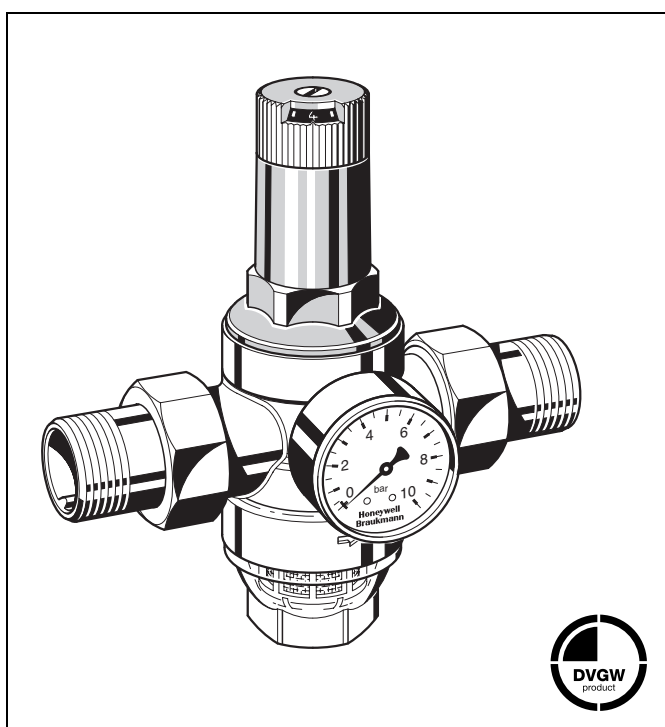


## D06F

### Pressure reducing valve with balanced seat Standard pattern with set point scale

#### 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 (options A & B)
- Valve insert complete with diaphragm and valve seat
- Fine filter with 0.16 mm mesh
- Spring bonnet with adjustment knob and setting scale
- Filter bowl
- Adjustment spring
- Pressure gauge not included (see accessories)

#### Materials

- Dezincification resistant brass housing
- Brass threaded connections
- High-quality synthetic material valve insert
- Stainless steel fine filter mesh
- High-quality synthetic material spring bonnet with adjustment knob and setting scale
- Clear synthetic or brass filter bowl
- Spring steel adjustment spring
- Fibre-reinforced NBR diaphragm
- NBR seals

#### Application

Pressure reducing valves of this type protect household water installations against excessive pressure from the supply. They can also be used for 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

- DVGW approved
- Up to size 1<sup>1</sup>/<sub>4</sub>" approved for low noise, Group 1 without limitations
- The outlet pressure is set by turning the adjustment knob
- The set pressure is directly indicated on the set point scale
- 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

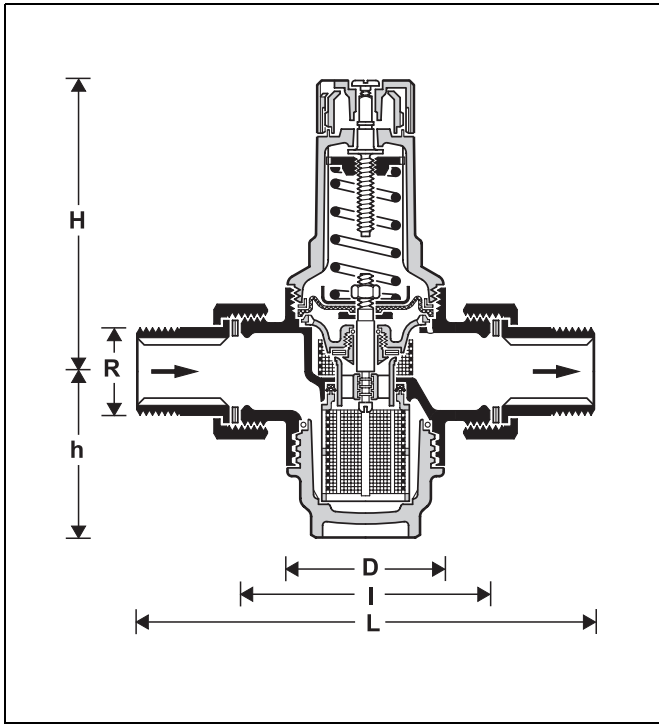
#### Range of Application

Medium	Water, compressed air* and nitrogen* in consideration of valid standards (e.g. DIN EN 12502)
Inlet pressure	max. 16 bar with clear filter bowl max. 25 bar with brass filter bowl
Outlet pressure	1.5-6.0 bar

#### Technical Data

Operating temperature	Maximum 40 °C with clear filter bowl Maximum 70 °C with brass filter bowl
Minimum pressure drop	1.0 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.

