

**canfield  
connector**

**Coil Saver®**

**5JMSD SERIES**  
IN-LINE MICRO SOLENOID DRIVER  
POWER CONVERTER WITH MOLDED  
SOLENOID VALVE CONNECTORS

## GENERAL DESCRIPTION

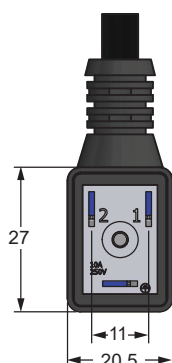
The Canfield Connector 5JMSD Series is a solenoid driver circuit (Coil Saver) tucked away in our in-line electronics package coupled with our 5J all-molded DIN solenoid valve connector/gasket/cord assembly for ISO DIN Style "A" EN175301-803 (Formerly DIN 43650), MINI and 9.4mm (Industry Standard) and 8mm Sub-Micro (DIN 43650 "C") connectors. The integrated gasket design boasts an IP67/NEMA 6 rating and makes it impossible to lose the gasket. The Coil Saver enhances solenoid valve function as it lowers the wattage of solenoid operators of solenoid valves as it first applies a full voltage to ensure strong pull-in then drops the current when the solenoid magnetic circuit is most efficient and lowers wattage during long term energization or repeated cycles and lower RMS wattage. The fully encapsulated enclosure design allows for the Coil Saver to be isolated from the heat of the solenoid as well as installed upstream, away from the coil connector that is designed for this heat. The in-line package can control input DC voltage and supplies PWM VDC to the coil. The 5JMSD Series is proudly made in the U.S.A.



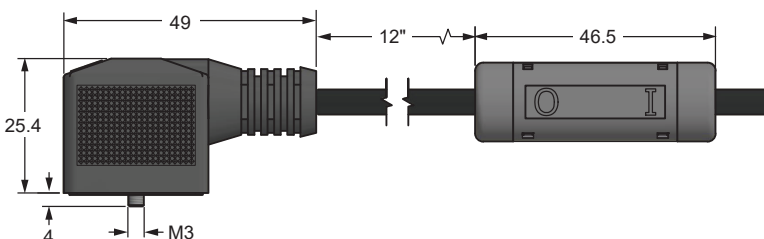
ISO, Unlighted version shown above

## DIMENSIONAL DATA

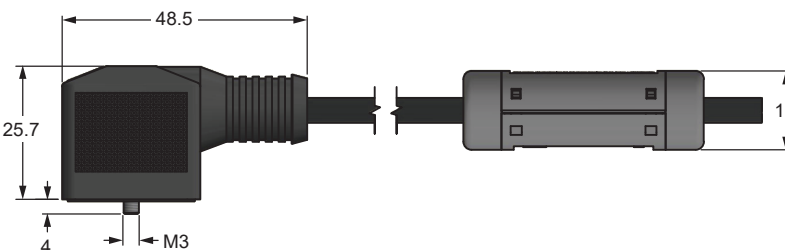
All dimensions are in millimeters unless otherwise noted.



