

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-the-shelf 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:

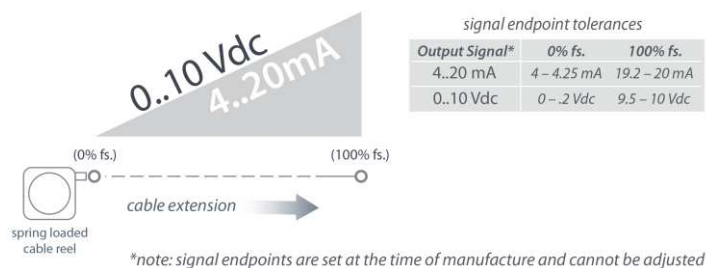
- Fork lifts
- Telescopic arms
- Boom lifts
- Scissor lifts

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

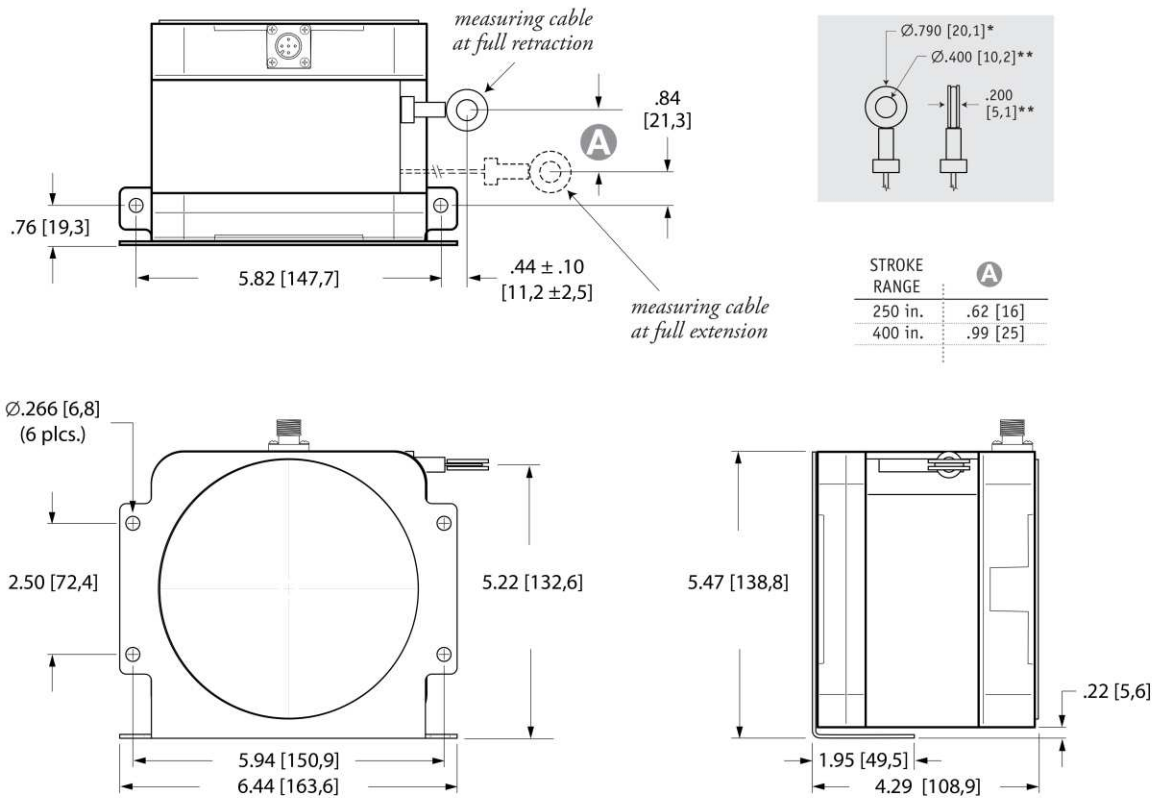
Specifications

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



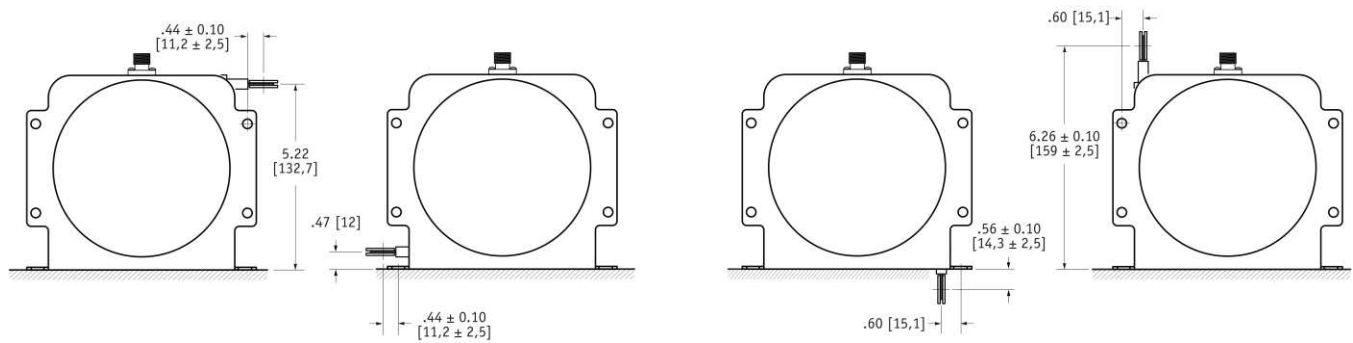
Outline Drawing



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]

Mounting Options

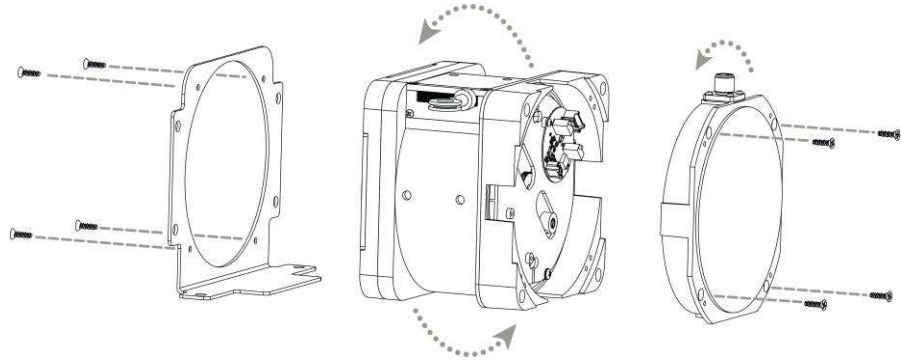
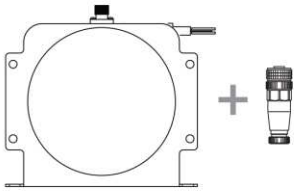


To change cable exit direction:

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

