

Data sheet

RA 15/6T valve for one-pipe systems RA 15/6TB valve for two-pipe systems

Application



The RA 15/6T and TB are special lance (bypass) valves, which allows the radiator to be connected at one point only - underneath or at the side of the radiator, as required.

It is designed for conventional one- and two-pipe systems with pumped circulation and has fixed k_v -values.

In one-pipe systems, the system water flows partly through the radiator and partly through the built-in bypass into the valve.

Efficient mounting is enabled by a range of compression fittings for steel, copper, PEX and AluPEX pipes.

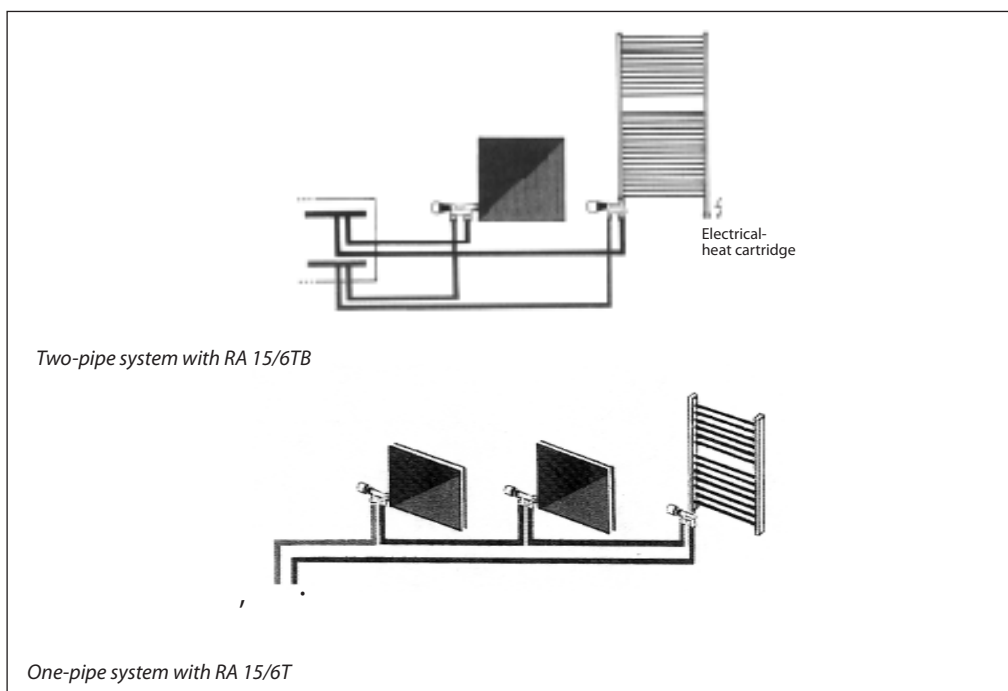
To prevent scale and corrosion, the system water should comply with VDI (Verein Deutscher Ingenieure) guideline 2035.

Depending on the type of radiator, a baffle plate or special connector, may be required.

Please note, when a bypass valve is fitted, not all radiators will provide the performance quoted in their catalogue, and variations in performance may occur, where different radiators are combined. In these cases, please ask your radiator manufacturer for detailed information.

RA 15/6T valve bodies can be fitted with RA 2000 thermostatic sensors and TWA thermal actuators.

Applications



Technical data and ordering

Typ RA 15/6TB for two-pipe systems

Valve with	Code no.	ISO 7-1 connections		k _v -values ¹⁾ m ³ /h at Xp				k _{vs}	Max. pressure (bar)			Max. flow °C
		System	Radiator	0,5	1,0	1,5	2,0		working	differential	test	
floor connections	013G3210	R _p 1/2	R 1/2	0,29	0,51	0,70	0,82	1,00	10	0,6	16	120
wall connections	013G3215											

Typ RA 15/6T für Einrohranlagen

Valve with	Code no.	ISO 7-1/228-1 connections		k _v ¹⁾	Max. pressure (bar)			Max. flow °C
		System	Radiator		working ³⁾	differential	test	
floor connections	013G3220	R _p 1/2 int. thread	R 1/2	2,15	10	0,6	16	120
	013G3218	G 3/4 ext. thread ³⁾						
wall connections	013G3270	R _p 1/2 int. thread		2,0				
	013G3268	G 3/4 ext. thread ³⁾						

¹⁾ k_{vs} = k_v bypass + k_v radiator. Max. flow through radiator, approx. 35%.

