



## Section 5

## Options

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**Codification table for voltages / Manual operator / Electrical connection**

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VALVE CODE > **-DM- D XX X-X XX**  
**1 2 3 4**

**OPTIONS AVAILABLE FOR**

- Pilot operated valves 52, 67, 92, 93, 400, ISO1, ISO2, ISO3 Series

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| 1. VOLTAGE  |                               | 4. ELECTRICAL CONNECTION |   |
|-------------|-------------------------------|--------------------------|---|
| D-XX X-X XX | VOLTAGE                       | D-XX X-X XX              | ELECTRICAL CONNECTION                             |
| DA          | 24 VDC (5.4W)                 | BA*                      | Flying leads (grommet)                            |
| DB          | 12 VDC (5.4W)                 | BK*                      | BA with protection diode                          |
| DC          | 12 VDC (7.5W)                 | BL*                      | BA with protection varistor                       |
| DD          | 24 VDC (7.3W)                 | BM**                     | Flying leads (solenoid plug-in)                   |
| DE          | 12 VDC (12.7W)                | BN**                     | BM with protection diode                          |
| DF          | 24 VDC (12.7W)                | BP**                     | BM with protection varistor                       |
| DK          | 110 VDC (4.7W)                | BG**                     | BM with ground                                    |
| DJ          | 28 VDC (5.2W)                 | BH**                     | BM with protection diode & ground                 |
| DL          | 64 VDC (6.0W)                 | BJ**                     | BM with protection varistor & ground              |
| DM          | 36 VDC (5.3W)                 | CA*                      | 1/2" NPS conduit with flying leads                |
| DN          | 6 VDC (6.0W)                  | CM*                      | 1/2" NPS metal conduit with flying leads          |
| DR          | 90 VDC (6.6W)                 | CN*                      | 1/2" NPS metal conduit with flying leads & ground |
| DS          | 110 VDC (7.3W)                | JB                       | Rectangular connector                             |
| DT          | 75 VDC (5.6W)                 | JD                       | JB with light                                     |
| DP          | 48 VDC (5.8W)                 | JM                       | Rectangular connector (male only)                 |
| FA          | 12 VDC (1.8W)                 | KA                       | Mini square connector                             |
| FB          | 24 VDC (1.8W)                 | KB                       | KA with protection diode                          |
| FE          | 12 VDC (2.4W)                 | KC                       | KA with protection varistor                       |
| FF          | 24 VDC (2.4W)                 | KD                       | KA with light                                     |
| JA          | 120/60, 110/50 (2.9W)         | KE                       | KA with light and protection diode                |
| JB          | 240/60, 220/50 (2.9W)         | KF                       | KA with light and protection varistor             |
| JC          | 24/60, 24/50 (3.7W)           | KG                       | KA with light & diode                             |
| JD          | 100/60, 100/50, 110/60 (3.9W) | KJ                       | Mini square connector (male only)                 |
| JE          | 220/60 (3.4W)                 | KK                       | KJ with protection diode (male only)              |
| JF          | 240/50 (2.8W)                 | KL                       | KJ with protection varistor (male only)           |
| JG          | 200/60, 200/50 (3.9W)         | TA                       | Dual tabs with receptacles                        |
|             |                               | TB                       | TA with protection diode                          |
|             |                               | TD                       | TA with light                                     |
|             |                               | TE                       | TA with light and protection diode                |
|             |                               | TJ                       | Dual tabs (male only)                             |
|             |                               | TK                       | TJ with protection diode                          |
|             |                               | TM                       | TJ with light                                     |
|             |                               | TN                       | TJ with light and protection diode                |

  

| 2. WIRE LENGTH |             |
|----------------|-------------|
| D-XX X-X XX    | WIRE LENGTH |
| 0              | No wires    |
| A              | 18"         |
| B              | 24"         |
| C              | 36"         |
| D              | 48"         |
| E              | 72"         |
| F              | 96"         |

  

| 3. MANUAL OPERATOR |                      |
|--------------------|----------------------|
| D-XX X-X XX        | MANUAL OPERATOR      |
| 0                  | No operator          |
| 1                  | Non-locking recessed |
| 2                  | Locking recessed     |
| 3                  | Non-locking extended |
| 4                  | Locking extended     |

\* From Lead wire length options choose A through F

\*\* From Lead wire length options choose 0 through F

Note: When coil is above 30 volts, a ground wire is required. Applies to options with flying leads.



