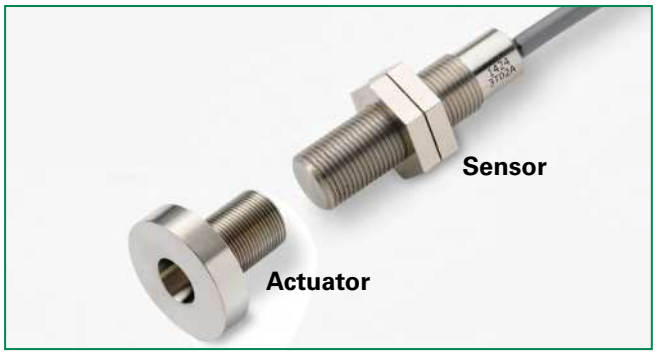
59075 Stainless Steel M12 Threaded Barrel Sensor + 57075 Actuator

RoHS



Description

The 59075 is a robust stainless steel barrel sensor with an M12 x 1mm pitch thread, 46mm (1.810") long with a choice of normally open, normally open high voltage, normally closed or change over contacts. It is capable of switching up to 265Vac/300Vdc at 10VA. It is ideally suited to position and limit sensing in heavy duty applications such as off road and heavy vehicles such as farm machinery. The 59075 is complete with two locking nuts and a separate actuator with M16 x 1mm pitch thread available. It functions best with the 57075 actuator.

Note: The 57075 Actuator is sold separately.

Features

- Two-part magnetically operated proximity sensor
- Heavy duty stainless steel threaded barrel with retaining nuts
- M12 by 1.00mm thread
- Choice of normally open, high voltage or change over contacts
- Customer defined sensitivity
- Choice of cable length and connector

Benefits

- Robust construction makes this sensor well suited to harsh industrial environments
- Simple installation and adjustment using supplied retaining nuts
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium

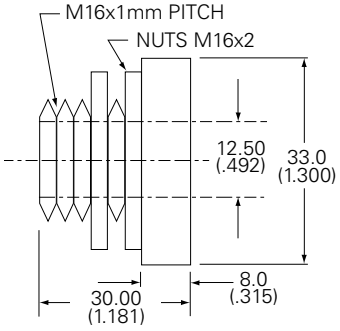
Applications

- Off-road and Heavy Vehicles
- Farm Machinery

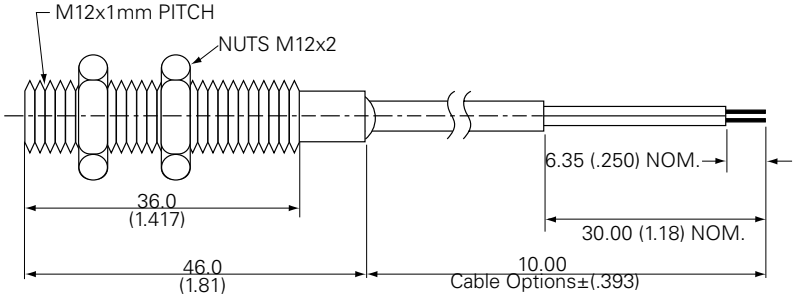
Dimensions

Dimensions in mm (inch)

Actuator



Sensor



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Electrical Ratings

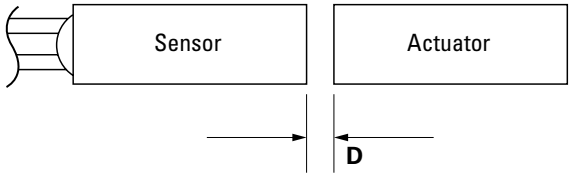
Contact Type			Normally Open	Normally Open HighVoltage	Change Over	Normally Closed
Switch Type			1	2	3	4
Contact Rating [1]		VA/Watt - max.	10	10	5	5
Voltage [4]	Switching [2] Breakdown [3]	Vdc - max. Vac - max. Vdc - min.	200 140 250	300 265 400	175 120 200	175 120 200
Current [4]	Switching [2] Carry	Adc - max. Aac - max. Adc - max.	0.5 0.35 1.2	0.4 0.30 1.4	0.25 0.18 1.5	0.25 0.18 1.5
Resistance [5]	Contact, Initial Insulation	Ω - max. Ω - min.	0.2 10^{10}	0.2 10^{10}	0.2 10^{9}	0.2 10^{9}
Capacitance	Contact	pF - typ.	0.3	0.2	0.3	0.3
Temperature	Operating	°C	-40 to +105	-20 to +105	-40 to +105	-40 to +105
Product Characteristics						
Operate Time [6]		ms - max.	1.0	1.0	3.0	3.0
Release Time [6]		ms - max.	1.0	1.0	3.0	3.0
Shock [7]	11ms ½ sine	G - max.	100	100	50	50
Vibration [7]	50-2000 Hz	G - max.	30	30	30	30

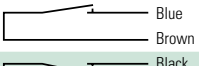
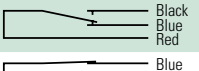
Notes:
1. Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application Notes AN108A and AN107 for details.
3. Breakdown Voltage - per MIL-STD-202, Method 301.
4. Electrical Load Life Expectancy - Contact Littelfuse with voltage, current values along with type of load.
5. This resistance value is for 11.81mm wire length. Resistance changes when wire lengthens.
6. Operate (including bounce)/Release Time - per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
7. Shock and Vibration - per EIA/NARM RS-421-A and MIL-STD-202.
8. For custom modifications to the wire length or size, or adding a special connector, please contact Littelfuse.

Sensitivity Options (Using 57075 Actuator)

Select Option		S		T		U		V	
Switch Type		Pull-In AT Range	Activate Distance–D mm (inch) Average	Pull-In AT Range	Activate Distance–D mm (inch) Average	Pull-In AT Range	Activate Distance–D mm (inch) Average	Pull-In AT Range	Activate Distance–D mm (inch) Average
1	Normally Open	12-18	25.0 (.984)	17-23	21.0 (.827)	22-28	19.0 (.748)	27-33	17.5 (.689)
2	High Voltage	–	–	17-23	21.0 (.827)	22-28	19.0 (.748)	27-33	17.5 (.689)
3	Change Over	15-20	23.0 (.906)	20-25	20.0 (.787)	25-30	18.0 (.709)	–	–
4	Normally Closed	15-20	23.0 (.906)	20-25	20.0 (.787)	25-30	18.0 (.709)	–	–

Note:
1. Pull-In AT Range: These AT values are the bare reed switch AT before modification.
2. The activation distance is average value on the final sensor assembly.



Schematics	Switch Type
	1 and 2
	3
	4

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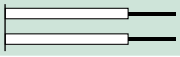
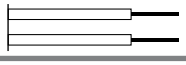
Littelfuse
Expertise Applied | Answers Delivered

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Cable Length Specification

Cable Type: BS 6500 3A 16/0.2 PVC DOUBLE INSULATED	
Select Option	**Cable Length mm (inch)**
02	300 (11.81)

Termination Specification

Termination Options		
Select Option	**Description (Two-wire versions illustrated)**	
A	Tinned leads (6.4±0.76)mm	
F	Untinned leads (6.4±0.76)mm	

Part Numbering System

Sensor: 59075 - X - X - XX - X

- **Series**
- **Switch Type** 1, 2, 3, or 4
- **Sensitivity** S, T, U, or V
- **Cable Length** 02
- **Termination** A or F

Actuator: 57075 - 000

- **Series**
- **Standard Actuator** 000

Note: The 57075 Actuator is sold separately.

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	500	N/A	N/A

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