

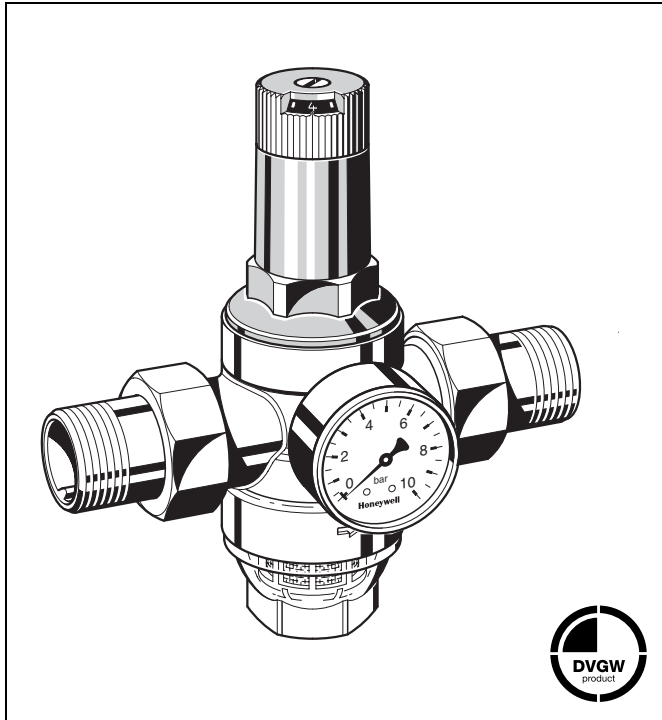
TYPE 16D06FI

Pressure reducing valve

WITH BALANCED SEAT

STAINLESS STEEL PATTERN

Product specification sheet



Construction

The pressure reducing valve comprises:

- Housing with G¹/₄" 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
- Venturi-nozzle
- Pressure gauge not included (see accessories)

Materials

- Stainless steel housing
- Stainless steel 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 stainless steel 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 1¹/₄" 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
- Inlet pressure balancing - fluctuating inlet pressure does not influence outlet pressure
- Light weight
- Meets KTW recommendations for potable water

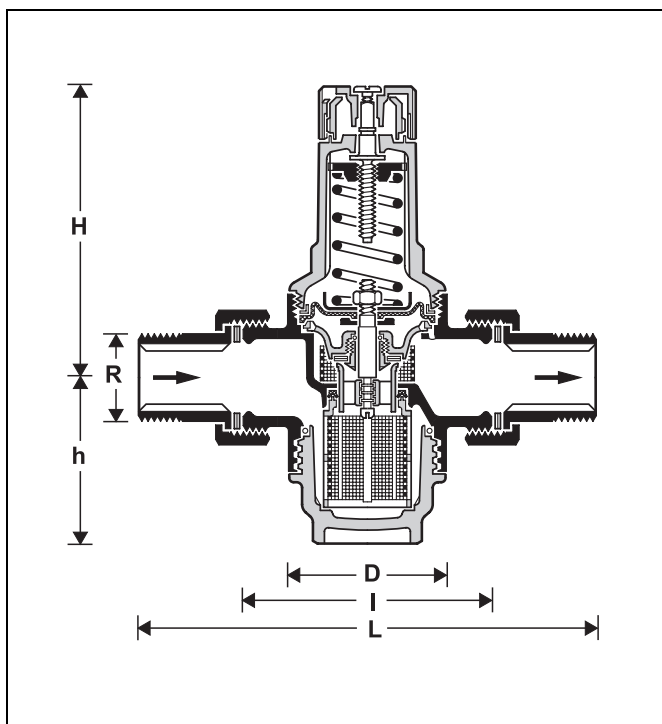
Range of Application

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 stainless steel filter bowl
Outlet pressure	1.5-6.0 bar

Technical Data

Operating temperature	Maximum 40 °C with clear filter bowl Maximum 70 °C with stainless steel 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.

