

Available in both 250 and 400-inch stroke ranges, this off-the-shelf linear position sensor is the perfect solution for applications ranging from mobile construction equipment to hydraulic lift tables and anything else in between. The SKD offers compact design, ease of use and the utmost in flexibility. Every unit offers the customer a user-selectable 4-20 mA or 0-10VDC output signal option, an easily adjustable stainless steel mounting bracket for multiple installation options and the ability to change the direction of the electrical connector to accommodate the user's wiring needs.

Our unique electronic circuitry and an extremely durable spring-loaded stainless steel measuring cable deliver an accurate reliable "absolute" position feedback signal over the entire stroke. This model is economically priced making it the perfect solution for both the single piece user and OEM customers alike.

## SKD

### Cable Actuated Sensor

### User Selectable 4..20mA / 0..10Vdc Output

**Linear Position to 400 inches (10 m)**

**Compact Design • Simple To Install**

**User Adjustable Measuring Cable Orientation**

**IN STOCK for Quick Delivery!**

#### Specifications

**Stroke Range Options** 250 inches (6.4 m), 400 inches (10.2 m)

**User Selectable Output Signal** 4...20mA (2-wire) / 0...10 Vdc

**Input Voltage, 4...20mA Option** 8-40 VDC

**Input Voltage, 0...10 VDC Option** 12-32 VDC

**Accuracy** .35% FS.

**Repeatability** .05% FS.

**Resolution** essentially infinite

**Measuring Cable** .031-inch dia. bare stainless steel

**Maximum Cable Velocity** 60 inches per second

**Maximum Cable Acceleration** 5 g

**Measuring Cable Tension** 23 oz. (6.4 N)  $\pm 40\%$

**Sensor** plastic-hybrid precision potentiometer

**Cycle Life**  $\geq 250,000$

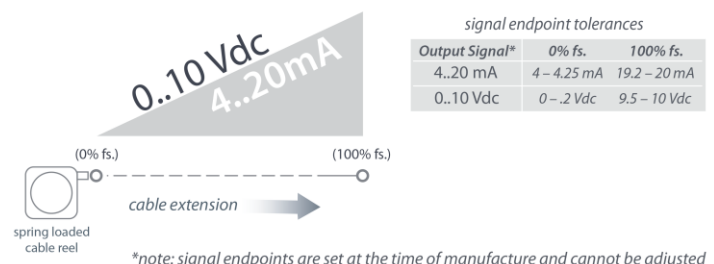
**Electrical Connection** 4-pin M12 connector, mating plug included