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**Codification table for voltages / Manual operator / Electrical connection**

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VALVE CODE ► **G XX X-X XX**  
**1 2 3 4**

**OPTIONS AVAILABLE FOR**

- Solenoid valves 32, 34, 38, 42, 44 & 48 Series

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**1. VOLTAGE**

| G-XX X-X XX | VOLTAGE   |
|-------------|---|
| AA          | 120 VAC (2.5W) Requires electrical connector with rectifier |
| AC          | 24 VAC (4.0W) Requires electrical connector with rectifier  |
| DA          | 24 VDC (1.0W) Not available for 34 series                   |
| DC          | 24 VDC (1.8W)   |
| DD          | 24 VDC (2.5W)   |
| DE          | 24 VDC (3.0W)   |
| DF          | 24 VDC (4.0W)   |
| DG          | 12 VDC (1.0W) Not available for the 34 series               |
| DJ          | 12 VDC (1.8W)   |
| DK          | 12 VDC (2.5W)   |
| DM          | 12 VDC (3.0W)   |
| DN          | 12 VDC (4.0W)   |
| DR          | 6 VDC (1.8W)  |
| DS          | 6 VDC (3.0W)  |
| EB          | 48 VDC (1.8W)   |
| EC          | 48 VDC (3.0W)   |
| ED          | 120 VDC (2.5W)  |

**2. WIRE LENGTH**

| G-XX X-X XX | WIRE LENGTH   |
|-------------|---|
| 0           | No lead wires (used only with "KJ" & "KM" connectors) |
| A           | 18" coil leads  |
| B           | 24" coil leads  |
| C           | 36" coil leads  |
| D           | 48" coil leads  |
| E           | 72" coil leads  |
| F           | 96" coil leads  |
| G           | 120" coil leads                                       |
| H           | 144" coil leads                                       |
| 1           | 18" base leads  |
| 2           | 24" base leads  |
| 3           | 36" base leads  |
| 4           | 48" base leads  |
| 5           | 72" base leads  |
| 6           | 96" base leads  |
| 7           | 120" base leads                                       |

**3. MANUAL OPERATOR**

| G-XX X-X XX | MANUAL OPERATOR      |
|-------------|----------------------|
| 1           | Non-locking recessed |
| 2           | Locking recessed     |
| 3           | Non-locking extended |
| 4           | Locking extended     |

**4. ELECTRICAL CONNECTION**

| G-XX X-X XX | ELECTRICAL CONNECTION  |
|-------------|--|
| BA          | Flying leads   |
| BB          | BA with ground wire  |
| BC          | BA with light  |
| BD          | BA with light and ground wire                                    |
| BE          | BA with suppression diode  |
| BF          | BA with suppression diode and ground wire                        |
| BG          | BA with suppression diode and light                              |
| BH          | BA with suppression diode, light and ground wire                 |
| BN          | BA with suppression diode and blocking diode                     |
| BP          | BA with suppression diode, blocking diode and ground wire        |
| BR          | BA with suppression diode, blocking diode and light              |
| BS          | BA with suppression diode, blocking diode, light and ground wire |
| KA          | Solenoid plug-in wire assembly                                   |
| KB          | KA with ground   |
| KC          | KA with rectifier and light                                      |
| KD          | KA with rectifier, light and ground                              |
| KE          | KA with suppression diode  |
| KF          | KA with suppression diode and ground                             |
| KJ          | Solenoid plug-in housing without wire assembly                   |
| KM          | Solenoid plug-in housing with ground pin without wire assembly   |
| KN          | KA with suppression diode and blocking diode                     |
| KP          | KA with suppression diode, blocking diode and ground             |
| KT          | KA with light  |
| KU          | KA with light and ground   |
| KV          | KA with suppression diode and light                              |
| KW          | KA with suppression diode, light and ground                      |
| KX          | KA with suppression diode, blocking diode and light              |
| KY          | KA with suppression diode, blocking diode, light & ground        |

