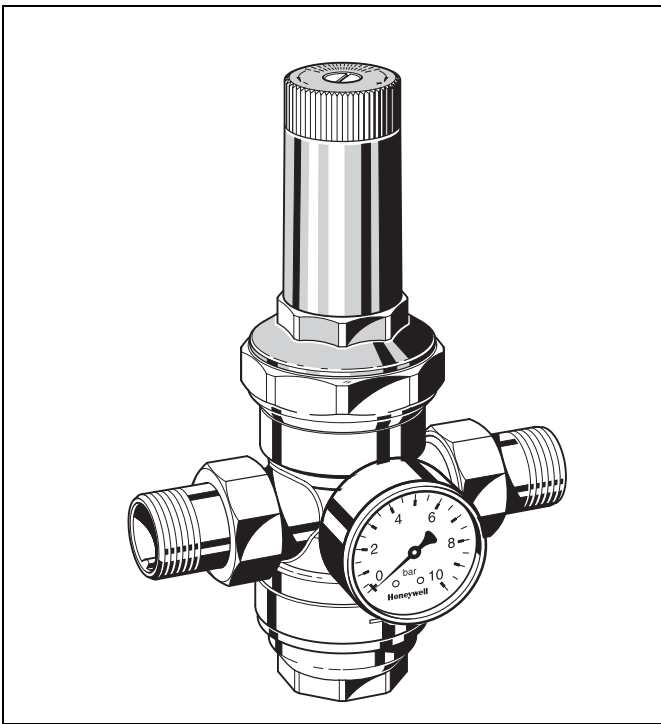


## D06FN

### Pressure reducing valve with balanced seat Low pressure pattern

#### Product specification sheet



#### Construction

The pressure reducing valve comprises:

- Housing with G<sup>1</sup>/<sub>4</sub>" pressure gauge connections on both sides
- Threaded male connections (option B)
- Valve insert complete with diaphragm and valve seat
- Fine filter with 0.16 mm mesh
- Spring bonnet with adjustment knob
- Filter bowl
- Adjustment spring
- Pressure gauge not included (see accessories)

#### Materials

- Dezincification resistant brass housing
- Brass intermediate ring
- Brass threaded connections
- High-quality synthetic material valve insert
- Stainless steel fine filter mesh
- High quality synthetic material spring bonnet
- Brass filter bowl
- Spring steel adjustment spring
- Fibre-reinforced NBR diaphragm
- NBR seals

#### Application

Pressure reducing valves of this type protect installations against excessive pressure from the supply. They can be used for household, industrial or commercial applications within the range of their specification.

By installing a pressure reducing valve, pressurisation damage is avoided and water consumption is reduced.

The set pressure is also maintained constant, even when there is wide inlet pressure fluctuation.

Reduction of the operating pressure and maintaining it at a constant level minimizes flow noise in the installation.

#### Special Features

- The outlet pressure is set by turning the adjustment knob
- The adjustment spring is not in contact with the potable water
- The valve insert is of high quality synthetic material and can be fully exchanged
- Integral fine filter
- Also available without fittings
- Easily retrofittable to convert valve to a reverse-rinsing filter combination
- Can be retrofitted with an inlet non-return valve
- Inlet pressure balancing - fluctuating inlet pressure does not influence outlet pressure
- Light weight

