SERVOMOTOR

FOR REGULATION VALVE

EQUISFERA 2 o 3 WAYS

1/2" - 3/4" - 1" - 1" 1/4 - 1" 1/2

OPERATING INSTRUCTIONS

de pala
Italian OEM Technology

Supply voltage: 24 V AC
Proportional control

☐ GENERAL INFORMATION

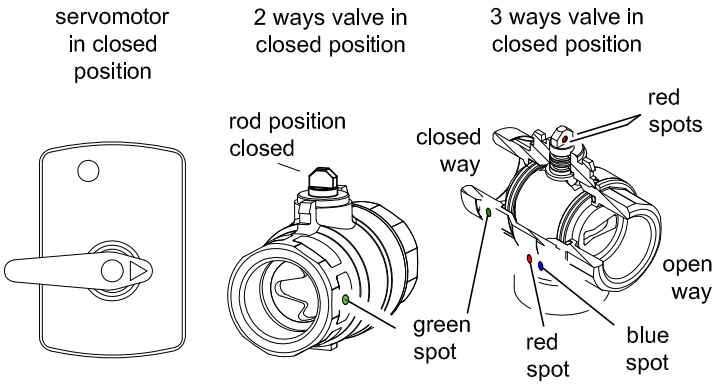
The electrical actuator is made by an electrical motor connected to a strong gear-box with steel gears.
This is a reversible movement actuator, specially developed to work with the flow regulation 2-ways and flow mixing 3-ways Equisfera valves on plants with hot or cold water.

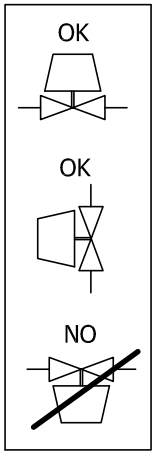
☐ WORKING

90° rotation movement of the actuator is controlled by a Vdc or mA signal. The positioning is proportional to the signal the actuator receives.
Control signal can be generated by any control unit with a modulating output signal, like a climatic regulation control, or an ambient temperature control unit.
Zero positioning sequence to define the working range: after the power supply is connected, the servomotor rotates clockwise (seen from handle side) to the end stroke position; then it moves according to the positioning signal. The zero positioning sequence is executed also if the positioning signal is zero for a few seconds (or if the signal is maximum, it depends on rotation way setting).

