canfield connector
8510 Foxwood Court
Youngstown, Ohio 44514
P:(330) 758-8299 F:(330) 758-8912
www.canfieldconnector.com

P5600 SERIES Surge Suppression

MICRO PROTECTIVE CONNECTORS

General Description

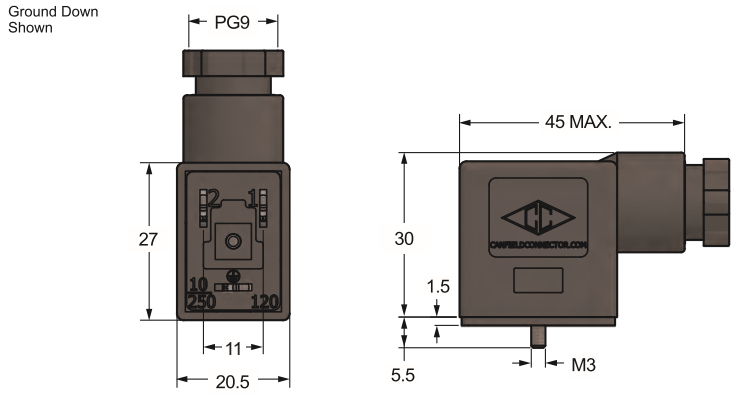
The Canfield Connector P5600 Series Micro Protective Connectors are a complete line of field wire style solenoid valve connectors that are offered with internal surge suppression and indicators light options. The connectors are made to meet EN175301-803 (Formerly DIN 43650) solenoid valve connector standards in all styles and configurations. The rugged design features integrated cable strain reliefs or conduit versions. The surge suppression can be tailored to need with 6 distinct versions. These connectors are designed to work seamlessly with your choice of solenoid valve.

Dimensional Data

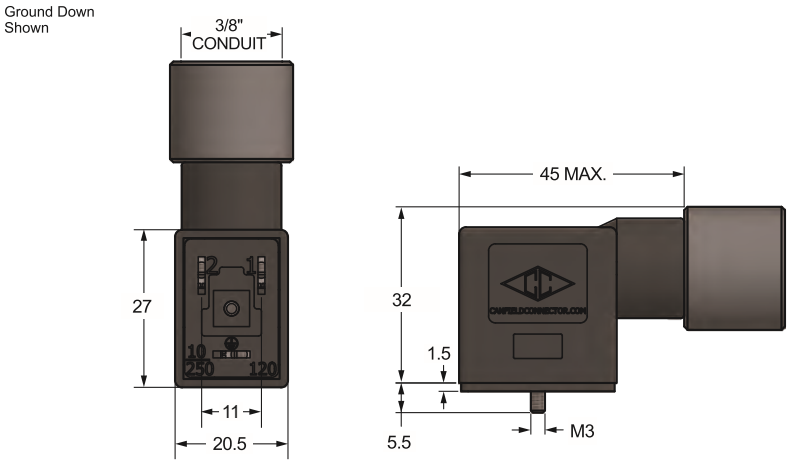
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

