version                       | Active carbon filter, Can be assembled into blocks |
| Parts                         | Active carbon filter                               |
| Mounting orientation          | vertical                                           |
| 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                      |
| Filter reservoir volume       | 4.4 fl.oz.                                         |
| Filter element                | exchangeable                                       |
| Weight                        | See table below                                    |

## Technical data

| Part No.   | Port  | Qn      | Weight   |
|------------|-------|---------|----------|
| 0821303817 | G 3/4 | 4.07 Cv | 3.57 lbs |
| 0821303815 | G 1   | 5.59 Cv | 4.23 lbs |

Nominal flow Qn with secondary pressure p2 = 87 psi at  $\Delta p = 1.45$  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.

Recommended pre-filtering 0.01  $\mu$ m

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

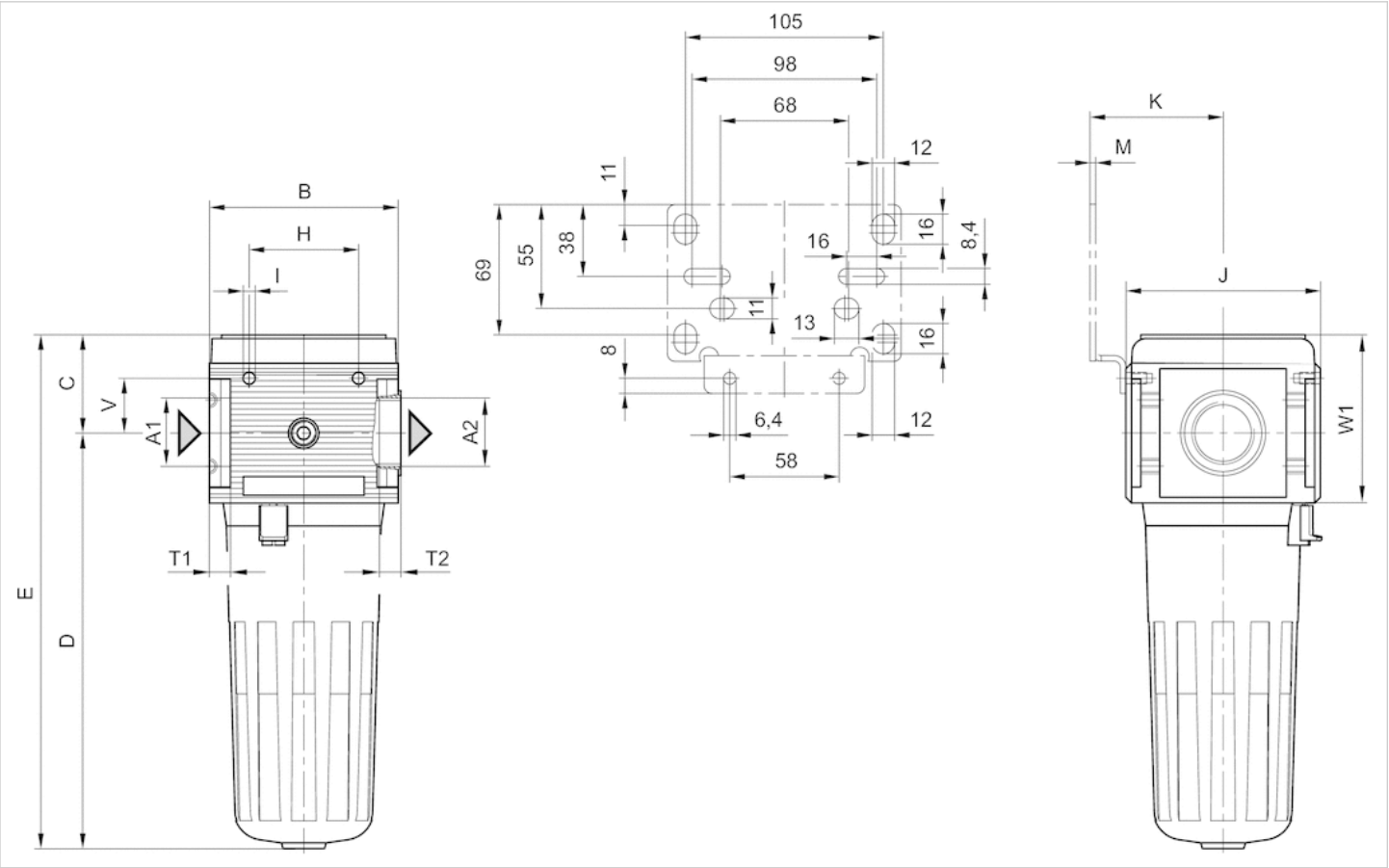
## Technical information

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

|               |               |
|---------------|---------------|
| Material      |               |
| Reservoir     | Die cast zinc |
| Filter insert | Active carbon |

Dimensions

Dimensions



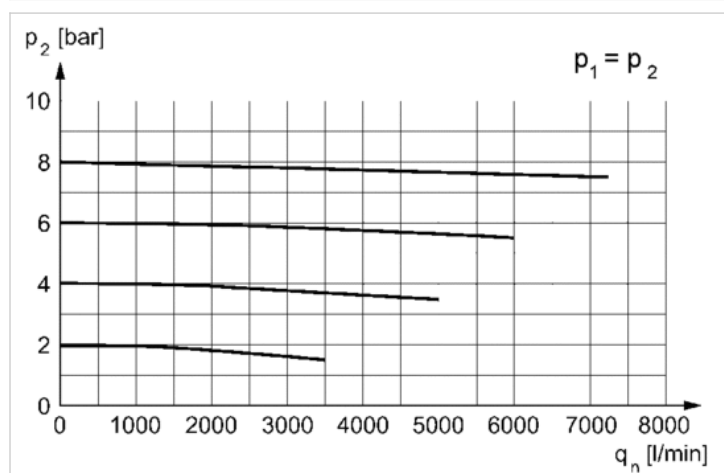
A1 = input  
A2 = output

Dimensions in mm

| A1    | A2    | B   | C  | D   | E   | H  | I  | J   | K    | M | T1 | T2 | V  | W1 |
|-------|-------|-----|----|-----|-----|----|----|-----|------|---|----|----|----|----|
| G 3/4 | G 3/4 | 100 | 54 | 223 | 280 | 58 | M6 | 103 | 70.5 | 3 | 16 | 16 | 29 | 89 |
| G 1   | G 1   | 100 | 54 | 323 | 380 | 58 | M6 | 103 | 70.5 | 3 | 16 | 16 | 29 | 89 |

## Diagrams

### Flow rate characteristic



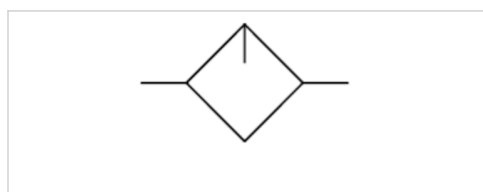
$p_2$  = secondary pressure

$q_n$  = nominal flow

# Standard oil-mist lubricator, Series NL6-LBS

- G 3/4, G 1

- suitable for ATEX



Version

Parts

Mounting orientation

Certificates

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Lubricator reservoir volume

Type of filling

Weight

Oil-mist lubricator, Can be assembled into blocks

Standard oil-mist lubricator

vertical

suitable for ATEX

8 ... 232 psi

14 ... 140 °F

14 ... 140 °F

Compressed air, Neutral gases

15.22 fl.oz.

Manual oil filling

See table below

## Technical data

| Part No.   | Port  | Nominal flow Qn | Reservoir                  | Protective guard | Weight   |
|------------|-------|-----------------|----------------------------|------------------|----------|
| 0821301801 | G 3/4 | 18.29 Cv        | Polycarbonate              | -                | 3.31 lbs |
| 0821301802 | G 3/4 | 18.29 Cv        | Polycarbonate              | Steel            | 3.53 lbs |
| 0821301803 | G 3/4 | 18.29 Cv        | Die cast zinc, with window | -                | 3.97 lbs |
| 0821301804 | G 1   | 18.29 Cv        | Polycarbonate              | -                | 3.31 lbs |
| 0821301805 | G 1   | 18.29 Cv        | Polycarbonate              | Steel            | 3.53 lbs |
| 0821301806 | G 1   | 18.29 Cv        | Die cast zinc, with window | -                | 3.97 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 .

The entire preset drip quantity enters the pressure system

Manual oil filling possible during operation

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.

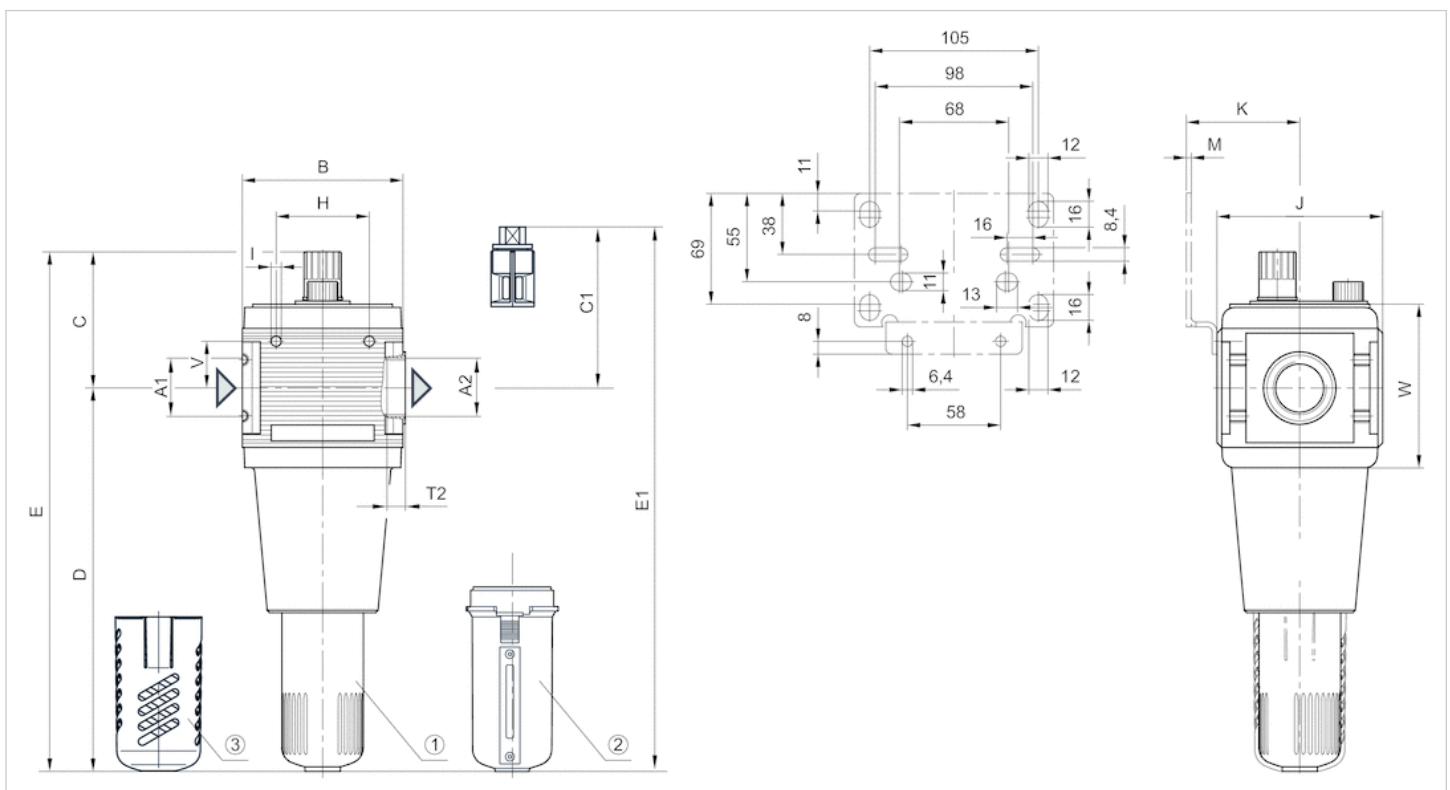
Oil dosing at 1 Cv 1-2 drops

## Technical information

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

## Dimensions

### Dimensions



A1 = input

A2 = output

1) PC reservoir

2) Metal reservoir with inspection glass

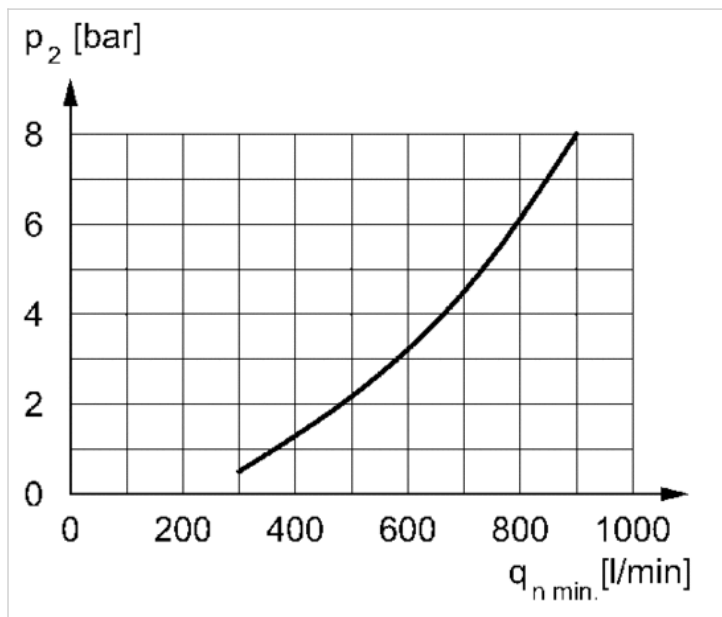
3) metal protective guard

### Dimensions in mm

| A1    | A2    | B   | C  | C1  | D   | E   | E1    | H  | I  | J   | K    | M | T2 | V  | W     |
|-------|-------|-----|----|-----|-----|-----|-------|----|----|-----|------|---|----|----|-------|
| G 3/4 | G 3/4 | 100 | 85 | -   | 238 | 321 | -     | 58 | M6 | 103 | 70.5 | 3 | 18 | 29 | 101.5 |
| G 3/4 | G 3/4 | 100 | 85 | 100 | 238 | 321 | 336,5 | 58 | M6 | 103 | 70.5 | 3 | 18 | 29 | 101.5 |
| G 1   | G 1   | 100 | 85 | -   | 238 | 321 | -     | 58 | M6 | 103 | 70.5 | 3 | 18 | 29 | 101.5 |
| G 1   | G 1   | 100 | 85 | 100 | 238 | 321 | 336,5 | 58 | M6 | 103 | 70.5 | 3 | 18 | 29 | 101.5 |

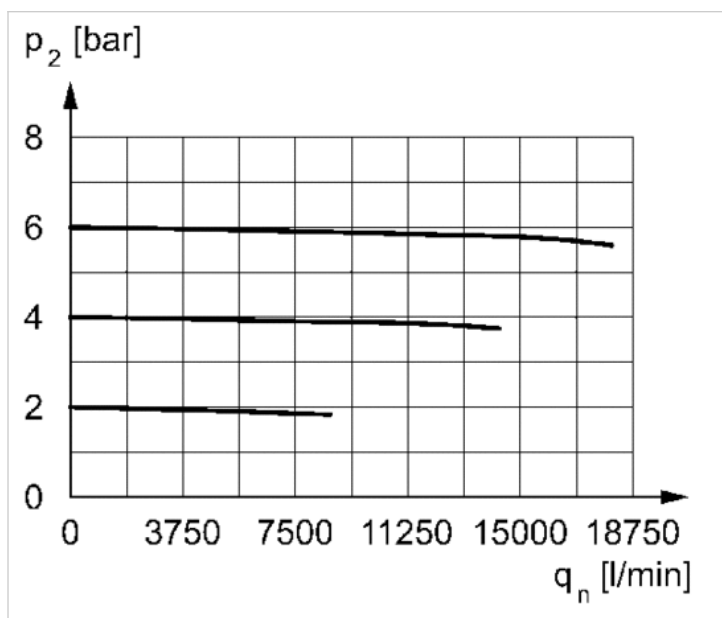
## Diagrams

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



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

## Flow rate characteristic



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

# Filling unit, electrically operated, Series NL6-SSU

- ATEX optional
- Compressed air connection G 3/4, G 1
- Pipe connection



|                                                  |                                                             |
|--------------------------------------------------|-------------------------------------------------------------|
| Version                                          | Poppet valve, Can be assembled into blocks                  |
| Parts                                            | Filling valve, 3/2-directional valve, electrically operated |
| Nominal flow 1 ▶ 2                               | 8.89 Cv                                                     |
| Nominal flow 2 ▶ 3                               | 3.96 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 |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------|----------------------------------|---------|
| 0821300959 |  | —                                                                                   | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300958 |  | —                                                                                   | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300960 |  | —                                                                                   | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300994 |  |  | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300961 |  | —                                                                                   | G 1                             | G 1                              | G 1/2   |
| 0821300962 |  | —                                                                                   | G 1                             | G 1                              | G 1/2   |
| 0821300963 |  | —                                                                                   | G 1                             | G 1                              | G 1/2   |
| 0821300995 |  |  | G 1                             | G 1                              | G 1/2   |

| Part No.   | Operational voltage | Operational voltage | Operational voltage |
|------------|---------------------|---------------------|---------------------|
|            | DC                  | AC 50 Hz            | AC 60 Hz            |
| 0821300959 | 24 V                | -                   | -                   |
| 0821300958 | -                   | 230 V               | 230 V               |
| 0821300960 | -                   | -                   | -                   |
| 0821300994 | -                   | -                   | -                   |
| 0821300961 | 24 V                | -                   | -                   |
| 0821300962 | -                   | 230 V               | 230 V               |
| 0821300963 | -                   | -                   | -                   |
| 0821300995 | -                   | -                   | -                   |

| Part No.   | Power consumption | Holding power | Switch-on power | Manual override |
|------------|-------------------|---------------|-----------------|-----------------|
|            | DC                | AC 50 Hz      | AC 50 Hz        |                 |
| 0821300959 | 4.8 W             | -             | -               | -               |
| 0821300958 | -                 | 8.5 VA        | 11.8 VA         | -               |
| 0821300960 | -                 | -             | -               | without         |
| 0821300994 | -                 | -             | -               | with detent     |
| 0821300961 | 4.8 W             | -             | -               | -               |
| 0821300962 | -                 | 8.5 VA        | 11.8 VA         | -               |
| 0821300963 | -                 | -             | -               | without         |
| 0821300995 | -                 | -             | -               | with detent     |

| Part No.   | Electrical connection  | basic valve with electrical connector |
|------------|------------------------|---------------------------------------|
|            | Pilot valve            |                                       |
| 0821300959 | Plug, ISO 6952, form B | -                                     |
| 0821300958 | Plug, ISO 6952, form B | -                                     |
| 0821300960 | -                      | pilot valve without coil              |
| 0821300994 | -                      | pilot valve without coil              |
| 0821300961 | Plug, ISO 6952, form B | -                                     |
| 0821300962 | Plug, ISO 6952, form B | -                                     |
| 0821300963 | -                      | pilot valve without coil              |
| 0821300995 | -                      | pilot valve without coil              |

| Part No.   | Reverse polarity protection         | Weight   |
|------------|-------------------------------------|----------|
| 0821300959 | Protected against polarity reversal | 6.9 lbs  |
| 0821300958 | Protected against polarity reversal | 6.9 lbs  |
| 0821300960 | -                                   | 6.75 lbs |
| 0821300994 | -                                   | 6.75 lbs |
| 0821300961 | Protected against polarity reversal | 6.9 lbs  |
| 0821300962 | Protected against polarity reversal | 6.9 lbs  |
| 0821300963 | -                                   | 6.75 lbs |
| 0821300995 | -                                   | 6.75 lbs |

Nominal flow Q<sub>n</sub> with secondary pressure p<sub>2</sub> = 87 psi at Δp = 14.5 psi

## Technical information

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.

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.

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.

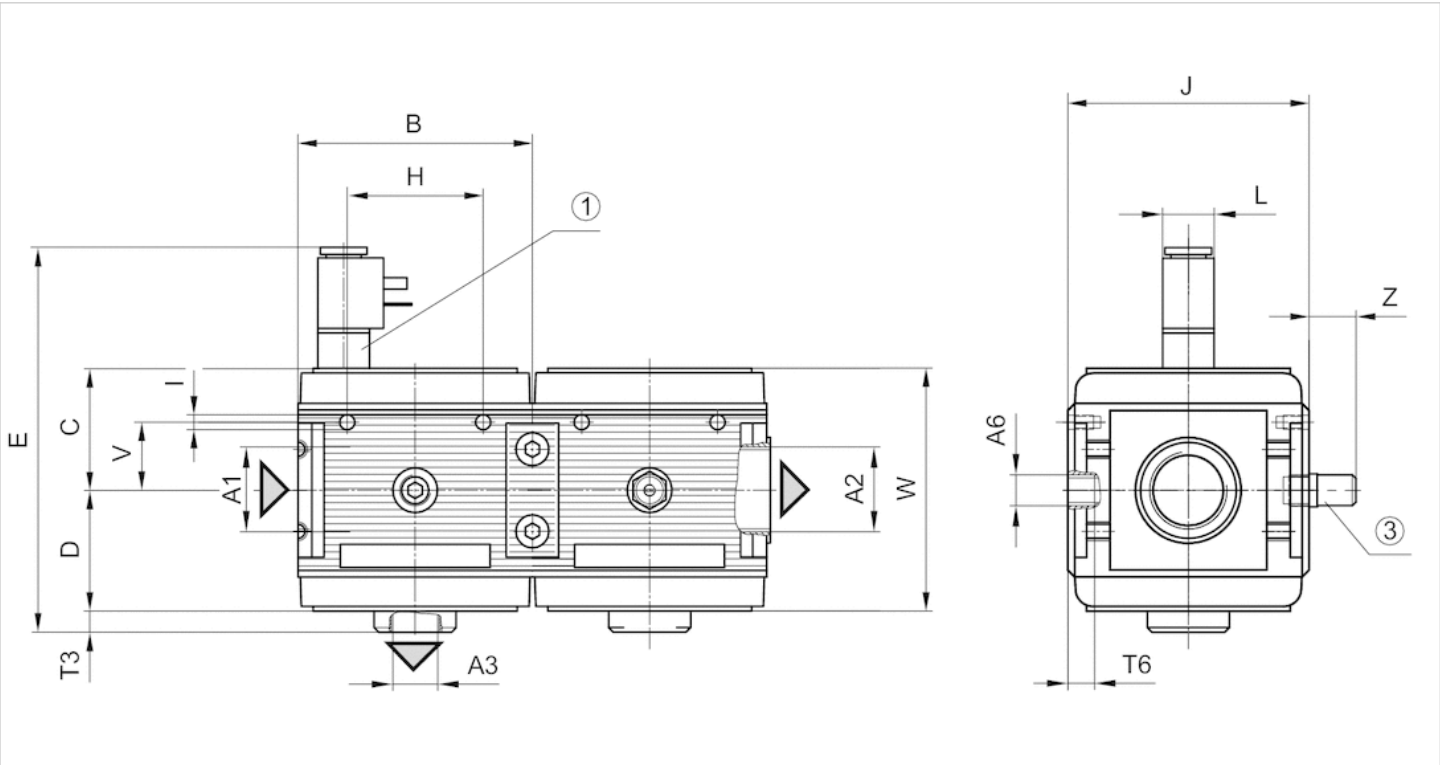
## Technical information

| Material    |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |

|          |                                 |
|----------|---------------------------------|
| Material |                                 |
| Seals    | Acrylonitrile butadiene styrene |

Dimensions

Dimensions



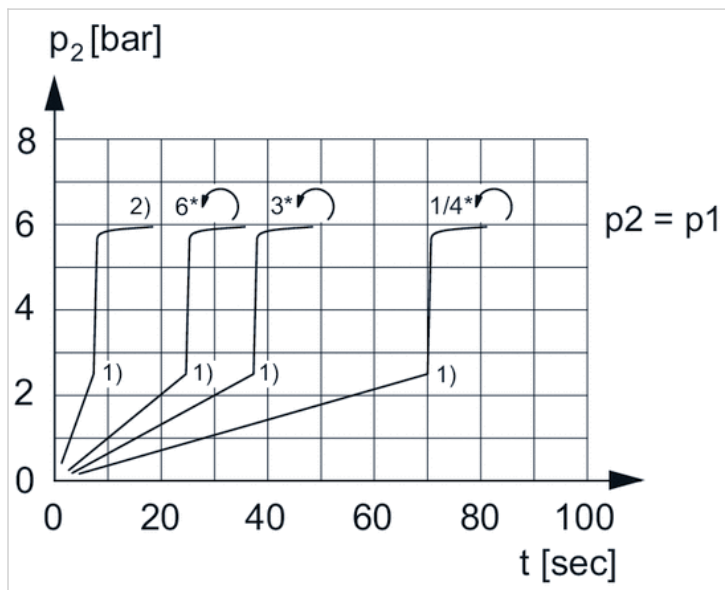
- A1 = input  
A2 = output  
A3 = ventilation port  
1) electrically operated  
2) Adjustment screw for filling time

Dimensions in mm

| A1    | A2    | A3    | A6    | B   | C  | D    | E     | H  | I  | J   | L  | T3  | T6 | V  | W     | Z  |
|-------|-------|-------|-------|-----|----|------|-------|----|----|-----|----|-----|----|----|-------|----|
| G 3/4 | G 3/4 | G 1/2 | G 1/4 | 100 | 52 | 51.5 | 164.5 | 58 | M6 | 103 | 22 | 9.5 | 7  | 29 | 103.5 | 20 |
| G 1   | G 1   | G 1/2 | G 1/4 | 100 | 52 | 51.5 | 164.5 | 58 | M6 | 103 | 22 | 9.5 | 7  | 29 | 103.5 | 20 |

## Diagrams

### Secondary pressure while filling



p1 = working pressure

p2 = secondary pressure

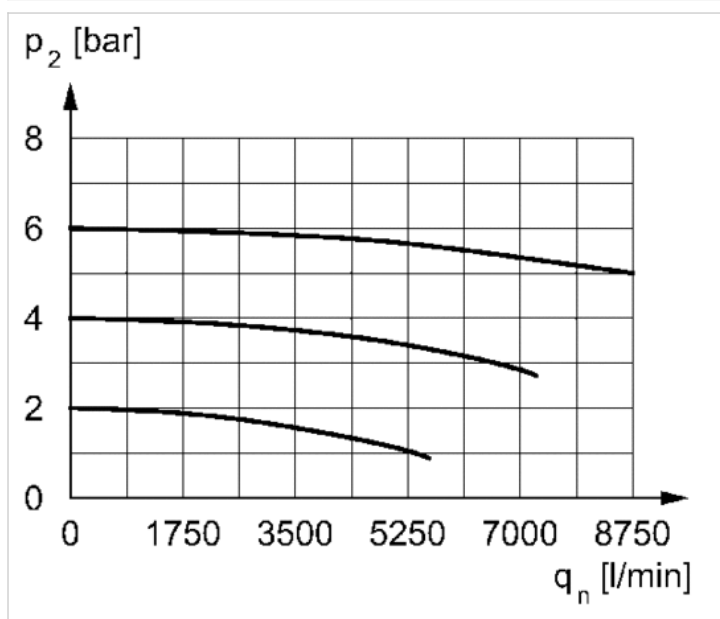
t = filling time, adjustable via adjustment screw (throttle)

1) Switching point: adjustable filling time, fixed change-over pressure  $\approx 0.5 \times p1$  (50%)

2) Throttle fully opened

\* Adjustment screw rotations

### Flow rate characteristic



p2 = secondary pressure

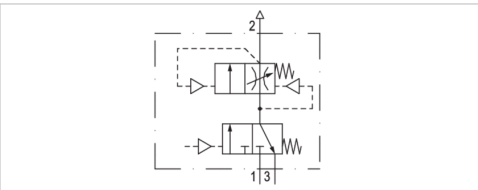
qn = nominal flow

# Filling unit, pneumatically operated, Series NL6-SSU

- Compressed air connection G 3/4, G 1
- 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                        | 6.79 lbs                                   |



## Technical data

| Part No.   | Port  | Exhaust | Flow    | Flow    |
|------------|-------|---------|---------|---------|
|            |       |         | Qn 1►2  | Qn 2►3  |
| 0821300992 | G 3/4 | G 1/2   | 8.89 Cv | 3.96 Cv |
| 0821300993 | G 1   | G 1/2   | 8.89 Cv | 3.96 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

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.

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

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

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.

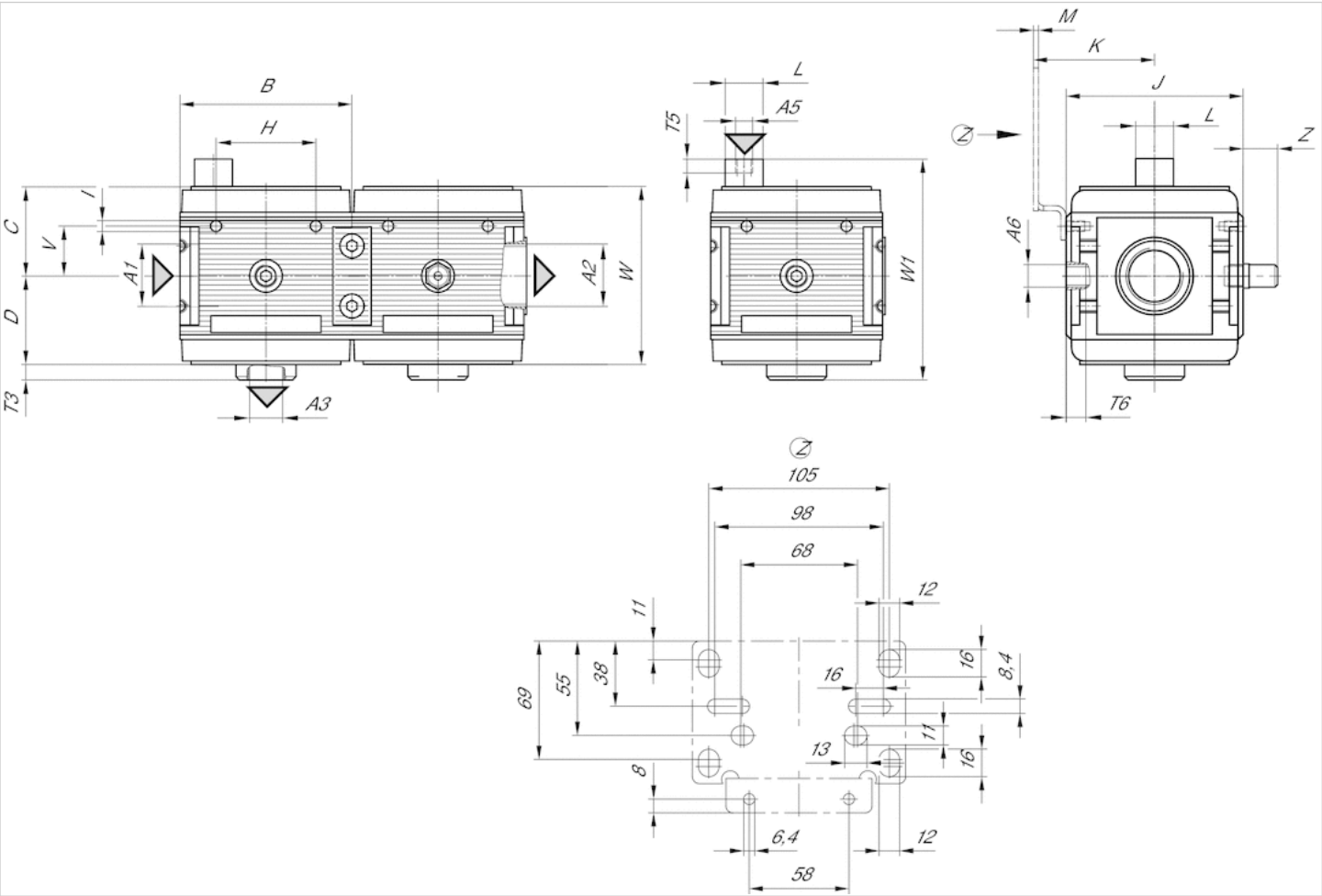
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Technical information

| Material    |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |
| Seals       | Acrylonitrile butadiene rubber  |

Dimensions

Dimensions



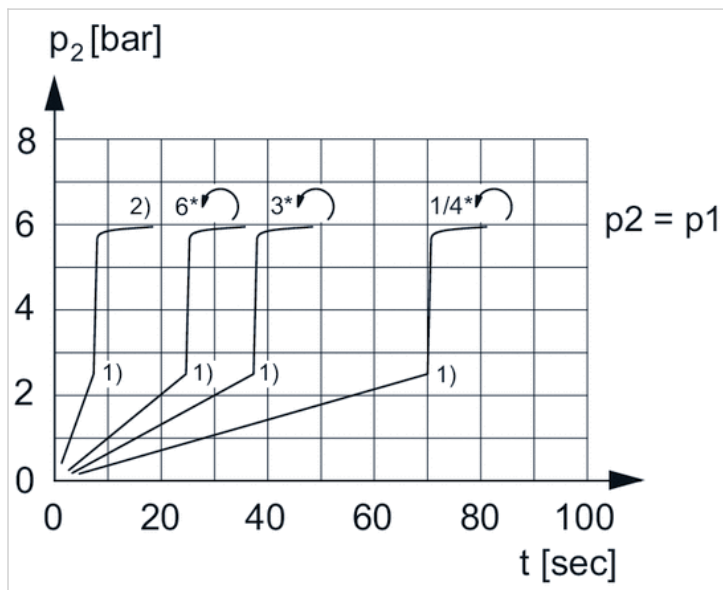
- A1 = input
- A2 = output
- A3 = ventilation port
- A5 = control pressure connection

Dimensions in mm

| A1    | A2    | A3    | A5    | A6    | B   | C  | D  | F   | H  | I  | J   | K    | L  | M | T5 | T6 | V  | W     | W1    | Z  |
|-------|-------|-------|-------|-------|-----|----|----|-----|----|----|-----|------|----|---|----|----|----|-------|-------|----|
| G 3/4 | G 3/4 | G 1/2 | G 1/8 | G 1/4 | 100 | 52 | 51 | 9.5 | 58 | M6 | 103 | 70.5 | 22 | 3 | 18 | 7  | 29 | 103.5 | 128.5 | 20 |
| G 1   | G 1   | G 1/2 | G 1/8 | G 1/4 | 100 | 52 | 51 | 9.5 | 58 | M6 | 103 | 70.5 | 22 | 3 | 18 | 7  | 29 | 103.5 | 128.5 | 20 |

## Diagrams

### Secondary pressure while filling



p1 = working pressure

p2 = secondary pressure

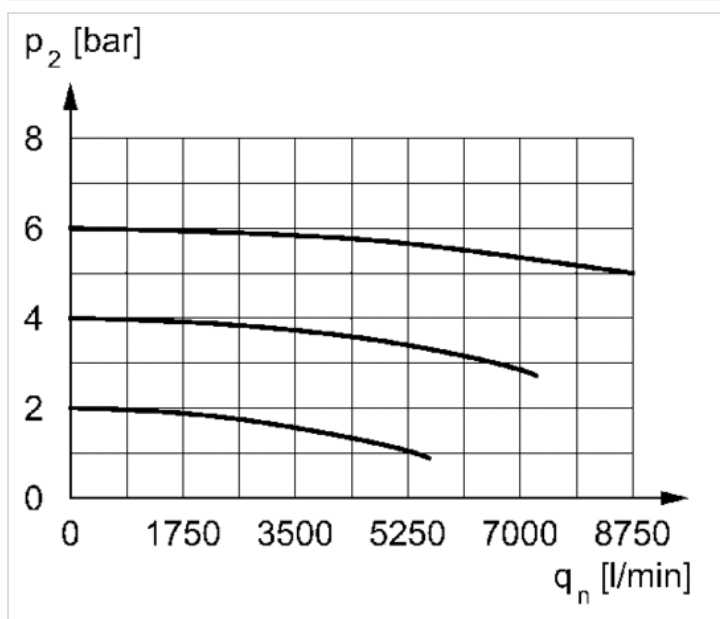
t = filling time, adjustable via adjustment screw (throttle)

1) Switching point: adjustable filling time, fixed change-over pressure  $\approx 0.5 \times p1$  (50%)

2) Throttle fully opened

\* Adjustment screw rotations

### Flow rate characteristic

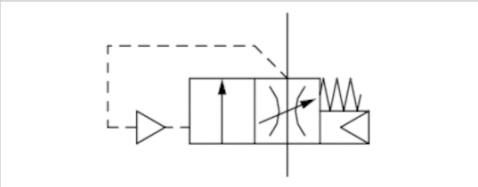


p2 = secondary pressure

qn = nominal flow

# Filling valve, pneumatically operated, Series NL6-SSV

- Compressed air connection G 3/4, G 1
- 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                        | 3.26 lbs                                   |

## Technical data

| Part No.   | Port  | Flow    |
|------------|-------|---------|
|            |       | Qn      |
| 0821300974 | G 3/4 | 12.2 Cv |
| 0821300967 | G 1   | 12.2 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

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.

