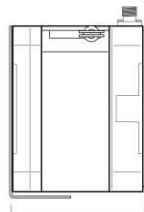


6.4" [164 mm]



4.3" [109 mm]

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) ±40%
- 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)

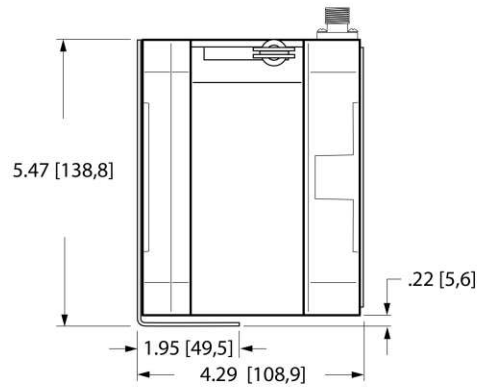
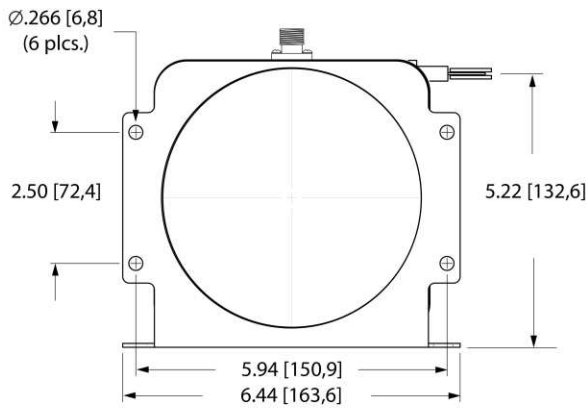
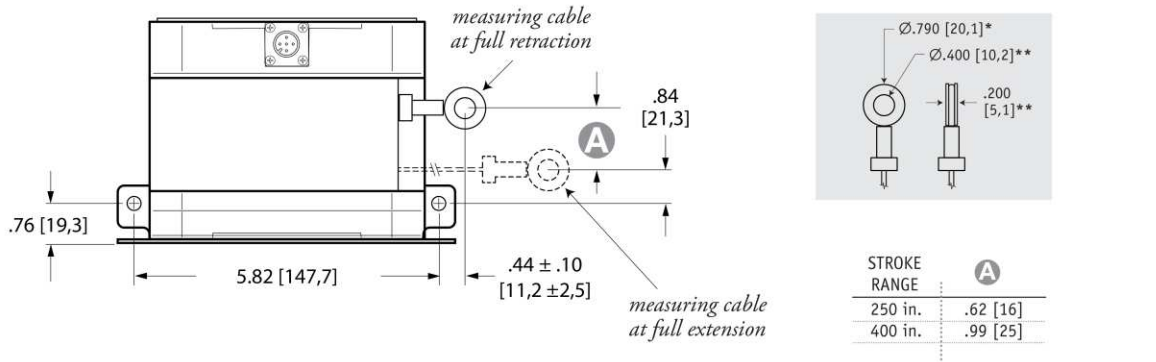
Output Signal

signal endpoint tolerances

Output Signal*	0% fs.	100% fs.
4..20 mA	4 – 4.25 mA	19.2 – 20 mA
0..10 Vdc	0 – .2 Vdc	9.5 – 10 Vdc