**ELECTRICAL CONNECTION FOR PLUG-IN VALVES**

| G-XX X-X XX | PLUG-IN OPTIONS  |
|-------------|--|
| DC          | Base/manifold plug-in with rectifier and light                 |
| DD          | Base/manifold plug-in with rectifier, light and ground         |
| DE          | Base/manifold plug-in with suppression diode                   |
| DF          | Base/manifold plug-in with suppression diode and ground        |
| DJ          | Base/manifold plug-in  |
| DM          | Base/manifold plug-in with ground                              |
| DT          | Base/manifold plug-in with light                               |
| DU          | Base/manifold plug-in with light and ground                    |
| DV          | Base/manifold plug-in with suppression diode and light         |
| DW          | Base/manifold plug-in with suppression diode, light and ground |

Consult "Precautions" before use, installation or service of MAC Valves.



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**Codification table for voltages / Manual operators / Electrical connections**

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VALVE CODE > **-GM- G XX X-X XX**  
**1 2 3 4**

**OPTIONS AVAILABLE FOR**

- Solenoid valves 52 & 400 Series

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| 1. VOLTAGE                |  | 4. ELECTRICAL CONNECTION |   |
|---------------------------|--|--------------------------|---|
| <b>G-XX X-X XX</b>        | <b>VOLTAGE</b>   | <b>G-XX X-X XX</b>       | <b>ELECTRICAL CONNECTION</b>  |
| <b>DC</b>                 | 24 VDC (1.8 W)   | <b>BA</b>                | Flying leads  |
| <b>DD</b>                 | 24 VDC (2.5 W)   | <b>BB</b>                | BA with ground wire   |
| <b>DE</b>                 | 24 VDC (3.0 W)   | <b>BC</b>                | BA with light parallel to leads   |
| <b>DF</b>                 | 24 VDC (4.0 W)   | <b>BD</b>                | BA with light parallel to leads & ground wire   |
| <b>DJ</b>                 | 12 VDC (1.8 W)   | <b>BE</b>                | BA with suppression diode   |
| <b>DK</b>                 | 12 VDC (2.5 W)   | <b>BF</b>                | BA with suppression diode & ground wire   |
| <b>DM</b>                 | 12 VDC (3.0 W)   | <b>BG</b>                | BA with suppression diode plus light parallel to leads                                |
| <b>DN</b>                 | 12 VDC (4.0 W)   | <b>BH</b>                | BA with suppression diode plus light parallel to leads & ground wire                  |
| <b>2. WIRE LENGTH</b>     |  | <b>*BN</b>               | BA with suppression diode plus blocking diode   |
| <b>G-XX X-X XX</b>        | <b>WIRE LENGTH</b>   | <b>*BP</b>               | BA with suppression diode plus blocking diode & ground wire                           |
| <b>0</b>                  | No lead wire (use only with "KJ" & "KM" electrical connectors) | <b>*BR</b>               | BA with suppression diode plus blocking diode & light parallel to leads               |
| <b>A</b>                  | 18"  | <b>*BS</b>               | BA with suppression diode plus blocking diode & light parallel to leads & ground wire |
| <b>B</b>                  | 24"  | <b>BT</b>                | BA with light on top  |
| <b>C</b>                  | 36"  | <b>BU</b>                | BA with light on top & ground wire  |
| <b>D</b>                  | 48"  | <b>BV</b>                | BA with suppression diode plus light on top   |
| <b>E</b>                  | 72"  | <b>BW</b>                | BA with suppression diode plus light on top & ground wire                             |
| <b>F</b>                  | 96"  | <b>*BX</b>               | BA with suppression diode plus blocking diode & light on top                          |
| <b>G</b>                  | 120"   | <b>*BY</b>               | BA with suppression diode plus blocking diode & light on top & ground wire            |
| <b>H</b>                  | 144"   |                          |   |
| <b>3. MANUAL OPERATOR</b> |  | <b>G-XX X-X XX</b>       | <b>SOLENOID PLUG-IN CONNECTOR WITH LEADS</b>  |
| <b>G-XX X-X XX</b>        | <b>MANUAL OPERATOR</b>   | <b>KA</b>                | Plug-in wire assembly   |
| <b>1</b>                  | Non-locking recessed   | <b>KB</b>                | KA with ground wire   |
| <b>2</b>                  | Locking recessed   | <b>KE</b>                | KA with suppression diode   |
| <b>3</b>                  | Non-locking extended   | <b>KF</b>                | KA with suppression diode & ground wire   |
| <b>4</b>                  | Locking extended   | <b>KJ</b>                | Plug-in housing without wire assembly ('KA' without wire assembly)                    |
|                           |  | <b>KM</b>                | Plug-in housing without wire assembly ('KB' without wire assembly)                    |
|                           |  | <b>*KN</b>               | KA with suppression diode plus blocking diode   |
|                           |  | <b>*KP</b>               | KA with suppression diode plus blocking diode & ground wire                           |
|                           |  | <b>KT</b>                | KA with light on top  |
|                           |  | <b>KU</b>                | KA with light on top & ground wire  |
|                           |  | <b>KV</b>                | KA with suppression diode plus light on top   |
|                           |  | <b>KW</b>                | KA with suppression diode plus light & ground wire                                    |
|                           |  | <b>*KX</b>               | KA with suppression diode plus blocking diode & light on top                          |
|                           |  | <b>*KY</b>               | KA with suppression diode plus blocking diode & light on top & ground wire            |

