

Air Breather Filters Pi 0101 - Pi 0185

1. Features

The Pi 0101 through Pi 0126 breather filters have pot-shaped housings made of non-corrosive material.

The air intake is located in the upper section, this prevents surface dust to be drawn in from the tank top. The cover is designed to prevent entry of splash-water. The disposable, pleated elements can be replaced in a matter of seconds.

The Pi 0140 through Pi 0185 breather filters have a housing made of galvanized sheet metal. The built-in o-ring provides accurate at the tank connection. With the choice of Mic or Sm-L elements the CETOP RP 98 H requirements are fulfilled. These specify the same filtration degree for the breather filter as the system filter utilizes.

Mol-elements prevent oil aerosol from exiting the tank. The oil aerosol coagulate, forming drops within the pleated coalescer layer, which are returned to the tank.

Filters are fixed by threads, clamps or flanges (hole circle 73 mm).

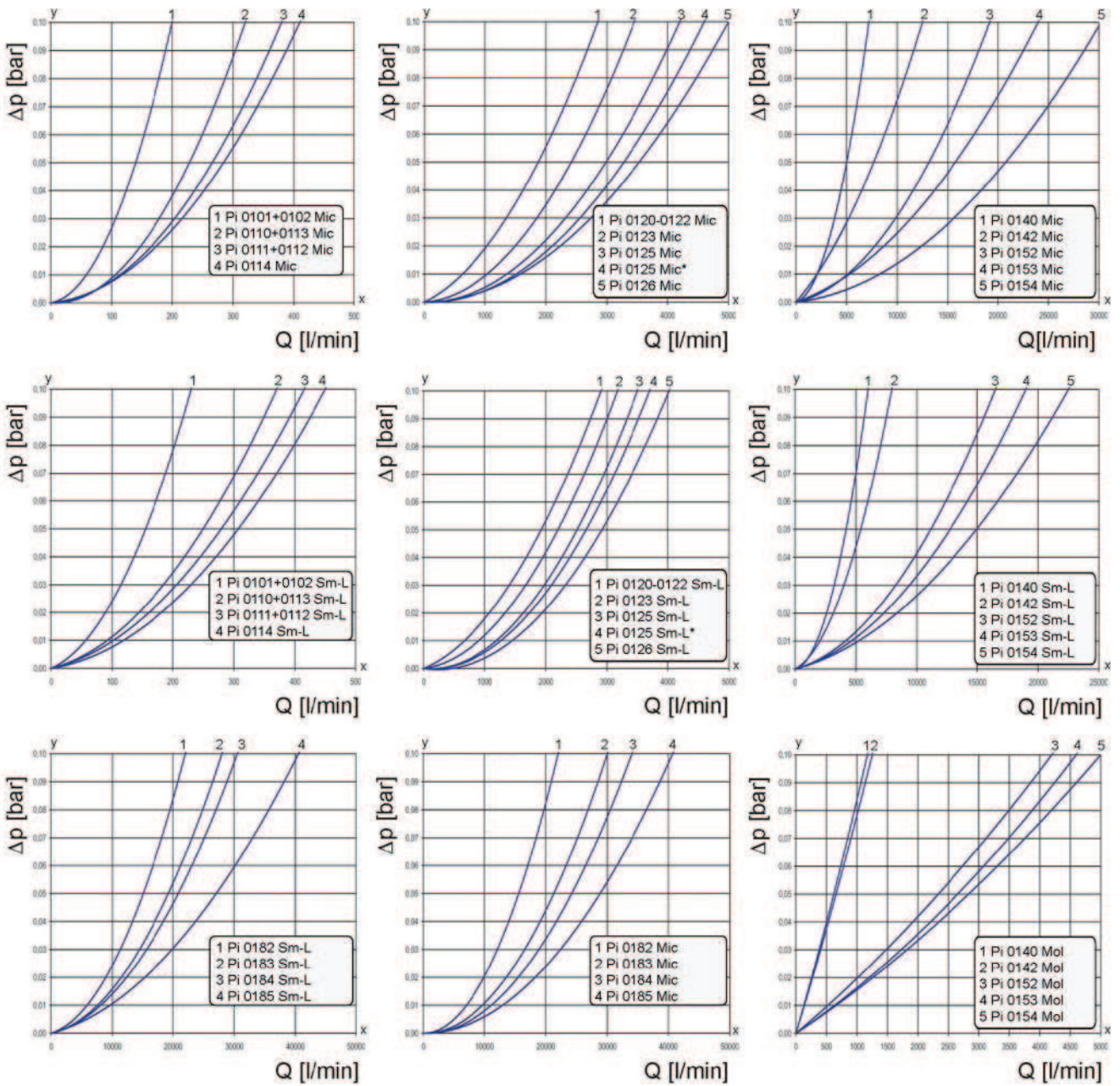
Using these filters your tank will breath clean air