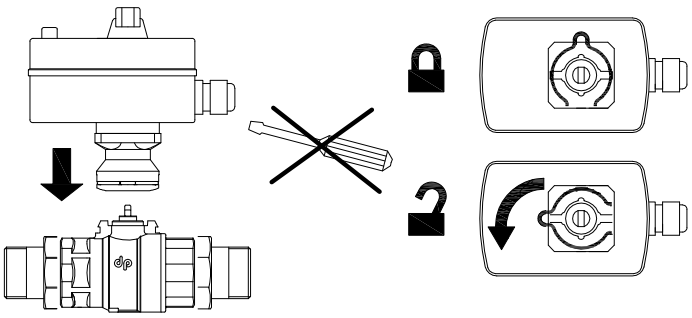
☐ INSTALLATION

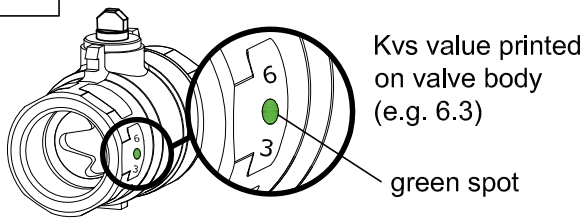
1) CHECK THAT VALVE AND SERVOMOTOR ARE BOTH IN CLOSED POSITION



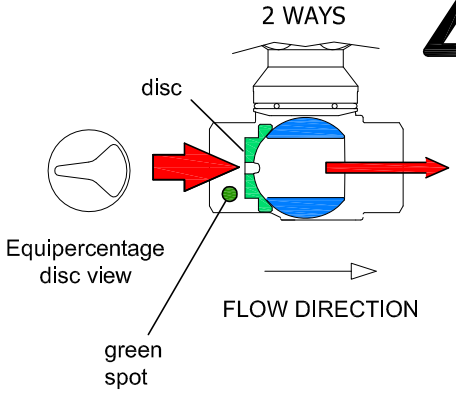


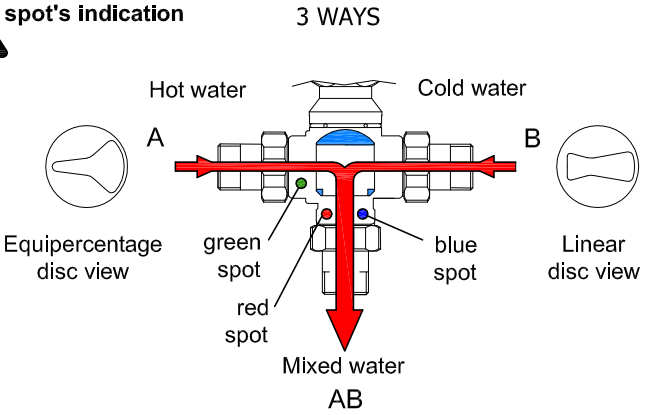
2) ENGAGE THE SERVOMOTOR





observe the green spot's indication





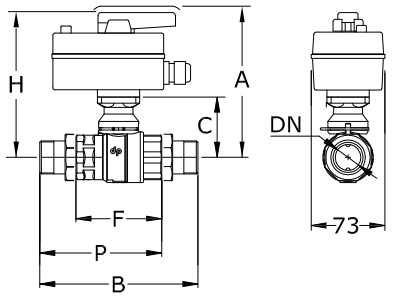
EA006 /0519

SERVOMOTOR

	P7EV9V	P7EV9	P7EV9L	P7EA9V	P7EA9	P7EA9L
Supply voltage	24 V +/- 10% 50 Hz					
Power consumption	5.6 VA					
Static torque	9 Nm	13 Nm		9 Nm	13 Nm	
Working ambient temperature	0 ÷ 50 °C					
Operation angle	90° bidirectional rotation					
Operation time	30"	60"	120"	30"	60"	120"
Type of control	0 - 10 V			4 - 20 mA		
Electrical protection level	IP65					

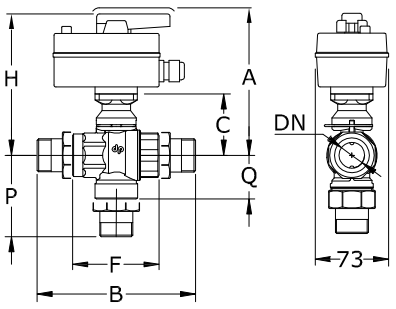
VALVE BODY

Valve body	Brass CW617N Nickel plated
Ball	Brass CW617N Nickel/Chromium plated
Discs	PTFE on EPDM o-rings
Rod	Drawn brass CW614N with double EPDM o-rings
Coupling	POM-C with stainless steel ring
Max. operating pressure	16 bar
Max. differential pressure	4 bar
Fluid temperature range	0 ÷ 110 °C
Operative fluid	Water or liquids which are compatible with PTFE/EPDM



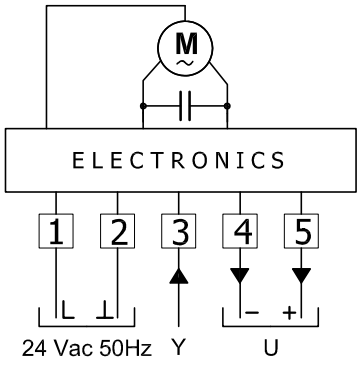
SERVOMOTOR + 2 WAYS VALVE

DN	H	A min	C	F	P	B
15	137	143	57	77	105	131
20	137	143	57	77	108	139
25	140	146	60	87	121	156
32	144	150	64	94	133	172
40	152	158	72	108	151	193



SERVOMOTOR + 3 WAYS VALVE

DN	H	A min	C	F	B	Q	P
15	137	143	57	76	130	38	65
20	137	143	57	76	136	38	68
25	141	147	61	86	155	43	78
32	144	150	64	94	172	47	86
40	152	158	72	108	193	60	102

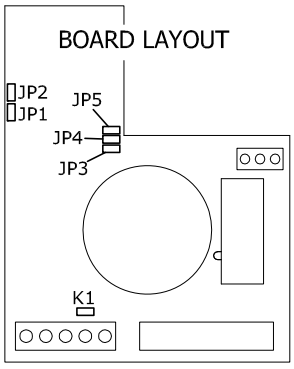


☐ ELECTRIC CONNECTIONS

terminals 1 - 2: supply voltage 24 Vac
terminal 3: positioning signal Y (negative pole is internally connected to terminal 2)
terminals 4 - 5: positional feedback signal U (V)

☐ SETTING ROTATION WAY AND TYPE OF CONTROL

DISCONNECT THE POWER SUPPLY BEFORE ANY SETTING



Positioning signal Y				
	0 - 10 V	2 - 10 V	0 - 20 mA	4 - 20 mA
JP2	○○	○○	●	●
JP1	○○	●	○○	●
K1	○○	○○	●	●
Rotation way setting with positioning signal Y increasing - (seen from handle side)				
	CCW (default setting)		CW	
JP3	○○		●	

○○ not connected jumper

● connected jumper

JP4, JP5 available to change the operation time

GUARANTEE

The Seller warrants each new servomotor to be free from defects in material, workmanship and construction, and that when installed and used in accordance with this technical datasheet will perform to applicable specifications for a period of two years from the date of delivery.
If examination by the Seller discloses that the product has been defective, then its obligation is limited to repair or replacement, at its option, of the defective product or its components. The Seller is not responsible for products which have been subject to misuse, alteration, accident or for repairs not performed by the Seller.
Products must be returned properly packed with transportation charges prepaid to The Seller; return delivery terms will be DDP Seller's Factory. The foregoing warranty constitutes the Seller sole liability, and is in lieu of any other warranty, of merchantability or fitness. The Seller shall not be responsible for any incidental or consequential damages arising from any breach of warranty.

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