Fluidic Proximity Sensor
Amplified, 1/8" I.D. Internal Orifice

PXDA111

For Use With PRDA12 Amplifier Relay			
Part Number	**Sensing Distance**	**Ø Mounting**	**Connections**
PXDA111	5/64" to 3/16" (2 to 5mm)	M12 x 2	5/32" (4mm) Instant

Function

Fluidic Proximity Sensors are used for non-contact sensing of stationary or moving parts.

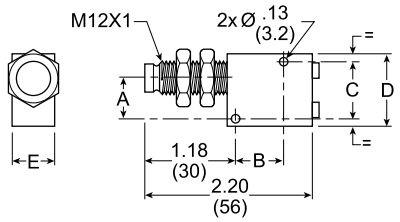
Certain applications require detection without physical contact, particularly where the object to be detected is fragile or soft. The technique of detection by fluid proximity sensor provides the ideal solution for this need.

D

Mounting Styles

Two mounting styles are provided on each Sensor.
Nose Mount: Nuts are supplied
Flush Mount: Two clearance holes are provided in Sensor body.

Dimensions



PXDA111

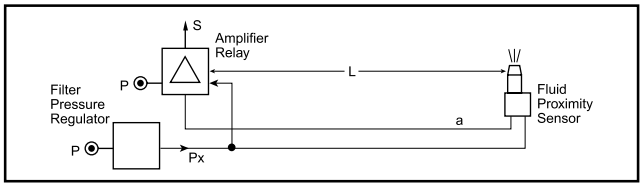
	inch	mm
A	.49	12.5
B	.67	17
C	.71	18
D	.98	25
E	.59	15

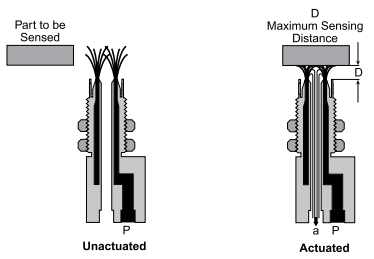
Operating Principle, Characteristics

Fluidic Proximity Sensors are used in conjunction with amplifier relays. A low pressure supply,“Px” 1.5 to 3 PSIG (.1 to .2 bar), is connected to Sensor and Relay.

A permanent bleed, in an annular pattern, issues from the Sensor, creating a sensitive field. When an object enters this field, it reflects a low pressure signal to the Sensor and, in turn, to the Amplifier Relay. The low pressure signal is then amplified to system level, 40 to 120 PSIG (2.8 to 8.3 bar) and output S appears.

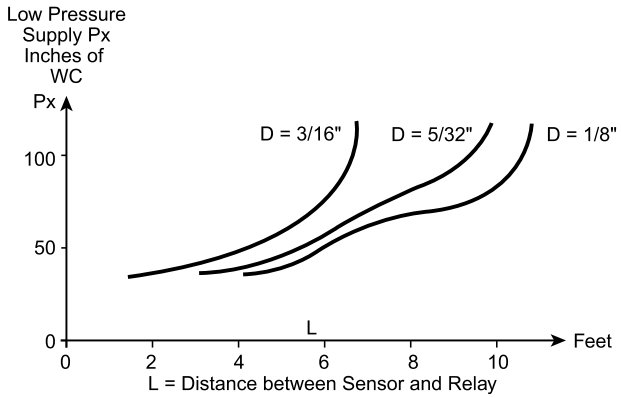
Low Pressure Supply, “Px” minimum pressure, varies as a function of Sensing Distance “D” and Signal Travel Distance “L” from Sensor to Amplifier Relay. The diagram shows these variations. In any case, air consumption is negligible and virtually inaudible.





Specifications

Sensing Distance –
PXDA11• ..... .04 to .20 (1 to 5 mm)



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