



## Electrohydraulic Valve Mod. IM-EL

### Hydraulic Function

The hydraulic valve mod. IM-EL is an automatic on-off valve that allows to open and to close the flow using one electrohydraulic solenoid valve.

### Operation Principle

The valve mod. IM-EL is controlled by one 3 ways solenoid (mod.EL) that allows the total diaphragm opening and closing.

The "normally opened" solenoid (N.O.) puts in communication the chamber with the inlet pressure water, maintaining consequently the valve normally closed (N.C.) when it is not powered.

Activating the solenoid and maintaining it under tension the solenoid position is reversed allowing the chamber to discharge and to open the valve totally.

The solenoid has a small handle that allows to manually open the valve in case of electrical failure.

Equipping the hydraulic circuit with a solenoid "normally closed" (N.C.) the valve would normally be "open" (N.O.) and will need a power supply to close itself.

The solenoid requires to be powered with tension corresponding to the value that can be identified in the coil (standard version 24V AC 50÷60 Hertz, other tensions available on demand).

Equipping the hydraulic circuit with a latch solenoid (mod.EL-BI) is possible to open and close the valve with pulses with 9-12V DC tension.

Over the mod.EL-BI version the manual handle is not operative.

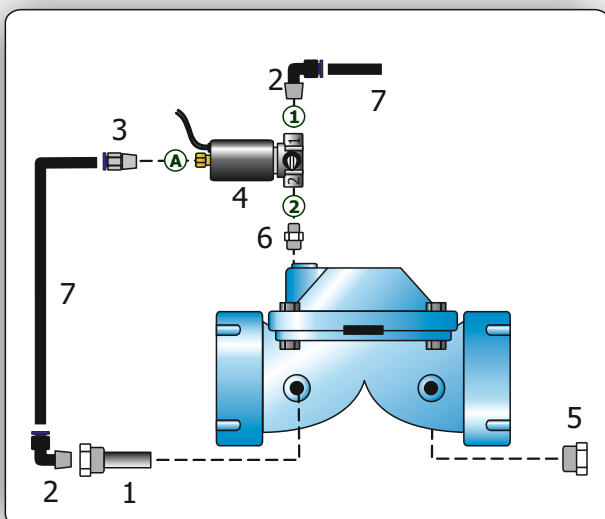
Equipping the hydraulic circuit with a latch solenoid (mod.EL-BA) is possible to open and close the valve with pulses with 6-24V DC tension. This special solenoid version have 2mm orifice designed for dirty water and manual handle integrated.

Other 3 way metal solenoids are available for working at higher pressure upto 16 bar. These solenoids can be N.O., N.C. or latch like the standard types.

### First Installation

- connect the solenoid cables to the electrical control circuit or to an irrigation electronic programmer.
- IM-EL valve does not require specific operations during first installation, only needs to execute some opening and closing maneuvers to evacuate all the air from the control chamber.

### Assembly Scheme



### Accessories Features



#### 3 Way Solenoid EL

Type: 3 way - 2 wire - N.O.  
Body: nylon  
Connections: Ø1/8" F BSP  
Nominal Pressure: 10 bar  
Tension: 24V AC 50÷60 Hz  
Protection: Ip66

### Optionals



#### 3 Way Solenoid EL

Type: 3 way - 2 wire - N.C.  
Body: nylon  
Connections: Ø1/8" F BSP  
Nominal Pressure: 10 bar  
Tension: 24V AC 50÷60 Hz  
Protection: Ip66



#### 3 Way Latch Solenoid EL-BI

Type: 3 way - 2 wire - Latch  
Body: nylon  
Connections: Ø1/8" F BSP  
Nominal Pressure: 10 bar  
Tension: 9-12V DC  
Protection: IP66



#### 3 Way Latch Solenoid EL-BA

Type: 3 way - 2 wire - Latch  
Body: reinforced nylon  
Connections: Ø1/8" F BSP  
Nominal Pressure: 10 bar  
Tension: 6-24V DC  
Protection: IP66



#### 3 Ways Solenoid EL-OT

Type: 3 routes - 2 threads - N.A.  
Body: brass  
Connections: Ø1/8" F BSP  
(side coil) Ø1/8" M BSP  
Nominal Pressure: 10 bar  
Tension: 24V AC 50÷60 Hertz  
Protection: IP65



#### 3 Ways Solenoid EL-16

Type: 3 routes - 2 threads - N.A.  
Body: brass  
Connections: Ø1/8" F BSP  
(side coil) Ø1/8" M BSP  
Nominal Pressure: 16 bar  
Tension: 24V AC 50÷60 Hertz  
Protection: IP65

### Reccomendations

- do not disassemble the valve or its circuit when the pipe is in pressure.
- do not use with pressures beyond Nominal values.

### LEGEND:

- 1 - Filter Ø1/4" M-1/8" F
- 2 - Elbow Ø1/8" M pipe Ø 6 mm
- 3 - Straight Ø1/8" M pipe Ø 6 mm
- 4 - Solenoid EL Ø1/8" F
- 5 - Plug Ø1/4" M
- 6 - Reduction Nipple Ø1/4" M-1/8" M
- 7 - Micropipe HDPE Ø 6 mm

- Ⓐ - Water Inlet
- ① - Discharge
- ② - Common

### NOTES:

- fittings and micropipe Ø 8 mm for valves of Ø6" or superior.
- the technical characteristics can change without prior notice.