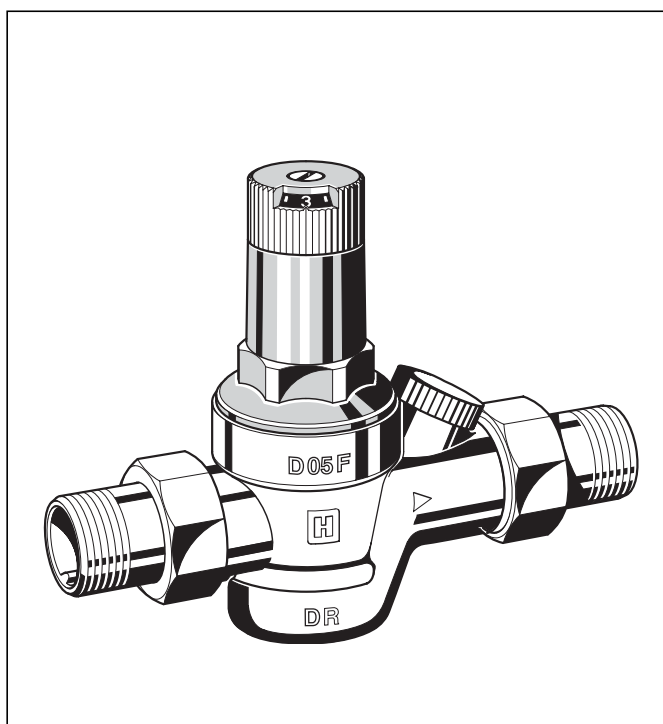


## D05F

### Pressure reducing valve with balanced seat Standard pattern

#### Product specification sheet



#### Construction

The pressure reducing valve comprises:

- Housing with G 1/4" pressure gauge connection
- Male, female thread and compression connections
- Valve insert complete with diaphragm and valve seat
- Filter sieve
- Spring bonnet with adjustment knob and setting scale
- Adjustment spring
- Without pressure gauge, see accessories

#### Materials

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

#### Application

D05F 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

- The set pressure is achieved 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
- Inlet pressure balancing – fluctuating inlet pressure does not influence outlet pressure
- Reliable and proven
- Light weight
- Has the capability to regulate "near zero" and no flow conditions equally good, completely eliminates the need for a low flow bypass valve

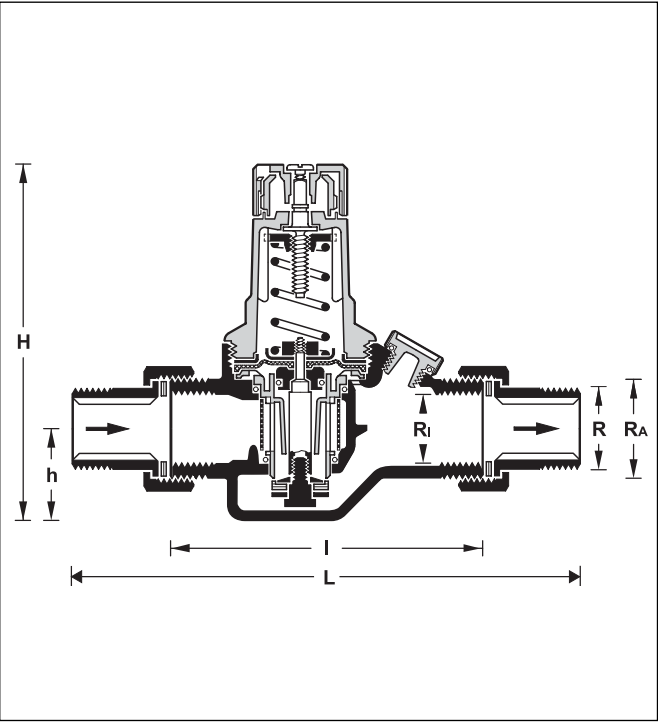
#### Range of Application

Medium	Water, compressed air* and inert gases*
Inlet pressure	Maximum 25.0 bar
Outlet pressure	1.5 - 6.0 bar

