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technische import

Produkt informatie

COSTER

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24.07.12 MZ
REV. 01

TWO-PORT FLANGED BALL VALVES PN 16 ; –15...120 °C

2 S Eng.

- **Cast iron body, chromed brass ball**
- **Teflon & viton gaskets**
- **Includes coupling for actuator**

CE

1. APPLICATION

2S two-port valves are designed to control the flow of hot or chilled water in heating and air-handling systems with
maximum working pressure of 1,600 kPa (16 bar).
They are operated by rotary actuators type:
– CVH 63.. - 21.. with fluid temperature 5…120 °C,
– CVH 63.. - 21../T, CVF... , CVS... with fluid temperature –15…120 °C.
Permitted fluids:
– hot water max. 120 °C,
– chilled water min. – 15 °C,
– water with max. 50% glycol,
– water treated with hydrates and phosphates.

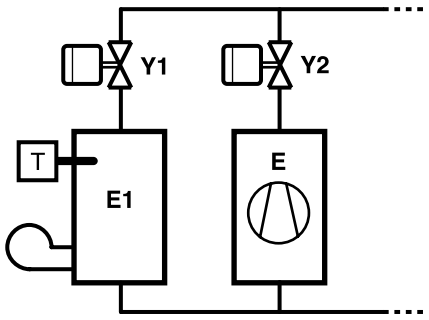
2. MODELS

Code	DN mm	Kvs m^3/h	Actuators **CVH 63.. - 21..** Δ p max.		Actuators **CVF...** Δ p max.		Actuator **CVS 808** Δ p max.	
			kPa	(bar)	kPa	(bar)	kPa	(bar)
2S DN 40	40	230	600	(6)	–	–	–	–
2S DN 50	50	265	600	(6)	–	–	–	–
2S DN 65	65	540	600	(6)	–	–	–	–
2S DN 80	80	873	–	–	600	(6)	–	–
2S DN 100	100	1390	–	–	600	(6)	–	–
2S DN 100S	100	1390	–	–	–	–	1000	(10)
2S DN 125	125	1707	–	–	–	–	1000	(10)
2S DN 150	150	2024	–	–	–	–	1000	(10)
2S DN 200	200	2720	–	–	–	–	1000	(10)

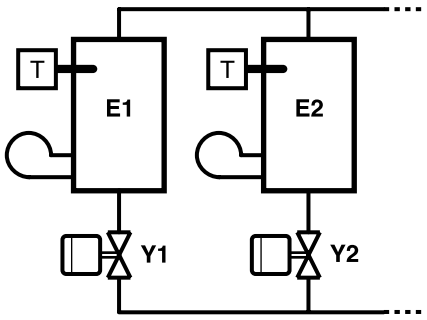
Kvs = flow coefficient: flow in m^3/h with valve open and pressure drop of 100 kPa: 100 kPa = 10 mWG = 1 bar
Δ p max. = maximum differential pressure permitted by actuator.

3. TYPICAL APPLICATION DIAGRAMS

Fan-Coil system



System with boilers in sequence



E – Refrigerator
E1, E2 – Boilers
Y1, Y2 – Shut-off motorised valve

4. TECHNICAL DATA

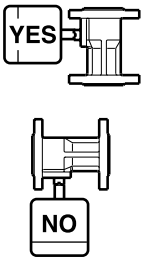
Valve body	G 25 cast iron	Test pressure	2,000 kPa (20 bar)
Ball	hard chromed OT58 brass	Max working pressure.	1,600 kPa (16 bar)
Spindle	stainless steel	Max differ. press. (2SDN40...2SDN100)	600 kPa (6 bar)
Ball seal	PTFE (teflon)	Max differ. press. (2SDN100S...2SDN200)	1000 kPa (10 bar)
Spindle seal	viton O-Ring	Fluid temperature	–15...120 °C
Connections	PN 16 flanged	Run	90°

5. CONSTRUCTION

The valve body is in G25 cast iron with PN 16 flanged connections.
The ball is in hard-chromed OT58 brass, held between two PTFE (teflon) seals which ensure the total absence of let by. The teflon-ball system, besides ensuring a perfect seal, presents the big advantage of being self-cleaning and therefore of keeping the valve free from scale build-up.
The spindle is in stainless steel and the hydraulic seal is ensured by two viton O-Rings.