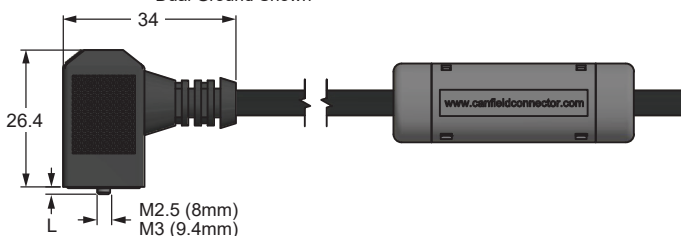
**MINI**  
Ground Down Shown



**ISO**  
Dual Ground Shown



**SUB-MICRO**  
Dual Ground Shown



## TECHNICAL DATA

|  |  |
|--|--|
| <b>Output Current</b>                    | Inrush: 8 Amps for 50 ms<br>Holding: 1 Amp   |
| <b>Output Voltage Range</b>              | 10% - 70% DC of Input  |
| <b>Input Voltage</b>                     | 12-24 VDC  |
| <b>Allowable Input Voltage DC Ripple</b> | 20% peak to peak   |
| <b>Input Voltage Tolerance</b>           | 10%  |
| <b>Materials</b>                         | Enclosure: Polyurethane<br>Module: PA and Polyurethane   |
| <b>Temperature Range</b>                 | -20° to +80°C  |
| <b>Environmental Protection</b>          | IP 67 AND NEMA 6,<br>Dust tight and water resistant  |
| <b>Cable Diameter</b>                    | 0.190  |
| <b>Cable Conductor Colors</b>            | EU Code: Blue, brown, yellow/green<br>US Code: Black, green, white<br>(Others available on request)  |
| <b>Cable Type</b>                        | Pressure extruded PVC jacket<br>(Others available on request)  |
| <b>Wire Gauge</b>                        | 20 AWG standard  |
| <b>Size</b>                              | ISO: 18mm pin spacing - DIN Style "A" EN175301-803<br>MINI: 11mm pin spacing - Industry Standard<br>Sub-Micro: 8mm pin spacing - DIN Style "C" EN 175301-803<br>Sub-Micro: 9.4mm pin spacing - Industry Standard |
| <b>Number of Contacts</b>                | 2+ ground  |

NOTE: Slight discoloration may occur to translucent material after prolonged exposure to UV rays.

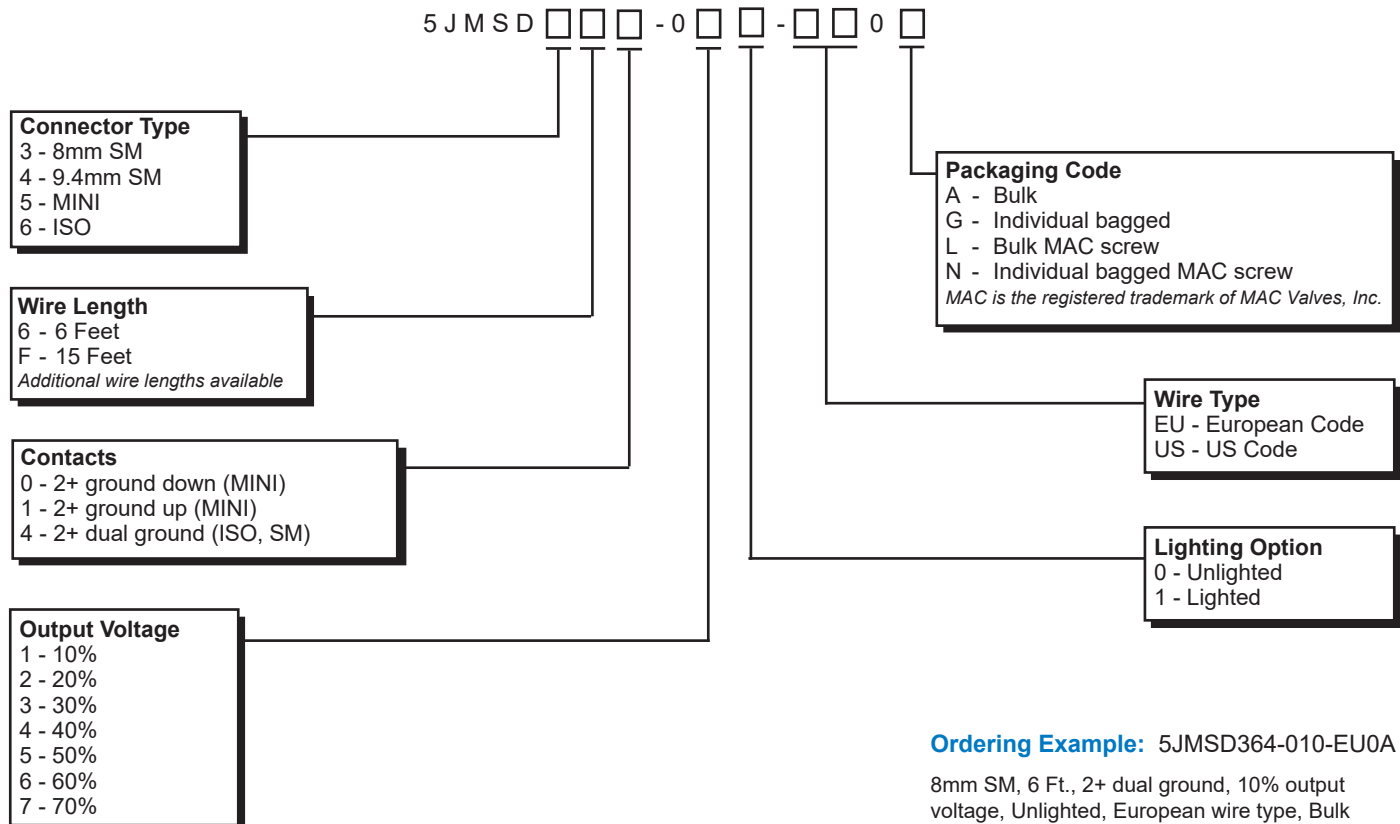
NOTE: When using MAC Valves with MINI and 9.4mm Sub-Micro, consult our factory.