Note: Blocking diode is located in the lead wire



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**Codification table for voltages / Manual operators / Electrical connections**

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VALVE CODE > **H XX X-X XX**  
**1 2 3 4**

**OPTIONS AVAILABLE FOR**

- Solenoid valves 37 & 47 Series

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**1. VOLTAGE**

| H-XX X-X XX | VOLTAGE  |
|-------------|--|
| <b>AA</b>   | 120/50, 120/60 (6.7 W)<br>(use connector with rectifier) |
| <b>AB</b>   | 220/50, 220/60 (5.6 W)<br>(use connector with rectifier) |
| <b>AC</b>   | 240/50, 240/60 (5.8 W)<br>(use connector with rectifier) |
| <b>AD</b>   | 24/50, 24/60 (7.8 W)<br>(use connector with rectifier)   |
| <b>DA</b>   | 24 VDC (5.2 W)   |
| <b>DB</b>   | 24 VDC (2.4 W)   |
| <b>DC</b>   | 24 VDC (1.8 W)   |
| <b>DD</b>   | 24 VDC (1.0 W)   |
| <b>DF</b>   | 12 VDC (5.2 W)   |
| <b>DG</b>   | 12 VDC (2.4 W)   |
| <b>DH</b>   | 12 VDC (1.8 W)   |
| <b>DJ</b>   | 12 VDC (1.0 W)   |
| <b>DL</b>   | 120 VDC (6.3 W)  |

**2. WIRE LENGTH**

| H-XX X-X XX | WIRE LENGTH                                    |
|-------------|--|
| <b>0</b>    | No lead wire (use with "MU" & "MM" connectors) |
| <b>A</b>    | 18"  |
| <b>B</b>    | 24"  |
| <b>C</b>    | 36"  |
| <b>D</b>    | 48"  |
| <b>E</b>    | 72"  |
| <b>F</b>    | 96"  |
| <b>G</b>    | 120"   |
| <b>H</b>    | 144"   |

**3. MANUAL OPERATOR**

| H-XX X-X XX | MANUAL OPERATOR      |
|-------------|----------------------|
| <b>0</b>    | No operator          |
| <b>1</b>    | Non-locking recessed |
| <b>2</b>    | Locking recessed     |
| <b>3</b>    | Non-locking extended |
| <b>4</b>    | Locking extended     |