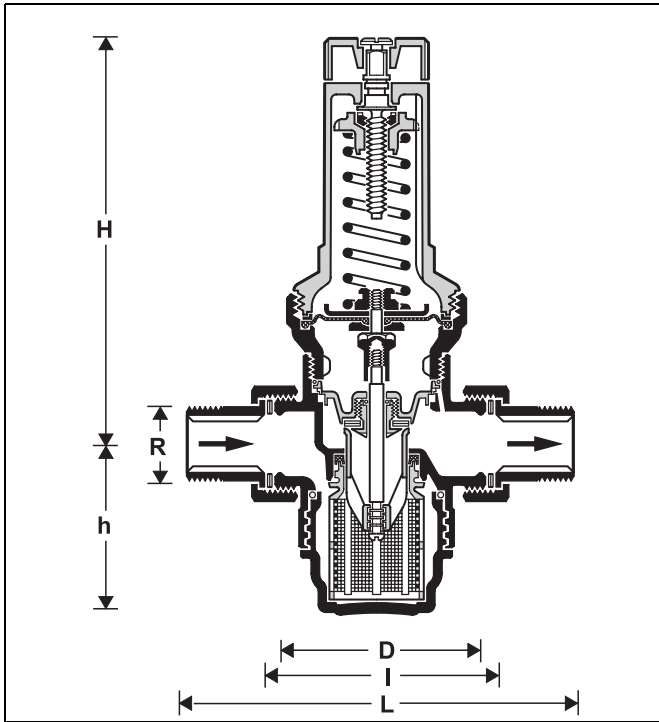
#### Range of Application

|                 |  |
|-----------------|--|
| Medium          | Water, compressed air* and nitrogen* in consideration of valid standards (e.g. DIN EN 12502) |
| Inlet pressure  | max. 25 bar  |
| Outlet pressure | 0.5-2 bar  |

#### Technical Data

|                       |             |
|-----------------------|-------------|
| Operating temperature | max. 70°C   |
| Minimum pressure drop | 0.5 bar     |
| Connection size       | 1/2" bis 2" |

\* As part of an installation being approved according to PED requirements, this product must also be certified.



**Method of Operation**

Spring loaded pressure reducing valves operate by means of a force equalising system. The force of a diaphragm operates against the force of an adjustment spring. If the outlet pressure and therefore diaphragm force fall because water is drawn, the then greater force of the spring causes the valve to open. The outlet pressure then increases until the forces between the diaphragm and the spring are equal again.

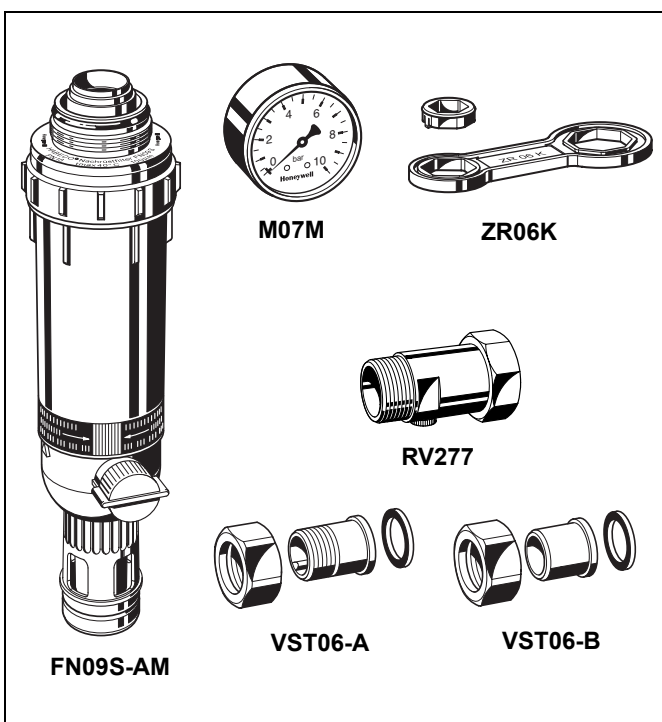
The inlet pressure has no influence in either opening or closing of the valve. Because of this, inlet pressure fluctuation does not influence the outlet pressure, thus providing inlet pressure balancing.

**Options**

D06FN-... B = With threaded male connections, brass filter bowl - up to 70 °C

Special Versions available on request  
 Connection size

|                       |                   |      |      |     |        |        |      |
|-----------------------|-------------------|------|------|-----|--------|--------|------|
| Connection size       | R                 | 1/2" | 3/4" | 1"  | 1 1/4" | 1 1/2" | 2"   |
| Nominal size diameter | DN                | 15   | 20   | 25  | 32     | 40     | 50   |
| Weight                | kg                | 1.4  | 1.6  | 2.4 | 2.8    | 4.4    | 5.6  |
| Dimensions            | mm                |      |      |     |        |        |      |
|                       | L                 | 140  | 160  | 180 | 200    | 225    | 255  |
|                       | I                 | 80   | 90   | 100 | 105    | 130    | 140  |
|                       | H                 | 148  | 148  | 185 | 185    | 210    | 210  |
|                       | h                 | 56   | 56   | 77  | 77     | 113    | 113  |
|                       | D                 | 73   | 73   | 83  | 83     | 102    | 102  |
| Kvs-value             | m <sup>3</sup> /h | 2.4  | 3.1  | 7.6 | 9.1    | 12.6   | 12.0 |



