



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



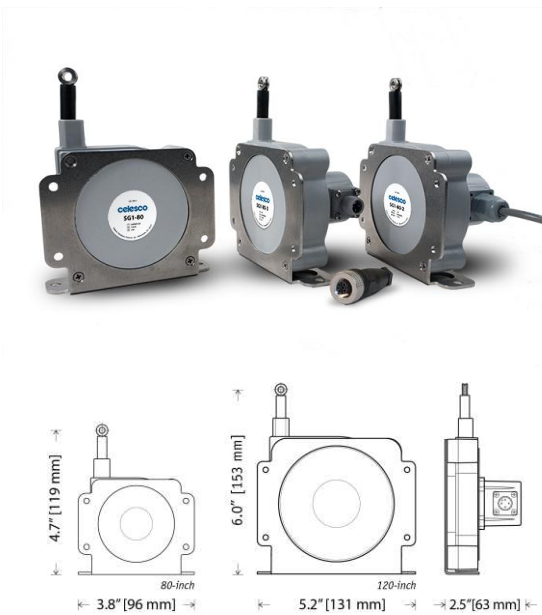
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





The SG1 provides absolute linear position up to a 10-ft. stroke range. Constructed with a rugged polycarbonate body, this model is available in an 80-inch or 120-inch stroke range and offers optional IP67 protection for wet or outdoor installations and an M12 connector for easy installation.

The SG1 uses a precision high-cycle plastic hybrid potentiometer and an extremely durable spring-loaded stainless steel measuring cable to provide an accurate reliable position feedback signal over the entire stroke. With its slim design and versatile mounting bracket, the SG1 has been designed to fit into spaces no other measurement device can. For the OEM customer, custom mounting hardware and electrical connections are available.



SG1

Cable Actuated Sensor Voltage Divider Output Signal

Compact Mid-Range String Pot • Absolute Position

80, 120-inch Stroke Range Options

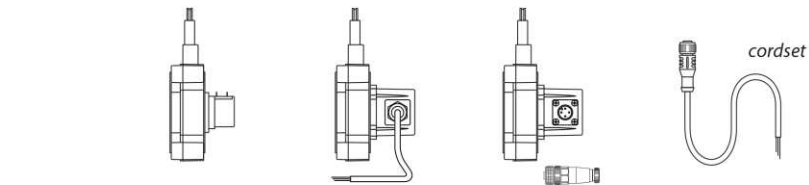
Polycarbonate Enclosure • IP67

In Stock for Quick Delivery

Specifications

Stroke Range Options	80 inches (2032 mm), 120 inches (3048 mm)
Output Signal	voltage divider (potentiometric)
Accuracy	.35% FS.
Repeatability	.05% FS.
Resolution	essentially infinite
Measuring Cable	.019-inch dia. nylon-coated stainless steel
Maximum Acceleration	10 g
Measuring Cable Tension	9 oz. (2,5 N) ±30%
Sensor	plastic-hybrid precision potentiometer
Input Resistance	10K ohms, ±10%
Power Rating, Watts	2.0 at 70°F
Recommended Maximum Input Voltage	30 V (AC/DC)
Output Signal Change Over Full Stroke Range	94% ±4% of V(+in)
Cycle Life	≥ 250,000
Electrical Connection	see ordering information
Enclosure	glass-filled polycarbonate
Environmental	IP 50 , IP67 (m12 connector & pigtail options)
Operating Temperature	-40° to 160° F (-40° to 70° C)
Weight, 80-inch (not including bracket)	.6 lbs. (272 g)
Weight, 120-inch (not including bracket)	1 lb. (453 g)