## WIRING INFORMATION

| Terminal Configuration |           |     |
|------------------------|-----------|-----|
| Wire Type              | EUR       | US  |
| Chassis Ground         | YEL & GRN | GRN |
| (+) Pos. / Hot Pin 1   | BRN       | BLK |
| (-) Neg. / Neut. Pin 2 | BLU       | WHT |

## ORDERING INFORMATION



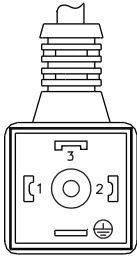
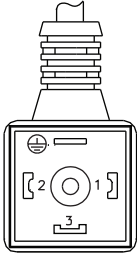
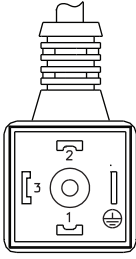
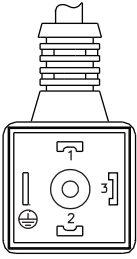
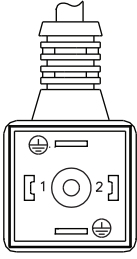


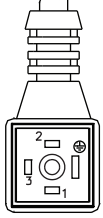
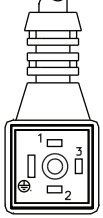

All connectors come standard with integrated gasket and screw.



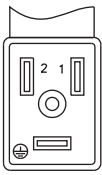

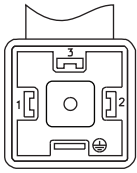
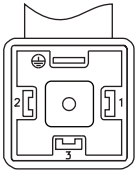
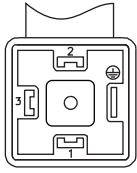
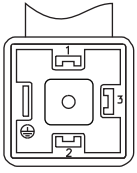
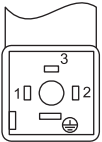
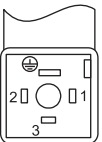
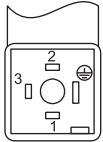
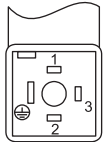
**Ordering Example:** 5JMSD364-010-EU0A

8mm SM, 6 Ft., 2+ dual ground, 10% output voltage, Unlighted, European wire type, Bulk

## Molded Connector Orientation Options

|  | Ground Down  | Ground Up  | Ground Right   | Ground Left  | Dual Ground  |
|--|--|--|--|--|--|
| <b>MINI</b>                            |   |   | --   | --   | --   |
| <b>ISO</b>                             |   |   |   |   |   |
| <b>Sub-Micro<br/>(8mm &amp; 9.4mm)</b> |  |  |  |  |  |

## Field Wireable Connector Orientation Options

|  | Ground Down   | Ground Up   | Ground Right  | Ground Left   |
|--|---|---|---|---|
| <b>MINI</b>                            |  |  | --  | --  |
| <b>ISO</b>                             |  |  |  |  |
| <b>Sub-Micro<br/>(8mm &amp; 9.4mm)</b> |  |  |  |  |