# **resideo** Pressure Reducing Valves

## Braukmann D06FH

High Pressure Reducing Valve With Balanced Seat and Set Point Scale

## APPLICATION

According EN 806-2 pressure reducing values 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

- Inlet pressure balancing no influence on outlet pressure by fluctuating inlet pressure
- Up to size 1<sup>1</sup>/4" approved by LGA for low noise, Group 1 without limitations
- The valve insert is of high-quality synthetic material and can be fully exchanged
- 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 drinking water
- Integral fine filter
- Easily retrofittable to convert valve to a reverse-rinsing filter combination
- Can be retrofitted with an inlet check valve
- Also available without fittings
- All materials are UBA conform
- ACS certified



## **TECHNICAL DATA**

Media			
Medium:	Drinking water		
<b>Connections/Sizes</b>			
Connection sizes:	1/2" - 2"		
Pressure values			
Max. inlet pressure:	25 bar		
Outlet pressure:	1.5 - 12 bar		
Preset outlet pressure:	5 bar		
Min. pressure drop:	1 bar		
Operating temperatures			
Max. operating temperature medium (10 bar):	70 °C		
Max. operating temperature medium accord. to EN 1567:	30 °C		

## CONSTRUCTION

#### Overview



### **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.

## TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

Parameter	Value
Environment:	clean, dry and dust free
Min. ambient temperature:	5 °C
Max. ambient temperature:	55 °C
Min. ambient relative humidity:	25 % *
Max. ambient relative humidity:	85 % *

\*non condensing

	Components	Materials
1	Spring bonnet with	High-quality synthetic
	adjustment knob	material
2	Housing with pressure	Dezincification-resistant
	gauge connections on both sides	brass
3	Threaded male connections (options A & B)	Brass
4	Pressure gauge connection	-
5	Filter bowl	Brass
	Not depicted components:	
	Adjustment spring	Spring steel
	Valve insert complete with diaphragm and valve seat	High-quality syntheticmaterial, EPDM diaphragm
	Fine filter with 0.16 mm mesh	Stainless steel
	Pressure gauge (see accessories)	High-quality synthetic material
	Seals	EPDM

## **INSTALLATION GUIDELINES**

#### Setup requirements

- Install in horizontal pipework with filter bowl downwards
- Install shut-off valves
- The installation location should be protected against frost and be easily accessible
  - Pressure gauge can be read off easily
  - Simplified maintenance and cleaning
  - Install downstream of the filter or strainer
  - This position ensures optimum protection for the pressure reducing valve against dirt
- Provide a straight section of pipework of at least five times the nominal valve size after the pressure reducing valve (in accordance with EN 806-2)
- Requires regular maintenance in accordance with EN 806-5

#### Installation Example



Fig. 1 Standard installation example for the pressure reducing valve

- 1 Water meter
- 2 Shut-off valve
- 3 Check valve
- 4 Filtering unit
- 5 Pressure reducing valve

Connection sizes:	<sup>1</sup> /2"	<sup>3</sup> /4"	1"	1 <sup>1</sup> /4"	1 <sup>1</sup> /2"	2"
Distance in mm (W*):	55	55	60	60	70	70

\* Required installation distances between the centerline of the pipework and the surrounding in dependency of the connection size.

## **TECHNICAL CHARACTERISTICS**

#### kvs-Values

Connection sizes:	<sup>1</sup> /2"	<sup>3</sup> /4"	1"	<b>1<sup>1</sup>/</b> 4"	<b>1<sup>1</sup>/</b> 2"	2"
k <sub>vs</sub> -value (m <sup>3</sup> /h):	2.4	3.1	7.6	9.1	12.6	12.0

#### Pressure drop characteristics



Fig. 2 Pressure drop within the valve in dependency of the flow rate and the used connection size

## DIMENSIONS

#### Overview



Parameter		Values					
Connection sizes:	R	1/2"	3/4"	1"	1 <sup>1</sup> /4"	$1^{1}/_{2}$ "	2"
Nominal size diameter:	DN	15	20	25	32	40	50
Weight:	kg	0.8	1.0	2.2	2.4	3.4	5.1
Dimensions:	L	140	160	180	200	225	255
	I	80	90	100	105	130	140
	Н	96	96	140	140	172	172
	h	56	56	77	77	113	113
	D	54	54	72	72	82	82

Note: All dimensions in mm unless stated otherwise.

## **ORDERING INFORMATION**

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

#### Options

The value is available in the following sizes: 1/2", 3/4", 1", 11/4", 11/2" and 2".

- standard
- not available

		D06FHB	D06FHE
Connection type:	external threaded connection set on in- and outlet	•	-
	external thread on in- and outlet	-	•

Note: ...= connection size.

Note: Ordering number example for  $1^{1}/4$ " and type B valve: D06FH-11/4B

#### Accessories

	Descripti	on	Dimension	Part No.
	M07M	Pressure gauge		
		Housing diameter 63 mm, rear connection thr	ead G <sup>1</sup> /4"	
		Range: 0 - 4 bar		M07M-A4
		Range: 0 - 10 bar		M07M-A10
		Range: 0 - 16 bar		M07M-A16
		Range: 0 - 25 bar		M07M-A25
	ZR06K	Double ring wrench		
		For removal of spring bonnet and filter bowl		
				ZR06K
	VST06A	Connection set		
		Threaded connections		
			1/2"	VST06-1/2A
			3/4"	VST06-3/4A
			1"	VST06-1A
			1 <sup>1</sup> /4"	VST06-11/4A
			$1^{1}/_{2}$ "	VST06-11/2A
			2"	VST06-2A
	VST06B	Connection set		
		Solder connections		
			1/2"	VST06-1/2B
			3/4"	VST06-3/4B
			1"	VST06-1B
			1 <sup>1</sup> /4"	VST06-11/4B
			1 <sup>1</sup> /2"	VST06-11/2B
			2"	VST06-2B

#### **Spare Parts**

Pressure Reducing Valve D06FH, from 1997 onwards

#### Overview



-		<b>.</b>	<b>D</b>				
	Description	Dimension	Part No.				
1	Spring bonnet complete						
		1/2" + 3/4"	0901227				
		$1" + 1^{1}/4"$	0901228				
		$1^{1}/_{2}" + 2"$	0901229				
2	Valve insert complete (w	vithout filter)					
		1/2" + 3/4"	D06FA-1/2				
		$1" + \frac{1}{4}"$	D06FA-1A				
		$1^{1}/_{2}$ " + 2"	D06FA-11/2				
3	Union seal washer (10 p	cs.)					
		1/2"	0901443				
		3/4"	0901444				
		1"	0901445				
		1 <sup>1</sup> /4"	0901446				
		$1^{1}/_{2}$ "	0901447				
		2"	0901448				
4	Blanking plug with O-ri	ng R <sup>1</sup> /4" (5 pcs.	.)				
		1/2" - 2"	S06K-1/4				
5	<b>Replacement filter inse</b>	rt					
		1/2" + 3/4"	ES06F-1/2A				
		$1" + 1^{1}/4"$	ES06F-1A				
		$1^{1}/_{2}$ " + 2"	ES06F-11/2A				
6	O-ring set (10 pcs.)						
		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"	SM06T-1/2				
		$1" + 1^{1}/4"$	SM06T-1A				
		$1^{1}/_{2}" + 2"$	SM06T-11/2				

\* included with 2



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