**Enclosure** glass-filled polycarbonate

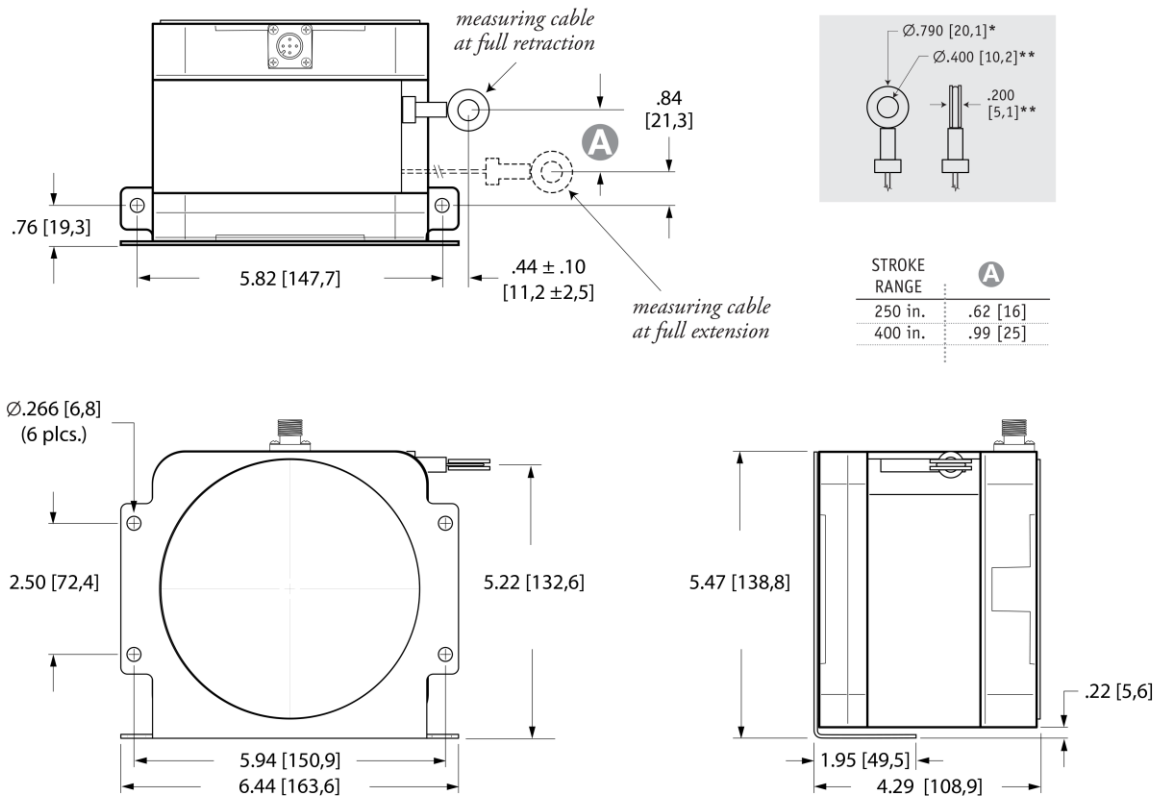
**Environmental** IP67

**Operating Temperature** -40° to 185° F (-40° to 85° C)

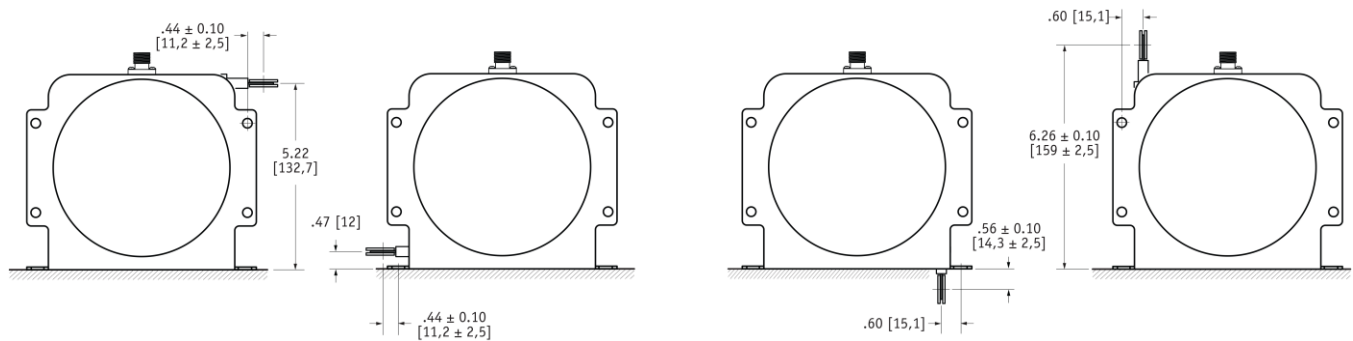
#### Output Signal



## Outline Drawing



## Mounting Options

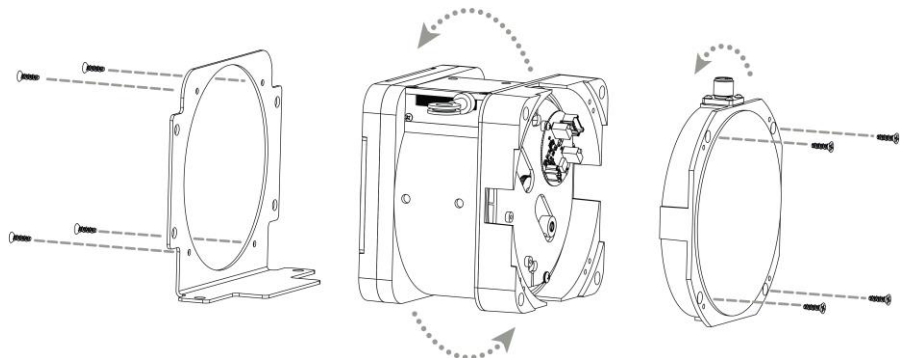


### To change cable exit direction:

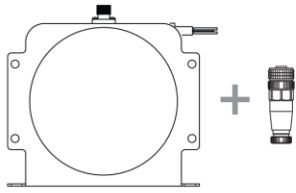
simply remove the 4 bracket mounting screws and rotate sensor body to desired direction.

### To change electrical connector orientation:

remove the 4 rear screws and carefully remove the rear cover and rotate cover.



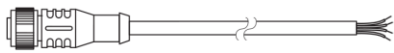
## Ordering Information



| Part Number      | full stroke range | accuracy | max. acceleration | measuring cable tension (± 40%) |
|------------------|-------------------|----------|-------------------|---------------------------------|
| <b>SKD-250-3</b> | 250 in (6.4 m)    | .35%     | 5 g               | 23 oz. (6,4 N)                  |
| <b>SKD-400-3</b> | 400 in (10.2 m)   | .35%     | 5 g               | 23 oz. (6,4 N)                  |

