

Seat valve, PN16

Internal threaded seat valves, stroke 20mm



2-port



3-port

VA2T/VA3T...

Application

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

- Water: Max. -25°C ... 120°C (spindle heater required for fluid temperature < 0°C)
- Domestic water
- Water with glycol (with up to a maximum of 50% as anti-freeze)

Design features

- Low leakage rate for best energy saving.
- 3-port valve can be used in mixing or diverting application.
- 20mm stroke valves design with different adaptors for the most common makers of actuators.
- Maintenance free low friction spindle sealing.
- The sealing gland can be replaced without removing the valve.

Types and operating data

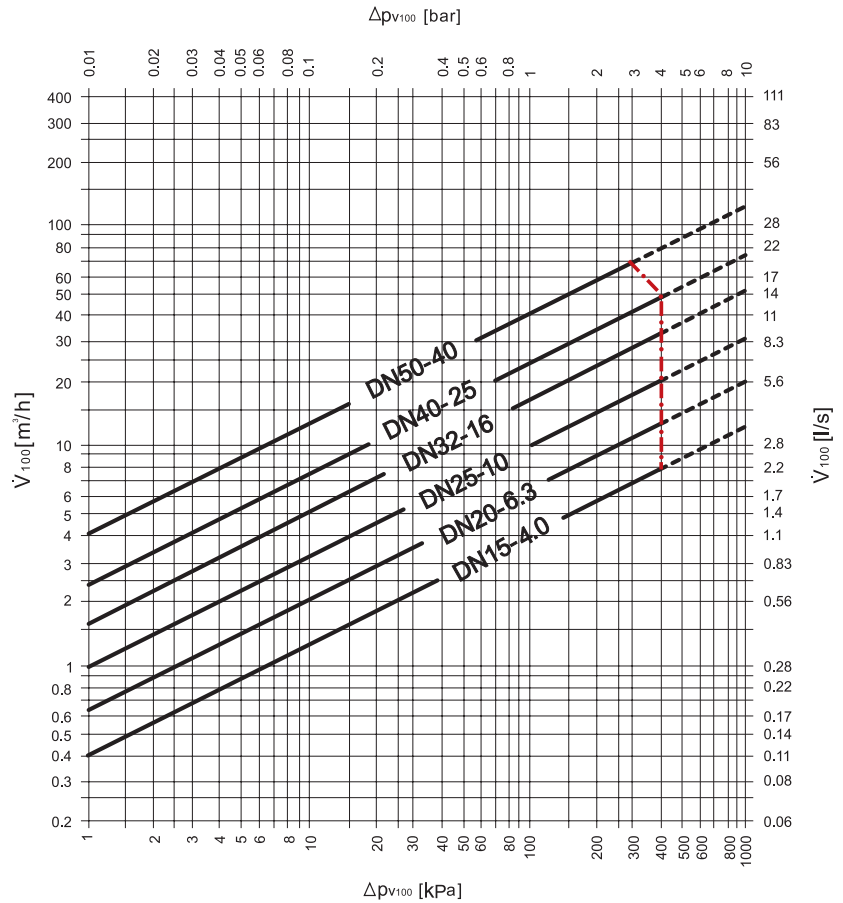
2-port seat valves

Type *	DN	k_{vs} m ³ /h	Sv	Δp_{max} with actuator ¹⁾ (bar)	
				M2-400S	M2-800
VA2T-015-E	15	4.0	>100	6 (1)	16 (1)
VA2T-020-E	20	6.3	>100	6 (1)	16 (1)
VA2T-025-E	25	10.0	>100	6 (1)	16 (1)
VA2T-032-E	32	16.0	>100	4 (1)	8 (1)
VA2T-040-E	40	25.0	>100	2 (1)	5 (1)
VA2T-050-E	50	40.0	>100	2 (1)	5 (1)

3-port seat valves

Type *	DN	k_{vs} m ³ /h	Sv	Δp_{max} with actuator ¹⁾ (bar)	
				M2-400S	M2-800
VA3T-015-E	15	4.0	>100	6 (1)	16 (1)
VA3T-020-E	20	6.3	>100	6 (1)	16 (1)
VA3T-025-E	25	10.0	>100	6 (1)	16 (1)
VA3T-032-E	32	16.0	>100	4 (1)	8 (1)
VA3T-040-E	40	25.0	>100	2 (1)	5 (1)
VA3T-050-E	50	40.0	>100	2 (1)	5 (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, DN40 three-port seat valve, PN16, VA3T-040-E

Technical data

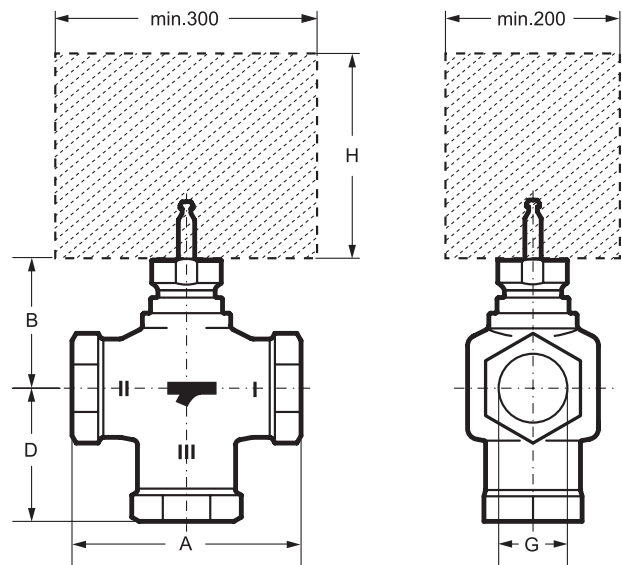
Nominal pressure		PN16
Valve characteristic		
2-port valve		0...30% Linear 30%...100% Equal percentage ($n_{gl}=3$)
3-port valve	- Through-port	0...30% Linear 30%...100% Equal percentage ($n_{gl}=3$)
	- Bypass	Linear
Leakage *		
2-port valve		Max. 0.02% of kvs
3-port valve	- Through-port	Max. 0.02% of kvs
	- Bypass	Max. 2% of kvs
Material	- Valve body	Bronze
	- Plug	Brass or bronze
	- Spindle	Stainless steel
	- Stem gland seal	EPDM O-ring
Operating pressure		Max. 1600 kPa (16 bar)
Thread dimension	- VA2T/VA3T	Rp thread to ISO228/1
Stroke		20mm
Weight		See "Dimensions"

* Test under differential pressure of 1 bar

Dimensions

DN		A	B	C	D	G	Hmin.	Dimension in mm	
Mm	inches	mm	mm	mm	mm		mm	Weight in kg	
								2-port	3-port
15	1/2"	102	68	42	72	Rp1/2"	500	1.2	1.3
20	3/4"	102	68	42	72	Rp3/4"	500	1.2	1.3
25	1"	105	68	48	78	Rp1"	500	1.4	1.6
32	1 1/4"	120	68	41	82	Rp1 1/4"	500	2.0	2.3
40	1 1/2"	140	76	45	82	Rp1 1/2"	500	3.2	3.5
50	2"	155	76	53	90	Rp2"	500	4.8	5.0

3 Port



2 Port