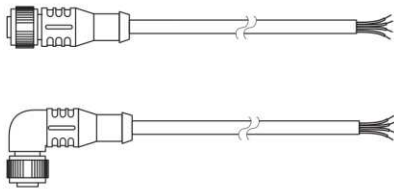
To change electrical connector orientation:

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%)
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.

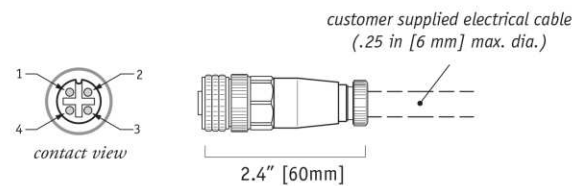
Optional Cordsets


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

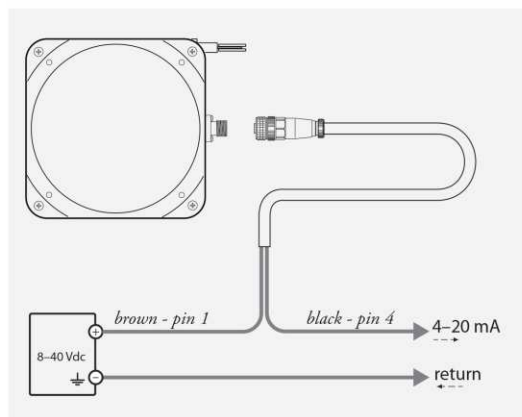
Electrical Connection

Output Signals		field installable connector		optional cordset	
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

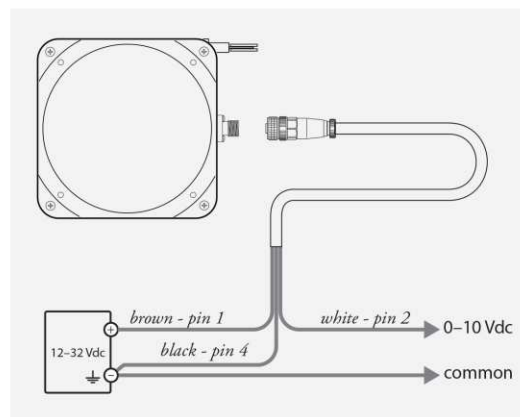
field installable connector.....



4..20 mA Signal Connections



0..10 Vdc Signal Connections



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