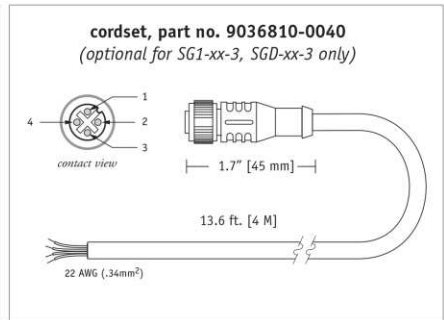
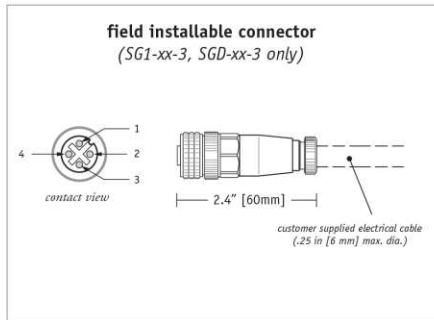
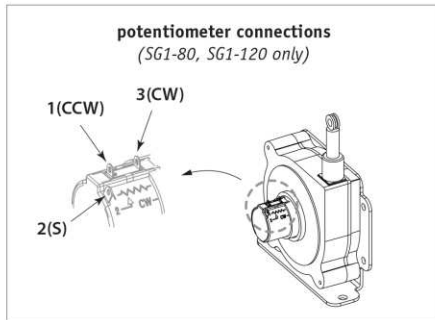
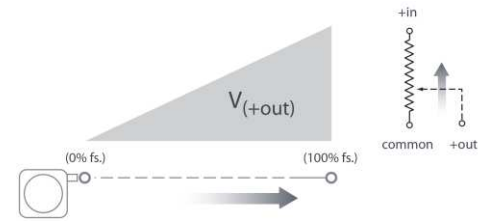
Electrical Connection



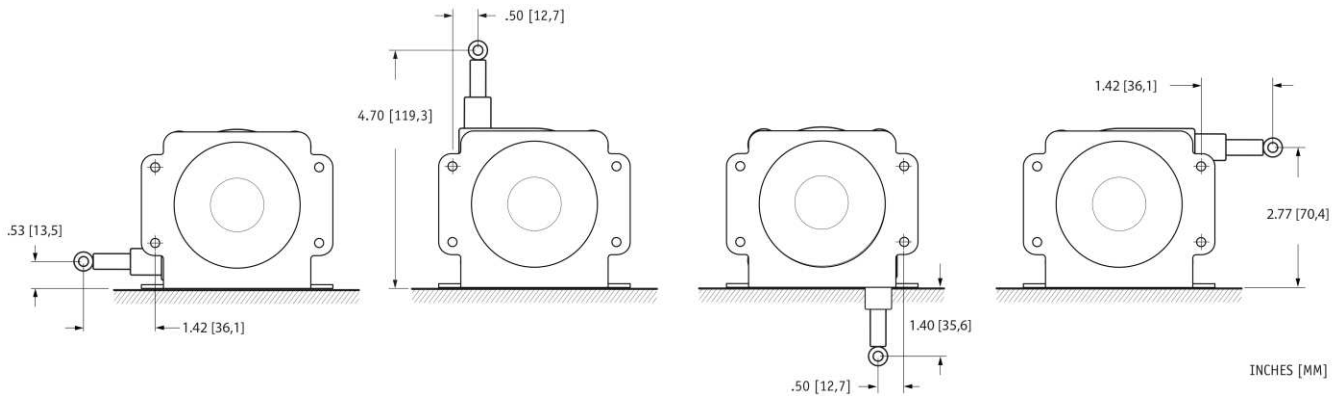
signals	terminal	colorcode	pin*	pin - colorcode*
+in	3 (cw)	red	1	1 - brown
common	1 (ccw)	black	2	2 - white
+out	2 (s)	green	3	3 - blue

*note: connector pin 4 and the black wire on the cordset are NOT used.

