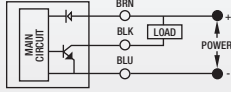


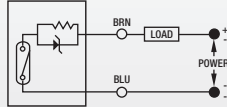


Models:

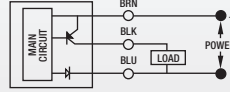
810164, 810167,
810171, 810174



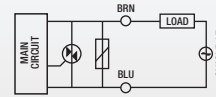
810159, 810168,
810169, 810175



810163, 810166,
810170, 810173



810165, 810172



page 13.3

Models 810159-810175



Cable: Robotic Grade, abrasion resistant polyurethane (PUR) jacket, PVC Insulation
 Temperature Range: 14° to 158° F (-10° to +70° C)
 Enclosure Classification: IP67 (NEMA 6)

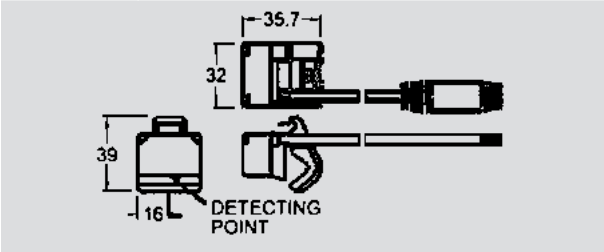
Tie Rod Mount Models

810165	Cord is 3 meters long
810172	Cord is 6" long with M8 Male

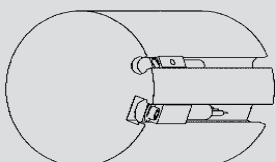
Model 8315 with sensor



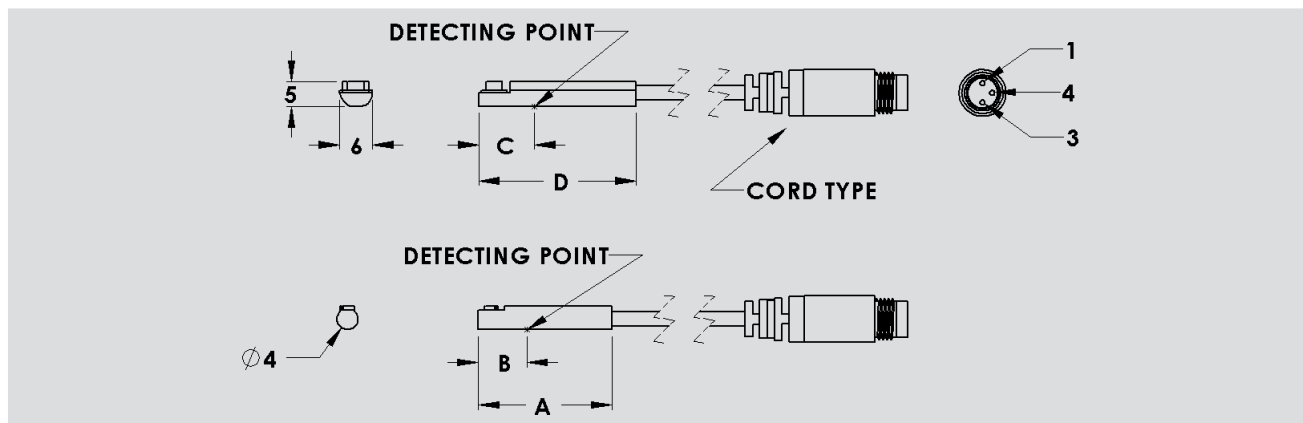
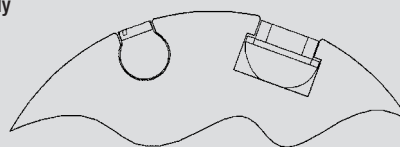
Model 807-S with sensor



