

canfield
connector

Coil Saver®

D5400 SERIES
MINI AND ISO
MICRO
SOLENOID DRIVER

GENERAL DESCRIPTION

The Canfield Connector D5400 Series Micro Solenoid Driver is a NEMA 4 DIN Style "A" EN175301-803 (Formerly DIN 43650) and MINI type connector with a built in electronic circuit used to induce solenoid pull-in and reduce holding current. The time proven MSD has been designed into many applications where heat buildup occurs which reduces operating efficiency and life span of solenoid valves. The MSD has two main functions: one is to induce faster or stronger than usual response times at solenoid pull-in, the second is to reduce the net wattage of the solenoid during hold-in. The MSD drives the coil with a high input voltage for a fixed time period until the coil has shifted at which time the MSD reduces the holding voltage, which saves power, and the solenoid runs cool. The MSD Series is often used to replace low voltage power supplies where a 24 VDC solenoid valve can then be operated by 120 VAC. The Alternating current is rectified and the duty cycle reduced so as to operate the valve at proper voltage and wattage ranges. An additional advantage can be found when the MSD drops the holding voltage, which then reduces heat and current requirements.

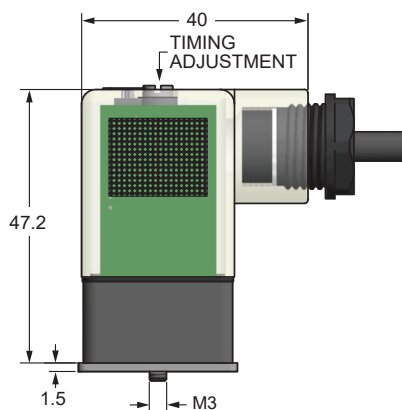
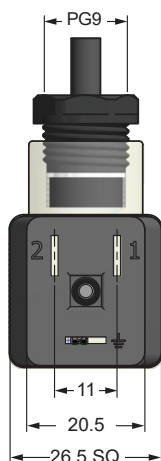


ISO, Lighted version shown above

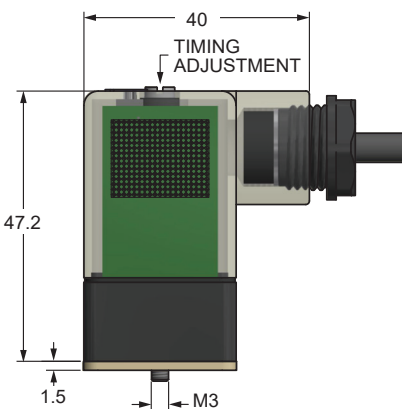
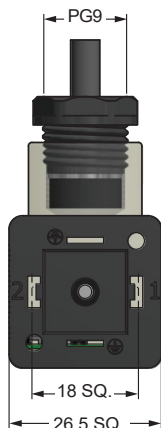
DIMENSIONAL DATA

All dimensions are in millimeters unless otherwise noted.