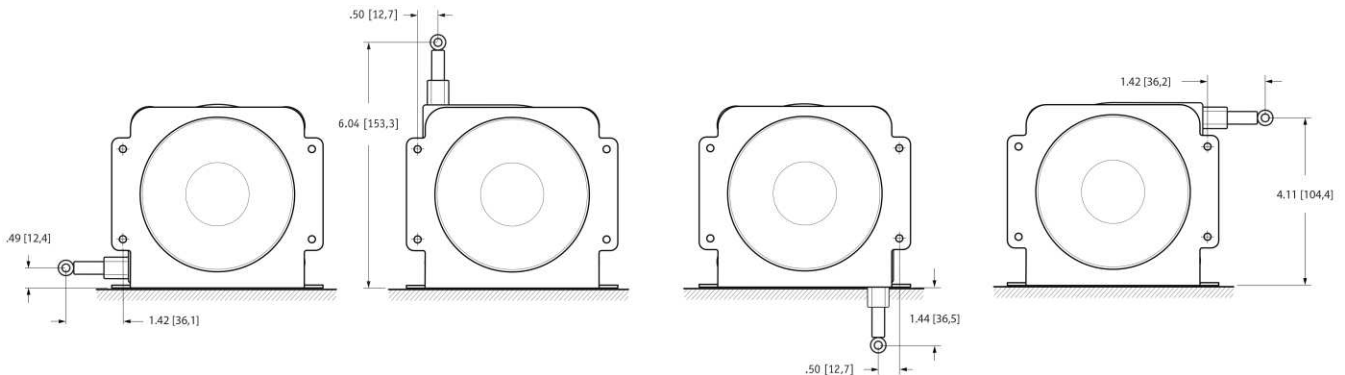
Output Signal



Mounting Options (SG1-80, SG1-80-2, SG1-80-3):



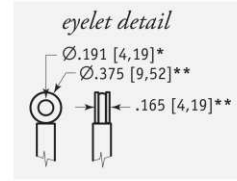
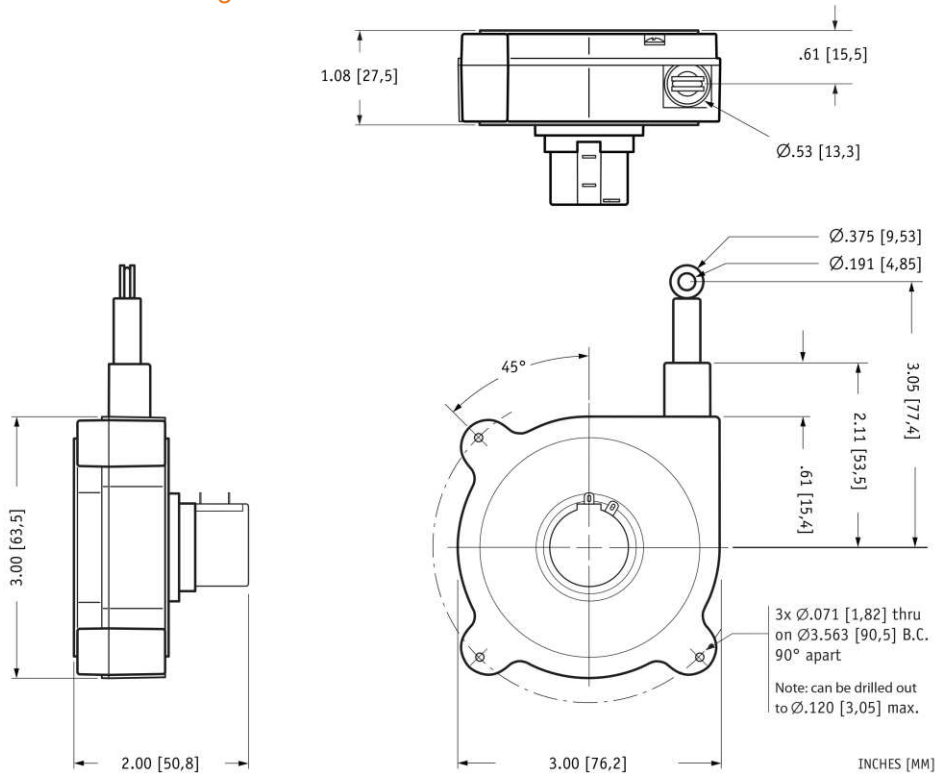
Mounting Options (SG1-120, SG1-120-2, SG1-120-3):



