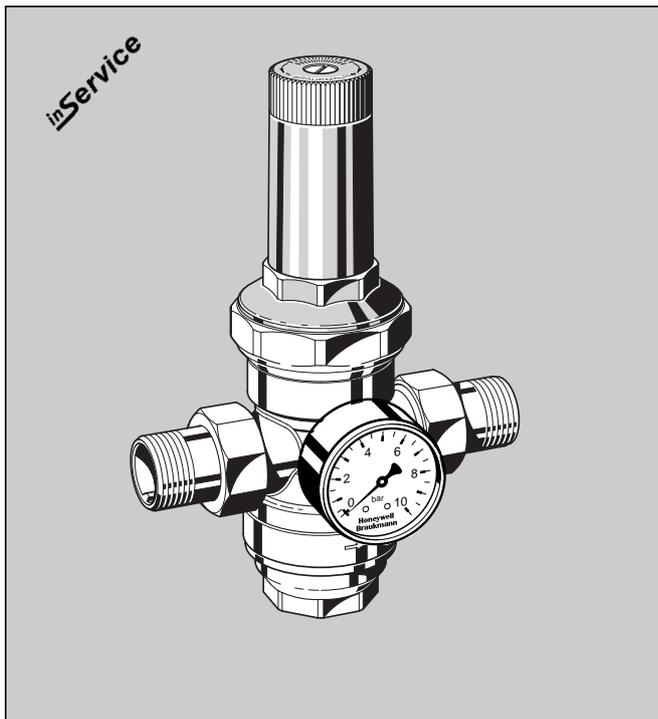


## D 06 FN

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

#### Product specification sheet



#### Construction

The pressure reducing valve comprises:

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

#### Materials

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

#### Application

D 06 FN pressure reducing valves 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 minimises flow noise in the installation.

#### Special Features

- Adjustment knob for setting of the outlet pressure
- The adjustment spring is not in contact with the potable water
- The valve insert is of high quality synthetic material and can be fully interchanged
- Integral 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
- **inService** – Servicing and maintenance without removal from pipework
- Light weight
- Reliable and proven

#### Range of Application

Medium: Water and other non-aggressive liquids, compressed air and nitrogen

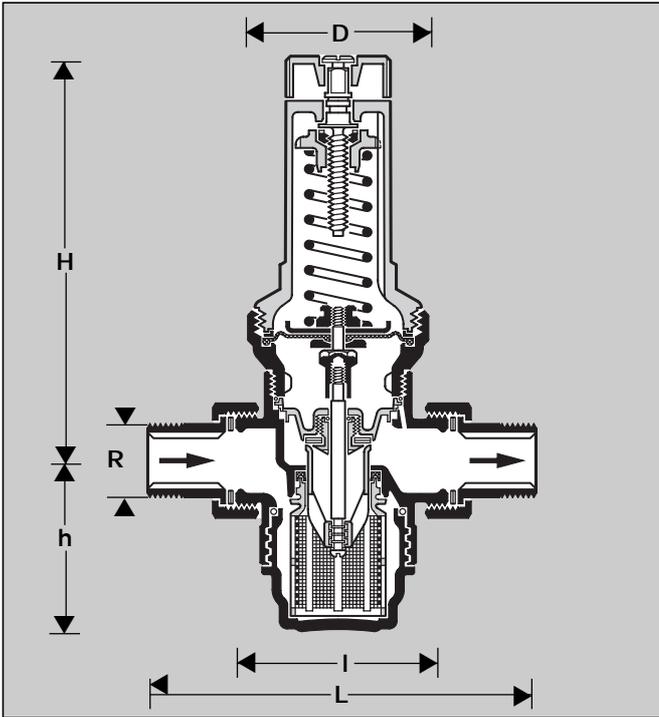
Inlet pressure: Maximum 25.0 bar

Outlet pressure: 0.5 – 2.0 bar

#### Technical Data

Operating temperature: Maximum 70 °C

Connection sizes: 1/2" bis 2"



