resideo Pressure Reducing Valves

Braukmann D05FT-GB

Pressure reducing valve with balanced seat High Temperature design with setting 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.

APPROVALS

- WRAS approved (AGB-versions 1/2" 1")
- WRAS in progress (AGB-versions 1¹/₄" 2" and CGB-versions)

SPECIAL FEATURES

- Suitable for hot water systems
- Inlet pressure balancing no influence on outlet pressure by fluctuating inlet pressure
- The valve insert is made of dezincification resistant brass 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
- With internal and external threads $^{1}\!/_{2}$ 1", with external threads 1 $^{1}\!/_{4}$ 2"



TECHNICAL DATA

Media			
Medium:	Domestic Hot Water		
Connections/Sizes			
Connection sizes:	1/2" - 2"		
Nominal sizes:	DN15 - DN50		
Pressure values			
Max. inlet pressure:	16 bar		
Outlet pressure:	1.5 - 6 bar		
Preset outlet pressure:	3 bar		
Min. pressure drop:	1 bar		
Operating temperatures			
Max. operating temperature:	70 °C permanent80 °C short-term		

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 % non-condensing
Max. ambient relative humidity:	85 % non-condensing

ComponentsMaterialsPressure gauge connectionDZR brassSpring bonnet with adjustment knob and setting scaleHigh-quality synthetic materialHousing with pressure gauge connectionDezincification-resistant brassThreaded male connections (option AGB)DZR brassCompression fittings (option CGB)CopperNot depicted components:Stainless steelAdjustment spring valve insert complete with diaphragm and valve seatDezincification-resistant brass, EPDM diaphragmPressure gauge (see accessories)High-quality synthetic materialSealsSpring			
 Spring bonnet with adjustment knob and setting scale Housing with pressure gauge connection Threaded male connections (option AGB) Compression fittings (option CGB) Not depicted components: Piston and spindle Adjustment spring Valve insert complete with diaphragm and valve seat Pressure gauge (see accessories) High-quality synthetic material High-quality synthetic material High-quality synthetic material 		Components	Materials
adjustment knob and setting scalematerialHousing with pressure gauge connectionDezincification-resistant brassThreaded male connections (option AGB)DZR brassCompression fittings (option CGB)CopperNot depicted components:Stainless steelAdjustment springSpring steelValve insert complete with diaphragm and valve seatDezincification-resistant brass, EPDM diaphragmPressure gauge (see accessories)High-quality synthetic material		Pressure gauge connection	DZR brass
gauge connectionbrassgauge connectionbrassThreaded male connections (option AGB)DZR brassCompression fittings (option CGB)CopperNot depicted components:CopperPiston and spindleStainless steelAdjustment springSpring steelValve insert complete with diaphragm and valve seatDezincification-resistant 		adjustment knob and setting	0 1 5 5
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(option CGB)Image: Constraint of the second sec	•		DZR brass
Piston and spindleStainless steelAdjustment springSpring steelValve insert complete with diaphragm and valve seatDezincification-resistant brass, EPDM diaphragmPressure gauge (see accessories)High-quality synthetic material		, 0	Copper
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Valve insert complete with diaphragm and valve seatDezincification-resistant brass, EPDM diaphragmPressure gauge (see accessories)High-quality synthetic material		Piston and spindle	Stainless steel
diaphragm and valve seatbrass, EPDM diaphragmPressure gauge (seeHigh-quality syntheticaccessories)material		Adjustment spring	Spring steel
accessories) material			
Seals FPDM		0 0	0 1 5 5
		Seals	EPDM

INSTALLATION GUIDELINES

Setup requirements

- Horizontal and vertical installation position possible
 - In vertical installation position spring bonnet with adjustment knob facing upwards
 - Vertical installation may require increased maintenance
- 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
- To guarantee perfect functioning, a filter must be installed upstream of the PRV
- 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