SG1

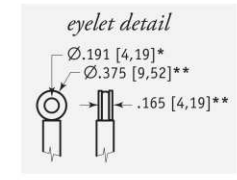
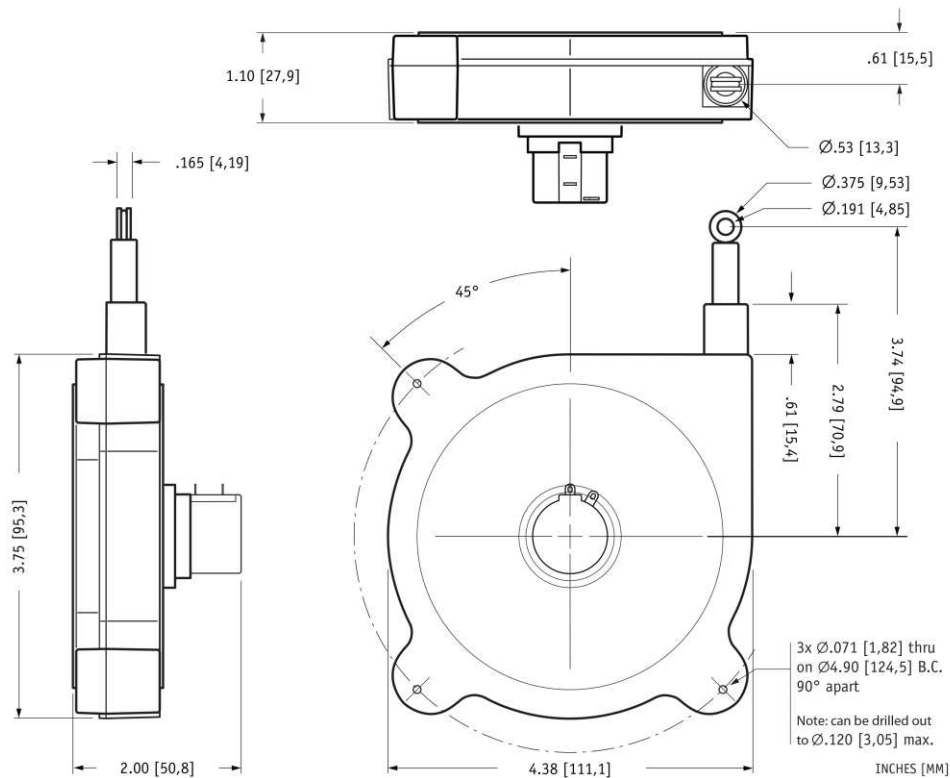
Voltage Divider Output Signal

SG1-80 w/o Mounting Bracket:



*tolerance = +.005 -.001 [+.13 -.03]
**tolerance = +.005 -.005 [+.13 -.13]

SG1-120 w/o Mounting Bracket:

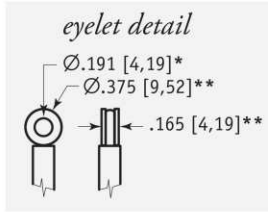


*tolerance = +.005 -.001 [+.13 -.03]
**tolerance = +.005 -.005 [+.13 -.13]

