

## XFRP: Pressure-reducing station

### How energy efficiency is improved

Filter elements with special filter materials which cause minimal drops in pressure.

### Areas of application

Supply, reduction and cleaning of compressed air for pneumatic measuring and control equipment.

### Features

- For removing dust, water and oil from compressed air
- Visual display of degree of contamination of sub-micron filter
- Accurate pressure controller for keeping supply pressure constant
- Integrated safety valve protects pneumatic controller from overloading
- Complies with directive 97/23/EC Art. 3.3 on pressure equipment

### Technical description

- Fine filter with 99.999% separation factor of particles as small as 0.01  $\mu\text{m}$
- Residual oil content 1  $\text{mg}/\text{m}^3$



T03431



Y03318

| Type               | Supplied      | Setting range<br>bar | Max. air<br>output       | Air<br>consumption              | Weight<br>kg |
|--------------------|---------------|----------------------|--------------------------|---------------------------------|--------------|
| <b>XFRP 5 F001</b> | assembled     | 0,2...1,7            | 20 $\text{m}^3/\text{h}$ | 75 $\text{l}_\text{n}/\text{h}$ | 2,2          |
| <b>XFRP 5 F002</b> | not assembled | 0,2...1,7            | 20 $\text{m}^3/\text{h}$ | 75 $\text{l}_\text{n}/\text{h}$ | 2.2          |

|                                      |             |                          |                         |
|--------------------------------------|-------------|--------------------------|-------------------------|
| Max. upstream pressure <sup>1)</sup> | 8 bar       | Permissible ambient temp | 0...55 °C               |
| Min. upstream pressure               | 2 bar       | Dimension drawing        | <a href="#">M297646</a> |
| Manometer scale                      | 0...2,5 bar | Fitting instructions     | MV 7337                 |

### Accessories

**0277938 000\*** Stop-cock of brass; fitted as per MV 7337

**0381003 001\*** Fine-filter with clogging indicator and double connector for fitting to submicrofilter; fitted as per MV 7337

**XFRP parts**, to be assembled as per MV 7337

**0297651 000** Positive-pressure valve with flat seal; blows off at 1,7 bar

**0297652 000** Fitting material

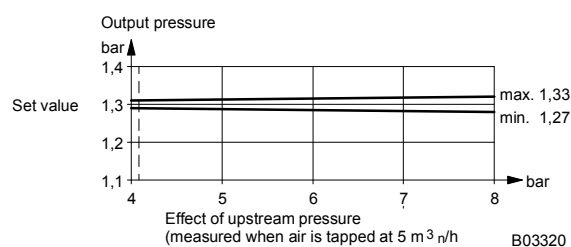
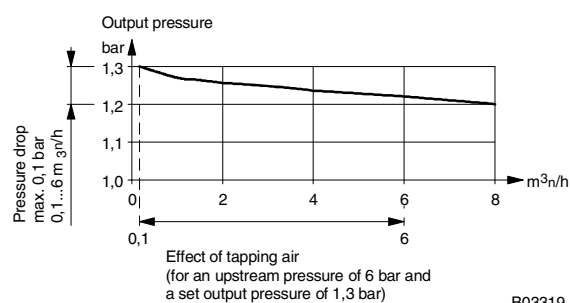
**0381002 001** Submicrofilter with clogging indicator

**0381007 001** Pressure controller with 2 manometer connections

**0381008 001** Manometer 0...2,5 bar; class of accuracy 1,6

\*) Dimension drawing or wiring diagram are available under the same number

1) See Section 60 on regulations concerning the quality of supply air, especially chapter 4: Guidelines for supply-air distributor installations.



### Additional details

The XFRP 5 pressure-reducing station comprises:-

Submicrofilter in aluminium housing with econometer (which indicates how dirty the filter is) and automatic draining of condensate. The residual oil content of the filter amounts to 0,01 mg/m<sup>3</sup>, and the separation factor is 99,99999 % of all foreign particles with molecular sizes down to 0,01 µm. The econometer indicates when the pressure difference is becoming uneconomical, therefore necessitating a change of filter element.

Pressure controller in die-cast aluminium housing with two manometer connections. The controller must be fitted so that the air flows in the direction of the arrow. To adjust the pressure, pull out the knob until the orange mark appears. To set the pressure, push the knob back in again.

