Description

The Miniature Flow Monitor SW112 operates on the proven calorimetric principle and is designed to operate with air. Self-contained sensor head with integral electronic circuitry.

Features

- Adjustable to wide range of flow rates
- No moving parts in the flow
- Operation largely independent of pipe diameter
- LED status indication
- Relay output for flow
- Fast response time
- Suitable for air
- Mounting by flange (included in delivery) or PG cable gland (accessory)

SW112 (with mounting flange)

TECHNICAL DATA		
General data		
Suitable for		air
Monitoring function	flow velocity	1 switching point (MIN)
Display	flow velocity	1 LED (yellow)
	operating state	1 LED (green)
Temperature range	medium and monitoring head	-20 ... +60 °C
	electronic control unit	-20 ... +50 °C
Electrical data		
Supply voltage		DC 24 V (18 ... 32 V)
Power consumption		approx. 30 ... 100 mA
Relay outputs	flow velocity	1 normally open contact, DC 24 V, max. load 0.7 A
Flow monitoring		
Flow response level adjustment (steplessly by means of a potentiometer)		0,5 ... 50 m/s standard flow speed referred to 20 °C and 1,01325 bar
Repeatability [1]		± 1 %
Response delay [2]		< 1 s
Switch point drift through temperature change of the medium		approx. ±0,25 %/°C
Delay on switch-on		35 s (contacts closed)
Mechanical data		
Type and size of monitoring head		ø 18 mm for mounting flange or PG
Pressure resistance of monitoring head		1 bar (relative pressure)
Degree of protection	monitoring head	IP60 between medium and control unit
	electronic control unit	IP40
Materials	fitting/sensor support	polyamide, aluminium
	sensor	ceramics, glass-passivated
	electronic control unit	PC/makrolon
Housing dimensions	electronic control unit	ø 18 mm, length: 159 mm
Weight		approx. 85 g with 2 m cable (cable weight approx. 24 g/m)
Max. cable length		according to cable resistance and supply voltage max. 550 â (R_{load} + cable resistance)

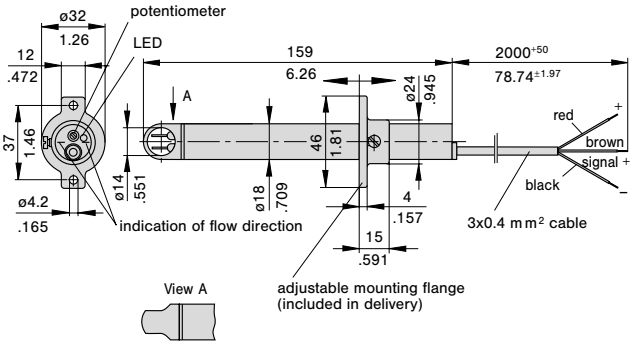
[1] Of the set value, at constant temperature and flow conditions, and stable thermal conductivity.
[2] Delay with the switch point set to 5 m/s / 16.4 fps and the flow at 10 m/s / 32.8 fps, after a sudden complete stop.

Ordering information

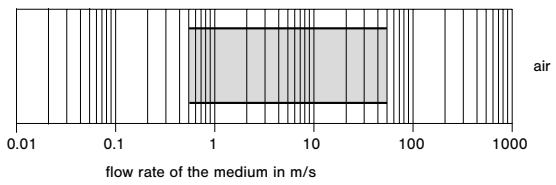
Miniature Flow Monitor				
SW112-RE	Flow Monitor for air, with relay output, incl. mounting flange			
	Input voltage			
	DC 24 V			
			Cable length	
			2 m/6.56 ft standard	
			or specify length up to 25 m/82 ft max.*	
SW112-RE	**DC24 V**	**-**	**2 m**	ordering example

* Available cable lengths: 2 m/6.56 ft, 3 m/9.84 ft, 5 m/16.4 ft, 8 m/26.2, 10 m/32.8 ft, 15 m/49.2 ft, 20 m/65.6 ft and 25 m/82 ft

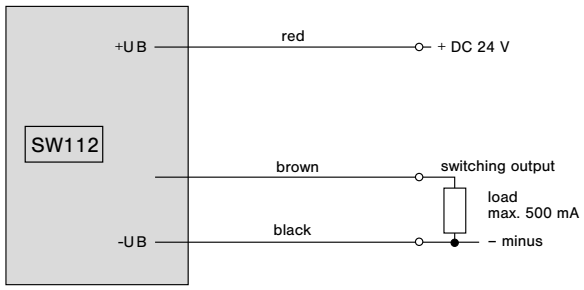
Dimensions



Flow ranges

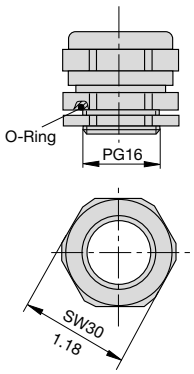


Connection diagram

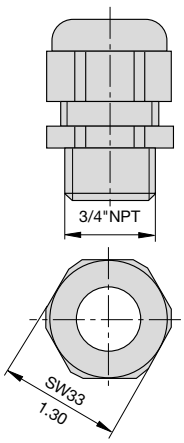


Accessories

PG16 nickel-plated brass
0Z122Z000128



NPT3/4" moulded, black
0Z122Z000131



This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.