TYPE R24 SOLENOID COIL INSTALLATION AND MAINTENANCE INSTRUCTIONS

IMPORTANT NOTES BEFORE INSTALLING

TypeR24 (24 Watt) solenoid coils, rated IP65 (weather proof and suitable for outdoors use) are designed to be used with Plast-O-Matic solenoid valves. The solenoid consists of the coil, plunger (AKA core), core tube housing and a few other parts. When energized, the solenoid creates a magnetic field that causes the core to move thus opening or closing the valve depending on the design of the valve. You, the end user, must apply the correct voltage for your particular valve/solenoid. This voltage (and part number) is imprinted on the coil.

IMPORTANT: these coils **MUST** be operated with the connector that was supplied by the factory, or the correct replacement connector if required. If used with the wrong connector, the valve will not operate. The coil, voltage and part numbers of the coil and connector are provided below. All connectors are designed for 1/2" NPT conduit connection. These connectors meet DIN 43650/ISO 4400 form A.

The reason the correct connector must be used is because the connector performs a special function. It rectifies the voltage. Rectified voltage has several advantages:

- 1. It is much quieter than AC voltage, which tends to hum and occasionally buzz.
- 2. The coil can be on/off cycled without increasing the heating like AC coils will.
- 3. In case the coil is energized without being mounted on the valve, no harm is done.

| COIL PART NUMBER | INPUT VOLTAGE | CONNECTOR PART NUMBER |
|------------------|---------------|-----------------------|
| 8826E-240VAC | 240 VAC | 9402 |
| 8825E-24VAC | 24 VAC | 6353 |
| 8824E-120VAC | 120 VAC | 6353 |
| 8827E-24VDC | 24 VDC | 5443 |

SPECIFICATIONS

Insulation class H
Watts (maximum) 24

Duty Cycle 100% (may be energized indefinitely, or rapid on/off cycling is acceptable)

Max. Ambient temp 50° C (122° F)

Voltage tolerance 10% above or below rated voltage. **See note below

Current (amps) See table below.

Enclosure Rating IP65

^{**}Note at 10% above rated voltage the coil will run a little warmer

| COIL PART NUMBER | MAXIMUM CURRENT |
|------------------|-----------------|
| 8826E-240VAC | 0.15 |
| 8825E-24VAC | 0.85 |
| 8824E-120VAC | 0.22 |
| 8827E-24VDC | `1.1 |

INSTALLATION CAUTION: Electrical wiring shall be performed by qualified persons in accordance with all national and local electrical codes. Three wire (single phase, grounded) is required. A ½" NPT threaded connection and all gaskets supplied must be used to maintain IP65 weather tight rating.

SOLENOID REPLACEMENT PART NUMBERS

| R24-24VAC | | 24 VAC |
|---------------|-----|-----------------------------|
| P/N | QTY | DESC |
| | | GL-FL POLYPRO CAP NUT FOR |
| 8895-GPP | 1 | W24 COIL |
| | | EPDM CLOSED CELL GASKET FOR |
| 9148EP | 1 | W24 |
| 0209EP | 1 | O-RING |
| 6353 | 1 | CONNECTOR |
| 8828 | 1 | CORE TUBE ASSY |
| 8825E-24VAC | 1 | COIL |
| 8672-SS | 1 | CORE |
| 8820-PF | 1 | SOLENOID MOUNT MACHINED |
| | | |
| LC-024B-11-SS | 1 | SPRING for EASMT model |
| LC026B-13-SS | 1 | SPRING for EASYMT model |
| 4310 | 1 | CAP, SRING |
| Y-INSTR-R24 | 1 | INSTRUCTION SHEET |

| R | 24-24VDC | | 24 VDC Exceptions to above |
|---|-------------|---|----------------------------|
| | 5443 | 1 | CONNECTOR |
| | 8827E-24VDC | 1 | COIL |

| R2 | 24-240VAC | | 240 VAC Exceptions to above |
|----|--------------|-----|-----------------------------|
| | <u>P/N</u> | QTY | DESC |
| | 9402 | 1 | CONNECTOR |
| | 8826E-240VAC | 1 | COIL |

| R | 24-120VAC | | 120 VAC Exceptions to above |
|---|--------------|-----|-----------------------------|
| | P/N | QTY | DESC |
| | 6353 | 1 | CONNECTOR |
| | 8824E-120VAC | 1 | COIL |

WIRING DIAGRAMS