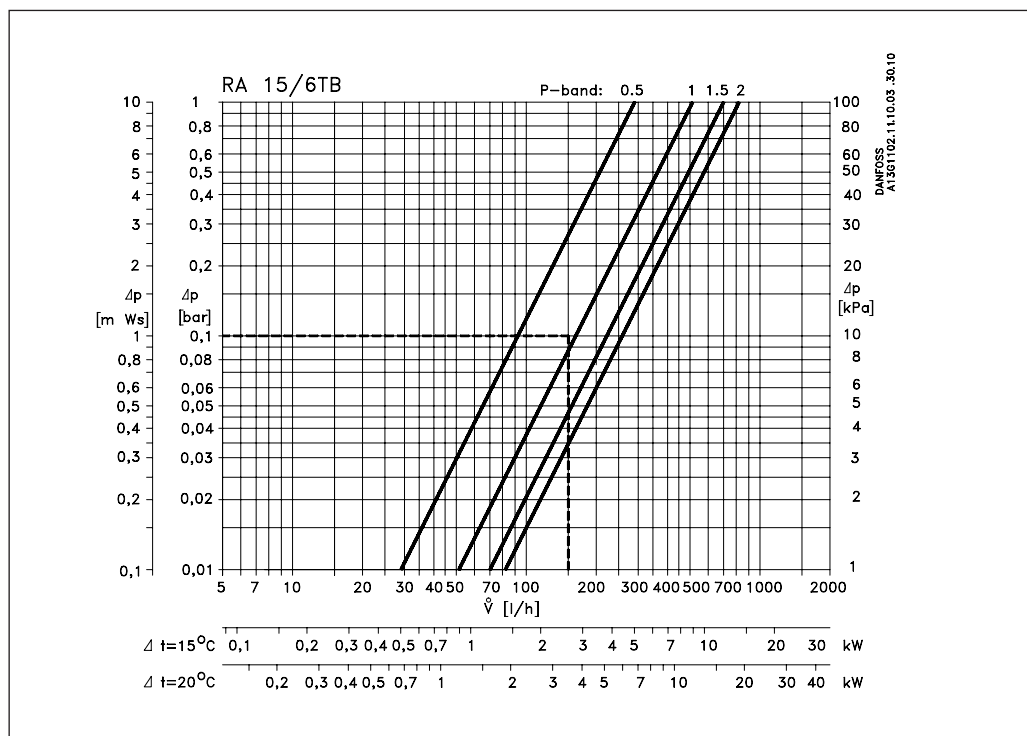
²⁾ Working pressure = Static pressure + differential pressure.

³⁾ Connection cone geometry according to DIN V3838

Accessories

Product	Code no.
Gland seal (10 pcs.) - can be replaced without draining down the system.	013G0290

Capacities in two-pipe systems



Example:
At Δp = 0,1 bar and
V = 150 l/h and RA-sensor the RA 15/6TB operates with a P-band of approx. 1.0 K.

Dimensioning of one-pipe systems

RA 15/6T is designed for circuits to max. 9 KW (8.000 kcal/h) at $\Delta t = 20$ K. With a P-band of 2 K (°C) flow through the radiator is approximately 30%.

Please pay attention to the fact that not all brands of radiators performs as stated in their documentation when used in one pipe systems with bypass valves.