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

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

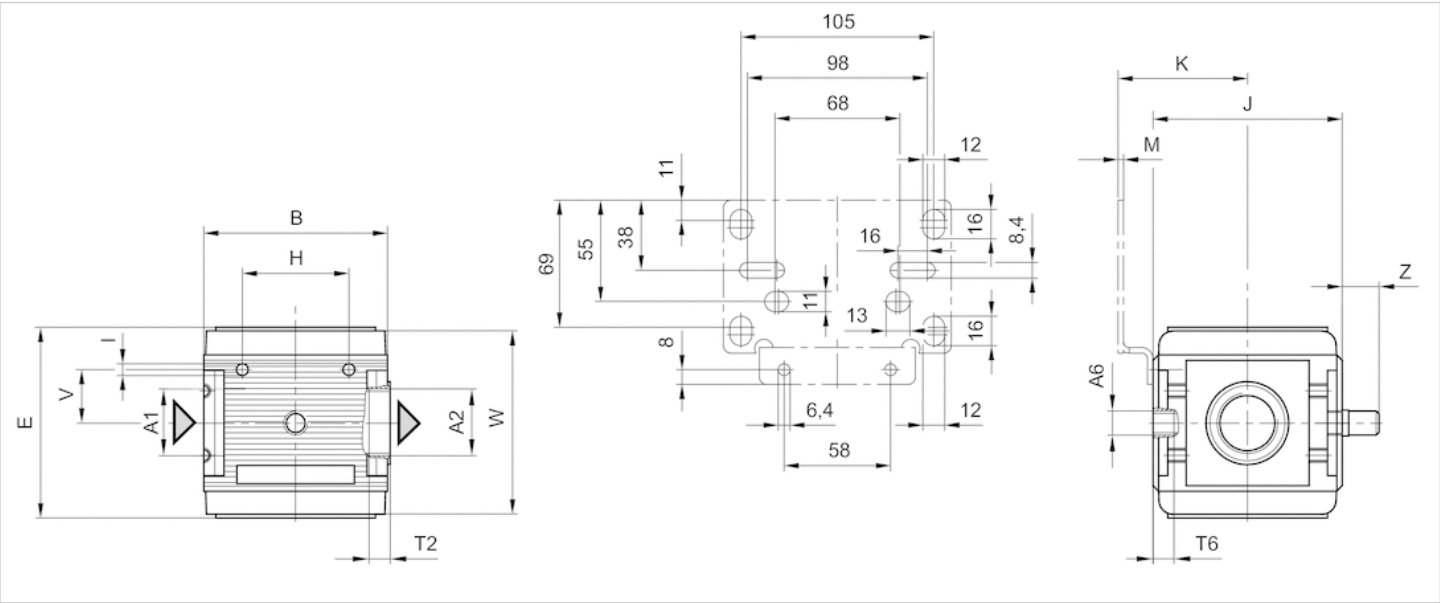
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Technical information

| Material    |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |
| Seals       | Acrylonitrile butadiene rubber  |

Dimensions

Dimensions



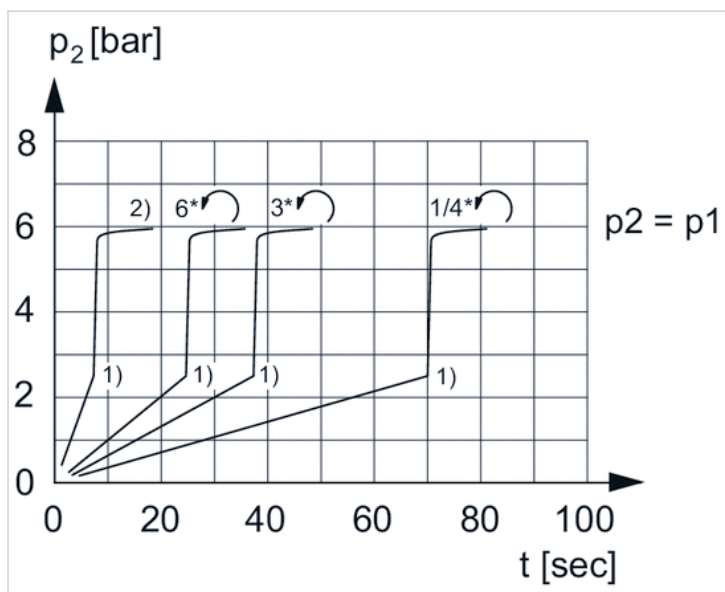
A1 = input  
 A2 = output  
 A6 = output

Dimensions in mm

| A1    | A2    | A6    | B   | E   | H  | I  | J   | K    | M | T2 | T6 | V  | W   | Z  |
|-------|-------|-------|-----|-----|----|----|-----|------|---|----|----|----|-----|----|
| G 3/4 | G 3/4 | G 1/4 | 100 | 103 | 58 | M6 | 103 | 70.5 | 3 | 18 | 7  | 29 | 100 | 20 |
| G 1   | G 1   | G 1/4 | 100 | 103 | 58 | M6 | 103 | 70.5 | 3 | 18 | 7  | 29 | 100 | 20 |

## Diagrams

### Secondary pressure while filling



$p_1$  = working pressure

$p_2$  = secondary pressure

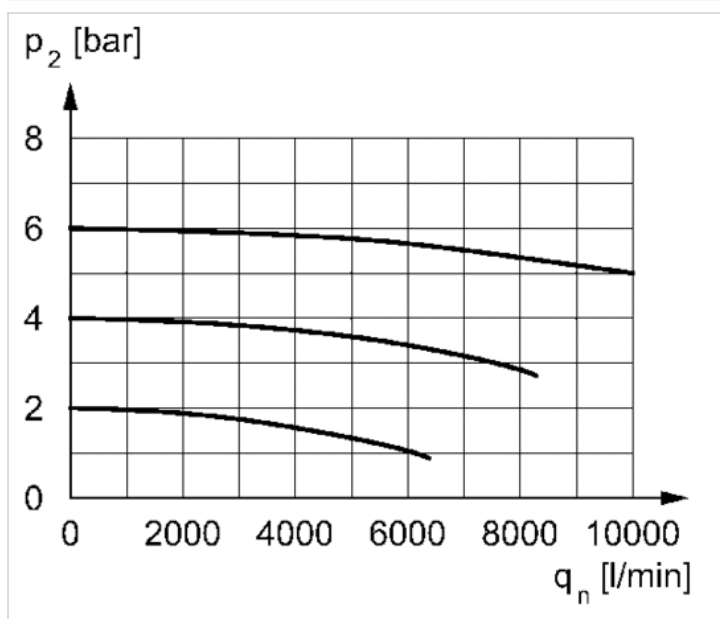
$t$  = filling time, adjustable via adjustment screw (throttle)

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 NL6-SOV

- ATEX optional
- Compressed air connection G 3/4, G 1
- Pipe connection



|                                                  |                                              |
|--------------------------------------------------|----------------------------------------------|
| Version                                          | Poppet valve, Can be assembled into blocks   |
| Parts                                            | 3/2-directional valve, electrically operated |
| Nominal flow 1 ▶ 2                               | 12.7 Cv                                      |
| Nominal flow 2 ▶ 3                               | 3.96 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 |
|------------|-------------------------------------------------------------------------------------|---------------------------------|----------------------------------|---------|
| 0821300973 |  | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300972 |  | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300971 |  | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300990 |  | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300966 |  | G 1                             | G 1                              | G 1/2   |
| 0821300965 |  | G 1                             | G 1                              | G 1/2   |
| 0821300964 |  | G 1                             | G 1                              | G 1/2   |
| 0821300991 |  | G 1                             | G 1                              | G 1/2   |

| Part No.   | Operational voltage | Operational voltage | Operational voltage |
|------------|---------------------|---------------------|---------------------|
|            | DC                  | AC 50 Hz            | AC 60 Hz            |
| 0821300973 | -                   | -                   | -                   |
| 0821300972 | 24 V                | -                   | -                   |
| 0821300971 | -                   | 230 V               | 230 V               |
| 0821300990 | -                   | -                   | -                   |
| 0821300966 | -                   | -                   | -                   |
| 0821300965 | 24 V                | -                   | -                   |
| 0821300964 | -                   | 230 V               | 230 V               |
| 0821300991 | -                   | -                   | -                   |

| Part No.   | Power consumption | Holding power | Switch-on power | Manual override |
|------------|-------------------|---------------|-----------------|-----------------|
|            | DC                | AC 50 Hz      | AC 50 Hz        |                 |
| 0821300973 | -                 | -             | -               | without         |
| 0821300972 | 4.8 W             | -             | -               | -               |
| 0821300971 | -                 | 8.5 VA        | 11.8 VA         | -               |
| 0821300990 | -                 | -             | -               | with detent     |
| 0821300966 | -                 | -             | -               | without         |
| 0821300965 | 4.8 W             | -             | -               | -               |
| 0821300964 | -                 | 8.5 VA        | 11.8 VA         | -               |
| 0821300991 | -                 | -             | -               | with detent     |

| Part No.   | Electrical connection  | basic valve with electrical connector |
|------------|------------------------|---------------------------------------|
|            | Pilot valve            |                                       |
| 0821300973 | -                      | pilot valve without coil              |
| 0821300972 | Plug, ISO 6952, form B | -                                     |
| 0821300971 | Plug, ISO 6952, form B | -                                     |
| 0821300990 | -                      | pilot valve without coil              |
| 0821300966 | -                      | pilot valve without coil              |
| 0821300965 | Plug, ISO 6952, form B | -                                     |
| 0821300964 | Plug, ISO 6952, form B | -                                     |
| 0821300991 | -                      | pilot valve without coil              |

| Part No.   | Reverse polarity protection         | Weight   |
|------------|-------------------------------------|----------|
| 0821300973 | -                                   | 3.13 lbs |
| 0821300972 | Protected against polarity reversal | 3.28 lbs |
| 0821300971 | Protected against polarity reversal | 3.28 lbs |
| 0821300990 | -                                   | 3.13 lbs |
| 0821300966 | -                                   | 3.13 lbs |
| 0821300965 | Protected against polarity reversal | 3.28 lbs |
| 0821300964 | Protected against polarity reversal | 3.28 lbs |
| 0821300991 | -                                   | 3.13 lbs |

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

## Technical information

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

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

The connections on the front and back are not connected to the main air flow. No pressure gauge may be connected here.

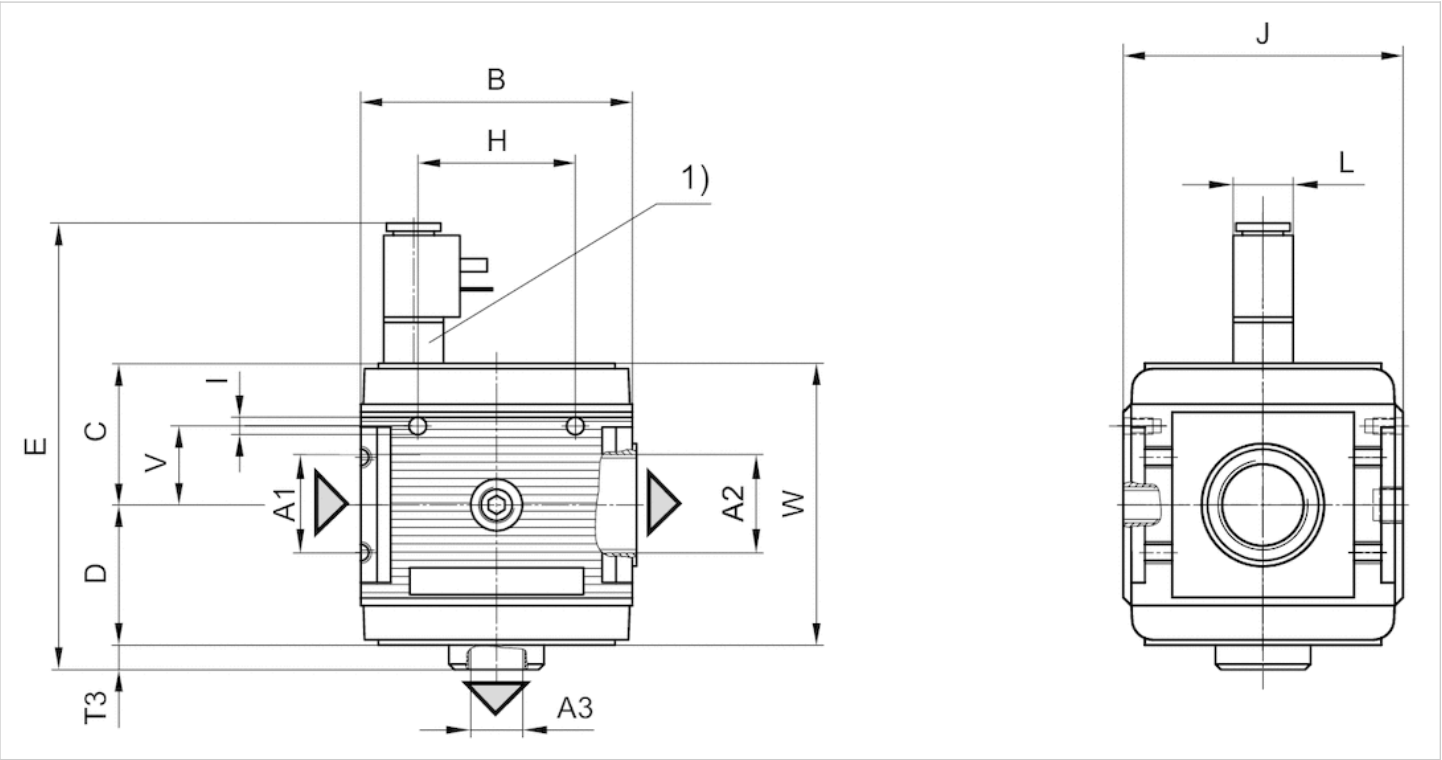
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

| Material    |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |
| Seals       | Acrylonitrile butadiene styrene |

Dimensions

Dimensions



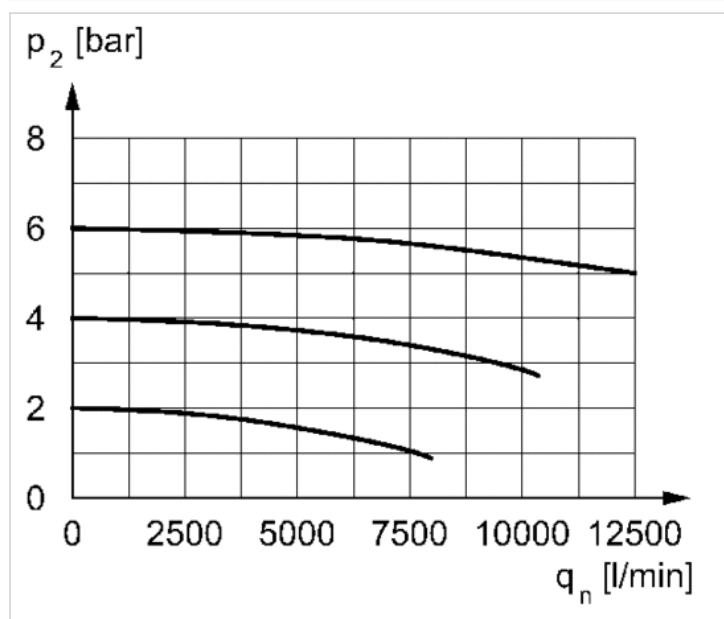
A1 = input  
A2 = output  
A3 = ventilation port  
1) electrically operated

Dimensions in mm

| A1    | A2    | A3    | B   | C  | D    | E     | H  | I  | J   | L  | T3  | T5 | V  | W     |
|-------|-------|-------|-----|----|------|-------|----|----|-----|----|-----|----|----|-------|
| G 3/4 | G 3/4 | G 1/2 | 100 | 52 | 51.5 | 164.5 | 58 | M6 | 103 | 22 | 9.5 | 7  | 29 | 103.5 |
| G 1   | G 1   | G 1/2 | 100 | 52 | 51.5 | 164.5 | 58 | M6 | 103 | 22 | 9.5 | 7  | 29 | 103.5 |

## Diagrams

### Flow rate characteristic



$p_2$  = secondary pressure

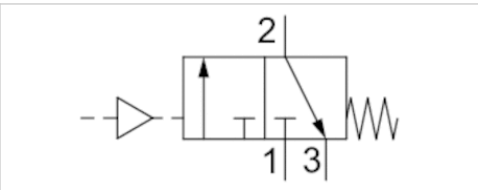
$q_n$  = nominal flow

# 3/2-directional valve, pneumatically operated, Series NL6-SOV

- Compressed air connection G 3/4, G 1
- 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                        | 3.17 lbs                                   |



## Technical data

| Part No.   | Port  | Exhaust | Flow    | Flow    |
|------------|-------|---------|---------|---------|
|            |       |         | Qn 1►2  | Qn 2►3  |
| 0821300988 | G 3/4 | G 1/2   | 12.7 Cv | 3.96 Cv |
| 0821300989 | G 1   | G 1/2   | 12.7 Cv | 3.96 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

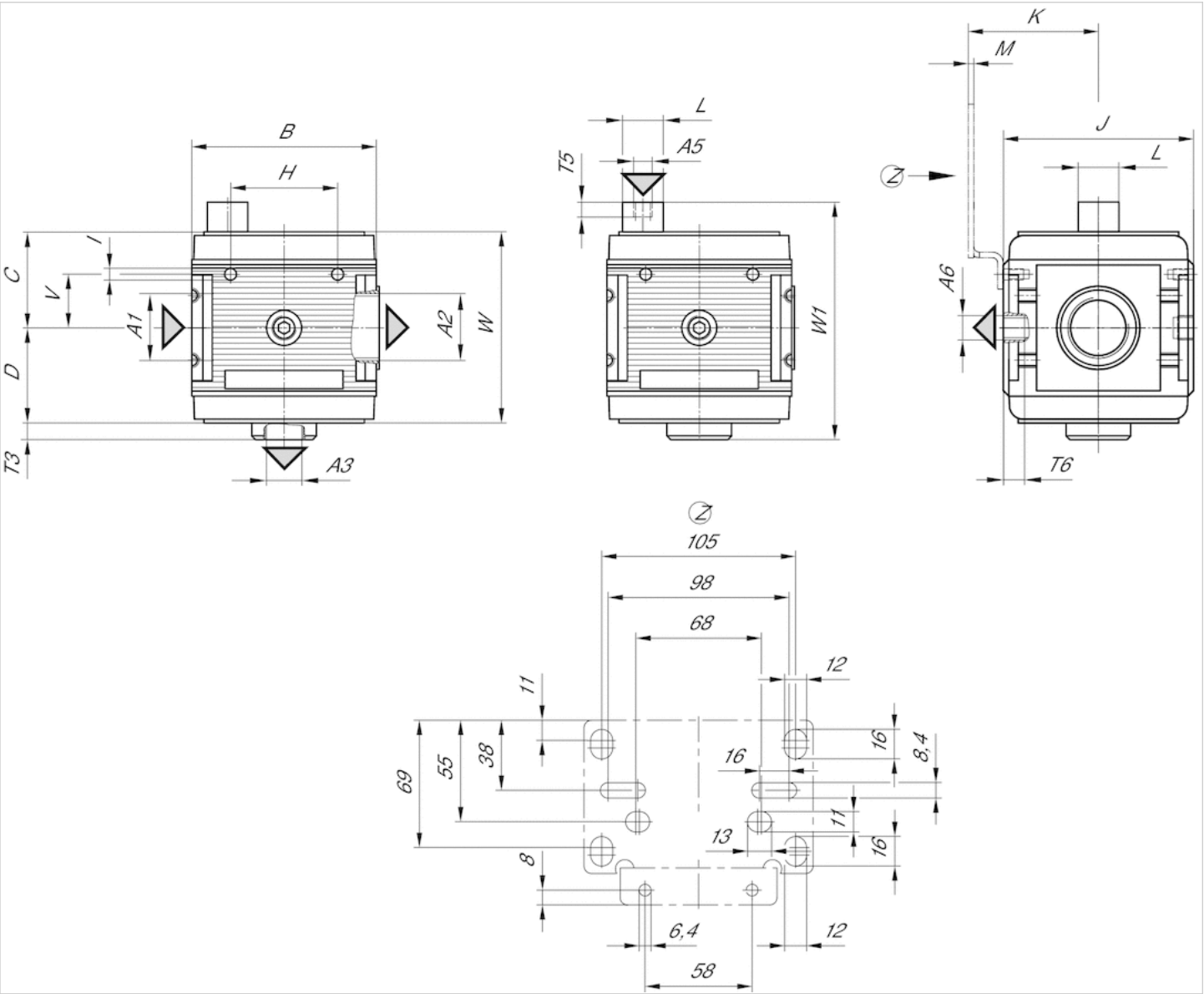
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

| Material    |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |
| Seals       | Acrylonitrile butadiene rubber  |

Dimensions

Dimensions



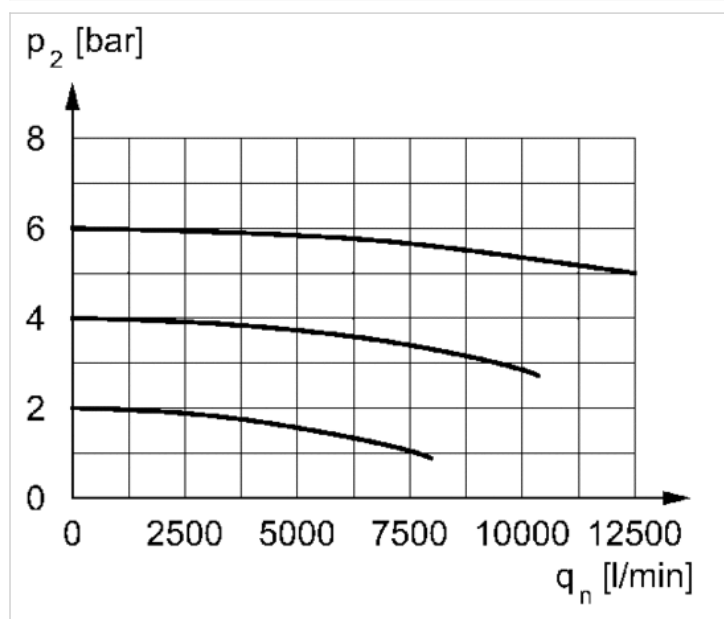
- A1 = input
- A2 = output
- A3 = ventilation port
- A5 = control pressure connection
- A6 = output

Dimensions in mm

| A1    | A2    | A3    | A5    | A6    | B   | C  | D    | F   | H  | I  | J   | K    | L  | M | T5 | T6 | V  | W1    |
|-------|-------|-------|-------|-------|-----|----|------|-----|----|----|-----|------|----|---|----|----|----|-------|
| G 3/4 | G 3/4 | G 1/2 | G 1/8 | G 1/4 | 100 | 52 | 50.5 | 9.5 | 58 | M6 | 103 | 70.5 | 22 | 3 | 18 | 7  | 29 | 128.5 |
| G 1   | G 1   | G 1/2 | G 1/8 | G 1/4 | 100 | 52 | 50.5 | 9.5 | 58 | M6 | 103 | 70.5 | 22 | 3 | 18 | 7  | 29 | 128.5 |

## Diagrams

### Flow rate characteristic



$p_2$  = secondary pressure

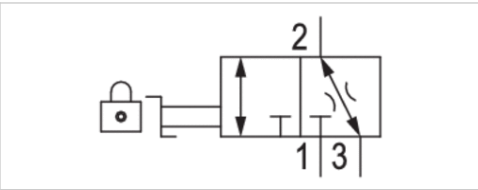
$q_n$  = nominal flow

# 3/2-shut-off valve, mechanically operated, Series NL6-BAV

- G 3/4, G 1
- lockable
- for padlocks
- suitable for ATEX



|                               |                               |
|-------------------------------|-------------------------------|
| Version                       | Ball valve                    |
| Activation                    | Mechanical                    |
| Lock type                     | lockable                      |
| Actuating element             | rotary switch                 |
| Sealing principle             | metal/metal sealing           |
| 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                        | 4.03 lbs                      |



## Technical data

| Part No.   | Version | Compressed air connection |        |
|------------|---------|---------------------------|--------|
|            |         | Input                     | Output |
| 0821300976 | 3/2     | G 3/4                     | G 3/4  |
| 0821300977 | 3/2     | G 1                       | G 1    |

| Part No.   | Compressed air connection |  | Flow     | Flow     | Lock type    |
|------------|---------------------------|--|----------|----------|--------------|
|            | Exhaust                   |  | Qn 1 ► 2 | Qn 2►3   |              |
| 0821300976 | G 1/2                     |  | 25.41 Cv | 0.112 Cv | for padlocks |
| 0821300977 | G 1/2                     |  | 25.41 Cv | 0.112 Cv | for padlocks |

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

Subbase (G3/4 = 1827009590, G1 = 1827009591) with block assembly kit (1827009593) is required to connect with the piping on the right.

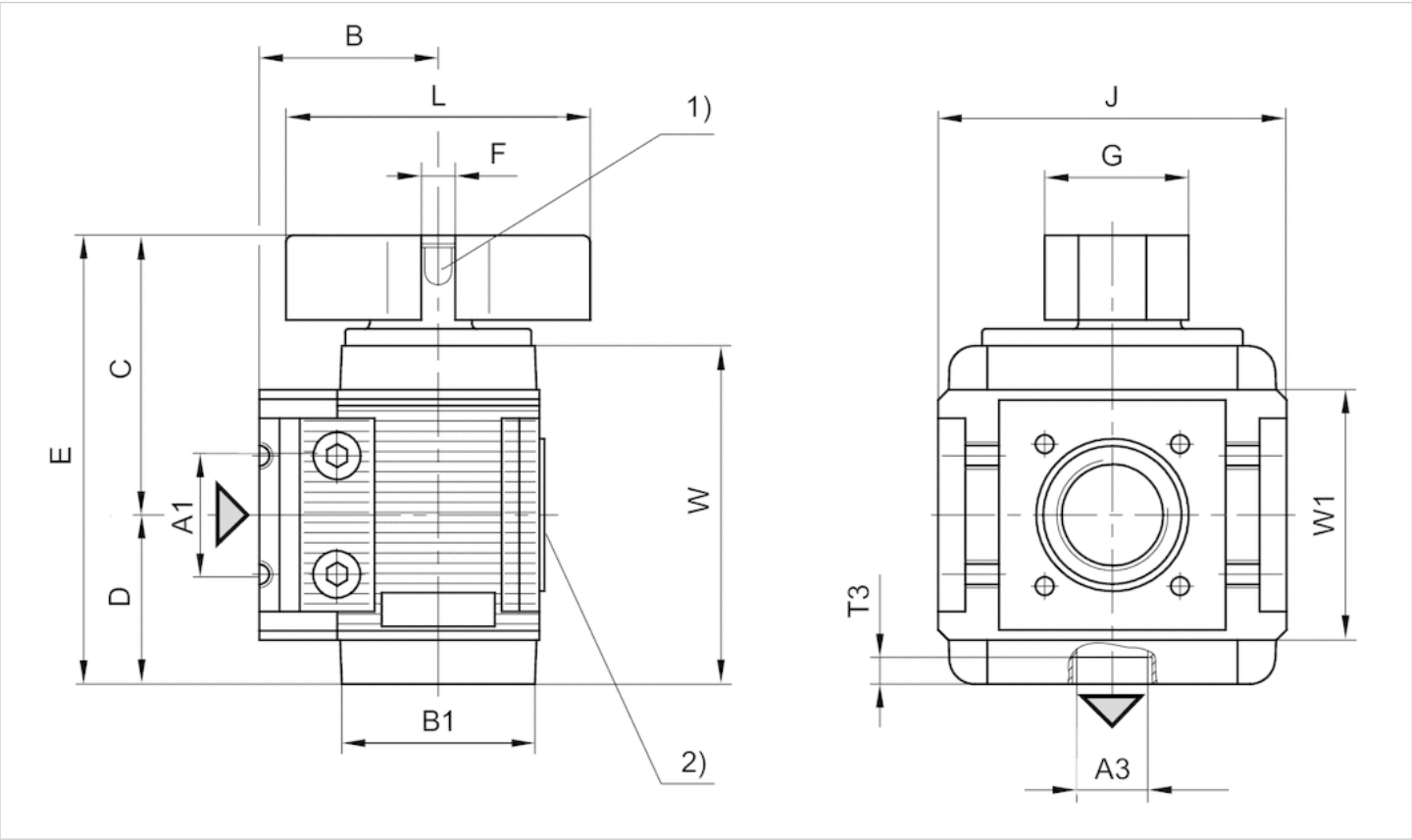
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Technical information

| Material          |                                 |
|-------------------|---------------------------------|
| Housing           | Die-cast aluminum               |
| Front plate       | Acrylonitrile butadiene styrene |
| Seals             | Acrylonitrile butadiene rubber  |
| Actuating element | Polyoxymethylene                |

Dimensions

Dimensions



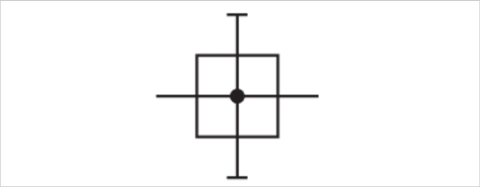
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) lockable with padlock
- 2) no connection thread

Dimensions in mm

| A3    | B  | B1 | C    | D  | E     | F | G    | J   | L  | T3   | W   | W1 |
|-------|----|----|------|----|-------|---|------|-----|----|------|-----|----|
| G 1/2 | 53 | 60 | 82.5 | 50 | 132.5 | 8 | 42.5 | 103 | 90 | 14.5 | 100 | 74 |

# Distributor, Series NL6-DIL

- G 1
- Distributor 2x
- 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                        | 2.09 lbs                                         |

## Technical data

| Part No.   | Port | Nominal flow | Nominal flow | Nominal flow |
|------------|------|--------------|--------------|--------------|
|            |      | Qn 1►2       | Qn 1►3       | Qn 1►5       |
| 0821300978 | G 1  | 25.41 Cv     | 10.16 Cv     | 10.16 Cv     |

Nominal flow Qn with secondary pressure p2 = 87 psi at Δp = 14.5 psi, Subbase G1, material number 1827009591, must be ordered separately., Block assembly with block assembly kit, material number 1827009593, 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

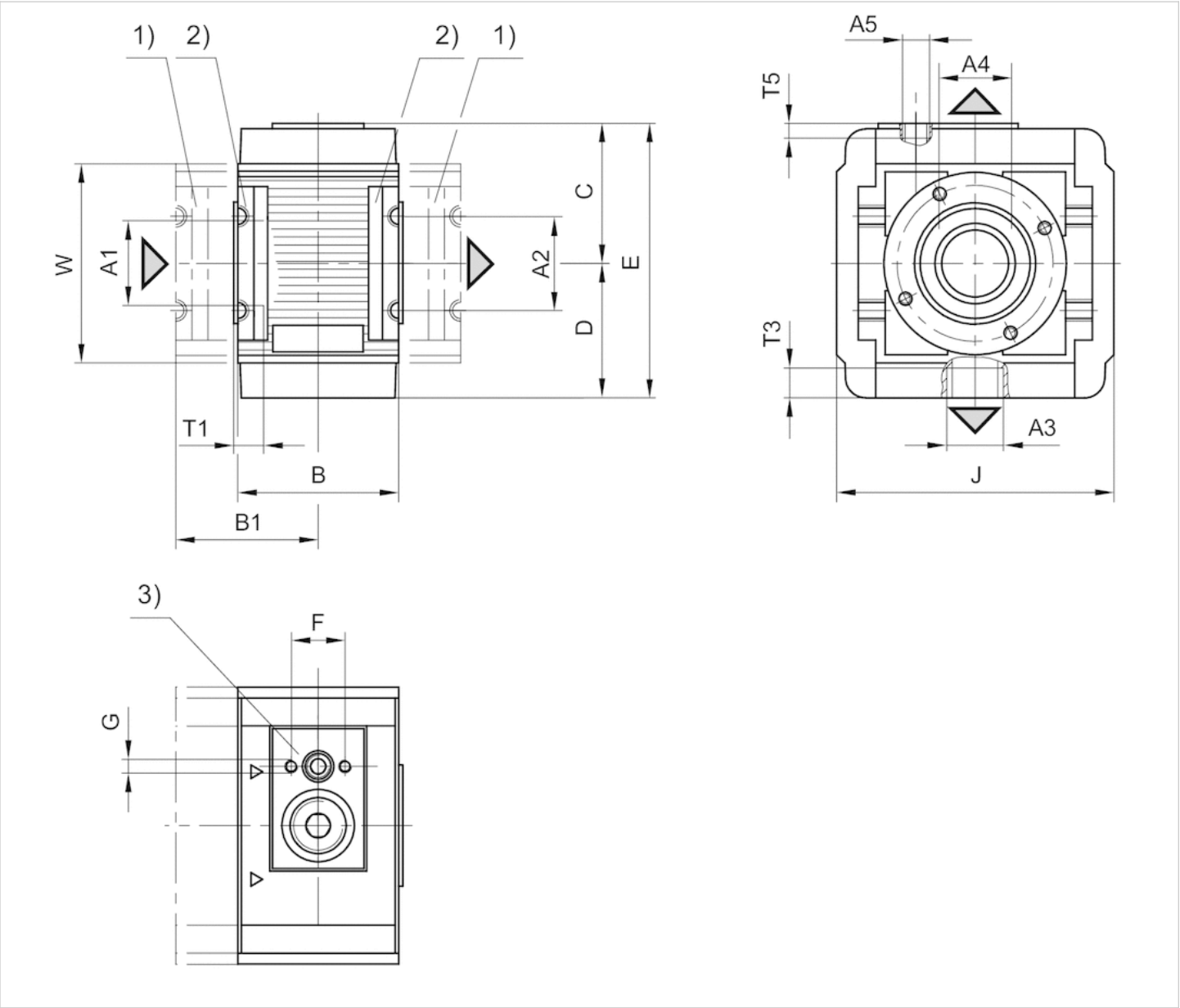
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

| Material |                   |
|----------|-------------------|
| Housing  | Die-cast aluminum |

