### **Non-Contact Pneumatic Sensors**

Gap (Air Barrier) Sensor

# **Gap Sensor** Type SFL-6

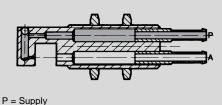


The air gap sensor is used for non-contact sensing of objects of a maximum width of 0.19 in / 5 mm. The device may also be used for metering and monitoring as well as detecting objects. To reduce air consumption, install a needle valve in air supply line P if the pressure at P is greater than 45 psi / 3 bar.

The recommended operating pressure is 1.5 to 15 psi / 0.1 to 1 bar at connection P (black).

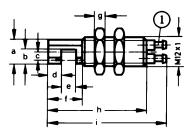
Signal pressure should not exceed the maximum allowable pressure for the downstream amplifier.

The air gap sensor is supplied with compressed air at connection P (black). If passage through the gap is clear, a signal is present at port A (yellow). If an object disrupts the flow of air in the gap, there will be no signal at port A.



A = Outlet





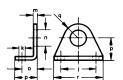
 Barbed fitting for 3/16 in / 3 mm tubing, connection P black, connection A yellow

SW = wrench size, mm

#### Mounting Accessories:

Flange Mount Order Number 5129 FBN-8/10 Foot Mount Order Number 5123 HBN-8/10





#### Air Consumption versus Supply Pressure at P

Dimensions:

a 0.42 in / 10.6 mm

0.12 in / 3.1 mm

b 0.24 in / 6.2 mm

d 0.20 in / 5 mm

0.24 in / 6 mm

f 0.55 in / 14 mm

g 0.16 in / 4 mm

1.58 in / 40 mm

1.90 in / 48 mm

0.99 in / 25 mm

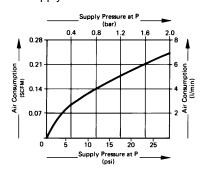
0.18 in / 4.5 mm

1 1.18 in / 30 mm m 0.12 in / 3 mm

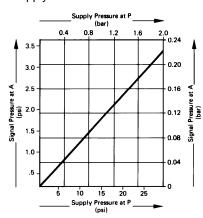
n 0.48 in / 12.1 mm o 0.43 in / 11 mm

p 0.63 in / 16 mm

q 0.39 in / 10 mm r 1.38 in / 35 mm



## Signal Pressure at A versus Supply Pressure at P



Order Number	Part No./Type	4439 SFL-6
Medium		Compressed air (filtered, unlubricated)
Mounting		M12 x 1 threaded with 2 mounting nuts
Mounting Hole Diameter		0.5 in / 12.5 mm
Connection		Barbed fitting for 3/16 in / 3 mm tubing
Orifice Size		0.10 in / 2.5 mm
Supply Pressure Range at P*		0 to 120 psi / 0 to 8 bar
Signal Pressure Range at A		See graph, above
Air Consumption at 1.5 psi / 0.1 bar		0.05 SCFM / 1.5 l/min (see graph, above)
Max. Nozzle Range		0.24 in / 6 mm
Ambient Temperature		-40 to 212°F / -40 to 100°C†
Design		Nozzle, no moving parts
Material		Brass
Weight		0.073 lb / 0.033 kg

<sup>\* 14</sup> to 140°F / -10 to 60°C

<sup>†</sup> Depending on tubing used