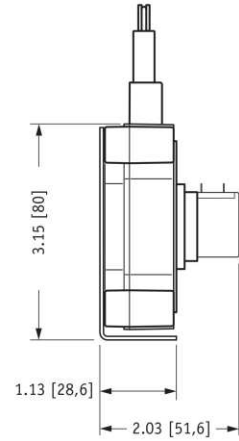
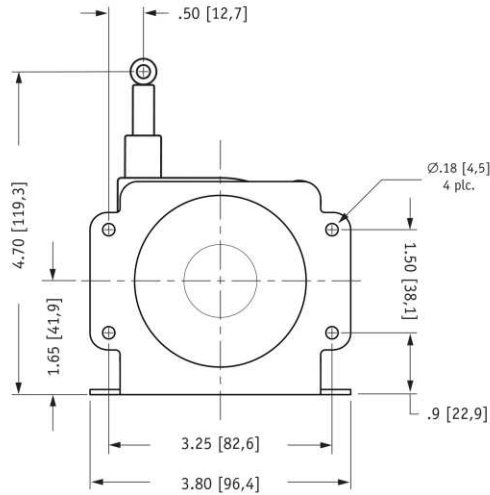
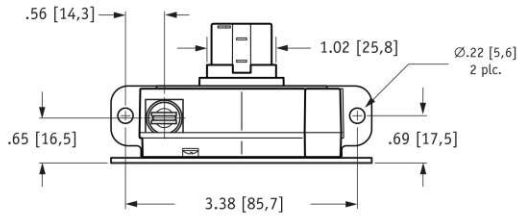
SG1

Voltage Divider Output Signal

SG1-80 w/ Mounting Bracket:

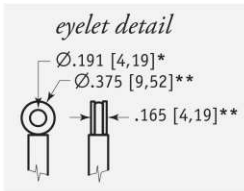


*tolerance = +.005 -.001 [+,.13 -.03]
**tolerance = +.005 -.005 [+,.13 -.13]

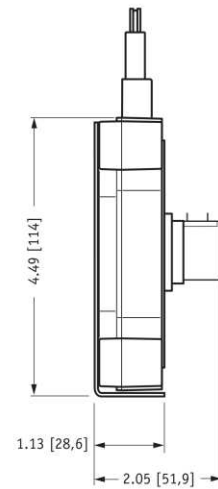
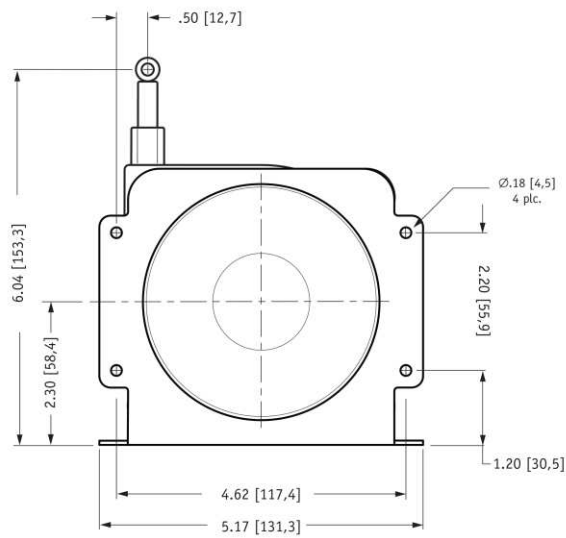
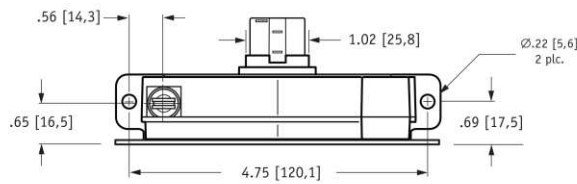


INCHES [MM]

SG1-120 w/ Mounting Bracket:

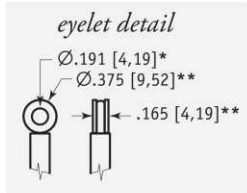


*tolerance = +.005 -.001 [+,.13 -.03]
**tolerance = +.005 -.005 [+,.13 -.13]