**Accessories**

**FN09S-AM HABEDO ® Retrofit filter**

Reverse-rinsing filter with red bronze filter cup for retro-conversion of a pressure reducing valves to a filter combination unit

**M07M Pressure gauge**

Housing diameter 63 mm, rear connection thread G<sup>1</sup>/<sub>4</sub>". Ranges: 0 - 4, 0 - 10, 0 - 16 or 0 - 25 bar. Please indicate upper value of pressure range when ordering

**ZR06K Double ring wrench**

For removal of spring bonnet and filter bowl

**RV277 Inlet check valve**

Available in sizes R<sup>1</sup>/<sub>2</sub>" - 2"

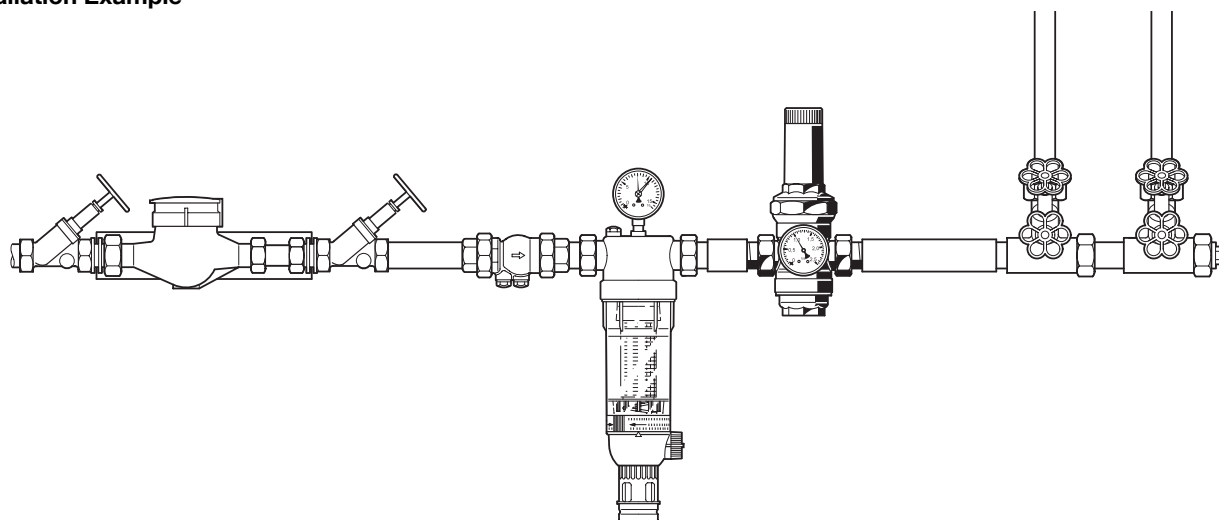
**VST06-A Connection set**

Threaded connections

**VST06-B Connection set**

Solder connections

**Installation Example**



|                 |    |      |      |    |        |        |    |
|-----------------|----|------|------|----|--------|--------|----|
| Connection size | R  | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
|                 | DN | 15   | 20   | 25 | 32     | 40     | 50 |
| W*              | mm | 55   | 55   | 60 | 60     | 70     | 70 |

\* Minimum distance from wall to centre line of pipework

**Installation Guidelines**

- Install in horizontal pipework with filter bowl downwards
- Install shutoff valves
- The installation location should be protected against frost and be easily accessible
  - o Pressure gauge can be read off easily
  - o Simplified maintenance and cleaning
- Install downstream of the filter or strainer
  - o This position ensures optimum protection for the pressure reducing valve against dirt
- Provide a straight section of pipework of at least five times the nominal valve size after the pressure reducing valve (in accordance with DIN 1988, Part 5)

