



# **ZFCM**

#### Internally threaded 2- and 3-way valves

Valves intended for on/off control of hot or cold water in heating or cooling systems. The valves can only be used together with Regin's RVAFC actuators. The valves are available as both 2- and 3-way models.

- ✓ Size DN15...DN32
- ✓ Kvs value 3.2...10
- ✓ Media temperature 2...94°C
- ✓ Pressure rating PN16
- ✓ Tight closing

#### **Function**

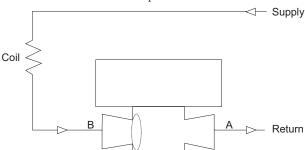
On demand, the valve is opened by a signal from a thermostat (supply voltage on). When the temperature reaches the desired level, the spring return mechanism will force the valve back to closed position.

The sealing ball of the valve closes against the flow on the 2-way valves. In 3-way valves, the ball normally closes towards the coil side (see pictures below).

On the side of the actuator there is a lever for manually opening the valve.

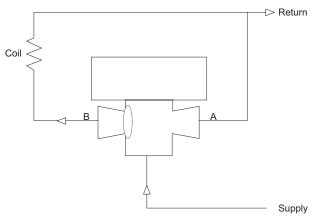
#### Installation

To ensure tight closure of the 2-way valve and to prevent noise when closing, it is to be mounted on the return line of the coil with the inlet on port B.



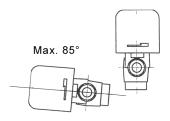
2-way valve

The 3-way valve is of diverting type and is to be mounted on the supply line at the diverting point with outlets both on port A and port B. The port B outlet should be mounted in the direction of the coil, since it is closed using the spring return of the actuator when not under power.



3-way valve

The valves should be mounted with the actuator in an upright or side position (see the picture below).





ZFCM

### Technical data

| Application       | ating systems, cooling systems, fan-coil units, ventilation systems |  |  |
|-------------------|---|--|--|
| Max. leakage      | 0.0 % of the kvs value  |  |  |
| Media             | t water, cold water, glycol-mixed water (max. 50 % glycol)          |  |  |
| Media temperature | 94 °C   |  |  |
| Pressure rating   | PN16 (240 psi)  |  |  |
| Connection        | Internal thread BSP according to ISO 228/1                          |  |  |

### Material

| Body    | Brass CW614N |
|---------|--------------|
| Ball    | NBR          |
| O-rings | EPDM         |

## 2-way valves

| Article   | Nominal diameter | Connection | Kvs                   | Max. diff. pressure | Actuator   |
|-----------|------------------|------------|-----------------------|---------------------|------------|
| ZFCM-215X | DN15             | G1/2"      | 3.2 m <sup>3</sup> /h | 200 kPa (2 bar)     | RVAFC-2302 |
| ZFCM-220X | DN20             | G3/4"      | 4.6 m³/h              | 150 kPa (1,5 bar)   | RVAFC-2302 |
| ZFCM-225X | DN25             | G1"        | 5.7 m <sup>3</sup> /h | 100 kPa (1 bar)     | RVAFC-2302 |
| ZFCM-232X | DN32             | G1 1/4"    | 10 m³/h               | 80 kPa (0,8 bar)    | RVAFC-2302 |

## 3-way valves

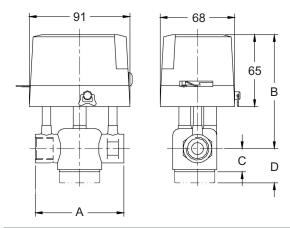
| Article   | Nominal diameter | Connection | Kvs                   | Max. diff. pressure | Actuator   |
|-----------|------------------|------------|-----------------------|---------------------|------------|
| ZFCM-315X | DN15             | G1/2"      | 3.2 m³/h              | 150 kPa (1,5 bar)   | RVAFC-2303 |
| ZFCM-320X | DN20             | G3/4"      | 4.6 m³/h              | 100 kPa (1 bar)     | RVAFC-2303 |
| ZFCM-325X | DN25             | G1"        | 5.7 m <sup>3</sup> /h | 100 kPa (1 bar)     | RVAFC-2303 |
| ZFCM-332X | DN32             | G1 1/4"    | 8.4 m³/h              | 80 kPa (0,8 bar)    | RVAFC-2303 |

### Suitable valve actuators

|   | Article    | Valve  |
|---|------------|--------|
|   | RVAFC-2302 | ZFCM-2 |
| Ì | RVAFC-2303 | ZFCM-3 |



## Dimensions



| Model (valve + actuator) | Α   | В   | С  | D  |
|--------------------------|-----|-----|----|----|
| ZFCM-215X + RVAFC-2302   | 80  | 103 | 21 | -  |
| ZFCM-315X + RVAFC-2303   | 80  | 103 | -  | 29 |
| ZFCM-220X + RVAFC-2302   | 89  | 103 | 21 | -  |
| ZFCM-320X + RVAFC-2303   | 89  | 103 | -  | 32 |
| ZFCM-225X + RVAFC-2302   | 93  | 103 | 23 | -  |
| ZFCM-325X + RVAFC-2303   | 93  | 103 | -  | 37 |
| ZFCM-232X + RVAFC-2302   | 105 | 110 | 30 | -  |
| ZFCM-332X + RVAFC-2303   | 105 | 110 | -  | 45 |

Measurements in mm unless otherwise specified.