**4. ELECTRICAL CONNECTION**

| H-XX X-X XX | ELECTRICAL CONNECTION  |
|-------------|--|
| <b>BA</b>   | Flying leads   |
| <b>BB</b>   | BA with ground wire  |
| <b>BC</b>   | BA with light  |
| <b>BD</b>   | BA with light & ground wire  |
| <b>BE</b>   | BA with suppression diode  |
| <b>BF</b>   | BA with suppression diode & ground wire                              |
| <b>BG</b>   | BA with suppression diode plus light                                 |
| <b>BH</b>   | BA with suppression diode plus light & ground wire                   |
| <b>*BN</b>  | BA with suppression diode plus blocking diode                        |
| <b>*BP</b>  | BA with suppression diode plus blocking diode & ground wire          |
| <b>*BR</b>  | BA with suppression diode plus blocking diode & light                |
| <b>*BS</b>  | BBA with suppression diode plus blocking diode & light & ground wire |
| <b>BK</b>   | BA with full wave rectifier  |

**H-XX X-X XX**

|           |  |
|-----------|--|
| <b>BL</b> | BA with full wave rectifier & ground wire            |
| <b>BT</b> | BA with full wave rectifier plus light               |
| <b>BU</b> | BA with full wave rectifier plus light & ground wire |

**H-XX X-X XX PLUG-IN CONNECTOR**

|            |   |
|------------|---|
| <b>FA</b>  | Base plug-in  |
| <b>FB</b>  | FA with ground wire   |
| <b>FC</b>  | FA with light   |
| <b>FD</b>  | FA with light & ground wire   |
| <b>FE</b>  | FA with suppression diode   |
| <b>FF</b>  | FA with suppression diode & ground wire                             |
| <b>FG</b>  | FA with suppression diode & light                                   |
| <b>FH</b>  | FA with suppression diode plus light & ground wire                  |
| <b>FK</b>  | FA with full wave rectifier   |
| <b>FL</b>  | FA with full wave rectifier & ground wire                           |
| <b>*FN</b> | FA with suppression diode plus blocking diode                       |
| <b>*FP</b> | FA with suppression diode plus blocking diode & ground wire         |
| <b>*FR</b> | FA with suppression diode plus blocking diode plus light            |
| <b>*FS</b> | FA with suppression diode plus blocking diode & light & ground wire |

|            |   |
|------------|---|
| <b>FT</b>  | FA with full wave rectifier plus light                              |
| <b>FU</b>  | FA with full wave rectifier plus light & ground wire                |
| <b>MA</b>  | Solenoid plug-in wire assembly                                      |
| <b>MB</b>  | MA with ground wire   |
| <b>MC</b>  | MA with light   |
| <b>MD</b>  | MA with light & ground wire   |
| <b>ME</b>  | MA with suppression diode   |
| <b>MF</b>  | MA with suppression diode & ground wire                             |
| <b>MG</b>  | MA with suppression diode plus light                                |
| <b>MH</b>  | MA with suppression diode plus light & ground wire                  |
| <b>MK</b>  | MA with full wave rectifier   |
| <b>ML</b>  | MA with full wave rectifier & ground wire                           |
| <b>*MN</b> | MA with suppression diode plus blocking diode                       |
| <b>*MP</b> | MA with suppression diode plus blocking diode & ground wire         |
| <b>*MR</b> | MA with suppression diode plus blocking diode & light               |
| <b>*MS</b> | MA with suppression diode plus blocking diode & light & ground wire |

