
canfield connector
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## SERIES 9E

## REED \& ELECTRONIC SENSORS FOR UNIVERSAL APPLICATIONS

## General Description

The Canfield Connector Series 9E is a universal, ultra-small, magnetic proximity switch available in both solid state electronic and reed styles. These sensors are designed to fit the most stringent space requirements by use of a standard .250 inch dovetail slot. Many other mounting options are also available. The electronic sensor exhibits greater sensitivity to magnetism with reduced dead-band and hysteresis as compared to competitive devices. The reed sensor offers a wide operating voltage range. The molded switch has an on board indicator light that can be viewed from wide angles. Standard connection to the sensor is provided by a 9 ft . PVC or 8 mm quick connect male pigtail. The rugged, fully encapsulated switch is shipped with mounting hardware ready for installation.


- Material: Nylon, TPU and PVC
- Temperature Range: Operational from $-20^{\circ}$ to $+80^{\circ} \mathrm{C}$
- Shock: Operational up to $30 \mathrm{G}(11 \mathrm{~ms}$.) reeds only.
Not applicable for electronic.
- Vibration: Operational up to $20 \mathrm{G}(10-55 \mathrm{~Hz})$ reeds only.
Not applicable for electronic.
- Sensitivity and Orientation:
85 gauss parallel
(standard for reeds)
25 gauss parallel
(standard for electronic)


## Features

- Small sensor fits most space requirements.
- Stand-alone mounting into any $1 / 4$ " dovetail slot (machined or extruded)
- Other special mounting clamp styles available
- Indicator light
- Corrosion and washdown resistant.
- Electronic sensing version (no moving parts)
- Reverse polarity protection
- DC or AC voltage versions
- Compatible with IS (Intrinsically Safe) barriers
- Available for dovetail, round, tie-rod and rodless cylinder mountings.

Style 0


Style 3


Style 1


Style 2


Style F


## Style G



Style J


Style H


9E10- $\square 00$ - $\square$ II

## Mating Cordsets

## Mounting Styles

$0-1 / 4 " 60^{\circ}$ dovetail (standard)
$1-12 \mathrm{~mm} 60^{\circ}$ dovetail adapter
$2-3 / 8^{\prime \prime} 60^{\circ}$ dovetail adapter
3 - Round cylinder clamp 3/4" - 4" bore
$4-14 \mathrm{~mm} 60^{\circ}$ dovetail adapter
F - NFPA tie-rod cylinder clamp 1" - 2 1/2" bore
G - Flat series cylinder clamp 3/4" - 2" bore
H - Flat series cylinder clamp 2 1/4" - 4" bore
J - NFPA tie-rod cylinder clamp 3 1/4" - 8" bore

## Connection Options

0-9 ft PVC cable
3-8mm quick connect male pigtail*
*Mates with cordsets shown at right.

8 mm female molded locking connectors


Order part number
Brown $=$ Pin 1
RC08S-FOM030120 (2m length)
Blue $=\operatorname{Pin} 3$
RC08S-F0M030150 (5m length)

| Type | Description | Function | Switching Voltage | Switching Current | Switching Power | Switching Speed | Voltage Drop | Magnetic Sensitivity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01 | Reed Switch | Normally Open SPST | $\begin{gathered} 0-120 \mathrm{~V} \mathrm{AC/DC} \\ 50 / 60 \mathrm{~Hz} \end{gathered}$ | 0.25 Amps Max. | 5 watts Max. | 0.4 ms operate 0.1 ms release | 0 Volts | 85 Ga . |
| 02 | Reed Switch for PLC's, LED (current limiting) | Normally Open SPST | $\begin{gathered} 5-120 \mathrm{~V} \mathrm{AC} / \mathrm{DC} \\ 50 / 60 \mathrm{~Hz} \end{gathered}$ | 0.03 Amps Max. <br> 0.001 Amps Min. | 4 watts Max. | 0.4 ms operate <br> 0.1 ms release | 3.5 Volts <br> @ 5mA | 85 Ga . |
| 31 | Electronic for Reed Magnet, LED \& Sourcing | Normally Open PNP | 5-28 VDC | 0.2 Amps Max. | 4.8 watts Max. | $4 \mu$ s operate $4 \mu$ s release | 1.0 Volts | 25 Ga . |
| 32 | Electronic for Reed Magnet, LED \& Sinking | Normally Open NPN | 5-28 VDC | 0.2 Amps Max. | 4.8 watts Max. | $4 \mu$ s operate $4 \mu$ s release | 1.0 Volts | 25 Ga . |


| Quick-Ship Bulk Packs |  |  |  |
| :---: | :---: | :---: | :---: |
| SERIES 9E |  |  |  |
| Can-Pak Part Number | Qty | Function <br> Normally Open | Switch Type |
| CP-9E10-000-002-010 | 10 | SPST | Reed |
| CP-9E10-000-031-010 | 10 | PNP | Electronic |
| CP-9E10-000-032-010 | 10 | NPN | Electronic |
| CP-9E10-000-302-010 | 10 | SPST | Reed |
| CP-9E10-000-331-010 | 10 | PNP | Electronic |
| CP-9E10-000-332-010 | 10 | NPN | Electronic |

## Ordering Example:

9E10-000-002

1/4" dovetail, 9 ft. PVC cable, reed switch for PLC's with LED, SPST, normally open, 5-120V AC/DC $50 / 60 \mathrm{~Hz}$

