

SK₁

Cable Actuated Sensor Voltage Divider Output Signal

The SK1 is a perfect solution for applications ranging from mobile construction equipment to hydraulic lift tables and anything else in between. Available in both 250 and 400-inch stroke ranges, this model offers the ultimate ease-of-use, compact design and user flexibility. Need to mount it upside down? Simply rotate its stainless mounting bracket to where you want it. Need the electrical connector to point in a different direction? Just rotate the rear cover to point the connector to the desired direction.

The SK1 is manufactured with a precision high-cycle plastic hybrid potentiometer and durable spring-loaded stainless steel measuring cable to deliver an accurate reliable voltage divider 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)

Output Signal voltage divider (potentiometric)

Accuracy .35% FS.

Repeatability .05% FS.

Resolution essentially infinite

Measuring Cable .031-inch dia. bare stainless steel

Maximum Cable

60 inches per second

Velocity

Maximum Cable

5 g

Acceleration

Measuring Cable

23 oz. (6,4 N) ±40%

Tension

Sensor plastic-hybrid precision potentiometer

Input Resistance 10K ohms, ±10%

Power Rating, Watts 2.0 at 70°F Recommended 30 V (AC/DC)

Maximum Input Voltage

Output Signal Change 94% ±4% of V(+in)

Over Full Stroke Range

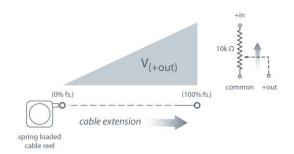
Cycle Life ≥ 250,000

Electrical Connection 4-pin M12 connector, mating plug included

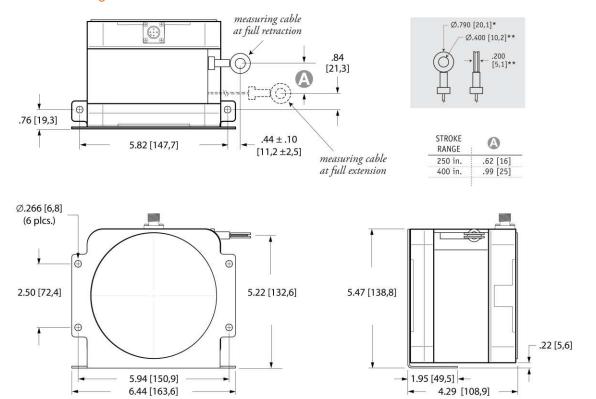
Enclosure glass-filled polycarbonate

Environmental IP67

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



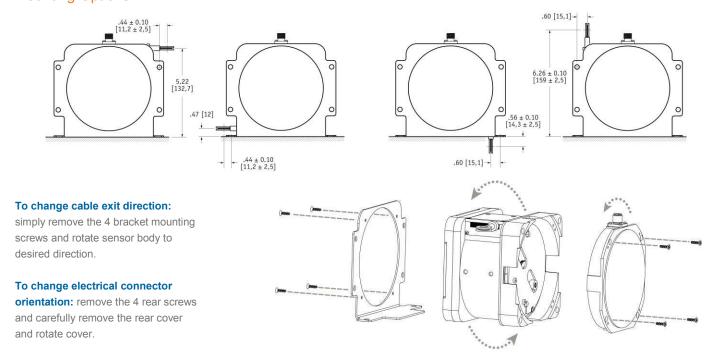
Outline Drawing



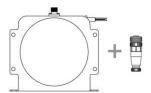
DIMENSIONS ARE IN INCHES [MM] tolerances are 0.04 IN. [1,0 MM] unless otherwise noted.

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

Mounting Options



Ordering Information

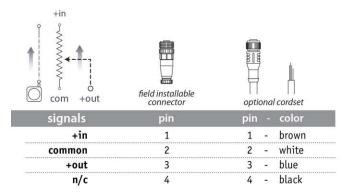


Part Number	full stroke range	accuracy	max. acceleration	measuring cable tension (± 40%)
SK1-250-3	250 in (6.4 m)	.35%	5 g	23 oz. (6,4 N)
SK1-400-3	400 in (10.2 m)	.35%	5 g	23 oz. (6,4N)

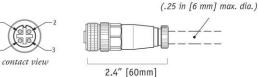
includes mounting bracket & mating connector.

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



NORTH AMERICA

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

EUROPE

MEAS Deutschland GmbH (Europe) a TE Connectivity Company Phone: +31 73 624 6999 Email: customercare.dtmd@te.com

ASIA

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

customer supplied electrical cable

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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Sensor Cables / Actuator Cables category:

Click to view products by TE Connectivity manufacturer:

Other Similar products are found below:

```
60963 60964 703000D02F2002 703000D02F300 703001D02F0602 703001D02F300 704000D02F120 773032K02F030 802027107404-1
802027213811-1 804001A09M150 805001A09M0502 84914-0235 84914-0237 885030A09M020 1200651332 1200651713 1200660844
1200660845 1200661173 1200680071 1200720053 1200720081 1200720099 1200720217 1200800231 1200860125 1200870123
1200980102 1200650267 1200650298 1200660183 1200660782 1200660849 1200661295 1200661297 1200661342 1200661343
1200670080 1200670220 1200680331 1200720252 1200730184 1200860344 1200870359 1200870643 1200980008 1200980031
1210502211 1210400542
```