#### Technical Data

Operating temperature	Maximum 70 °C
Nominal pressure rating	1.0 bar
Connection sizes	1/2", 3/4", 1", 15mm, 22mm

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



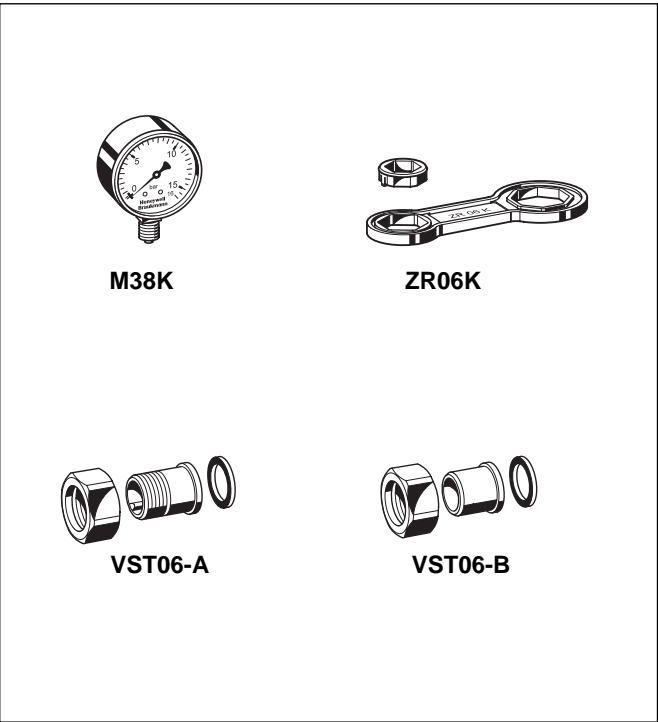
**Method of Operation**

Spring loaded pressure reducing valves operate by means of a force equalising sytem. 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 tailpiece
  - D05F- ... E = Without fittings
  - D05F-...EC= Compression tailpieces
- └─┘  
Connection size

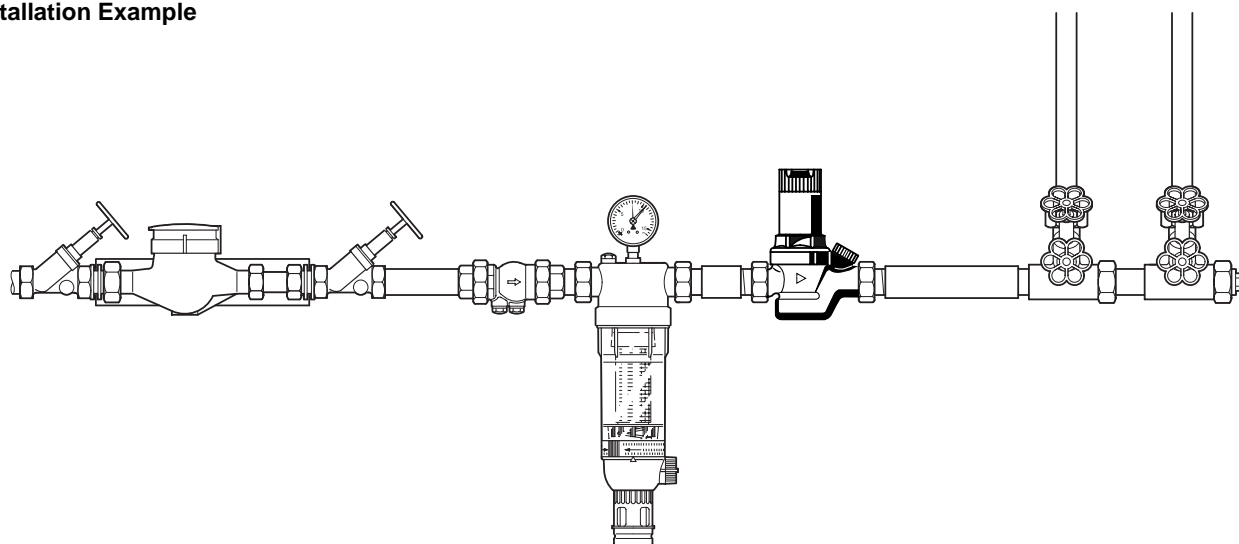
Connection size	R	1/2"	3/4"	1"
	Ri	1/2"	3/4"	-
	RA	3/4"	1"	1 1/4"
Nominal size	DN	15	20	25
Weight	approx. kg	0,65	0,82	1,35
Dimensions	(mm)			
	L	150	168	186
	l	90	100	107
	H	122	122	122
	h	33	33	33
kvs-value		2,6	2,8	3,0



