canfield connector

ILSS SERIES
IN-LINE SOFT START
ELECTRONIC SOFT
START CONTROL

GENERAL DESCRIPTION

Canfield Connector's ILSS Series, In-Line Soft Start (Electronic Soft Start Control) improves the performance and lifespan of your hydraulic systems. This innovative electronic device provides a smooth and controlled ramp-up of hydraulic pressure, eliminating the damaging shock and stress associated with traditional sudden starts reducing wear and tear on hydraulic components while minimizing stress on pumps, cylinders, hoses, and other parts, extending their lifespan. The all-solid-state microprocessor-based control makes for precise and reliable operation which can be modified with adjustable start-up time and pressure ramp rates to match any application. Upon power up, the device outputs the starting PWM and ramps to the ending PWM over the ramp time selected, and will remain until power is removed. The compact and rugged enclosure is designed for harsh environments and is available in various configurations to suit your needs.

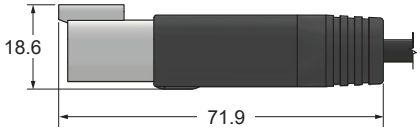
5J ISO, M12 Male version shown above

DIMENSIONAL DATA

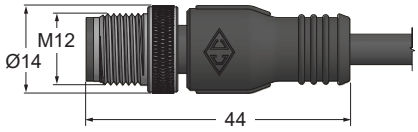
All dimensions are in millimeters unless otherwise noted.

CONNECTION OPTIONS
Input

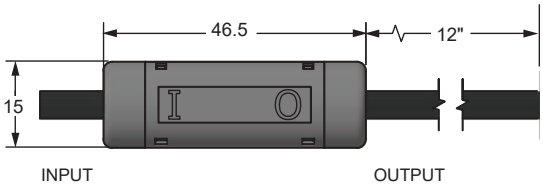
GT 2 Pin Receptacle



M12 3 Pin Male

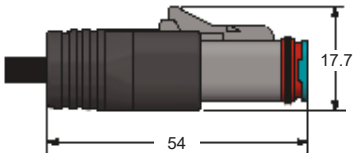


IL1

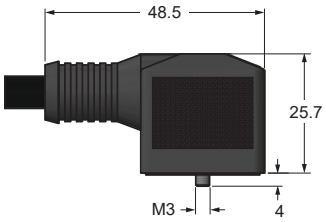


CONNECTION OPTIONS
Output

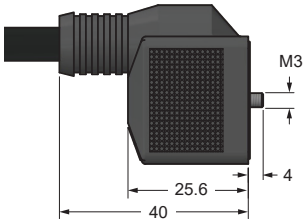
GT 2 Pin Plug



5J ISO



5F ISO



TECHNICAL DATA

Output Current	1 Amp Max.
Input Voltage	12-24 VDC
Allowable Input Voltage DC Ripple	20% peak to peak
Input Voltage Tolerance	10%
Materials	Enclosure: Polyurethane Module: PA and Polyurethane
Temperature Range	-20° to +80°C
Environmental Protection	IP 67 AND NEMA 6, Dust tight and water resistant
Cable Diameter	0.190
Cable Conductor Colors	US Code: Black, green, white (Others available on request)
Cable Type	Pressure extruded PVC jacket (Others available on request)
Wire Gauge	20 AWG standard

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

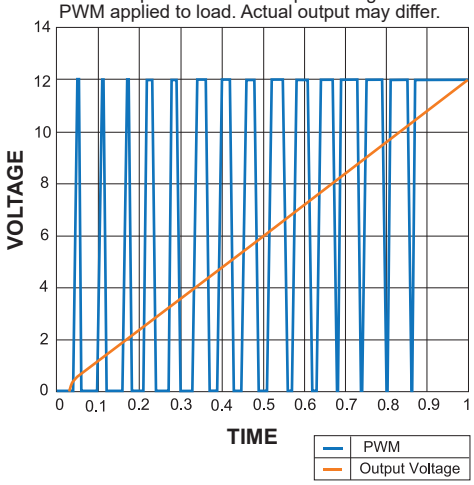
WIRING INFORMATION

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

OUTPUT WAVEFORMS

PWM vs Output Voltage

Note: Graph shows how Output Voltage relates to PWM applied to load. Actual output may differ.



ORDERING INFORMATION

All connectors come standard with integrated gasket and screw.

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Enclosure Style
1 - IL1

Input Wire Length
6 - 6 ft cable
Additional wire lengths available

Input Connection
01 - Cable with leads
02 - GT0402 2 Pin Receptacle
90 - M12 3 Pin Male Straight

Output Wire Length
6 - 6 ft cable
Additional wire lengths available

Output Connection
01 - Cable with leads
02 - GT0602 2 Pin Plug
10 - 5J ISO Dual Ground Up/Down
20 - 5F ISO Dual Ground

Start PWM

0 - 0%	5 - 50%
1 - 10%	6 - 60%
2 - 20%	7 - 70%
3 - 30%	8 - 80%
4 - 40%	9 - 90%

Packaging Code
A - Bulk
G - Individual bagged

Input Voltage
2 - 12-24 VDC

End PWM

0 - 0%	6 - 60%
1 - 10%	7 - 70%
2 - 20%	8 - 80%
3 - 30%	9 - 90%
4 - 40%	A - 100%
5 - 50%	

Ramp Time

01 - 1 sec.	06 - 6 sec.
02 - 2 sec.	07 - 7 sec.
03 - 3 sec.	08 - 8 sec.
04 - 4 sec.	09 - 9 sec.
05 - 5 sec.	10 - 10 sec.

Contact factory for additional requirements.

Ordering Example: ILSS-16020-69020522A

IL1, 6 ft., GT 2 Pin Receptacle, 6 ft, M12 3 Pin Male, Straight, 20% Start PWM, 5 sec. Ramp Time, 20% End PWM, 12-24VDC Input Voltage, Bulk