ISO, Unlighted version shown above

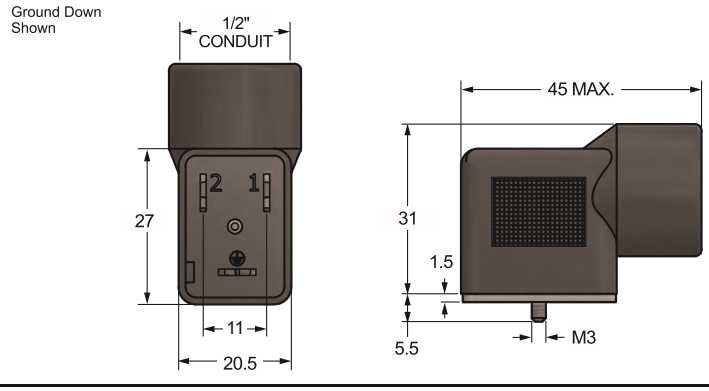
MINI - PG9



MINI - 3/8" CONDUIT



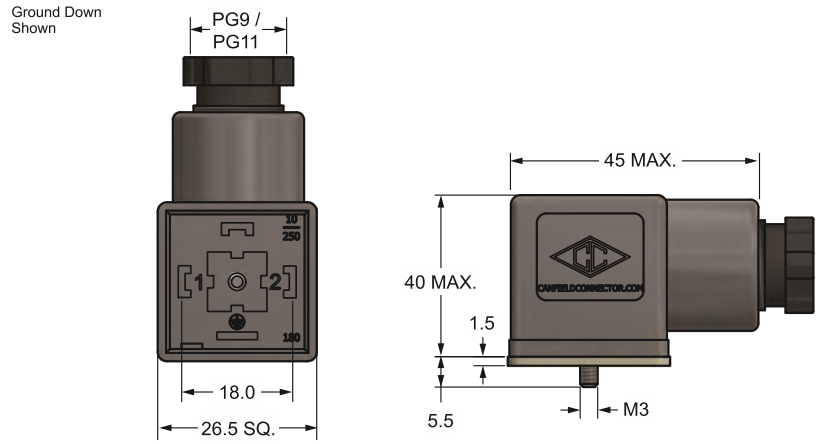
MINI - 1/2" CONDUIT



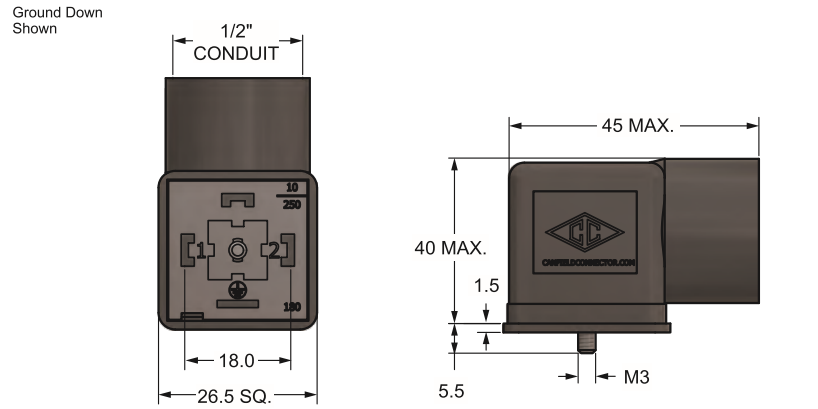
Dimensional Data Continued

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

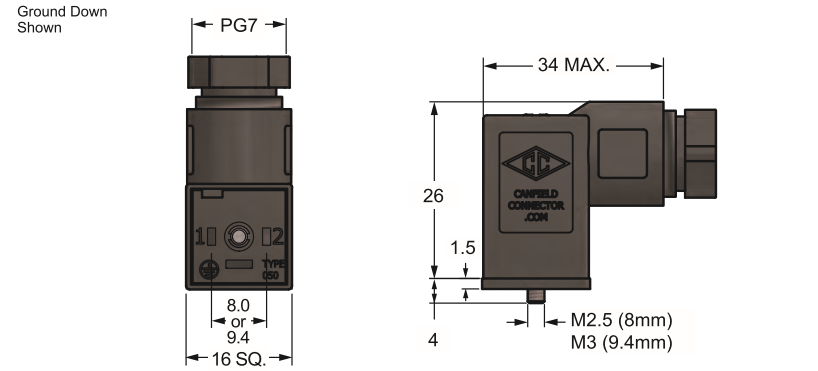
ISO - PG9 / PG11



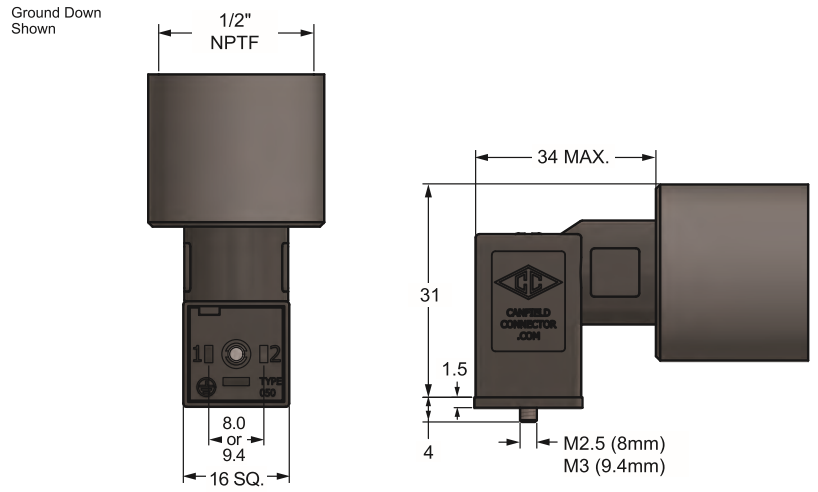
ISO - 1/2" CONDUIT

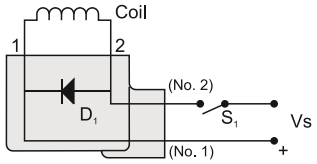
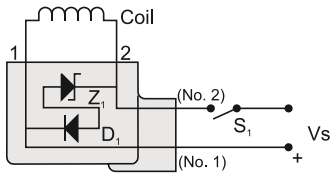
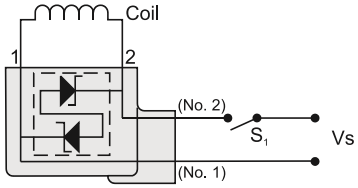
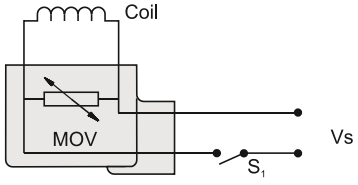
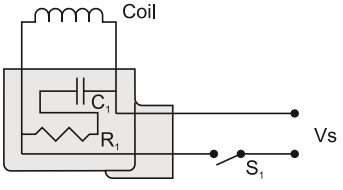


SUB-MICRO - PG7



SUB-MICRO - 1/2" CONDUIT



TYPE 1*	• Increases drop out time • Works only with DC voltage • Polarity dependent • Supply and switch are protected	Diode in parallel with coil. When switch (S_1) is opened, the energy stored in the coil is trapped and dissipated by the diode (D_1).	
TYPE 2	• Exact limitation of inductive spikes • Works only with DC voltage • Polarity dependent • Supply and switch are protected	Diode & Zener in parallel with coil. When switch (S_1) is opened, the energy stored in the coil is trapped and dissipated by the diode (D_1) and zener diode (Z1) and the coil resistance.	
TYPE 3	• Good drop out time • Works with AC or DC voltage • NOT polarity dependent • Coil, supply and switch are protected	Transorb in parallel with coil. When switch (S_1) is opened or closed, the energy stored in the coil is limited by transorb.	
