



FLANGED GLOBE VALVE BODIES - STROKE 16,5 mm

VFSF

APPLICATION AND USE

VFZ valve bodies are used in HVAC systems to control fluid in heating, cooling, refrigeration, ventilation in civil or industrial plants. Valves are fitted with female threaded connections in 2 and 3-way. 3-way valves are used in mixing mode, they can be used in diverting mode reducing the max differential pressure value by 50%. Do not use the bypass (angle way) as control port.

VFSF are motorized by SE6 series electric actuators.

TYPE		DN	KVs m ³ /h	STROKE mm	MAX DIFF. PRESS. bar
2-WAY	3-WAY				
VFSF220	VFSF320	20	6.3	16.5	2.2 (11.0)*
VFSF225	VFSF325	25	10.0	16.5	2.2 (7.0)*
VFSF232	VFSF332	32	16.0	16.5	2.2 (4.4)*
VFSF240	VFSF340	40	25.0	16.5	2.2 (2.7)*
VFSF250	VFSF350	50	40.0	16.5	2.2 (2.2)*

(*) the values in the brackets are the max diff. pressure when valve is fully closed and actuator is still able to open or close the valve with security.
the values outside the brackets are the suggested max pressure drop (valve fully open)

TECHNICAL FEATURES

Nominal pressure: PN16
2F-3F: direct way equal-percentage
3F: angle way linear
Leakage:
2F-3F: direct way 0...0.05% of KVs
3F: angle way 0...1% of KVs
Connections: flanged
Control stroke: 16.5 mm (max 18.3)
Rangeability: 50:1
Fluids: water: temperature max 130°,
 temperature min. -10 °C
Dimensions: see relevant table
Weight: see relevant table

WORKING

When stem is up, the direct way is closed, with stem is down direct way is open.

MANUFACTURING CHARACTERISTICS

- Valve body is made of G25 cast iron.
- Plug is made of brass with Contoured-type profile on direct way and V-port on angle way.
- Stem is made of CrNi steel with threaded M8.
- Stem packing is made of NOK O-ring and nitrile rubber.

INSTALLATION

PIPING CONNECTIONS

Make the piping connections according to flow directions indicated on valve body as the following drawings.

AB is always the output. Input is A for 2-way valve, A and B for 3-way valve.

VALVE MOUNTING

Before mounting the valve body be sure that the pipes are clean and free of soldering scraps. Pipes must be lined up squarely with the valve at each connection and free of vibrations. Install the valve/ actuator in the vertical or horizontal position, never at upside down. Leave sufficient clearance to facilitate the dismantling of actuator from the valve body for maintenance purpose. The valve must not be installed in an explosive atmosphere or in places in which temperature and humidity are outside ranges indicated on the data sheet. Valve must not be subjected to steam or water jets or dripping liquid. 3-way valve must be used as mixing valve (2 inlets 1 output). If the valve is used in diverting way (1 inlet 2 outputs), the max differential pressure indicated in the data sheet must be reduced by 50%.