Dimensions

Dimensions



- A1 = input  
A2 = output  
A3 = output  
A4 = output  
1) Subbase G1, material number 1827009591, must be ordered separately.  
2) No connection thread  
3) hole pattern for mechanical vacuum/pressure switch  
Block assembly with block assembly kit, material number 1827009593

Dimensions in mm

| A1  | A2  | A3    | A4    | A5    | B  | B1 | C  | D  | E   | F  | G  | J   | T1 | T3   | T5 | W  |
|-----|-----|-------|-------|-------|----|----|----|----|-----|----|----|-----|----|------|----|----|
| G 1 | G 1 | G 1/2 | G 1/2 | G 1/8 | 60 | 53 | 52 | 50 | 102 | 20 | M5 | 103 | 18 | 14.5 | 8  | 74 |

# 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 |

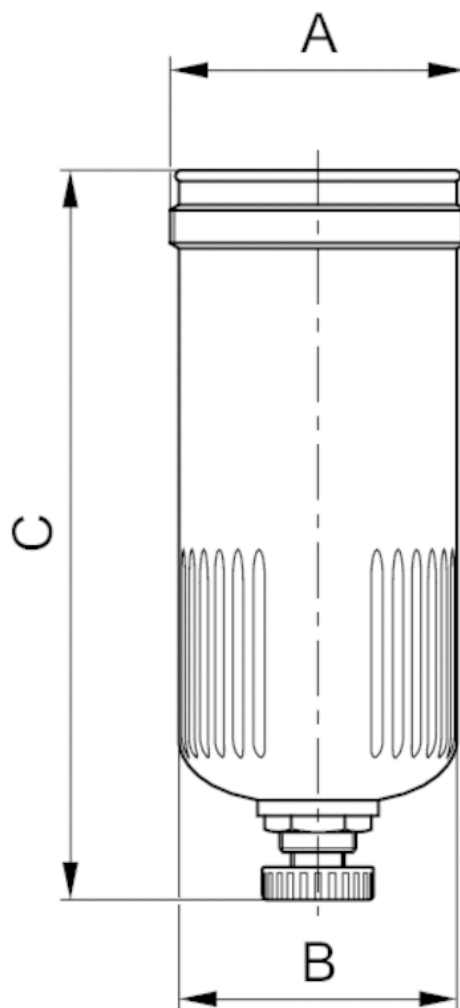
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

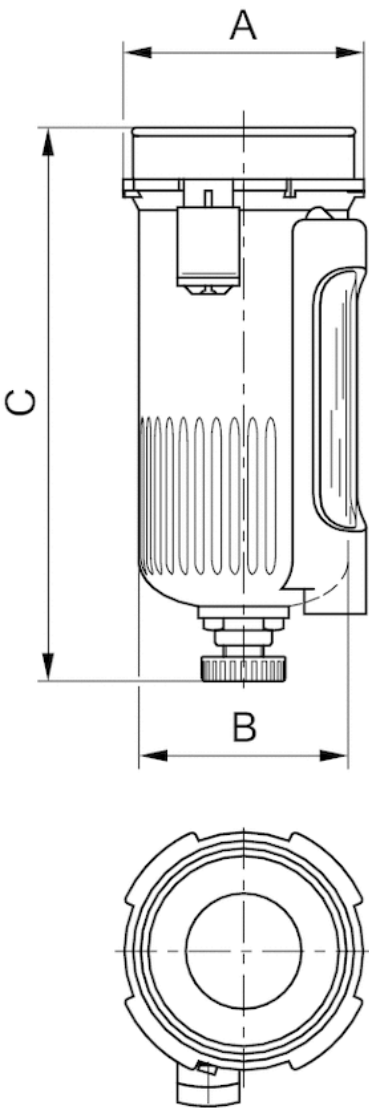
| Material  |                                |
|-----------|--------------------------------|
| Reservoir | Polycarbonate, Die cast zinc   |
| Seal      | Acrylonitrile butadiene rubber |

## Dimensions

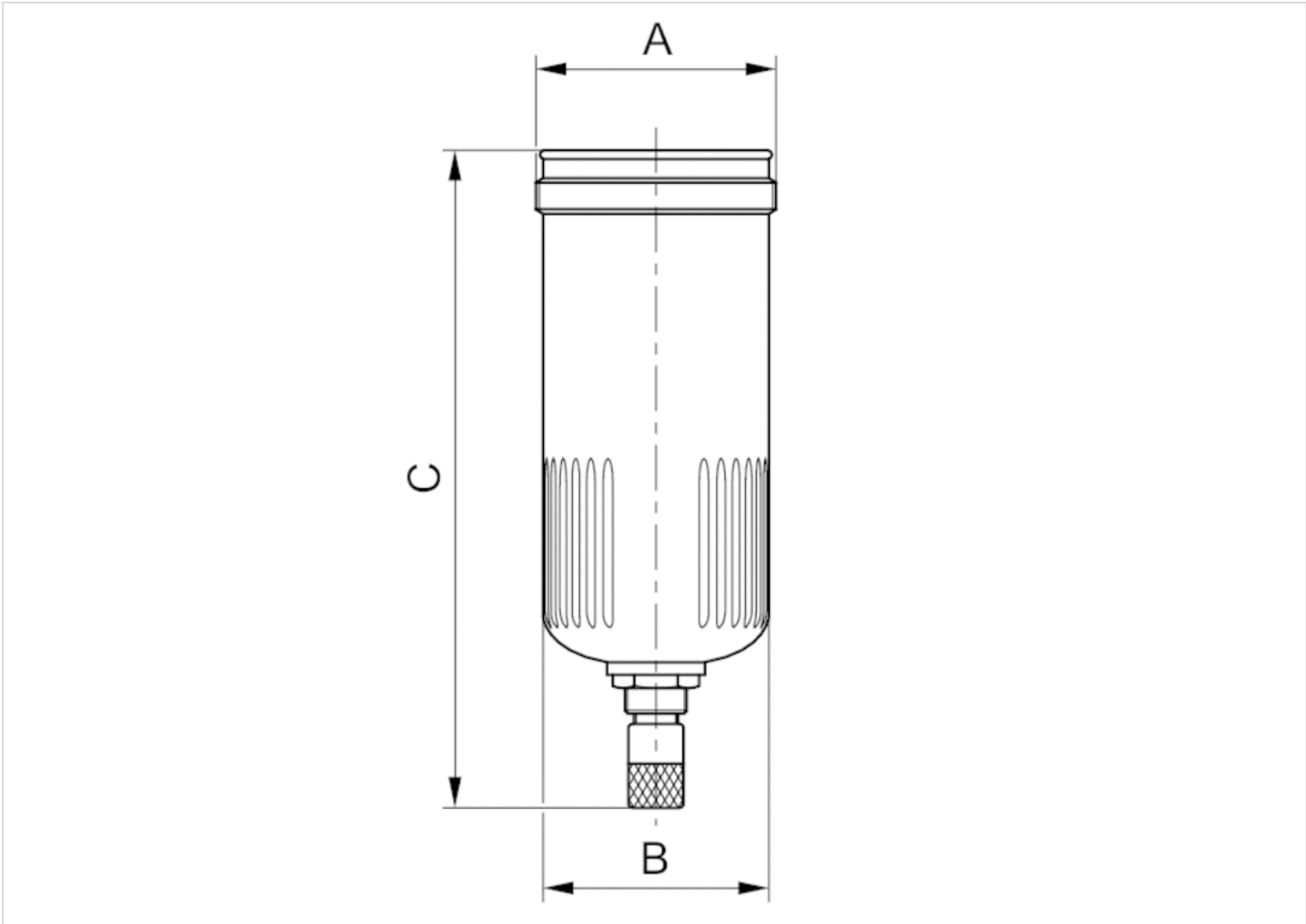
Dimensions Fig. 1



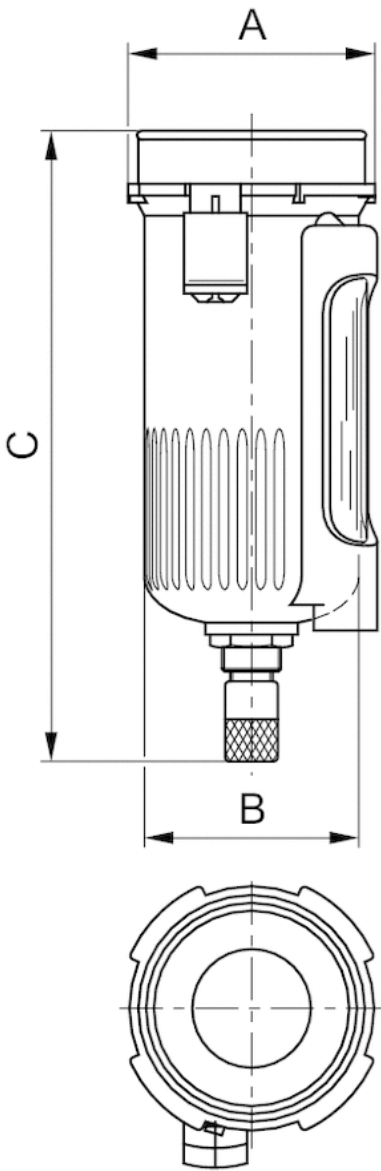
Dimensions Fig. 2



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 NL6-CLC

- for prefilters and microfilters

- Material Polycarbonate, Die cast zinc



Version

Certificates

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Filter reservoir volume

Weight

Reservoir

suitable for ATEX

22 ... 232 psi

14 ... 140 °F

14 ... 140 °F

Compressed air

5.07 fl.oz.

2.42 lbs

## Technical data

| Part No.   | Condensate drain                       | Reservoir     | Fig.   |
|------------|----------------------------------------|---------------|--------|
| 1827009604 | fully automatic, open without pressure | Polycarbonate | Fig. 1 |
| 1827009605 | fully automatic, open without pressure | Die cast zinc | Fig. 2 |

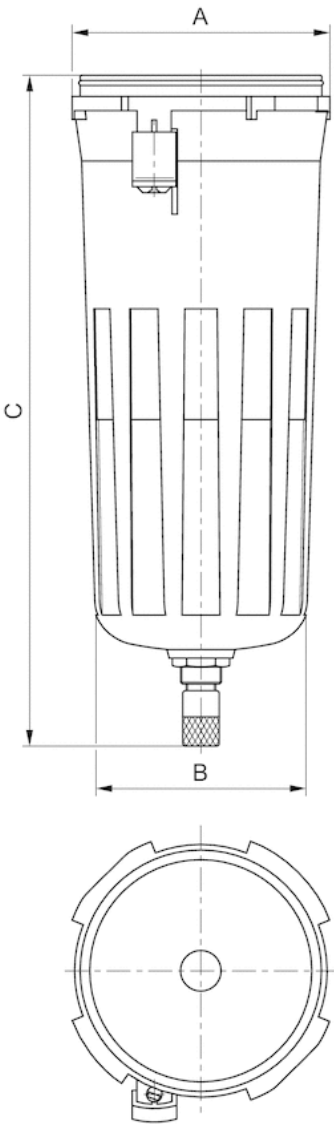
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

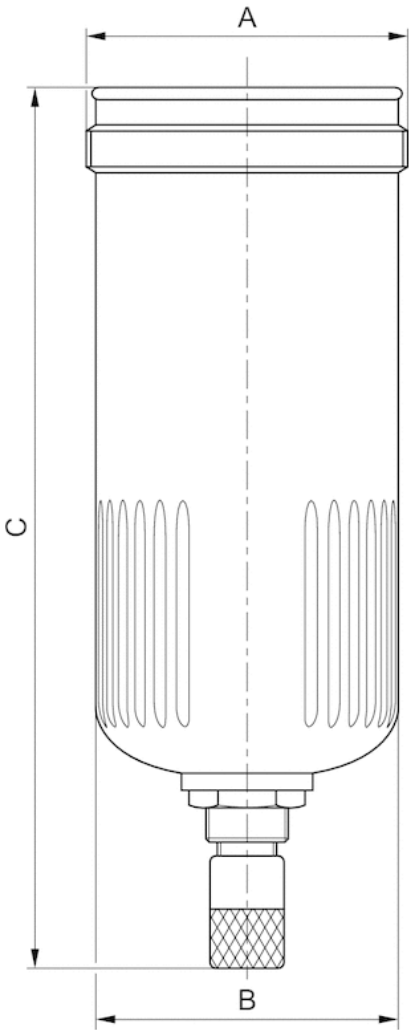
| Material  |                                |
|-----------|--------------------------------|
| Reservoir | Polycarbonate, Die cast zinc   |
| Seal      | Acrylonitrile butadiene rubber |

Dimensions

Dimensions Fig. 1



Dimensions Fig. 2



Dimensions

| Part No.   | A    | B    | C     |
|------------|------|------|-------|
| 1827009604 | 94.5 | 75.4 | 233.5 |
| 1827009605 | 94.5 | 70.5 | 333.5 |

# Reservoir, Series NL6-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 ... 140 °F

14 ... 140 °F

Compressed air

4.4 fl.oz.

See table below

## Technical data

| Part No.   | Weight   |
|------------|----------|
| 1827009610 | 1.98 lbs |
| 1827009611 | 2.42 lbs |

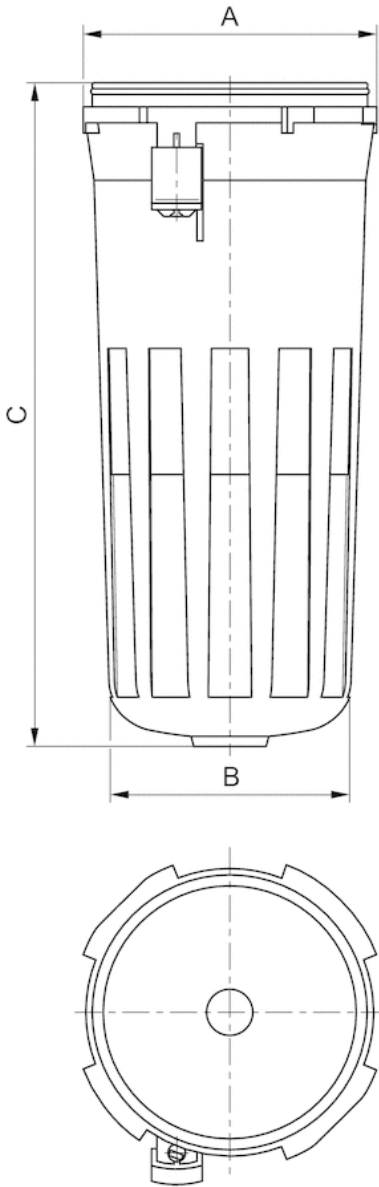
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

| Material  |                                |
|-----------|--------------------------------|
| Reservoir | Die cast zinc                  |
| Seal      | Acrylonitrile butadiene rubber |

Dimensions

Dimensions



Dimensions in mm

| Part No.   | Compressed air connection | A    | B    | C   |
|------------|---------------------------|------|------|-----|
| 1827009610 | G 3/4                     | 94.5 | 75.4 | 200 |
| 1827009611 | G 1                       | 94.5 | 70.5 | 300 |

# 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 |

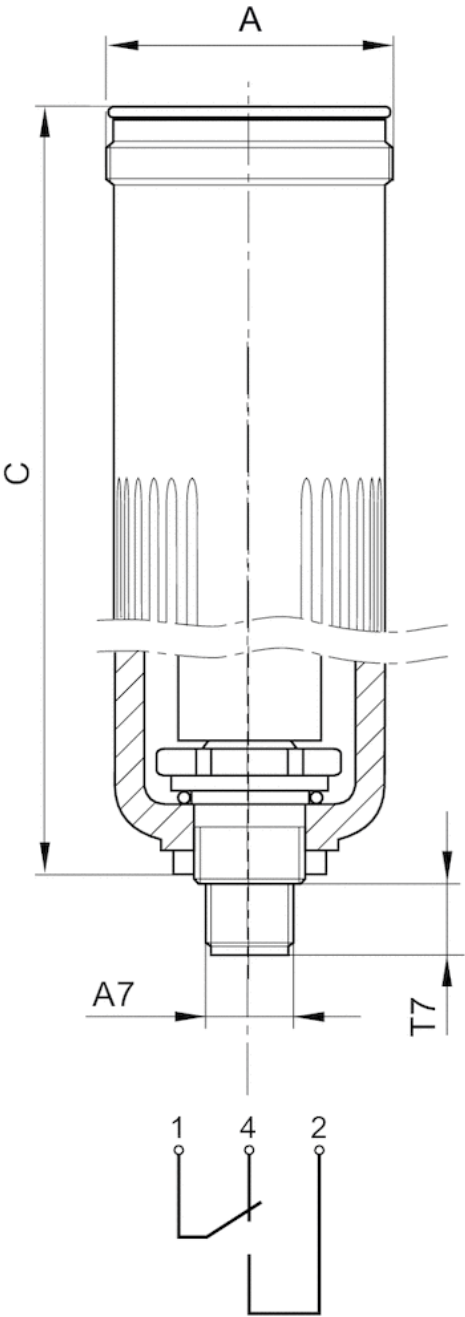
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

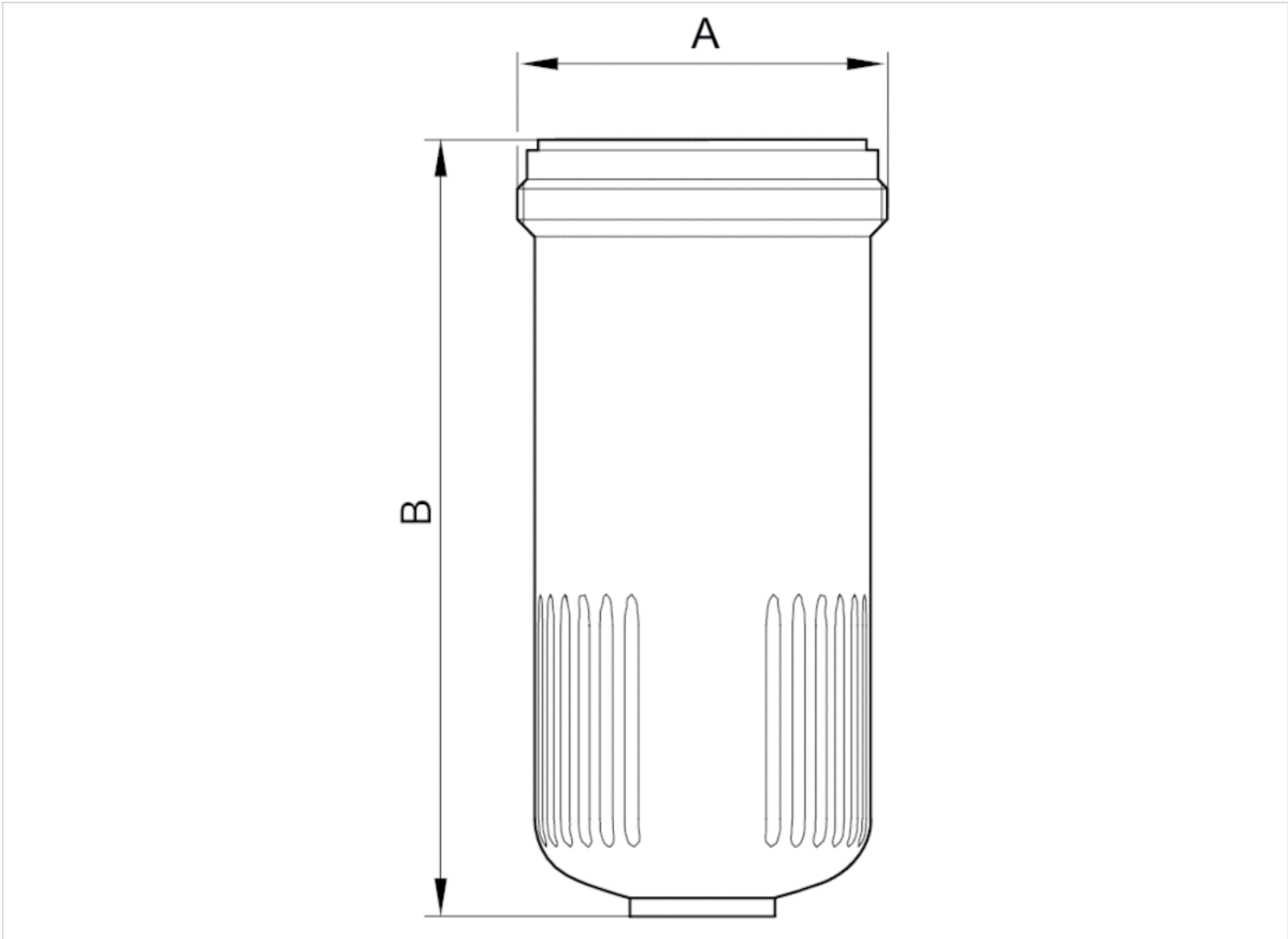
| Material  |                                |
|-----------|--------------------------------|
| Reservoir | Polycarbonate, Die cast zinc   |
| Seal      | Acrylonitrile butadiene rubber |

Dimensions

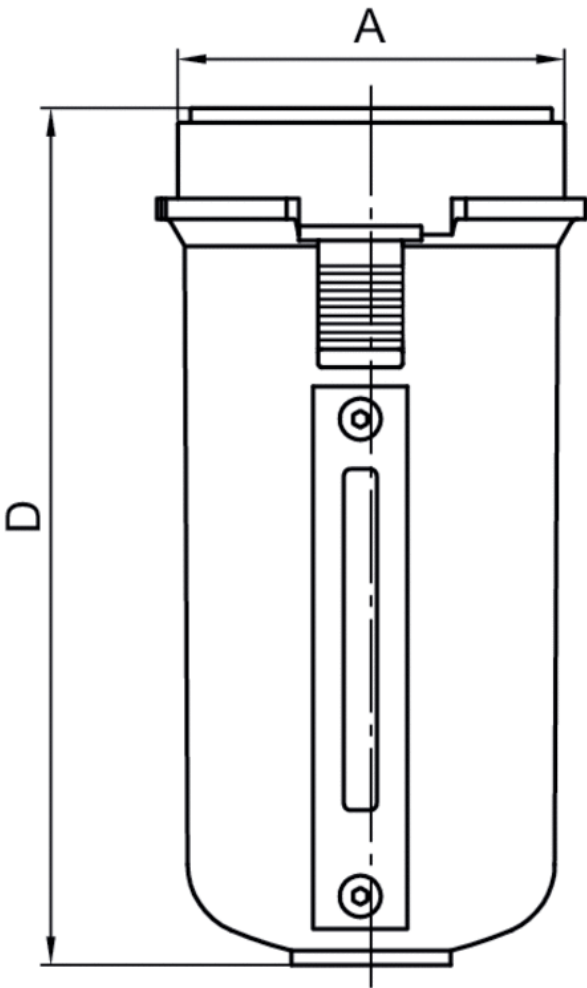
Dimensions Fig. 1



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

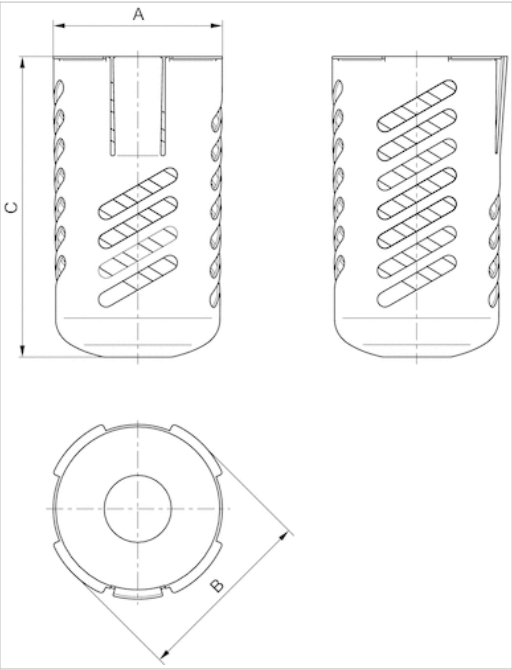
## Technical information

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, Series NL6

- for NL6



Ambient temperature min./max.  
Weight

-40 ... 140 °F  
0.606 lbs

## Technical data

| Part No.   |
|------------|
| 1821336017 |

Scope of delivery incl. mounting screws

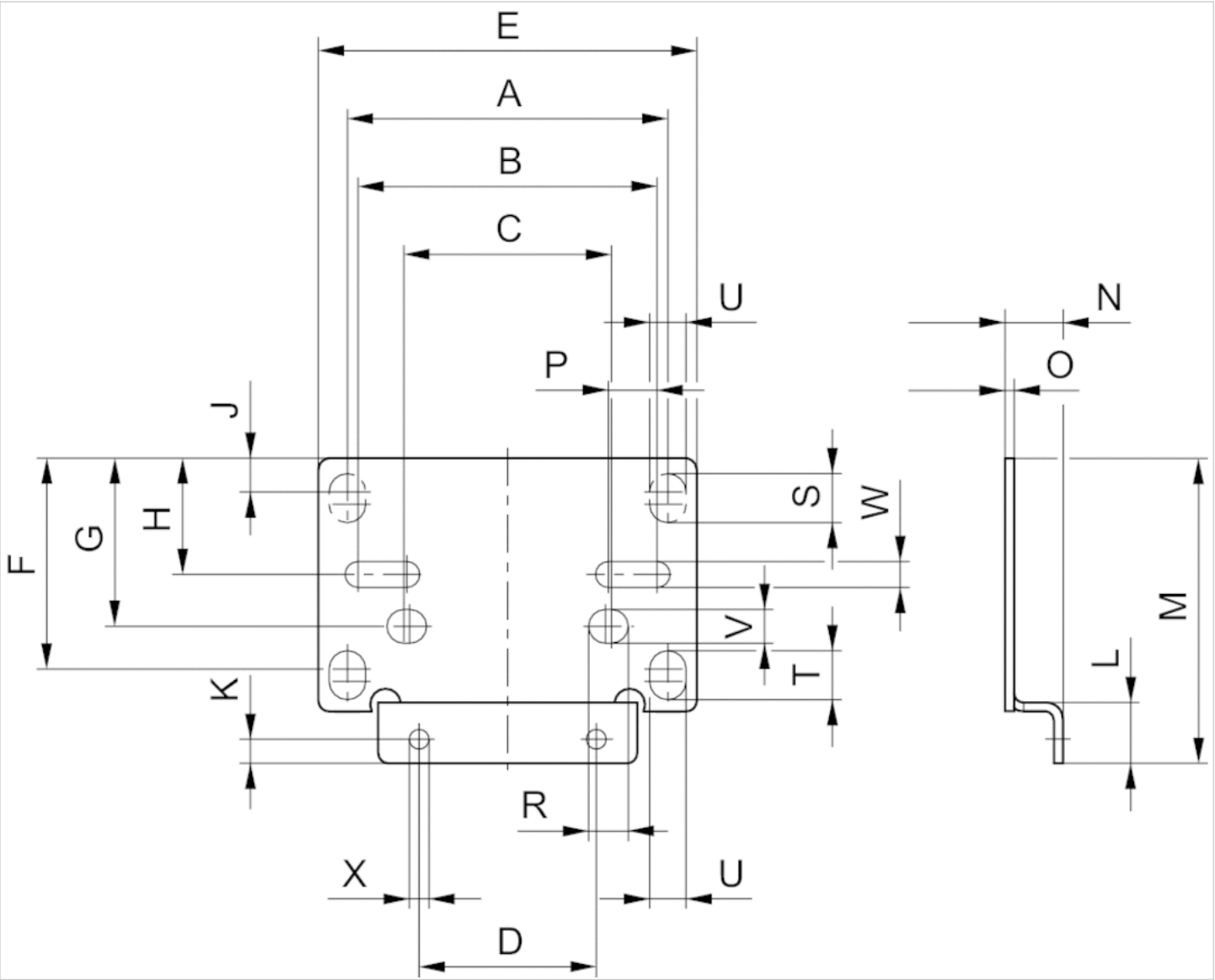
## Technical information

suitable for individual units

## Technical information

| Material |                   |
|----------|-------------------|
| Housing  | Steel, galvanized |

Dimensions



Dimensions

| Part No.   | A   | B  | C  | D  | E   | F  | G  | H  | J  | K | L  | M   | N  | O | P  | R  | S  | T  | U  | V  | W   | X   |
|------------|-----|----|----|----|-----|----|----|----|----|---|----|-----|----|---|----|----|----|----|----|----|-----|-----|
| 1821336017 | 105 | 98 | 68 | 58 | 124 | 69 | 55 | 38 | 11 | 8 | 20 | 100 | 19 | 3 | 16 | 13 | 16 | 16 | 12 | 11 | 8.4 | 6.4 |

# Block assembly kit

- NL6



Weight

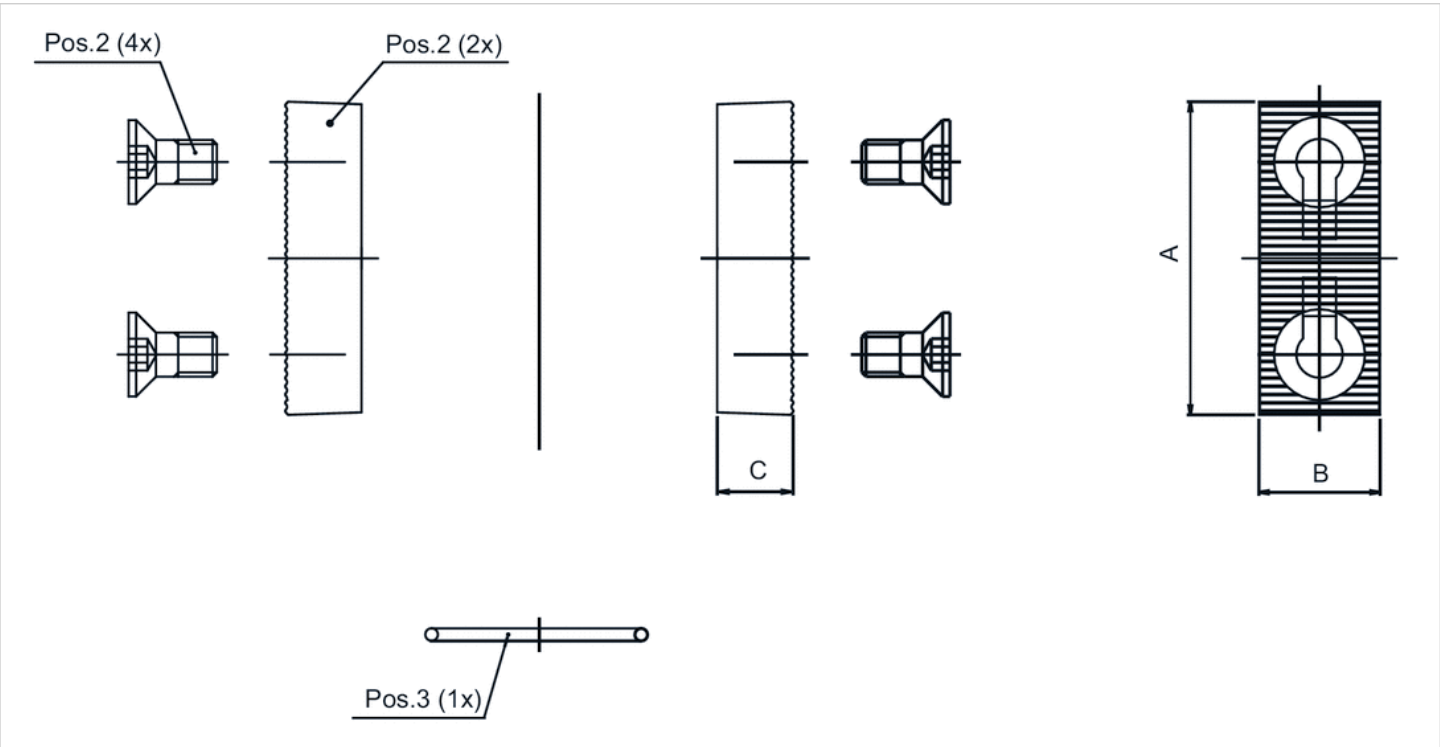
0.044 lbs

## Technical data

| Part No.   |
|------------|
| 1827009593 |

Scope of delivery: 2 clamp mountings, 4 screws ISO 10642 M8x16-8.8, 1 O-ring  
Suitable for use in Ex zones 1, 2, 21, 22

## Dimensions



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

Dimensions

| Part No.   | A    | B  | C    |
|------------|------|----|------|
| 1827009593 | 56.9 | 22 | 13.8 |

# Stop plate with connection thread

- G 3/4, G 1
- NL6



Working pressure min./max.
0 ... 232 psi

Ambient temperature min./max.
14 ... 140 °F

## Technical data

| Part No.   | Type | Port G |
|------------|------|--------|
| 1827009590 | NL6  | G 3/4  |
| 1827009591 | NL6  | G 1    |

