

canfield connector
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SERIES P5600 (MPC) MICRO PROTECTIVE CONNECTORS

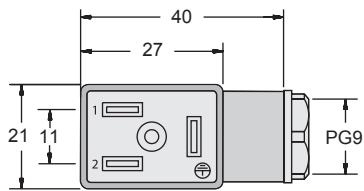
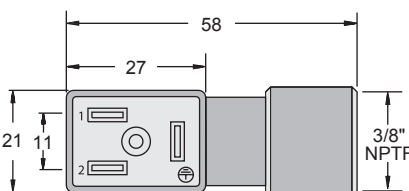
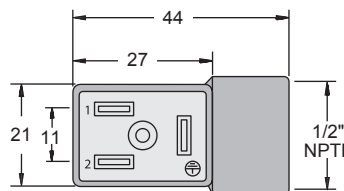
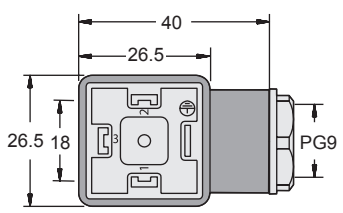
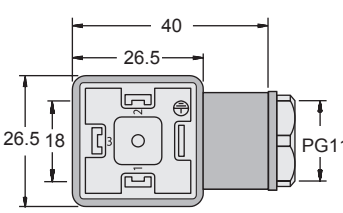
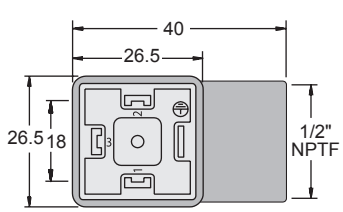
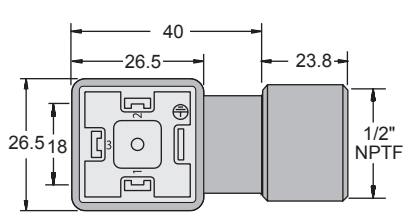
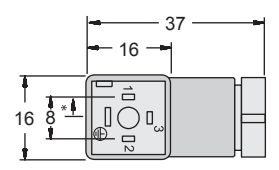
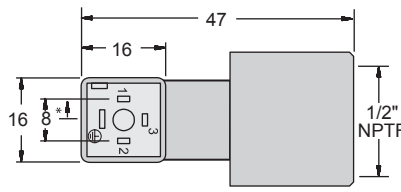
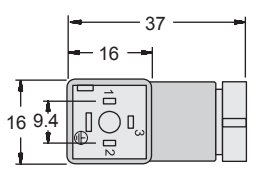
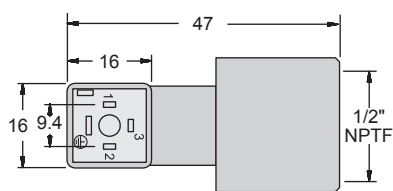
Surge Suppression

General Description

The Micro Protective Connectors are available in standard MINI, DIN 43650 Form "A" / ISO 4400, EN175301-803:2000 and Sub-Micro 8mm and 9.4mm. The Canfield Connector MPCs provide electrical controllers surge suppression against voltage spikes caused by the solenoids used on hydraulic and pneumatic solenoid valves.

Dimensional Data

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED (COMPLETE DIMENSIONAL INFORMATION IS PROVIDED ON INDIVIDUAL PAGES)

MINI	ISO DIN 43650 Form "A" / ISO 4400, EN175301-803:2000	Sub-Micro (8mm) DIN 43650 Form "C" / ISO 4400, EN175301-803:2000
 <p>PG9</p>  <p>3/8" Conduit</p>  <p>1/2" Conduit</p>	 <p>PG9 / HT PG9</p>  <p>PG11 / HT PG11</p>  <p>1/2" Conduit</p>  <p>HT 1/2" Conduit</p>	 <p>8mm Strain Relief <small>*Ground spade offset by 0.2mm toward pin 1.</small></p>  <p>8mm 1/2" Conduit <small>*Ground spade offset by 0.2mm toward pin 1.</small></p>  <p>9.4mm Strain Relief</p>  <p>9.4mm 1/2" Conduit</p>

Technical Data

- Voltage max.: 240 VAC / 120 VDC
- Current max.: ISO - 10 Amps
MINI - 10 Amps
Sub-Micro - 6 Amps
- Wire gauge max.: ISO - 14 AWG
MINI - 14 AWG
Sub-Micro - 20 AWG

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

- Recommended cable diameter:
PG7 - .157 to .236 inches O.D.
PG9 - .236 to .315 inches O.D.
PG11 - .315 to .394 inches O.D.
1/2" Conduit - .410 inch max. for MINI & ISO
1/2" Conduit - .250 inch max. for Sub-Micro
- Gaskets temperature max.: Nitrile: -25° to +90°C
Silicone: -40° to +125°C
- Environmental protection: NEMA 4 and IP 65 dust tight and water resistant