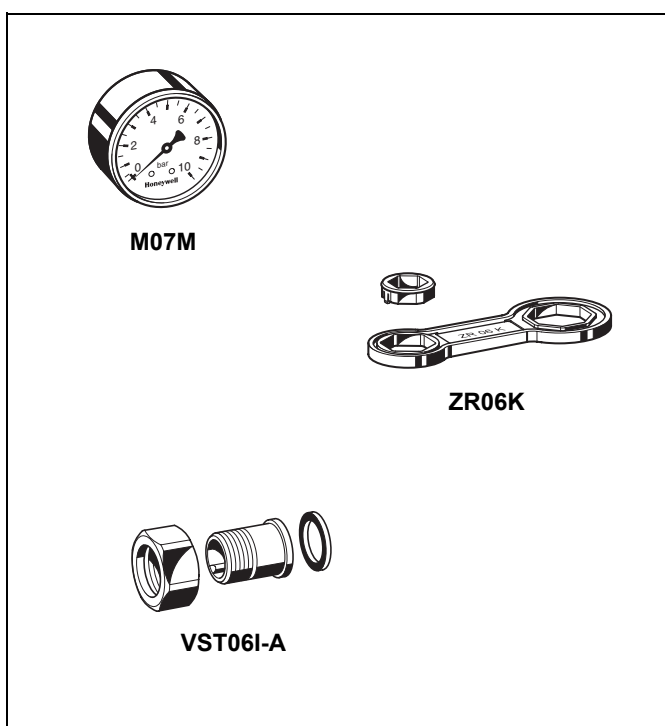
Options

- D06FI... A = With threaded male connections, clear filter bowl - up to 40 °C
- D06FI... B = With threaded male connections, stainless steel filter bowl - up to 70 °C
- D06FI... E = Without fittings, with clear filter bowl - up to 40 °C



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 (A-Version)	kg	0.7	0.8	1.2	1.6	2.9	3.6
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 _{VS} -value	m ³ /h	2.4	3.1	5.8	5.9	12.6	12.0
DVGW-Approval No.	DW-6330AT2314						

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



Accessories

M07M Pressure gauge

Housing diameter 63 mm, rear connection thread G¹/₄". Ranges: 0 - 4, 0 - 10, 0 - 16 or 0 - 25 bar. Please indicate upper value of pressure range when ordering

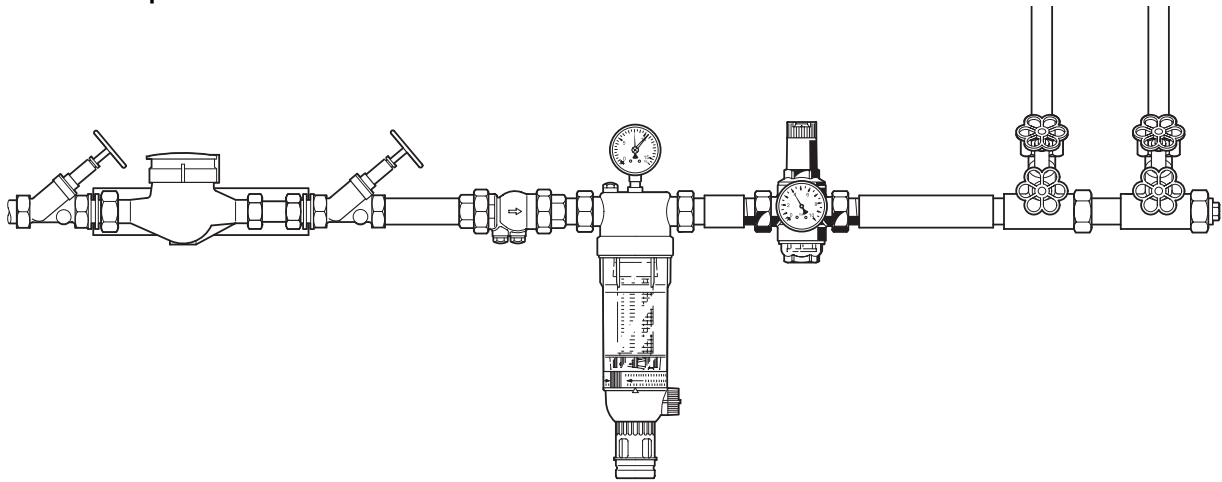
ZR06K Double ring wrench

For removal of spring bonnet and filter bowl

VST06I-A Connection set

Stainless steel threaded 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)