TYPE 5*	• Good drop out time • Works with AC or DC voltage • NOT polarity dependent • Coil, supply and switch are protected	MOV (metal oxide varistor) in parallel with coil. When switch (S_1) is opened or closed, the energy stored in the coil is limited by the MOV.	
TYPE 6	• Good drop out time • Works with AC or DC voltage • NOT polarity dependent • Coil, supply and switch are protected	RC Network in parallel with coil. When switch (S_1) is opened or closed, the energy stored in the coil is absorbed by the capacitor (C_1) and dissipated by the resistor (R_1).	

*Most Commonly Used

Technical Data

Current Max.	Sub-Micro: 6 Amps ISO / MINI: 10 Amps
Voltage Max.	240 VAC, 120 VDC
Materials	Housing: PA, Black; Gray; Translucent (lighted versions)
Gasket Temperature Max.	Nitrile: -25° to +90°C Silicone: -40° to +125°C
Environmental Protection	Designed for IP 65 / NEMA 4 Dust tight and water resistant
Cable Diameter	PG7: 0.157" to 0.236" O.D. PG9: 0.236" to 0.315" O.D. PG11: 0.315" to 0.394" O.D. 1/2" Conduit 0.410" maximum
Wire Gauge	ISO / MINI: 14 AWG Max. Sub-Micro: 20 AWG Max.
Size	ISO: 18mm pin spacing - DIN Style "A" EN175301-803 MINI: 11mm pin spacing - Industry Standard Sub-Micro: 8mm pin spacing - DIN Style "C" EN 175301-803 Sub-Micro: 9.4mm pin spacing - Industry Standard
Number of Contacts	MINI: 2+ ground ISO / Sub-Micro: 2 contacts + 2 grounds

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

NORMAL POLARITY	
⏚	Chassis Ground
1	(+) Pos. / High
2	(-) Neg. / Neut.

Ordering Information

Each connector kit contains screw, washer and gasket assembly.

