Seat Valve, PN16
2VF-3VF

2VF

3VF

PN 16 Flange Seat Valve made of Cast Iron, stroke 20/40 mm.

Application

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

- Water Max. –15°C … 120° C (spindle heater required for fluid temperature < 0°C)
- Domestic Water
- Water with glycol (with up to a max. of 50% as anti-freeze

Design features

Energy saving with tight shut off through soft sealing.

- 3-port valve can be used in mixing or diverting application
- 20/40 mm stroke valves design compatible with Forta actuator
- Maintenance free low friction spindle sealing
- The sealing gland can be replaced without removing the valve

Technical Data

Nominal Pressure		PN16
Valve Characteristic		
	2-port valve	0..30% Linear 30%…100% Equal % (n_{gl}=3)
	3-port valve –Through-port	0…30% Linear 30%…100% Equal % (n_{gl}=3)
	–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. 0.2% of K_{vs}
Material	- Valve Body	Cast iron GG20
	- Plug	Bronze
	- Spindle	Stainless Steel
	- Stem Gland Seal	EPDM O-ring
Operating Pressure		Max. 1600kPa (16bar)
Flange connection		To ISO7005
Stroke	- Up to DN80	20mm
	- DN100 .. DN150	40mm
Weight		see “Dimensions”

Ordering information

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

Example: 1pc, DN80 three-port seat valve, PN16.
Model 3VF80

Types and operating data

2-Port Seat Valves

Types	DN	K_{vs} m^3/h	Sv	Actutators M800 (kPa) ΔP_{max}	ΔP_S
2VF65	65	52	>100	100	200
2VF80	80	79	>100	100	120
2VF100	100	124	>100	100	100
2VF125	125	200	>100	100	100
2VF150	150	300	>100	100	100

3-Port Seat Valves

Types	DN	K_{vs} m^3/h	Sv	Actutators M800 (kPa) ΔP_{max}	ΔP_S
3VF65	65	52	>100	100	100
3VF80	80	79	>100	100	100
3VF100	100	124	>100	100	70
3VF125	125	200	>100	100	60
3VF150	150	300	>100	100	50

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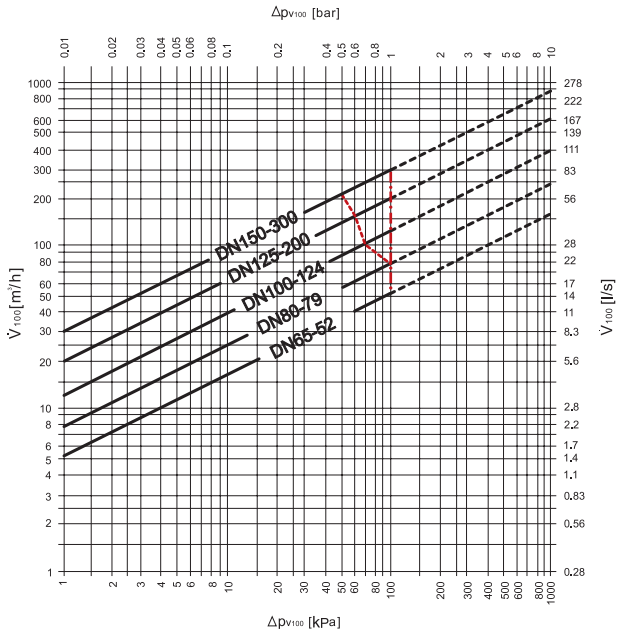
3 port seat valve used as a mixing or diverting valve

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
Sv	Range ability to VDI2173
$\triangle p_{max}$	Max. permissible differential pressure across closed valve
$\triangle p_s$	Max. permitted differential pressure at which the valve still closes against the pressure
V 100	Nominal flow rate at $\triangle p_{v100}$
$\triangle p_{v100}$	Pressure differential across the fully open valve

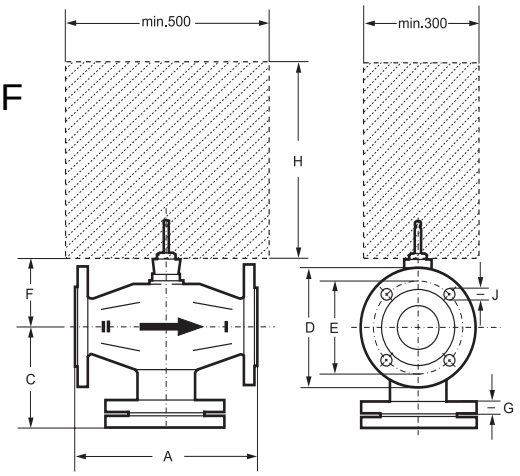
Accessories (Optional)

SV12	Spindle heating element for valve with stroke 20mm, 24V a.c.
SV13	Spindle heating element for valve with stroke 40mm, 24V a.c.

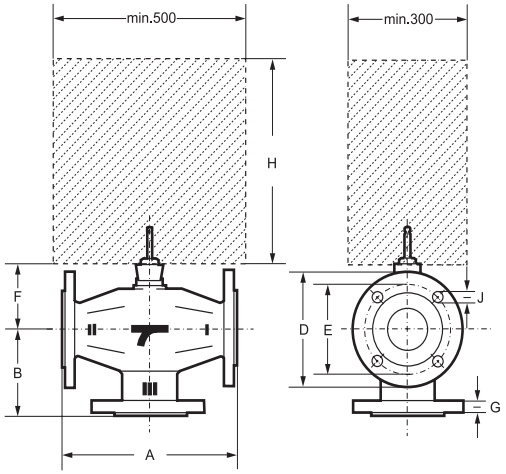
Dimensions (in mm)

DN mm	DN inches	A mm	B mm	C mm	D mm	E mm	F mm	J mmØ	G mm	Hmin. mm	Weight in kg 2VF…	Weight in kg 3VF…
65	$2^1/_2$”	290	140	172	185	145	106	(4x)19	20	500	24.4	20.3
80	3”	310	150	184	200	160	107	(8x)19	22	500	31.5	25.6
100	4”	350	150	186	220	180	150	(8x)19	24	500	40.8	33.8
125	5”	400	170	208	250	210	165	(8x)19	26	500	58.5	48.6
150	6”	480	200	238	285	240	179	(8x)24	26	500	82.8	69.6

2VF



3VF



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