

# Non-Contact Pneumatic Sensors

## Gap (Air Barrier) Sensor

### Gap Sensor Type SFL-6

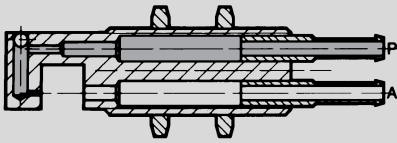


The air gap sensor is used for non-contact sensing of objects of a maximum width of 0.19 in / 5 mm. The device may also be used for metering and monitoring as well as detecting objects. To reduce air consumption, install a needle valve in air supply line P if the pressure at P is greater than 45 psi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

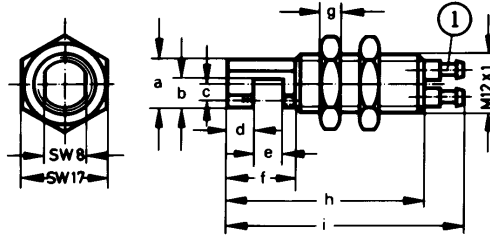
The recommended operating pressure is 1.5 to 15 psi / 0.1 to 1 bar at connection P (black).

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.



P = Supply  
A = Outlet



① Barbed fitting for 3/16 in / 3 mm tubing, connection P black, connection A yellow

SW = wrench size, mm

#### Mounting Accessories:

Flange Mount

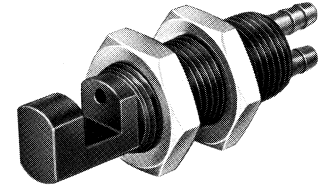
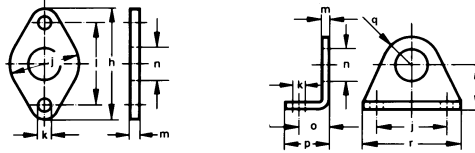
Order Number 5129

FBN-8/10

Foot Mount

Order Number 5123

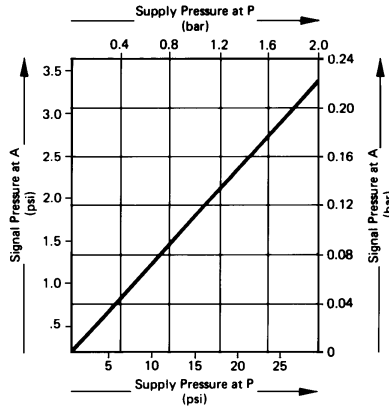
HBN-8/10



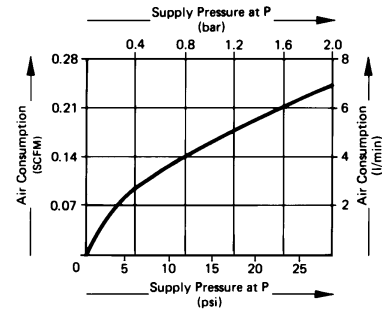
#### Dimensions:

a	0.42 in / 10.6 mm
b	0.24 in / 6.2 mm
c	0.12 in / 3.1 mm
d	0.20 in / 5 mm
e	0.24 in / 6 mm
f	0.55 in / 14 mm
g	0.16 in / 4 mm
h	1.58 in / 40 mm
i	1.90 in / 48 mm
j	0.99 in / 25 mm
k	0.18 in / 4.5 mm
l	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



#### Air Consumption 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

\* 14 to 140°F / -10 to 60°C

† Depending on tubing used

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