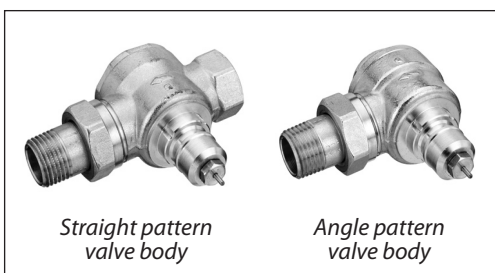


Data sheet

High capacity valve body, type RA-G



Application



The high capacity valve bodies RA-G are used in gravity systems or in pumped one-pipe systems.

RA-G valves have a fixed flow capacity of 2.06 - 4.75 m³/h (k_{vs} -value).

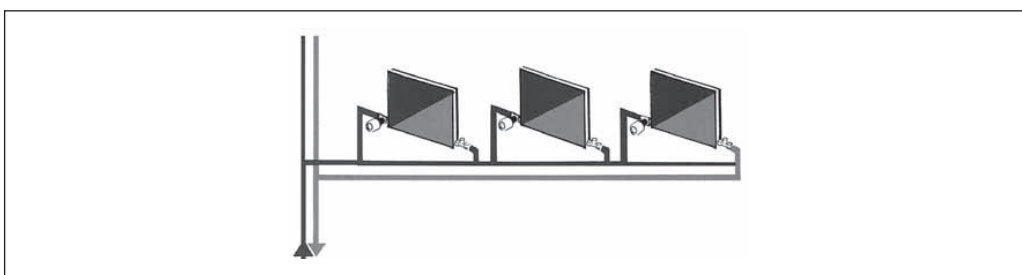
All thermostatic sensors in the RA-series can be combined with all RA-G valves.

The technical data for RA-G valve bodies in combination with RA 2000 sensors meet Euronorm EN 215.

For easy identification the protective cap is grey. The valves are nickel plated.

In order to avoid deposition and corrosion the composition of the hot water must be in accordance with the VDI 2035

System



Ordering and specifications

Type	Code no.	Design	Connection ISO 7-1		k_v -values ¹⁾²⁾ [m ³ /h] P-Band [K]					Max. pressure			Max. flow temp. °C
			Inlet	Outlet	0.5	1.0	1.5	2.0	k_{vs}	Working bar	Diff. ³⁾ bar	Test bar	
RA-G 15	013G3383 013G3384	Angle Straight	R _p 1/2	R 1/2	0.48	0.92	1.29	1.25	2.05	10	0.2	16	120
RA-G 20	013G3385 013G3386	Angle Straight	R _p 3/4	R 3/4	0.60	1.14	1.75	1.70	3.20				
RA-G 25	013G3387 013G3388	Angle straight	R _p 1	R 1	0.71	1.42	2.04	2.20	4.75		0.16		

¹⁾ The k_v -value indicates the water flow (Q) in m³/h at a pressure drop (Δp) across the valve of 1 bar. $k_v = V : \sqrt{\Delta p}$.
The k_{vs} -value states the flow Q at a maximum lift, i.e. at fully open valve at setting N.

²⁾ Eurocone.

³⁾ Working pressure = static + differential pressure. 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 30 to 35 kPa. The differential pressure can be reduced by the use of the Danfoss differential pressure regulators.

Spare parts and accessories

Product	Units	Code no
Gland seal	10 pcs.	013G0290

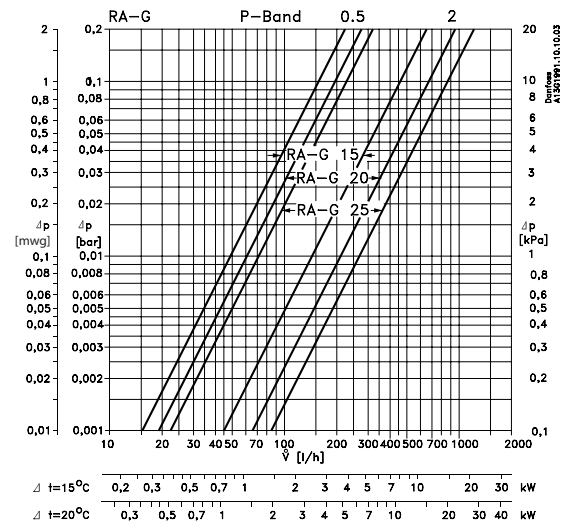
The gland seal may be replaced with the heating system in operation.

Capacities

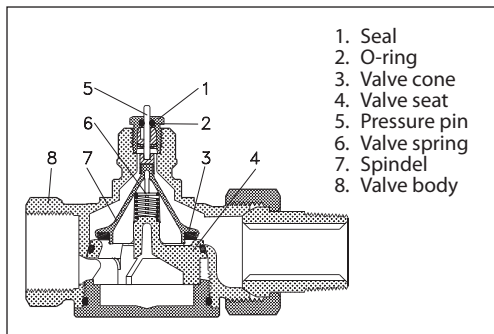
Example:
 Heat demand:
 2400 kcal/h ~ 2.8 kW
 System temperature drop:
 t = 20 °C
 Calculated water quantity:
 $Q = 2400/20 = 120$ litres/hour
 Differential pressure:
 p = 0.004 bar = 400 Pa

The valve body found in the capacity diagramme: RA-G 20 which controls at Xp ~ 2 K.

Alternatively, the settings can be found directly in the table "Ordering and specifications":



Construction



Materials in contact with water

Valve body	Ms 58 brass
O-Ring	EPDM
Valve cone	NBR
Pressure pin	Chrome steel
Federschale	Zinnbronze

Dimensions

Type	Connection ISO 7-1			L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	Spanner	
	DN	D	d ₂								S ₁	S ₂
RA-G 15	10	Rp 1/2	R 1/2	68	96	30	58	27	50	99	27	30
RA-G 20	10	Rp 3/4	R 3/4	74	106	34	66	30	50	99	32	37
RA-G 25	15	Rp 1	R 1	90	126	42	78	34	54	103	41	46

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