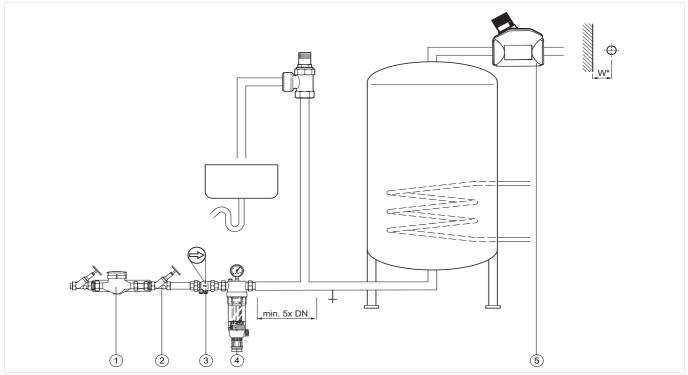


Fig. 1 Standard installation example for the pressure reducing valve

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

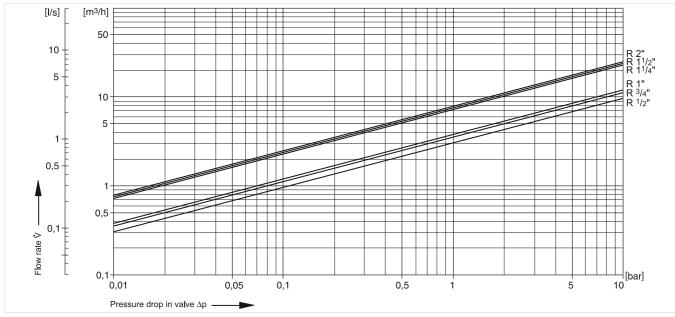
Connection sizes:	1/2"	³ /4"	1"	1 ¹ /4"	1 ¹ / ₂ "	2"
Distance in mm (W*):	55	55	60	60	70	70

* 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):	3.0	3.5	3.7	7.3	7.5	7.7

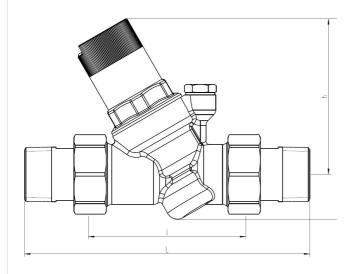


Pressure drop characteristics

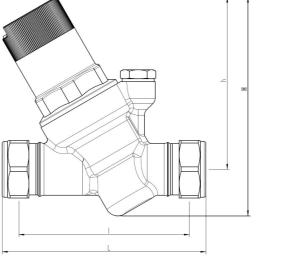
Fig. 2 Pressure drop within the valve in dependency of the flow rate and the used connection size

DIMENSIONS

Overview



D05FT-AGB



D05FT-CGB

Parameter			Values					
Connection sizes:	AGB	R	¹ /2"	3/4"	1"	1 ¹ /4"	1 ¹ /2"	2"
	CGB	Ra Ø	15.2	22.2	-	-	-	-
Nominal size diameter:		DN	15	20	25	32	40	50
Weight:	AGB	kg	0.9	1.0	1.6	3.0	3.8	5.2
	CGB	kg	0.8	0.9	-	-	-	-
Dimensions:	AGB	L	155	163	176	207	216	257
	CGB	L	144	144	-	-	-	-
		1	95	95	97	115	120.5	140
		Н	123	123	123	178	178	178
		h	96	96	96	147	147	147

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

		D05FTAGB	D05FTCGB
Connection type:	external threaded connection set on in- and outlet	•	-
	compression fittings	_	•

Note: ... = space holder for connection size

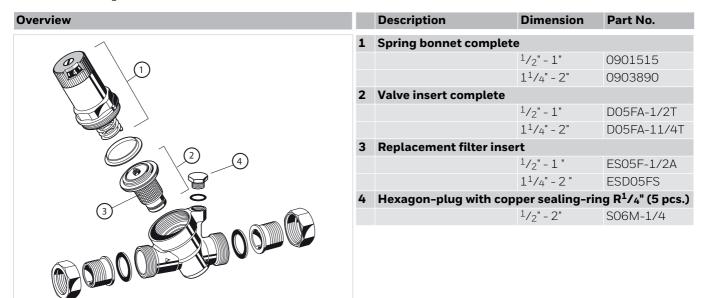
Note: Ordering number example for $1^{1}/4$ " and type AGB value: D05FT-11/4AGB

Accessories

	Description		Dimension	Part No.		
	M38T-A10	Pressure gauge				
		Housing Ø 50 mm, below connection thread G $^{1}/_{4}$ "				
		Range: 0 - 10 bar		M38T-A10		
	DS05	Insulation shells				
			1/2"	DS05-1/2		
			3/4"	DS05-3/4		
			1"	DS05-1		
			1 ¹ /4"	DS05-11/4		
			$1^{1}/_{2}$ "	DS05-11/2		
			2"	DS05-2		
	ZR06K	Double ring wrench				
		For removal of spring bonnet and filter bowl				
e e				ZR06K		
	VST06AGB	Connection set				
		Threaded connections				
			1/2"	VST06-1/2AGB		
			3/4"	VST06-3/4AGB		
			1"	VST06-1AGB		
			1 ¹ /4"	VST06-11/4AGB		
			$1^{1}/_{2}$ "	VST06-11/2AGB		
			2"	VST06-2AGB		

Spare Parts

Pressure Reducing Valve D05FT, from 2018 onwards





Manufactured for and on behalf of Pittway Sàrl, Z.A., La Pièce 4, 1180 Rolle, Switzerland by its authorised representative Ademco 1 GmbH For more information **homecomfort.resideo.com/europe** Ademco 1 GmbH, Hardhofweg 40, 74821 MOSBACH, GERMANY Phone: +49 6261 810 Fax: +49 6261 81309

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