## resideo Pressure Reducing Valves



## Braukmann CD06F-LFA

### Pressure Reducing Valve

Lead-free combination of Pressure Reducing Valve and check Valve

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#### **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.

Check valves of this type are particularly suitable for integral use with pipeline appliances such as water meters. Check valves are safety devices for independent prevention of water backflow, for example from drinking water appliances back into the central water supply system.

They can also be used for industrial, commercial and similar systems where back pressure, backflow and back syphonage must be prevented.

The classic fications of appliances to meet these requirements are specified in EN 1717.

#### **APPROVALS**

- DVGW
- WRAS (up to 23 °C)
- VA (ETA)
- SINTEF

#### **SPECIAL FEATURES**

- Inlet pressure balancing no influence on outlet pressure by fluctuating inlet pressure
- Up to size 1<sup>1</sup>/<sub>4</sub>" 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











- ACS certified
- Lead-free material
- Universal application
- Easy installation
- Quiet operation
- Creates no shock pressure loadings
- Suitable for installation in any position
- Low pressure loss

#### **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 brass filter bow:	25 bar
Outlet pressure:	1.5 - 6 bar
Preset outlet pressure:	3 bar
Min. pressure drop:	1 bar
Operating temperatures	
Max. operating temperature medium with clear filter bowl:	40 °C
Max. operating temperature medium with brass filter bowl:	70 °C *

<sup>\*</sup> max. operating pressure 10 bar

Note: Use the SM06T brass filter bowl, if the valve can be exposed to UV radiation or solvent vapors.

#### **Technical Data RV260-LFA**

Media	
Medium:	Drinking water
Connections/Sizes	
Connection size:	Male threaded union $R^1/2$ " – $R2$ " Female threaded union $G^3/4$ " – $G2^1/2$ "
Pressure values	
Operating pressure:	approx. 0.03 bar
Max. inlet pressure:	10.0 bar
Operating temperatures	
Max. operating temperature	5 - 40 °C
medium:	
Specifications	
Liquid category:	2 (no hazardous materials)

#### **CONSTRUCTION**

Overview		Components	Materials
	1	Spring bonnet with adjustment knob and setting scale	High-quality synthetic material
311	2	Union nut with internal thread	Brass
1)	3	Pressure gauge connection	-
	4	Filter bowl	Clear synthetic or brass
6	5	Threaded male connections (options A & B)	Brass
Prosest Original Table 1828 Learness	6	Housing with pressure gauge connections on both sides	Dezincification-resistant brass
		Not depicted components:	
(3)		Adjustment spring	Spring steel
D06F-3/4LFA DW-9330AT2314		Valve insert complete with diaphragm and valve seat	High-quality synthetic material, EPDM diaphragm
4		Fine filter with 0.16 mm mesh	Stainless steel
		Pressure gauge (see accessories)	High-quality synthetic material
		Seals	EPDM
		Check valve insert	High grade synthetic material check valve cartridge
		Test plug with seal ring	Lead-free brass
		Sealing elements	EPDM and cooper

#### 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.

Spring loaded check valves have a moving seal disc which is lifted off the seat by a greater or lesser amount depending on the flow rate through the valve. If the flow falls towards zero, then the spring pushes the disc back onto the seat and seals the waterway.

To ensure continuing correct function it is recommended that check valves be regularly checked and maintained (as specified in EN 1717).

#### 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

#### **INSTALLATION GUIDELINES**

#### Setup requirements

- Install in horizontal pipework with filter bowl downwards
- Install shut-off valves
- The device downstream should be protected by means
  of a safety valve (installed downstream of the pressure
  reducing valve). In these cases the delivery pressure of
  the pressure reducing valve shall be set to at least 20 %
  below the response pressure of the pressure relief-valve
  according to EN 806-2
- The installation location should be protected against frost and be easily accessible
  - Pressure gauge can be read off easily
  - With clear filter bowl, degree of contamination can be easily seen
  - Simplified maintenance and cleaning
- Install downstream of the filter or strainer
- 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

