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THREE-PORT BALL ZONE VALVES PN 10; 5...120 °C

HMM 3.. Eng.

Body in brass

• Ball in hard chromed brass

• Male threaded connections with unions

• Teflon and Viton seals



1. APPLICATION

HMM3 valves are designed to control water flow in heating and cooling systems. They are particularly suitable for zone plants, fan-coil plants and for mounting on modular manifolds.

They can be operated by hand or by rotary actuators model CDK and CDR.

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Permitted fluids :

- hot water max. 120 °C,
- chilled water min. 5 °C,
- water with max. 50 % glycol.

2. MODELS

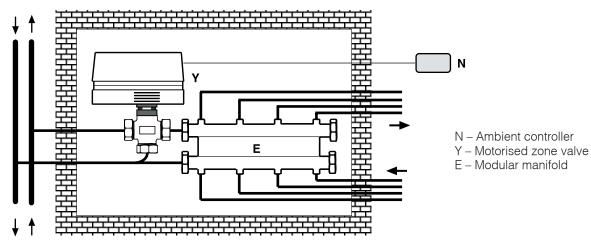
Code	DN body	Valve unions	Pipe unions	Kvs ⁽¹⁾		Suitable actuators	
	mm	inches	inches	m ³ /h		CDK CDR	
3 port HMM 320 HMM 325	20 25	male 1" 1"1/4	male 3/4" 1"	► ↑ 11 25.7	→ 3 6.5	kPa ⁽²⁾ (bar) 600 (6) 600 (6)	sec. ⁽³⁾ 60 60

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

(2) kPa = maximum differential pressure Δp permitted by actuator: 100 kPa = 10 mWG = 1 bar

(3) sec. = time necessary for actuator to make complete valve run.

3. TYPICAL APPLICATION DIAGRAM



4. TECHNICAL DATA

Valve body Spindle Ball Seals : - ball and nut seal - spindle OT58 brass stainless steel hard chromed OT58 brass

PTFE (teflon)

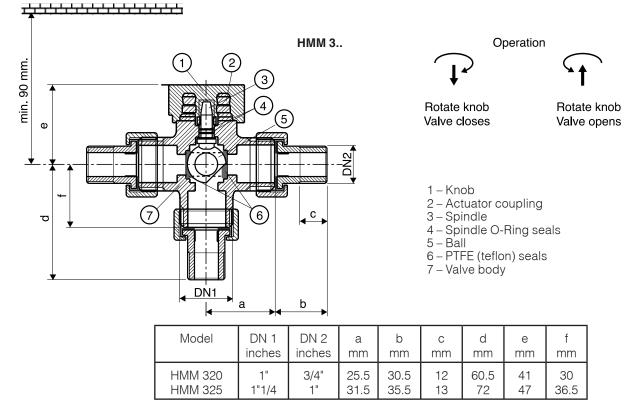
viton O-Ring

Connections Nominal pressure Fluid temperature Run male threaded with unions 1000 kPa (10 bar) 5...120 °C 90°

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5. OVERALL DIMENSIONS



6. CONSTRUCTION

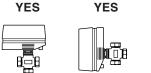
The valve body (5.7) is made in OT58 brass, the spindle (5.3) is in stainless steel and the ball (5.5) is in hard chromed OT58 brass. the ball is enclosed by two seals (5.6) in PTFE (teflon) which ensure the total absence of let-by, while the spindle seal is ensured by two viton O-Rings (5.4).

At the head of the valve is a knob (5.1) for tha manual control of the ball.

7. MOUNTING

7.1 Mounting of the valve

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





Leave enough space on the spindle side for the mounting of actuator (see section 5).

7.2 Installing the actuator on the valve

downwards.

CDK actuator: set the valve in the closed position manually. Pull out the hand grip and then insert and push down the CDK actuator (factory setting: "Closed").

CDR actuator: set the valve in closed position manually. Pull out the hand grip and then, using a suitable tool, set the valve in the open position. Then insert and push down the CDR actuator (factory setting: "Open").

8. OPERATION

The valve operates with a 90° rotary movement.

The throughport is full bore with high flow coefficient, the by pass has narrow cross section with reduced flow coefficient.

The valve can be operated by hand, using the hand grip, or by the CDK or CDR actuator.

A mark on the valve spindle, also visible when the actuator is installed, indicates the position of the valve.

