

Suited for IP67 (wet) environments, the SGD provides a user-selectable 4-20mA or 0-10VDC absolute linear position signal over an 80-inch or 120-inch full stroke range option. Signal selection is simply made by connecting the appropriate pins on the included connector or selecting the proper wires in the optional cordset.

Additionally, this sensor is constructed with a rugged polycarbonate body, an extremely durable spring-loaded stainless steel measuring cable and a mounting bracket that lets the customer mount this sensor in just about any direction. The SGD is in stock for quick delivery.

Customized options are also available for OEM customers.

## SGD

### Cable Actuated Sensor 4..20mA • 0..10 Vdc Output Signal

Compact Mid-Range String Pot • Absolute Position

80, 120-inch Stroke Range Options

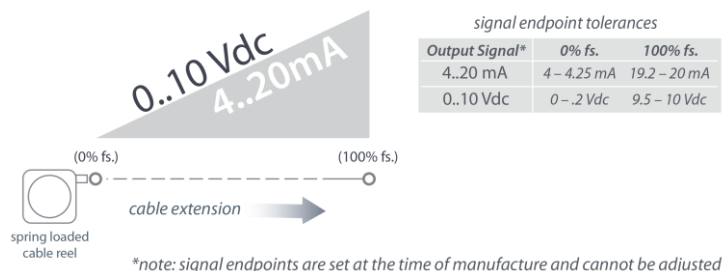
Polycarbonate Enclosure • IP67

In Stock for Quick Delivery

#### Specifications

<b>Stroke Range</b>	80 inches (2032 mm), 120 inches (3048 mm)
<b>User Selectable Output Signal</b>	4...20 mA (2-wire) / 0...10 Vdc
<b>Input Voltage, 4...20 mA option</b>	8-40 VDC
<b>Input Voltage, 0...10 Vdc option</b>	12-32 VDC
<b>Accuracy</b>	.35% FS.
<b>Repeatability</b>	.05% FS.
<b>Resolution</b>	essentially infinite
<b>Measuring Cable</b>	.019-inch dia. nylon-coated stainless steel
<b>Maximum Acceleration</b>	10 g
<b>Measuring Cable Tension</b>	9 oz. (2,5 N) ±30%
<b>Sensor</b>	plastic-hybrid precision potentiometer
<b>Cycle Life</b>	≥ 250,000
<b>Electrical Connection</b>	M12 connector (mating plug included)
<b>Enclosure</b>	glass-filled polycarbonate
<b>Environmental</b>	IP 67
<b>Operating Temperature</b>	0° to 160° F (-18° to 70° C)
<b>Weight, 80-inch (not including bracket)</b>	.6 lbs. (272 g)
<b>Weight, 120-inch (not including bracket)</b>	1 lb. (453 g)

#### Output Signal



# SGD

4...20mA • 0..10 Vdc Output Signal

## Electrical Connection

field installable connector (included)

cordset, part no. 9036810-0040 (optional)

customer supplied electrical cable, (.25 in [6 mm] max. dia.)

22 AWG (.34mm<sup>2</sup>)

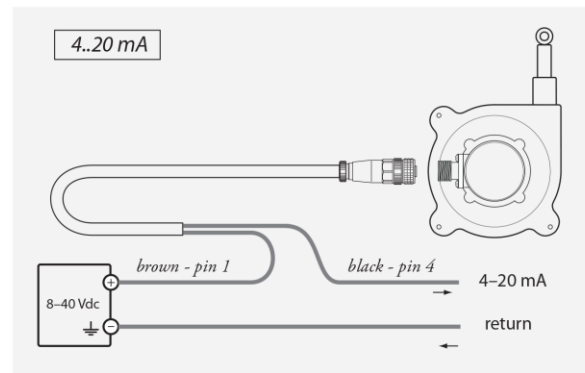
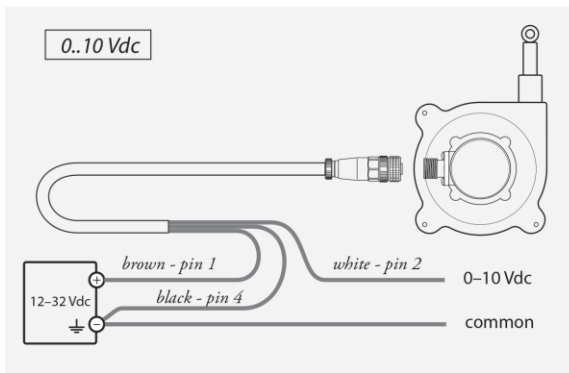
13.6 ft. [4 M]