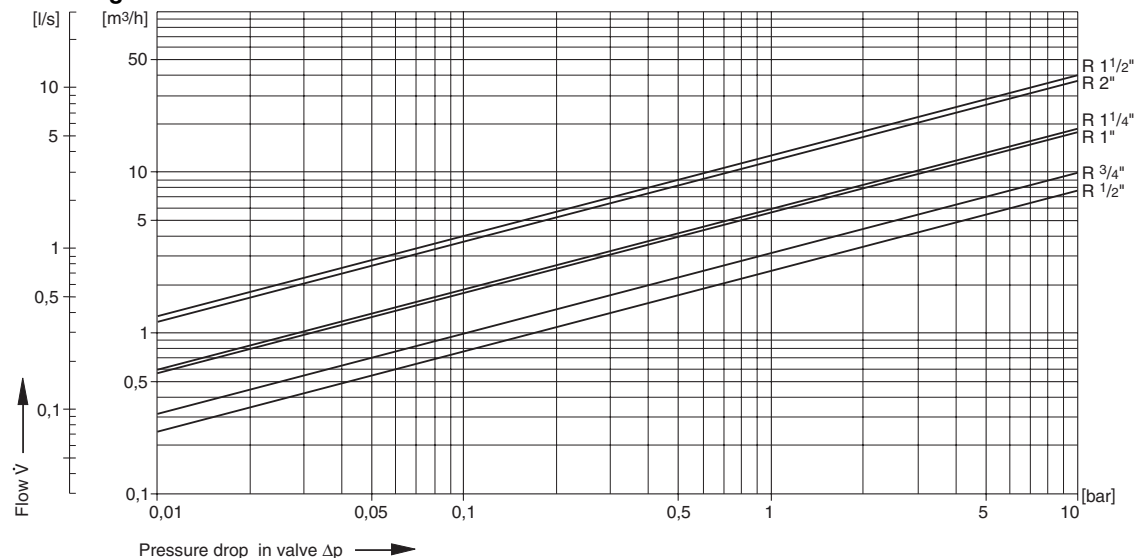
Typical Applications

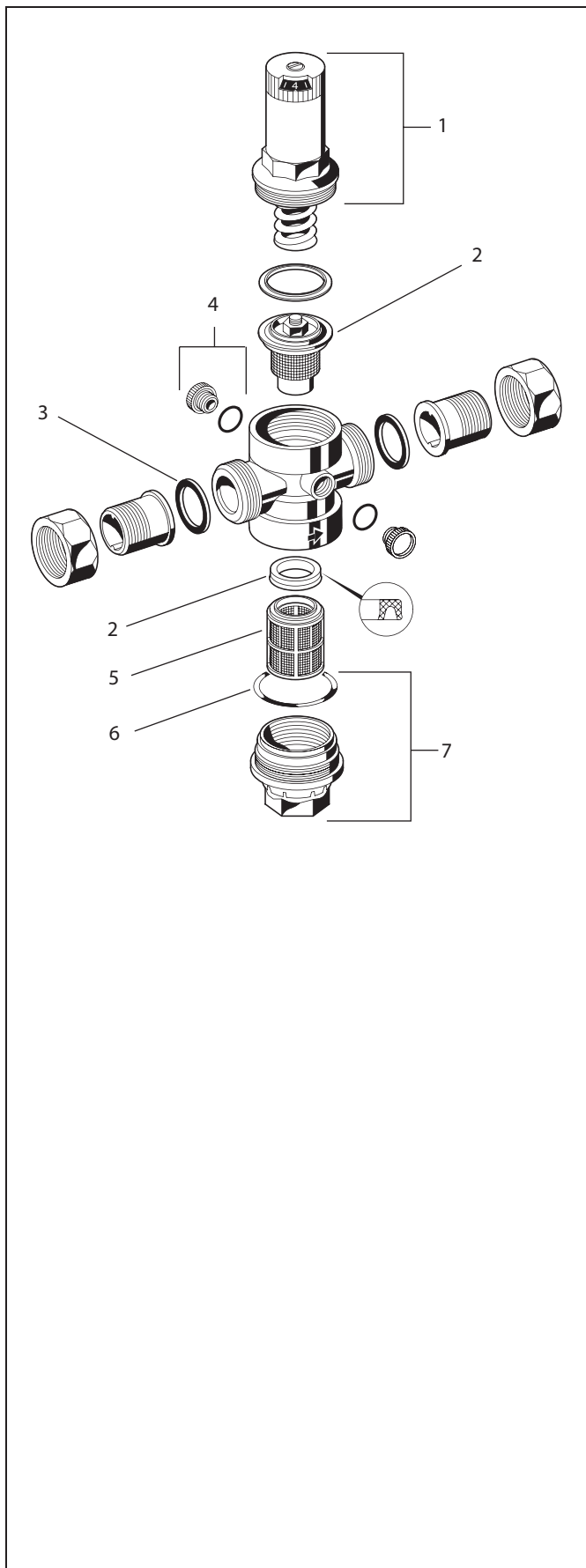
Pressure reducing valves of this type are suitable for all types of household water installations.

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





Spare Parts

Pressure Reducing Valve D06FI, from 2007 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 D06FI (without filter)	$1/2" + 3/4"$	D06FI-1/2
		$1" + 1 1/4"$	D06FI-1
		$1 1/2" + 2"$	D06FI-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 R $1/4"$ (5 pcs.)		S06K-1/4
5	Replacement filter insert for D06FI	$1/2" + 3/4"$	ES06F-1/2A
		$1" + 1 1/4"$	ES06F-1B
		$1 1/2" + 2"$	ES06F-11/2A
6	O-ring set for D06FI (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 D06FI	$1/2" + 3/4"$	SK06T-1/2
		$1" + 1 1/4"$	SK06T-1B
		$1 1/2" + 2"$	SK06T-11/2
8	Stainless steel filter bowl with O-ring for D06FI	$1/2" + 3/4"$	SI06T-1/2
		$1" + 1 1/4"$	SI06T-1
		$1 1/2" + 2"$	SI06T-11/2