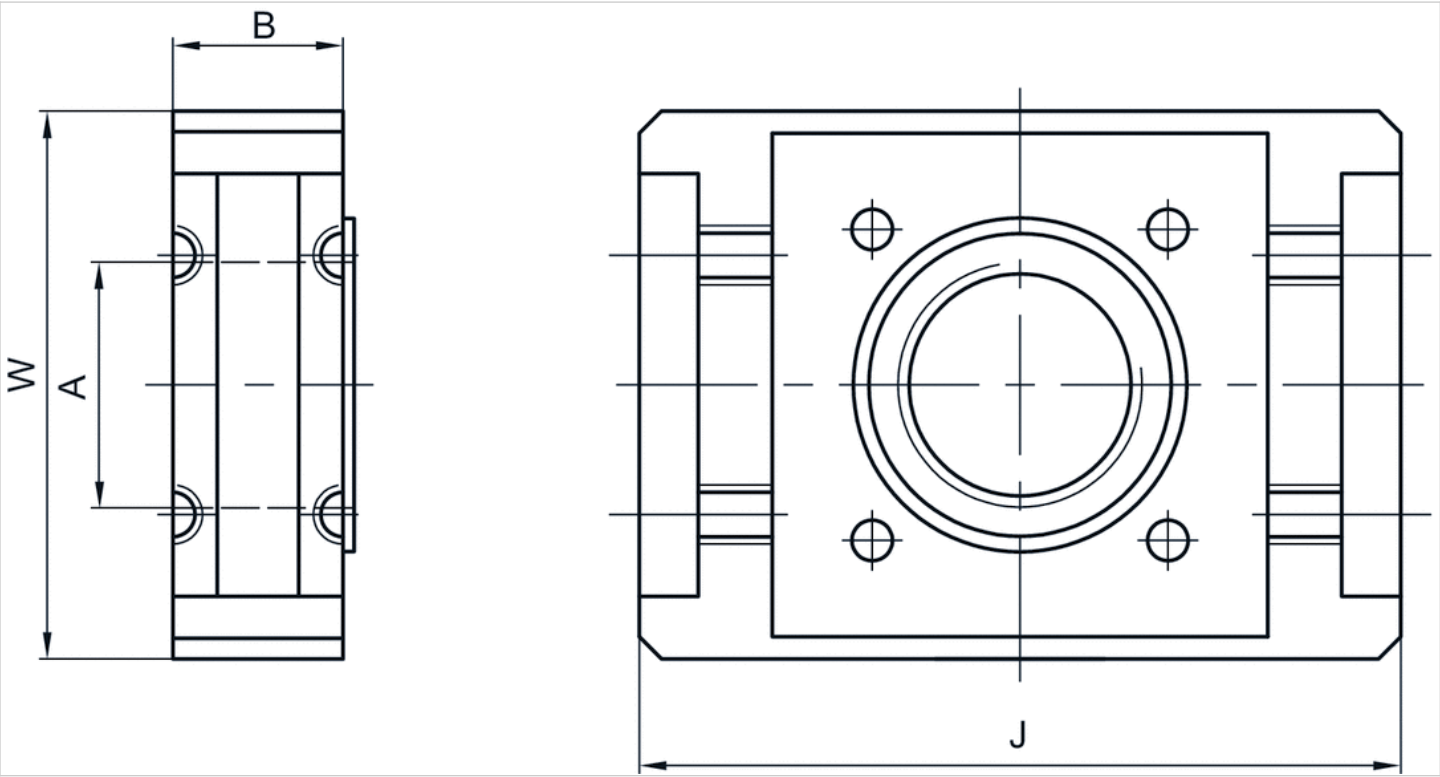
Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

| Material |               |
|----------|---------------|
| Material | Die cast zinc |

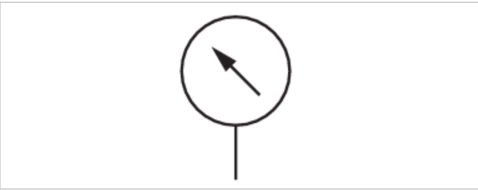
Dimensions

Dimensions



# 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.

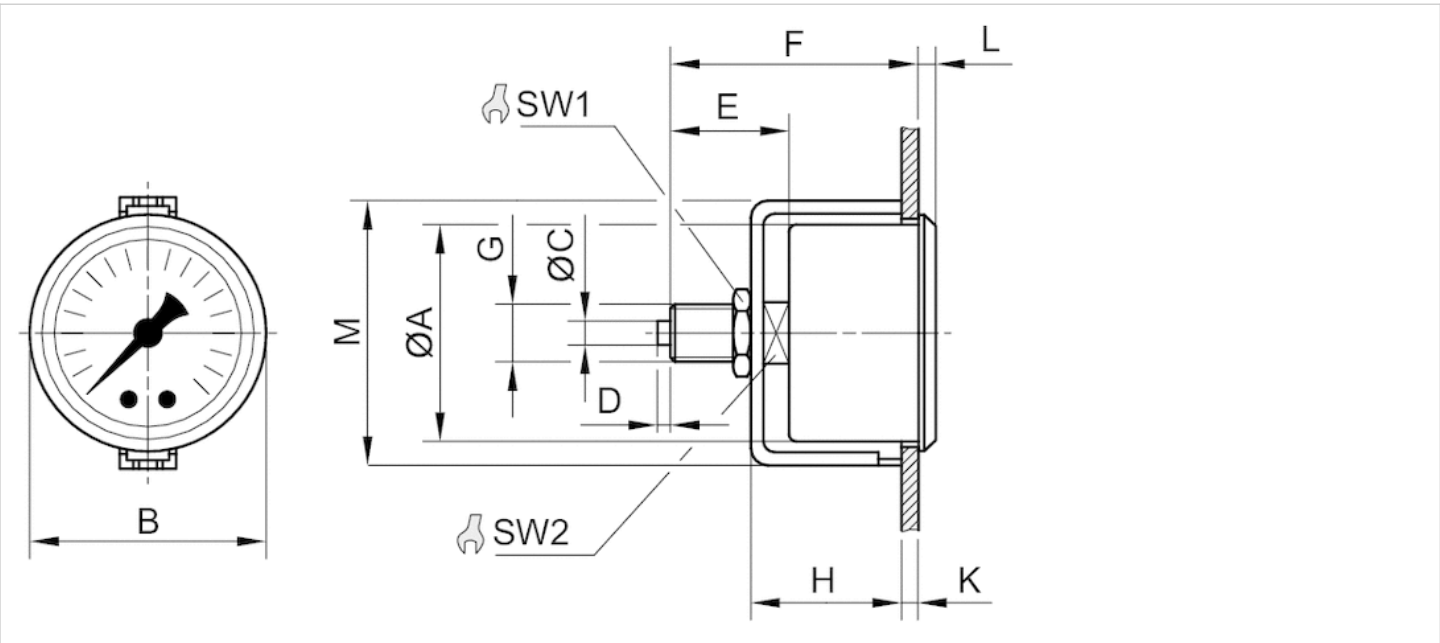
Order axial seal separately

Technical information

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

Dimensions

Dimensions



Dimensions in mm

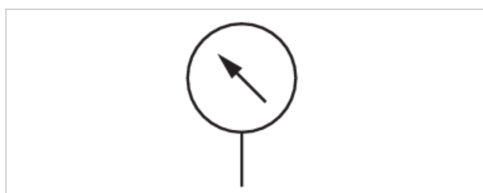
| Compressed air connection | Nominal diameter | Ø A | B  | C | D | E    | F    | H    | K   | L   | M  | SW1 |
|---------------------------|------------------|-----|----|---|---|------|------|------|-----|-----|----|-----|
| G 1/4                     | 1.97 inch        | 50  | 54 | 5 | 3 | 29.5 | 51.5 | 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

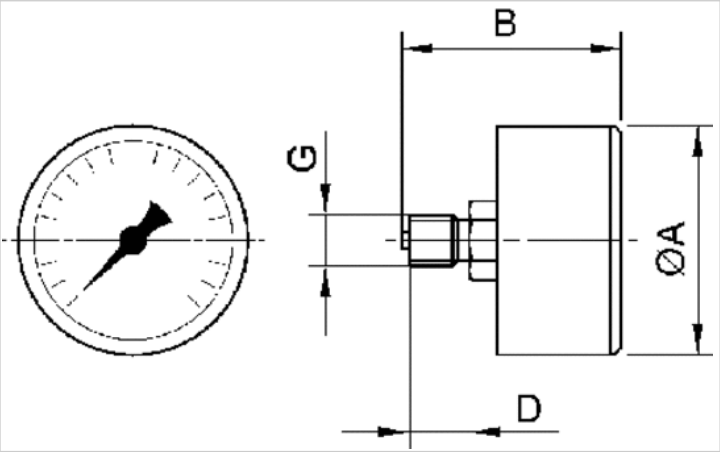
Order axial seal separately

## Technical information

| Material       |                                 |
|----------------|---------------------------------|
| Housing        | Acrylonitrile butadiene styrene |
| Thread         | Brass                           |
| Viewing window | Polystyrene                     |

## Dimensions

### Dimensions

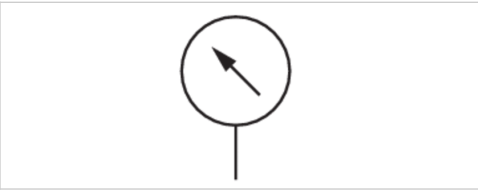


### Dimensions in mm

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

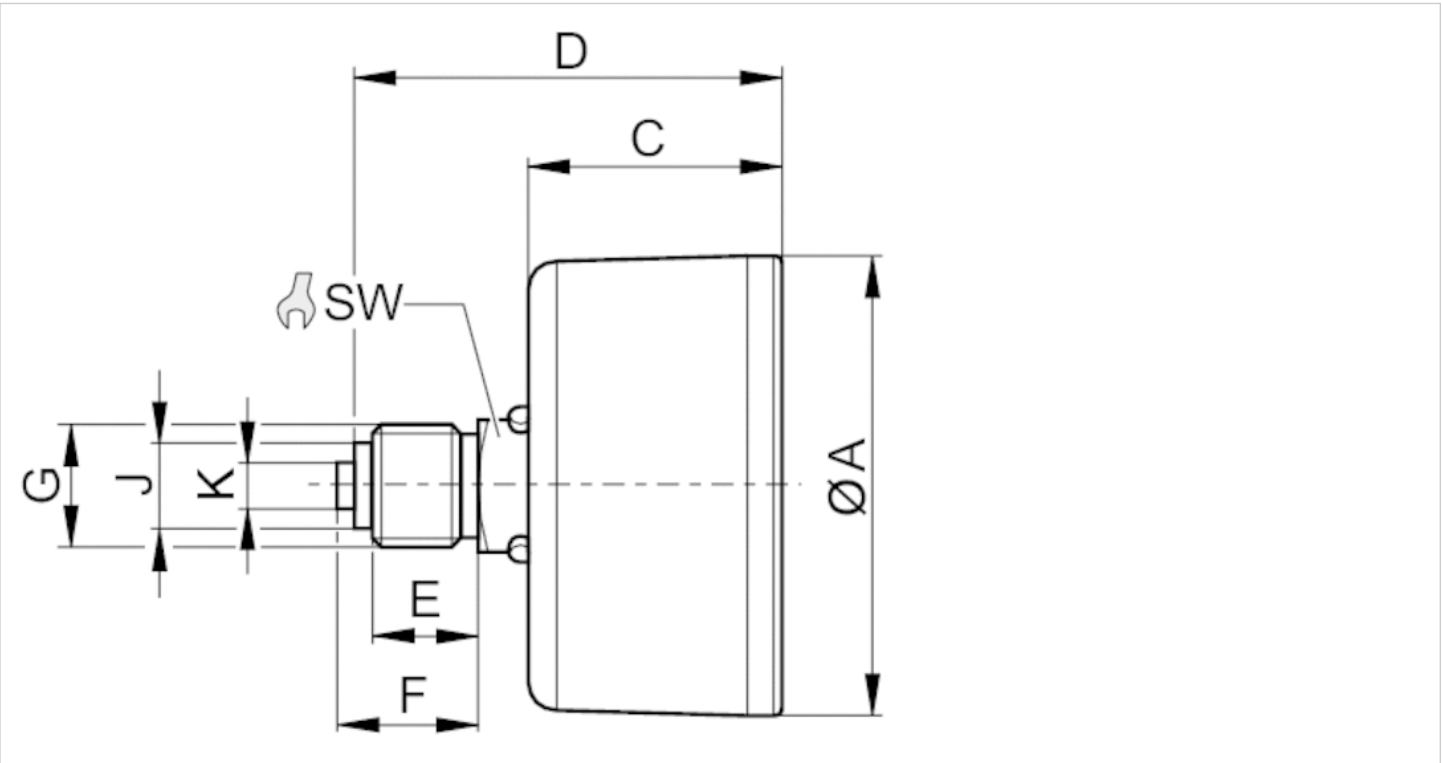
## Technical information

| Material |                                 |
|----------|---------------------------------|
| Housing  | Acrylonitrile butadiene styrene |
| Thread   | Brass                           |

|                |             |
|----------------|-------------|
| Material       |             |
| Viewing window | Polystyrene |

Dimensions

Dimensions

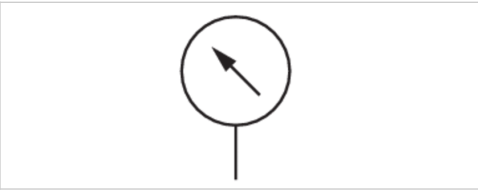


Dimensions

| 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

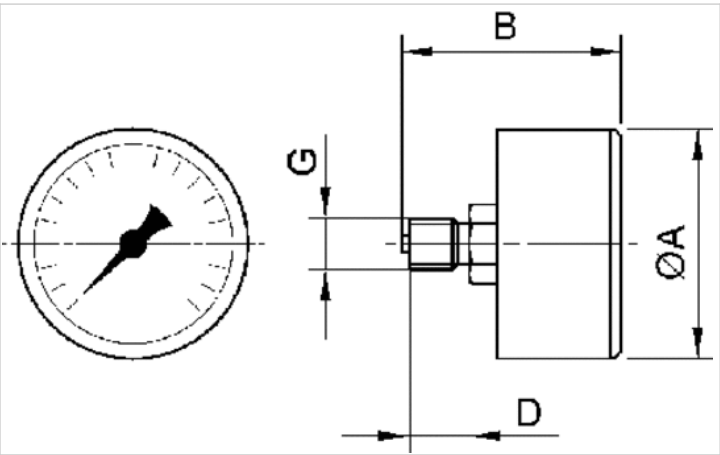
Order axial seal separately

## Technical information

| Material       |                                 |
|----------------|---------------------------------|
| Housing        | Acrylonitrile butadiene styrene |
| Thread         | Brass                           |
| Viewing window | Mineral glass                   |

Dimensions

Dimensions

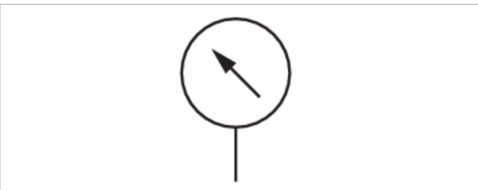


Dimensions in mm

| 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

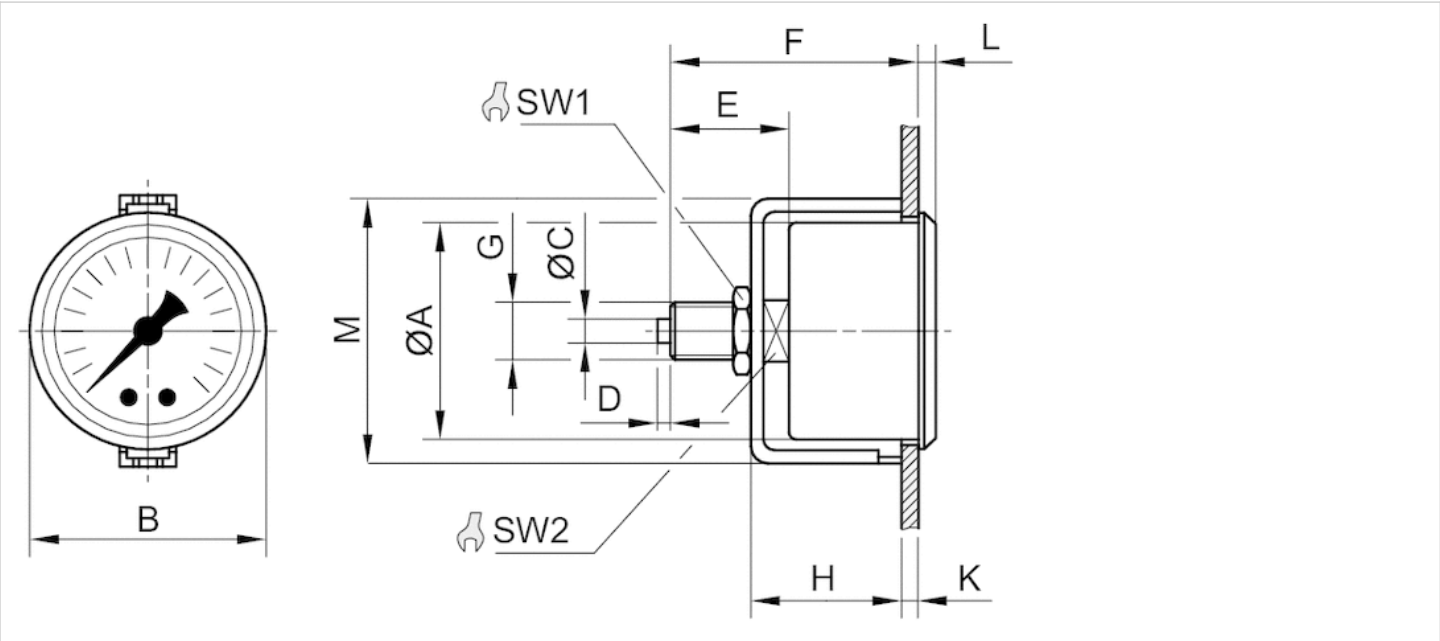
Order axial seal separately

## Technical information

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

Dimensions

Dimensions

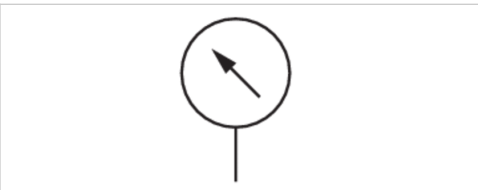


Dimensions in mm

| Compressed air connection | Ø 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

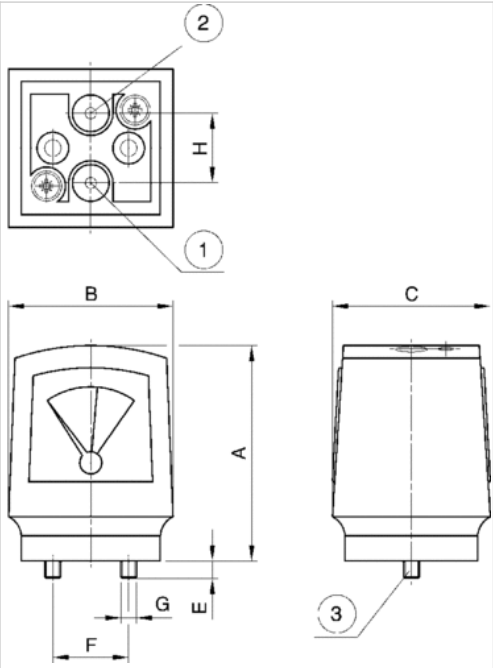
Suitable for use in Ex zones 1, 2, 21, 22

## 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 |

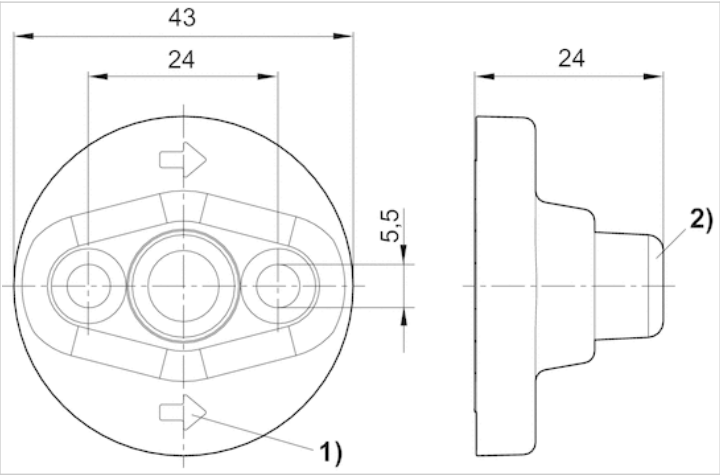
2 mounting screws and 2 O-rings supplied loose, Suitable for use in Ex zones 1, 2, 21, 22

## 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

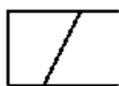
| Part No.   | A  | B  | C   | D  |
|------------|----|----|-----|----|
| R412006363 | 43 | 24 | 5.5 | 24 |

# Coil, Series CO1

- form B
- Coil width 0.87 inch
- Power consumption,DC 2.6-5.9 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 %                 |
| Weight                                          | 0.154 lbs             |



## Technical data

| Part No.   | Operational voltage | Operational voltage | Operational voltage |
|------------|---------------------|---------------------|---------------------|
|            | DC                  | AC 50 Hz            | AC 60 Hz            |
| 1824210245 | 24 V                | -                   | -                   |
| 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                |
| 1824210245 | -10% / +10%       | -10% / +10%       | -10% / +10%       | 2.6 W             |
| 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        |
| 1824210245 | -             | -             | -               | -               |
| 1824210239 | 8.9 VA        | 7.3 VA        | 12 VA           | 9.9 VA          |

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

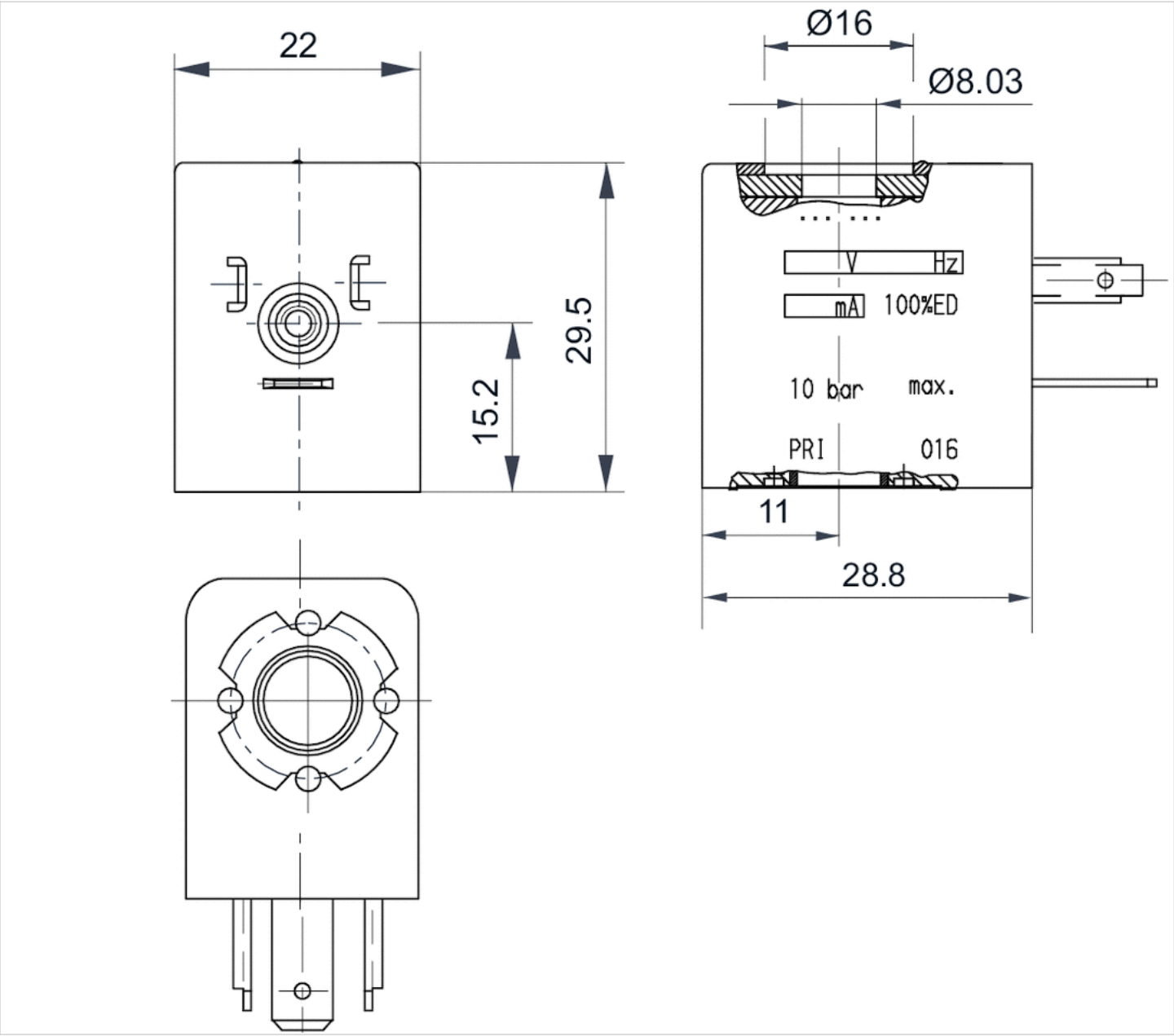
| Part No.   | Compatibility index |
|------------|---------------------|
| 1824210245 | 13                  |
| 1824210239 | 14                  |
| 1824210243 | 14                  |
| 1824210241 | 14                  |
| 1824210237 | 14                  |
| 1824210235 | 14                  |

## Technical information

| Material |                         |
|----------|-------------------------|
| Housing  | Thermoplastic elastomer |

Dimensions

Dimensions

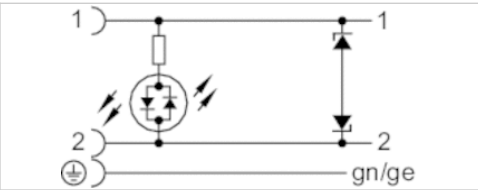


# Valve plug connector, series CON-VP

- 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 in²       |
| 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

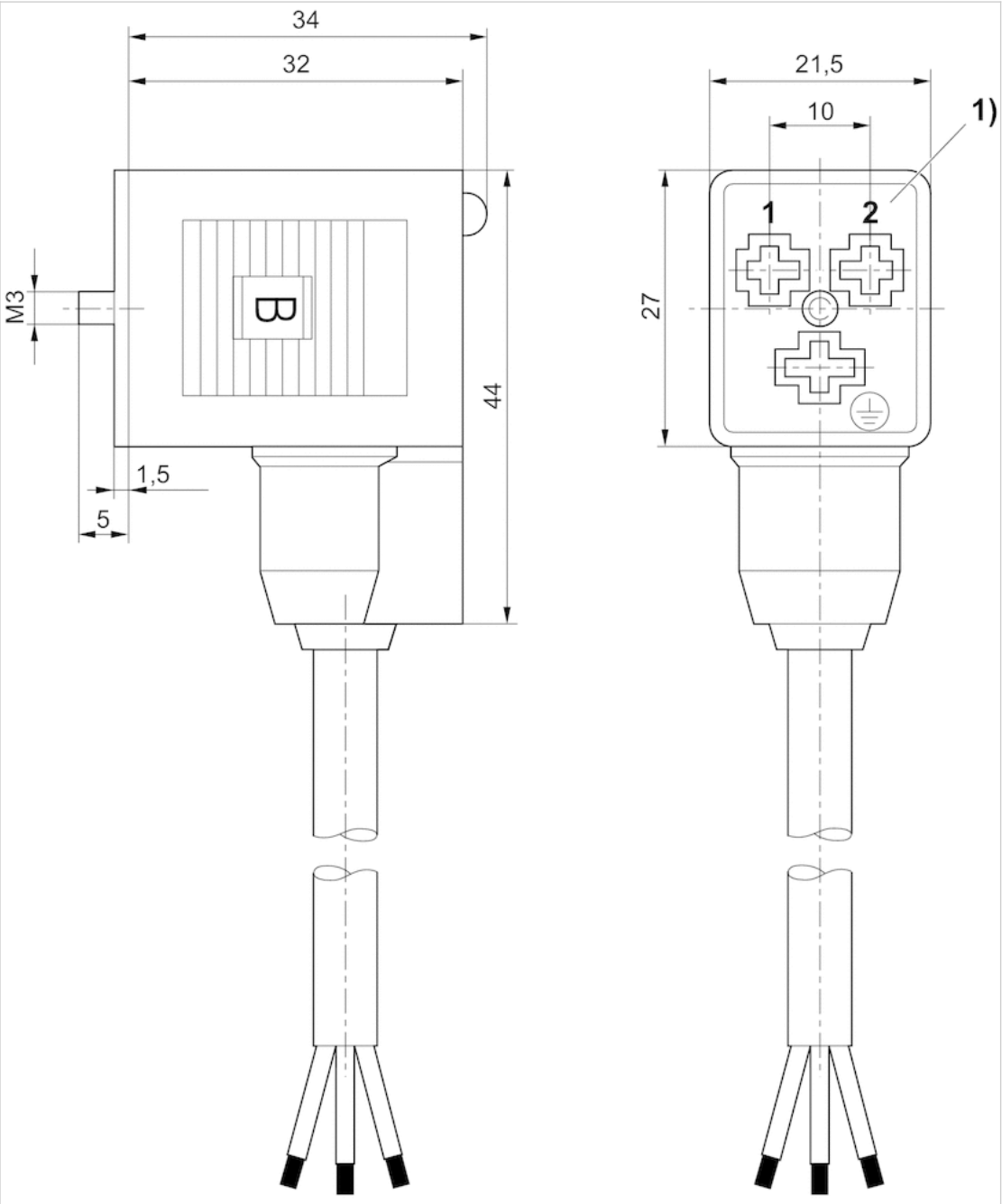
The specified protection class is only valid in assembled and tested state.

## Technical information

| Material     |                                 |
|--------------|---------------------------------|
| Seals        | caoutchouc/butadiene caoutchouc |
| Cable sheath | Polyvinyl chloride              |