- non-corrosive
- impact proof
- selection of elements to meet system requirements
 - choose Mic 10 µm, Sm-L 3 µm, Mol oil aerosols
 - pleated
 - high dirt holding capacity
- varied mounting option
 - screwed
 - pipe mount
 - face mount
 - with filling strainer
 - with protective screen

Worldwide distribution



2. Flow rate/pressure drop curve complete filter



y = differential pressure Δp [bar]

x = air flow rate Q [l/min]

3. Order numbers

| 3.1 Filter complete | | | | | | 3.2. Filter elements | | |
|---------------------|-----------------|-------------|--------------|-------------|---------------------------------------|----------------------|--------------|-------------------|
| Order number | Type | Element Mic | Element Sm-L | Element Mol | Connection for contam. indicator (VA) | Order number | Type | Quantity per pack |
| 77575830 | Pi 0101 Mic | | | | | 77687692 | 852 514 Mic | 3 |
| 77575848 | Pi 0101 Sm-L | | | | | 77643562 | 852 514 Sm-L | 3 |
| 77575806 | Pi 0102 Mic | | | | | 77687692 | 852 514 Mic | 3 |
| 77575814 | Pi 0102 Sm-L | | | | | 77643562 | 852 514 Sm-L | 3 |
| 77734700 | Pi 0110 Mic | | | | | 77687643 | 852 507 Mic | 3 |
| 77734718 | Pi 0110 Sm-L | | | | | 77643547 | 852 507 Sm-L | 3 |
| 77734734 | Pi 0111 Mic | | | | | 77687643 | 852 507 Mic | 3 |
| 77734742 | Pi 0111 Sm-L | | | | | 77643547 | 852 507 Sm-L | 3 |
| 77734767 | Pi 0112 Mic | | | | | 77687643 | 852 507 Mic | 3 |
| 77734775 | Pi 0112 Sm-L | | | | | 77643547 | 852 507 Sm-L | 3 |
| 77734791 | Pi 0113 Mic | | | | | 77687643 | 852 507 Mic | 3 |
| 77734809 | Pi 0113 Sm-L | | | | | 77643547 | 852 507 Sm-L | 3 |
| 77734825 | Pi 0114 Mic | | | | | 77687643 | 852 507 Mic | 3 |
| 77734833 | Pi 0114 Sm-L | | | | | 77643547 | 852 507 Sm-L | 3 |
| 77575681 | Pi 0120 Mic | | | | | 77687767 | 852 519 Mic | 3 |
| 77575699 | Pi 0120 Sm-L | | | | | 77643554 | 852 519 Sm-L | 3 |
| 77575657 | Pi 0121 Mic | | | | | 77687767 | 852 519 Mic | 3 |