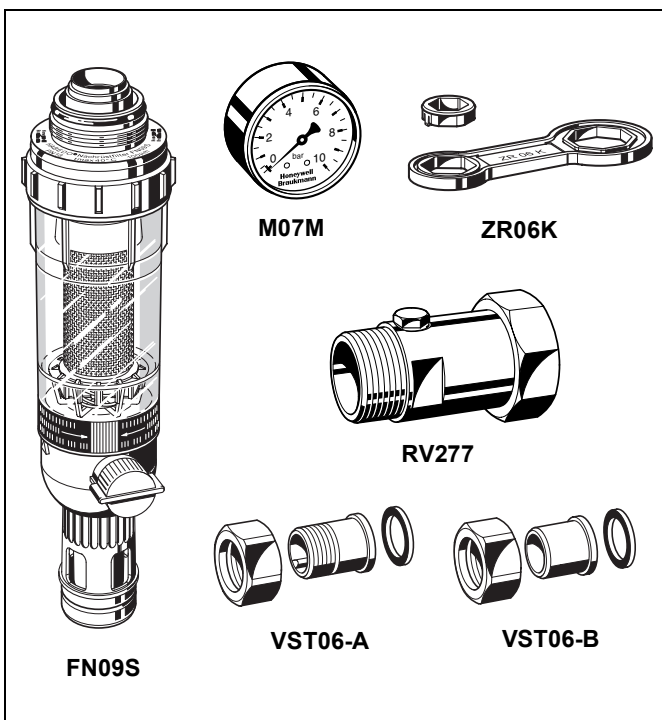
The inlet pressure has no influence in either opening or closing of the valve. Because of this, inlet pressure fluctuation does not influence the outlet pressure, thus providing inlet pressure balancing.

**Options**

- D06F-... A = With threaded male connections, clear filter bowl - up to 40 °C
  - D06F-... B = With threaded male connections, brass filter bowl - up to 70 °C
  - D06F-... E = Without fittings, with clear filter bowl - up to 40 °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	0.8	1.0	1.4	2.0	3.3	4.5
Dimensions	mm						
	L	140	160	180	200	225	255
	I	80	90	100	105	130	140
	H	89	89	111	111	173	173
	h	58	58	64	64	126	126
	D	54	54	61	61	82	82
k <sub>vs</sub> -value	m <sup>3</sup> /h	2.4	3.1	5.8	5.9	12.6	12.0
DVGW-Register No.		DW-6330AT2314					

\* Compulsory testing in sizes R 1/2" to R 1 1/4"



**Accessories**

**FN09S HABEDO ® Retrofit filter**

Reverse-rinsing filter for retro-conversion to a filter combination unit of pressure reducing valves

**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**

For connection sizes R<sup>3</sup>/<sub>4</sub>" - 2"

