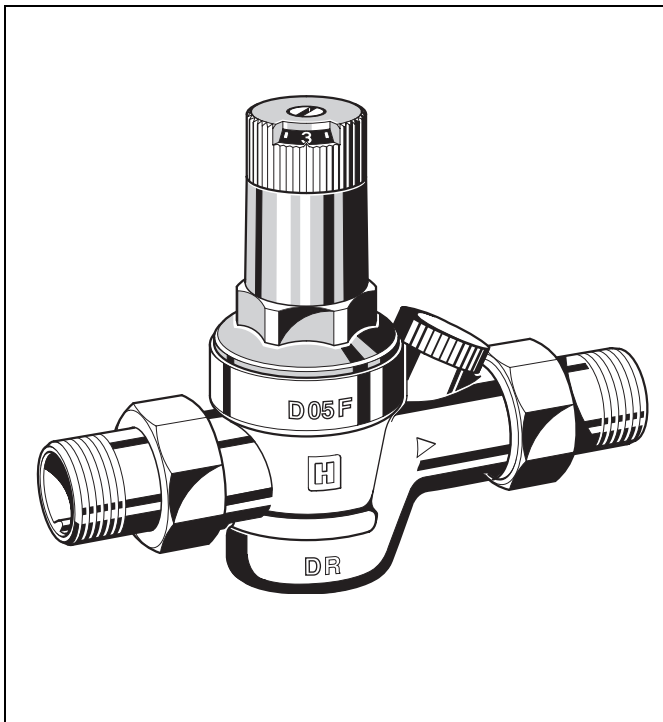


## D05F

### Pressure reducing valve with balanced seat Standard pattern with setting scale

#### Product specification sheet



#### Construction

The pressure reducing valve comprises:

- Housing with pressure gauge connection G $1/4$ "
- Threaded connections (option A)
- Valve insert complete with diaphragm and valve seat
- Fine filter with 0.16 mm mesh
- Spring bonnet with adjustment knob and setting scale
- 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
- 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

- 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
- Reliable and proven

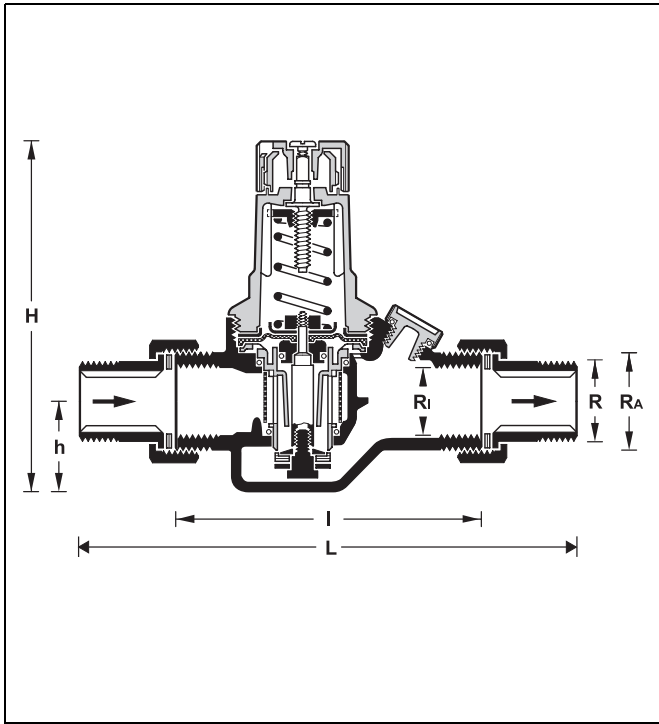
#### Range of Application

Medium	Water, compressed air* and nitrogen* in consideration of valid standards (e.g. DIN EN 12502)
Inlet pressure	max. 25 bar
Outlet pressure	1.5 - 6 bar

#### Technical Data

Operating temperature	max. 70°C
Minimum pressure drop	1 bar
Connection size	$1/2$ ", $3/4$ ", 1"

\* 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.

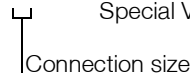
The inlet pressure has no influence in either opening or closing of the valve. Because of this, inlet pressure fluctuation does not influence the outlet pressure, thus providing inlet pressure balancing.

