



bafa

technische import

Produkt informatie

COSTER

COSTER T.E.

TWO-PORT BALL VALVE

-15...120 °C

M 913
07.10.14 MZ
REV. 01

YDG 2.. Eng.



- Female threaded connections
- Body in nickel-plated brass and ball in hard-chromed brass
- Seals in Teflon and Viton
- With connection for actuator

1. APPLICATION

The YDG2 valves are used for closing in hydraulic circuits in heating and cooling systems. They can operate with high pressures given the power of the actuators used.

They are operated by rotary actuators:

- CRB..., CVC..., CVH... and CVF... with fluid temperature 5...120°C,
- CVC.../T and CVH.../T with fluid temperature -15...120°C.

Permitted fluids :

- hot water max. 120°C,
- chilled water min. - 15°C,
- water with max. 50% glycol.

2. MODELS

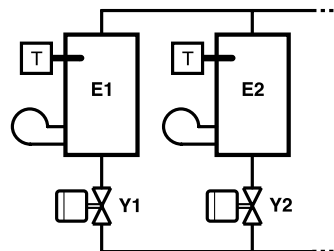
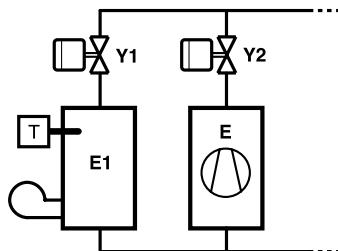
Code	DN connection inches	Nominal pressure PN	Kvs m ³ /h	Actuators CRB... - CVC... Δ p max	Actuator CVH... Δ p max	Actuator CVF... Δ p max
YDG 215	1/2"	40	16,3	kPa (bar) 1000 (10)	kPa (bar) 1000 (10)	— —
YDG 220	3/4"	40	29,5	1000 (10)	1000 (10)	— —
YDG 225	1"	40	43	1000 (10)	1000 (10)	— —
YDG 232	1"1/4	40	89	1000 (10)	1000 (10)	— —
YDG 240	1"1/2	40	230	—	1000 (10)	— —
YDG 250	2"	40	265	—	1000 (10)	— —
YDG 265	2"1/2	25	540	—	1000 (10)	— —
YDG 280	3"	16	873	—	—	1000 (10)
YDG 2100	4"	16	1390	—	—	1000 (10)

Kvs = flow coefficient: flow in m³/h with valve open and pressure drop of 100 kPa.

Δ p max. = maximum differential pressure permitted by actuator.

100 kPa = 10 mWG = 1 bar

3. TYPICAL APPLICATION DIAGRAMS



E – Refrigerator
E1, E2 – Boilers
Y1, Y2 – Motor-operated valves

4. TECHNICAL DATA

Operating pressure:

- DN 1/2"...DN 2" 4000 kPa (40 bar)
- DN 2"1/2 2500 kPa (25 bar)
- DN 3"...DN 4" 1600 kPa (16 bar)

Maximum differential pressure 1000 kPa (10 bar)

Leakage rate nil

Fluid temperature - 15...120 °C

Run 90°

Materials:

- Valve body nickel-plated CW617N brass
- Spindle nickel-plated CW614N brass
- Ball hard-chromed CW617N brass
- Ball seals PTFE (teflon)
- Spindle seals FKM (viton) O-Ring
- Connections female threaded

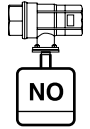
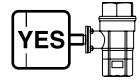
5. CONSTRUCTION

The valve body is in nickel-plated brass with female threaded connections. The ball is in hard-chromed brass, held between two seals in PTFE (teflon) which guarantee the total absence of let-by. The ball-teflon system presents the big advantage of being self-cleaning and therefore of keeping the valve free from scale build-up. The spindle is in nickel-plated brass and is rendered watertight by two O-Rings in viton.



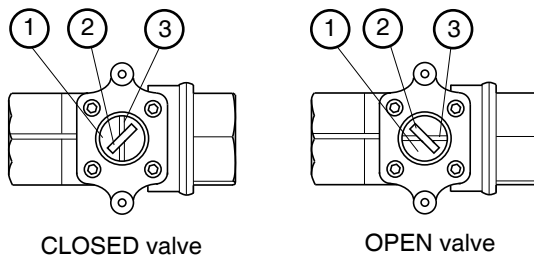
6. MOUNTING

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 mounted in any position except with the spindle facing downwards. Leave enough space on the spindle side for the mounting of actuator (see section 8).



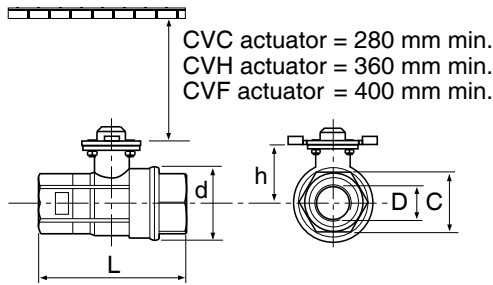
7. OPERATION

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. The position of the ball is indicated by a groove at the head of the coupling spindle.



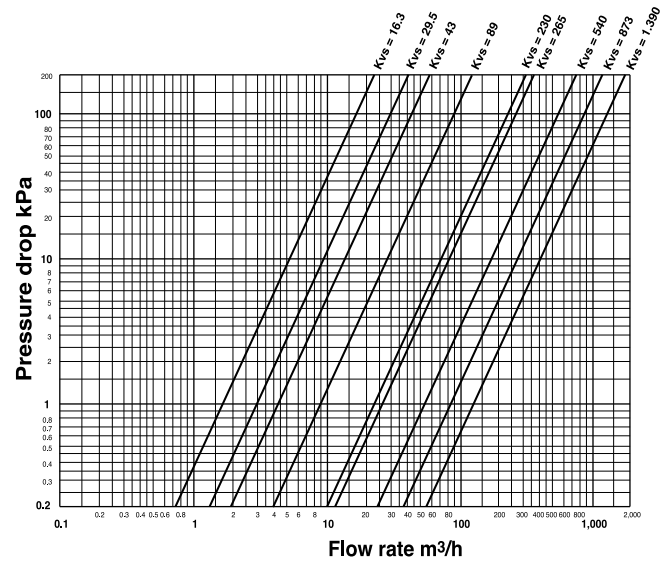
- 1 – actuator to valve coupling
- 2 – slot for actuator shaft
- 3 – position indicator of the ball inside the valve

8. OVERALL DIMENSIONS



Model	DN inches	L mm	d mm	h mm	Ch mm
YDG 215	1/2"	67	33,5	30,5	27
YDG 220	3/4"	76	40	32,5	32
YDG 225	1"	90	49	43	41
YDG 232	1"1/4	102	58,5	46,5	50
YDG 240	1"1/2	114	73	61	55
YDG 250	2"	138	91,5	70,2	70
YDG 265	2"1/2	165	114,5	85	90
YDG 280	3"	188	136	94,5	105
YDG 2100	4"	225	166	116	130

9. PRESSURE DROP



Amendments to data sheet

Date	Revision No.	Page	Section	Amendment description
30.03.06 MZ		1 - 2	various	Update to operating pressure. Update to overall dimensions.
07.10.14 MZ	01	1 - 2	4 - 5 - 7	Update to materials of valve components. Correction of OPEN-CLOSED valve description.