| 77575665 | Pi 0121 Sm-L | | | | | 77643554 | 852 519 Sm-L | 3 |
| 77575624 | Pi 0122 Mic | | | | | 77687767 | 852 519 Mic | 3 |
| 77575632 | Pi 0122 Sm-L | | | | | 77643554 | 852 519 Sm-L | 3 |
| 77575590 | Pi 0123 Mic | | | | | 77687767 | 852 519 Mic | 3 |
| 77575608 | Pi 0123 Sm-L | | | | | 77643554 | 852 519 Sm-L | 3 |
| 77728223 | Pi 0125 Mic | | | | | 77687767 | 852 519 Mic | 3 |
| 77728231 | Pi 0125 Sm-L | | | | | 77643554 | 852 519 Sm-L | 3 |
| 77728173 | Pi 0126 Sm-L | | | | | 77643554 | 852 519 Sm-L | 3 |
| 77749732 | Pi 0140 Mic | | | | | 77687999 | 852 621 Mic | 3 |
| 77749740 | Pi 0140 Sm-L | | | | | 77645625 | 852 621 Sm-L | 3 |
| 77765498 | Pi 0140 Mol | | | | | 77789365 | 852 621 Mol | 3 |
| 77749765 | Pi 0140 Mic/VA | | | | | 77687999 | 852 621 Mic | 3 |
| 77728165 | Pi 0126 Mic | | | | | 77687767 | 852 519 Mic | 3 |
| 77749773 | Pi 0140 Sm-L/VA | | | | | 77645625 | 852 621 Sm-L | 3 |
| 77765506 | Pi 0140 Mol/Va | | | | | 77789365 | 852 621 Mol | 3 |
| 77730724 | Pi 0142 Mic | | | | | 77687999 | 852 621 Mic | 3 |
| 77730732 | Pi 0142 Sm-L | | | | | 77645625 | 852 621 Sm-L | 3 |
| 77765514 | Pi 0142 Mol | | | | | 77789365 | 852 621 Mol | 3 |
| 77728272 | Pi 0142 Mic/VA | | | | | 77687999 | 852 621 Mic | 3 |
| 77728280 | Pi 0142 Sm-L/VA | | | | | 77645625 | 852 621 Sm-L | 3 |
| 77765522 | Pi 0142Mol/Va | | | | | 77789365 | 852 621 Mol | 3 |
| 77749328 | Pi 0152 Mic | | | | | 77687726 | 852 516 Mic | 2 |
| 77749336 | Pi 0152 Sm-L | | | | | 77687759 | 852 516 Sm-L | 2 |
| 77765530 | Pi 0152 Mol | | | | | 77789381 | 852 516 Mol | 2 |
| 77749359 | Pi 0152 Mic/VA | | | | | 77687226 | 852 516 Mic | 2 |
| 77749369 | Pi 0152 Sm-L/VA | | | | | 77687759 | 852 516 Sm-L | 2 |
| 77765548 | Pi 0152 Mol/Va | | | | | 77789381 | 852 516 Mol | 2 |
| 77728306 | Pi 0153 Mic | | | | | 77687226 | 852 516 Mic | 2 |
| 77728314 | Pi 0153 Sm-L | | | | | 77687759 | 852 516 Sm-L | 2 |

