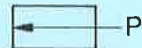
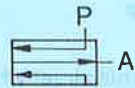


**Air barrier**  
consisting of

**Sender**  
Type SFL-100-S



**Receiver**  
Type SFL-100-F

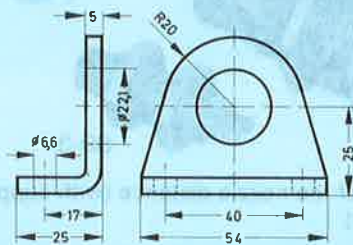


This air barrier is used as a non-contacting signal generator for distances up to 100 mm, e.g. determining of objects with undetermined position or with a varying distance from the nozzle.

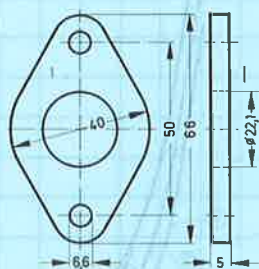
**Accessories:**

**Foot mounting**

Order code 5127 HBN-20/25-1

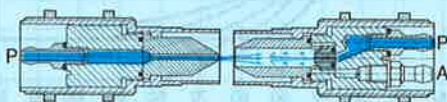


**Flange mounting**  
Order code  
5131 FBN-20/25



SFL-100-S

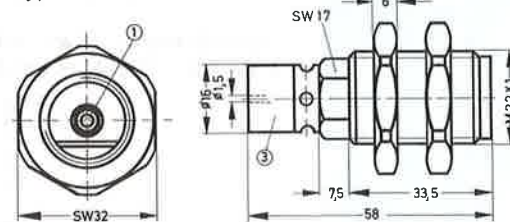
SFL-100-F



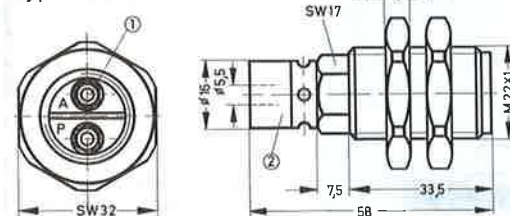
Both the sender and receiver are supplied with filtered, non-lubricated compressed air with a supply pressure of 0.1 to 0.2 bar via port P. In the case of the receiver, this is done in order to prevent the danger of contamination and to obtain a perfect 0-signal (partial vacuum) at outlet A.

The air jet from the sender interrupts the free outflow of the air jet at the receiver. A back pressure is produced which generates a control pressure  $\geq 0.5$  mbar at outlet A of the receiver. This pressure signal is increased to the desired pressure by means of an amplifier. If an object breaks the air jet between the sender and receiver, the continuous signal at A becomes to 0.

Type SFL-100-S



Type SFL-100-F



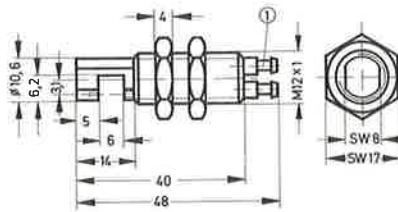
- ① Barbed fitting for 4 mm plastic tubing
- ② Brown coloured band
- ③ Green coloured band

- 1 (P) = Supply port
- 2 (A) = Outlet line

Order code	Part No./Type	100430 SFL-100-S	100431 SFL-100-F
Medium		Compressed air, filtered, non-lubricated	
Design		Nozzle without moving parts	
Mounting		M22 x 1 with mounting nuts	
Installation dia.		22.5 mm	
Connection		Barbed fitting for 4 mm plastic tubing	
Supply pressure range at P		0.1 to 0.2 bar	
Max. supply pressure		4 bar	0.5 bar
Signal pressure range at A		– 0.002 bar to supply pressure	
Air consumption at 0.1 bar		8.5 l/min	
Max. nozzle distance		100 mm	
Ambient temperature		– 40 to + 100° C*	
Medium temperature		– 10 to + 60° C	
Materials		Housing: aluminium, brass	
Weight		0.050 kg	0.050 kg

\* depending on tubing used

## Gap sensor Type SFL-6



① Barbed fitting for 3 mm plastic tubing  
Port P black, port A yellow



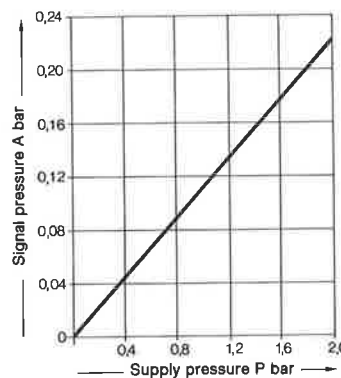
1 (P) = Supply  
2 (A) = Outlet line

The gap sensor is used for proximity sensing of objects with a width up to 5 mm. It can be used for counting and monitoring purposes or for registering objects. In order to reduce air consumption, it is recommended to install a flow control valve in the air supply line P, if P is greater than 3 bar.

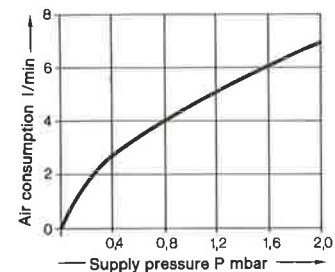
The recommended working pressure range is 0.1 to 1 bar at port P (black).

The signal pressure must correspond to the permissible pressure of the downstream amplifier (see graph).

Signal pressure A as a function of supply pressure P

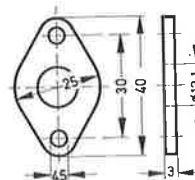


Air consumption as a function of supply pressure P

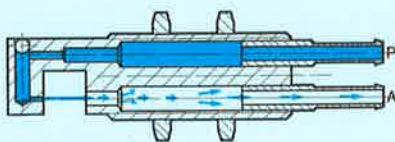
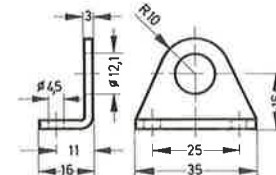


### Accessories:

Flange mounting  
Order code  
5129 FBN-8/10



Foot mounting  
Order code  
5123 HBN-8/10-1



Order code	Part No./Type	4439 SFL-6
Medium		Compressed air, filtered, non-lubricated
Design		Nozzle without moving parts
Mounting		Thread M12 x 1 with two mounting nuts
Installation dia.		12.5 mm
Connection		Barbed fitting for 3 mm tubing
Nominal size		2.5 mm
Supply pressure range at P		0 to 8 bar
Signal pressure range at A		See graph
Air consumption at 0.1 bar		1.5 l/min (see graph)
Nozzle distance		6 mm
Ambient temperature		-40 to +100° C*
Medium temperature		-10 to +60° C
Materials		Brass
Weight		0.033 kg

\* depending on tubing used