

canfield
connector



EiS SERIES

J1939 AND CANOPEN
ELECTRONIC
INCLINOMETER SENSORS

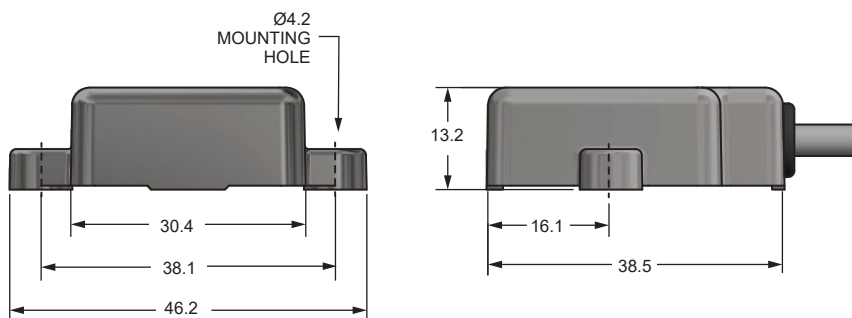
GENERAL DESCRIPTION

The Canfield Connector Electronic Inclinometer Sensor EiS is available in two versions, CANopen and SAE J1939 communication interfaces. The EiS CAN BUS versions feature dual axis output designed to measure angles of slope or tilt angles of an object with respect to gravity based on an artificial horizon. Synonyms include tilt sensor, tilt switch, clinometer, slope sensor, slope gauge, level sensor, level meter, tiltmeter or pitch and roll sensor. The EiS Series is an all solid-state, MEMs device designed to measure tilt while reporting the data via CANopen or SAE J1939 within 0.3 degrees accuracy $\pm 90^\circ$. The unit features a miniature metal housing and is epoxy encapsulated for vibration, water and dust resistance and is rated up to IP 69K environmental rating. The unit boasts a temperature drift of $\pm 1^\circ$ maximum with a temperature range of -40 to 85°C . The EiS CAN BUS versions are precisely calibrated to remove non-linearity in the sensing range. Applications for inclinometers such as the EiS Series include platform leveling, motion sensing, filter vibrations, boom angle sensing, cameras, machine arm angle sensing, engine management as well as mobile security systems. The unit comes with high quality 9 ft. PVC jacketed wire, other lengths and quick connections as options, and is mounted in place by use of two 4.2mm holes.

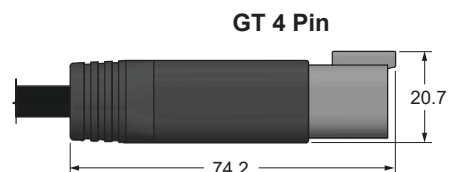
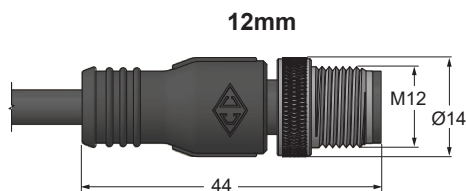
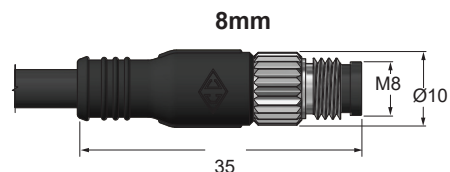


DIMENSIONAL DATA

All dimensions are in millimeters unless otherwise noted.