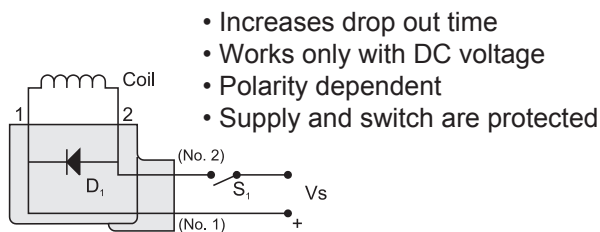
Advantages of Suppression

- Ideal for use with reed switch proximity sensor.
- Reduce contact burnoff, increasing switch life.
- High frequency interference pulses reduced, lowering electronic noise.
- Protect programmable controllers and other types of electronic devices from inductive spikes.
- Addition of extra modules or hardware is not required.
- Most suppression systems are available with standard connectors.

MPC Types

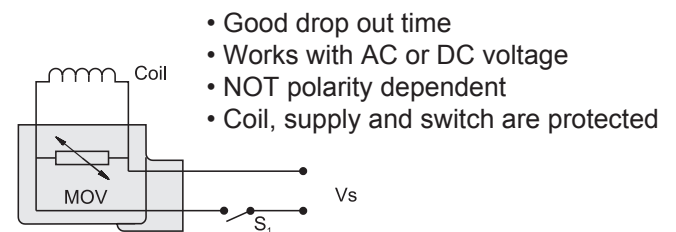
Type 1*

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).



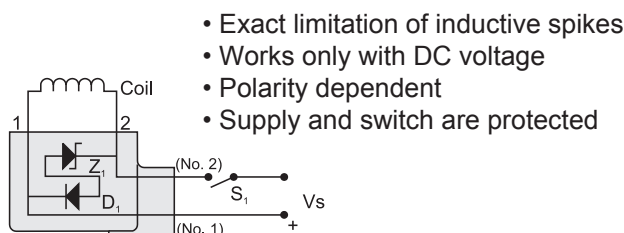
Type 5*

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.



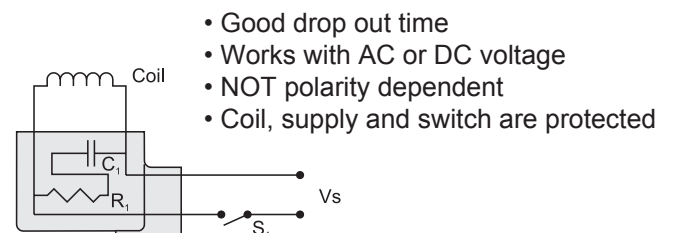
Type 2

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 (Z_1) and the coil resistance.



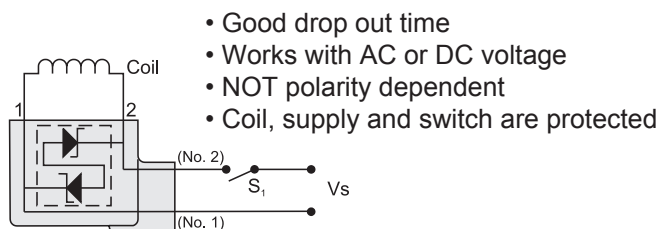
Type 6

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).



Type 3

Transorb in parallel with coil. When switch (S_1) is opened or closed, the energy stored in the coil is limited by transorb.



*Most Commonly Used

Ordering Information

Use a prefix of "G" for Individually Bagged

P 5 0 - 0 0

Orientation

1 - Ground down
Other ground orientations available.
Please consult factory.

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^{††}

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)**

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)



Quick-Ship
Bulk Packs

SERIES P5600

Can-Pak Part Number	Qty
CP-P5103-1311000-025	25
CP-P5103-1311000-100	100
CP-P5103-1351000-025	25
CP-P5103-1351000-100	100
CP-P5107-1351000-025	25
CP-P5107-1351000-100	100
CP-P5103-1611000-025	25
CP-P5103-1611000-100	100
CP-P5103-1651000-025	25
CP-P5103-1651000-100	100
CP-P5107-1651000-025	25
CP-P5107-1651000-100	100

[†] NOT available in Operating Voltage 7

^{††} NOT available in Sub-Micro

* NOT available in MINI type connectors

** MPC Circuits 1 & 5 only

Consult factory for custom configurations.

Each connector kit contains screw, washer and gasket assembly.

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

Ordering Example:

P5103-1310000

Ground down, 6 - 48 VDC, nitrile gasket, MINI strain relief PG9, Diode, unlighted, black house