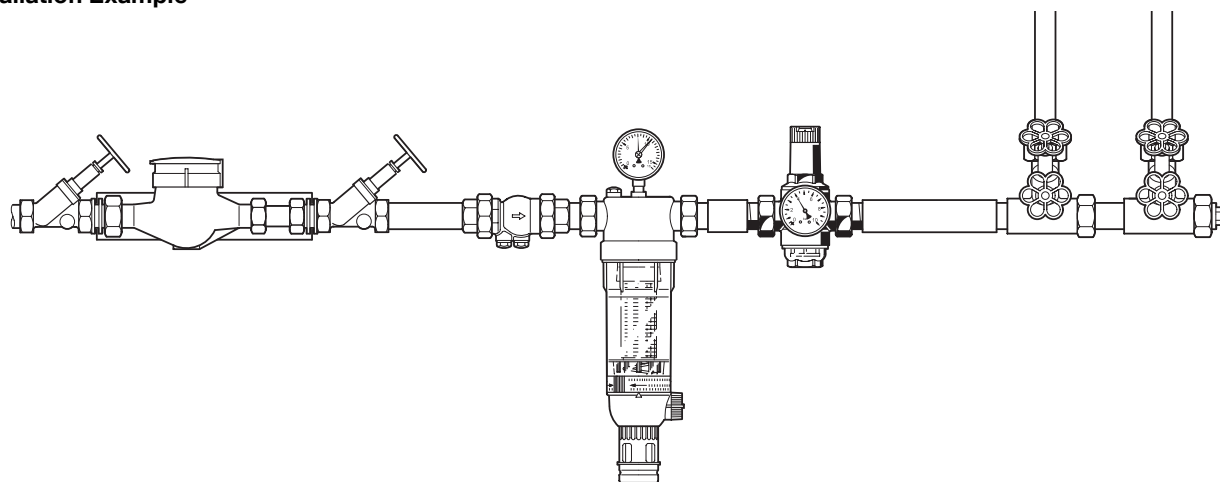
**VST06-A Connection set**

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

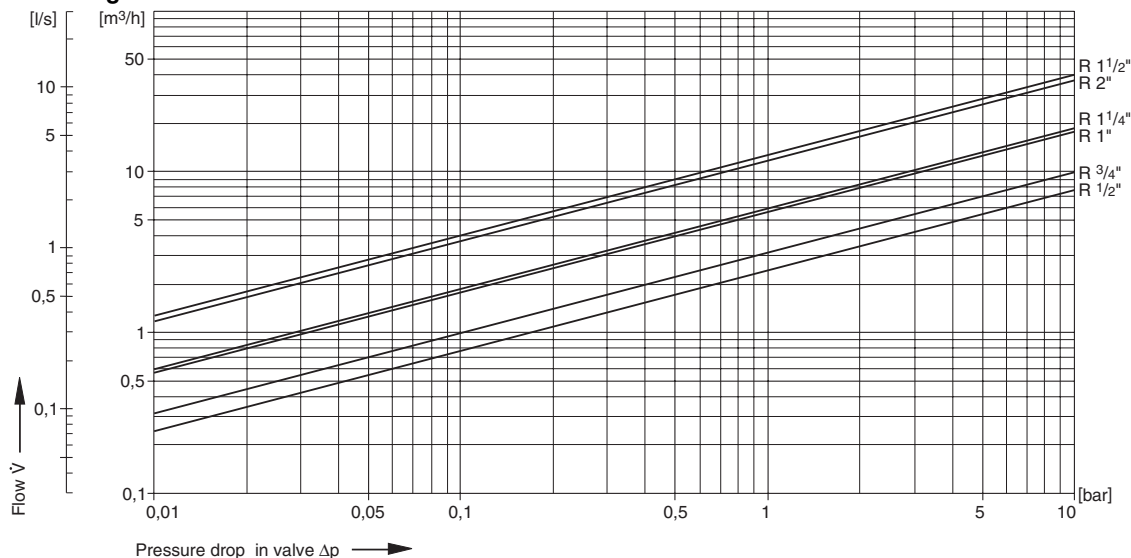
**Installation Guidelines**

- Install in horizontal pipework with filter bowl downwards.
- Install shutoff valves
- The device downstream should be protected by means of a safety valve (installed downstream of the pressure reducing valve).
- The installation location should be protected against frost and be easily accessible
  - o Pressure gauge can be read off easily
  - o With clear filter bowl, degree of contamination can be easily seen
  - o Simplified maintenance and cleaning
- For residential applications where maximum protection against dirt is required, install a fine filter upstream of the pressure reducing valve
- 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)