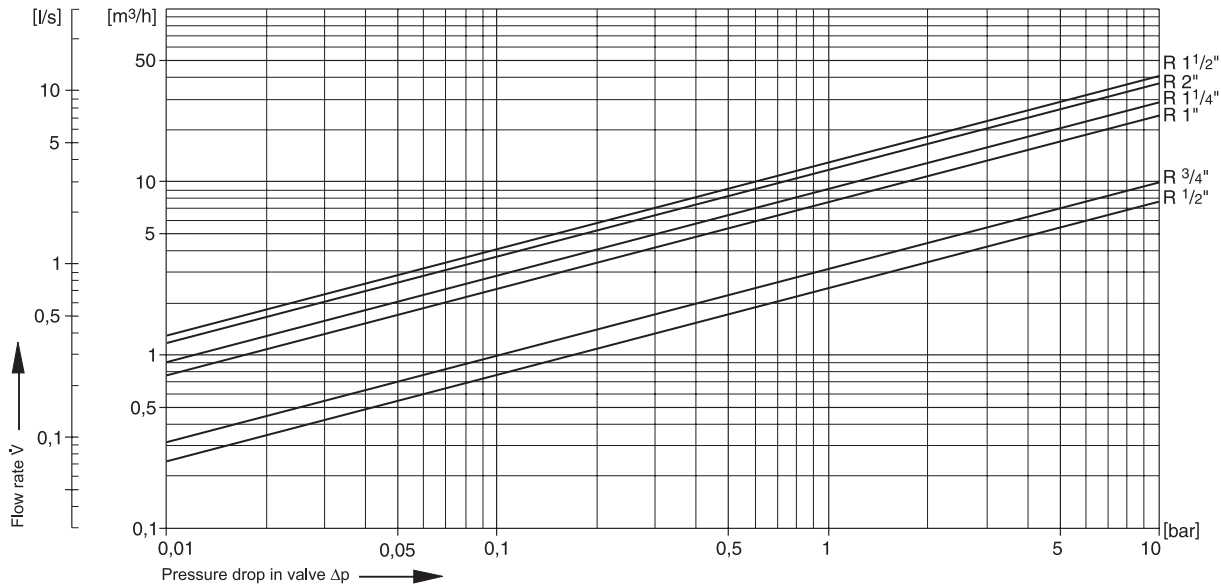
**Typical Applications**

Pressure reducing valves of this type are suitable for household, industrial and commercial applications within the range of their specifications.

