

Seat valve, PN16

Internal threaded seat valves, stroke 5.5mm



2-port



3-port

VA2T5 / VA3T5...

Application

Suitable for use as control valves in small to medium heating, ventilating and air conditioning plants for low-pressure hot water and chilled water systems with permissible fluids as:

- Water: Max. 2°C ...120°C
- Domestic water
- Water with glycol (up to a maximum of 50% as anti-freeze)

Design features

- 3-port valves can be used in mixing or diverting application.
- The compact size makes it perfectly suited for installations where space is limited.
- Equal-percentage flow characteristics
- Maintenance free low friction spindle sealing.
- Threaded valve neck for fitting actuator.
- Screwed knob for manual operation.

Types and operating data

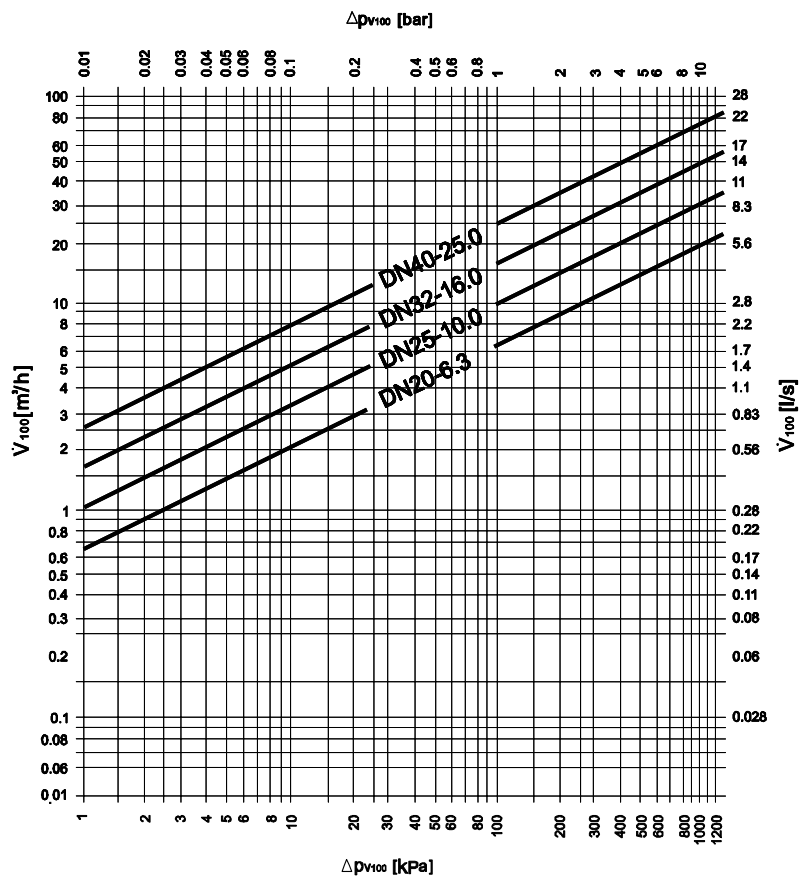
2-port seat valves

| Type * | DN | k_{vs} m ³ /h | Sv | Actuators M5-400 $\Delta p_{max}^{1)}$ (bar) |
|-------------|----|-------------------------------|------|---|
| VA2T5-015-G | 15 | 6.3 | >100 | 3 (1) |
| VA2T5-020-A | 20 | 6.3 | >100 | 3 (1) |
| VA2T5-025-A | 25 | 10.0 | >100 | 3 (1) |
| VA2T5-032-A | 32 | 16.0 | >100 | 2 (1) |
| VA2T5-040-A | 40 | 25.0 | >100 | 2 (1) |

3-port seat valves

| Type * | DN | k_{vs} m ³ /h | Sv | Actuators M5-400 $\Delta p_{max}^{1)}$ (bar) |
|------------|----|-------------------------------|------|---|
| VA3T5-015G | 15 | 6.3 | >100 | 3 (1) |
| VA3T5-020 | 20 | 6.3 | >100 | 3 (1) |
| VA3T5-025 | 25 | 10.0 | >100 | 3 (1) |
| VA3T5-032 | 32 | 16.0 | >100 | 2 (1) |
| VA3T5-040 | 40 | 25.0 | >100 | 2 (1) |

¹⁾ The Δp_{max} shown is the differential pressure limitation where the actuator can still close the valve, the figure in the bracket is the recommended Δp_{max} under normal operation of the valve.



