

Data Sheet

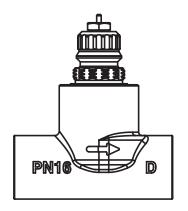
Steel Valve for Convectors in One-pipe Heating Systems

Application

The steel valve is designed for welding into convectors by the manufacturer.

The complete valve consists of a steel valve body and a large capacity valve insert with fixed flow through the valve. The insert has connection for all Danfoss RA 2000 thermostatic sensors.

The flow capacity of this valve is designed for one-pipe heating systems.



Ordering and Specifications

Part	Code no.
Valve insert with RA 2000 sensor connection	013G1805
Steel valve body, straight pattern, welding connections	013G1801
Spare part: Gland seal for valve insert, 10 pcs/pack	013L0669
Spare part: Cover cap, green	013G8469

Туре	Differerential pressure 1)		Test	Work.	Max. water temperature	Code no.
	Recomm.	Technical	pressure	pressure	temperature	
RA-G valve, incl. cap	0.05 - 0.1 bar	0.15 bar	25 bar	16 bar	120° C	013G1809

RA-G 013G1809	P-band (K)					l.
KA-G 013G1809	0.5	1.0	1.5	2.0	3.0	K _{VS}
k_v -value ²⁾ (m ³ /h at $\Delta p = 1$ bar)	0.55	1.11	1.63	2.14	3.07	4.32

¹⁾ The maximum differential pressure specified is the maximum pressure at which the valves give satisfactory regulation. As with any device which imposes a pressure drop in the system, noise may occur under certain flow/pressure conditions. To ensure quiet operation, maximum pressure drop should not exceed 0.3 to 0.35 bar. The differential pressure can be reduced by the use of the Danfoss differential pressure regulators.

VDFOF102 © Danfoss 08/2012

The k_V -value indicates the flow volume (Q) in m^3/h at a given lift and a pressure drop (p) across the valve at 1 bar. $k_V = Q / \sqrt{\Delta p}$. The k_{VS} -value states the flow Q at a maximum lift, i.e. at fully open valve. If a remote temperature adjuster is used, the P-band is increased by a factor of 1.1.

Data Sheet

Steel Valve for Convectors in One-pipe Heating Systems

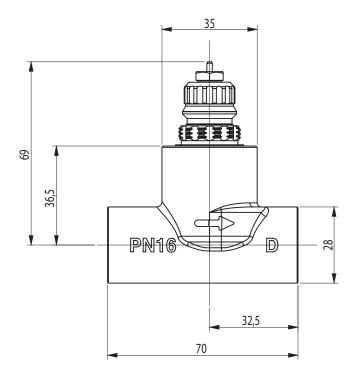
Design and Handling

Materials in contact with water

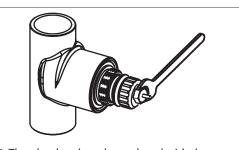
Valve body	Welding proof ASTM steel
Valve top	Ms 58
Valve seat	ASTM steel
O-rings	NBR / EPDM
Valve spindle	Ms 58
Valve cone	NBR
Pressure pin and valve spring	Chrome steel

To avoid calcification and corrosion, it is important for the composition of the circulating water to comply with the VDI 2035 guidelines.

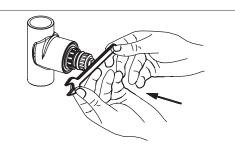
Dimensions



Replacing the gland seal



1. The gland seal can be replaced with the system in operation. Use a 10M spanner to remove the old gland seal.



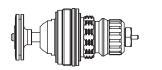
2. After replacing the gland seal, test if the valve spindle is operating freely.

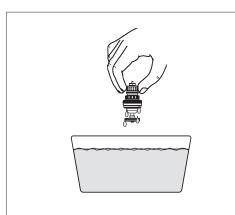


Mounting Instructions

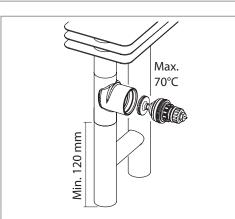
Note!

Valve body and insert should always be handled with utmost care. Keep in original packing until final use. Any damage may result in malfunction of the valve.

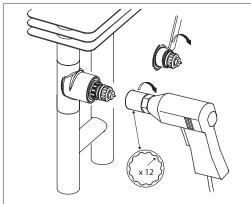




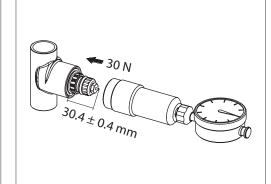
1. Lubricate valve insert by dipping in water.



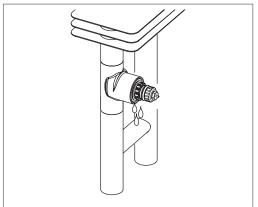
2. Apply insert to housing and tighten by hand. Be aware of the max. temperature, not to destroy the o-ring when applying the insert.



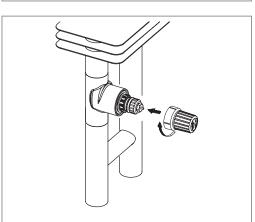
3. Tighten insert with a 21M spanner, torque 30 Nm \pm 10%.



 To ensure closing measure of the valve, load the spindle with a force of 30 N until stop, and measure as shown.
A special tool for control is available.



A leak test has to be carried out according to procedures stated by the convector manufacturer.



6. Fit green protection cap and tighten by hand.



Data Sheet

Steel Valve for Convectors in One-pipe Heating Systems

Danfoss A/S Heating Solutions Haarupvaenget 11 8600 Silkeborg Denmark

Phone: +45 7488 8000 Fax: +45 7488 8100

Email: heating. solutions@danfoss.com

www.heating.danfoss.com