

**canfield connector**  
 8510 Foxwood Court  
 Youngstown, Ohio 44514  
 (330) 758-8299 Fax: (330) 758-8912  
 www.canfieldconnector.com

## SERIES 7C

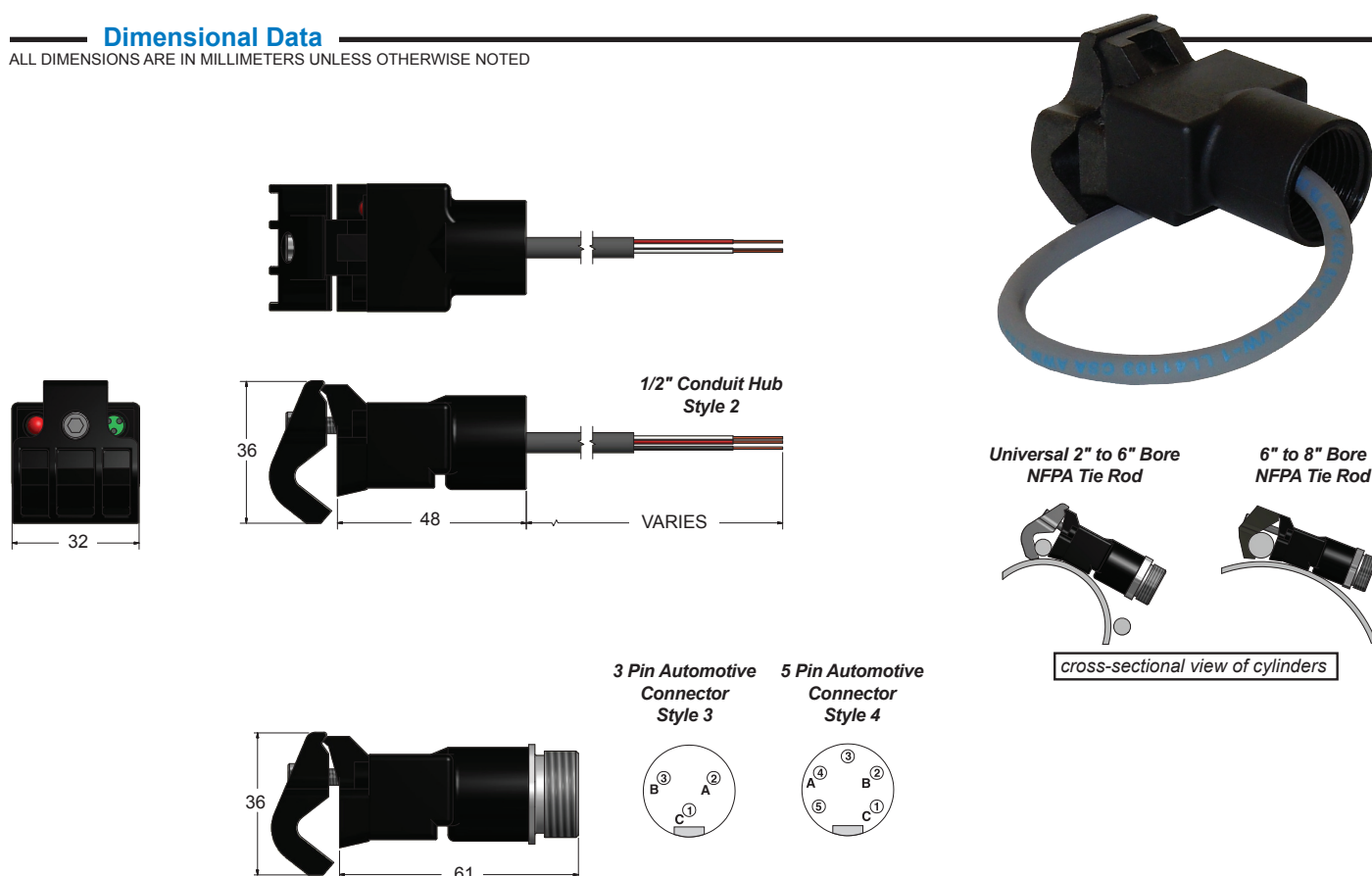
## REED AND ELECTRONIC SENSORS FOR 2" TO 8" BORE TIE ROD CYLINDERS

### General Description

The Canfield Series 7C proximity sensors are used to sense position on pneumatic actuators equipped with magnetic pistons from 2" to 8" bore. This proven design is rugged yet cost effective. All switches feature a self-adjusting clamp that grips standard NFPA and custom cylinders eliminating stocking requirements of many clamps for different bore sizes. The Series 7C boasts the largest number of custom circuits to match applications found in the market. Examples include; 1 or 4 Amp reed switches, normally open, normally closed or SPDT switch types, reed or electronic sensing elements in the same package style, not to mention the industry's first 120 VAC Hall sensor. The low cost 7C features a 1/2" conduit hub and wire lead to meet stringent electrical codes in certain regions and applications.