### 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

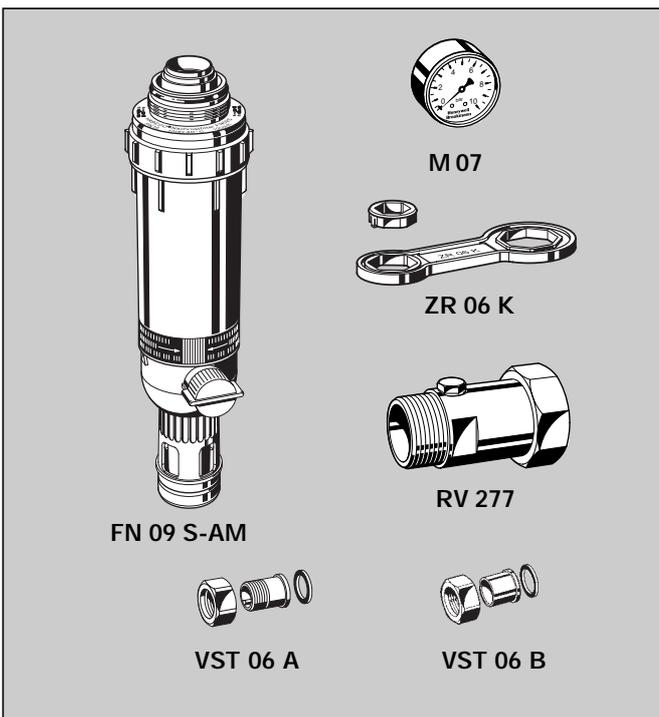
D 06 FN - . . . B = With threaded mail connections, brass filter bowl – up to 70 °C

D 06 FN - . . . F = Without fittings, with brass filter bowl - up to 70°C

└ Connection size

Special versions available on request

Connection size	R	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Nominal size	DN	15	20	25	32	40	50
Weight app.	(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
k <sub>vs</sub> -value		2.4	3.1	7.6	9.1	12.6	12.0
Peak flow rate (m <sup>3</sup> /h) according to DIN 1988. Pt 5:	Household installations	1.8	2.9	4.7	7.2	8.3	13.0
	Commercial installations	1.8	3.3	5.4	8.6	13.7	21.2



### Accessories

#### FN 09 S-AM HABEDO® retrofit filter

Reverse-rinsing filter with red bronze filter cup (up to 70 °C) for retro-conversion to a filter combination unit of D 06 FN pressure reducing valves made after 1977

#### M 07 Pressure gauge

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

#### ZR 06 K Double ring wrench

For removal of spring bonnet and filter bowl of D 06 FN valves with connection sizes R 1/2" - 2"

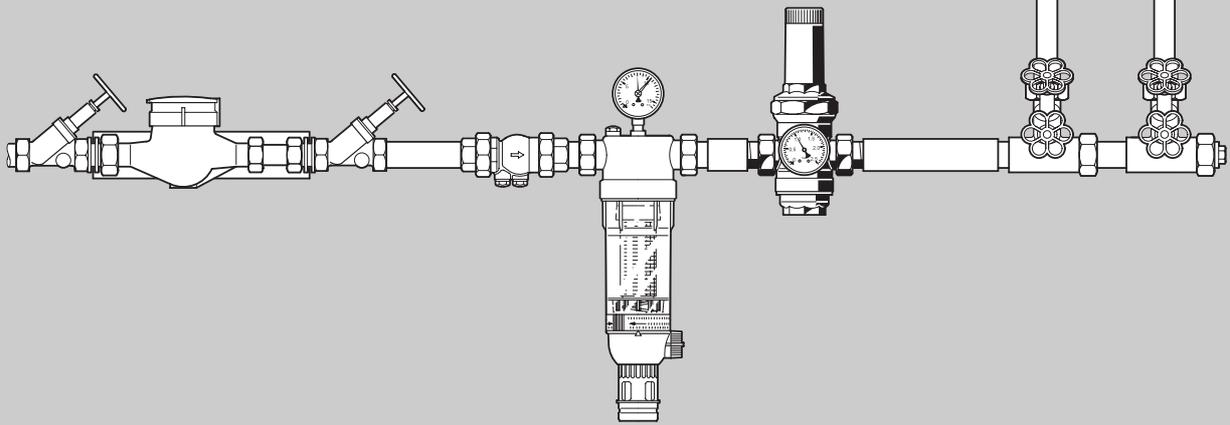
#### RV 277 Inlet non-return valve

For D 06 FN with connection sizes R 3/4" - 2"