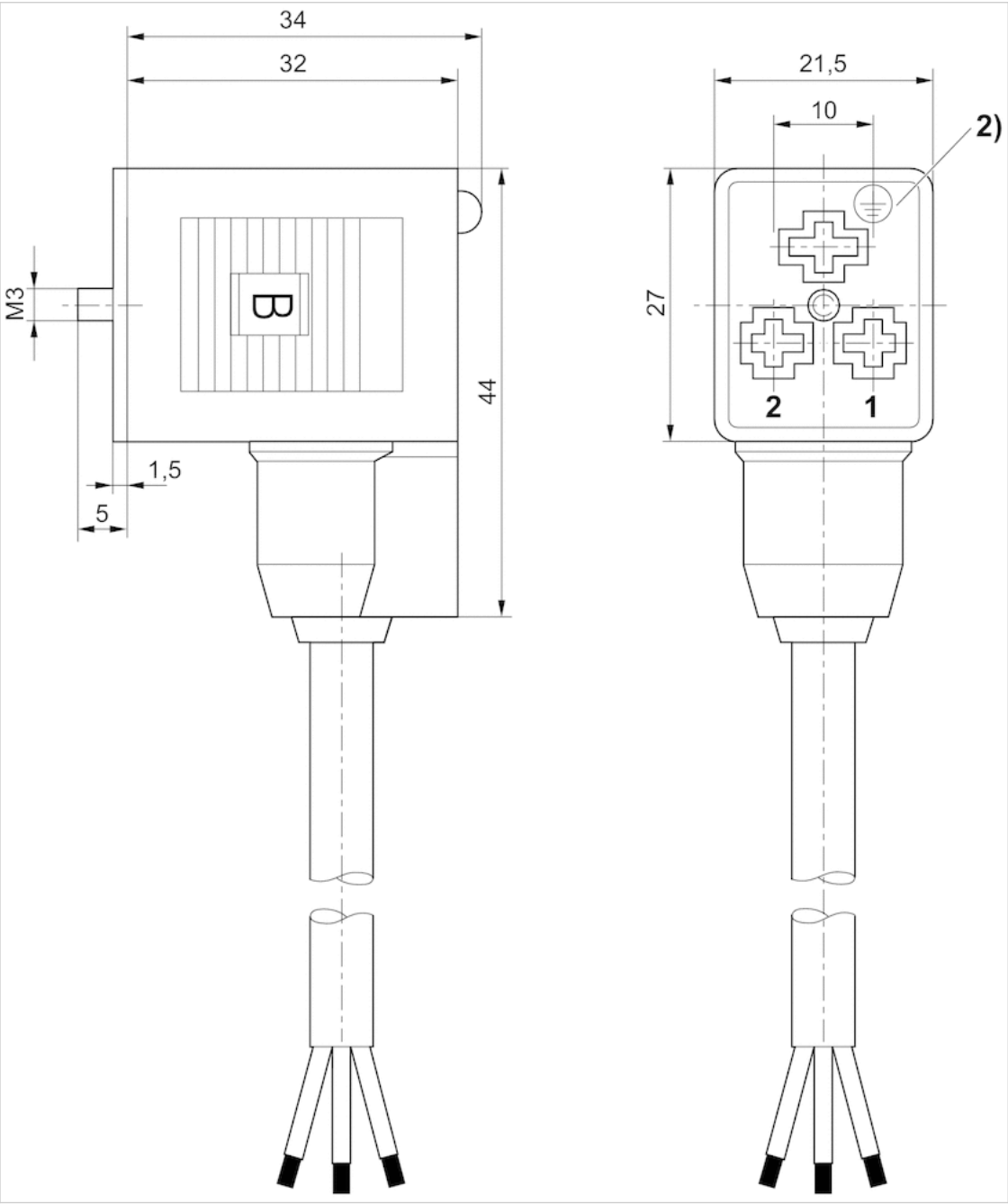
Dimensions

Fig. 1



1) 0° female insert

Fig. 2



2) 180° female insert

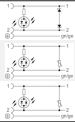
# Valve plug connector, series CON-VP

- 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

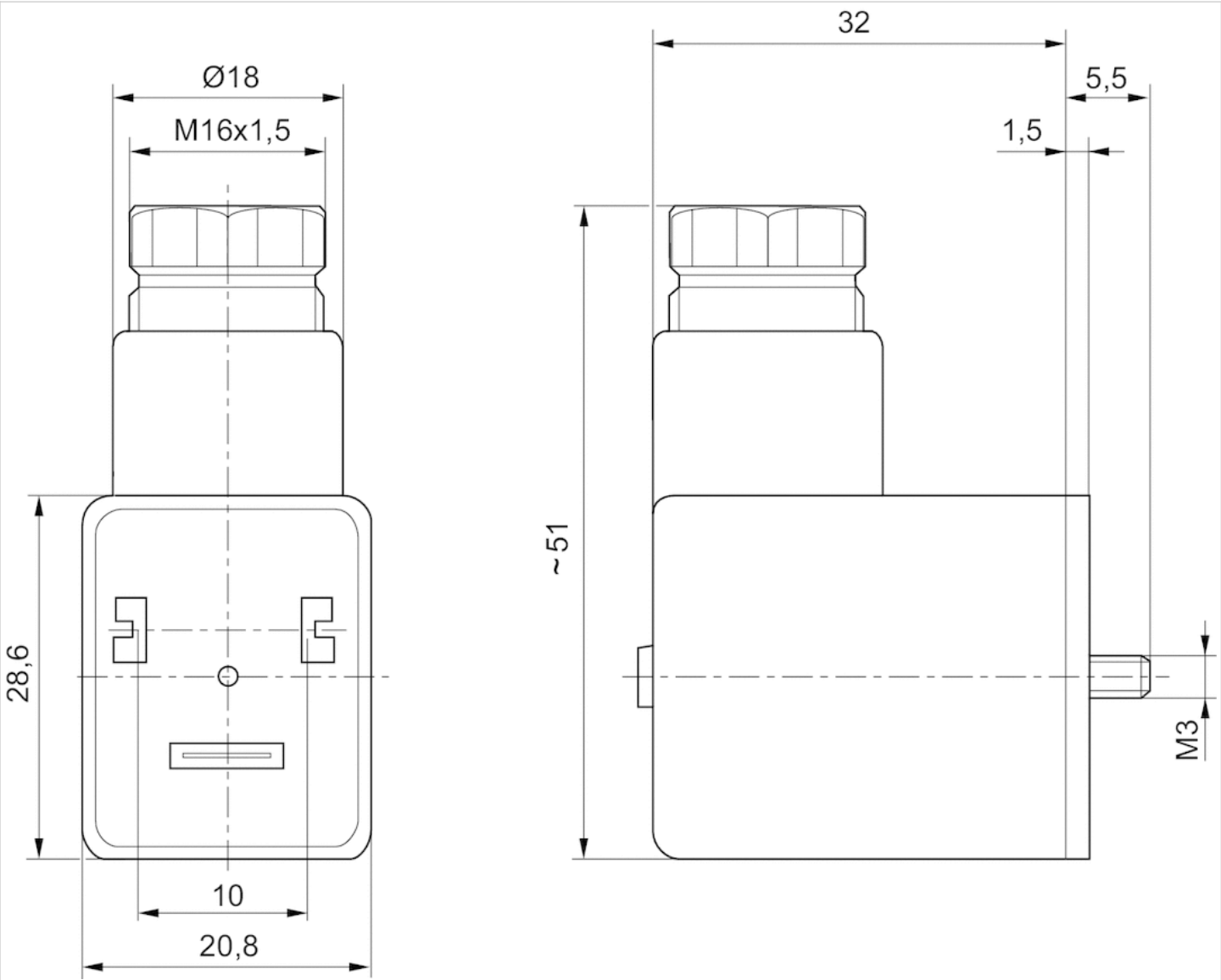
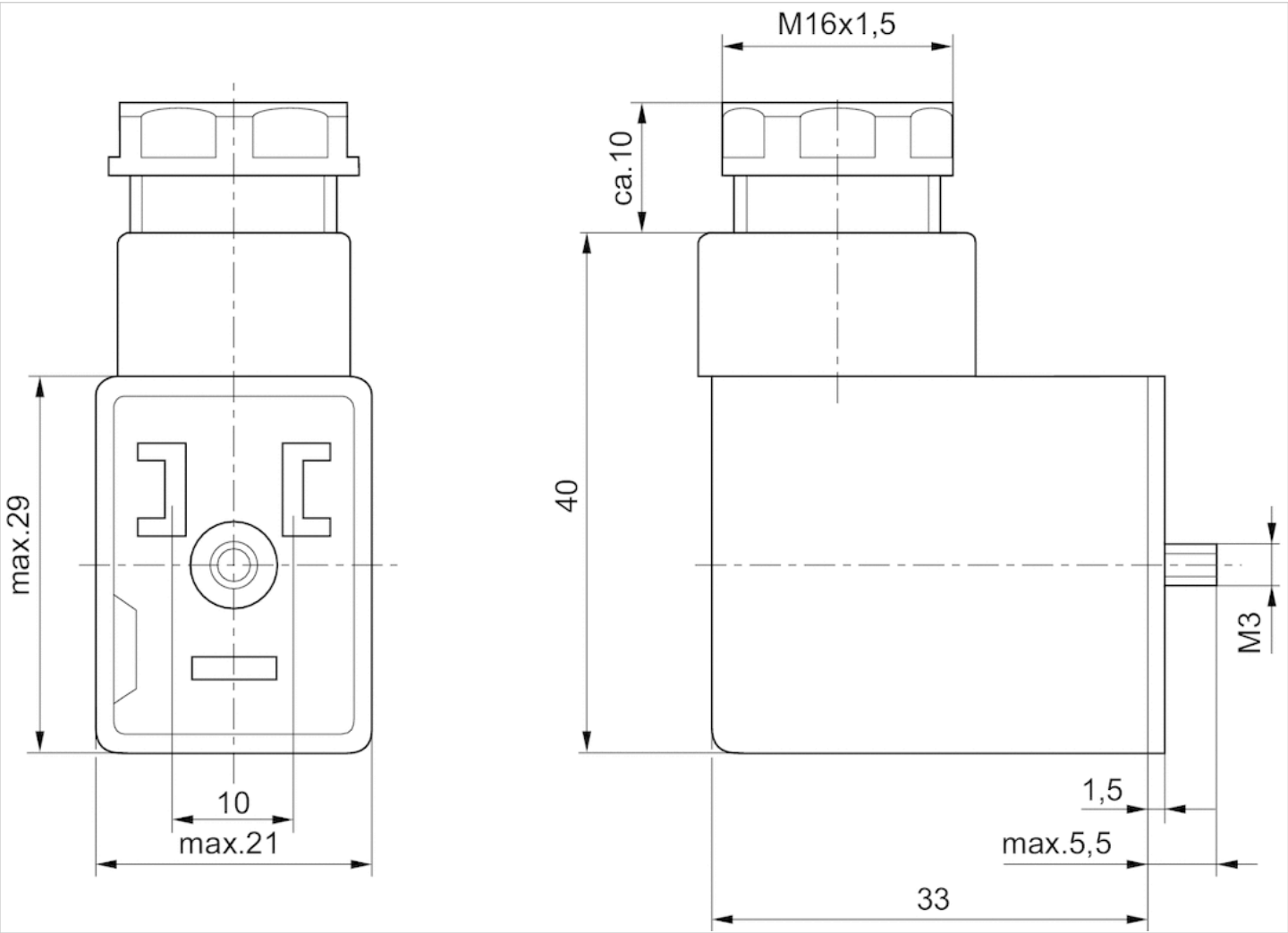


Fig. 2



# 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/m³                                                                                                                              |
| Measurement                           | Relative pressure                                                                                                                     |
| Display                               | LCD display, 4 digits, Color setting: green or red                                                                                    |
| Units displayed                       | bar, psi, kPa, MPa, inHg                                                                                                              |
| Switching logic                       | NO/NC (adjustable)                                                                                                                    |
| Shock resistance max.                 | 30 g                                                                                                                                  |
| Vibration resistance                  | 5 g (10 - 150 Hz)                                                                                                                     |
| Precision (% of full scale value)     | ±1.5% in temperature range of 10 - 30°C, ± 2 % including temperature drift                                                            |
| Repeatability (% of full scale value) | ± 0,2 %                                                                                                                               |
| Switching time                        | 5 ms                                                                                                                                  |
| Switching point                       | adjustable 0 ... 100%                                                                                                                 |
| Resetting point                       | adjustable 0 ... 100%                                                                                                                 |
| Hysteresis                            | adjustable                                                                                                                            |
| Delayed hysteresis                    | adjustable                                                                                                                            |
| Window function                       | adjustable                                                                                                                            |
| DC operating voltage,min./max.        | 17 ... 30 V DC                                                                                                                        |
| Analog output                         | 0 - 10 V DC, 4 - 20 mA                                                                                                                |
| Quiescent current consumption         | 40 mA                                                                                                                                 |
| Analog output linearity               | ± 0.5% of the final value                                                                                                             |
| Maximum load (analog current output)  | 600 Ω                                                                                                                                 |
| Short circuit resistance              | Max. 600 ohms (current output), Min. 3K ohms (voltage output)                                                                         |
| Mounting types                        | Directly on hat rail and wall mounting, For panel installation using mounting kit, via double nipple                                  |
| Protection class                      | IP65, IP67 with connections assembled                                                                                                 |
| Electr. connection                    | Plug, M12x1, 4-pin                                                                                                                    |
| Weight                                | 0.088 lbs                                                                                                                             |

## Technical data

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

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

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

Technical information

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

Display color selectable, red or green

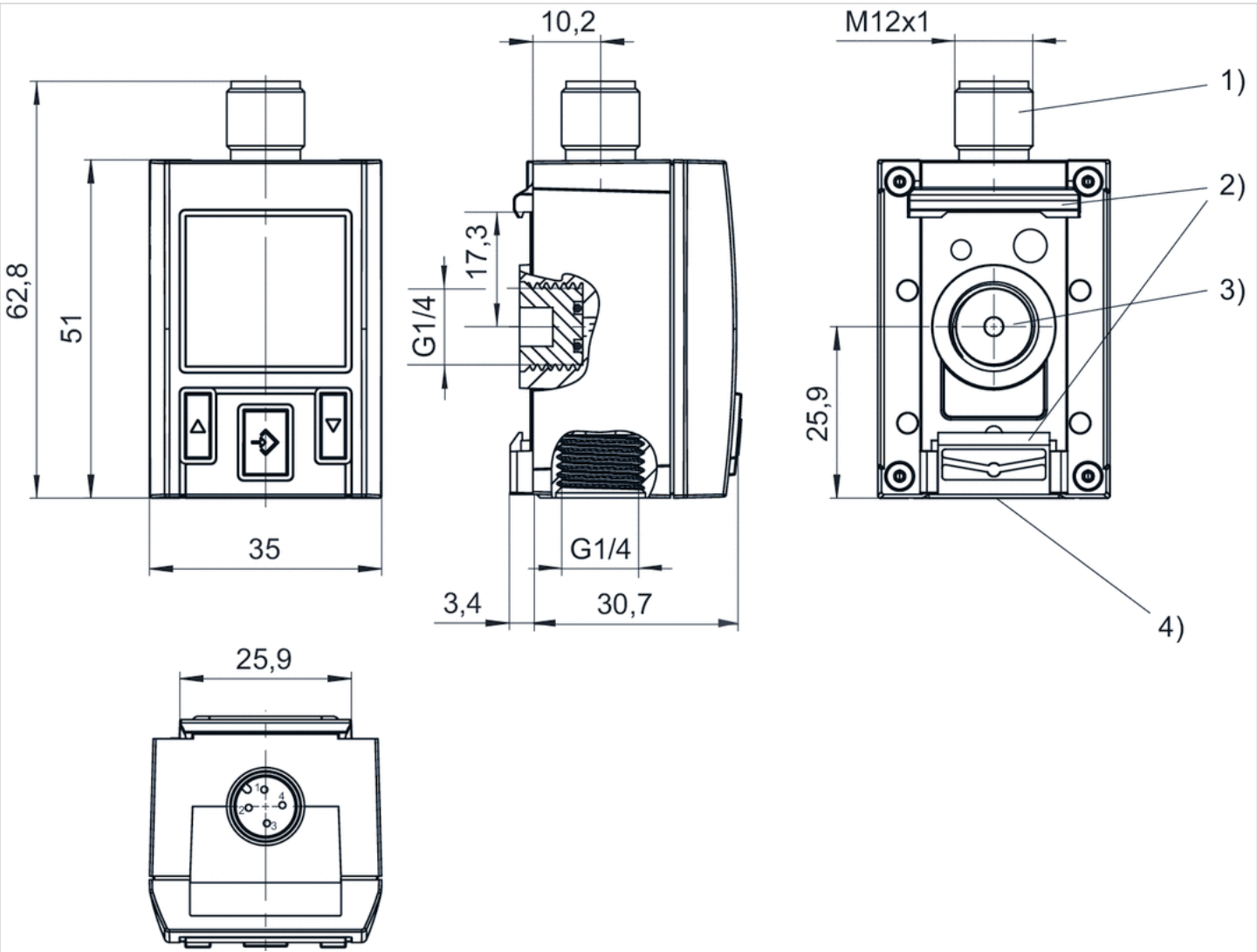
The IO-Link device description (IODD) for the PE5 pressure sensor is available for download in the Media Centre.

Technical information

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

Dimensions

Fig. 1

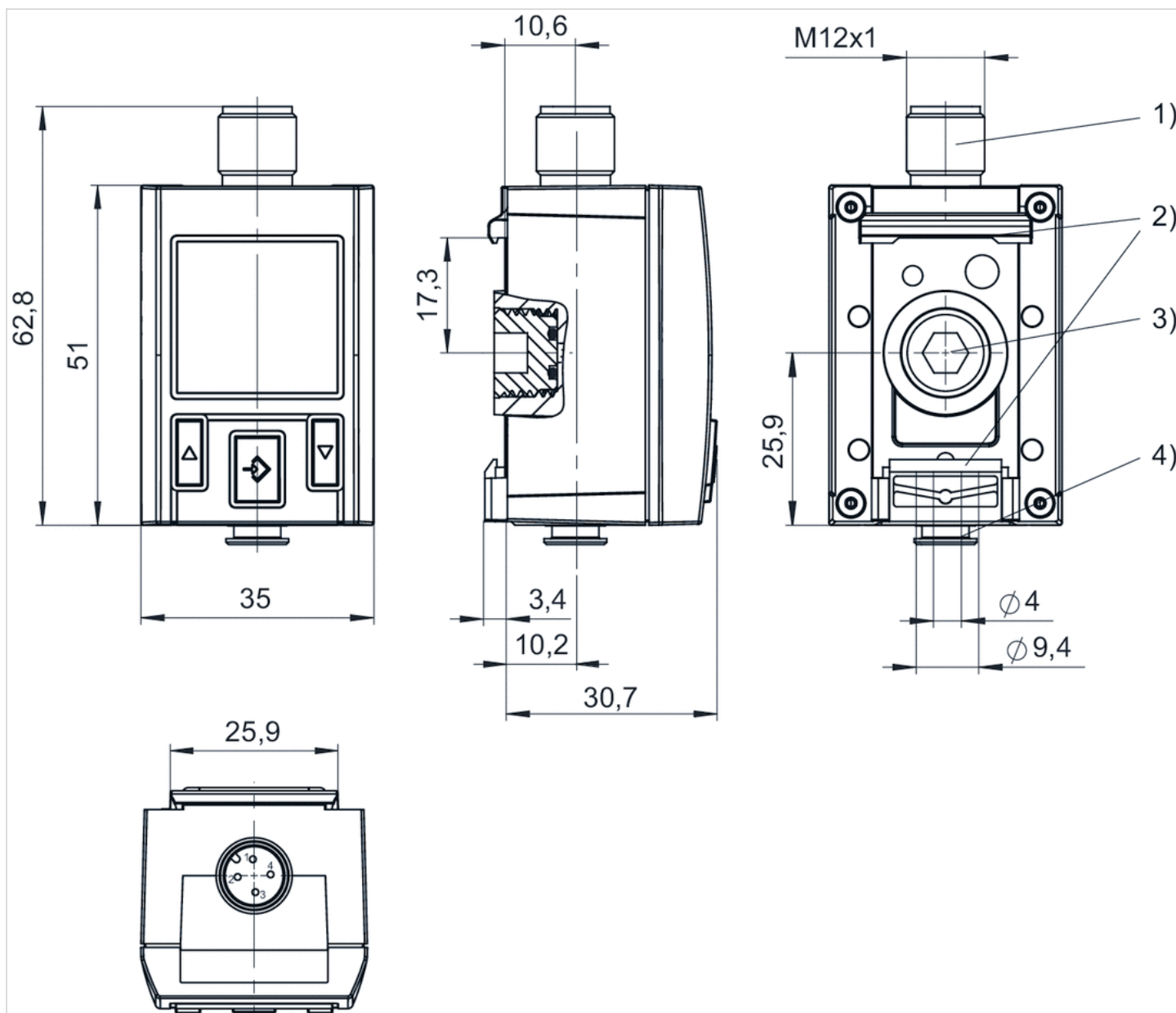


- 1) M12x1 electrical connection
- 2) Mounting for hat rail and wall mounting

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

4) Pressure connection G1/4

Fig. 2



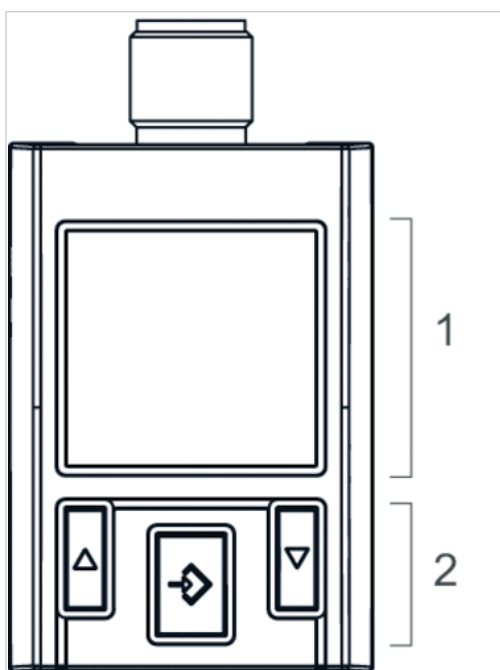
1) M12x1 electrical connection

2) Mounting for hat rail and wall mounting

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

4) Pressure connection, tubing Ø 4 mm

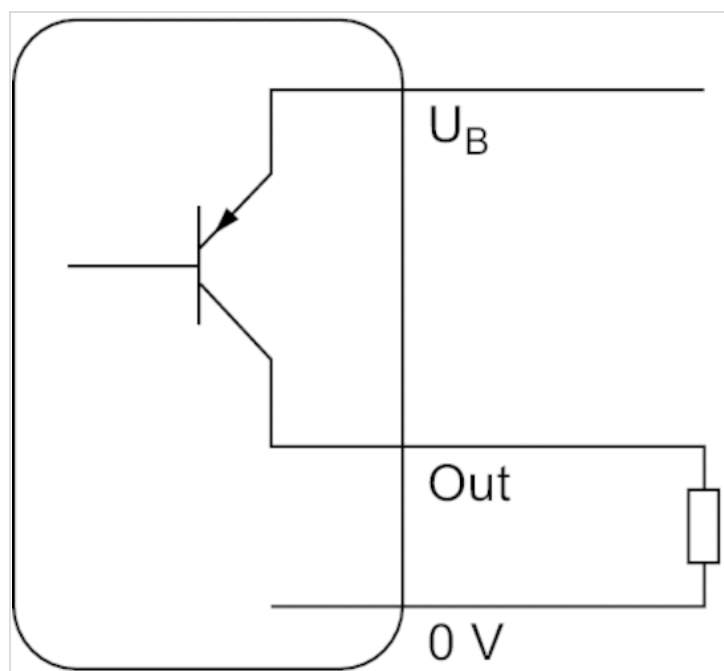
## Display and operation area



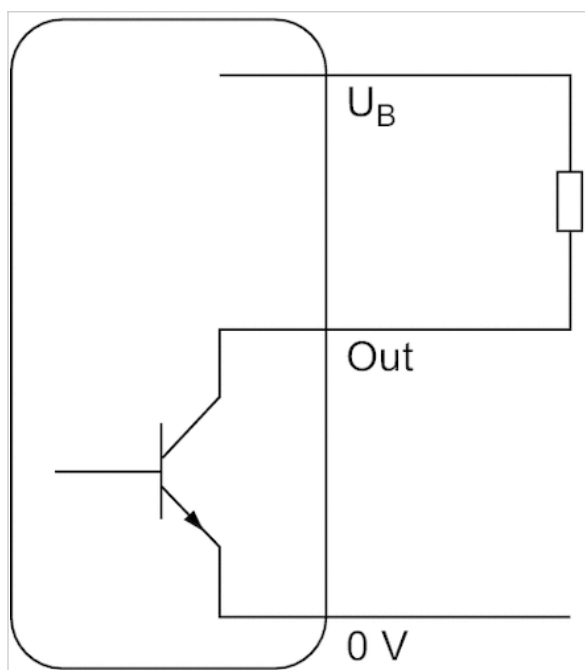
- 1) LCD display
- 2) Control panel with 3 buttons

## Diagrams

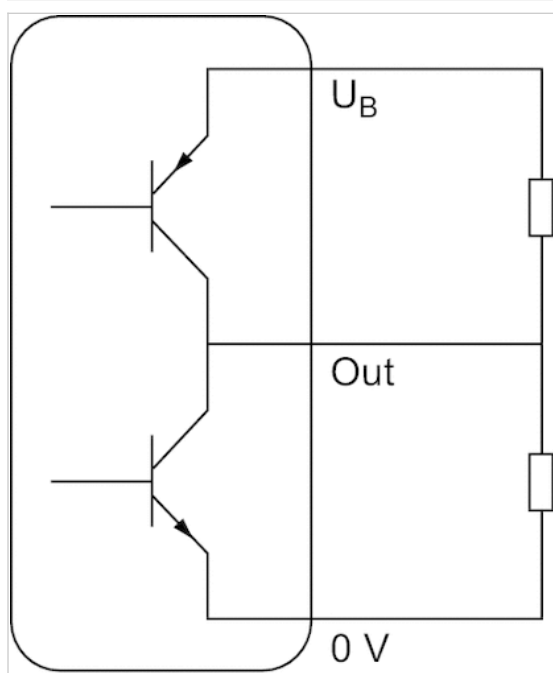
### Operating mode PNP



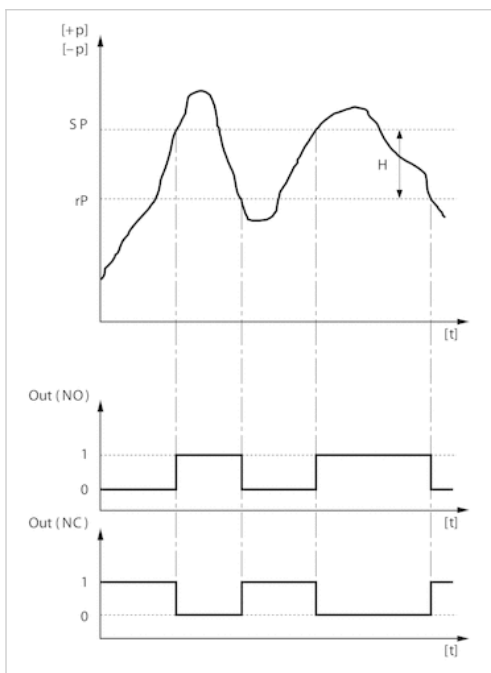
## Operating mode NPN



## Operating mode Push-pull



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



H: Hysteresis

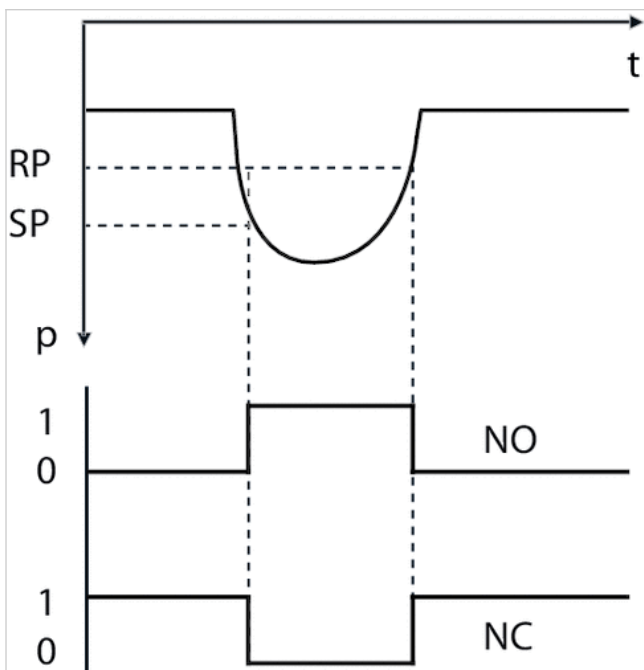
SP = switching point

RP = resetting point

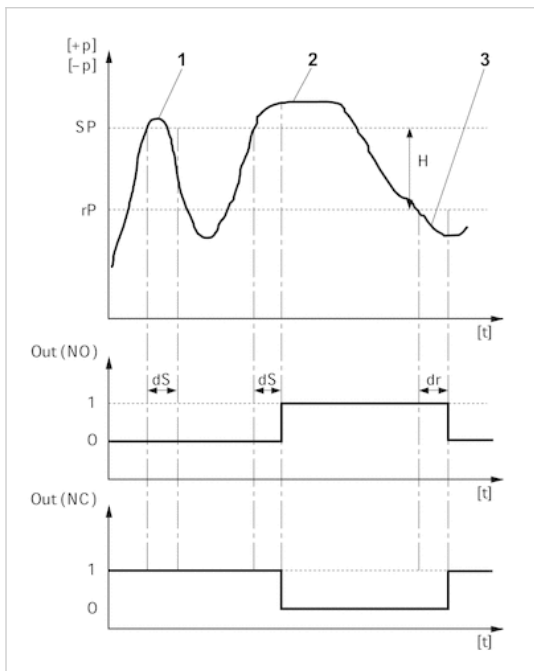
Out (NC): switch output, break contact

Out (NO): switch output, make contact

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



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



H: Hysteresis

SP = switching point

RP = resetting point

Out (NC): switch output, break contact

Out (NO): switch output, make contact

dS: switching delay

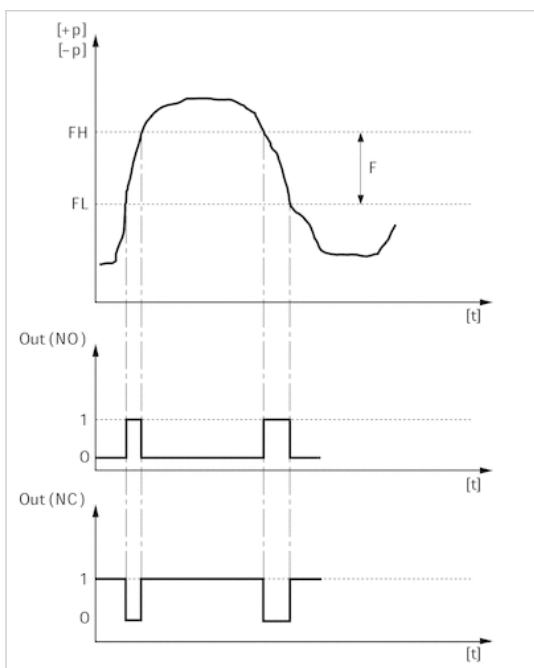
dR = reset delay

1) period of pressure over the switching point  $dS$ : pressure sensor does not switch

2) Period of pressure over the switching point  $> dS$ : pressure sensor switches

3) Period of pressure under the resetting point  $> dR$ : pressure sensor switches

