

ANSI 125, Fan Coil Unit Valves

Specifications subject to change without notice. | 1st Issue rev. I, 11/2018, DBL216e | USA 200204 | Page 1 of 4



MODEL	DESCRIPTION	SIZE	FLOW COEFFICIENT Cv (Kv)
VSXT..	2-way valve	1/2-3/4"	0.29-6.94 (0.25-6)
VMXT..	3-way valve; 4 angle way	1/2-3/4"	0.29-6.94 (0.25-6) direct 0.29-4.62 (0.25 - 4) angle
VTXT..	3-way valve w/built-in by-pass; 4 angle way	1/2-3/4"	0.29-6.94 (0.25-6) direct 0.29-4.62 (0.25-4) angle

V.XT
(VSXT-VMXT)



APPLICATION AND USE

V.XT series valves are used for hot and chilled water control in two- or four-pipe fan coil units, zone plants, solar plants, small re-heaters and dehumidifiers, in electric/electronic temperature control systems. They are motorized by MVTx03S actuators.

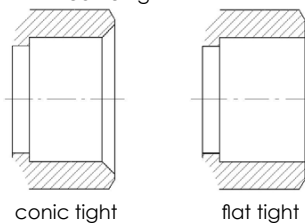
MANUFACTURING CHARACTERISTICS

Brass valve body. Fortron plug with EPDM double OR. Stainless steel stem. Stem packing with EPDM double OR. All models are normally closed, i.e. the action of the valve spring makes the plug move to the upper seat, even with disassembled actuator.

Patented

TECHNICAL CHARACTERISTICS

Construction: ANSI 125
Control characteristics: equal percentage A-AB port, linear B-AB for Cv 0.29 to 2.89 (Kv 0.25 to 2.5); linear A-AB port, linear B-AB for Cv 4.62 (Kv 4) and Cv 6.94 (Kv 6);
Stroke: 5.5 mm (0.2")
Max fluid speed: 3 m/s (590 ft/min)
Allowed fluids:
 - water 5 to 95°C (41 to 203°F)
 - glycol-added max 30%
Weight: see dimensions
Connections: male threaded gas connection flat or conic tight



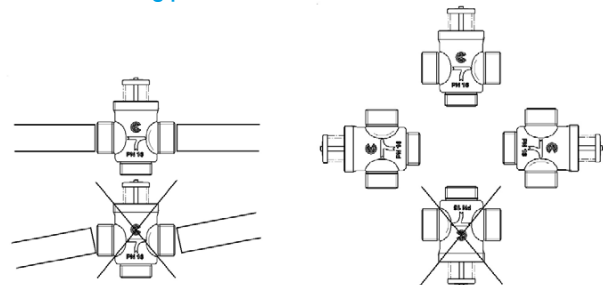
INSTALLATION AND MOUNTING

Before installing the valve, make sure that pipes are clean, free from foreign matter, perfectly aligned with the valve body and not subjected to vibration.

The valve can be mounted in any position but with the stem pointing downwards. 3-way valves must be used as mixing valves (see fig. 4 and 5).

Should valves be installed as diverting (one inlet two outlets) a reduction to 1/3 of the declared value will result in the max. differential pressure for standard operation.

Allowed mounting position



OPERATION

V.XT valves without the actuator are normally closed (with reference to the direct way). The plug with double EPDM O-ring ensures tight close-off on both straight and angle way in all V.XT models. The valve tight close-off with DeltaP max is guaranteed by the valve spring, even without actuator.

COUPLING VALVES V.XT

With MVT actuator

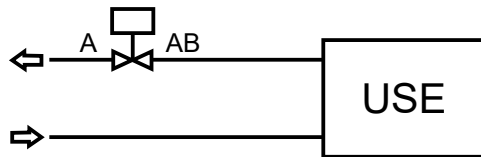
Before coupling the actuator to the valve, check that the thrust screw is at the top. If this is not the case, bear in mind that, in order to correctly position the actuator on the valve, the spring force of the valve must be overcome; then tighten the ring nut M30x1.5 on the thread on the valve body.