3. Order numbers

| 3.1 Filter complete | | | | | | 3.2 Filter elements | | |
|---------------------|-----------------|-------------|--------------|-------------|---------------------------------------|---------------------|--------------|-------------------|
| Order number | Type | Element Mic | Element Sm-L | Element Mol | Connection for contam. indicator (VA) | Order number | Type | Quantity per pack |
| 77765555 | Pi 0153 Mol | | | | | 77789381 | 852 516 Mol | 2 |
| 77728330 | Pi 0153 Mic/VA | | | | | 77687226 | 852 516 Mic | 2 |
| 77728348 | Pi 0153Sm-L/VA | | | | | 77687759 | 852 516 Sm-L | 2 |
| 77765653 | Pi 0153 Mol/Va | | | | | 77789381 | 852 516 Mol | 2 |
| 77749799 | Pi 0154 Mic | | | | | 77687226 | 852 516 Mic | 2 |
| 77749807 | Pi 0154 Sm-L | | | | | 77687759 | 852 516 Sm-L | 2 |
| 77765571 | Pi 0154 Mol | | | | | 77789381 | 852 516 Mol | 2 |
| 77749823 | Pi 0154 Mic/VA | | | | | 77687226 | 852 516 Mic | 2 |
| 77749831 | Pi 0154 Sm-L/VA | | | | | 77687759 | 852 516 Sm-L | 2 |
| 77765589 | Pi 0154 Mol/Va | | | | | 77789381 | 852 516 Mol | 2 |
| 77950918 | Pi 0182 Mic | | | | | 77950298 | 852 822 Mic | 1 |
| 77950926 | Pi 0182 Sm-L | | | | | 77950348 | 852 822 Sm-L | 1 |
| 77950934 | Pi 0182 Mol | | | | | 77873318 | 852 822 Mol | 1 |
| 77950959 | Pi 0182 Mic/VA | | | | | 77950298 | 852 822 Mic | 1 |
| 77950967 | Pi 0182 Sm-L/VA | | | | | 77950348 | 852 822 Sm-L | 1 |
| 77950975 | Pi 0182 Mol/VA | | | | | 77873318 | 852 822 Mol | 1 |
| 77950538 | Pi 0183 Mic | | | | | 77950298 | 852 822 Mic | 1 |
| 77950546 | Pi 0183 Sm-L | | | | | 77950348 | 852 822 Sm-L | 1 |
| 77873219 | Pi 0183 Mol | | | | | 77873318 | 852 822 Mol | 1 |
| 77950785 | Pi 0183 Mic/VA | | | | | 77950298 | 852 822 Mic | 1 |
| 77950835 | Pi 0183 Sm-L/VA | | | | | 77950348 | 852 822 Sm-L | 1 |
| 77950843 | Pi 0183 Mol/VA | | | | | 77873318 | 852 822 Mol | 1 |
| 77950215 | Pi 0184 Mic | | | | | 77950298 | 852 822 Mic | 1 |
| 77950223 | Pi 0184 Sm-L | | | | | 77950348 | 852 822 Sm-L | 1 |
| 77950850 | Pi 0184 Mol | | | | | 77873318 | 852 822 Mol | 1 |
| 77950876 | Pi 0184 Mic/VA | | | | | 77950298 | 852 822 Mic | 1 |
| 77950884 | Pi 0184 Sm-L/VA | | | | | 77950348 | 852 822 Sm-L | 1 |
| 77950892 | Pi 0184 Mol/VA | | | | | 77873318 | 852 822 Mol | 1 |
| 77954498 | Pi 0185 Mic | | | | | 77950298 | 852 822 Mic | 1 |
| 77954506 | Pi 0185 Sm-L | | | | | 77950348 | 852 822 Sm-L | 1 |
| 77954514 | Pi 0185 Mol | | | | | 77873318 | 852 822 Mol | 1 |
| 78224123 | Pi 0185 Mic/VA | | | | | 77950298 | 852 822 Mic | 1 |
| 78224149 | Pi 0185 Sm-L/VA | | | | | 77950348 | 852 822 Sm-L | 1 |
| 78224131 | Pi 0185 Mol/VA | | | | | 77873318 | 852 822 Mol | 1 |

4. Specifications

Separation:

| | |
|------|------------|
| Mic | 10 μ m |
| Sm-L | 3 μ m |
| Mol | oil vapors |

Temperature range:

- 10 °C to + 100 °C
(other temperature ranges
on request)

Housing material:

| | |
|--------------------|------------------------|
| Pi 0101 to Pi 0126 | polyamide |
| Pi 0140 to Pi 0154 | galvanized sheet metal |
| Pi 0182 to Pi 0185 | steel/Al |

Sealing material:

| | |
|--------------------|-----------------|
| Pi 0126 | rubberized cork |
| Pi 0140 to Pi 0185 | NBR |

Resistance:

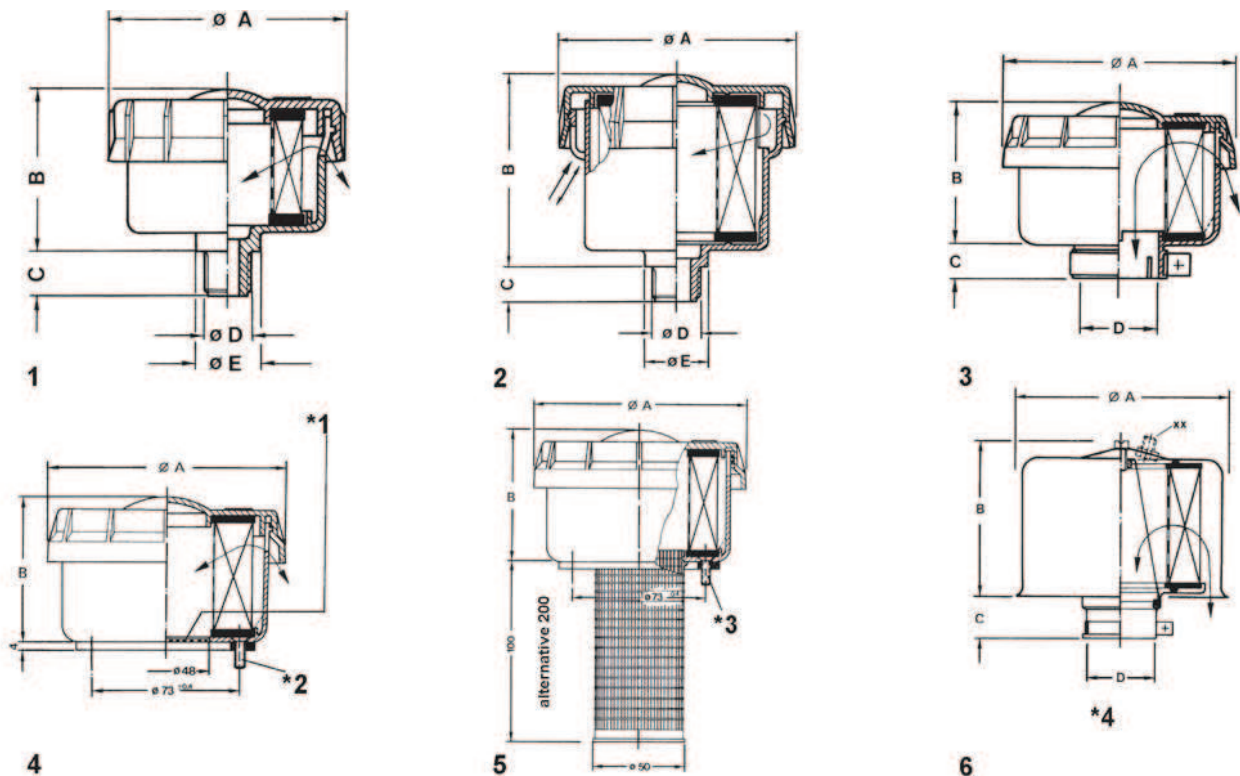
all hydraulic oils

Other elements for HFA, HFC and HFD fluids on request.

We draw attention to the fact that all values indicated are average values which do not always occur in specific cases of application. Our products are continually being further developed. Values, dimensions and weights can change as a result of this. Our specialized department will be pleased to offer you advice.

When using our filters in areas which are to be classified according to EU Directive 94/9 EC (ATEX 95), we recommend prior discussion with us. The standard version can be used for liquids based on mineral oil (corresponding to the fluids in Group 2 of Directive 97/23 EC Article 9). Please consult with us if using other media.

Subject to technical alteration without prior notice.



*1 2 mm dia screen removable

*2 6x screw M 5 x 16 DIN 7500 (cross-slotted)

*3 6x screw M 5 x 16 DIN 7500 (cross-slotted)

*4 optional connection for contamination indicator (VA)