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



FH: pressure band, upper value

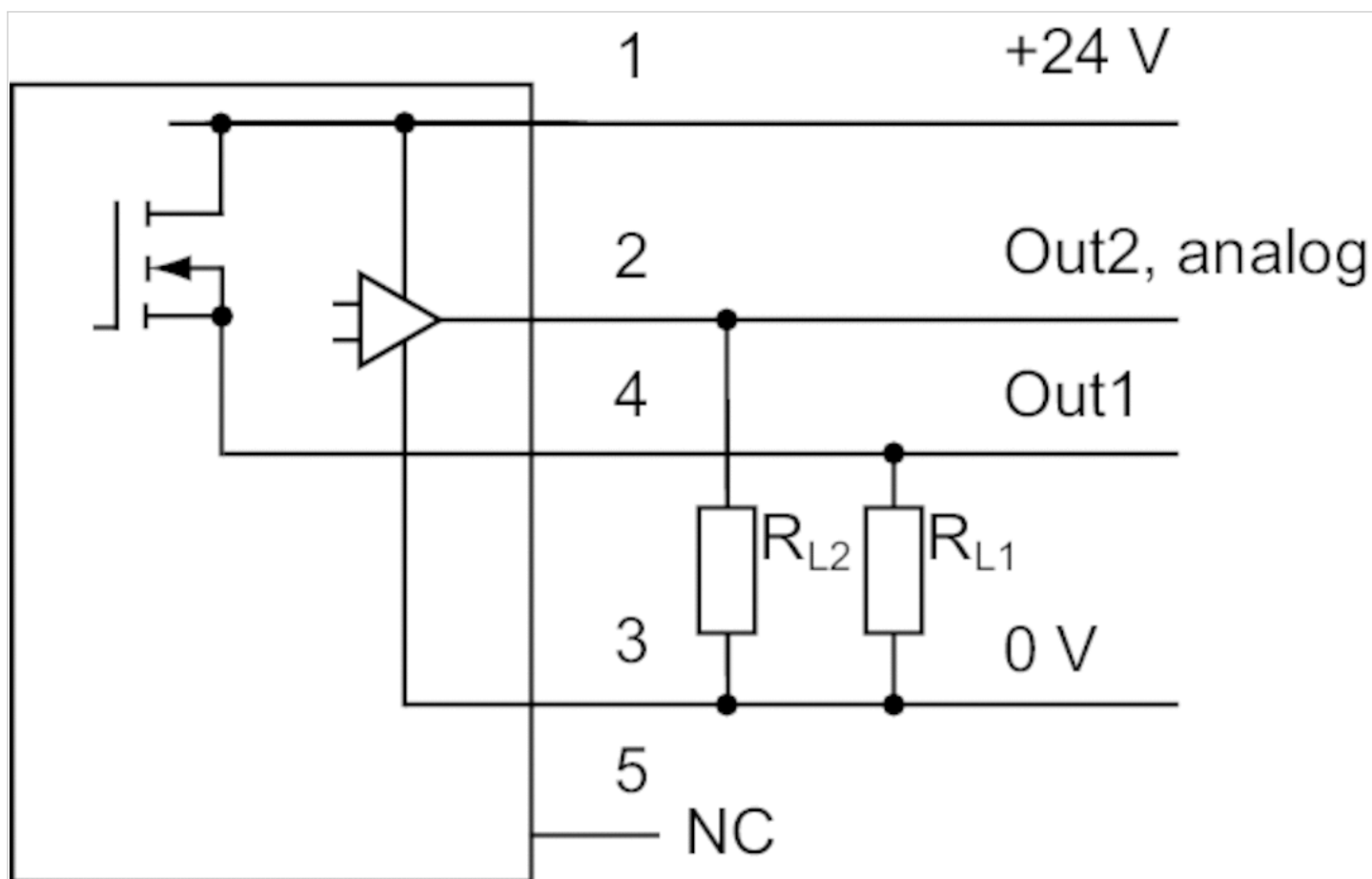
FL: pressure band, lower value

Out (NC): switch output, break contact

Out (NO): switch output, make contact

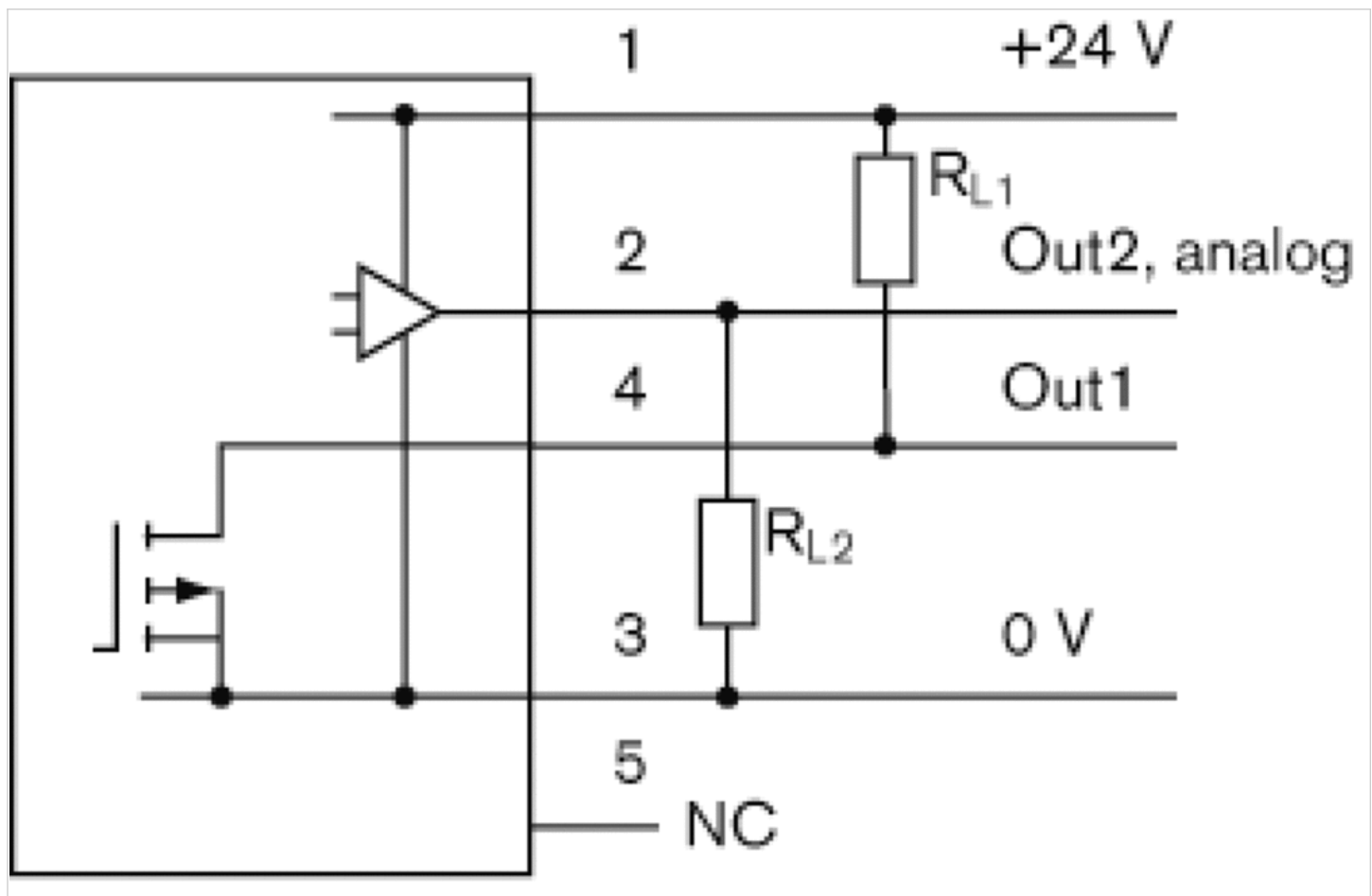
## Circuit diagram

Block diagram 1x PNP and 1x analog



RL = storable position

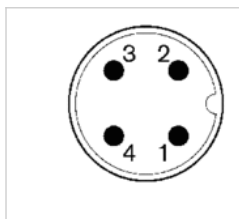
## Block diagram 1x NPN and 1x analog



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

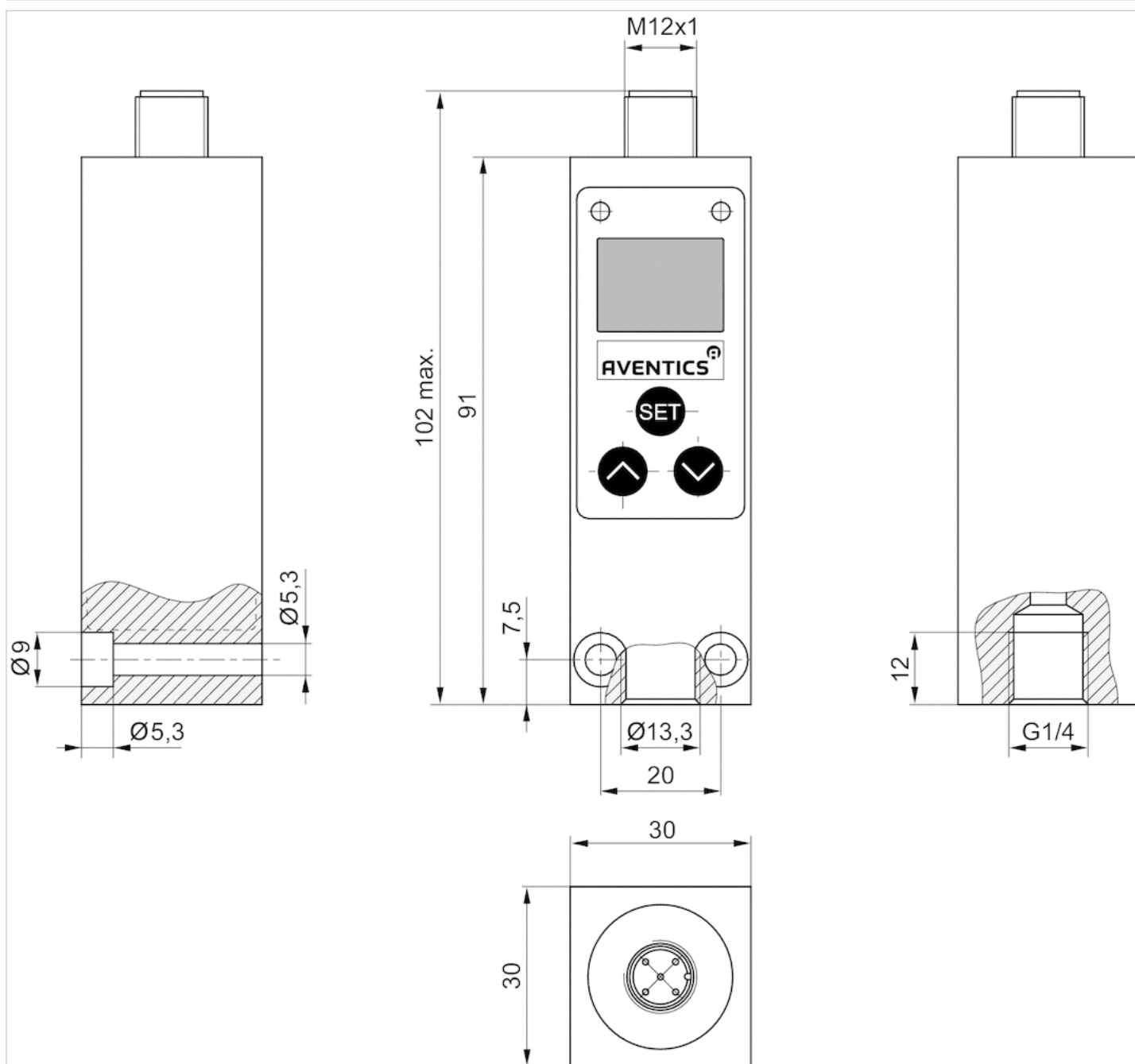
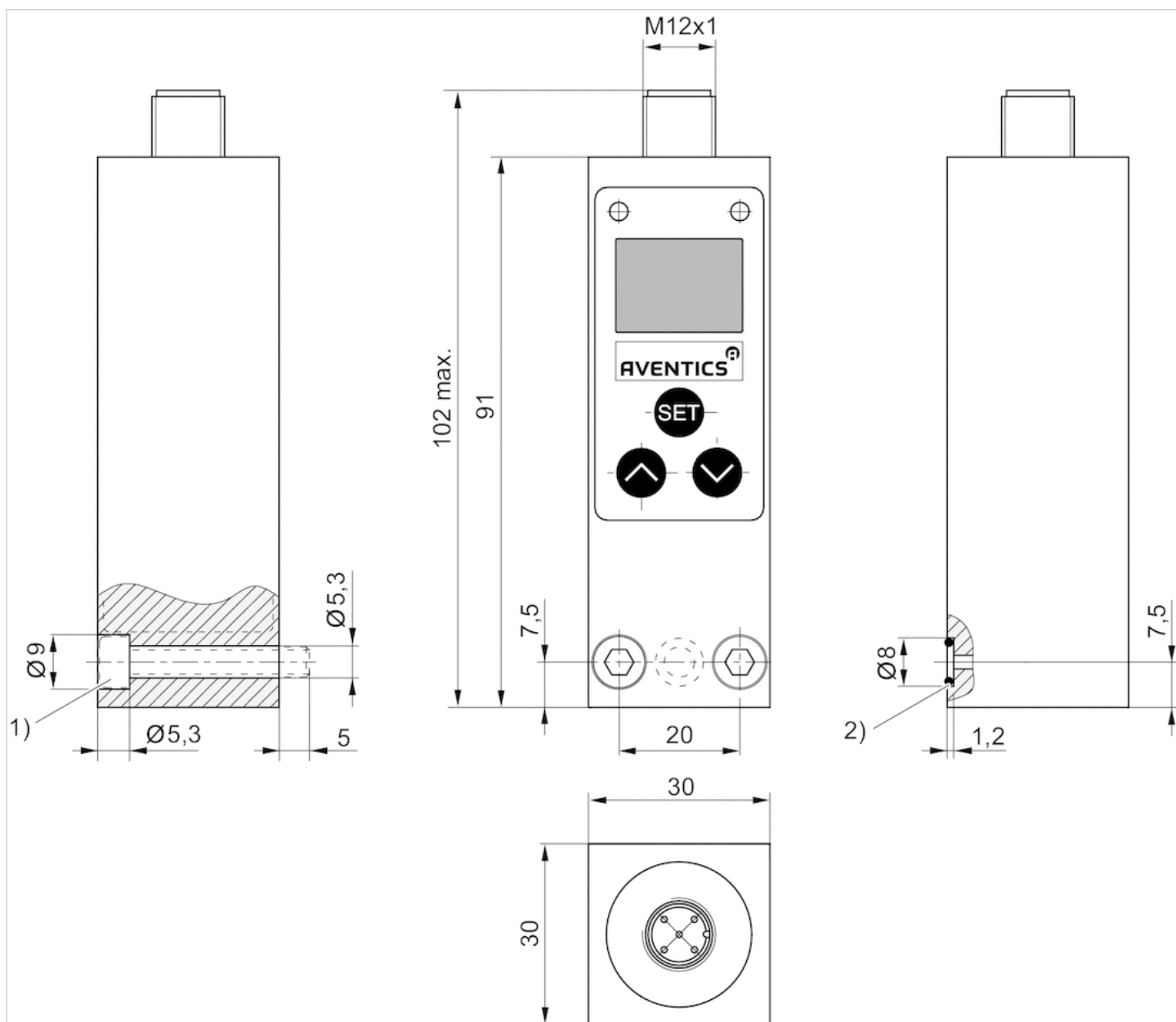


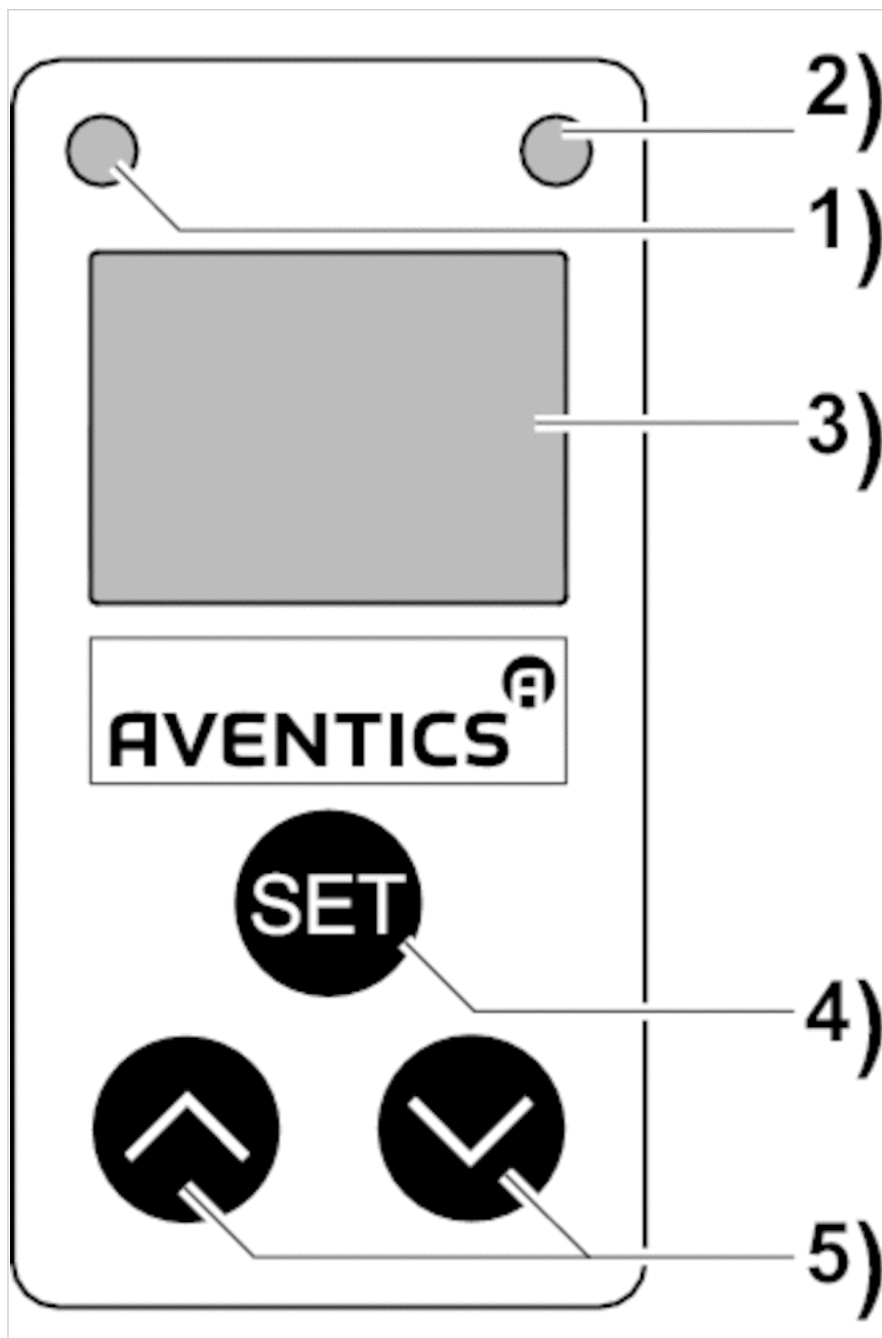
Fig. 2



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

2) O-ring Ø5x1,5 (included)

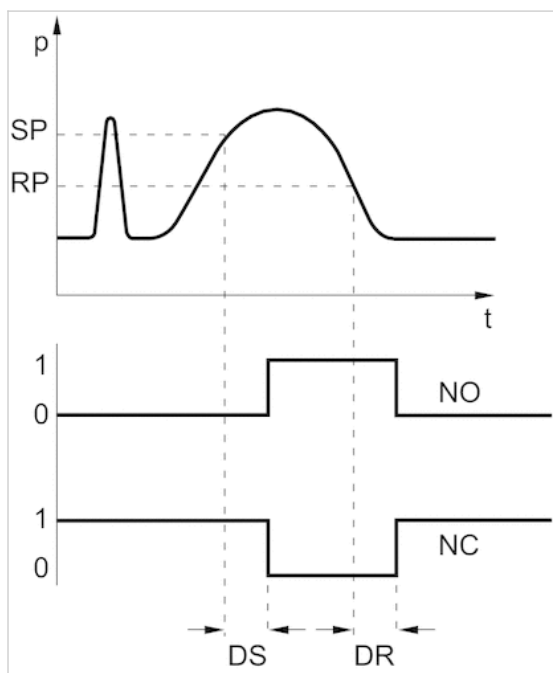
## Display and operation area



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

## Diagrams

### Pressure-voltage characteristics curve



SP = switching point

RP = resetting point

NO = Switching function open

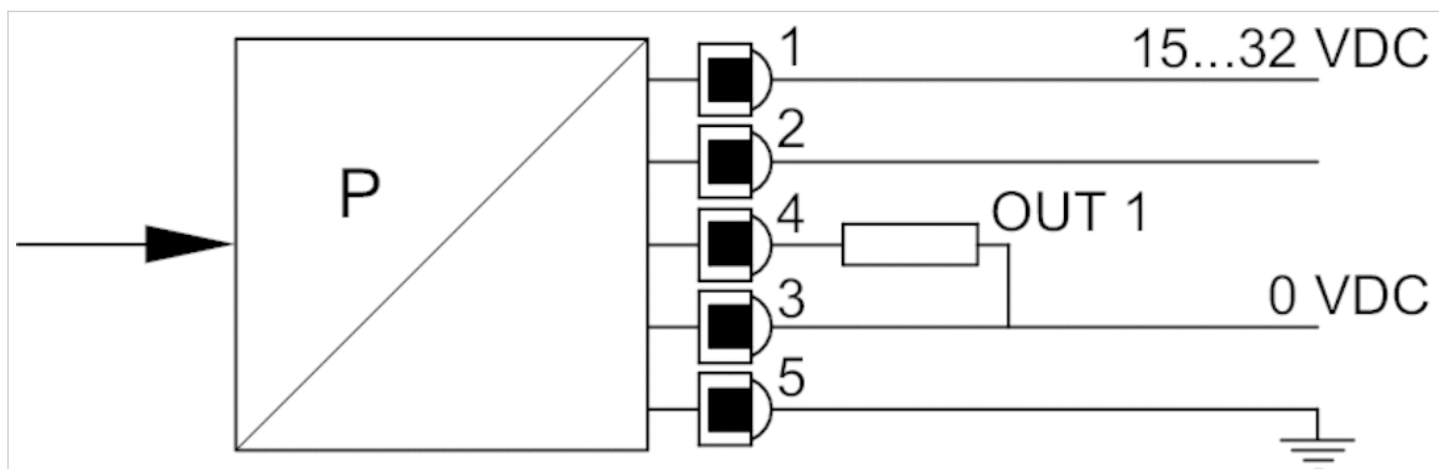
NC = Switching function closed without current

DS = Delay for the switching point

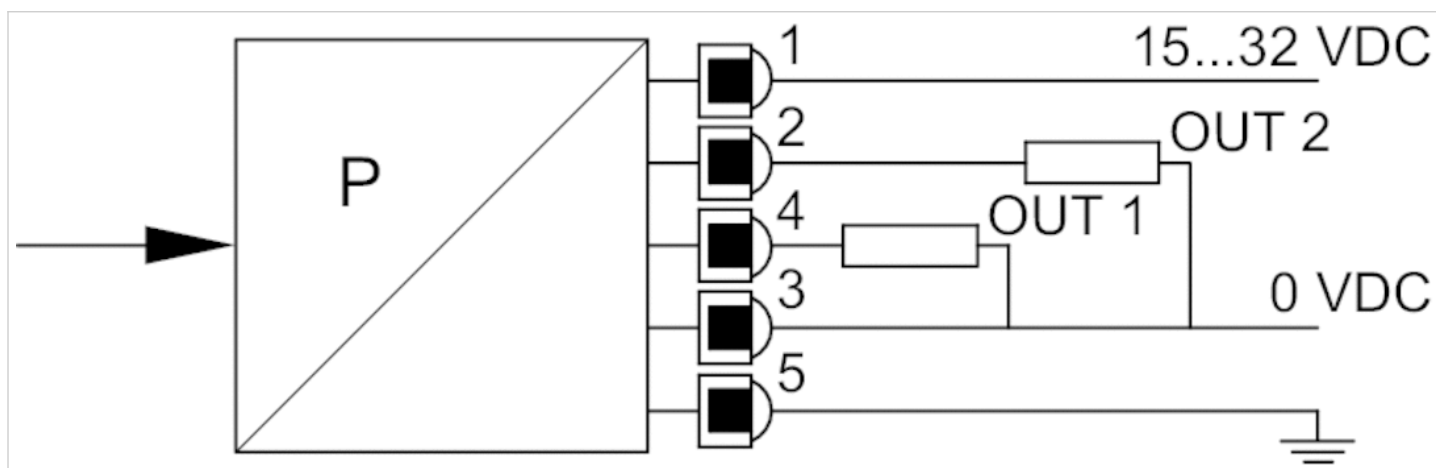
DR = Delay for the resetting point

## Circuit diagram

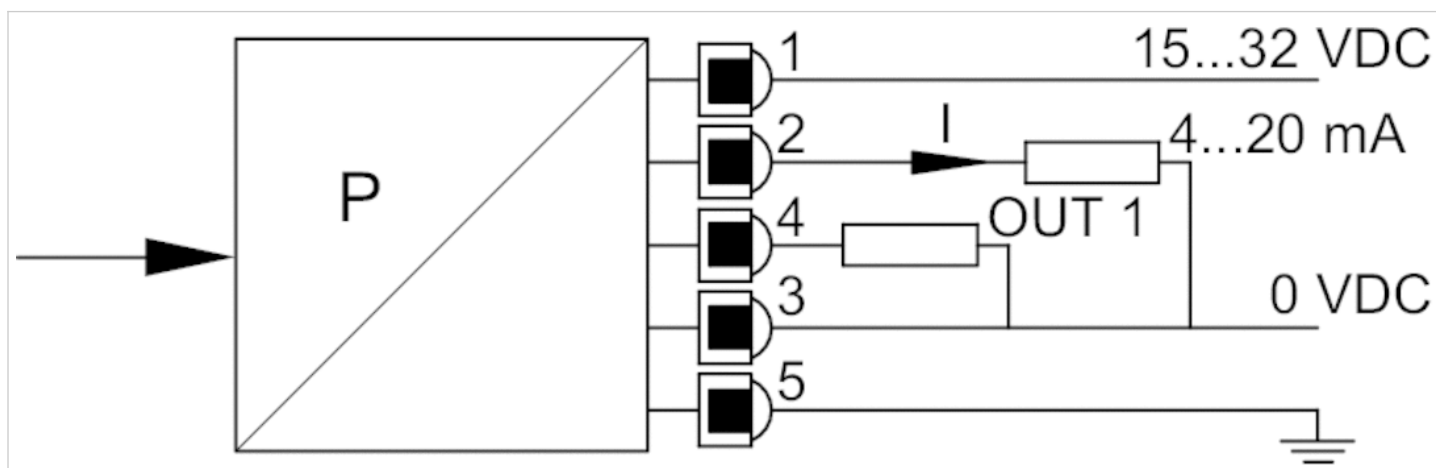
### Block diagram 1 x PNP



## Block diagram 2 x PNP

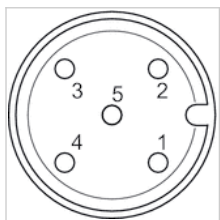


## Block diagram 1x PNP and 1x analog



## Pin assignments

## Pin assignments



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

# Pressure Switches, Series PM1

- Operating pressure -13.05 ... 0, -13.05 ... 43, 2.9 ... 232 psi
- Mechanical
- Spring-loaded 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.

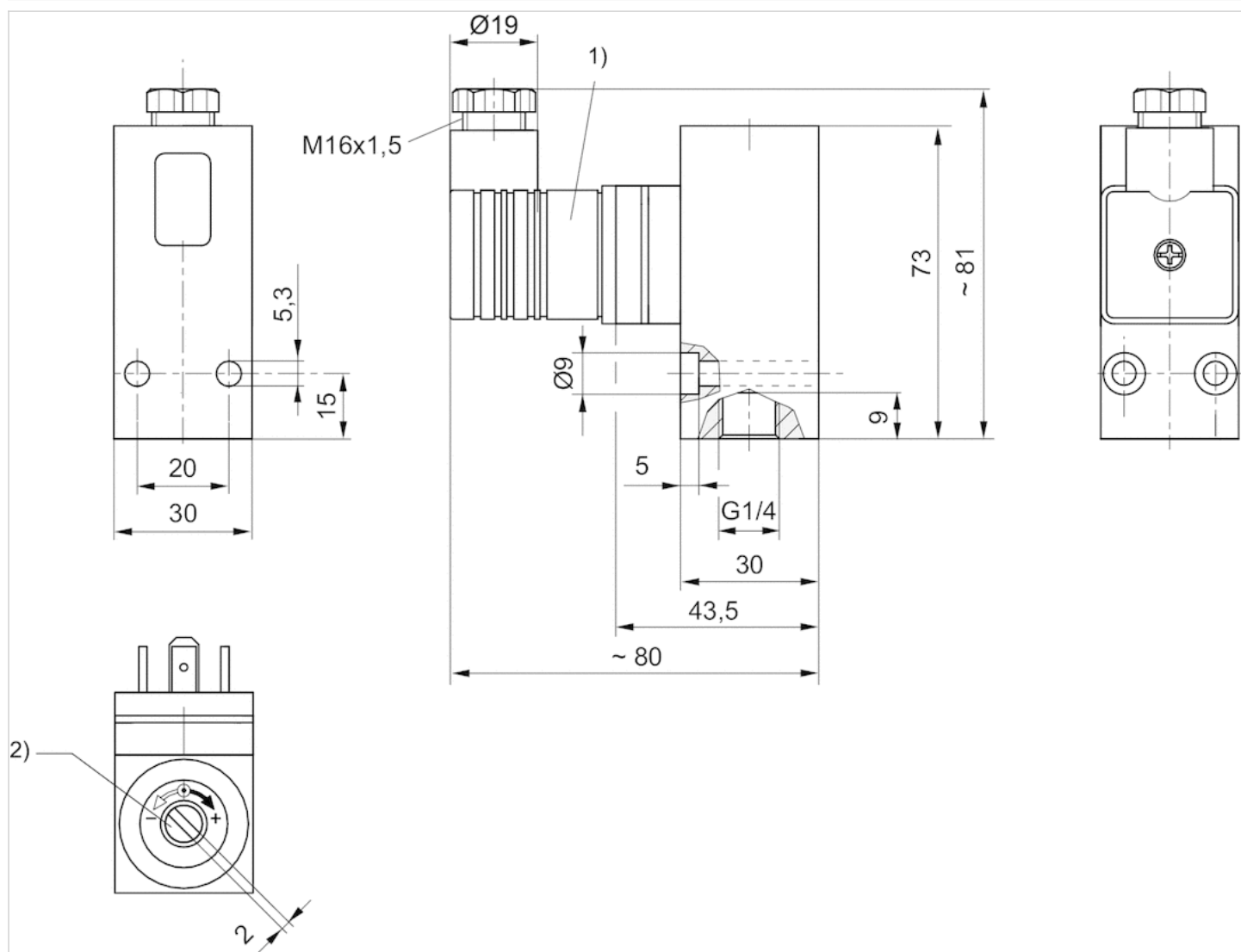
Please observe the pin assignment when selecting plug connectors.

Technical information

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

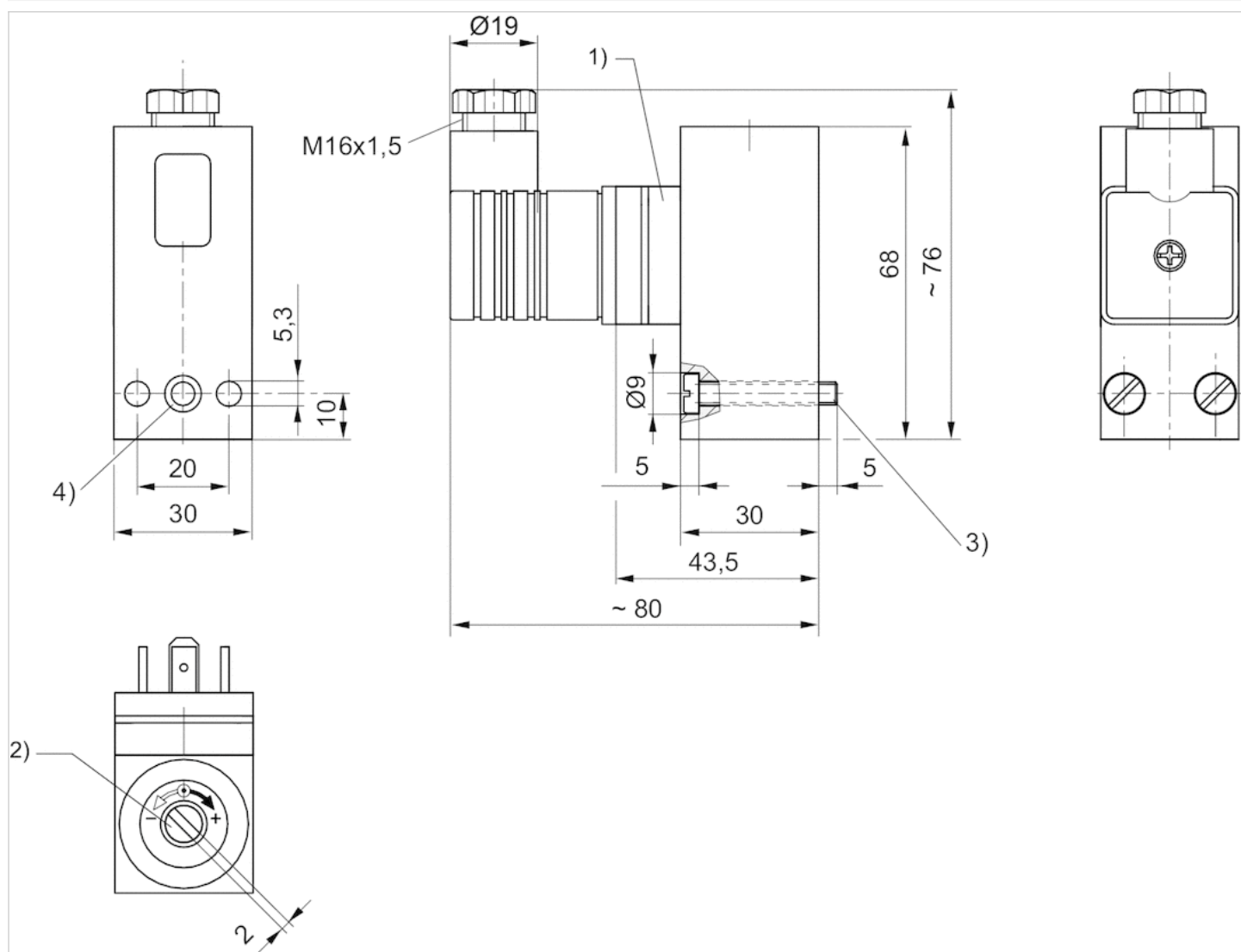
## Dimensions

Fig. 1



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

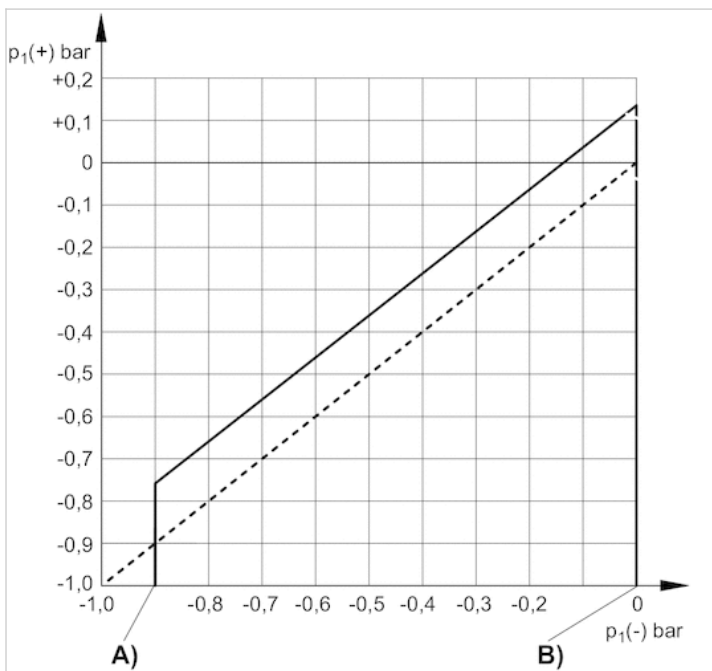
Fig. 2



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

## Diagrams

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



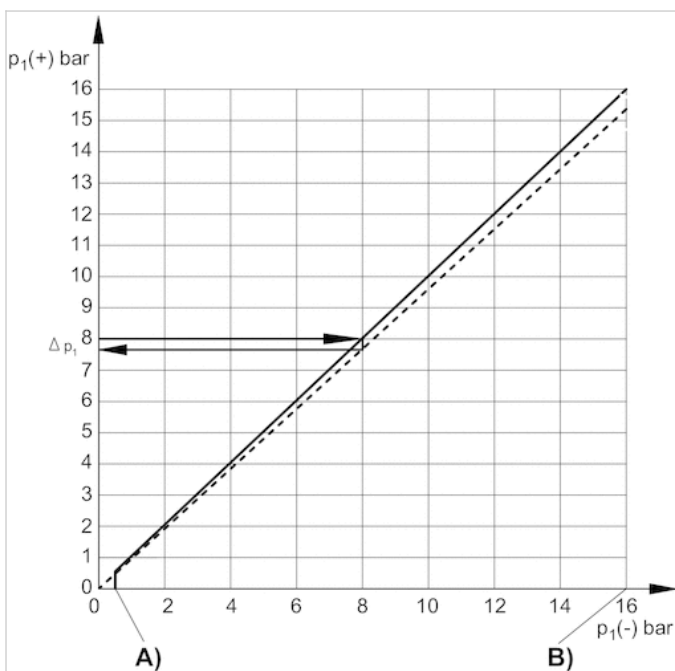
A)  $p_1(-)$ , min.