|           |   |
|-----------|---|
| <b>MT</b> | MA with full wave rectifier plus light                                    |
| <b>MU</b> | MA with full wave rectifier plus light & ground wire                      |
| <b>MJ</b> | Plug-in housing without wire assembly ('MA' option without wire assembly) |
| <b>MM</b> | Plug-in housing without wire assembly ('MB' option without wire assembly) |
| <b>KA</b> | Mini square connector   |
| <b>KB</b> | KA with suppression diode   |
| <b>KC</b> | KA with M.O.V.  |
| <b>KD</b> | KA with light   |
| <b>KE</b> | KA with light & suppression diode   |
| <b>KF</b> | KA with light & M.O.V.  |
| <b>KJ</b> | Mini square connector – male only   |
| <b>KK</b> | KJ with suppression diode   |
| <b>KL</b> | KJ with M.O.V.  |
| <b>KM</b> | KA with full wave rectifier   |
| <b>KN</b> | KA with full wave rectifier & M.O.V.                                      |
| <b>KP</b> | KA with full wave rectifier & light                                       |
| <b>KR</b> | KA with full wave rectifier plus light & M.O.V.                           |
| <b>KS</b> | KJ with full wave rectifier   |

\* Blocking diode is located in the lead wire



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**Codification table for voltages / Manual operators / Electrical connections**

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VALVE CODE >

**J XX X-X XX**  
**1 2 3 4**

**OPTIONS AVAILABLE FOR**

- Solenoid valves 36 and 46 Series

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### 1. VOLTAGE

| J-XX X-X XX | VOLTAGE                       |
|-------------|-------------------------------|
| AA          | 120VAC (5.4W)                 |
| AC          | 24VAC (5.4W)                  |
| DA          | 24VDC (5.4W)                  |
| DB          | 12VDC (5.4W)                  |
| DC          | 24VDC (2.4W)                  |
| DD          | 12VDC (2.4W)                  |
| DE          | 24VDC (1.8W)                  |
| DF          | 12VDC (1.8W)                  |
| DJ          | 24VDC (1.3W) - 46 series only |
| DL          | 12VDC (1.3W) - 46 series only |

### 2. WIRE LENGTH

| J-XX X-X XX | WIRE LENGTH    |
|-------------|----------------|
| A           | 18" coil leads |
| B           | 24" coil leads |
| C           | 36" coil leads |
| D           | 48" coil leads |
| E           | 72" coil leads |
| F           | 96" coil leads |
| P           | Base plug-in   |

### 3. MANUAL OPERATOR

| J-XX X-X XX | MANUAL OPERATOR      |
|-------------|----------------------|
| 0           | No operator          |
| 1           | Non-locking recessed |
| 2           | Locking recessed     |
| 3           | Non-locking extended |
| 4           | Locking extended     |

### 4. ELECTRICAL CONNECTION

| J-XX X-X XX | CONNECTORS FOR NON PLUG-IN VALVES<br>ELECTRICAL CONNECTION    |
|-------------|---|
| BA          | Flying leads  |
| GA          | MAC JAC solenoid plug-in                                      |
| GB          | MAC JAC solenoid plug-in with diode                           |
| GC          | MAC JAC solenoid plug-in with MOV                             |
| GD          | MAC JAC solenoid plug-in with light                           |
| GE          | MAC JAC solenoid plug-in with diode and light                 |
| GF          | MAC JAC solenoid plug-in with MOV and light                   |
| GG          | MAC JAC solenoid plug-in with rectifier                       |
| GH          | MAC JAC solenoid plug-in with rectifier and light             |
| GJ          | MAC JAC solenoid plug-in - Male only                          |
| GK          | MAC JAC solenoid plug-in with diode - Male only               |
| GL          | MAC JAC solenoid plug-in with MOV - Male only                 |
| GM          | MAC JAC solenoid plug-in with light - Male only               |
| GN          | MAC JAC solenoid plug-in with diode and light - Male only     |
| GP          | MAC JAC solenoid plug-in with MOV and light - Male only       |
| GR          | MAC JAC solenoid plug-in with rectifier - Male only           |
| GS          | MAC JAC solenoid plug-in with rectifier and light - Male only |
| *JA         | Square Connector  |
| *JC         | Square Connector with light                                   |
| *JE         | Square Connector with diode                                   |
| *JF         | Square Connector with MOV                                     |
| *JG         | Square Connector with diode/light                             |
| *JH         | Square Connector with MOV/light                               |
| *JK         | Square Connector with Rectifier                               |