#### VST 06 Connection set

Two threaded or solder connections  
A = Threaded connections  
B = Solder connections

## Installation Example



Connection size	R	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
W*	(mm)	55	55	60	60	70	70

\* Minimum distance from wall to centre line of pipework

### Installation Guidelines

- If possible install in horizontal pipework with the filter bowl downwards
  - This is the most effective position for cleaning
- Fit shut off valves
  - This permits **inService** – servicing and maintenance without removal from pipework
- Ensure good accessibility
  - So that the pressure gauge can be easily seen
  - Simplifies maintenance and inspection
- Install a fine filter upstream of the pressure reducing valve
  - This gives maximum protection against dirt
- If sufficient space is available, it is recommended that a straight section of pipework of at least five times the nominal valve size is provided after the pressure reducing valve

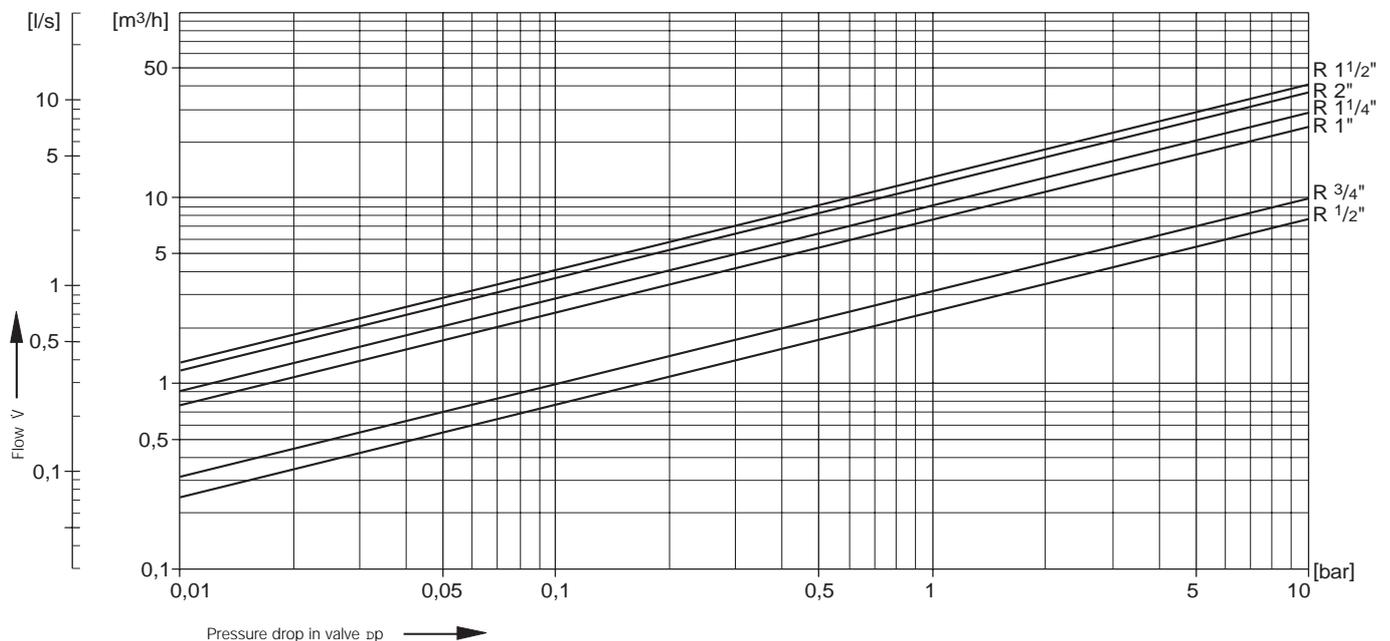
### Typical Applications

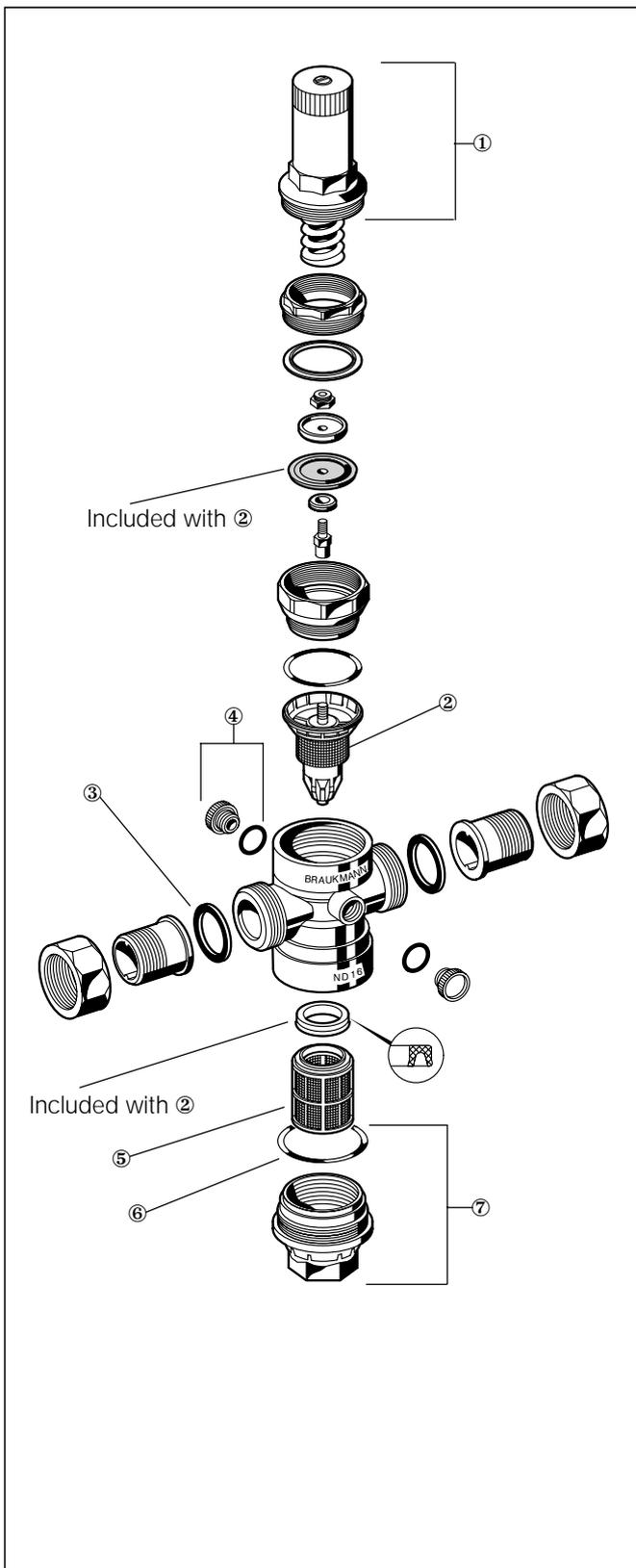