TYPE	MODELS	CONNECTIONS	DIRECT FLOW RATE Cv (Kv)	ANGLE FLOW RATE Cv (Kv)	MAX DIFF. PRESSURE kPa (PSI)
2-way	VSXT09P	G 1/2" Flat tight	0.29 (0.25)	-	400 (58)
	VSXT10P		0.46 (0.4)	-	
	VSXT11P		0.69 (0.6)	-	
	VSXT12P		1.16 (1)	-	
	VSXT13P		1.85 (1.6)	-	
	VSXT1P		2.31 (2)	-	
	VSXT21P		2.89 (2.5)	-	
	VSXT24P	G 3/4" Flat tight	4.62 (4)	-	150 (22)
	VSXT26P		6.94 (6)	-	
	VSXT09		0.29 (0.25)	-	
	VSXT10	0.46 (0.4)	-		
	VSXT11	0.69 (0.6)	-		
	VSXT12	G 1/2" Conic tight	1.16 (1)	-	
	VSXT13		1.85 (1.6)	-	
	VSXT1		2.31 (2)	-	
	VSXT21		G 3/4" Conic tight	2.89 (2.5)	-
	VSXT21		G 3/4" Conic tight	2.89 (2.5)	-
3-way	VMXT09P	G 1/2" Flat tight	0.29 (0.25)	0.29 (0.25)	400 (58)
	VMXT10P		0.46 (0.4)	0.46 (0.4)	
	VMXT11P		0.69 (0.6)	0.69 (0.6)	
	VMXT12P		1.16 (1)	0.69 (0.6)	
	VMXT13P		1.85 (1.6)	1.16 (1)	
	VMXT1P		2.31 (2)	1.85 (1.6)	
	VMXT21P		2.89 (2.5)	2.31 (2)	
	VMXT24P	G 3/4" Flat tight	4.62 (4)	2.89 (2.5)	100 (15) Direct; 40 (6) Angle
	VMXT26P		6.94 (6)	4.62 (4)	
	VMXT09		0.29 (0.25)	0.29 (0.25)	
	VMXT10	0.46 (0.4)	0.46 (0.4)		
	VMXT11	G 1/2" Conic tight	0.69 (0.6)	0.69 (0.6)	
	VMXT12		1.16 (1)	0.69 (0.6)	
	VMXT13		1.85 (1.6)	1.16 (1)	
	VMXT1		2.31 (2)	1.85 (1.6)	
	VMXT21		G 3/4" Conic tight	2.89 (2.5)	2.31 (2)
	3-way valves with built-in by-pass (4-ports)	VTXT09P	G 1/2" Flat tight	0.29 (0.25)	0.29 (0.25)
VTXT10P		0.46 (0.4)		0.46 (0.4)	
VTXT11P		0.69 (0.6)		0.69 (0.6)	
VTXT12P		1.16 (1)		0.69 (0.6)	
VTXT13P		1.85 (1.6)		1.16 (1)	
VTXT1P		2.31 (2)		1.85 (1.6)	
VTXT21P		2.89 (2.5)		2.31 (2)	
VTXT24P		G 3/4" Flat tight	4.62 (4)	2.89 (2.5)	100 (15) Direct; 40 (6) Angle
VTXT26P			6.94 (6)	4.62 (4)	
VTXT09			0.29 (0.25)	0.29 (0.25)	
VTXT10		0.46 (0.4)	0.46 (0.4)		
VTXT11		G 1/2" Conic tight	0.69 (0.6)	0.69 (0.6)	
VTXT12			1.16 (1)	0.69 (0.6)	
VTXT13			1.85 (1.6)	1.16 (1)	
VTXT1			2.31 (2)	1.85 (1.6)	
VTXT21			G 3/4" Conic tight	2.89 (2.5)	2.31 (2)

