Honeywell | Pressure Reducing Valves

D06FI

Pressure reducing valve with balanced seat Stainless steel pattern

APPLICATION

According EN 806-2 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.

APPROVALS

- DVGW
- WRAS (up to 23°C)

SPECIAL FEATURES

- Inlet pressure balancing no influence on outlet pressure by fluctuating inlet pressure
- Up to size 1¹/₄" 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
- Also available without fittings
- Conforms to BSEN 1567
- All materials are UBA conform
- All materials are ACS approved



TECHNICAL DATA

Media			
Medium:	Drinking water		
Connections/Sizes			
Connection sizes:	1/2" - 2"		
Nominal sizes:	DN15 - DN50		
Pressure values			
Max. inlet pressure with clear filter bowl:	16 bar		
Max. inlet pressure with stainless steel filter bowl:	25 bar		
Outlet pressure:	1.5 - 6.0 bar		
Preset outlet pressure:	3 bar		
Min. pressure drop:	1.0 bar		
Operating temperatures			
Max. operating temperature medium with clear filter bowl:	40 °C		
Max. operating temperature medium with stainless steel filter bowl:	70 °C *		

* max. operating pressure 10 bar

CONSTRUCTION



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 adjustment knob and setting scale	High-quality synthetic material
2	Housing with pressure gauge connections on both sides	Stainless steel
3	Threaded male connections (options A & B)	Stainless steel
4	Pressure gauge connection	-
5	Filter bowl	Clear synthetic or stainless steel
	Not depicted components	
	Adjustment spring	Spring steel
	Valve insert complete with diaphragm and valve seat	High-quality synthetic material, 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

- Horizontal and vertical installation position possible
- Install shut-off 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
 - Pressure gauge can be read off easily
 - Simplified maintenance and cleaning
- 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

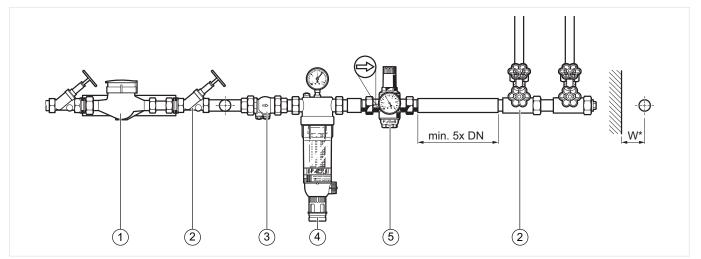


Fig. 1 Standard installation example for the pressure reducing valve

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

Connection sizes:	¹ / ₂ "	³ /4"	1"	1¹/ 4"	1 ¹ /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.

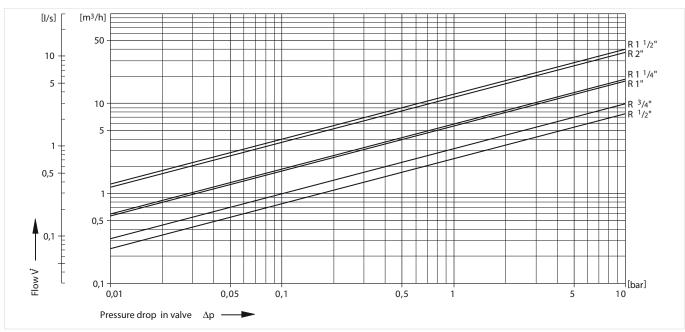
TECHNICAL CHARACTERISTICS

kvs-Values

Connection sizes:	¹ /2"	³ /4"	1"	1¹/ 4"	1 ¹ /2"	2"
k _{vs} -value (m ³ /h):	2.4	3.1	5.8	5.9	12.6	12.0
IfBt designation:	P-IX 1582/I	P-IX 1582/I	P-IX 1582/I	P-IX 1582/I	- *	- *
DIN/DVGW Registration No.:	DW-6330AT2314					

