



- maximum section of wiring AWG14 (1,6 mm) 4
- CONNECTOR WITH OPENING FOR ARMORED CABLE Strain relief "PG9" outside diameter of covered cable from 6 to 8 mm. Upon request luminous connector. STRAIN RELIEF GASKET 5
- WASHER
- 6 7
- STRAIN RELIEF 8



MF-1150C-230U



SOLENOID VALVE OPERATING CONTROLLER

VOC-10	VALVE OPERATING	CONTROLLER	with	10	mm
VOC-15	diameter bore size	CONTROLLER	with	15	mm
VOC-18	VALVE OPERATING diameter bore size	CONTROLLER	with	18	mm

- · The quickest and easiest way to convert electrically operated solenoid valves into hand operated valves. To allow testing of valve operation and to undertake repairs.
- 3 models with 3 different stem sizes fit all models of solenoid valves on the market
- Pocket size, easy to use, the ideal addition to every service engineers tool kit
- Do not use the magnet when the solenoid valve is electrically operated.

"DIN" STANDARD SOLENOID COILS

+ "LUMINOUS DIN CONNECTOR"

STANDARD COIL ORDERING FOR ALL SOLENOID VALVES

MF-1150C-024U* MF-1150C-048U* MF-1150C-110U* MF-1150C-230U* MF-1150C-240U*	COIL COIL COIL COIL COIL	24V 48V 110V 230V 240V	50Hz 50Hz 50Hz 50Hz 50Hz 50Hz	11W 11W 11W 11W 11W
MF-1360C-024U*	COIL	24V	60Hz	13W
MF-1360C-110U*	COIL	110V	60Hz	13W
MF-1360C-120U*	COIL	120V	60Hz	13W
MF-1360C-240U*	COIL	240V	60Hz	13W
MF-1900C-012U*	COIL	12V	(DC)	19W
MF-1900C-024U*	COIL	24V	(DC)	19W
MF-1900C-048U*	COIL	48V	(DC)	19W

(*) Add "4" to the coil part number for LUMINOUS GASKET Add "7" to the coil part number for PG9 DIN CONNECTOR

DESCRIPTION

- Only one standard coil for all solenoid valves.
- Capsuled, humidity and weather proof. Continuous use.
- DIN 43650 (ISO 4400) connectors for PG9, PG11 or 1/2" NPT conduit (PG9 is the standard DIN connector normally supplied and available on stock).
- IP65 protection (explosion proof version upon request). Luminous gasket or luminous DIN connector incorporated to
- light up when the coil is energized (upon request).
- All solenoid valves are U.L. listed, CSA Canadian standard and BVQI-ISO 9001 approved.
- The thermal isolation is +155°C, Class "F".

ELECTRICAL INSTALLATION

- All the coils are for continuous use or high frequency of operation and they are protected against humidity by the encapsulation or by weather proof housings.
- Verify that the coil supplied with the valve is of the correct tension and current required. If not, replace it with the adequate coil without changing the valve.
- The tension variation that is permitted without affecting the perfomance of the valve is of -15% to +10% of the nominal tension.
- The rest of the models described in this manual are provided normally with capsulated coils with DIN 43650 (ISO 4400) connections.

MECHANICAL INSTALLATION

- Verify that the working conditions are within the range of differential pressure and temperature indicated on the name plate of the valve.
- That a strainer is fitted immediately upstream of the valve with the adequate capacity and a mesh of no greater than a 100 microns.
- The most favorable mounting position: on a horizontal pipe line with the coil in the upright position.
- Pipe lines upstream of the valve must be carefully and exhaustively cleaned even before a strainer, by purges with compressed air or any other system which ensure the elimination of all solid elements as well as welding bits, mud, dirt, and this happens particularly in new installations.
- Do not forget to look at the arrow indicating the flow in the body. For that, the pressure at the inlet must always be greater or equal to the outlet.

INSTRUCTIONS FOR THE ELECTRICAL CONNECTION OF THE COIL WITH STRAIN RELIEF CONNECTOR

- 1. Unscrew the screw (8) to be able to get to the block (3) where the terminals are. The design is prepared to use standard cables or 3-wire armored cables "PG9". Carry out the wiring as per diagram.
- 2. Insert the terminal block into the connector (4) according to the entrance angle desired, within the four possible positions: Left, right, above, below.
- 3. Insert into the terminal block the spades of the coil. Secure it with the fixing screw (8).
- 4. Lastly, but very important: tighten the strain relief (7) to ensure it is hermetic. Otherwise humidity ingresses and can cause a shortcircuit between the terminals or reach the coil and short-circuit the windings, damaging the coil.