

Change-over zone valve, 3-way, Internal thread

- For closed cold and warm water systems
- For switching functions on the water side and 2-point controls in air handling units and heating systems
- · Snap-assembly



## Type overview

Туре	<b>DN</b> []	<b>Rp</b> ["]	<b>kvs</b> [ m³/h]	<b>PN</b> []
C315Q-H	15	1/2	2.5	25
C320Q-J	20	3/4	4	25

### **Technical data**

## **Functional data**

Media	Cold and warm water, water with glycol up to				
	max. 50% vol.				
Medium temperature	2100°C 290°C (with actuator)				
Closing pressure Δps	280 kPa				
Differential pressure Δpmax	280 kPa				
Differential pressure note	50 kPa for low-noise operation				
Leakage rate	air-bubble tight, leakage rate A (EN 12266-1)				
Pipe connectors	Internal thread according to ISO 7-1				
Angle of rotation	90° (Operating range 1590°)				
Installation position	Upright to horizontal (in relation to the stem)				
Maintenance	Maintenance-free				
Housing	Brass body				
Closing element	Chrome-plated brass				
Stem	Brass				
Stem seal	O-ring EPDM				
Valve seat	PTFE, O-ring EPDM				

# Safety notes



**Materials** 

- The valve has been designed for use in stationary heating, ventilation and airconditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The valve does not contain any parts that can be replaced or repaired by the user.
- The valve may not be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- When determining the flow rate characteristic of controlled devices, the recognised directives must be observed.



## **Product features**

Mode of operation The change-over zone valve is adjusted by a rotary actuator. The rotary actuator is

connected by an open-close signal.

**Direct mounting** Tool-free snap-assembly

The actuator can be plugged to the valve with hand pressure (Caution! vertical

movement only). Pins must match the holes on the flange.

The mounting orientation in relation to the valve can be selected in 180° increments.

(possible 2 x)

#### **Accessories**

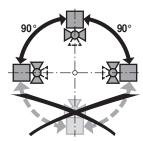
#### Mechanical accessories

Description	Туре
Pipe connector to ball valve DN 15 Rp 1/2"	ZR2315
Pipe connector to ball valve DN 20 Rp 3/4"	ZR2320
Spindle extension CQ for cooling application only	ZCQ-E

### Installation notes

#### Recommended installation positions

The ball valve can be installed upright to horizontal. The ball valve may not be installed in a hanging position, i.e. with the stem pointing downwards.



## Water quality requirements

The water quality requirements specified in VDI 2035 must be adhered to.

Belimo valves are regulating devices. For the valves to function correctly in the long term, they must be kept free from particle debris (e.g. welding beads during installation work).

The installation of suitable strainer is recommended.

#### Maintenance

Ball valves and rotary actuators are maintenance-free.

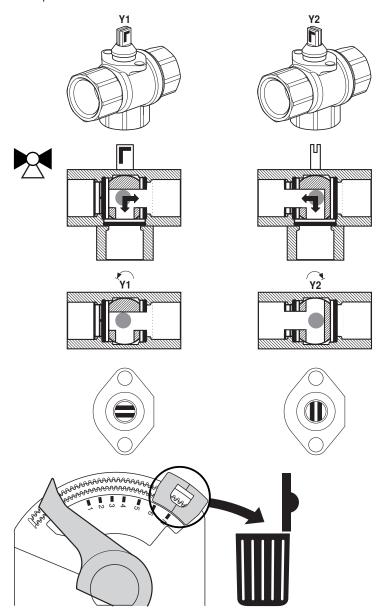
Before any kind of service work is carried out on the actuator, it is essential to isolate the rotary actuator from the power supply (by unplugging the electrical cable). Any pumps in the part of the piping system concerned must also be switched off and the appropriate slide valves closed (allow everything to cool down first if necessary and reduce the system pressure to ambient pressure level).

The system must not be returned to service until the ball valve and the rotary actuator have been properly reassembled in accordance with the instructions and the pipeline has been refilled in the proper manner.



# **Installation notes**

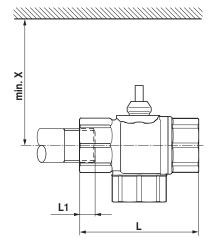
Flow direction Flow possible in both directions.

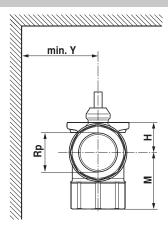




# **Dimensions / Weight**

# **Dimensional drawings**





L1: Maximum screwing depth.

X/Y: Minimum distance with respect to the valve centre.

The actuator dimensions can be found on the respective actuator data sheet.

Туре	<b>DN</b> []	<b>Rp</b> ["]	<b>L</b> [ mm]	<b>L1</b> [ mm]	<b>M</b> [ mm]	<b>H</b> [ mm]	<b>X</b> [ mm]	<b>Y</b> [ mm]	Weight approx. [ kg]
C315Q-H	15	1/2	58	13	32	14.5	110	35	0.21
C320Q-J	20	3/4	70	14	36	16.5	110	35	0.29