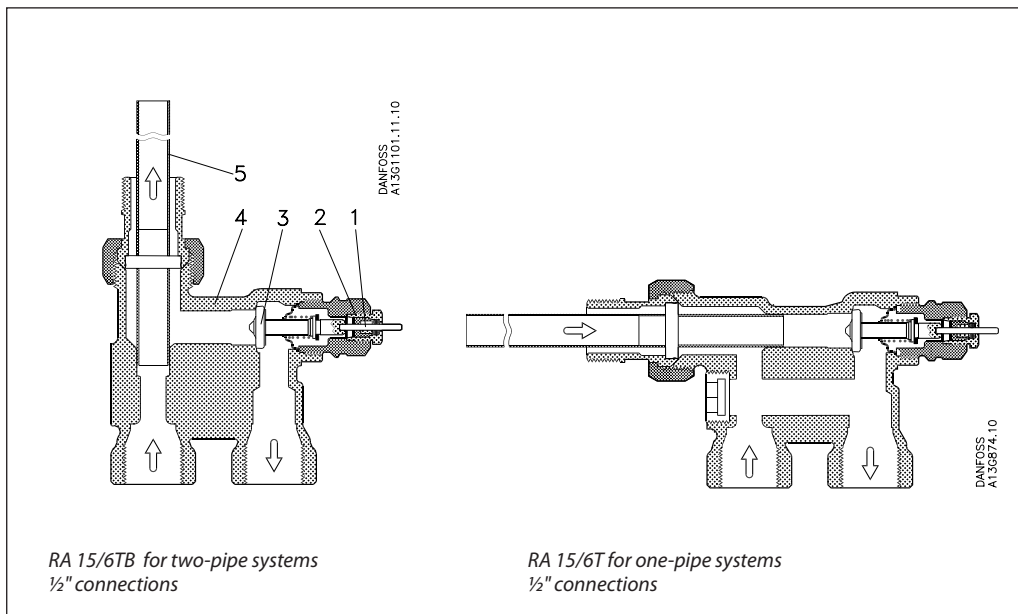
Excess pressure in a riser may be reduced using Danfoss differential pressure controls.

The radiator manufacturer will inform about possible reduction in performance.

Design

- 1. Pressure pin
- 2. O-ring gland seal
- 3. Valve cone
- 4. Valve body
- 5. Lance (distribution pipe)

Valve bodies are nickel plated.



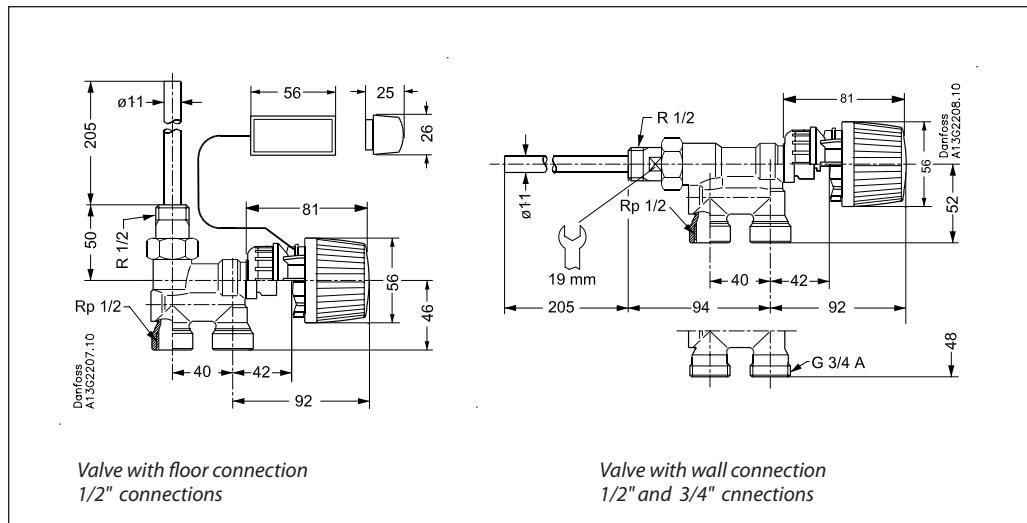
RA 15/6TB for two-pipe systems
1/2" connections

RA 15/6T for one-pipe systems
1/2" connections

Materials in contact with water

Pipe supporting bush	PP
O-ring	EPDM
Valve cone	NBR
Pressure pin	Chrome steel
Lock washer	Tin alloy
Valve body and other metal parts	Ms 58 brass

Dimensions



Valve type	Connection	H ₁	H ₂	H ₃	H ₄	a	b
RA 15/6TB, RA 15/6T	R 1/2 internal thread	16	32	205		R 1/2	
RA 15/6T	G 3/4 external thread	20	27	205	21		G 3/4