

M 916 03.11.08 MZ

03.11.08 M∠ **REV. 01**



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

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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 Δp max.	Actuator CVH 11 Δp max.	Actuator CVH 052163 Δp max.	
		>	~	kPa (bar)	kPa (bar)	kPa (bar)	kPa (bar)	
XLG 315	1/2"	16.3 1.5		600 (6)	600 (6)	600 (6)	600 (6)	
XLG 320	3/4"	29.5	2.7	600 (6)	600 (6)	600 (6)	600 (6)	
XLG 325	1"	43	3.9	600 (6)	600 (6)	600 (6)	600 (6)	
XLG 332	1"1/4	89	7.9	600 (6)	600 (6)	600 (6)	600 (6)	
XLG 341	1"1/2	160	14.8	_	_	600 (6)	600 (6)	
XLG 351	2"	265 24.5		_	_	_	600 (6)	

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

 $\Delta p \text{ max.} = \text{maximum differential pressure permitted by actuator.}$

100 kPa = 10 mWG = 1 bar

3. TYPICAL APPLICATION DIAGRAM

E1 - Boiler

E2 - Hot water reservoir

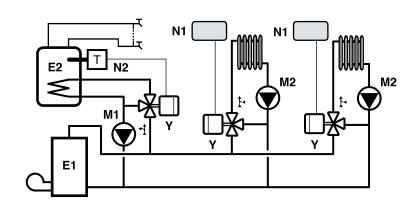
 M1 – Anticondensing boiler and hot water reservoir pump

M2 – Heating pump

Y - 3-port motorised valves

N1 - Ambient controller

N2 - Hot water reservoir thermostat



4. TECHNICAL DATA

Test pressure Working pressure Maximum differential pressure Leakage rate Fluid temperature 1000 kPa (10 bar) 600 kPa (6 bar) 600 kPa (6 bar)

−15...120 °C

Materials :

- valve body
- ball
- spindle
- ball sealspindle seal

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





5. 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.

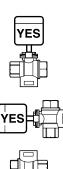
The ball-teflon system presents the big advantage of being self-cleaning and therefore of keeping the valve free from scale build-up.

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

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.

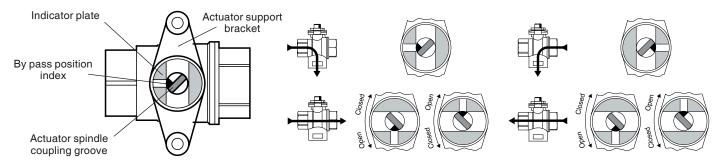
The valve can be mounted in any position except with the spindle facing downwards. Leave enough space on the spindle side for the mounting of actuator (see section 8).



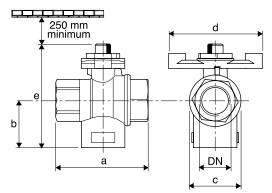
7. OPERATION

The valve operates with a 90° rotary movement.

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.

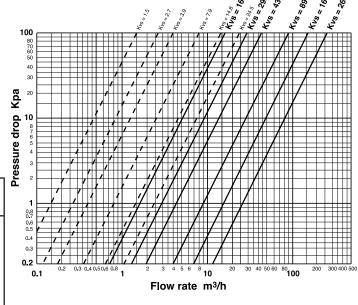


8. OVERALL DIMENSIONS



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

9. PRESSURE DROP



Amendment to data sheet

Amendment to data sneet								
	Data	Revision No.	Page	Section	Amendment description	Versione Firmware	Versione Software	
	03.11.08 MZ	01	2	8. Overall dimensions	Update Overall dimensions's table			



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