Manometer with measuring range 0...2,5 bar; class of accuracy 1,6.

Positive-pressure valve blows off at 1,7 bar (factory setting); protects the pneumatic system.

Connections for input and output; female thread Rp 3/8 as per ISO 7/1.

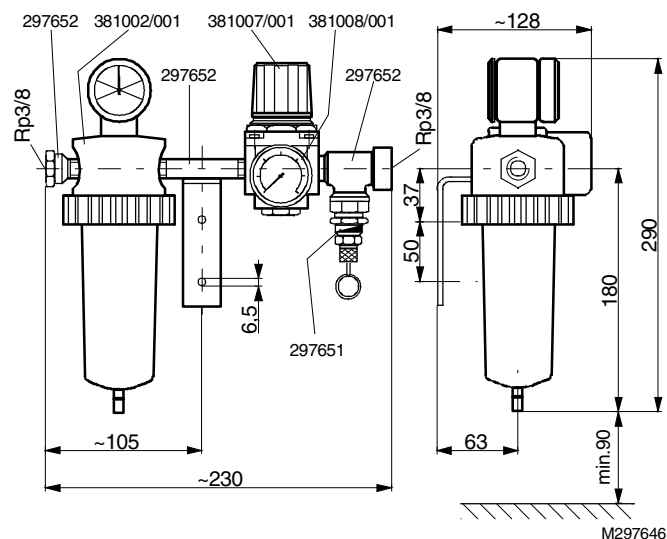
The XFRP 5 F001 pressure-reducing station is designed so that air flows through it from left to right. The direction can be reversed by turning round both the pressure controller (putting the manometer onto the second connection) and the submicrofilter (the display can be turned round, see MV 7337). The XFRP 5 F002 pressure-reducing station is not ready-assembled at the factory. The component parts can be assembled according to the direction of flow required (see MV 7337).

If oil-lubricated compressors are used, an additional fine filter (accessory) should be fitted. The fine filter is in an aluminium housing with econometer (which indicates how dirty the filter is) and automatic draining of condensate. The residual oil content of the filter amounts to 1 mg/m<sup>3</sup>, and the separation factor is 99,999 %. In order to turn off the compressed air when shutting the system down or when exchanging the filter, a spherical stop-cock must be fitted in front of the pressure-reducing station (see *Accessories*). The stop-cock is of brass; its connections have both male and female threads (G 3/8) as per ISO 228/1

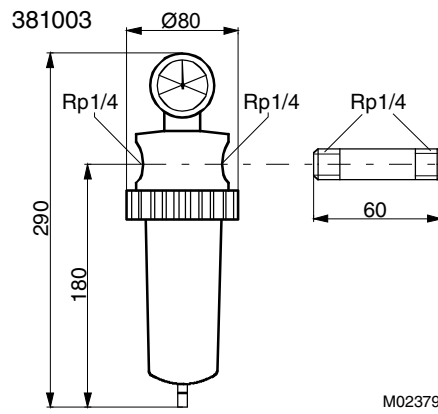
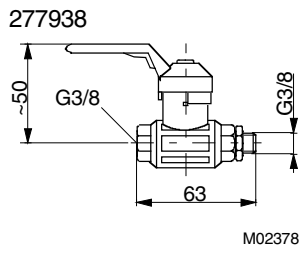
### Additional details on the accessories

- 0297652 000** Fitting material comprising: reduction piece, female thread Rp 3/8 as per ISO 7/1 on male thread R1/4 as per ISO 7/1; fitting bracket for wall mounting and assembly of submicrofilter and pressure controller; branch piece for fitting the safety valve to the output-pressure connector of the pressure controller, female thread Rp 3/8 as per ISO 7/1.
- 0381002 001** Submicrofilter with econometer. The residual oil content of the filter amounts to 0,01 mg/m<sup>3</sup> and the separation factor is 99,99999 % with respect to molecular sizes down to 0,01 µm.
- 0381003 001** Fine filter with econometer. The residual oil content of the filter amounts to 1 mg/m<sup>3</sup>, and the separation factor is 99,999 % with respect to molecular sizes down to 0,01 µm.

### Dimension drawing



**Accessories**



**Fitting note**

If a fine filter is fitted in front of the pressure-reducing station, the reduction piece (0297652) must be screwed off of the submicrofilter (0381002 001) and screwed into the inlet of the fine filter (0381003 001).