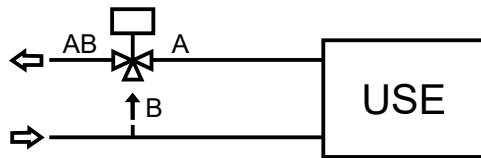
TYPE	MODELS	CONNECTIONS	DIRECT FLOW RATE Cv (Kv)	ANGLE FLOW RATE Cv (Kv)	MAX DIFF. PRESSURE kPa (PSI)
3-way valves with built-in by-pass (4-ports)	VTXT09P4	G 1/2" Flat tight interaxis 40 mm (1.6")	0.29 (0.25)	0.29 (0.25)	400 (58)
	VTXT10P4		0.46 (0.4)	0.46 (0.4)	
	VTXT11P4		0.69 (0.6)	0.69 (0.6)	
	VTXT12P4		1.16 (1)	0.69 (0.6)	
	VTXT13P4		1.85 (1.6)	1.16 (1)	
	VTXT1P4	2.31 (2)	1.85 (1.6)		
	VTX21P4	G 3/4" Flat tight interaxis 40 mm (1.6")	2.89 (2.5)	2.31 (2)	350 (51)

APPLICATION DIAGRAM

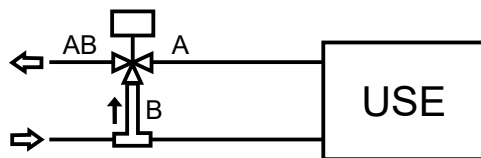
2-way valves (FIG.3)



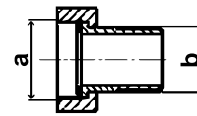
3-way valves (FIG.4)



3-way valves with bypass (FIG.5)