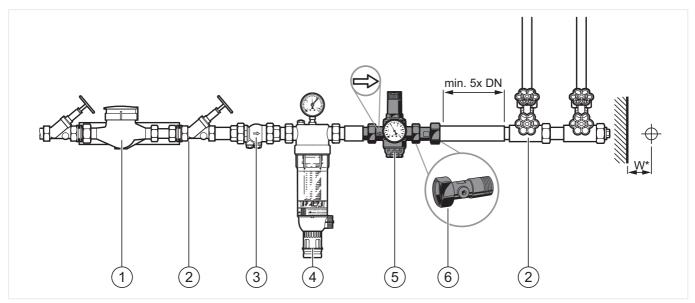


Fig. 1 Standard installation example for the pressure reducing valve

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

Connection sizes:						
DN:	15	20	25	32	40	50
inch:	1/2"	3/4"	1"	11/4"	11/2"	2"
Distance in mm (W*):	55	60	60	60	70	70

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

#### **TECHNICAL CHARACTERISTICS**

#### kvs-Values

Connection sizes:	15	20	25	32	40	50
k <sub>vs</sub> -value (m <sup>3</sup> /h):	2.4	3.1	5.8	5.9	12.6	12.0
k <sub>vs</sub> -value (m <sup>3</sup> /h):	6.0	10.0	15.0	28.0	41.0	70.0
IfBt designation:	P-IX 1582/I	P-IX 1582/I	P-IX 1582/I	P-IX 1582/I	- *	- *
DVGW registration number:	DW-6330 AT 2314					

<sup>\*</sup> Compulsory testing in sizes R  $^1\!/_2$  " to R 1  $^1\!/_4$ 

#### Pressure drop characteristics

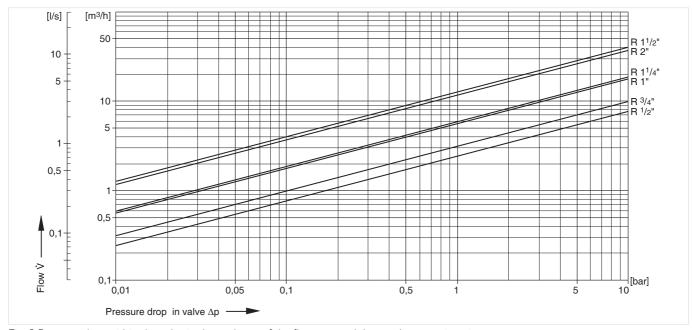
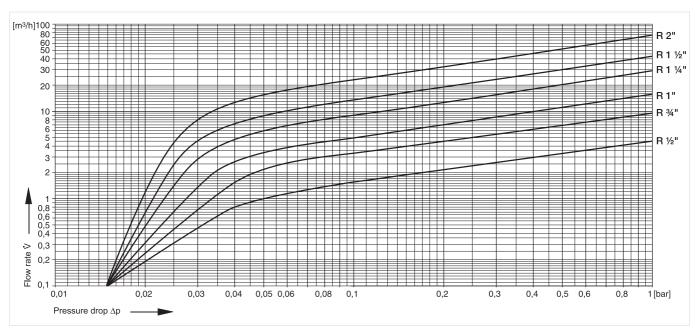
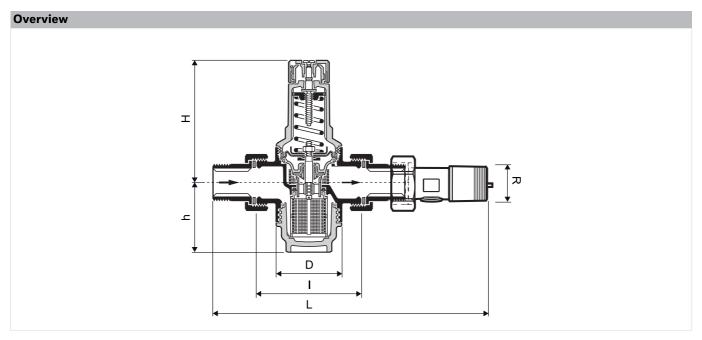


Fig. 2 Pressure drop within the valve in dependency of the flow rate and the used connection size



 $Fig.\ 3\ Pressure\ drop\ within\ the\ valve\ in\ dependency\ of\ the\ flow\ rate\ and\ the\ used\ connection\ size$ 

#### **DIMENSIONS**



Parameter		Values						
Connection sizes:	R	1/2"	3/4"	1"	11/4"	11/2"	2"	
Nominal size diameter:	DN	15	20	25	32	40	50	
Nominal size diameter:	G	3/4"	1"	11/4"	11/2"	2"	21/2"	
Test and drain plug:	R	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"	
Weight:	kg	0.8	1.0	1.4	2.0	3.3	4.5	
Dimensions:	L	XX	XX	XX	XX	XX	XX	
	l	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	
Nominal flow rate at $\Delta p = 0.15$ bar	m <sup>3</sup> /h	1.8	3.8	5.8	10.8	15.9	27.1	
SINTEF:		Product certificate 3139						
VA:		1.55/19260						
DVGW (internal check val	ve):	NW - 6312 AS2269						

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:  $^{1}/_{2}$ ",  $^{3}/_{4}$ ",  $^{1}$ ",  $^{1}/_{4}$ ",  $^{1}/_{2}$ " and  $^{2}$ ".