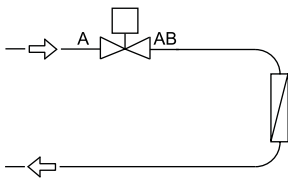


fig.1
2-way

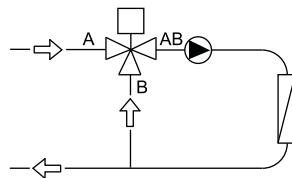


fig.2
3-way mixing used in mixing application toward user

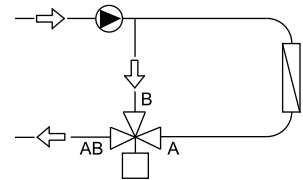
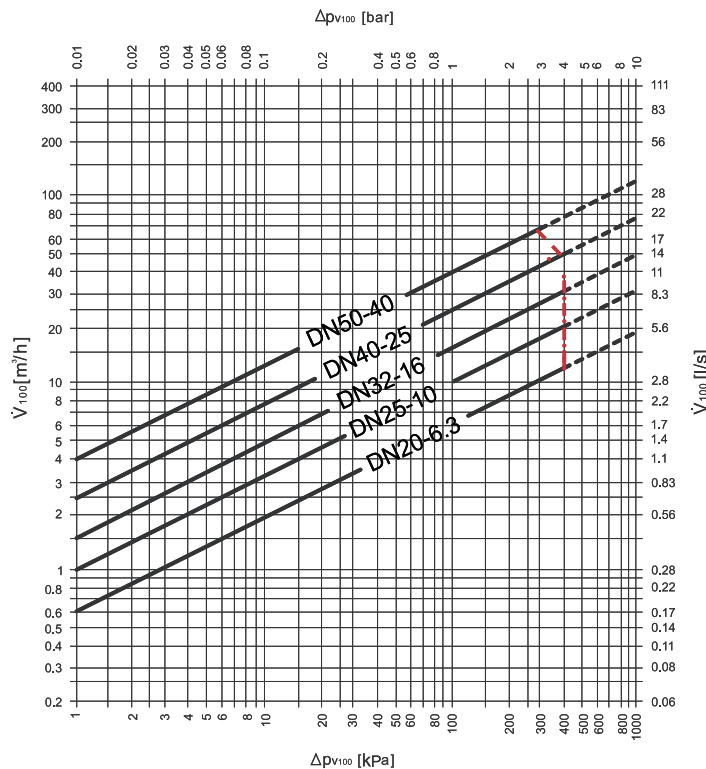


fig.3
3-way mixing used in diverting application toward user

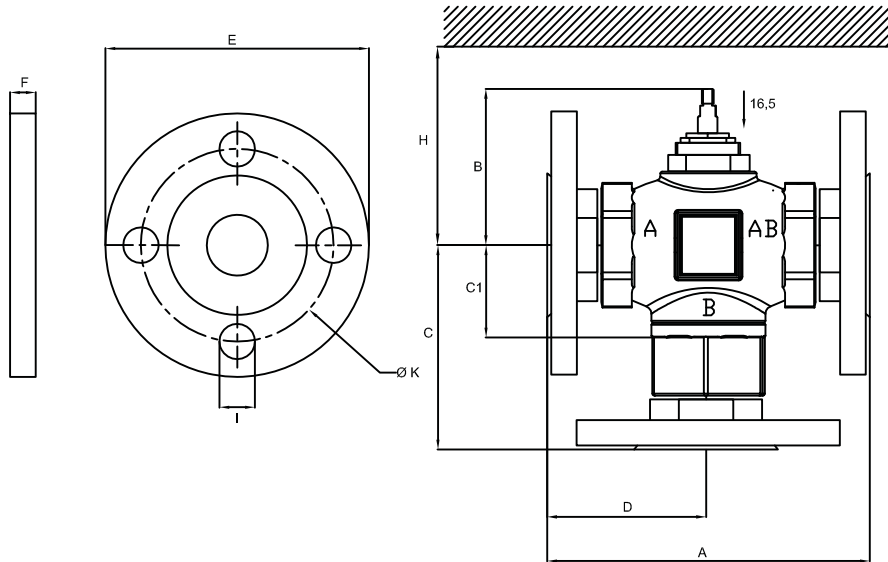
CONTROL DROP DIAGRAM



KVs nominal flow rate
V 100 nominal flow rate at Δp_{V100}
 Δp_{V100} differential pressure drop across the valve fully open



OVERALL DIMENSIONS (mm)



DN mm	A	B	C	C1	D	E	F	H	I	K	2F kg	3F kg
20	144	79.0	91.0	40.5	72.0	105	11.0	305	14	75	2.7	3.7
25	150	86.5	97.0	42.0	75.0	115	12.0	310	14	85	3.5	4.7
32	172	89.5	108.0	47.5	86.0	135	13.0	315	18	100	4.8	6.5
40	192	94.0	115.0	55.0	96.0	145	13.5	320	18	110	6.6	8.7
50	218	101.5	126.5	62.5	109.0	165	15.0	325	18	125	9.5	12.6