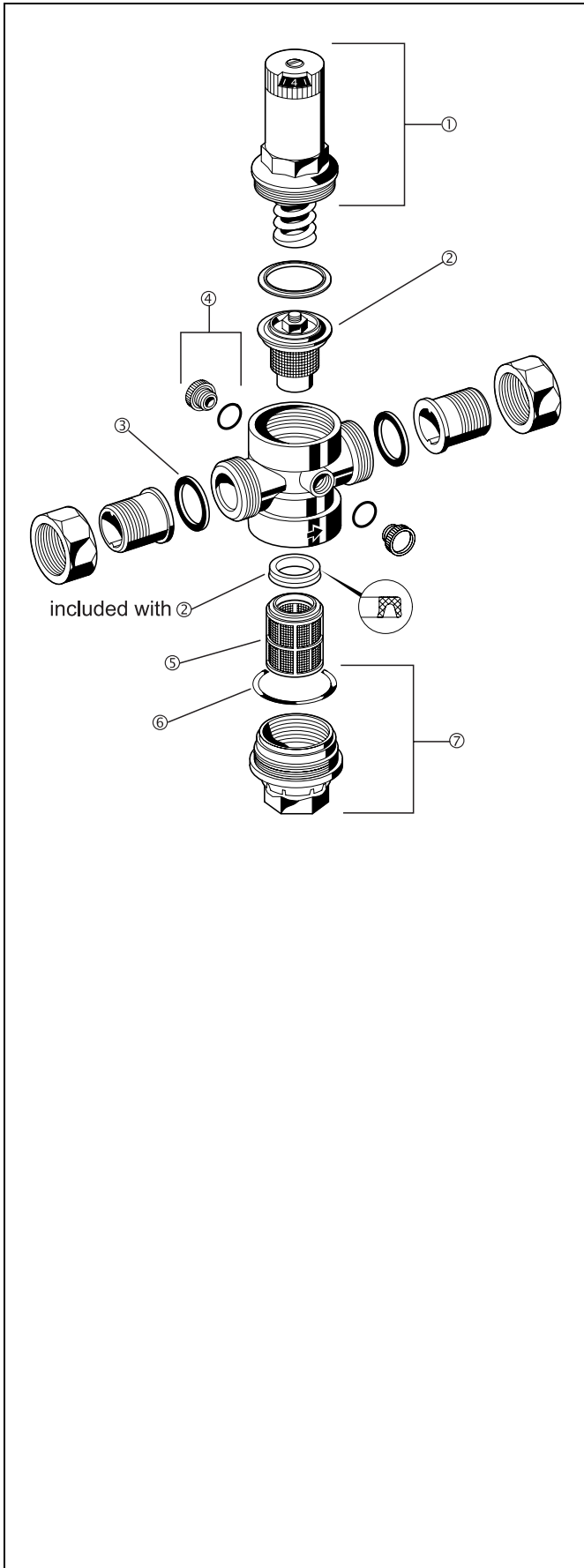
**Typical Applications**

- Pressure reducing valves of this type are suitable for all types of household water installations.
- Pressure reducing valves can also be used for 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
  - As protection against noise if the static pressure at take off points exceeds 5.0 bar (DIN 4109: Noise protection in high buildings)
  - 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-1002GE23 RO106 • Subject to change without notice



**Spare Parts**

**Pressure Reducing Valve D06F, from 1997 onwards**

No.	Description	Dimension	Part No.
①	Spring bonnet complete	1/2" + 3/4"	0901515
		1" + 1 1/4"	0901517
		1 1/2" + 2"	0901518
②	Valve insert complete for D06F (without filter)	1/2" + 3/4"	D06FA-1/2
		1" + 1 1/4"	D06FA-1B
		1 1/2" + 2"	D06FA-11/2
③	Union seal washer (10 pcs.)	1/2"	0901443
		3/4"	0901444
		1"	0901445
		1 1/4"	0901446
		1 1/2"	0901447
		2"	0901448
④	Blanking plug with O-ring R1/4" (5 pcs.)	all	S06K-1/4
⑤	Replacement filter insert for D06F	1/2" + 3/4"	ES06F-1/2A
		1" + 1 1/4"	ES06F-1B
		1 1/2" + 2"	ES06F-11/2A
⑥	O-ring set for D06F (10 pcs.)	1/2" + 3/4"	0901246
		1" + 1 1/4"	0901499
		1 1/2" + 2"	0901248
⑦	Clear filter bowl with O-ring for D06F	1/2" + 3/4"	SK06T-1/2
		1" + 1 1/4"	SK06T-1B
		1 1/2" + 2"	SK06T-11/2
⑧	Brass filter bowl with O-ring for D06F	1/2" + 3/4"	SM06T-1/2
		1" + 1 1/4"	SM06T-1B
		1 1/2" + 2"	SM06T-11/2

**Automation and Control Solutions**

Honeywell GmbH  
 Hardhofweg  
 D-74821 Mosbach  
 Phone: (49) 6261 810  
 Fax: (49) 6261 81309  
<http://europe.hbc.honeywell.com>  
[www.honeywell.com](http://www.honeywell.com)

Manufactured for and on behalf of the  
 Environment and Combustion Controls Division of  
 Honeywell Technologies Sàrl, Ecublens, Route du  
 Bois 37, Switzerland by its Authorised  
 Representative Honeywell GmbH  
 EN0H-1002GE23 R0106  
 Subject to change  
 © 2005 Honeywell GmbH