Use a prefix of "G" for Individually Bagged

P 5 □ 0 □ - □ □ □ □ □ 0 0

Orientation
1 - Ground down
Additional ground orientations available

Operating Voltage
3 - 6 - 48 VDC
4 - 48 - 120 VDC
5 - 6 - 48 V AC/DC 50/60 Hz
6 - 48 - 120 V AC/DC 50/60 Hz
7 - 120 - 240 V AC/DC 50/60Hz

Gasket
1 - Nitrile
2 - Silicone
3 - Nitrile profile††
††NOT available in Sub-Micro

Housing Color
0 - Black "B" standard. Translucent if lighted.
1 - Gray "A"

Lighting Specification
0 - Unlighted
1 - Lighted

MPC Circuit
1 - Diode (DC Only)
2 - Diode & Zener diode (DC Only)
3 - Transorb (AC/DC)†
5 - MOV (AC/DC)
6 - RC network (AC/DC)
†NOT available in Operating Voltage option 7

Connector Type
3 - MINI strain relief PG9
4 - MINI 3/8" conduit
5 - MINI 1/2" conduit
6 - ISO strain relief PG9
7 - ISO strain relief PG11
8 - ISO 1/2" conduit
B - Sub-Micro strain relief PG7 (9.4mm)**
C - Sub-Micro 1/2" conduit (9.4mm)**
D - Sub-Micro strain relief PG7 (8mm)**
E - Sub-Micro 1/2" conduit (8mm)**
***MPC Circuits 1 & 5 only*

For convenience and faster shipping, this series is available in Can-Paks.
CAN-PAK Quick-Ship Bulk Packs

Ordering Example: P5103-1311000

Ground down, 6-48 VDC, Nitrile gasket, MINI strain relief PG9, Diode, Lighted

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R5000 SERIES

ISO RECTIFIED SOLENOID VALVE CONNECTORS

General Description

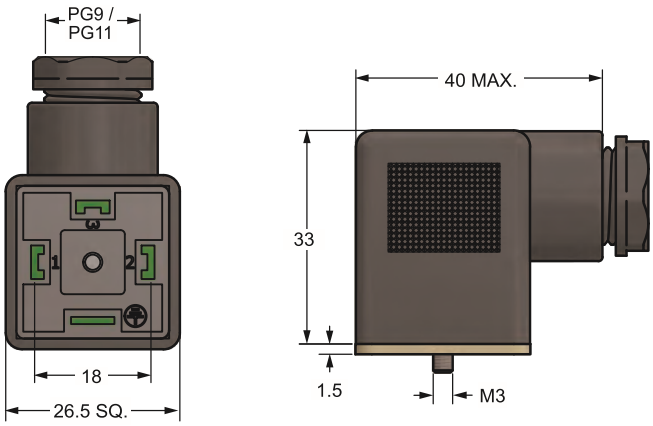
Canfield Connector's R5000 Series solenoid valve connectors incorporate full-wave bridge rectifiers inside the DIN Style "A" EN175301-803 (Formerly DIN 43650) connectors. This standard permits industry interchange-ability and has been embraced by the solenoid valve industry worldwide. The R5000 converts alternating current to direct current reducing coil burnout due to valve sticking. Also, direct current eliminates AC "hum" inherent to alternating current. Features include the ability for the user to wire the connector into existing installations. Wire connections are made inside the connector housing and the wire inlet is either PG9, PG11 or 1/2" conduit. The R5000 has a maximum current rating of 1 Amp continuous with maximum wire gauge diameter of 14 AWG. An indicator light is offered for instant diagnostics and to aid setup and installation. The HT High Top connector accommodates larger wire gauge and easy installation.

Dimensional Data

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

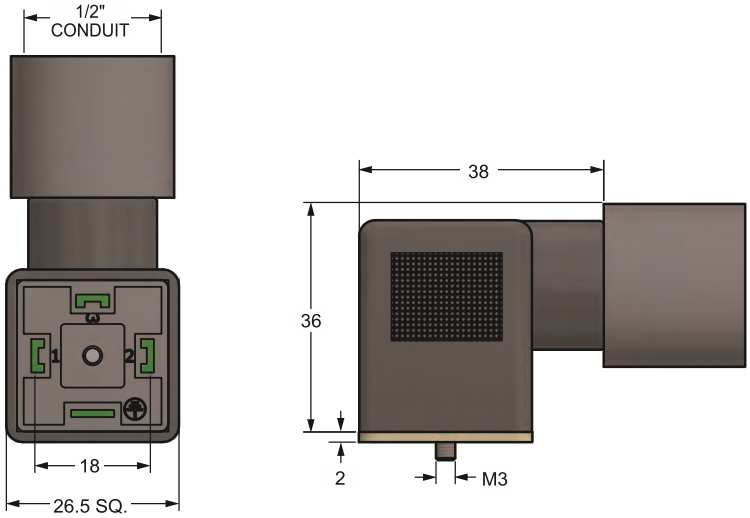
PG9 / PG11

Ground Down Shown



1/2" CONDUIT

Ground Down Shown



Consult factory for available versions listed by Canadian Standards Association for use with certified electrical equipment.

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