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:

$p1 (+) = 8 \text{ bar} > p1(-) = 7.6 \text{ bar}$   
 $\Delta p1 = 0.4 \text{ bar}$

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

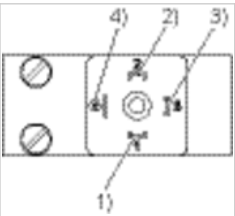
| U [V] | I [A] 1) 3) | I [A] 2) 4) |
|-------|-------------|-------------|
| 30    | 3           | 2           |
| 48    | 3           | 0.55        |
| 60    | 3           | 0.4         |
| 125   | 3           | 0.15        |
| 250   | 3           | –           |

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

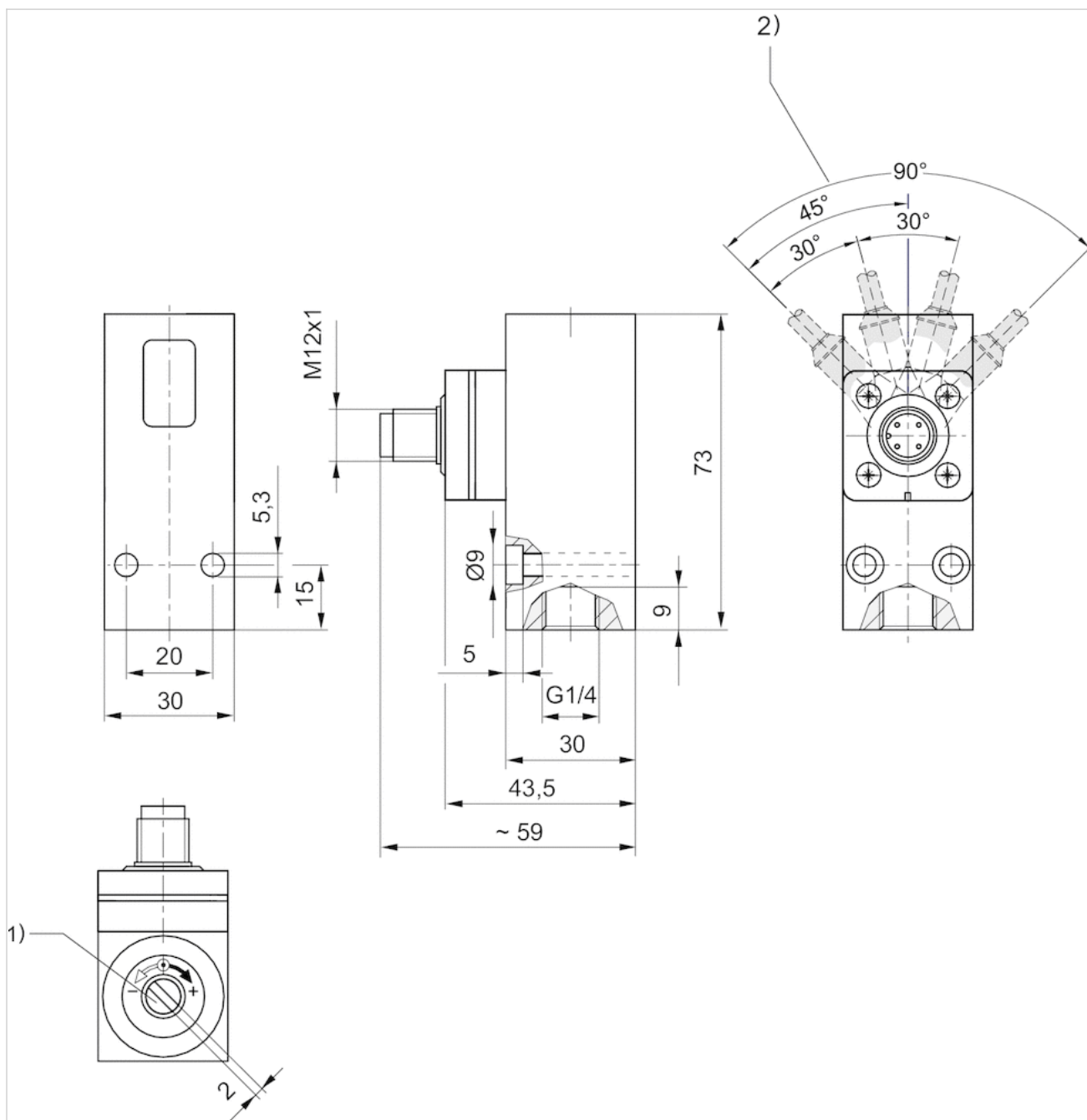
Switching function increasing pressure: contact switches from 1-2 to 1-3.  
Switching function decreasing pressure: contact switches from 1-3 to 1-2.  
Notice: Too-high currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching!  
The microswitch has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

# Technical information

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

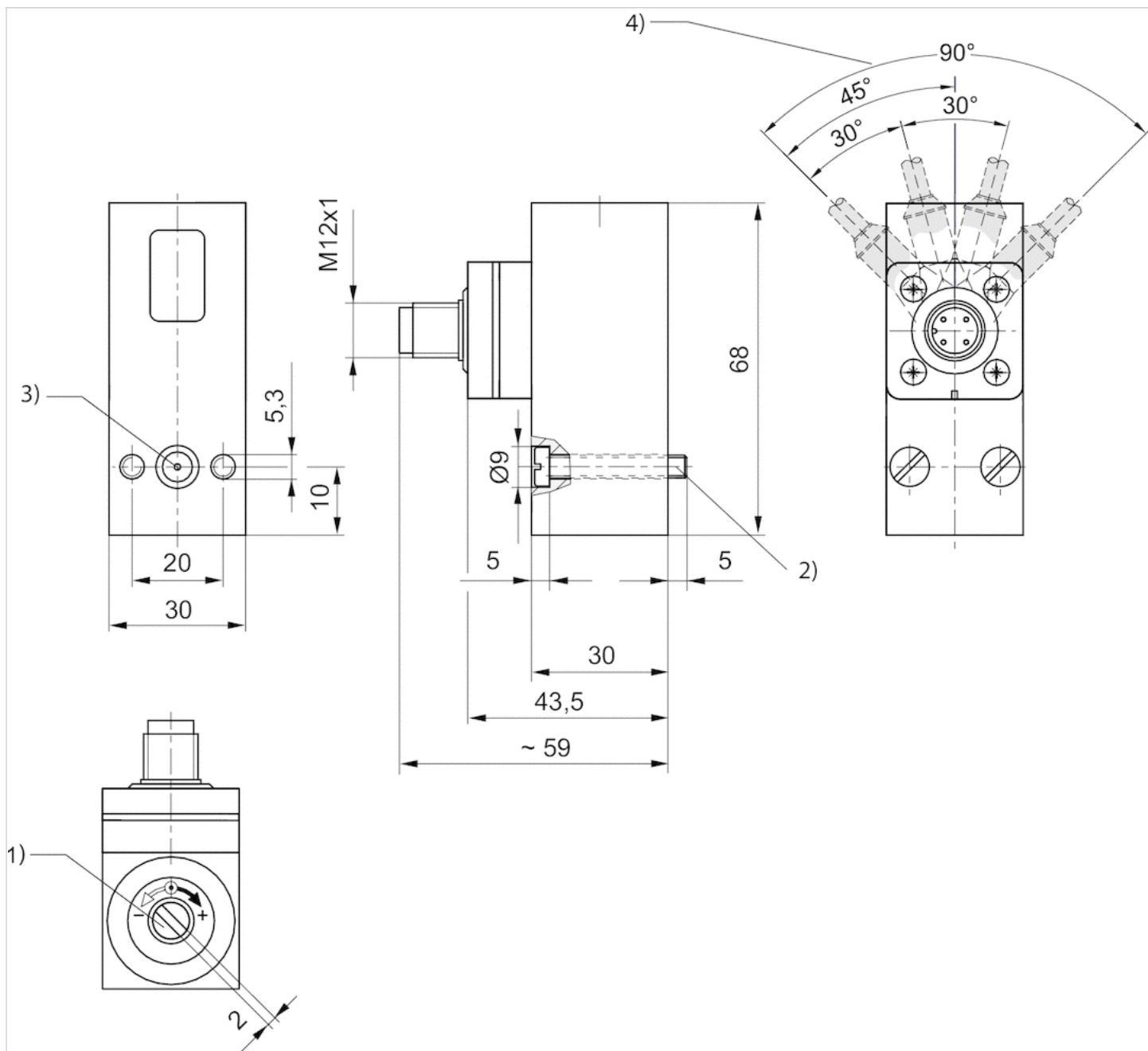
## Dimensions

Fig. 1



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

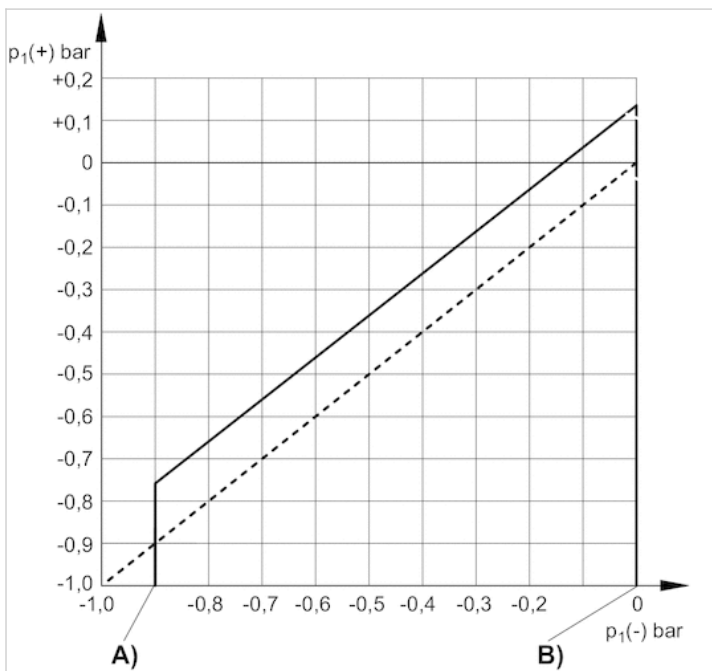
Fig. 2



- 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)



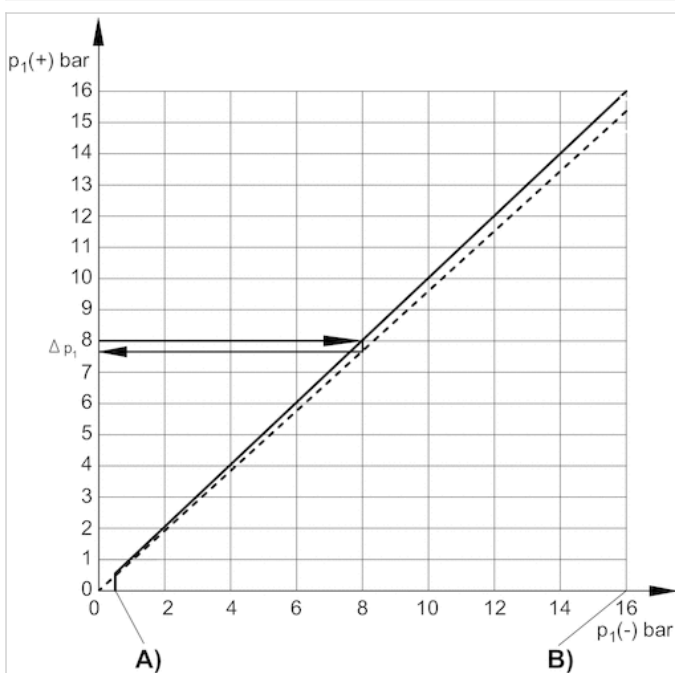
A)  $p_1 (-)$ , min.

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

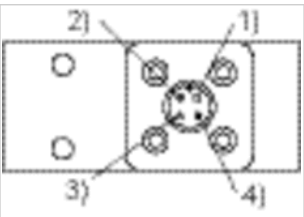
| U [V]              | I [A] 1) 3) | I [A] 2) 4)          |
|--------------------|-------------|----------------------|
| 30-250             | 3A          |                      |
| 30 / 48 / 60 / 125 |             | 2 / 0,55 / 0,4 / 0,2 |

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) |

## QR1-S standard series

- Straight fitting
- External thread
- G 1/2
- push-in fitting
- Ø 8, Ø 10, Ø 12, Ø16, Ø 14
- 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    |
|------------|--------|--------|---------------|-----------|
| 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  | Ø16    | 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).

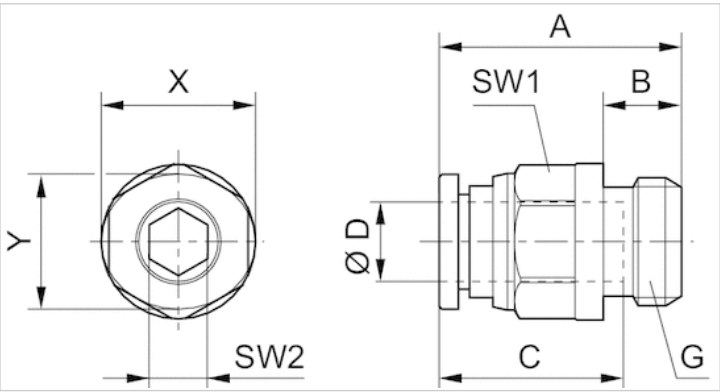
### Technical information

| 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 |

|          |                      |
|----------|----------------------|
| Material |                      |
| Thread   | Brass, nickel-plated |

Dimensions

Dimensions



Dimensions

| Part No.   | Port D | Port G | A    | B   | C    | SW1 | SW2 | X  | Y  |
|------------|--------|--------|------|-----|------|-----|-----|----|----|
| 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 | Ø16    | 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 1/2
- push-in fitting
- Ø 8, Ø 10, Ø 12, Ø 14, Ø16
- 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    |
|------------|--------|--------|---------------|-----------|
| 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  | Ø16    | 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).

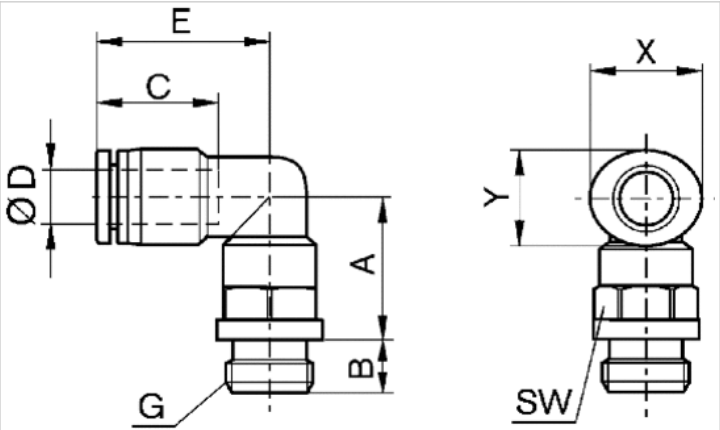
### Technical information

| Material          |                                |
|-------------------|--------------------------------|
| Material          | nickel-plated                  |
| Housing           | Polybutyleneterephthalate      |
| Seal              | Acrylonitrile butadiene rubber |
| Tooth lock washer | Stainless steel                |
| Release ring      | Polyoxymethylene               |

| Material            |                                     |
|---------------------|-------------------------------------|
| 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  |
|------------|--------|--------|------|-----|------|------|----|----|----|
| 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 |
| 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

- Straight fitting
- External thread
- G 1/2
- push-in fitting
- 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.   |
|------------|--------|--------|---------------|-----------|--------|
| 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

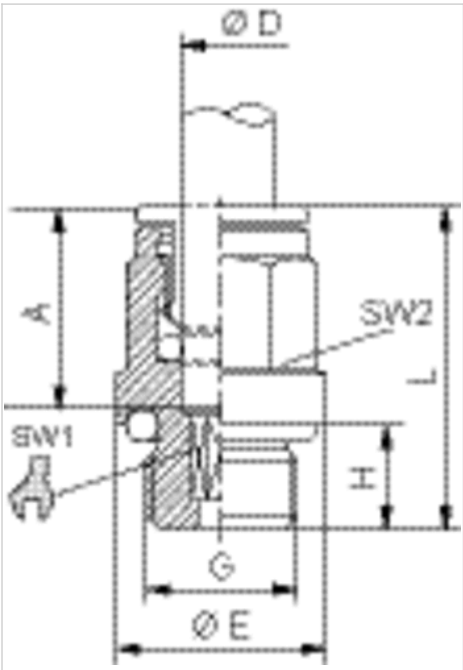
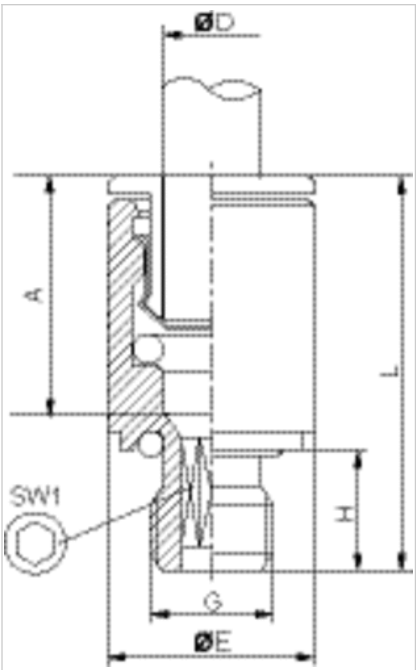


Fig. 2



Dimensions

| Part No.   | Port D | Port G | Ø E | H  | L  | A* | SW 1 | SW 2 | Fig.   |
|------------|--------|--------|-----|----|----|----|------|------|--------|
| 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

# Series QR2-S, standard

- Elbow fitting, rotatable
- External thread
- G 1/2
- push-in fitting
- Ø 10, Ø 12, Ø 14, Ø16
- 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    |
|------------|--------|--------|---------------|-----------|
| 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  | Ø16    | 1 piece       | 0.185 lbs |

Weight per piece

## Technical information

The series QR1 (plastic) and QR2 (metal) can not be combined

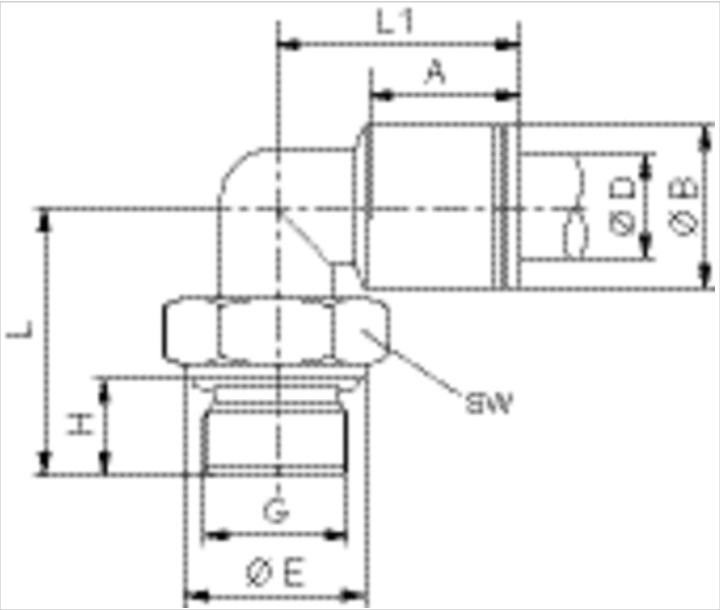
Thread seal with captive O-ring

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 |
|------------|--------|--------|----|----|----|------|----|------|----|
| 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 3/4, G 1
- plug-in with tube nut
- Ø 18
- 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    |
|------------|--------|--------|---------------|-----------|
| 1823391807 | G 3/4  | Ø 18   | 1 piece       | 0.458 lbs |
| 1823391808 | G 1    | Ø 18   | 1 piece       | 0.608 lbs |

Weight per piece

### Technical information

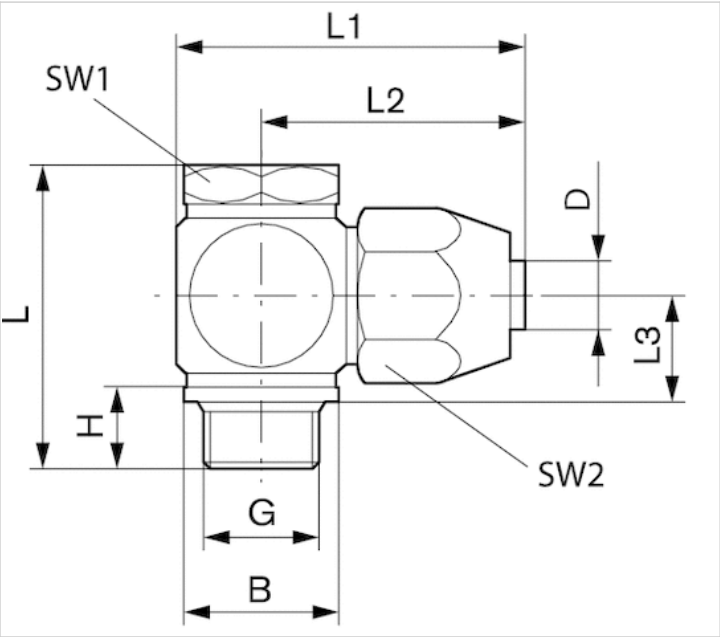
For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

### Technical information

| Material |                    |
|----------|--------------------|
| Housing  | Aluminum, anodized |
| Seal     | Polyvinyl chloride |

Dimensions

Dimensions



for fabric-reinforced plastic tubing

Dimensions

| Part No.   | Port D | Port G | B  | H    | L  | L1 | L2 | L3 | SW1 | SW2 |
|------------|--------|--------|----|------|----|----|----|----|-----|-----|
| 1823391807 | Ø 18   | G 3/4  | 33 | 18.5 | 66 | 69 | 51 | 25 | 32  | 41  |
| 1823391808 | Ø 18   | G 1    | 40 | 20.5 | 70 | 77 | 55 | 25 | 41  | 41  |

Connection D = inside diameter of the tubing to be used

# Double nipple, Series PE5

- External thread



Weight

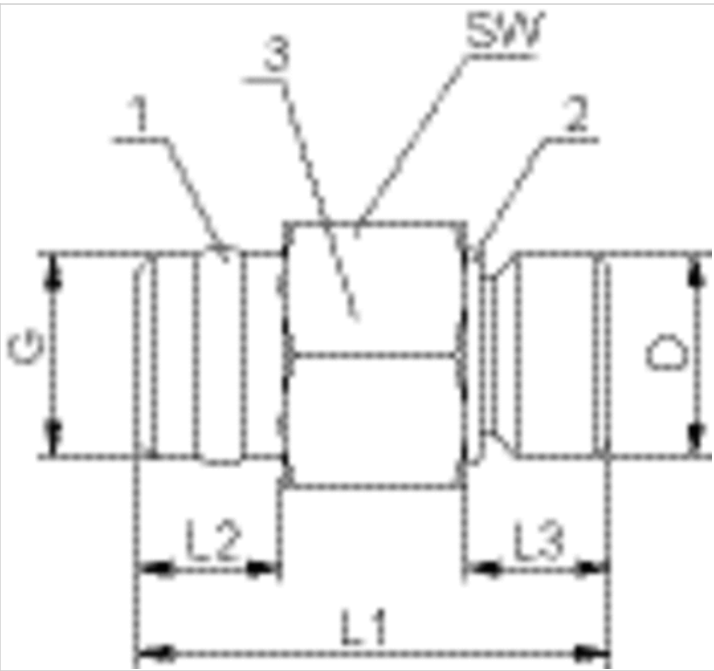
0.088 lbs

## 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

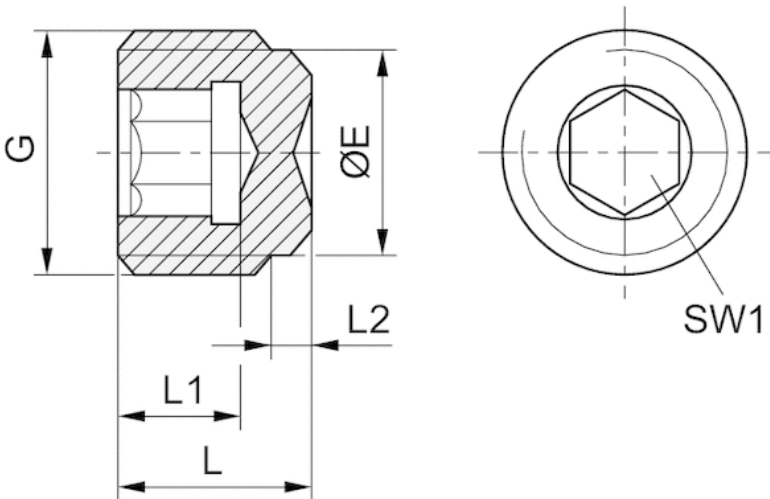
| Part No.   | Port G | Delivery unit |
|------------|--------|---------------|
| 1823462004 | G 1/8  | 10 piece      |
| 1823462003 | G 1/4  | 10 piece      |

## 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



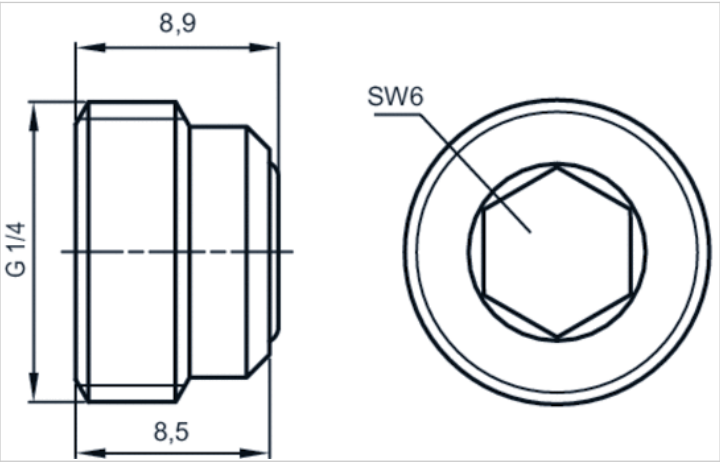
Technical data

| 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, G 1
- 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

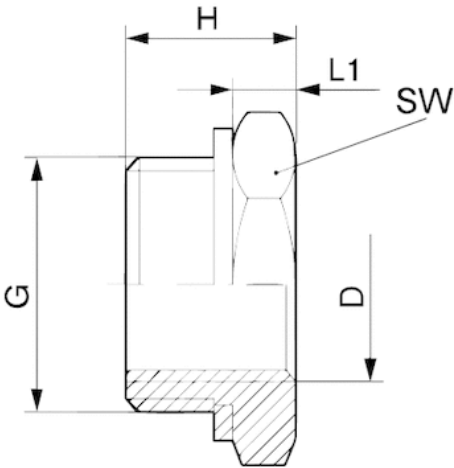
| Part No.   | Port G | Port D | Delivery unit |
|------------|--------|--------|---------------|
| 1823391300 | G 1/2  | G 1/4  | 5 piece       |
| 1823391014 | G 1/2  | G 3/8  | 5 piece       |
| 1823391028 | G 3/4  | G 1/2  | 5 piece       |
| 1823391304 | G 1    | G 1/2  | 2 piece       |

## 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 |
| 1823391304 | G 1/2  | G 1    | 23   | 8   | 41 |

# 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

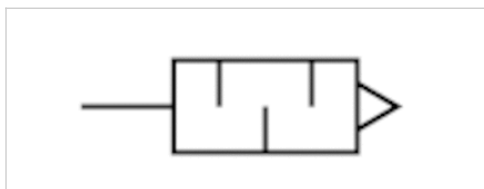
90 dB

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

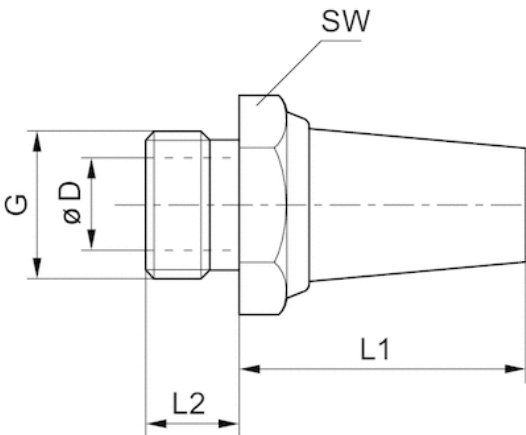
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

## Technical information

| Material  |                 |
|-----------|-----------------|
| Silencers | Sintered bronze |
| Thread    | Brass           |

Dimensions

Dimensions

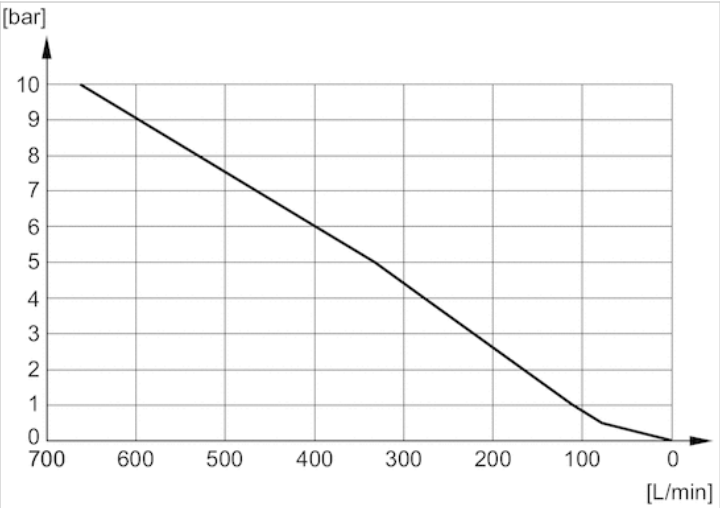


Dimensions

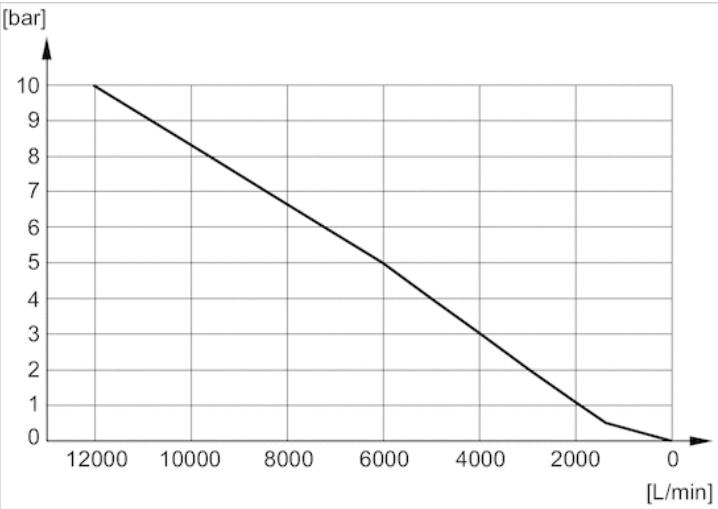
| Part No.   | Port G | SW | Ø D  | L1 | L2 |
|------------|--------|----|------|----|----|
| 1827000003 | G 1/2  | 27 | 14.5 | 44 | 12 |

Diagrams

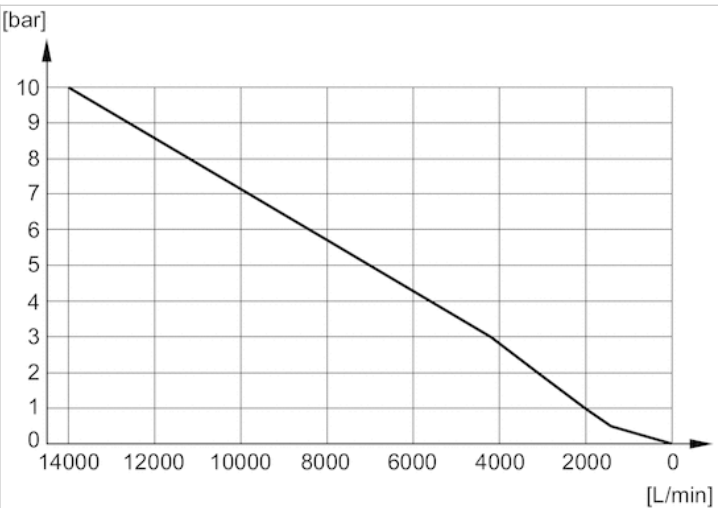
Flow diagram 1827000006



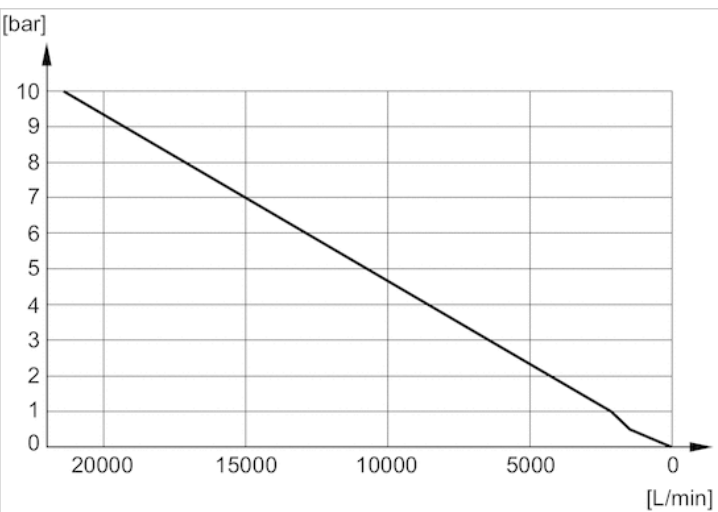
Flow diagram 1827000003



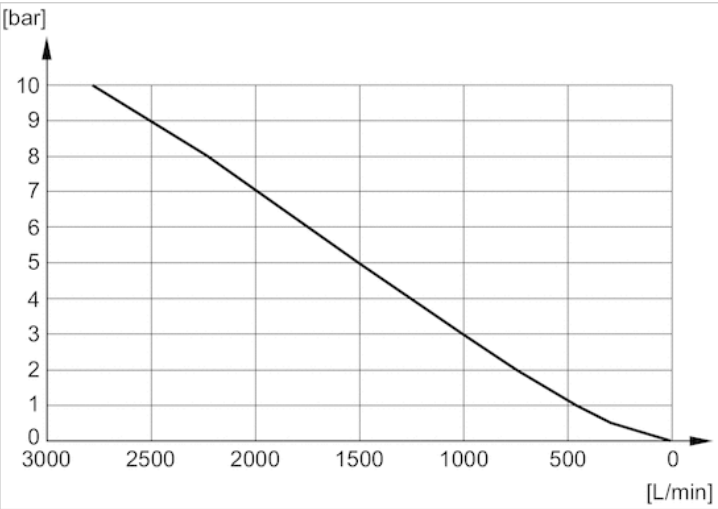
Flow diagram 1827000004



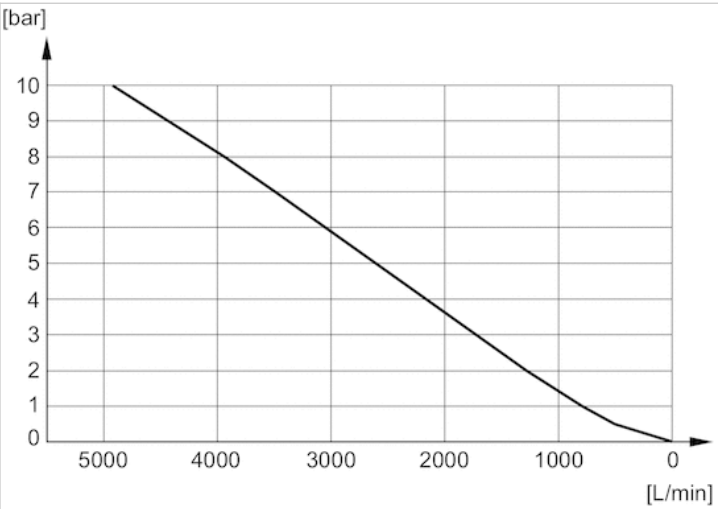
Flow diagram 1827000005



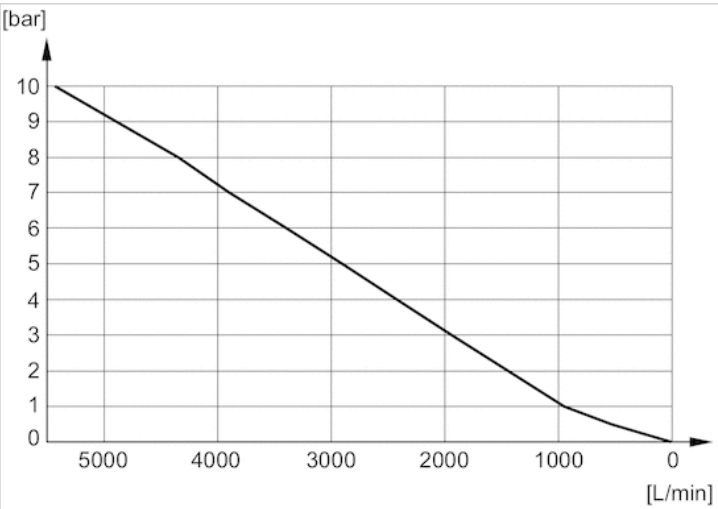
Flow diagram 5324001110



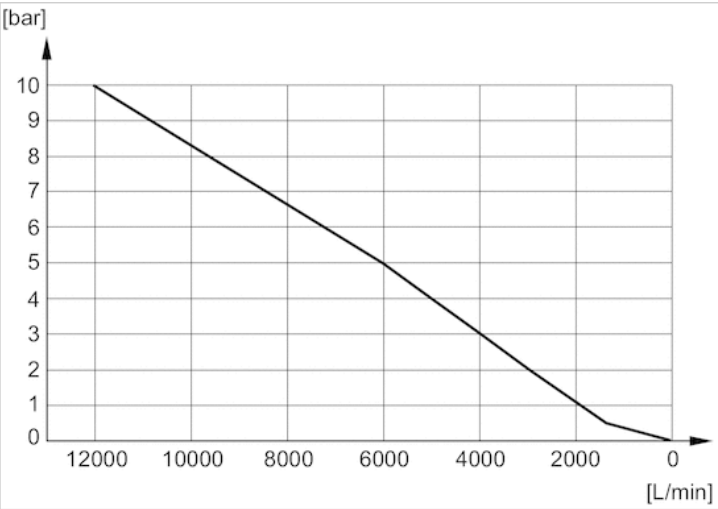
Flow diagram 5324001170



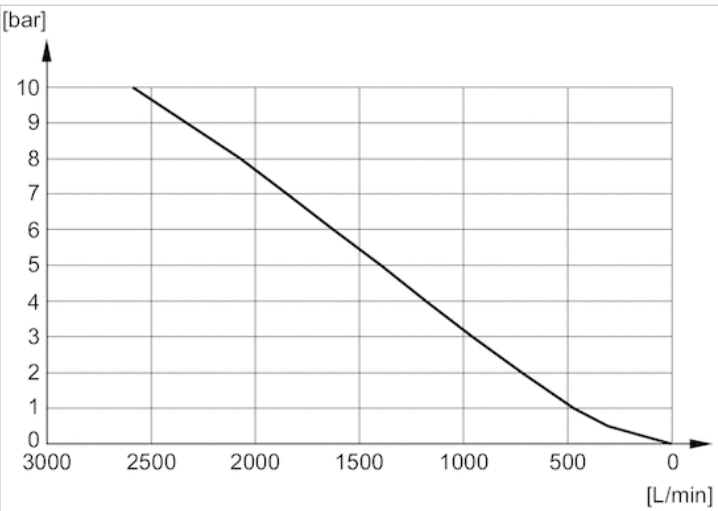
Flow diagram 5324001120



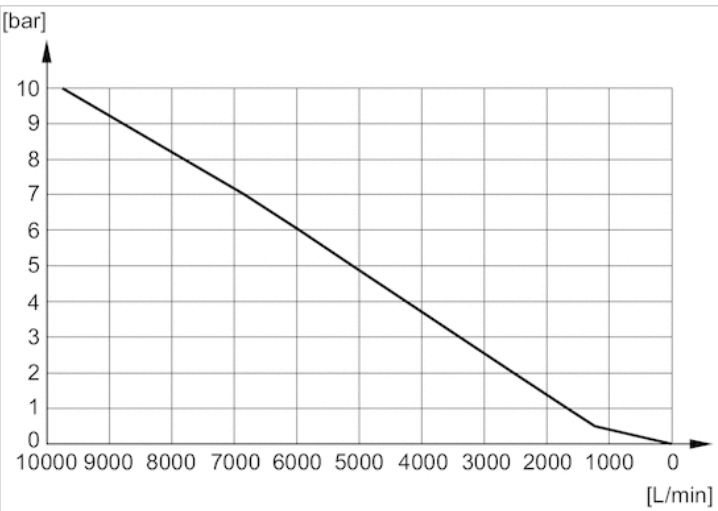
Flow diagram 5324001140



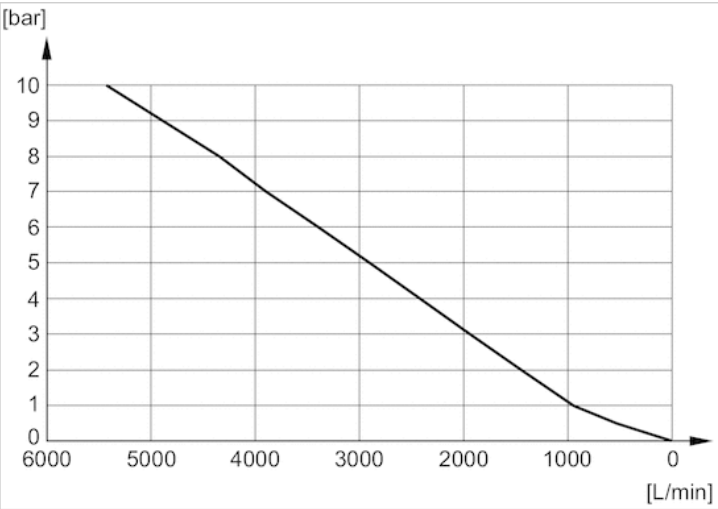
Flow diagram 1827000000



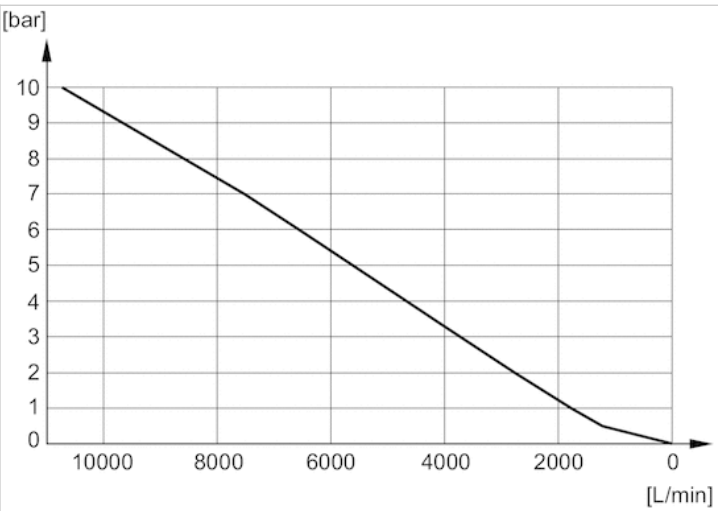
Flow diagram R412004817



Flow diagram 1827000001



Flow diagram 1827000002



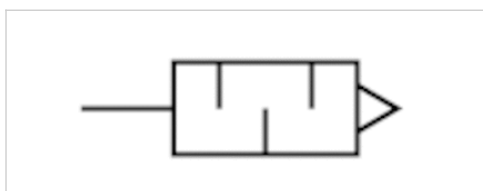
# Silencers, series SI1

- Stainless steel



Working pressure min./max.  
Ambient temperature min./max.  
Medium  
Sound pressure level  
Weight  
Comment