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

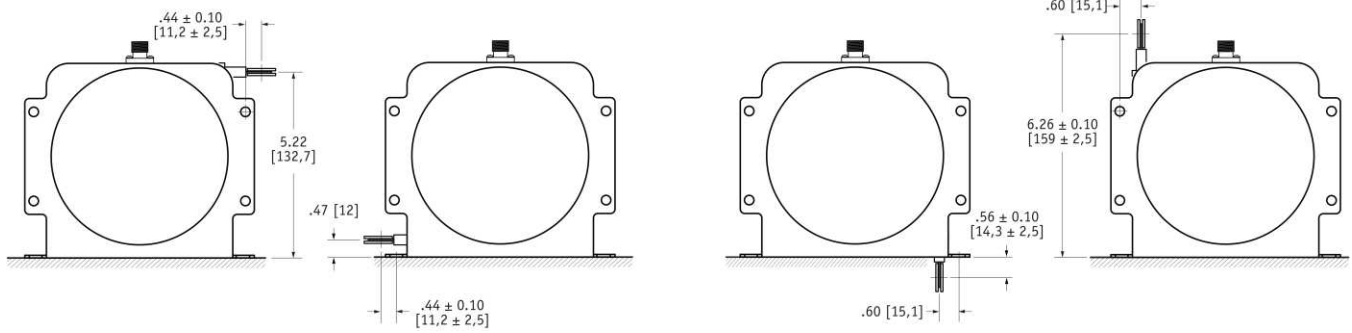
Outline Drawing



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



SKD

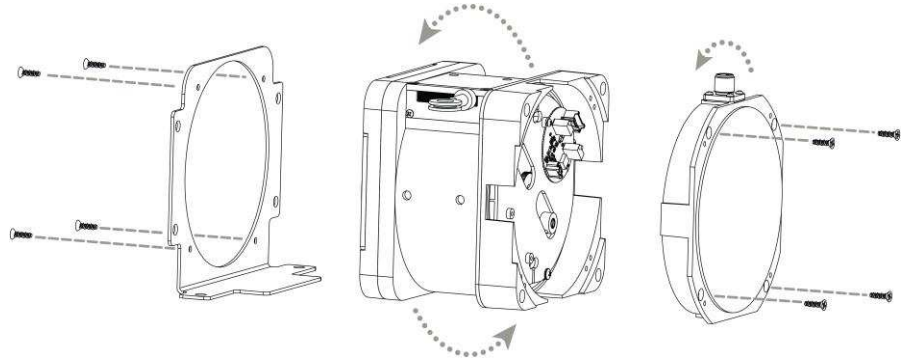
User Selectable 4..20mA / 0..10Vdc

To change cable exit direction:

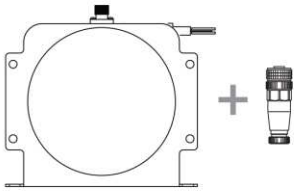
simply remove the 4 bracket mounting screws and rotate sensor body to desired direction.

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. (6,4 N)

includes mounting bracket & mating connector.

Optional Cordsets



Part Number

9036810-0040

length

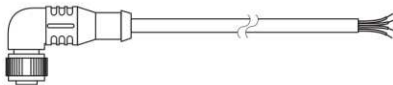
13 ft (4 m)

wire size

22 AWG (.34mm²)

connector

straight
4-pin
M12



9036810-0041

13 ft (4 m)

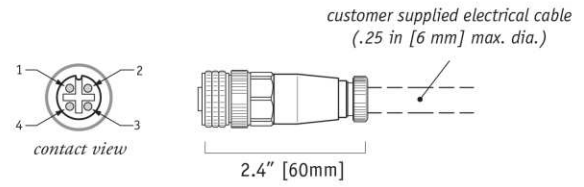
22 AWG (.34mm²)

90°
4-pin
M12

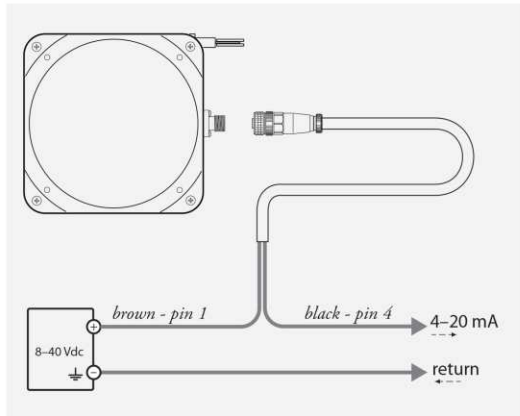
Electrical Connection

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

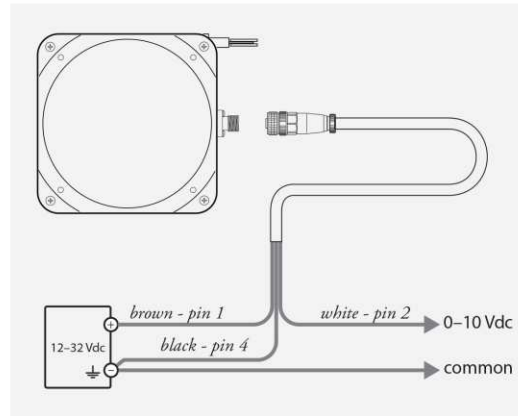
field installable connector



4..20 mA Signal Connections



0..10 Vdc Signal Connections



NORTH AMERICA

Measurement Specialties, Inc.,
 a TE Connectivity Company
 Phone: +1-800-522-6752
 Email: customer-care.hmpt@te.com

EUROPE

MEAS Deutschland GmbH (Europe)
 a TE Connectivity Company
 Phone : +31 73 624 6999
 Email: customer-care.dtm@te.com

ASIA

Measurement Specialties (China), Ltd.,
 a TE Connectivity Company
 Phone: +86-400-820-6015
 Email: customer-care.shzn@te.com

TE.com/sensors

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.

© 2019 TE Connectivity Ltd. family of companies All Rights Reserved.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[SKD-250-3](#)