**Options**

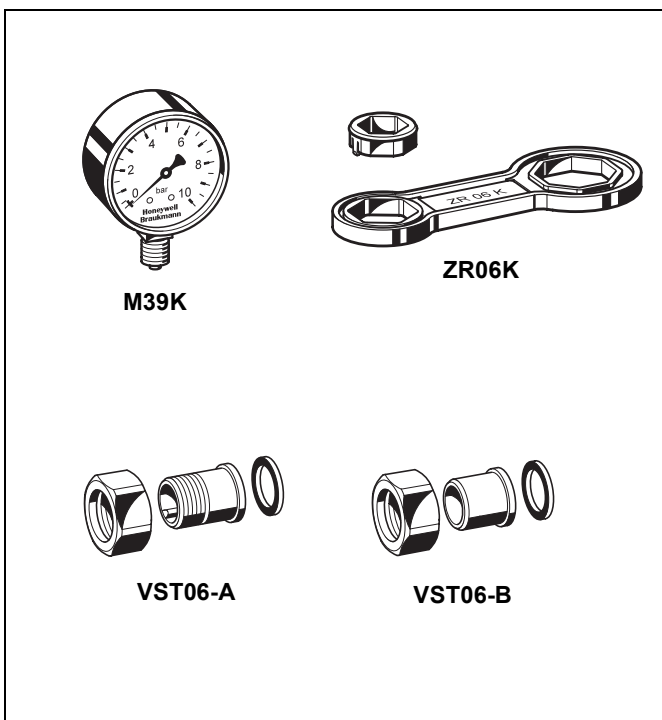
D05F-... A = Threaded male connection

D05F-... E = without fittings

Special Versions available on request



Connection size	R	1/2"	3/4"	1"
Connection size	Ri	1/2"	3/4"	-
Connection size	RA	3/4"	1"	1 1/4"
Nominal size diameter	DN	15	20	25
Weight	kg	0.65	0.82	1.35
Dimensions	mm			
	L	150	168	186
	l	90	100	107
	H	122	122	122
	h	33	33	33
K <sub>VS</sub> -value	m <sup>3</sup> /h	2.6	2.8	3.0



**Accessories**

**M39K Pressure Gauge**

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

**ZR06K Double ring wrench**

For removal of spring bonnet and filter bowl

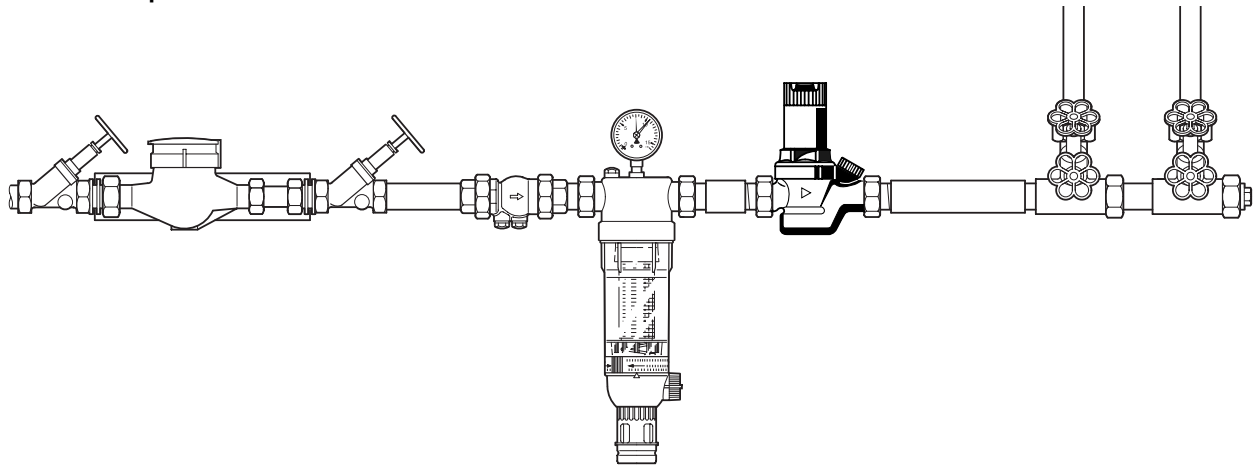
**VST06-A Connection set**

Threaded connections

**VST06-B Connection set**

Solder connections

**Installation Example**



Connection size	R	1/2"	3/4"	1"
	DN	15	20	25
W*	mm	55	55	55

\* Minimum distance from wall to centre line of pipework

**Installation Guidelines**

- Install in horizontal pipework with spring bonnet directed upwards
- Install shutoff valves
- 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**