Mount example



Assembly

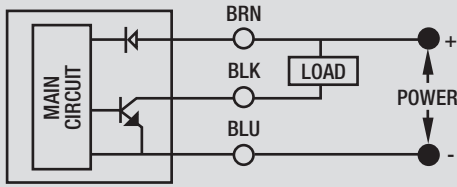


Dimensions

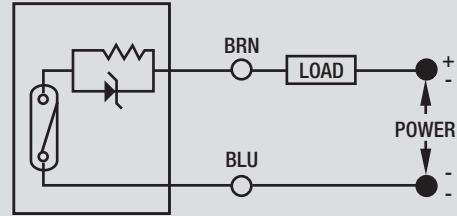
Model no.	A	B	C	D	1	4	3	Cord Type
810159	22	10	-	-	-	-	-	3 Meters Long (no connector)
810163	-	-	8	30	-	-	-	3 Meters Long (no connector)
810164	-	-	8	30	-	-	-	3 Meters Long (no connector)
810165	See Illustration				-	-	-	3 Meters Long (no connector)
810166	18.5	6	-	-	-	-	-	3 Meters Long (no connector)
810167	18.5	6	-	-	-	-	-	3 Meters Long (no connector)
810168	-	-	13	30	-	-	-	3 Meters Long (no connector)
810169	22	10	-	-	BRN(+)	Not Used	BLU(-)	6" Male, M8 Connector
810170	-	-	8	30	BRN(+)	BLK(OUT)	BLU(-)	6" Male, M8 Connector
810171	-	-	8	30	BRN(+)	BLK(OUT)	BLU(-)	6" Male, M8 Connector
810172	See Illustration				BRN(+)	Not Used	BLU(-)	6" Male, M8 Connector
810173	18.5	6	-	-	BRN(+)	BLK(OUT)	BLU(-)	6" Male, M8 Connector
810174	18.5	6	-	-	BRN(+)	BLK(OUT)	BLU(-)	6" Male, M8 Connector
810175	-	-	13	30	BRN(+)	Not Used	BLU(-)	6" Male, M8 Connector

Wiring diagrams

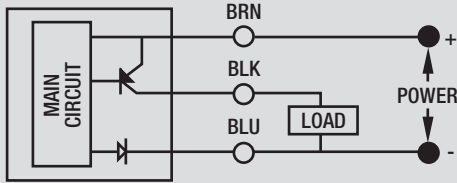
810164, 810167, 810171, 810174



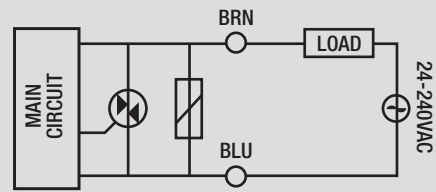
810159, 810168, 810169, 810175



810163, 810166, 810170, 810173



810165, 810172



Specifications

Model no.	Mount	Sensor Type	Operation	Operation Voltage	Switching Current	Power Rating	Voltage Drop	Protection Circuit
810159	ø4mm	Reed Switch	SPST Normally Open	5-120V DC/AC 50/60Hz	50mA Max.	6 Watts	3.0V Max.	None
810163	6.5 x 5mm	Solid State	PNP Normally Open	10-30V DC	100mA Max.	3 Watts	2.0V Max.	Reverse Polarity, Short Circuit
810164	6.5 x 5mm	Solid State	NPN Normally Open	10-30V DC	100mA Max.	3 Watts	2.0V Max.	Reverse Polarity, Short Circuit
810165	Tie Rod	Solid State	TRIAC Normally Open	24-240 V AC 50/60 Hz Only	4 AmpsMax- 25Amplnrush	30 Watts	1.5 V @ .05 A Max.	Reverse Polarity, Short Circuit
810166	ø4mm	Solid State	PNP Normally Open	4.5-28 V DC	100mA Max.	3 Watts	0.5 V @ 50mA Max.	Rev Pol, Surge Suppression
810167	ø4mm	Solid State	NPN Normally Open	4.5-28 V DC	100mA Max.	3 Watts	0.5 V @ 50mA Max.	Rev Pol, Surge Suppression
810168	6.5 x 5mm	Reed Switch	SPST Normally Open	5-220V DC/AC 50/60Hz	100mA Max.	10 Watts	3.0V Max.	None
810169	ø4mm	Reed Switch	SPST Normally Open	5-120V DC/AC 50/60Hz	50mA Max.	6 Watts	3.0V Max.	None
810170	6.5 x 5mm	Solid State	PNP Normally Open	10-30V DC	100mA Max.	3 Watts	2.0V Max.	Reverse Polarity, Short Circuit
810171	6.5 x 5mm	Solid State	NPN Normally Open	10-30V DC	100mA Max.	3 Watts	2.0V Max.	Reverse Polarity, Short Circuit
810172	Tie Rod	Solid State	TRIAC Normally Open	24-240 V AC 50/60 Hz Only	4AmpsMax- 25Amplnrush	30 Watts	1.5 V @ .05 A Max.	Reverse Polarity, Short Circuit
810173	ø4mm	Solid State	PNP Normally Open	4.5-28 V DC	100mA Max.	3 Watts	0.5 V @ 50mA Max.	Rev Pol, Surge Suppression
810174	ø4mm	Solid State	NPN Normally Open	4.5-28 V DC	100mA Max.	3 Watts	0.5 V @ 50mA Max.	Rev Pol, Surge Suppression
810175	6.5 x 5mm	Reed Switch	SPST Normally Open	5-220V DC/AC 50/60Hz	100mA Max.	10 Watts	3.0V Max.	None

Models 810151, 810152, 810153, 810154, 810155, 810156, 810157, 810158

Switch options are available for the following Models: 812-U, 816, 840, 841, 849, 860, 861, 863, 864, 870, 871, 890, 891, 893, 894, 1000 & 1001.

