

7GL SERIES GENERAL LOCATION MAGNETIC PROXIMITY SENSORS FOR TIE ROD CYLINDERS

GENERAL DESCRIPTION

The Canfield Connector 7GL is an expansion of the popular Series 7000 "floating" clamp design, which adapts to NFPA tie rod linear actuators with 2 to 8 inch bore. This rugged magnetic proximity sensor can sense actuator position in stringent, general location applications. The switch features a robust, aircraft aluminum body, epoxy-filled, vibration and shock resistant, electronic circuit. Available in a normally open contact, the 7GL can switch current up to .5 Amps and has a voltage range of 0-120VAC/VDC 50/60 Hz.



DIMENSIONAL DATA

All dimensions are in millimeters unless otherwise noted.



TECHNICAL DATA

Switch Type	S.P.S.T., Normally Open, Reed
Operating Voltage	0-120 V AC/DC 50/60 Hz
Load Max.	10W, Resistive only
Current Max.	0.5A
Response Time	On: 0.5ms Off: 0.1ms
Sensitivity / Orientation	85 Gauss Parallel (measured from sensor surface)
Shock	Up to 30G (11mS)
Vibration	Up to 20G (10-55 Hz)
Materials	Cable: PVC House: Anodized 6061-T6 Aluminum, Epoxy encapsulated printed circuit board
Temperature Range	-20° to +80°C
Environmental Protection	Designed for NEMA 1, 4 and 13
Cable Diameter	.19mm
Wire Gauge	20 AWG standard
Wire Length	9 Ft. standard

MOUNTING INSTALLATION





tie-rod cylinders Universal 2" to 6" bore.

ELECTRICAL INSTALLATION



ORDERING INFORMATION 7 G L 1 0 - 0 0 0 - 0 0 1





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SERIES 7GL

GENERAL LOCATION MAGNETIC PROXIMITY SENSORS FOR TIE ROD CYLINDERS INSTALLATION GUIDE

Application Recommendations and Precautions

This switch has been carefully engineered and tested, but since it may be installed in virtually an unlimited number of applications under a great variety of plant conditions, it should be installed as outlined below to provide maximum reliability.

- 1. Always stay within the specifications and power rating limitations of the unit installed.
- 2. Primary and control circuit wiring should not be mixed in the same conduit. Motors will produce high impulses that will be introduced into the control wiring if the wiring is carried in the same conduit.
- 3. Never connect the switch without a load present. The switch will be destroyed.
- 4. Some electrical loads may be capacitive. <u>Capacitive loading may also occur due to distributed capacity in cable runs over 25 feet.</u> In order to obtain optimum performance and long life, magnetically operated limit switches should not be subjected to (1) strong magnetic fields, (2) extreme temperature ranges, and (3) excessive ferrous filling or chip buildup.

/ Improper wiring will damage or destroy the switch. Therefore, the wiring diagram, along with the listed power ratings, should be carefully observed before connecting power to the switch.

Technical Data

- Temperature Range: Operational from -20° to +80°C
- Shock: Operational up to 30 G (11ms)
- Vibration: Operational up to 20 G (10 55 Hz)
- Sensitivity: 85 Gauss parallel minimum, as measured on the surface of actuator
- Environmental protection: NEMA 1, 4 and 13
- · Body Material: Anodized 6061-T6 Aluminum, Epoxy encapsulated printed circuit board
- Wire: PVC 20/3 Leads
- · Circuit: S.P.S.T., Normally Open
- Operating Voltage: 0 120 V AC/DC 50/60 Hz
- Maximum Load (Power Rating): 10W, Resistive Only
- Maximum Current: 0.5A Max.
- Response Time ON: 0.5ms
- Response Time OFF: 0.1ms

Do not use on relay loads or with incandescent bulbs.

Electrical, Mounting Installation





MOUNTING