D 06 FN pressure reducing valves are suitable for all types of household, commercial and industrial water installations within the limits of their specifications.

Pressure reducing valves should be installed:

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

### K<sub>vs</sub>-value Diagram





**Spare parts for D06FN Pressure Reducing Valves  
(From 1977 onwards)**

**Description Nominal size Part number**

① Spring bonnet complete	1/2" + 3/4"	0900153
	1" + 1 1/4"	0900154
	1 1/2" + 2"	0900229
② Valve insert complete (without filter)	1/2" + 3/4"	D 06 FNA - 1/2
	1" + 1 1/4"	D 06 FNA - 1
	1 1/2" + 2"	D 06 FNA - 1 1/2
③ Gasket ring (10 No.)	1/2"	0901443
	3/4"	0901444
	1"	0901445
	1 1/4"	0901446
	1 1/2"	0901447
	2"	0901448
④ Blanking plug with O-ring R 1/4" (5 No.)	1/2" - 2"	S 06 K - 1/4
⑤ Replacement filter insert	1/2" + 3/4"	ES 06 F - 1/2 A
	1" + 1 1/4"	ES 06 F - 1A
	1 1/2" + 2"	ES 06 F - 1 1/2 A
⑥ O-ring (10 No.)	1/2" + 3/4"	0901246
	1" + 1 1/4"	0901247
	1 1/2" + 2"	0901248
⑦ Brass filter bowl with O-ring	1/2" + 3/4"	SM 06 T - 1/2
	1" + 1 1/4"	SM 06 T - 1A
	1 1/2" + 2"	SM 06 T - 1 1/2

Subject to change 08/98

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