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COSTER

THREE-PORT BALL VALVE PN 6; -15...120 °C

XLG 3.. Eng.

- Female threaded connections
- · Body in nickel-plated brass and ball in hard-chromed brass
- Seals in Teflon and Viton

1. APPLICATION

The XLG3 valves can be used for diverting or mixing water flow in heating or cooling systems.

- They are operated by rotary actuators:
 - CRB ..., CVC... and CVH ... 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 inches	Kvs m³/h	Actuator CRB Δp max.	Actuator CVC Ap max.	Actuator CVH 11 Δp max.	Actuator CVH 052163 Δp max.
			kPa (bar)	kPa (bar)	kPa (bar)	kPa (bar)
XLG 315 XLG 320 XLG 325 XLG 332 XLG 341 XLG 351	1/2" 3/4" 1" 1"1/4 1"1/2 2"	16.31.529.52.7433.9897.916014.826524.5	600 (6) 600 (6) 600 (6) 600 (6) – –	600 (6) 600 (6) 600 (6) 600 (6) –	600 (6) 600 (6) 600 (6) 600 (6) 600 (6) –	600 (6) 600 (6) 600 (6) 600 (6) 600 (6) 600 (6)

= flow coefficient : flow in m^3/h with valve open and pressure drop of 100 kPa. Kvs

 Δp max. = maximum differential pressure permitted by actuator.

100 kPa = 10 mWG = 1 bar

3. ACCESSORIES

Model	Description	DN valve	Data sheet
TMS 500	Hydraulic sealing accessories for XLG 315 valve	1/2"	D01476
TMS 600	Hydraulic sealing accessories for XLG 320 valve	from 3/4" to 1" 1/4	D01476
TMS 700	Hydraulic sealing accessories for XLG 341 - 351 valves	from 1" 1/2 to 2"	D01476

Т N2

M1

F2

4. TYPICAL APPLICATION DIAGRAM

- E1 Boiler
- E2 Hot water reservoir M1 - Anticondensing boiler and hot water reservoir pump
- M2 Heating pump
- Υ - 3-port motorised valves
- N1 Ambient controller
- N2 Hot water reservoir thermostat



Test pressure Working pressure Maximum differential pressure Leakage rate Fluid temperature

1000 kPa (10 bar) 600 kPa (6 bar) 600 kPa (6 bar) nil -15...120 °C

E1

Materials :

- valve body – ball - spindle - ball seal - spindle seal

N1

N1

M2

nickel-plated OT58 brass hard-chromed OT58 brass OT58 brass PTFE (teflon) O-Ring in viton

М2



CE





6. CONSTRUCTION

The valve body is in OT58 nickel-plated brass with threaded female connections. The ball is in OT58 hard-chromed brass, held between two seals in PTFE (teflon) which guarantee the total absence of leakage rate.

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 OT58 brass and is rendered watertight by two O-Rings in viton.

7. 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).

8. OPERATION

The valve operates with a 90° rotary movement.

Through port is full bore with a high flow coefficient; by-pass has a restricted bore with a reduced flow coefficient.

The position of the by-pass flow is indicated by a groove in the head of the coupling spindle and by an indicator plate, firmly secured to the spindle, which permits to locate the position of the ball even when the actuator is mounted.



9. OVERALL DIMENSIONS

10. PRESSURE DROP



Model	DN	a	b	c	d	e
	inches	mm	mm	mm	mm	mm
XLG 315 XLG 320 XLG 325 XLG 332 XLG 341 XLG 351	1/2" 3/4" 1" 1"1/4 1"1/2 2"	64 74 89 100 110 130	33.5 39.5 47 54.5 61.5 73	34,5 43 53 63 77 93	74 74 74 74 74 74 74	70 80 91 105 122 142