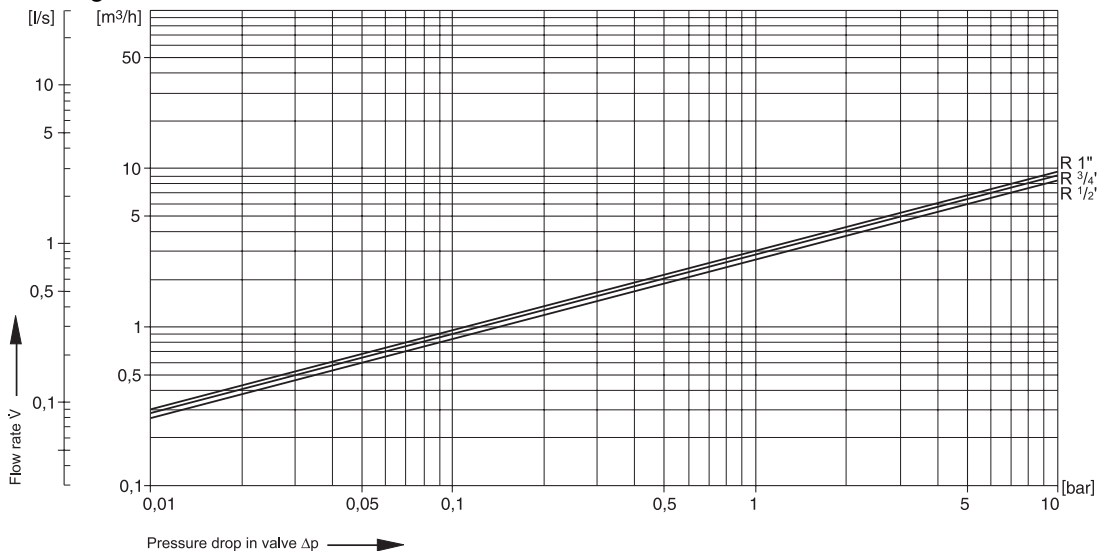
Pressure reducing valves of this type are suitable for all types of household water installations.

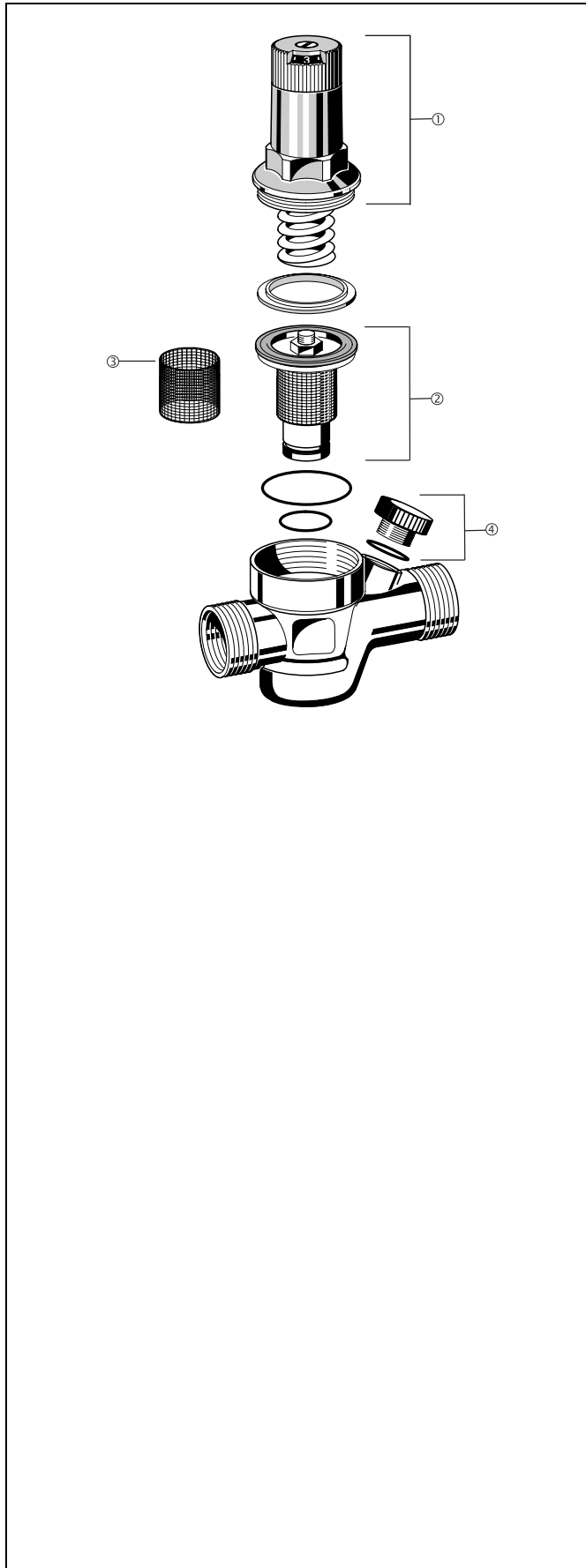
Pressure reducing valves can also be used for industrial and commercial applications within the range of their specifications.

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)
- To achieve constant inlet and outlet pressures on pumped pressure boosting systems
- If pressure fluctuations in the downstream system must be avoided

**Flow Diagram**





**Spare Parts**

**Pressure Reducing Valve D05F, from 2000 onwards**

No.	Description	Dimension	Part No.
①	Spring bonnet complete with setting scale for D05F	1/2" - 1"	0901515
②	Valve insert complete for D05F (without filter)	1/2" - 1"	D05FA-1/2B
③	Replacement filter insert for D05F	1/2" - 1"	ES05F-1/2A
④	Blanking plug with O-ring R1/4" (5 pcs.)	all	S06K-1/4

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