2TGB.B-3TGB.B

MODELS		DN (inches)	FLOW Kvs m3/h	STROKE (mm)
Two-way	Three-way			
2TGB15BR00	--	1/2	0,4	11,5
2TGB15BR0	--		0,63	
2TGB15BR1	--		1	
2TGB15BR2	3TGB15BR2		1,6	
2TGB15BR3	3TGB15BR3		2,5	
2TGB15B	3TGB15B		4	

100 kPa = 1 bar = 10 m H_2O

APPLICATION AND USE

These valves can be used either for fluid control or 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 Teflon V-rings.

TECHNICAL CHARACTERISTICS

Body rating	1600 kPa max (16 bar)
Control characteristics	
direct way	equal percentage
angle way (3-way only)	linear
Leakage *	
direct way	0...0,001% of Kvs
angle way	0...0,1% of Kvs
Connections	female thread
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, see actuator data sheets)
- glycol added	60%
Weight	See overall dimensions

* Leakage is measured according to the EN1349 standard.

ATTENTION: If the valves are assembled with MVB+spacer (MVBHT) the max. operating temperature is 140 °C, while without spacer is 120 °C.

INSTALLATION

Before mounting the valves, make sure that pipes are clean, free from welding slags, 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.

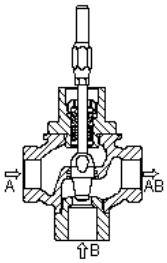

FIG. 1

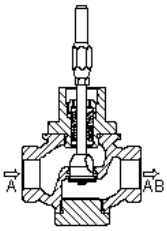

FIG. 2

OPERATION

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

ACTUATORS

The valves are motorised by CONTROLLI MVB electric actuators.

DIFFERENTIAL PRESSURE (kPa)

DN	MVB Actuator	
	direct way	angle way*
1/2”	1370	1240

*only 3-way valves

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.

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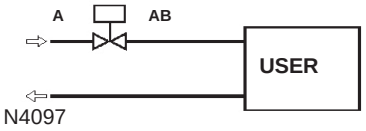
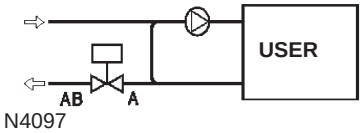
APPLICATION SCHEMES

TWO-WAY VALVES

a) Variable flow control when used

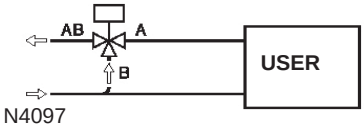


b) Constant flow when used in injection circuits

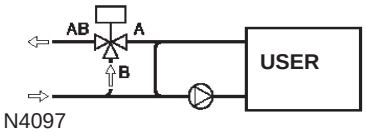


THREE-WAY VALVES

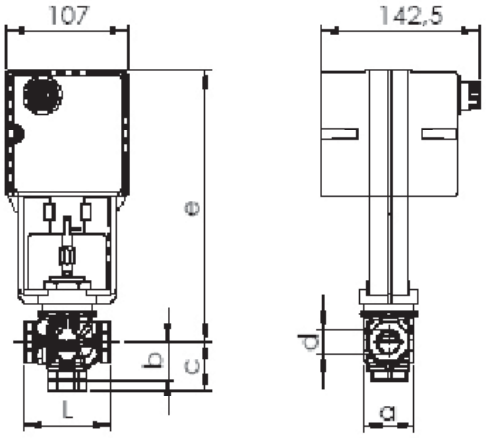
c) Variable flow mixing when used



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



DIMENSIONS (mm.)



DN	d	Valve dimensions [mm]					Weight [Kg]
		2-3 way			2 way	3 way	
		L	a	e	b	c	
1/2”	Rp 1/2 - 14	76,5	50	239	34	43	0,8

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

CONTROLLI 1936

Automatic control systems for:
air conditioning/heating/industrial thermal process.

ISO 9001