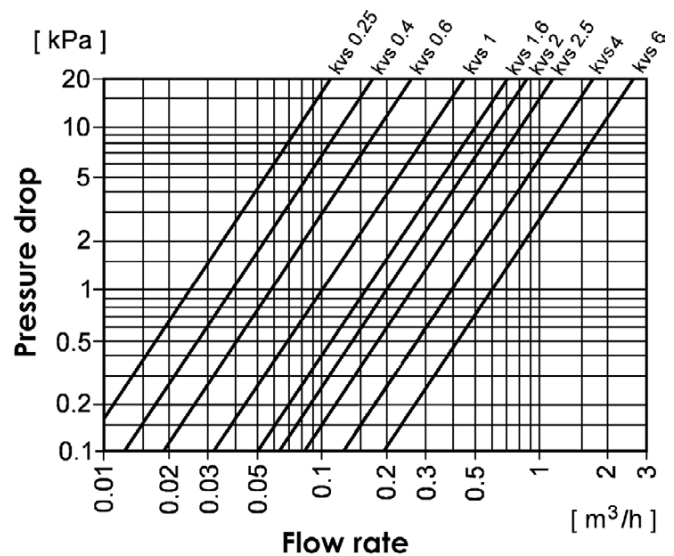


ACCESSORIES

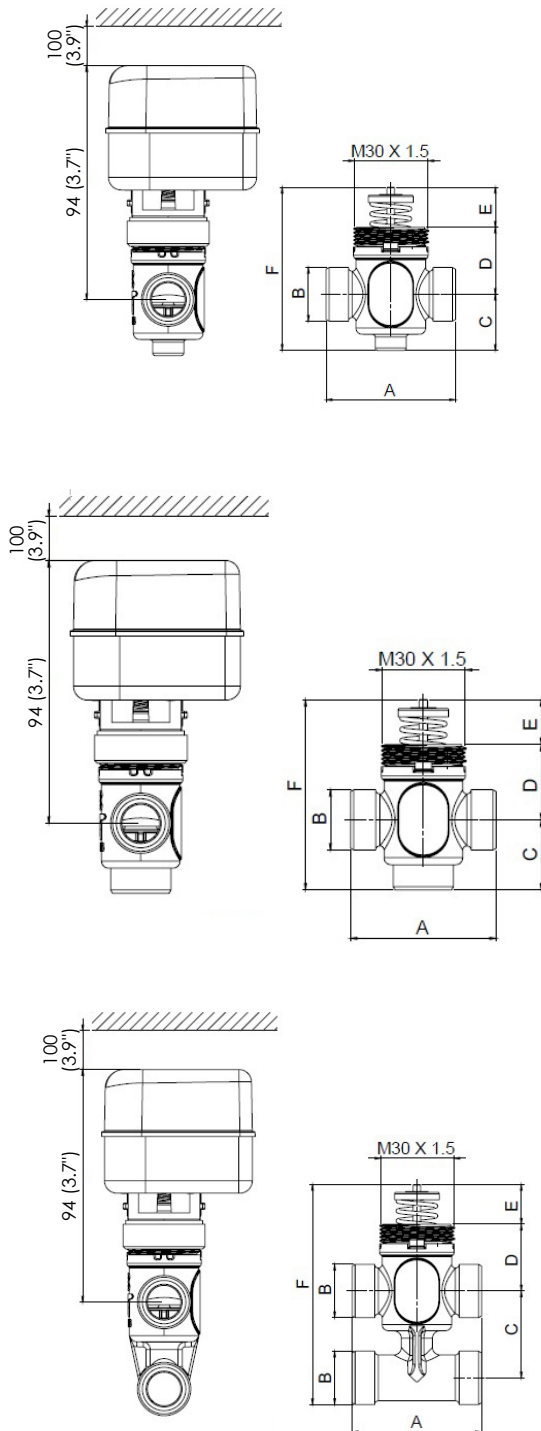


FITTINGS				
CODE	SIZE	a	b	Pack quantity
911-2078-010	1/2"	G 1/2"	R 3/8"	10
911-2079-010	3/4"	G 3/4"	R 1/2"	

PRESSURE DROP DIAGRAM



DIMENSIONS [mm (inch)]



Valve	Actuator	a	b	c	d	e	f
VSXT09P VSXT10P VSXT11P VSXT12P VSXT13P-VSXT13	MVT203S MVT403S MVT503S	52 (2")	G 1/2" A	22.5 (0.9")	27 (1.1")	15.6 (0.6")	65 (2.6")
VSXT21-VSXT21P		56 (2.2")	G 3/4" A	23.6 (0.9")	25.8 (1")		

Valve	Actuator	a	b	c	d	e	f
VMXT09P VMXT10P VMXT11P VMXT12P VMXT13P-VMXT13	MVT203S MVT403S MVT503S	52 (2")	G 1/2" A	25 (1")	27 (1.1")	15.6 (0.6")	67.6 (2.7")
VMXT21-VMXT21P		56 (2.2")	G 3/4" A	34 (1.3")	25.8 (1")		75.4 (3")

Valve	Actuator	a	b	c	d	e	f
VTXT09P VTXT10P VTXT11P VTXT12P VTXT13P-VTXT13		52 (2")	G 1/2" A	35 (1.4")	27 (1.1")	15.6 (0.6")	88.4 (3.5")
VTXT09P4 VTXT10P4 VTXT11P4 VTXT12P4 VTXT13P4 VTXT1P4	MVT203S MVT403S MVT503S	56 (2.2")	G 1/2" A	40 (1.6")			
VTXT21-VTXT21P		56 (2.2")	G 3/4" A	50 (2")	25.8 (1")		98.4 (3.9")
VTXT21P4		56 (2.2")	G 3/4" A	40 (1.6")	25.8 (1")		88.4 (3.5")

Valve	Actuator	a	b	c	d	e	f
VSXT24P VSXT26P				20.5 (0.8")			77.1 (3")
VMXT24P VMXT26P	MVT203S MVT403S MVT503S	78 (3.1")	G 3/4" A	36 (1.4")	41 (1.6")	15.6 (0.6")	92.6 (3.6")
VTXT24P VTXT26P				44 (1.7")			107.6 (4.2")