contact view

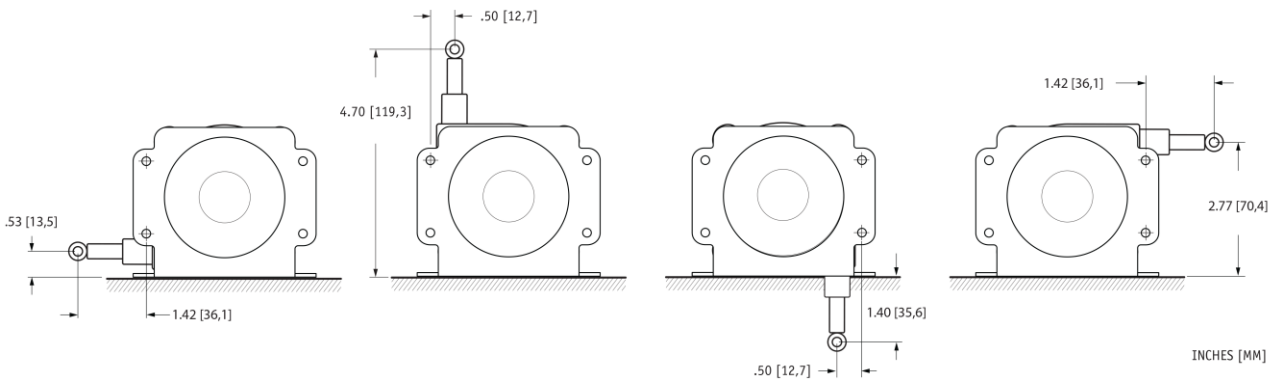
contact view

Output Signals

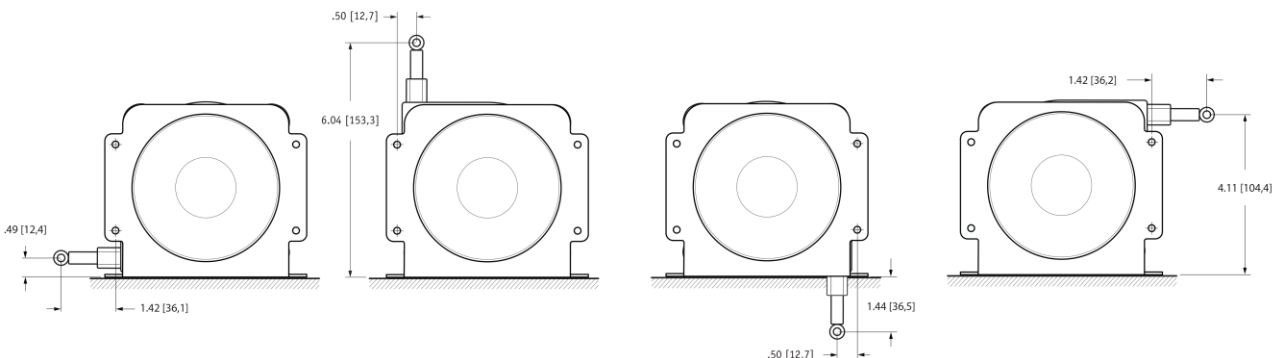
0...10 Vdc	4...20 mA	pin	pin - colorcode
12...32 Vdc	8...40 Vdc	1	1 - brown
0...10 Vdc	n/c	2	2 - white
n/c	n/c	3	3 - blue
common	4...20 mA	4	4 - black



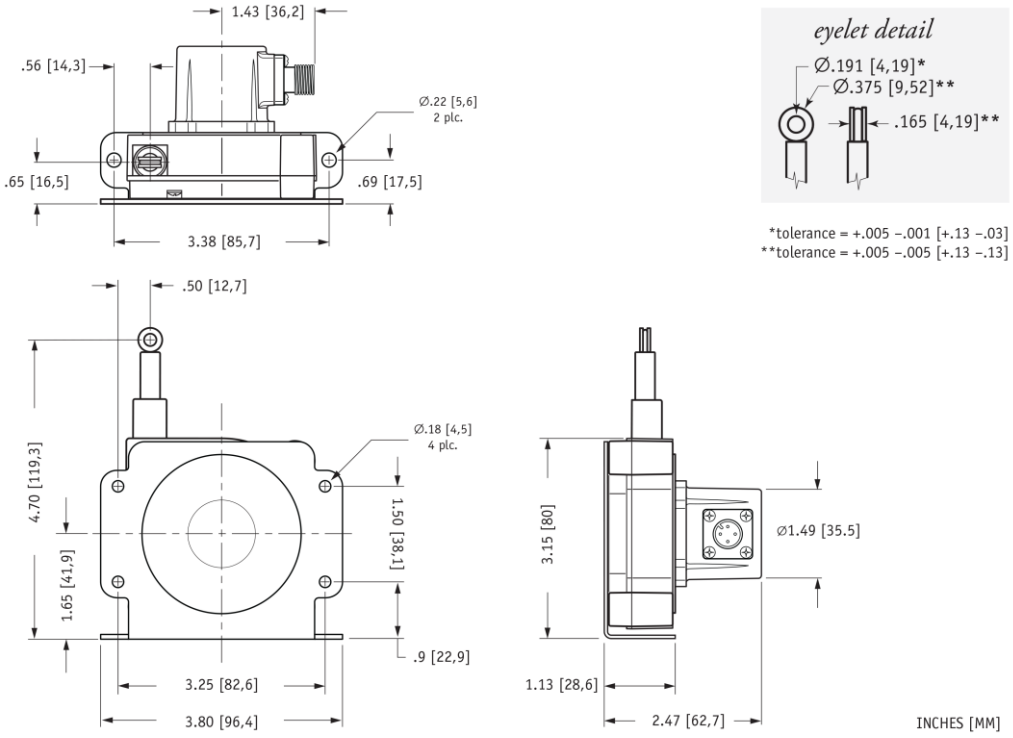
## Mounting Options (SGD-80-3):



