

SERVOMOTOR MODELS

3 - WAY DEVIATING "T" BORED / BY-PASS

3 - WAY DEVIATING LATERAL TYPE

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



TECHNICAL INSTRUCTION

M73AN Model (normal) M73BN Model (auxiliary switch)

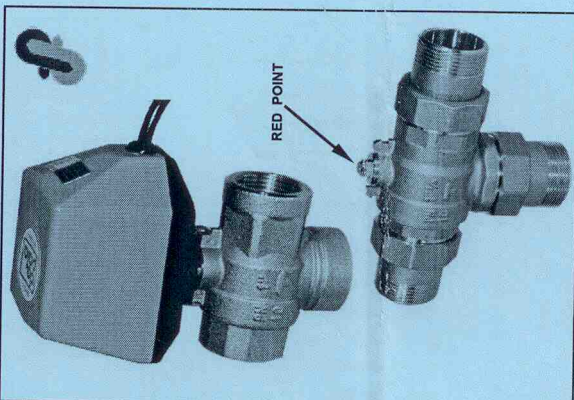
□ OPERATION

3 WIRES CONTROL - 60" OPEN/CLOSE

3-WAY DEVIATING "T" BORED, 3-WAY with BY-PASS and 3 - WAY DEVIATING LATERAL TYPE VALVES have the same kind of servomotor (M7A3N or M7B3N) which is a **2 senses of march** servomotor and it is joined to the valve by a bayonet coupling system. Servomotor opens and closes valve with a 90° movement. With the auxiliary switch version it is possible to stop circulation pump when the last zone valve is closed. Motorized zone valve has to be controlled by using a **3 wires room-thermostat (COMMON-OPEN-CLOSE)** or by every deviating electrical control. With an 180° reversing action, the bayonet coupling system allows to choose closing position in relation with the heating plant. A **manual operation** is possible by rotating the servomotor when it is partly disconnected.

□ GENERAL USES

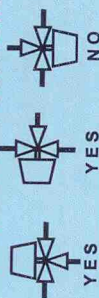
DE PALA ZONE VALVE can be used for thermoregulation in zone heating plants, with sanitary water, with wood-burning boiler or thermo-fireplace, in plants with automatic adjustment of warm and cold flows. All the fluids **must be compatible** with P.T.F.E. and EPDM rubber.



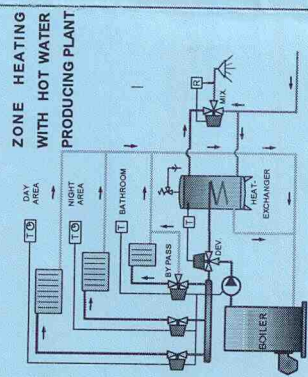
□ INSTALLING

Ball valves have to be installed referring to the technical instructions included; please look at the flows according to the heating plant. Before installing make sure that in pipeworks there is no extraneous matter such as remains of welding or threading. Servomotor and valve are separately supplied so that it is possible to install valve before and servomotor after, just when all building works are finished. It's easy to connect them with a bayonet coupling system. The disconnecting can be carried out easily by widening the two reeds with a screwdriver.

INSTALLING POSITIONS



EXAMPLE



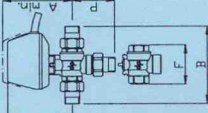
FEATURES OF ZONE BALL VALVE

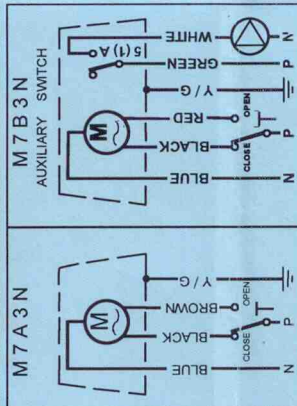
BALL VALVES 633 603 613 623

- Valve body : **BRASS CW617N (UNI 12165)**
- Ball : **BRASS CW617N (nichel-chromium plated)**
- Rod : **EXTRUDED OT CW614N (UNI 12164)**
- SEALS on the ball and on the rod : **P.T.F.E. and EPDM O-RINGS**
- Nominal operating pressure : **10 bar**
- Maximum differential operating pressure : **6 bar**
- Fluid temperature field : **FROM 0 °C to 100 °C**
- Utilisable fluids : **WATER or Fluids compatible with PTFE and EPDM rubber**
- Attachments : **Internal GAS or Flat sealing union attachments**
- Load loss : **no effect (TOTAL FLOW TYPE)**

SERVOMOTORS M7A3N – M7B3N

- Supply voltage : **230 V 50 Hz**
- Absorbed power : **4 VA**
- Torque on the control rod : **7 Nm (70 Kg • cm)**
- Ambient operating temperature : **0 °C + 65 °C**
- Opening or closing time : **60 sec.**
- Type of control : **3 wires control – deviating type**
- Auxiliary contact capability : **5A 250V**
- Electrical protection level : **IP 54**
- Cable length : **1000 mm**

COMPONENTS		OVERALL DIMENSIONS				
SERVO - MOTORS	BALL VALVES	A	B	F	P	WIDTH 63
M7A3N or M7B3N	633 Y/R 633 FL	110	120	76	38	
	603 Y/R 603 FL	110	120	76	38	
	613 Y/R 613 FL	115	125	86	43	
	623 Y/R 623 FL	120	130	94	47	
M7A3N or M7B3N	633 U/S 633 BL	110	120	130	65	
	603 U/S 603 BL	110	120	136	68	
	613 U/S 613 BL	115	125	155	78	
	623 U/S 623 BL	120	130	172	86	



ELECTRICAL CONNECTIONS

The electric actuator has been equipped with a strong gear-box and steel gears. The auxiliary switch and a low rotation time avoid high boiler pressure. The electric connections of servomotor have to be connected with the multipolar electric cable (4 or 6 wires) by reading technical instructions above-stated. The auxiliary switch (GREEN and WHITE) that stops circulation pump, is a "CLEAN" type, therefore it's insulated from the control of the valve. The two wires (GREEN and WHITE) have to be parallel connected with the power supply of circulation pump. The possible hour-meter has to be connected between OPEN (RED or BROWN) and NEUTRAL (BLUE) conductors.

WARRANTY

ALL EQUIPMENT MANUFACTURED BY DE PALA S.N.C. IS GUARANTEED FOR A PERIOD OF 2 YEARS BEGINNING FROM THE MANUFACTURING DATE WHICH IS STAMPED ON THE EQUIPMENT. THE WARRANTY DOES NOT INCLUDE THE COSTS OF TRANSPORTING EQUIPMENT TO AND FROM THE REPAIR WORKSHOP. FURTHERMORE, IT DOES NOT COVER ANY KIND OF DAMAGE TO THE EQUIPMENT CAUSED BY MISUSE OR BY FORCE MAJEURE. IN NO CASE OF WARRANTY REPAIR THERE IS THE POSSIBILITY TO MAKE A CLAIM FOR DAMAGES TO DE PALA S.N.C.

de pala snc

33080 ROVEREDO IN PIANO (Pordenone) – Via del Lavoro, 10 – ITALY Web : www.depala.it
TEL. +39 (0) 434.920466 +39 (0) 434.923166 FAX +39 (0) 434.591473 e-mail : info@depala.it