MINI
Ground Down Shown



ISO
Dual Ground Shown



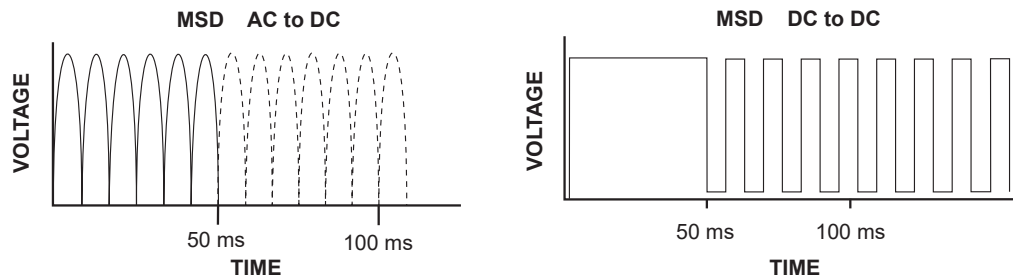
TECHNICAL DATA

Output Current	Inrush: 8 Amps for 50 ms Holding: 1 Amp
Output Voltage	10% - 70% DC of Input
Input Voltage Max.	240 VAC, 24 VDC
Allowable Input Voltage DC	20% peak to peak
Materials	Housing: Nylon, Black; Translucent (lighted versions) Interface: Nylon, Black Gasket: Nitrile
Temp Range	-20° to +50°C
Gasket Temperature Max.	Nitrile: -25° to +90°C
Environmental Protection	NEMA 4
Cable Diameter	PG7 0.157" to 0.236" O.D. 1/2" Conduit 0.410" max.
Wire Gauge	20 AWG
Size	ISO: 18mm pin spacing - DIN Style "A" EN175301-803 MINI: 11mm pin spacing - Industry Standard
Number of Contacts	2+ ground

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

The MSD allows the input line voltage directly to the coil for a fixed single shot of 50 milliseconds. After that period, the MSD automatically pulses the input voltage to the coil. In either fixed or adjustable versions, the MSD turns the power on and off so fast that the armature does not respond. By adjusting the off period so that it is longer than the on period, the net RMS voltage decreases and wattage is decreased. Many coils can be adjusted much lower than expected due to the fact that much less energy is required for hold-in as opposed to pull-in.

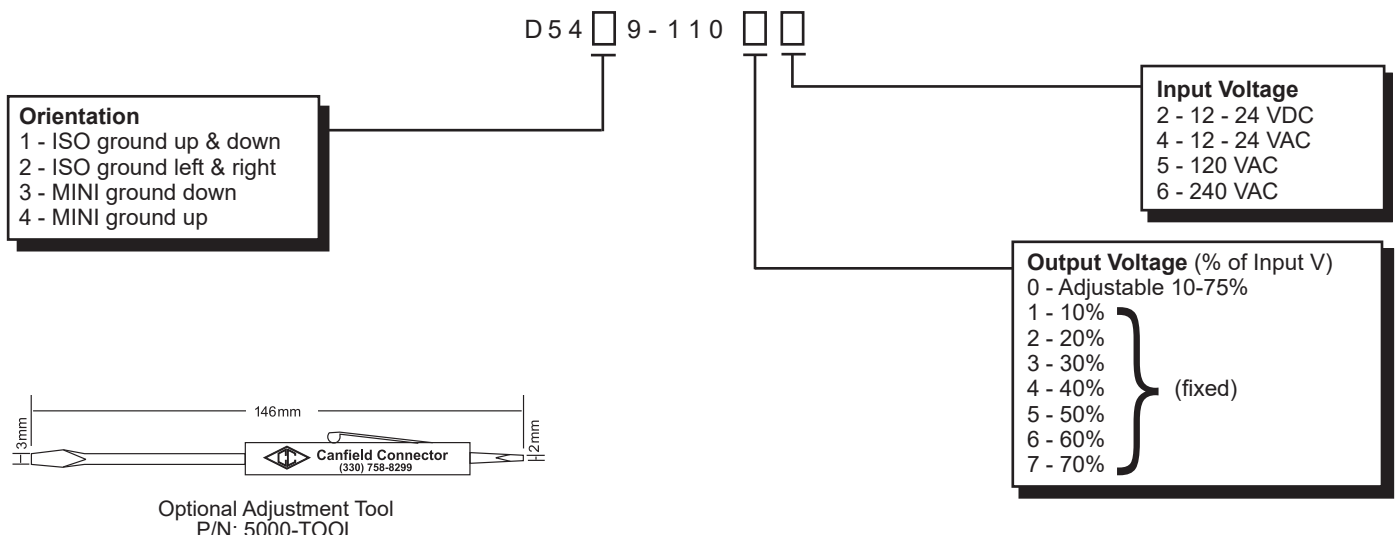
OUTPUT WAVEFORMS



Output Frequency = 1.6 KHz

ORDERING INFORMATION

Each connector kit contains screw, washer and gasket assembly.



Ordering Example: D5439 - 11005

MINI ground down, Adjustable output, 120 VAC