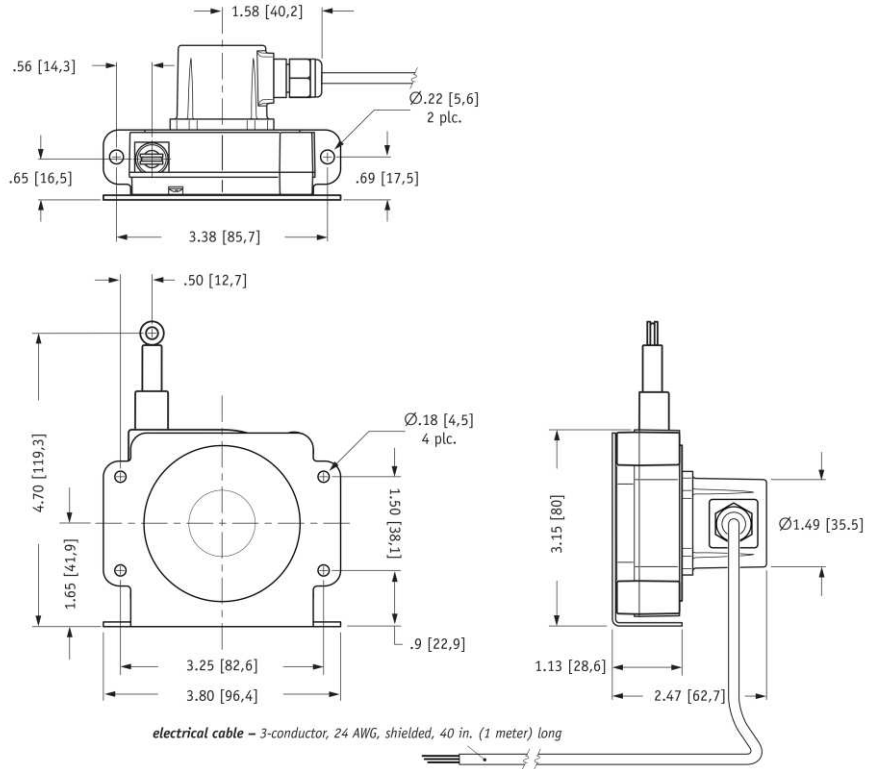


INCHES [MM]

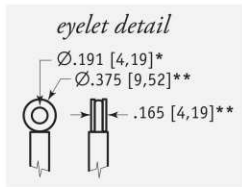
SG1-80-2 w/ Mounting Bracket:



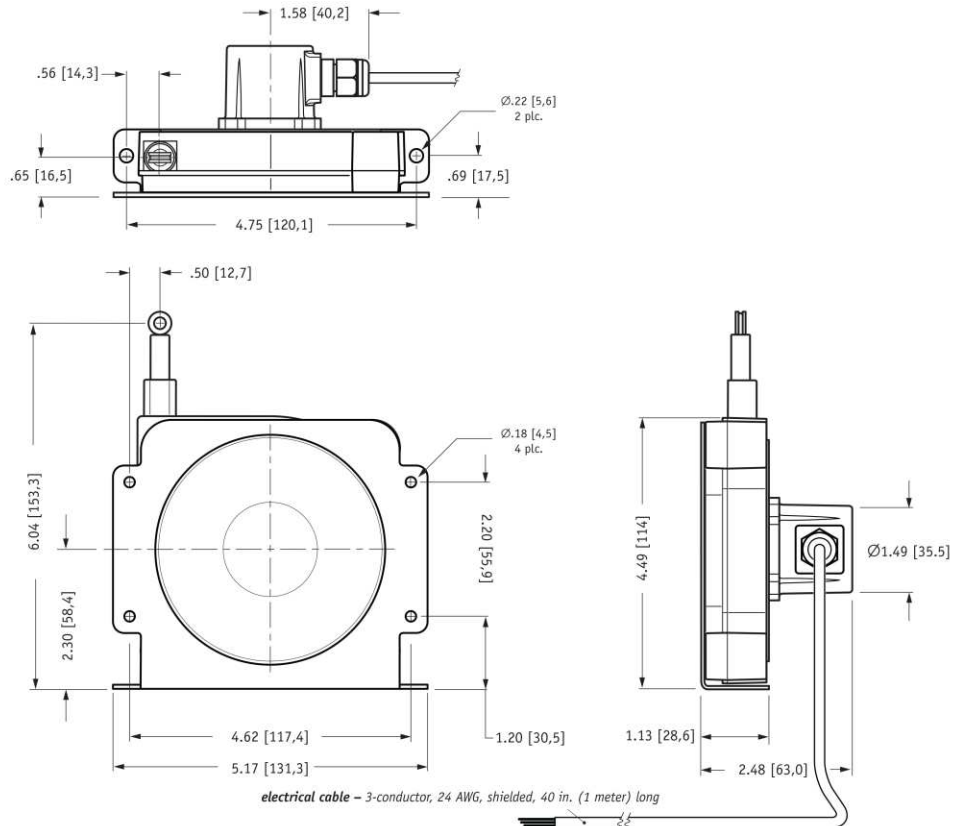
*tolerance = +.005 - .001 [+13 -.03]
 **tolerance = +.005 - .005 [+13 -.13]



