



Threaded Seat Valves made of bronze, stroke 5.5mm

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 valve can be used in mixing or diverting application.
- Maintenance free low friction spindle sealing.
- With threaded valve neck for fitting actuator
- With manual setting knob (supplied as standard).

Technical Data

Nominal Pressure		PN16
Valve Characteristic		
2-port valve		Linear
3-port valve	- Through-port	Linear
	- Bypass	Linear
Leakage		
2-port valve		Max. 0.02% of K_{vs}
3-port valve	-Through-port	Max. 0.02% of K_{vs}
	-Bypass	Max. 2% of K_{vs}
Material	- Valve Body	Bronze
	- Plug	Brass
	- Spindle	Stainless Steel
Operating Pressure		Max.1600kPa (16bar)
Thread dimension – Valve		To ISO228/1
	- Fitting	To ISO7/1
Stroke		5.5mm
Weight		see "Dimensions"

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

Example: 1pc, DN25 three-port seat valve, PN16.
3VG 25.

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

Types and operating data

2-Port Seat Valves

3-Port Seat Valves

Types	DN	K_{vs} m ³ /h	Sv	Actutators EM51 (kPa)		Fitting	Types	DN	K_{vs} m ³ /h	Sv	Actutators EM51 (kPa)		Fitting
				ΔP_{max}	ΔP_s						Mixing ΔP_{max}	Diverting ΔP_s	
2VG15	15	3.0	>100	300	400	FG15...	3VG15	15	3.0	>100	300	300	FG15...
2VG20	20	5.0	>100	300	400	FG20...	3VG20	20	5.0	>100	300	300	FG20...
2VG25	25	7.5	>100	200	400	FG25...	3VG25	25	7.5	>100	200	200	FG25...
2VG32	32	12.5	>100	200	400	FG32...	3VG32	32	12.5	>100	200	200	FG32...

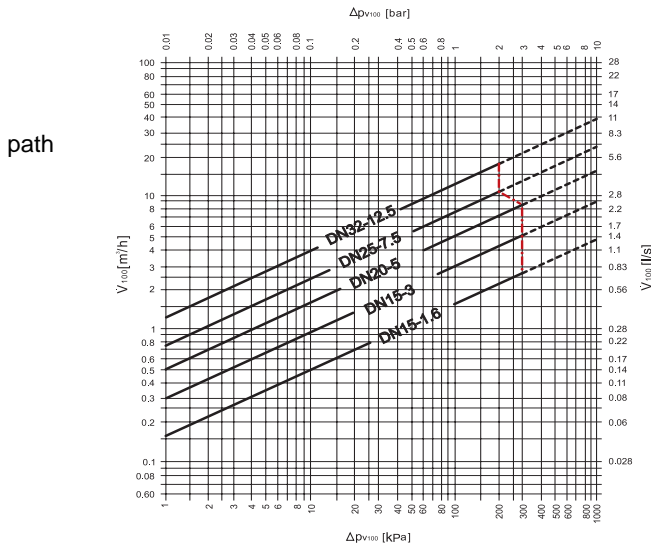
Note: For information on actuator, refer to technical data sheet, TAC/EM51.

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



- k_{vs} Nominal flow
- S_v Range ability to VDI2173
- Δp_{max} Max. permitted pressure differential across control in relation the full stroke
- Δp_s Max. permitted differential pressure at which the valve still closes against the pressure
- V_{100} Nominal flow rate at Δp_{V100}
- Δp_{V100} Pressure differential across the fully open valve

Accessories (Optional)

- FG...Rc** Coupling sets made of brass with taper thread, complete with and
- FG...Rp** Same as FG...Rc, except with parallel thread
- FG...NPT** Same as FG...Rc, but with NPT thread

Dimensions (in mm)

DN mm inches	A mm	AA mm	B mm	C mm	D mm	E mm	G	Hmin. mm	Weight in kg		
									2VG	3VG	FG...
15 1/2"	85	135	33.0	73	37	22.5	G1"	200	1.0	0.8	0.15
20 3/4"	100	150	50.0	76	59	30.5	G1 1/4"	200	1.1	0.9	0.23
25 1"	105	160	52.5	81	62	32.5	G1 1/2"	200	1.3	1.0	0.26
32 1 1/4"	105	168	52.5	84	62	39.5	G2"	200	1.9	1.6	0.44