includes mounting bracket & mating connector.

## Optional Cordsets



| Part Number         | length      | wire size                    | connector          |
|---------------------|-------------|------------------------------|--------------------|
| <b>9036810-0040</b> | 13 ft (4 m) | 22 AWG (.34mm <sup>2</sup> ) | straight 4-pin M12 |
| <b>9036810-0041</b> | 13 ft (4 m) | 22 AWG (.34mm <sup>2</sup> ) | 90° 4-pin M12      |



## Electrical Connection

### Output Signals

| 0..10Vdc   | 4..20mA   | pin | pin - color |
|------------|-----------|-----|-------------|
| 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   |

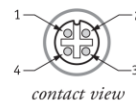


field installable connector



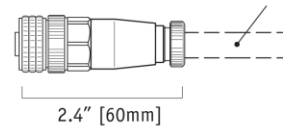
optional cordset

### field installable connector



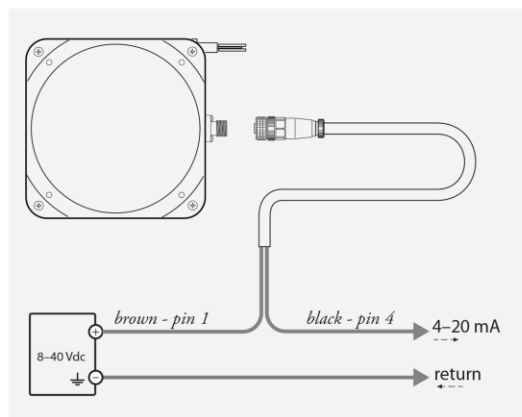
contact view

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

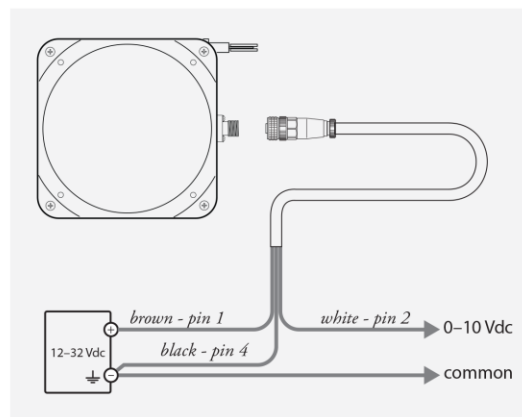


2.4" [60mm]

### 4..20 mA Signal Connections



### 0..10 Vdc Signal Connections



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