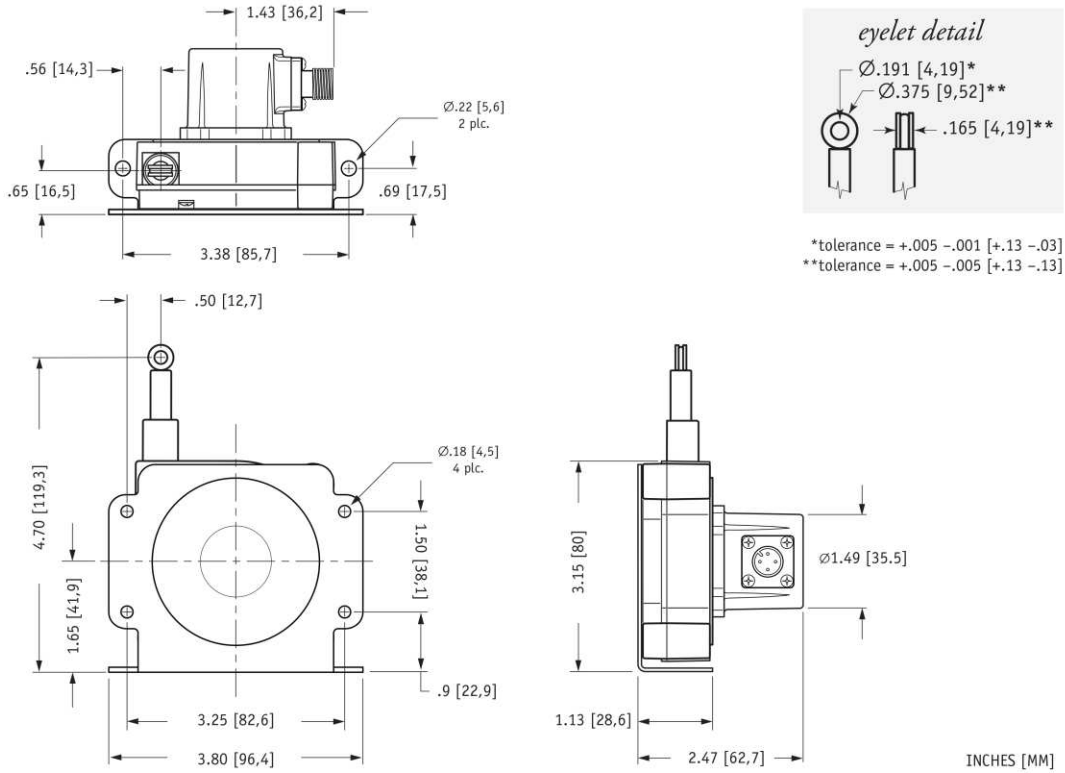
SG1-120-2 w/ Mounting Bracket:



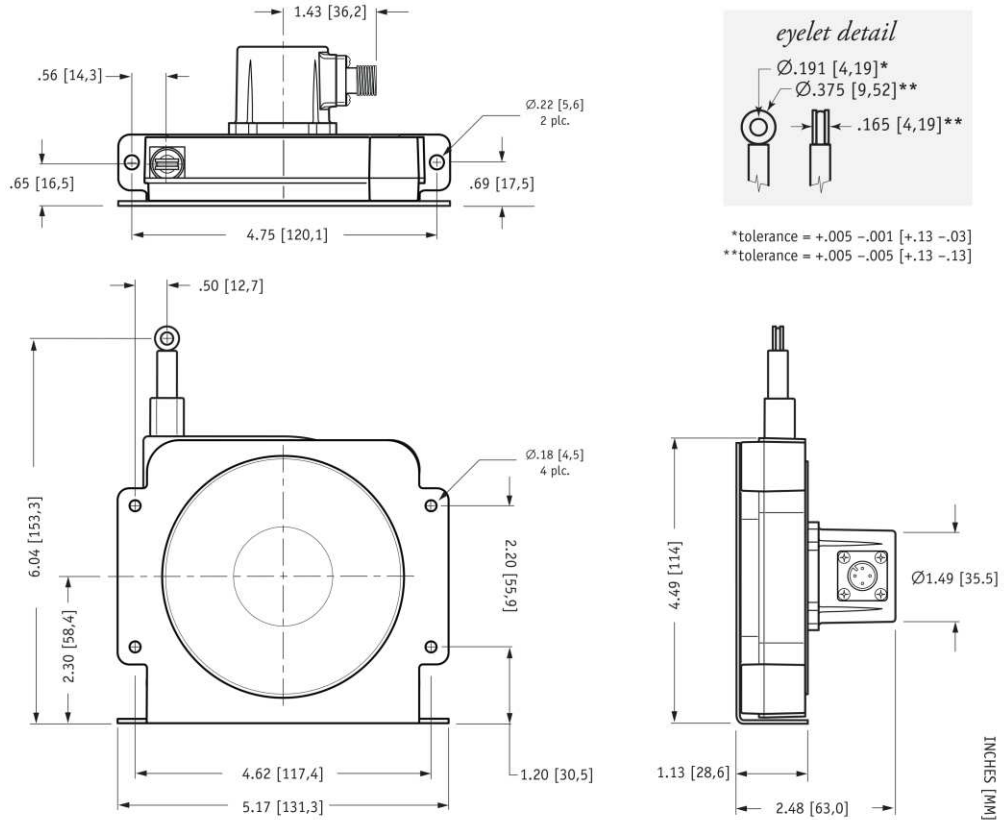
*tolerance = +.005 - .001 [+13 -.03]
 **tolerance = +.005 - .005 [+13 -.13]




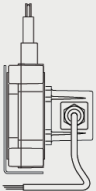
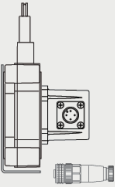

SG1-80-3 w/ Mounting Bracket:



SG1-120-3 w/ Mounting Bracket:



Ordering Information

	<p>Part No. SG1-80</p> <p>80-inch stroke range, solder terminal connection, IP50 environments, mounting bracket included</p>	<p>Part No. SG1-120</p> <p>120-inch stroke range, solder terminal connection, IP50 environments, mounting bracket included</p>
	<p>Part No. SG1-80-2</p> <p>80-inch stroke range, 40-inch electrical cable, IP67 environments, mounting bracket included</p>	<p>Part No. SG1-120-2</p> <p>120-inch stroke range, 40-inch electrical cable, IP67 environments, mounting bracket included</p>
	<p>Part No. SG1-80-3</p> <p>80-inch stroke range, M12 connector, IP67 environments, mounting bracket included</p>	<p>Part No. SG1-120-3</p> <p>120-inch stroke range, M12 connector, IP67 environments, mounting bracket included</p>
 <p>4-pin M12 connector 13 ft (4 m) 22 AWG (.34mm²)</p>	<p>Optional Cordset</p> <p>Part No. 9036810-0040</p> <p>for short-run connections, a convenient optional 13-ft. cordset with a 4-pin M12 connector is available for the SG1-80-3 and SG1-120-3.</p>	

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SG1 12/01/2015