



SKD

Cable Actuated Sensor User Selectable 4..20mA / 0..10Vdc Output

Available in both 250 and 400-inch stroke ranges, the SKD linear position sensor is a 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

FEATURES

- Flexibility Every unit offers linear position up to 400" (10m) providing flexibility to work across a wide range of aerial applications. This off-theshelf series offers a wide selection of industry standard output signals (4-20mA, 0-10Vdc, CANOpen and J1939 CANbus).
- Ease of use A compact design, a stainless-steel mounting bracket for multiple installation options and an easily-adjustable measuring cable orientation make this sensor easy to install and manage.
- Superior engineering TE provides engineering partnership to customize for specific applications. There is also an option to have two sensors elements in the same package with no additional space requirement. This provides fail-safe security for aerial applications.

APPLICATIONS

Accurate measurement in customized applications industrial and commercial transportation like:

- Fork lifts
- Telescopic arms
- Boom lifts
- Scissor lifts

Linear Position to 400 inches (10 m) Compact Design • Simple To Install User Adjustable Measuring Cable Orientation

Specifications

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

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

Signal

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

Option

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

Option

 Accuracy
 0.35% FS.

 Repeatability
 0.05% 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

23 oz. (6,4 N) ±40%

Tension

Sensor plastic-hybrid precision potentiometer

Cycle Life ≥ 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

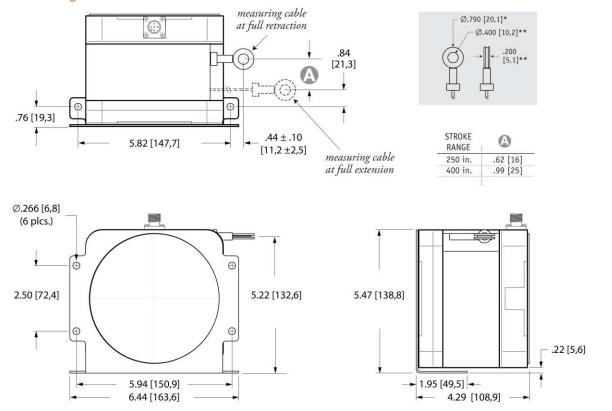


cable extension

| signal endpoint tolerances | | | | | |
|----------------------------|-------------|--------------|--|--|--|
| Output Signal* | 0% fs. | 100% fs. | | | |
| 420 mA | 4 - 4.25 mA | 19.2 – 20 mA | | | |
| 010 Vdc | 02 Vdc | 9.5 – 10 Vdc | | | |

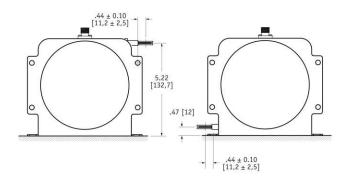
*note: signal endpoints are set at the time of manufacture and cannot be adjusted

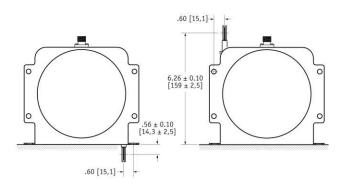
Outline Drawing



Mounting Options

DIMENSIONS ARE IN INCHES [MM] tolerances are 0.04 IN. [1,0 MM] unless otherwise noted.





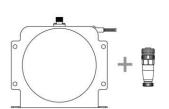
* tolerance = +.005 -.001 [+0,1 -0,0] ** tolerance = +.005 -.005 [+0,1 -0,1]

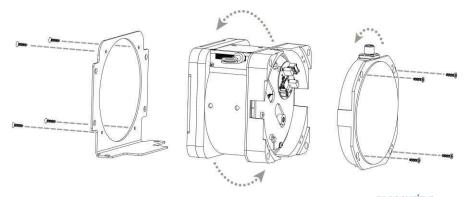
To change cable exit direction:

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



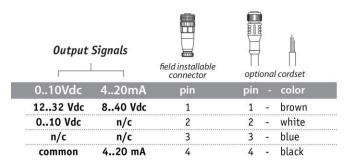


| Part Number | full stroke range accuracy | | max. acceleration | measuring cable tension (± 40%) | |
|-------------|-------------------------------|------|----------------------|---------------------------------------|--|
| SKD-250-3 | 250 in (6.4 m) | .35% | 5 g | 23 oz. (6,4 N) | |
| SKD-400-3 |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

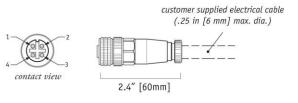
includes mounting bracket & mating connector.

| Optional Cordsets | Part Number | length | wire size | connector |
|-------------------|--------------|----------------|--------------------|--------------------------|
| | 9036810-0040 | 13 ft (4 m) | 22 AWG (.34mm²) | straight 4-pin M12 |
| | 9036810-0041 | 13 ft (4 m) | 22 AWG (.34mm²) | 90° 4-pin M12 |

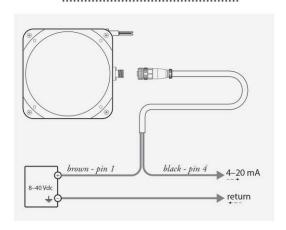
Electrical Connection



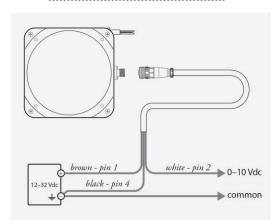
field installable connector



4...20 mA Signal Connections



0...10 Vdc Signal Connections



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