- k_{vs} Nominal flow
- Sv Range ability to VDI2173
- V_{100} Nominal flow rate at Δp_{v100}
- Δp_{v100} Pressure differential across the fully open valve

3-port seat valve used as a mixing or diverting valve



Used as a mixing valve: From II and III to I
 Used as a diverting valve: From I to II and III

Ordering information

When ordering, please give quantity, designation and type code.

Example: 1pc, DN25 three-port seat valve, PN16, VA3T5-025

The fittings are to be ordered separately if required. They are also packed separately.

Technical data

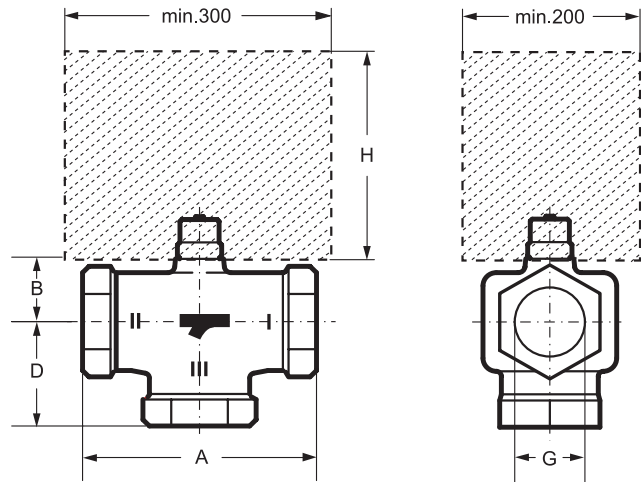
| | | |
|-----------------------------|--------------|--|
| Nominal pressure | | PN16 |
| Valve characteristic | | |
| 2-port valve | | 0...30% Linear 30%...100% Equal percentage ($n_{gl}=3$) |
| 3-port valve - Through-port | | 0...30% Linear 30%...100% Equal percentage ($n_{gl}=3$) |
| - Bypass | | Linear |
| Leakage * | | |
| 2-port valve | | Max. 0.2% of k_{vs} |
| 3-port valve - Through-port | | Max. 0.2% of k_{vs} |
| - Bypass | | Max. 2% of k_{vs} |
| Material | - Valve body | Bronze |
| | - Plug | Brass |
| | - Spindle | Stainless steel |
| Operating pressure | | Max. 1600 kPa (16 bar) |
| Thread dimension | -VA2T5/VA3T5 | Rp thread to ISO228/1 |
| Stroke | | 5.5mm |
| Weight | | See "Dimensions" |

* Test under differential pressure of 1 bar

Dimensions

| DN | | Dimension in mm | | | | | | | |
|----|--------|-----------------|------|------|------|----------|-------|--------------|--------|
| mm | inches | A | B | C | D | G | Hmin. | Weight in kg | |
| | | mm | mm | mm | mm | | mm | 2-port | 3-port |
| 15 | 3/4" | 100 | 32.5 | 38.5 | 50 | Rp3/4" | 200 | 0.9 | 1.2 |
| 20 | 3/4" | 100 | 32.5 | 38.5 | 50 | Rp3/4" | 200 | 1.1 | 1.2 |
| 25 | 1" | 105 | 32.5 | 38.5 | 52.5 | Rp1" | 200 | 1.3 | 1.5 |
| 32 | 1 1/4" | 115 | 39.5 | 38.5 | 57.5 | Rp1 1/4" | 200 | 1.9 | 2.2 |
| 40 | 1 1/2" | 140 | 39.5 | 44 | 64 | Rp1 1/2" | 200 | 3.2 | 3.5 |

VA3T5



VA2T5

