

MODELS		DN (inches)	FLOW Kvs m <sup>3</sup> /h	STROKE (mm)
Two-way	Three-way			
2TGB15FR00	--	1/2	0,4	11,5
2TGB15FR0	--		0,63	
2TGB15FR1	--		1	
2TGB15FR2	3TGB15FR2		1,6	
2TGB15FR3	3TGB15FR3		2,5	
2TGB15F	3TGB15F		4	

100 kPa = 1 bar = 10 m H<sub>2</sub>O

#### APPLICATION AND USE

These valves can be used either for control or fluid detection in air-conditioning, thermoventilation and heating plants, both environmental and industrial, and in machines for product thermal process.

Three-way valves should be used only as mixing valves; angle way should never be used for control purposes.

#### MANUFACTURING CHARACTERISTICS

The valve body is made of grey cast iron (EN1561 GJL-250). The plug is in brass (EN12164 CW614N) with equal-percentage profile on direct way and linear on angle way. The stem is in stainless steel with threaded M8 end and female threaded connections. The stem packing is composed of V Teflon O-rings.

#### TECHNICAL CHARACTERISTICS

Body rating	1600 kPa max (16 bar)
Control characteristics	
direct way	equalpercentage
angle way (3-way only)	linear
Leakage*	
direct way	0...0,001% of Kvs
angle way	0...0,1% of Kvs
Connections	female threaded
Stroke	11,5 mm
Allowed fluids	
- water	
max. temperature	140 °C
min. temperature	-5 °C (in case of ice on stem and gasket, use the stem-heater)
- glycol added	60%

Weight See overall dimensions

\* Leakage is measured according to the EN1349 standard.



#### OPERATION

When stem is up, A-AB way is closed; with stem down B-AB way is closed.

#### ACTUATORS

The valves are motorised by CONTROLLO MVF54S/58S/ MVF59S electrical actuators.

#### INSTALLATION

Before valves are mounted, make sure that pipes are clean, free from welding slags, that are perfectly lined up with valve body and not subjected to vibrations.

The valve can be mounted in any position except upside-down.

While assembling, respect the flow directions indicated by the letters located on the valve body (see Fig. 1 and 2) and the application schemes.

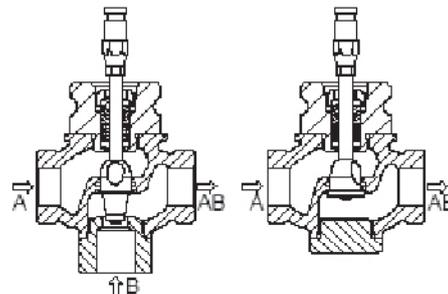


FIG. 1

FIG. 2

#### DIFFERENTIAL PRESSURE (kPa)

DN	MVF54S	MVF58S	MVF59S	MVEX06S	MVEX10S
1/2"	1600				

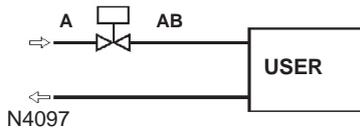
DP max= max differential pressure value ensured by the actuator for regular operation

**NOTE:** In order to avoid wear between plug and seat, we recommend not to overcome the 4 bar differential pressure

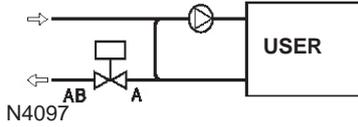
APPLICATION SCHEMES

TWO-WAY VALVES

a) Variable flow control when used

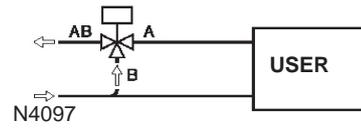


b) Constant flow when used in injection circuits

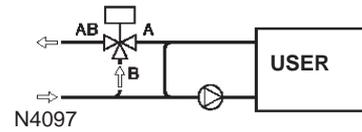


THREE-WAY VALVES

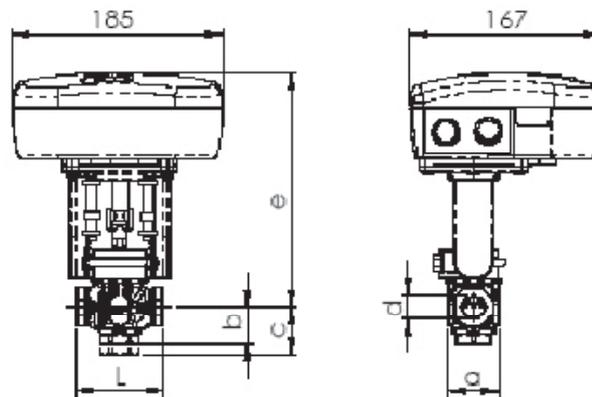
c) Variable flow mixing when used



d) Constant flow mixing when used in injection or tapping circuits



OVERALL DIMENSIONS [mm]



DN	d	Valve dimensions [mm]					Weight [Kg]
		2-3way			2 way	3 way	
		L	a	e	b	c	
1/2"	Rp 1/2 - 14	76,5	50	209	34	43	0,8

The performances stated in this sheet can be modified without any prior notice due to design improvements