### J-XX X-X XX

|     |   |
|-----|---|
| *JL | Square Connector with Rectifier with light      |
| *JJ | Square Connector Male only (Plain)              |
| *JB | Rectangular Connector                           |
| *JD | Rectangular Connector with light                |
| *JN | Rectangular Connector with diode                |
| *JP | Rectangular Connector with MOV                  |
| *JR | Rectangular Connector with diode/light          |
| *JS | Rectangular Connector with MOV/light            |
| *JT | Rectangular Connector with Rectifier            |
| *JU | Rectangular Connector with Rectifier with light |
| *JM | Rectangular Connector Male only (Plain)         |

\* Not available on manifold or stacking valves

### CONNECTORS FOR NON PLUG-IN VALVES

#### J-XX X-X XX

#### MINI SQUARE PLUG-IN CONNECTORS 9.4 MM SPACING BETWEEN PINS

|    |   |
|----|---|
| KA | Mini plug-in                                      |
| KB | Mini plug-in with diode                           |
| KC | Mini plug-in with MOV                             |
| KD | Mini plug-in with light                           |
| KE | Mini plug-in with diode and light                 |
| KF | Mini plug-in with MOV and light                   |
| KG | Mini plug-in with rectifier                       |
| KH | Mini plug-in with rectifier and light             |
| KJ | Mini plug-in - Male only                          |
| KK | Mini plug-in with diode - Male only               |
| KL | Mini plug-in with MOV - Male only                 |
| KM | Mini plug-in with light - Male only               |
| KN | Mini plug-in with diode and light - Male only     |
| KP | Mini plug-in with MOV and light - Male only       |
| KR | Mini plug-in with rectifier - Male only           |
| KS | Mini plug-in with rectifier and light - Male only |

### CONNECTORS FOR NON PLUG-IN VALVES

#### J-XX X-X XX

#### MINI SQUARE PLUG-IN CONNECTORS 8.0 MM SPACING BETWEEN PINS ISO SPECIFICATION 15217

|    |   |
|----|---|
| LA | Mini plug-in                                      |
| LB | Mini plug-in with diode                           |
| LC | Mini plug-in with MOV                             |
| LD | Mini plug-in with light                           |
| LE | Mini plug-in with diode and light                 |
| LF | Mini plug-in with MOV and light                   |
| LG | Mini plug-in with rectifier                       |
| LH | Mini plug-in with rectifier and light             |
| LJ | Mini plug-in - Male only                          |
| LK | Mini plug-in with diode - Male only               |
| LL | Mini plug-in with MOV - Male only                 |
| LM | Mini plug-in with light - Male only               |
| LN | Mini plug-in with diode and light - Male only     |
| LP | Mini plug-in with MOV and light - Male only       |
| LR | Mini plug-in with rectifier - Male only           |
| LS | Mini plug-in with rectifier and light - Male only |

#### J-XX X-X XX

#### CONNECTORS FOR PLUG-IN VALVES

|    |                                       |
|----|---------------------------------------|
| FA | Base plug-in                          |
| FB | Base plug-in with diode               |
| FC | Base plug-in with MOV                 |
| FD | Base plug-in with light               |
| FE | Base plug-in with diode and light     |
| FF | Base plug-in with MOV and light       |
| FG | Base plug-in with rectifier           |
| FH | Base plug-in with rectifier and light |



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**Codification table for voltages / Manual operators / Electrical connections**

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VALVE CODE ►

**L XX X-X XX**  
**1 2 3 4**

**OPTIONS AVAILABLE FOR**

- Solenoid valves 32, 38, 42, 44, 47 & 48 Series

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| 1. VOLTAGE (32, 38, 42, 44, 48 SERIES) |               | 1. VOLTAGE (47 SERIES) |              |
|--|---------------|------------------------|--------------|
| L-XX X-X XX                            | VOLTAGE       | L-XX X-X XX            | VOLTAGE      |
| DF                                     | 24VDC (4.0W)  | DA                     | 24VDC (5.2W) |
| DN                                     | 12VDC (4.0W)  | DF                     | 12VDC (5.2W) |
| HA                                     | 24VDC (1.95W) |                        |              |
| HE                                     | 12VDC (1.95W) |                        |              |