CONNECTION OPTIONS

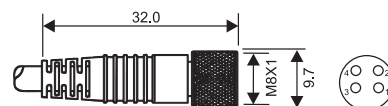


TECHNICAL DATA

Accuracy @ 20°C	-0.3° to +0.3°
Environmental Protection	Up to IP 69K
Materials	Housing: Zinc die-cast Housing Finish: Black powder coat
Number of Axis	Dual: 2
Angle Range	Both Axis -90° to +90°
Supply Current	30 mA Maximum
CAN Speed	250 kbps (default)
Startup Time	Vcc = 0V to VCC = 12V 1 sec.
Resolution	0.01°
Update Rate	100 Hz
Supply Voltage	8 to 30V
Temperature Drift	+/- 1° Maximum
Temperature Range	-40° to +85°C
Cable Type	PVC (PUR on request. Consult Factory)
Wire Gauge	24 AWG

(ADDITIONAL) MATING CORDSETS / PIN CONFIGURATION

8mm female molded locking connector



Brown = Pin 1

White = Pin 2

Blue = Pin 3

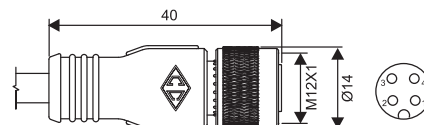
Black = Pin 4

Order P/N:

RC08-AFM040-0120C10A (2m length)

RC08-AFM040-0150C10A (5m length)

12mm female molded locking connector



Brown = Pin 1

White = Pin 2

Blue = Pin 3

Black = Pin 4

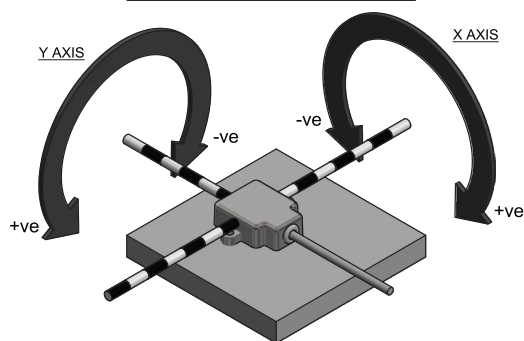
Order P/N:

RC12-AFM040-0120C10A (2m length)

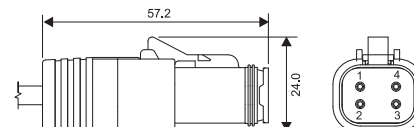
RC12-AFM040-0150C10A (5m length)

MOUNTING / SENSING ORIENTATION

Mounted on Horizontal Surface



GT Deutsch style locking plug



Brown = Pin 1

Blue = Pin 2

Black = Pin 3

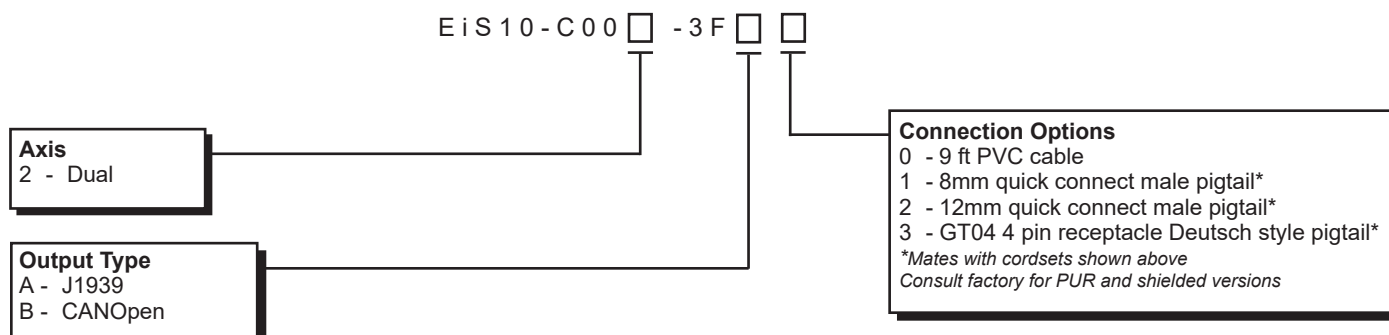
Green = Pin 4

Order P/N:

GT0604-U000-1A (2m length)

GT0604-X000-1A (5m length)

ORDERING INFORMATION



Ordering Example: EiS10-C002-3FA0

Dual Axis, J1939, 9 ft. PVC cable.