5. Dimensions

| Type | Air flow rate [l/min]* | | | Illustration | Dimensions [mm and inch] | | | | |
|--------------------------------|---------------------------|------|-----|--------------|--------------------------|-------|-----|----|----|
| | Mic | Sm-L | Mol | | D | A | B | C | E |
| Pi 0101 | 60 | 55 | - | 1 | M 12 x 1.5 | 62 | 44 | 12 | 17 |
| Pi 0102 | 60 | 55 | - | 1 | G ¼ | 62 | 44 | 12 | 17 |
| Pi 0110 | 100 | 90 | - | 2 | M 16 x 1.5 | 80 | 67 | 12 | 21 |
| Pi 0111 | 110 | 100 | - | 2 | M 22 x 1.5 | 80 | 67 | 13 | 27 |
| Pi 0112 | 110 | 100 | - | 2 | G ½ | 80 | 67 | 13 | 26 |
| Pi 0113 | 100 | 90 | - | 2 | G 3/8 | 80 | 67 | 12 | 22 |
| Pi 0114 | 120 | 110 | - | 2 | G ¾ | 80 | 67 | 15 | 32 |
| Pi 0120 | 1000 | 900 | - | 1 | M 33 x2 | 117.5 | 73 | 20 | - |
| Pi 0121 | 1000 | 900 | - | 1 | G 1 | 117.5 | 73 | 19 | - |
| Pi 0122 | 1000 | 900 | - | 3 | Ø 25 | 117.5 | 73 | 16 | - |
| Pi 0123 | 14500 | 1300 | - | 3 | Ø 40 | 117.5 | 73 | 16 | - |
| Pi 0125 | 750 | 650 | - | 4 | Ø 73 | 117.5 | 81 | - | - |
| Pi 0125 (without enclosure) | 1600 | 1400 | - | 4 | Ø 73 | 117.5 | 81 | - | - |
| Pi 0126 | 1350 | 1150 | - | 5 | Ø 73 | 117.5 | 81 | - | - |
| Pi 0140 | 2000 | 1700 | 130 | 6 | Ø 40 **) | 142 | 95 | 30 | - |
| Pi 0142 | 2400 | 2000 | 140 | 6 | Ø 52 **) | 142 | 95 | 30 | - |
| Pi0152 | 5300 | 4200 | 570 | 6 | Ø 70 **) | 230 | 117 | 30 | - |
| Pi0153 | 6300 | 4600 | 620 | 6 | Ø 76 **) | 230 | 117 | 30 | - |
| Pi0154 | 7700 | 5200 | 640 | 6 | Ø 80 **) | 230 | 117 | 30 | - |
| Pi0182 | 7200 | 5800 | - | 6 | Ø 70 **) | 230 | 320 | 30 | - |
| Pi0183 | 9600 | 7600 | - | 6 | Ø 76 **) | 230 | 320 | 30 | - |
| Pi0184 | 10500 | 8100 | - | 6 | Ø 80 **) | 230 | 320 | 30 | - |
| Pi0185 | 13000 | 9600 | - | 6 | Ø 100 **) | 230 | 320 | 30 | - |

*) when Δp is 0,01 bar/Air flow can be reduced by oil humidifying.

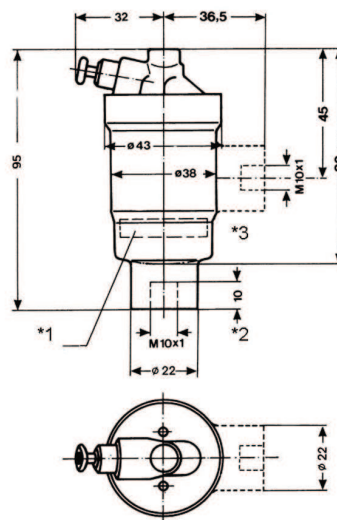
***) connection fits at H11

6. Contamination indicator

The types Pi 0101-Pi 0185 may be equipped with a contamination indicator for optimal filter element exploitation. They indicate when the filter element must be serviced and thus save unnecessary costs.

The contamination indicator responds at 65 mm water column and is available in two variations, i.e. with optical or electrical signal.

| Type | Indicating pressure [mbar] ± 10% | Order number | Type |
|----------|----------------------------------|--------------|------|
| TB 745 | - 50 | 78309056 | 1 |
| TB 745/1 | - 50 | 78309064 | 2 |
| TB 745/1 | - 65 | 78309049 | 2 |



*1 Indication: Position of display at nominal value in mbar

*2 Execution 2

*3 Execution 1

The unit is connected to the filter housing via an M 10x1 external threaded nipple.

For further information also see our leaflet contamination indicators!

| Type | Order number |
|-----------------------|-----------------------------|
| LES 250 IP | 78308918 |
| Contact rating | 24 V/6 W Ohm load |
| Electrical connection | 2 flat-plugs without ground |

