

# V5013P

## THREE-WAY THREADED GLOBE VALVE

SPECIFICATION DATA



### Application

Three port mixing control valves for:

- hot water
- chilled water
- Domestic Hot Water

in Heating, Ventilating, Air Conditioning Systems,  
Open Circuits

To be operated by

- electric linear actuators as  
ML 6420 / 25  
ML 7420 / 25  
M 6421  
M 7421

### Features

- Bronze body with BSPT-threaded connections.
- Stainless steel stem and brass plug.
- Low seat leakage rate ( $\leq 0.05$  percent of  $K_{vs}$ ).
- Spring-loaded, self-adjusting packing.
- Accurate positioning to ensure state of the art temperature control.
- Sizes range from 1-1/4 in. to 2 in.

### Specifications

|                                  |                                                       |          |
|----------------------------------|-------------------------------------------------------|----------|
| Action:                          | Stem up to close port A-AB                            |          |
| Nominal pressure rating:         | 20 bar (300 psi)                                      |          |
| Flow characteristic:             | See Fig. 2                                            |          |
|                                  | Equal percentage port A-AB                            |          |
|                                  | Linear port B-AB                                      |          |
| Rangeability:                    | 50:1                                                  |          |
| Leakage rate:                    | $\leq 0.05\%$ of $k_{vs}$                             |          |
| Stroke:                          | 20 mm                                                 |          |
| Valve body:                      |                                                       |          |
| Pipe connections:                | Internal BSPT-threaded                                |          |
| Material:                        | Bronze                                                |          |
| Dimensions:                      | See Fig. 1                                            |          |
| Trim:                            |                                                       |          |
| Seat:                            | Integral brass (upper)<br>Replaceable brass (lower)   |          |
| Plug:                            | Brass                                                 |          |
| Stem:                            | Stainless steel                                       |          |
| Packing:                         | Spring loaded carbon fiber<br>reinforced PTFE V-rings |          |
| Medium temperature and pressure: |                                                       |          |
| Water                            | 2 to 120 °C max.                                      | 20 bar   |
|                                  | 120 to 170 °C max.                                    | 12.8 bar |

## Sizes and flow capacities

| Order Number | Valve size | K <sub>Vs</sub> |
|--------------|------------|-----------------|
| V5013P1002   | DN32       | 16              |
| V5013P1010   | DN40       | 25              |
| V5013P1028   | DN50       | 40              |

## Installation

Water should meet VDI2035 requirements.

Do not install valve with stem below the horizontal.

Fluid flow must correspond with the arrow direction on the valve body.

The installation of a strainer is strongly recommended.

## Spare Parts

Repair packing kit

DN32: Order number 88609014-1

DN40...50: Order number 88609014-2

## Close-off Pressure Ratings in kPa

### Electric Actuators

| Actuator                           |       | Valve size |      |      |      |      |      |
|------------------------------------|-------|------------|------|------|------|------|------|
| Type                               | Force | DN15       | DN20 | DN25 | DN32 | DN40 | DN50 |
| ML6420 / ML6425<br>ML7420 / ML7425 | 600N  | 1600       | 1600 | 1000 | 700  | 460  | 260  |

# Dimensions

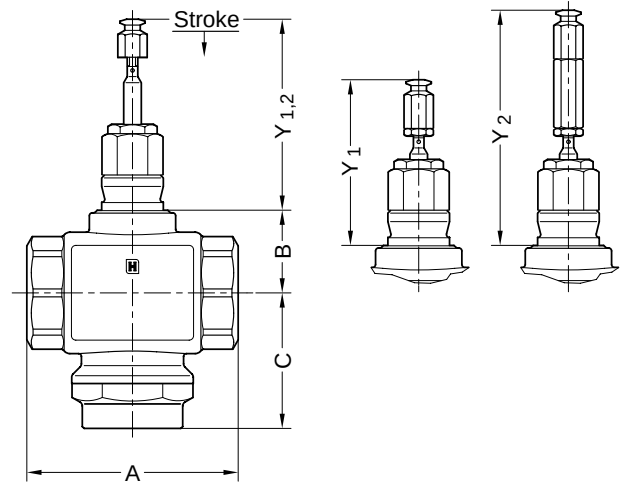


Fig. 1

| Valve<br>Size | A   | B  | C  | Y <sub>1</sub> | Y <sub>2</sub> * |
|---------------|-----|----|----|----------------|------------------|
|               |     |    |    | Stem up        |                  |
| DN32          | 106 | 40 | 73 | 107            | 151              |
| DN40          | 120 | 46 | 77 |                |                  |
| DN50          | 134 | 46 | 84 |                |                  |

For Actuator dimensions please refer to:

ML6420 / ML6425 ENOC-0623  
ML7420 / ML7425 ENOC-0624

# Flow characteristic

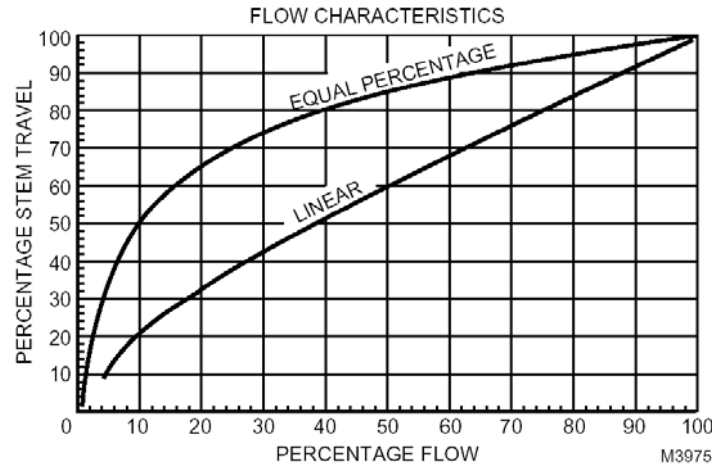


Fig. 2. Equal percentage and linear flow characteristics.

**Honeywell**

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