canfield connector
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ETS SERIES

INSTALLATION GUIDE
ELECTRONIC TILT SWITCH

> > STOP! *Read this first.* < <

This tilt switch is not to be used in applications where personal safety depends on device function.
The product is not a safety device according to EC machinery directives.

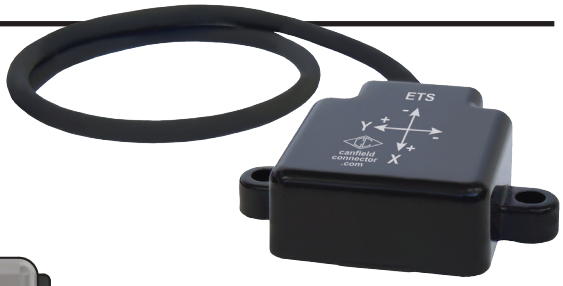
Canfield Connector tilt switch products are miniaturized solid state electronic devices using mems electronic chips at their core. As such they are subject to proper installation and use in accordance with the technical information supplied for each product. When used to specification, standard warranties apply but, poor sources of electricity, over or under voltage conditions, voltage spikes beyond specification, unauthorized tapering, altering of the device, or uses beyond the published intended use of the product may cause the device to malfunction and void to warranty.

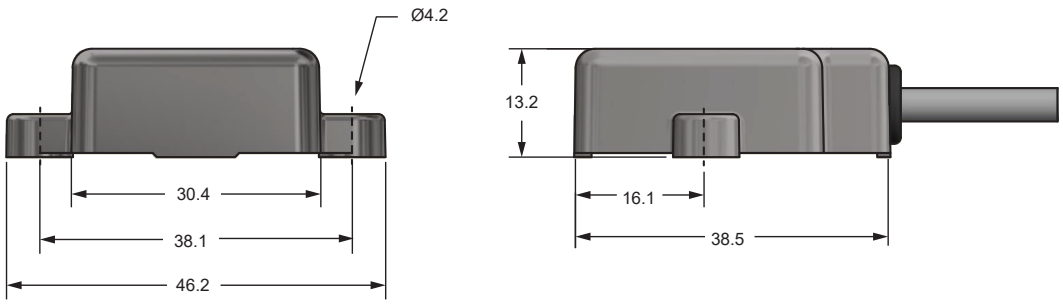
General Description

The Canfield Connector Electronic Tilt Switch is a rugged, non-mercury, all electronic sensor designed to trigger a precision output based on user defined angles of slope, tilt, or elevation of an object with respect to gravity, based on an artificial horizon. The Canfield Connector ETS Series is an all solid-state MEMs device designed to measure tilt and facilitate either a high or low signal output, while internally calculating the data within 0.5 degrees accuracy up to a preset trigger point within +/- 85 degrees. The unit features a rugged metal housing and is epoxy encapsulated for vibration, dust and water resistance to IP69k. The ETS Series is omnidirectional and boasts a temperature drift of +/- 1 degree maximum with a temperature range of -40 to 80°C. The ETS Series is digitally and temperature compensated and precisely calibrated to remove non-linearity of the trip point. Applications for Tilt Switches such as the ETS Series include platform leveling, motion limit sensing, boom angle sensing, cameras, machine arm angle sensing as well as mobile security systems. The unit comes with PVC wire (PUR on request), 9ft. length with other lengths and quick connections available. The unit is installed in place by use of two 4.2mm holes.

Dimensional Data

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED



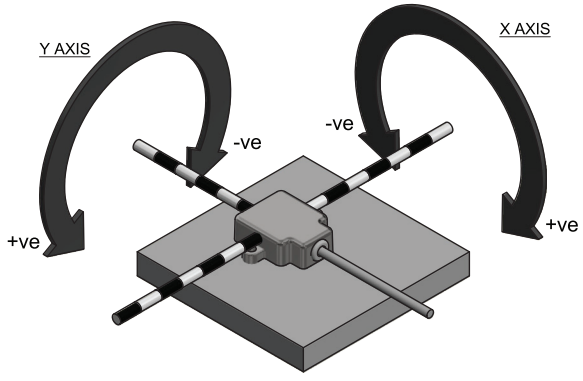


Technical Data

Accuracy @ 20°C	0.5°
Environmental Protection	Up to IP 69K
Materials	Housing: Zinc die-cast Housing Finish: Black powder coat
Number of Axis	Single: 1 Dual: 2
Output Current	1Amp Max (each)
Output Format	Sourcing
Output Type	Supply 1V Max
Supply Voltage	12-24 VDC
Temperature Drift	+/- 1° Maximum
Temperature Range	-40° to +85°C
Cable Type	PVC (PUR on request. Consult Factory)
Wire Gauge	24 AWG

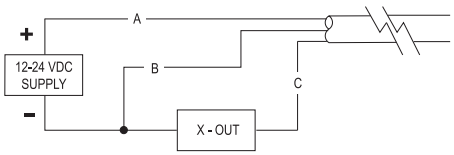
Mounting / Sensing Orientation

Mounted on Horizontal Surface

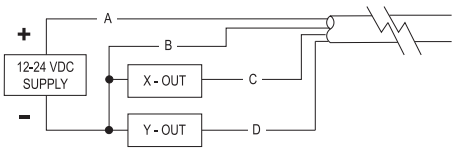


Wiring

Single Axis



Dual Axis

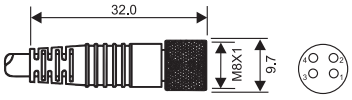


Wire Color Code

	Flying Leads	M8 / M12	GT Deutsch
A	Brown	Pin 1	Pin 1
B	Blue	Pin 3	Pin 2
C	Black	Pin 4	Pin 3
D	White	Pin 2	Pin 4

Optional Mating Cordsets and Pin Configuration

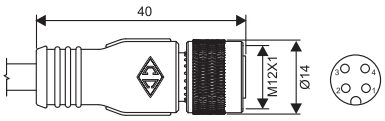
8mm female molded locking connector



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)

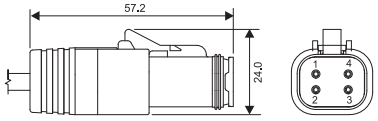
12mm female molded locking connector



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)

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)

Graph