0 ... 174 psi  
-4 ... 302 °F  
Compressed air  
95 dB  
0.106 lbs  
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

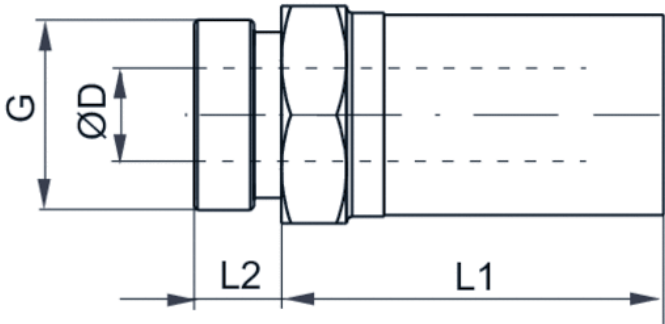
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

## Technical information

| Material  |                 |
|-----------|-----------------|
| Silencers | Stainless steel |
| Thread    | Stainless steel |

Dimensions

Dimensions

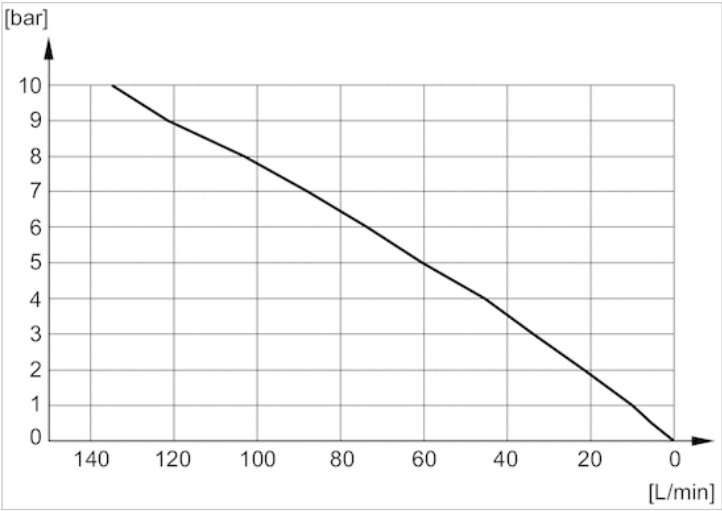


Dimensions

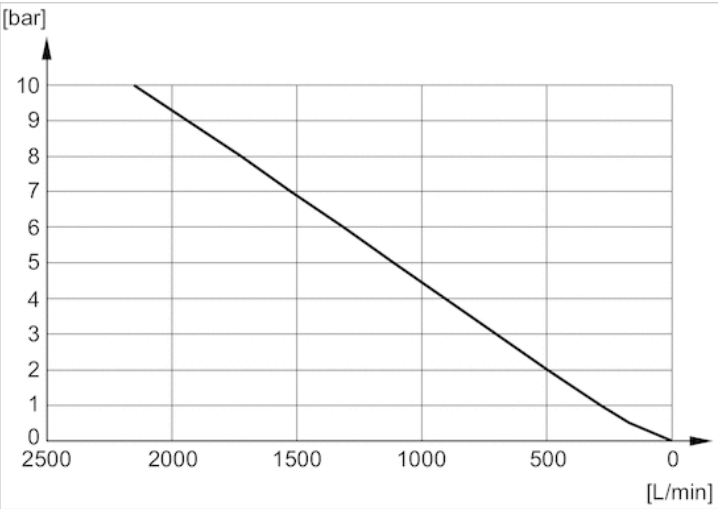
| Part No.   | Port G | SW | Ø D  | L1   | L2  |
|------------|--------|----|------|------|-----|
| R412010084 | G 1/2  | 24 | 15.3 | 39.5 | 9.5 |

Diagrams

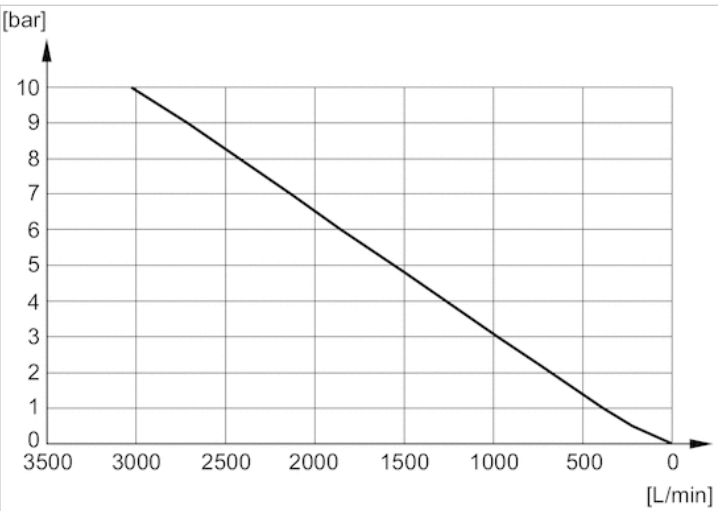
Flow diagram R412010090



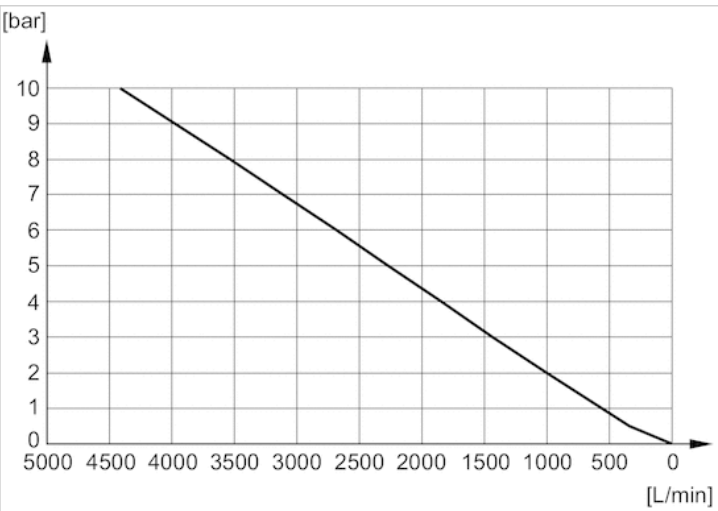
Flow diagram R412010081



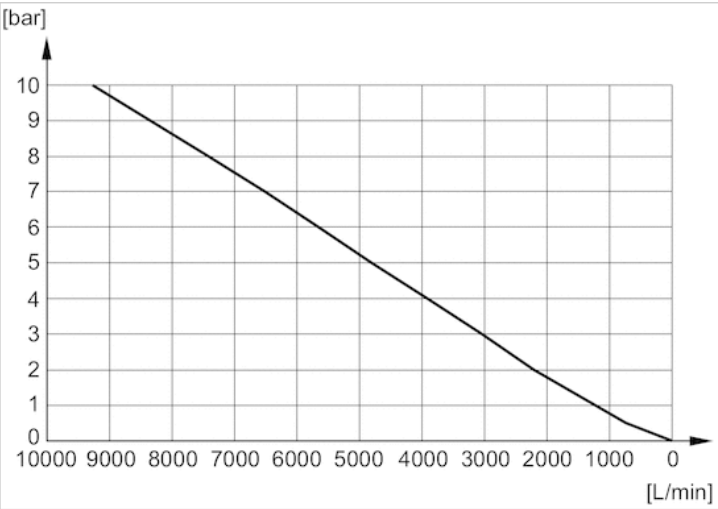
Flow diagram R412010082



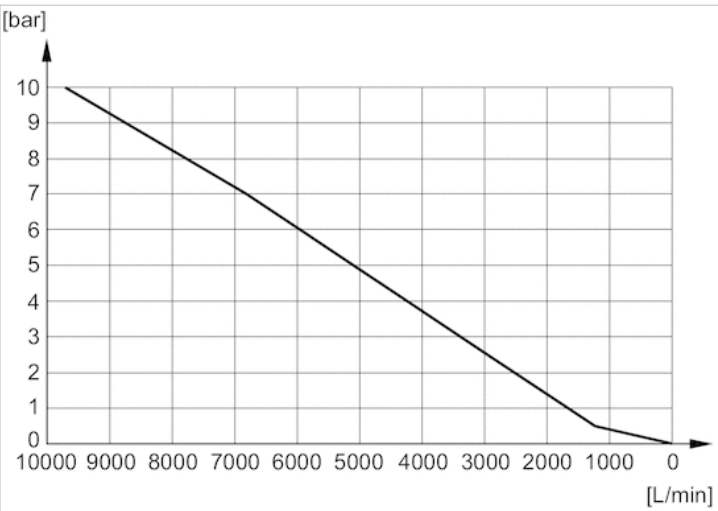
Flow diagram R412010083



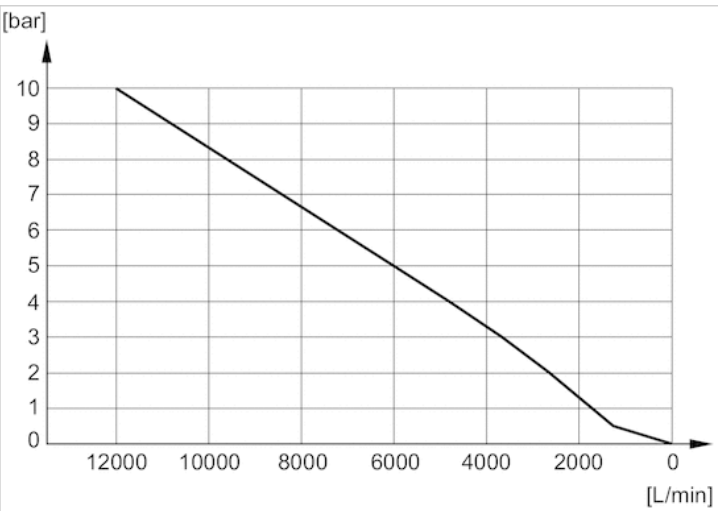
Flow diagram R412010084



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

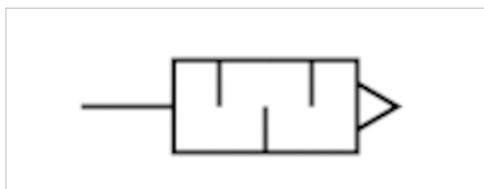
85 dB

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

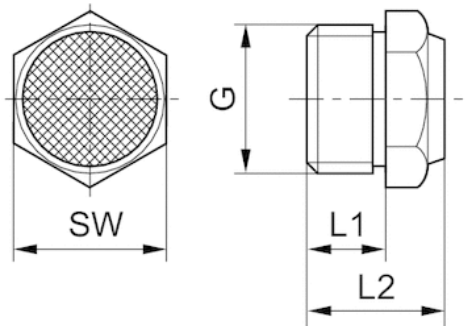
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

## Technical information

| Material  |                 |
|-----------|-----------------|
| Silencers | Sintered bronze |
| Thread    | Brass           |

Dimensions

Dimensions



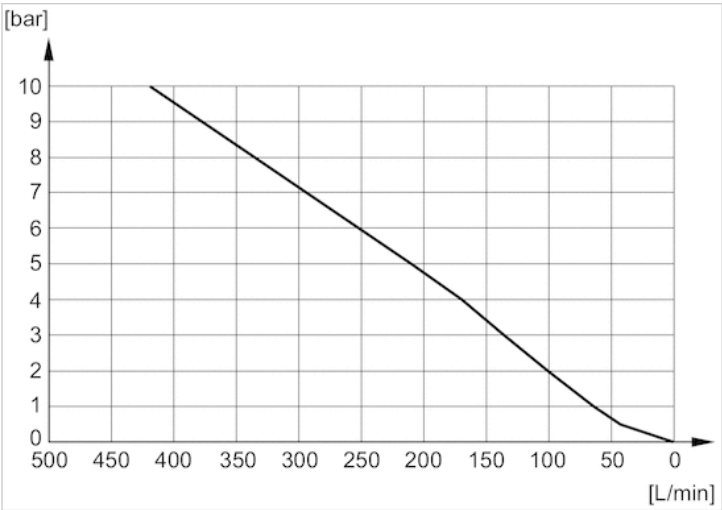
Dimensions

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

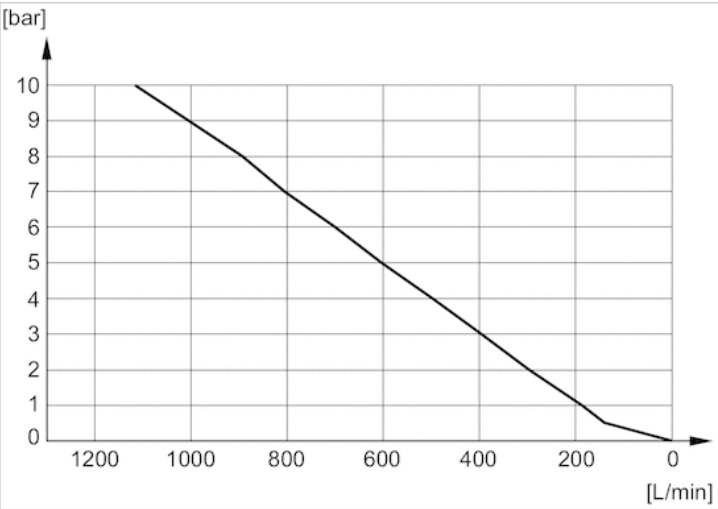
Sound pressure level measured at 6 bar at 1 m distance

Diagrams

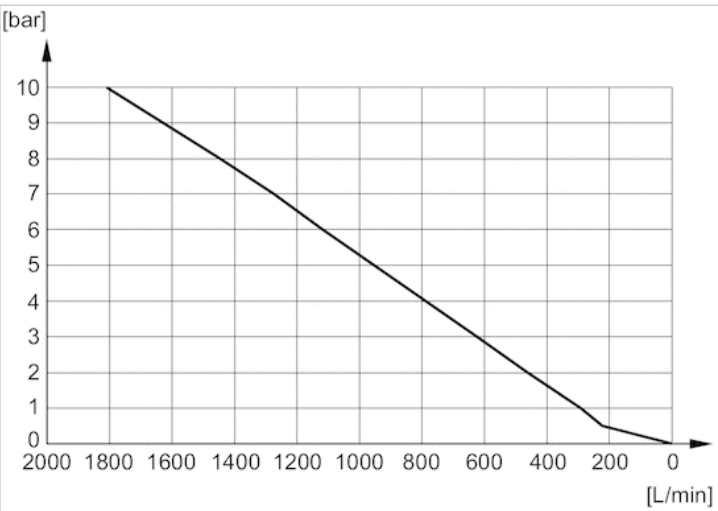
Flow diagram 1827000032



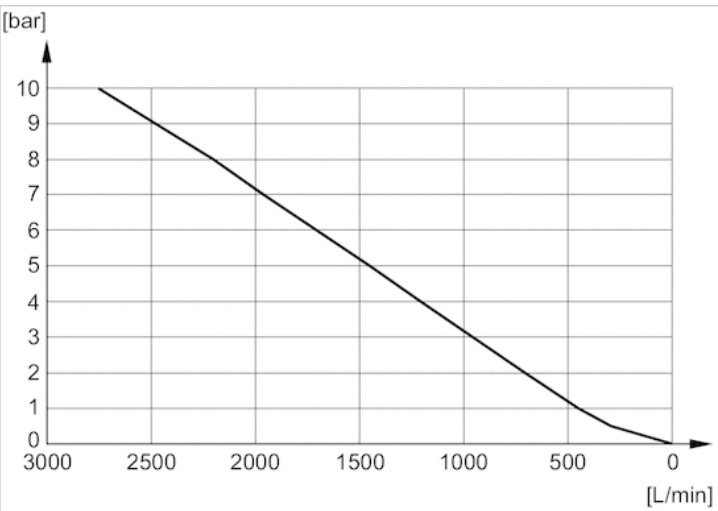
Flow diagram 1827000031



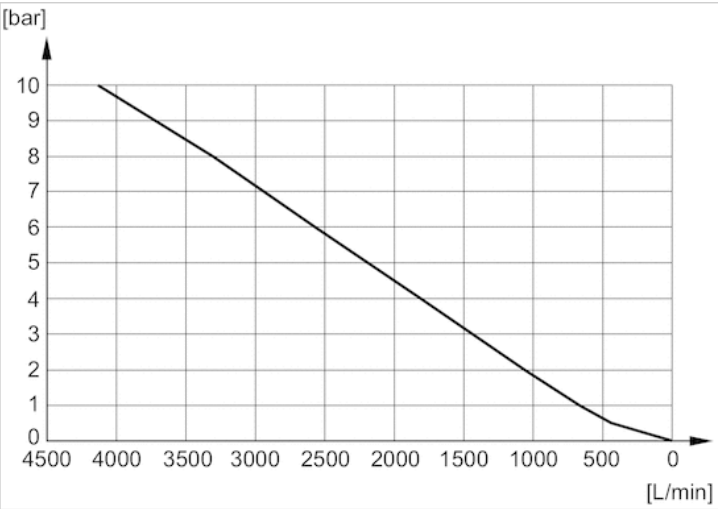
Flow diagram 1827000033



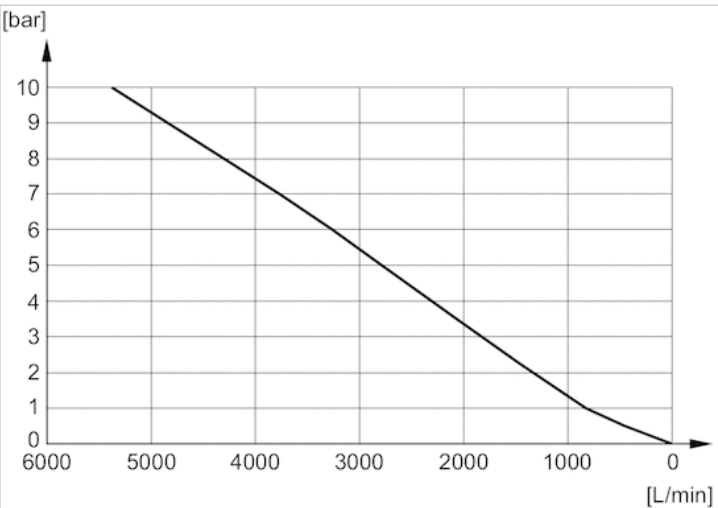
Flow diagram 1827000034



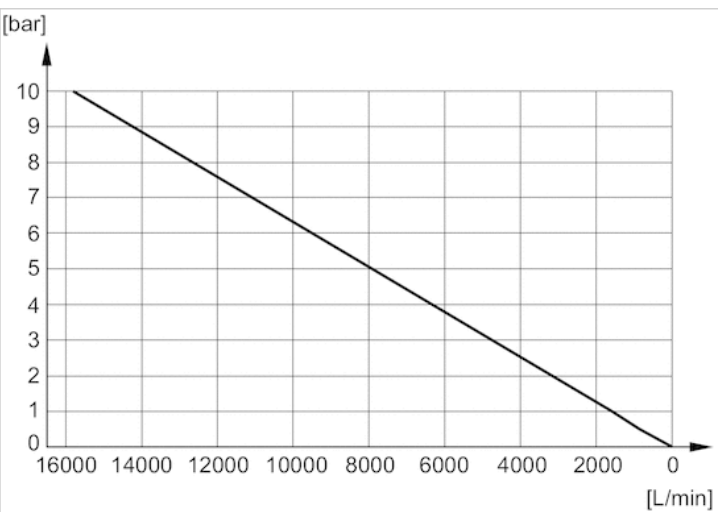
Flow diagram 1827000035



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

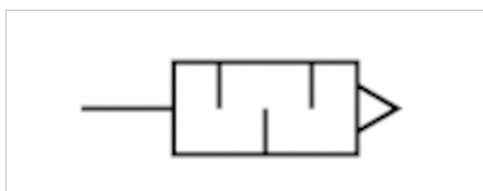
88 dB

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

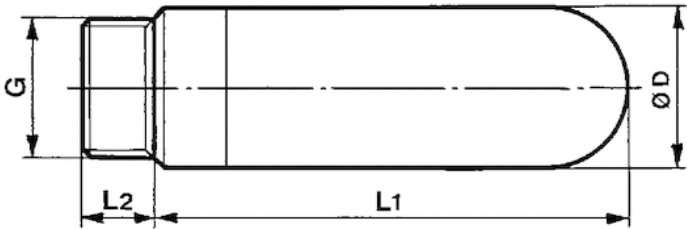
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

## Technical information

| Material  |              |
|-----------|--------------|
| Silencers | Polyethylene |
| Thread    | Polyethylene |

Dimensions

Dimensions

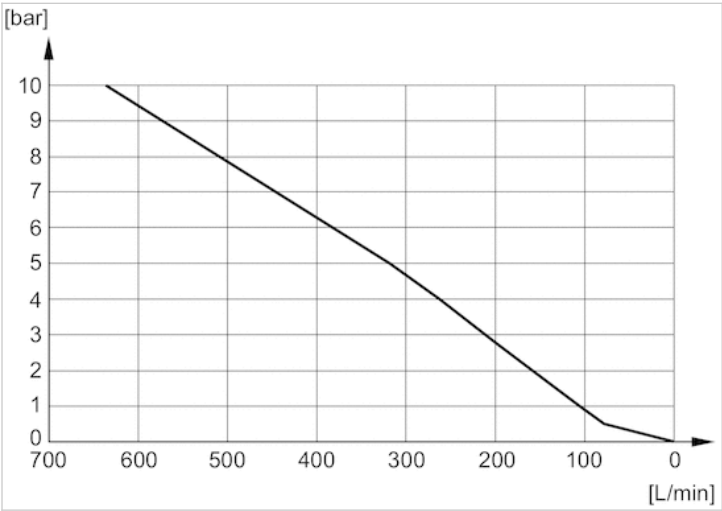


Dimensions

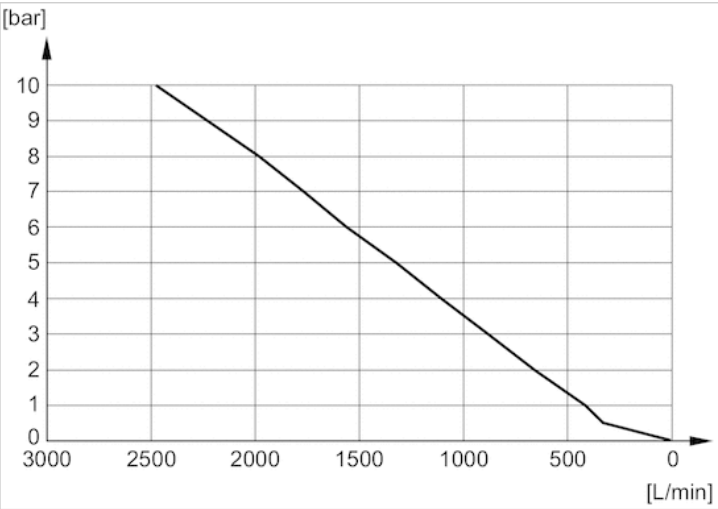
| Part No.   | Port G | Ø D  | L1   | L2 |
|------------|--------|------|------|----|
| 1827000022 | G 1/2  | 23.3 | 66.5 | 11 |

Diagrams

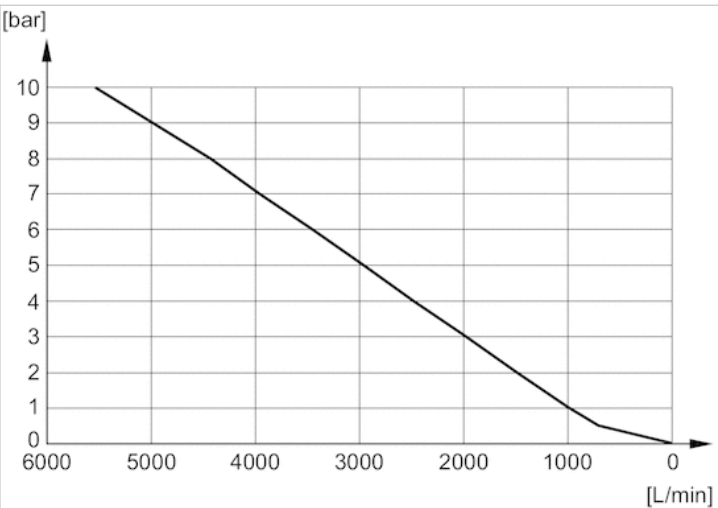
Flow diagram 1827000018



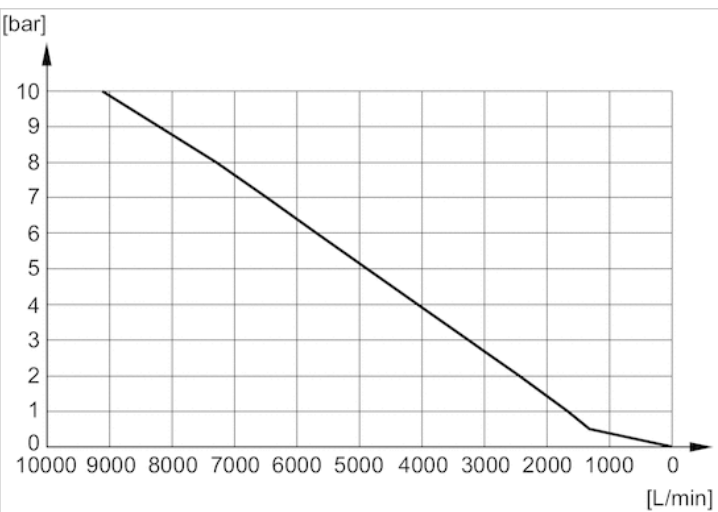
Flow diagram 1827000019



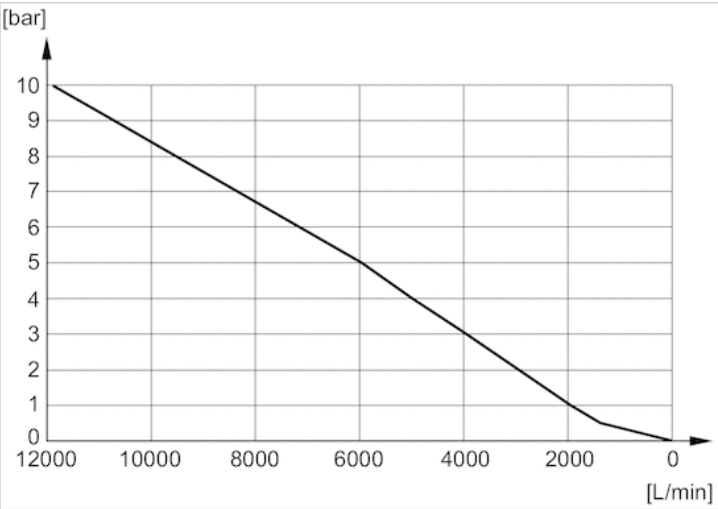
Flow diagram 1827000020



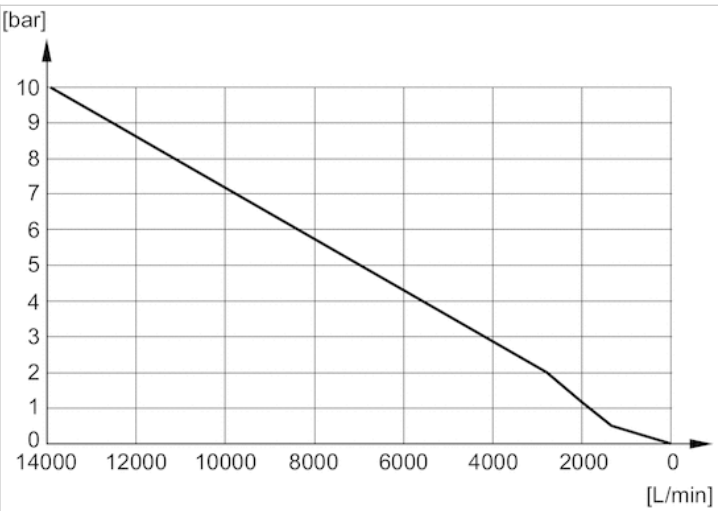
Flow diagram 1827000021



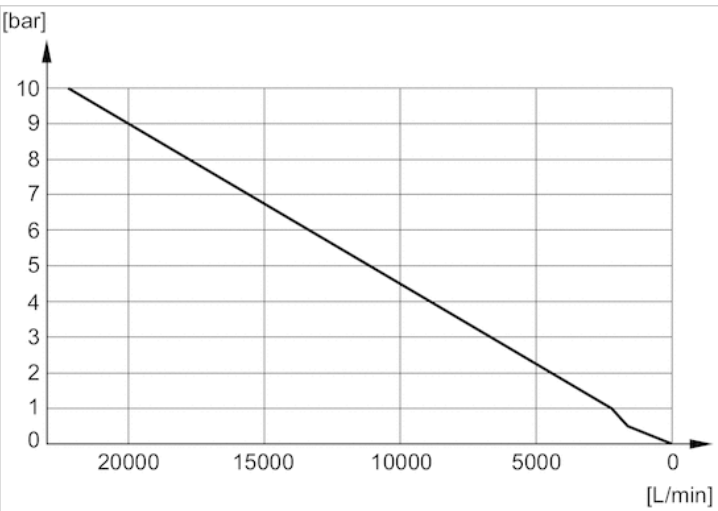
Flow diagram 1827000022



Flow diagram 1827000023



Flow diagram 1827000024



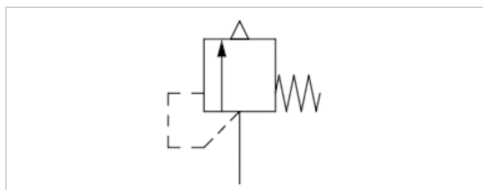
# Series RV1

- Qn 1►2 = 1.13-16.3 Cv
- thread-in
- External thread
- 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   |
| 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 .

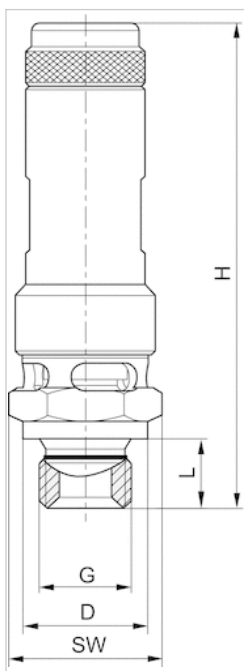
## Technical information

### Material

|         |                  |
|---------|------------------|
| Housing | Brass            |
| Seals   | Fluorocaoutchouc |

## Dimensions

### Dimensions



G = connection 1

## Dimensions

| Part No.   | Port G | Ø D | H  | L  | SW | T [Nm] | NW |
|------------|--------|-----|----|----|----|--------|----|
| R412007542 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |
| R412007720 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |
| R412007690 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |
| R412007691 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |
| R412007692 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |
| R412007699 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |
| R412007696 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |
| R412007702 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |
| R412007698 | G 1/2  | 26  | 78 | 12 | 27 | 50     | 15 |

| Part No.   | Port G | Ø D | H    | L  | SW | T [Nm] | NW |
|------------|--------|-----|------|----|----|--------|----|
| 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