## **SERVOMOTOR**

FOR REGULATION VALVE 3 WAYS LATERAL MIXING 3/4" - 1"

# OEM Technology

Supply voltage: 24 V AC **Proportional control** 

#### **OPERATING INSTRUCTIONS**

#### ☐ GENERAL INFORMATION

The electrical actuator is made by an electrical motor connected to a strong gear-box with steel gears.

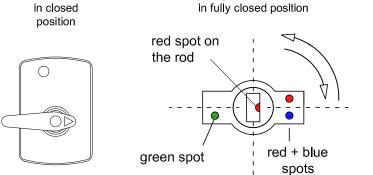
This is a reversible movement actuator, specially developed to work with the De Pala 3 ways lateral mixing valves (equipercentage flow regulation) on plants with hot or cold water.

#### $\square$ INSTALLATION

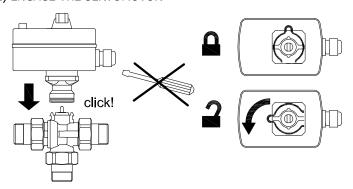
servomotor

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

body valve top view



#### 2) ENGAGE THE SERVOMOTOR

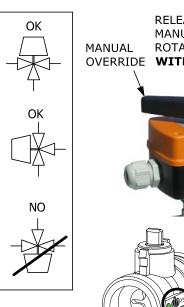


#### WORKING

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.

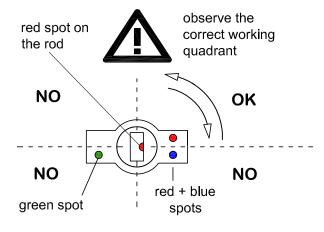
Zero positioning sequence to define the working range: after the power supply is connected, the servomotor rotates clockwise (seen from handle side) to the end stroke position; then it moves according to the positioning signal. The zero positioning sequence is executed also if the positioning signal is zero for a few seconds (or if the signal is maximum, it depends on rotation way setting).

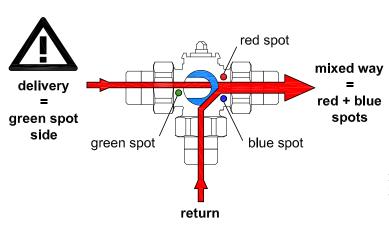




(e.g. 2.5)

#### ☐ CONNECTION OF THE VALVE



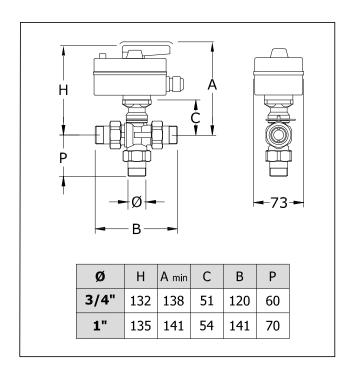


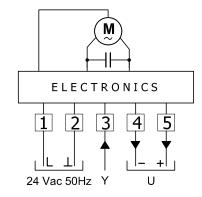
#### **SERVOMOTOR**

	P7FV9V	P7FV9	P7FV9L	P7FA9V	P7FA9	P7FA9L	
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 ℃						
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	10 bar		
Max. differential pressure	4 bar		
Fluid temperature range	0 ÷ 100 ℃		
Operative fluid	Water or liquids which are compatible with PTFE/EPDM		



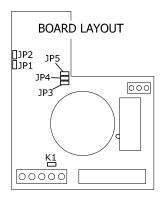


### ☐ ELECTRIC CONNECTIONS

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	00	00					
JP1	00		00				
K1	00	00					
Rotation way setting with positioning signal Y increasing - (seen from handle side)							
	CCW (default setting)		CW				
JP3	O	0					

oo 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.

to applicable specifications for a period or 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.