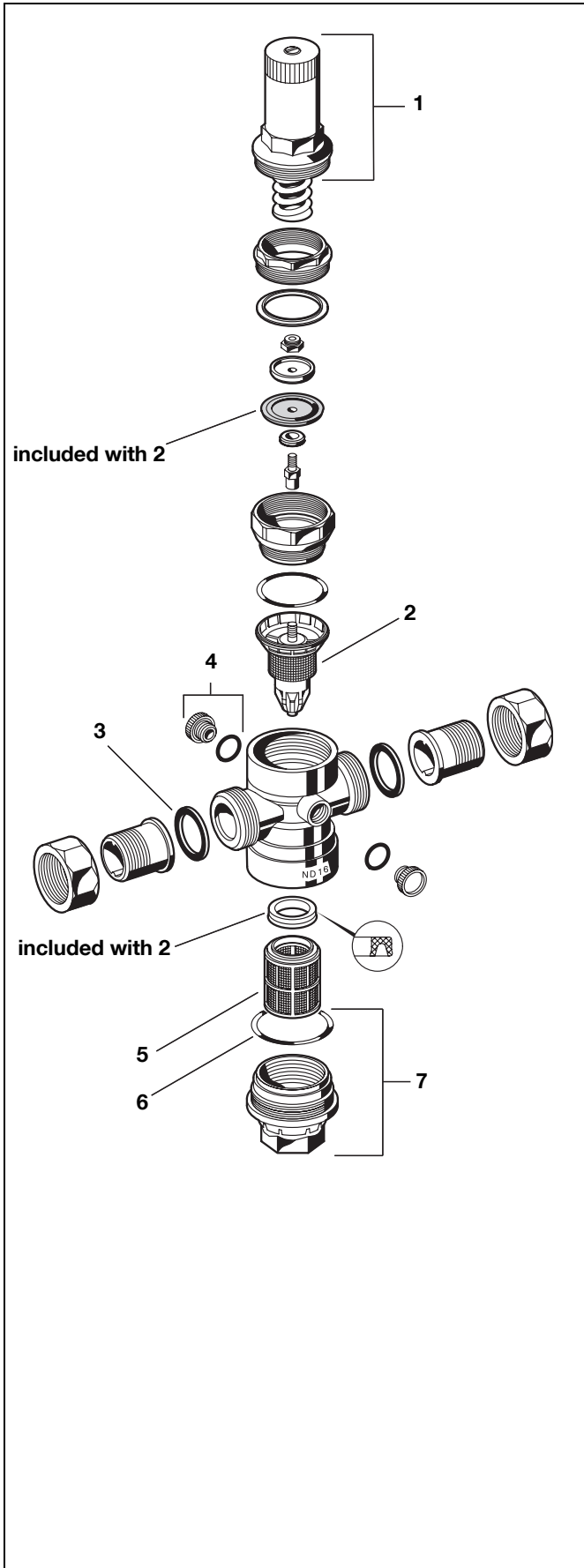
Pressure reducing valves should be installed:

- If the static pressure exceeds the maximum permissible value for the system
- If several pressure zones are required when a pressurisation system is used (pressure reducers on each storey of a building)
- If pressure fluctuations in the downstream system must be avoided
- To achieve constant inlet and outlet pressures on pumped pressure boosting systems

**Flow Diagram**



EN0H-1004GE23 R0307 • Subject to change without notice



**Spare Parts**

**Pressure Reducing Valve D06FN, from 1997 onwards**

| No. | Description  | Dimension   | Part No.    |
|-----|--|-------------|-------------|
| 1   | Spring bonnet<br>for D06FN                             | 1/2" + 3/4" | 0900153     |
|     |  | 1" + 1 1/4" | 0900154     |
|     |  | 1 1/2" + 2" | 0900229     |
| 2   | Valve insert complete<br>for D06FN (without<br>filter) | 1/2" + 3/4" | D06FNA-1/2  |
|     |  | 1" + 1 1/4" | D06FNA-1A   |
|     |  | 1 1/2" + 2" | D06FNA-11/2 |
|     |  |             |             |
| 3   | Union seal washer<br>(10 pcs.)                         | 1/2"        | 0901443     |
|     |  | 3/4"        | 0901444     |
|     |  | 1"          | 0901445     |
|     |  | 1 1/4"      | 0901446     |
|     |  | 1 1/2"      | 0901447     |
|     |  | 2"          | 0901448     |
|     |  |             |             |
| 4   | Blanking plug<br>with O-ring R1/4"<br>(5 pcs.)         | all         | S06K-1/4    |
|     |  |             |             |
|     |  |             |             |
|     |  |             |             |
|     |  |             |             |
| 5   | Replacement filter<br>insert                           | 1/2" + 3/4" | ES06F-1/2A  |
|     |  | 1" + 1 1/4" | ES06F-1A    |
|     |  | 1 1/2" + 2" | ES06F-11/2A |
| 6   | O-ring<br>(10 pcs.)                                    | 1/2" + 3/4" | 0901246     |
|     |  | 1" + 1 1/4" | 0901247     |
|     |  | 1 1/2" + 2" | 0901248     |
|     |  |             |             |
| 7   | Brass filter bowl with<br>O-ring                       | 1/2" + 3/4" | SM06T-1/2   |
|     |  | 1" + 1 1/4" | SM06T-1A    |
|     |  | 1 1/2" + 2" | SM06T-11/2  |

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