# M3800 • ON/OFF ALTITUDE LEVEL CONTROL VALVE



#### **OPERATING PRINCIPLE**

This valve controls the maximum water level in a reservoir using a three-way altitude pilot. The valve opens when the minimum level is reached in the tank. The minimum level is determined by the hysteresis of the altitude pilot. The hysteresis value depends on the altitude height to control, included from 0.3 mwh to 1.3 mwh according to the adjustment range of the pilot. This type of valve is normally used for tower-tank and also for underground reservoirs, where the installation of a conventional float pilot would be complicated or, in some cases, even impossible. Altitude pilot is non-intrusive and doesn't require the installation of any devices inside the reservoir.

### ADDITIONAL FUNCTIONS

- pressure sustaining;
- flow rate control;
- shut-off with electrical remote control;
- non-return;
- minimum re-opening level control with hydraulic memory device adjustable within a range between 1 and 10 mwh;
- reverse flow (for supplying the system through the same pipe in reverse from tower tank to network);
- anti water-hammer function;
- relief function.



## CIRCUIT AND MATERIALS



ITEM	DESCRIPTION	MATERIALS
1	Main valve	GJS400-15 EN1563
2 (a,b,c)	Isolating ball valve	Ni-plated Brass
3	CL800 altitude on-off pilot	1.4301 EN10088-3
4	Needle valve (drain valve)	1.4401 EN10088-3 + Brass
5 (a,b)	3-way gauge holder	Ni-plated Brass
6	Isolating ball valve for sensing line	Ni-plated Brass
7	Position indicator with manual venting cock	Brass + Hardened glass
8	Ball valve 1/8 (S) for draining to air	Ni-plated Brass
9	Y - Strainer	1.4401 EN10088-3 + Brass
10	Bidirectional regulating speed needle valve	1.4401 EN10088-3 + Brass
11	Pressure gauge	1.4301 EN10088-3 + Glycerine
	Pipe	1.4401 EN10088-3
	Fittings	1.4401 EN10088-3
	Compression fittings	1.4401 EN10088-3 + Brass

PILOT RANGE TABLE			
PILOT TYPE	AVAILABLE RANGE	RE-OPENING (HYSTERESIS)	
PCL800 A	1 - 6 mwh	0.3 mwh	
PCL800 B	5 - 25 mwh	0.5 mwh	
PCL800 C	20 - 40 mwh	0.8 mwh	

Other higher range, available on request



### TYPICAL APPLICATION