| 2. WIRE LENGTH (all series) |              |
|-----------------------------|--------------|
| L-XX X-X XX                 | WIRE LENGTH  |
| 0                           | No lead wire |
| A                           | 18"          |
| B                           | 24"          |
| C                           | 36"          |
| D                           | 48"          |
| E                           | 72"          |
| F                           | 96"          |
| G                           | 120"         |
| H                           | 144"         |

| 3. MANUAL OPERATOR (all series) |                 |
|---------------------------------|-----------------|
| L-XX X-X XX                     | MANUAL OPERATOR |
| 0                               | No operator     |

| 4. ELECTRICAL CONNECTOR (32, 38, 42, 44 & 48 series) |  |
|--|--|
| L-XX X-X XX  | NON PLUG-IN  |
| BA   | 2 wire flying leads                                |
| BB   | 2 wire flying leads with ground wire               |
| BC   | 2 wire flying leads with light                     |
| BD   | 2 wire flying leads with light & ground wire       |
| BJ   | 4 wire flying leads                                |
| BK   | 4 wire flying leads with ground                    |
| BL   | 4 wire flying leads with light                     |
| BM   | 4 wire flying leads with light & ground wire       |
| KA   | 2 wire plug-in assembly                            |
| KB   | 2 wire plug-in assembly with ground wire           |
| KC   | 2 wire plug-in assembly with light                 |
| KD   | 2 wire plug-in assembly with light and ground wire |
| KE   | 4 wire plug-in assembly                            |
| KF   | 4 wire plug-in assembly with ground wire           |
| KG   | 4 wire plug-in assembly with light                 |
| KH   | 4 wire plug-in assembly and ground wire            |
| LA   | 3 wire plug-in assembly (polarity switching cover) |

  

| L-XX X-X XX | PLUG-IN                                       |
|-------------|---|
| *DA         | Base plug-in                                  |
| *DB         | Base plug-in with ground pin                  |
| *DC         | Base plug-in with light                       |
| *DD         | Base plug-in with light & ground pin          |
| **EA        | Base plug-in 3 pin (Polarity switching cover) |

| 4. ELECTRICAL CONNECTOR (47 series) |  |
|-------------------------------------|--|
| L-XX X-X XX                         | NON PLUG-IN  |
| BA                                  | 2 wire flying leads                                |
| BB                                  | 2 wire flying leads with ground wire               |
| BC                                  | 2 wire flying leads with light                     |
| BD                                  | 2 wire flying leads with light & ground wire       |
| BJ                                  | 4 wire flying leads                                |
| BK                                  | 4 wire flying leads with ground                    |
| BL                                  | 4 wire flying leads with light                     |
| BM                                  | 4 wire flying leads with light & ground wire       |
| LA                                  | 3 wire plug-in assembly (Polarity switching cover) |
| MA                                  | 2 wire plug-in assembly                            |
| MB                                  | 2 wire plug-in assembly with ground wire           |
| MC                                  | 2 wire plug-in assembly with light                 |
| MD                                  | 2 wire plug-in assembly with light and ground wire |
| ME                                  | 4 wire plug-in assembly                            |
| MF                                  | 4 wire plug-in assembly with ground wire           |
| MG                                  | 4 wire plug-in assembly with light                 |
| MH                                  | 4 wire plug-in assembly and ground wire            |

  

| L-XX X-X XX | PLUG-IN                                       |
|-------------|---|
| EA          | Base plug-in 3 pin (Polarity switching cover) |
| FA          | Base plug-in with ground                      |
| FB          | Base plug-in with ground & light              |
| FC          | Base plug-in 4 wire with ground               |
| FD          | Base plug-in 4 wire with light & ground       |

\* Use these options for plug-in base with 2 or 4 wire assemblies  
 \*\* Use this option for plug-in bases with 3 wire assemblies