* Compulsory testing in sizes R $^{1}\!/_{2}$ " to R 1 $^{1}\!/_{4}$

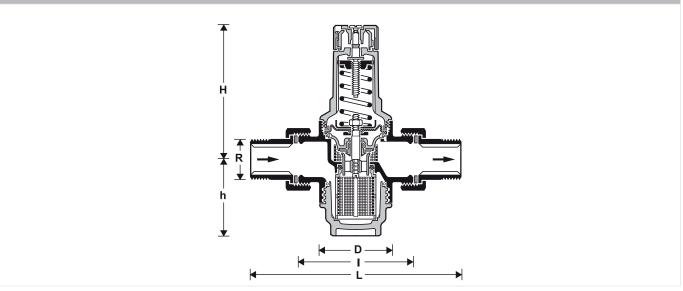
Pressure drop characteristics





DIMENSIONS

Overview



Parameter		Values					
Connection sizes:	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	0.7	0.8	1.2	1.6	2.9	3.6
Dimensions:	L	140	160	180	200	225	255
	1	80	90	100	105	130	140
	Н	89	89	111	111	173	173
	h	58	58	64	64	126	126
	D	54	54	61	61	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 valve is available in the following sizes: 1/2", 3/4", 1", $1^{1}/4$ ", $1^{1}/2$ " and 2".

- standard
- not available

		D06FIA	D06FIB	D06FIE
Max. operating	40 °C	•	-	•
temperature medium:	70 °C	-	•	-
Filter bowl:	clear	•	-	•
	stainless steel	-	•	-
Connection type:	external threaded connection set on in- and outlet	•	•	-
	external thread on in- and outlet	-	-	•

Note: ... = space holder for connection size

Note: Ordering number example for $1^{1}/4^{"}$ and type A valve: D06FI-11/4A

Accessories

	Descriptio	n	Dimension	Part No.		
	M07M	Pressure gauge				
		Housing diameter 63 mm, rear connection thre	ad G ¹ /4"			
		Range: 0 - 4 bar		M07M-A4		
-2		Range: 0 - 10 bar		M07M-A10		
al ber 10		Range: 0 - 16 bar		M07M-A16		
Homywell s21		Range: 0 - 25 bar		M07M-A25		
	ZR06K	Double ring wrench				
		For removal of spring bonnet and filter bowl				
				ZR06K		
	VST06I-A	Connection set				
5 0		With stainless steel threaded connections				
			1/2"	VST06I-1/2A		
			3/4"	VST06I-3/4A		
			1"	VST06I-1A		
			1 ¹ /4"	VST06I-11/44		
			$1^{1}/_{2}$ "	VST06I-11/24		
			2"	VST06I-2A		

Spare Parts

Pressure Reducing Valve D06FI, from 2007 onwards

Overview		Description	Dimension	Part No.		
		Spring bonnet complete	e			
			¹ / ₂ " - 1"	0901515		
			$1" + 1^{1}/4"$	0901516		
			$1^{1}/_{2}$ " + 2"	0901518		
	2	Valve insert complete (Valve insert complete (without filter)			
			1/2" + 3/4"	D06FI-1/2		
			1" + 1/4"	D06FI-1		
			$1^{1}/_{2}$ " + 2"	D06FI-11/2		
	3	Union seal washer (10 p	-			
4			1/2"	0901443		
			3/4"	0901444		
			1"	0901445		
			$1^{1}/4$ "	0901446		
			$1^{1}/_{2}$ "	0901447		
			2"	0901448		
	4					
			1/2" - 2"	S06K-1/4		
	5	Replacement filter inse				
			1/2" + 3/4"	ES06F-1/2A		
			$1" + 1^{1}/4"$	ESO6F-1B		
	-		$1^{1}/_{2}" + 2"$	ES06F-11/2A		
	6	O-ring set (10 pcs.)	1			
			$\frac{1}{2} + \frac{3}{4}$	0901246		
			$1" + 1^{1}/4"$	0901499		
	_		1 ¹ / ₂ " + 2"	0901248		
	7	Clear filter bowl with O	-			
			1/2" + 3/4"	SK06T-1/2		
			$1" + 1^{1}/4"$	SK06T-1B		
	0	Chaimlann at a l filter l	$1^{1}/2" + 2"$	SK06T-11/2		
	8	Stainless steel filter boy	wl with O-ring $1/2$ " + $3/4$ "	CIOCT 1/2		
			$\frac{1}{2} + \frac{3}{4}$ 1" + 1 ¹ /4"	SI06T-1/2 SI06T-1		
			1 + 1 - 74 $1^{1}/2" + 2"$	SI06T-1 SI06T-11/2		
			T-15 + C	31001-11/2		

Environmental & Energy Solutions

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