### Dimensional Data

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED



### Technical Data

- Temperature Range: Operational from -20° to +80°C.
- Shock: Operational up to 30G (11 ms.) reeds only. Not applicable for electronics.
- Vibration: Operational up to 20 G (10 - 55Hz) reeds only. Not applicable for electronics.
- Sensitivity and orientation: 85 gauss parallel minimum required for proper operation, as measured on sensor surface. Size of sensing area depends on size and strength of magnet and thickness of cylinder wall.

### Features

- One switch for a majority of voltages and cylinder sizes
- 2" - 6" bore, same clamp (8" bore optional)
- Wash down compatible NEMA 6 (most versions)
- Materials: Ultem®, Nylon, PVC wire and stainless steel
- CSA approved versions
- "Floating" clamp
- Surge suppression
- Compatible with IS (Intrinsically Safe) barriers

## Ordering Information

7 C 1 0 -  0 0 -

### Clamp Style

0 - Universal tie rod clamp 2" to 6" bore  
 1 - Round cylinder bracket  
 2 - Round cylinder 3/4" to 1 3/4" bore  
 3 - Round cylinder 1 9/16" to 2 1/2" bore  
 4 - Round cylinder 2 5/16" to 3 1/4" bore  
 5 - Round cylinder 3 1/16" to 4" bore  
 9 - 5/8" tie rod clamp 6" to 8" bore

### Connector Style

2 - 1/2" Conduit Hub  
 3 - 3 Pin Automotive Connector  
 4 - 5 Pin Automotive Connector

Type	Description	Function	Switching Voltage	Switching Current	Switching Power	Switching Speed	Voltage Drop
01	Reed Switch, 2 Wire	Normally Open SPST	0 - 240V AC/DC 50/60 Hz	1 Amp max.	30 Watts max.	0.6 ms operate 0.05 ms release	0 Volts
04	Reed Switch, MOV, LED, 2 Wire	Normally Open SPST	5 - 240V AC/DC 50/60 Hz	1 Amp max. .005 Amps min.	30 Watts max.	0.6 ms operate 0.05 ms release	3 Volts
05	Reed Switch, 2 Wire	Normally Closed SPST	0 - 120V AC/DC 50/60 Hz	1 Amp max.	20 Watts max.	1.0 ms operate 0.02 ms release	0 Volts
06	Reed Switch, LED, 3 Wire	Single Pole, Double Throw	5 - 120V AC/DC 50/60 Hz	1 Amp max. .005 Amps min.	20 Watts max.	1.0 ms operate 0.02 ms release	3Volts/load1 0Volts/load2
09	Reed Switch, MOV, LED, 2 Wire	Normally Closed SPST	5 - 120V AC/DC 50/60 Hz	1 Amp max. .005 Amps min.	20 Watts max.	1.0 ms operate 0.02 ms release	3 Volts
15	AC Electronic Sensor for Reed Magnets, LED, 3 Wire	Normally Open TRIAC output	12-24 VAC	600 mA max. 5 Amps Inrush	15 Watts max.	1.5 $\mu$ s operate 0.5 $\mu$ s release	1 Volt
16	AC Electronic Sensor for Reed Magnets, LED, 3 Wire	Normally Open TRIAC output	120 VAC	600 mA max. 5 Amps Inrush	72 Watts max.	1.5 $\mu$ s operate 0.5 $\mu$ s release	1 Volt
21	Reed Switch, MOV, 2 Wire	Normally Open TRIAC output	10 - 240 VAC 50/60 Hz	4 Amps max. 50 Amps Inrush	100 Watts max.	0.6 ms operate 0.05 ms release	1 Volt
23	Reed Switch, MOV, LED, 3 Wire	Normally Open TRIAC output	10 - 50 VAC 50/60 Hz	4 Amps max. 50 Amps Inrush .005 Amps min.	100 Watts max.	0.6 ms operate 0.05 ms release	1 Volt
24	Reed Switch, MOV, LED, 3 Wire	Normally Open TRIAC output	24 - 240 VAC 50/60 Hz	4 Amps max. 50 Amps Inrush .005 Amps min.	100 Watts max.	0.6 ms operate 0.05 ms release	1 Volt
25	Reed Switch, MOV, 2 Wire	Normally Closed TRIAC output	10-120 VAC 50/60 Hz	4 Amps max. 50 Amps Inrush	100 Watts max.	0.6 ms operate 0.05 ms release	1 Volt
29	Reed Switch, MOV, LED, 3 Wire	Normally Closed TRIAC Output	10-120 VAC 50/60 Hz	4 Amps max. 50 Amps Inrush .005 Amps min.	100 Watts max.	06 ms operate 0.05 ms release	1 Volts
31	Electronic for Reed Magnet, LED & Sourcing, 3 Wire	Normally Open PNP	6 - 24 VDC	1 Amp max.	24 Watts max.	1.5 $\mu$ s operate 0.5 $\mu$ s release	0.5 Volts
32	Electronic for Reed Magnet, LED & Sinking, 3 Wire	Normally Open NPN	6 - 24 VDC	1 Amp max.	24 Watts max.	1.5 $\mu$ s operate 0.5 $\mu$ s release	0.5 Volts

### Ordering Example:

7C10-000-204

Universal tie rod clamp, 1/2" conduit hub,  
 reed switch, lighted, MOV surge suppression,  
 normally open, 5 - 240V AC/DC 50/60 Hz