Reed Switches are available from factory stock. The switches are activated by a magnetic ring installed on the cylinder piston. As the magnetic ring moves under the switch, it closes the contacts and sends a signal to a programmable controller or other electronic device.

Switches have nine-foot leads as standard. Longer leads are available upon special request.

Hall Effect switches are also available on special order. Contact our Customer Service Department.

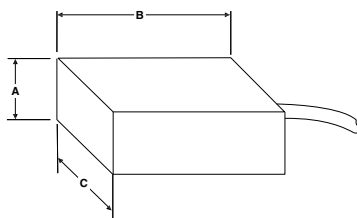
Switches have a tie-rod mounting clamp as standard. A band clamp is required for 812-U, 816 cylinders used with Switch Models 810156 and 810158. Please order the band clamp as model 810156-1.



Part no.	EDP no.	Type	Function	Switching Voltage	Switching Current	Switching Power	Maximum Voltage Drop	Temperature Limit (Ambient)	Lead Wire	Sensitivity and Orientation
810151	58150	REED, MOV, LED	SPST Normally Open	5-120V AC/DC 50/60 HZ	.5A Max. .005A Min.	10 Watts Max.	3.5 Volts	176° F (80° C)	9'	85 Gauss Parallel
810152	58152	REED, MOV, LED	SPST Normally Open	5-120V AC/DC 50/60 HZ	.5A Max. .005A Min.	10 Watts Max.	3.5 Volts	176° F (80° C)	12'	85 Gauss Parallel
810153	58104	REED, MOV, LED	Normally Open	24-240V AC 50/60 HZ	4A Max. .005A Min. 50A in Rush	100 Watts Max.	1 Volt	176° F (80° C)	9'	85 Gauss Parallel
810154	58154	REED, No MOV, No LED	SPST Normally Open	0-120V AC/DC 50/60 HZ	.5A Max.	10 Watts Max.	0 Volt	176° F (80° C)	9'	85 Gauss Parallel
810155	58155	Hall Effect, LED Sourcing	Normally Open PNP Output	6-24V DC 50/60 HZ	.5A Max.	12 Watts Max.	1 Volt	176° F (80° C)	9'	85 Gauss Parallel
810156	58156	REED, MOV, LED	SPST Normally Open	5-120V AC/DC 50/60 HZ	.5A Max. .005A Min.	10 Watts Max.	3.5 Volts	176° F (80° C)	9'	85 Gauss Parallel
810157	58157	Hall Effect	Normally Open NPN Output	6-24V DC	.5A Max.	12 Watts Max.	1 Volt	176° F (80° C)	9'	85 Gauss Parallel
810158	58158	Hall Effect	Normally Open PNP Output	6-24V DC	.5A Max.	12 Watts Max.	1 Volt	176° F (80° C)	9'	85 Gauss Parallel

Note: Models 810156 and 810158 use 810156-1 band clamp to mount the switch to the wall of the cylinder. All other Models use tie-rod clip 810151-1.

WARRANTY ON ELECTRICAL PRODUCTS
 DE-STA-CO EXPRESSLY LIMITS THE PRODUCT WARRANTY AS APPLIED TO ANY ELECTRICAL OR ELECTRONIC COMPONENT USED ON OR ASSOCIATED OR CONNECTED WITH ANY PRODUCT TO A PERIOD OF ONE (1) YEAR FROM THE DATE THE PRODUCT IS DELIVERED TO THE FIRST USER.



Switch Dimensions (Less Mounting Clip)

Part no.	EDP no.	A	B	C
810151	58105	0.37	0.93	0.53
810152	58152	0.37	0.93	0.53
810153	58104	0.87	1.30	0.67
810154	58154	0.37	0.93	0.53
810155	58155	0.37	0.93	0.53
810156	58156	0.37	0.93	0.53
810157	58157	0.37	0.93	0.53
810158	58158	0.37	0.93	0.53

*To be used on larger clamp models only – Series 847 and higher.