- standard
- not available

		D06FA	D06FB	D06FE
Max. operating temperature medium:	40 °C	•	-	•
	70 °C	-	•	_
Filter bowl:	clear	•	-	•
	brass	-	•	-
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: D06F-11/4A

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

		RV260LFA
Connection type:	external threaded connection set on in- and outlet	•

Note: ... = space holder for connection size

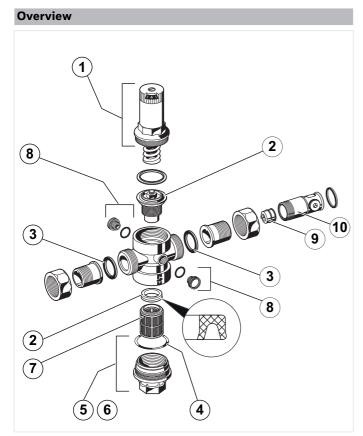
Note: Ordering number example for 1": RV260-1LFA

#### **Accessories**

	Descripti	on	Dimension	Part No.		
	M07M	Pressure gauge				
		Housing diameter 63 mm, rear connection thre	ad G <sup>1</sup> /4"			
4 6		Range: 0 - 4 bar		M07M-A4		
8		Range: 0 - 10 bar		M07M-A10		
bar 10		Range: 0 - 16 bar		M07M-A16		
825		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		
			11/4"	VST06-11/4A		
			11/2"	VST06-11/2A		
			2"	VST06-2A		
	VST06B	Connection set				
		Solder connections				
			1/2"	VST06-1/2B		
			3/4"	VST06-3/4B		
			1"	VST06-1B		
			11/4"	VST06-11/4B		
			11/2"	VST06-11/2B		
			2"	VST06-2B		

#### **Spare Parts**

Pressure Reducing Valve CD06F-LFA, from 2017 onwards



	Description	Dimension	Part No.
1	Spring bonnet complet	:e	
		1/2" - 1"	0901515
		1" + 11/4"	0901516
		$1^{1}/_{2}" + 2"$	0901518
2	Valve insert complete (	without filter)	
		1/2" + 3/4"	D06FA-1/2
		1" + 1/4"	D06FA-1B
		11/2" + 2"	D06FA-11/2
3	Union seal washer (10	pcs.)	
		1/2"	0901443
		3/4"	0901444
		1"	0901445
		11/4"	0901446
		$1^{1}/_{2}$ "	0901447
		2"	0901448
4	O-ring set (10 pcs.)		
		1/2" + 3/4"	0901246
		1" + 11/4"	0901499
		11/2" + 2"	0901248
5	Clear filter bowl with O	-ring	
		1/2" + 3/4"	SK06T-1/2
		1" + 11/4"	SK06T-1B
		$1^{1}/_{2}$ " + 2"	SK06T-11/2

#### **Spare Parts**

Pressure Reducing Valve CD06F-LFA, from 2017 onwards

Overview		Description	Dimension	Part No.	
	6	Brass filter bowl with O-ring			
(1)			1/2" + 3/4"	SM06T-1/2	
			1" + 11/4"	SM06T-1B	
			$1^{1}/_{2}$ " + 2"	SM06T-11/2	
	7	Replacement filter ins	ert		
			1/2" + 3/4"	ES06F-1/2A	
8 2			1" + 1 <sup>1</sup> / <sub>4</sub> "	ES06F-1B	
			$1^{1}/_{2}" + 2"$	ES06F-11/2A	
	8	8 Blanking plug with O-ring R <sup>1</sup> / <sub>4</sub> " (5 pcs.)			
10			<sup>1</sup> / <sub>2</sub> " - 2"	S06K-1/4	
	9	Check valve			
			1/2"	2166200	
3			3/4"	2110200	
8			1"	2164400	
			11/4"	2164500	
2			11/2"	2164600	
			2"	2164700	
	10	Plug (10 pcs.)			
			1/2"	S06LFA-1/8	
(5)(6) (4)			3/4" - 2"	S06LFA-1/4	