**Accessories**

- M 38K Pressure gauge**  
Housing diameter 50 mm, connection thread G 1/4".  
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
- VST06 Connection set**  
With threaded or soldered unions  
A = Threaded tailpiece  
B = Soldered tailpiece

### Installation Example



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

\*Minimum distance from wall to centre line of pipework

### Installation Guidelines

- Installation in horizontal or vertical pipework with spring bonnet upwards
- Fit shut off valves
- Ensure good accessibility
  - So that the pressure gauge can be easily seen
  - Simplifies maintenance and inspection
- Install downstream of a fine filter
  - Gives pressure reducing valve 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

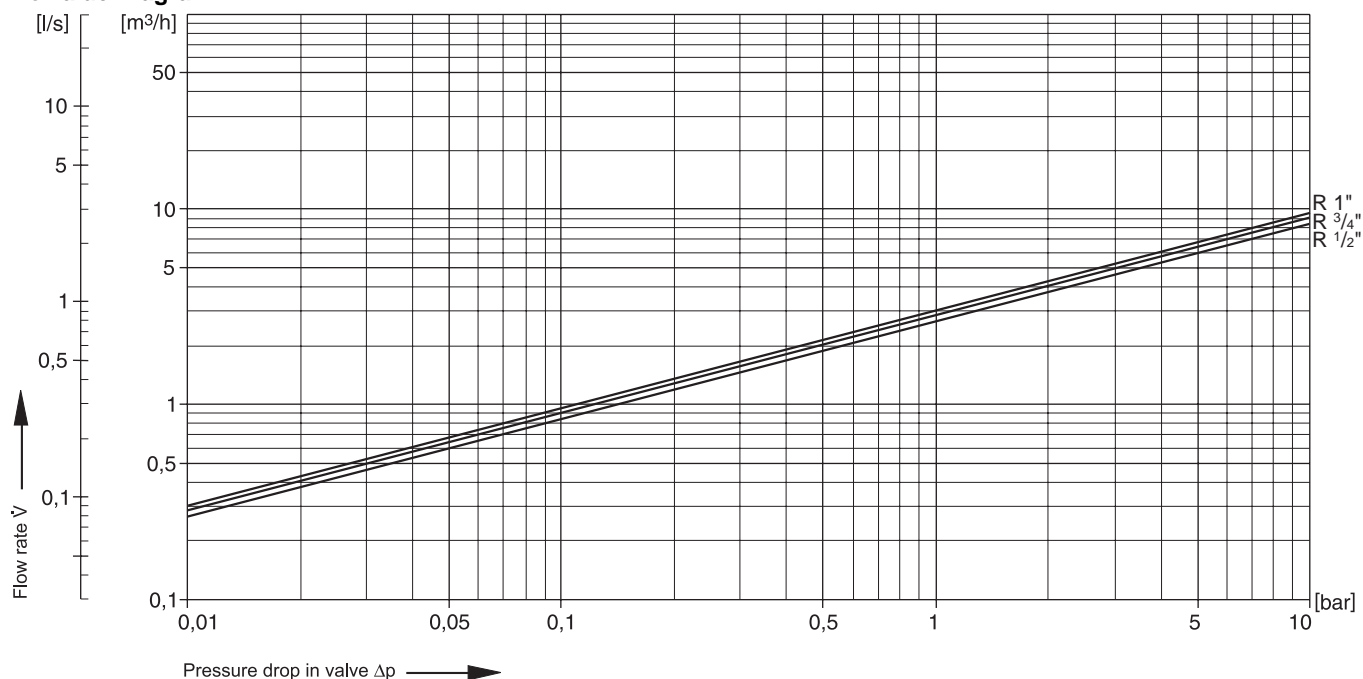
### Typical Applications

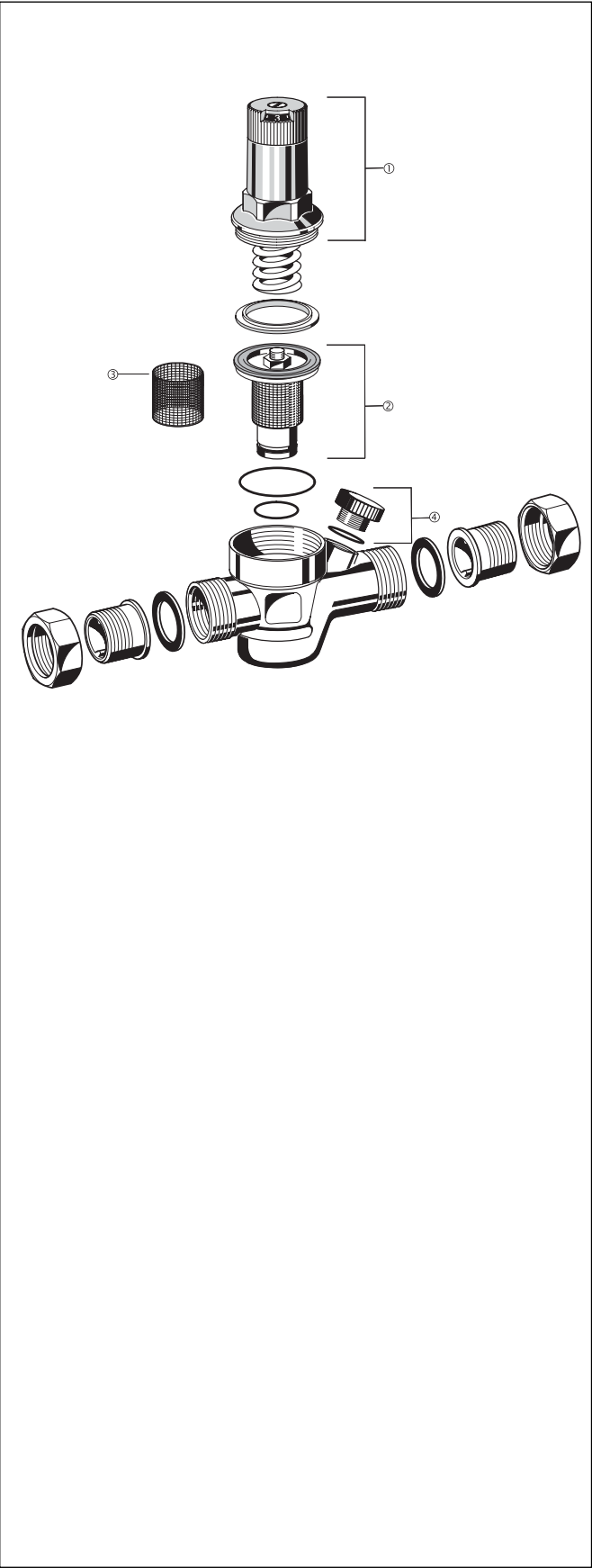
D05F pressure reducing valves are suitable for household, industrial and commercial applications within the range of their specifications.

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

### kvs-value Diagram





Spare Parts for D05F Pressure Reducing Valves

Description	Nominal size	Part number
① Spring bonnet complete	1/2" + 3/4"	0901515
② Valve insert complete	1/2" + 3/4"	D06FA-1/2B
③ Replacement filter insert	1/2" + 3/4"	ES05F-1/2A
④ Blanking plug with O-ring R 1/4" (5 pcs.)	1/2" + 3/4"	S06K-1/4