6. MOUNTING

Before mounting the valve make sure that there is'nt any extraneous matter in the pipework (remains of welding or threading). The pipework must not be subject to vibrations and must be perfectly aligned with the valve unions in order to avoid dangerous strains.
The valve can be installed in any position except with the spindle facing downwards.
Leave enough space on the spindle side for the mounting of the actuator (see section 8).
On 2S DN40...2S DN 200 valves, actuators CVH, CVF or CVS.

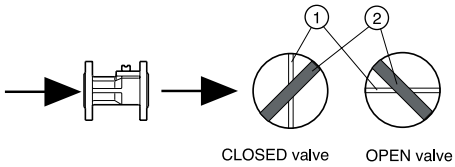


7. OPERATION

The valve operates with a 90° rotary movement.
When the valve is open there is full bore with very low pressure drop, whereas when is closed the seals prevent any let-by.

Position of the ball inside the valve:

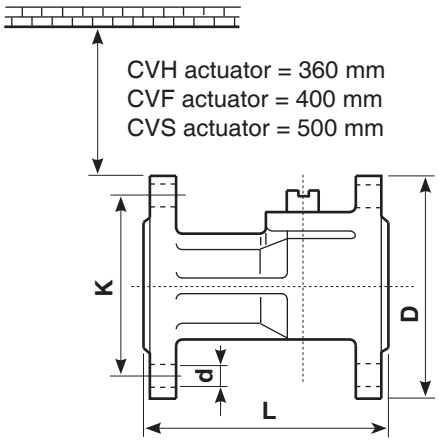
– valves 2SDN40...2SDN100: the position of the ball is indicated by a groove at the head of the coupling spindle.



1 – position indicator of the ball inside the valve
2 – slot for actuator shaft

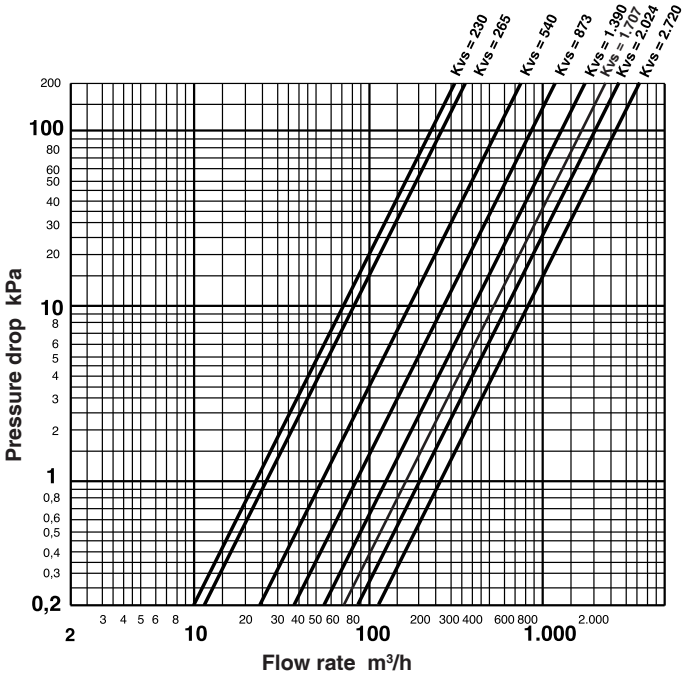
– valves 2SDN100S...2SDN200: to know the position of the ball inside the valve, see data sheet CVS 808 - M141.

8.OVERALL DIMENSIONS



Model	D mm	L mm	K mm	d n° x mm
2S DN 40	150	140	110	4xM16
2S DN 50	165	150	125	4xM16
2S DN 65	180	170	145	4xM16
2S DN 80	200	180	160	8xM16
2S DN 100	220	190	180	8xM16
2S DN 100S	220	190	180	8xM16
2S DN 125	250	200	210	8xM16
2S DN 150	285	210	240	8xM20
2S DN 200	340	400	295	12xD22

9. PRESSURE DROP



Amendment to data sheet

Date	Revision No.	Page	Section	Details of amendment	Firmware version	Software version
24.07.12 RB	**01**	2	6. MOUNTING	Update section		