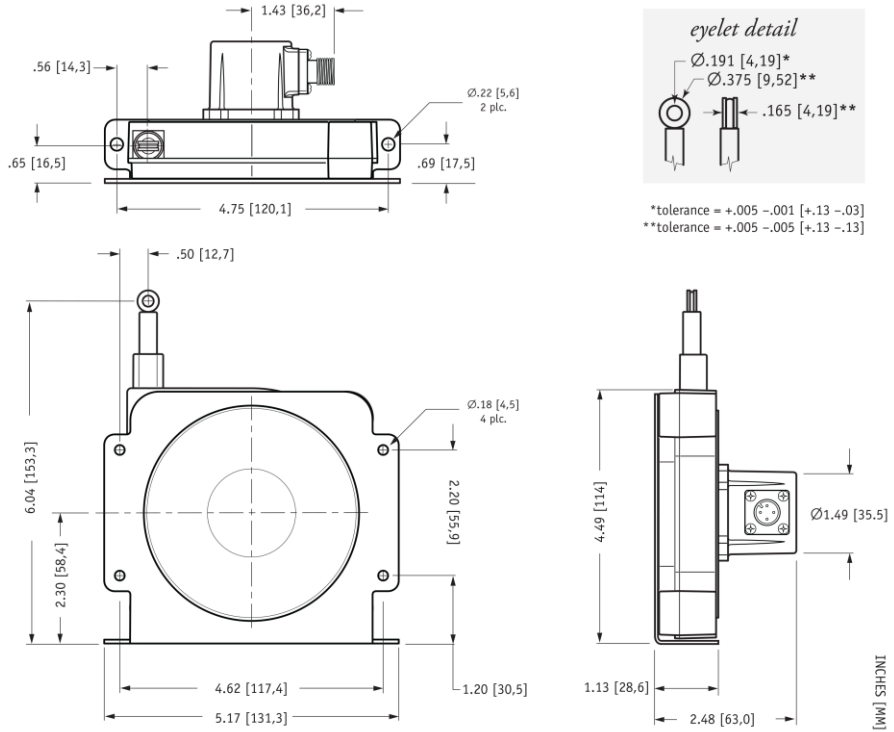
## Mounting Options (SGD-120-3):



**SGD-80-3 w/ Mounting Bracket**



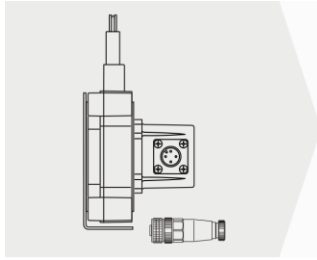
**SGD-120-3 w/ Mounting Bracket**



## SGD

4..20mA • 0..10 Vdc Output Signal

### Ordering Information



Part No.

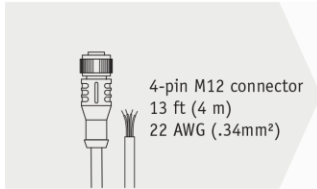
# SGD-80-3

80-inch stroke range,  
4–20 mA / 0–10 Vdc output  
M12 connector,  
IP67 environments,  
mounting bracket included

Part No.

# SGD-120-3

120-inch stroke range,  
4–20 mA / 0–10 Vdc output  
M12 connector,  
IP67 environments,  
mounting bracket included



4-pin M12 connector  
13 ft (4 m)  
22 AWG (.34mm<sup>2</sup>)

### Optional Cordset

Part No.

# 9036810-0040

for short-run connections, a convenient optional 13-ft. cordset with a 4-pin M12 connector is available for the SGD-80-3 and SGD-120-3.

**INTERTECHNOLOGY**  
INC.  
**1-800-465-1600**

**19 Waterman Ave. Toronto, Ont. M4B1Y2**  
**Tel: 416-445-5500 Fax: 416-445-1170**  
**Toll Free: 1-800-465-1600**  
**Email: sales@intertechnology.com**  
**Website: www.intertechnology.com**

#### [TE.com/sensorsolutions](http://TE.com/sensorsolutions)

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.

SGD 12/01/2015