

Description

The Miniature Flow Monitor SW 112 operates on the proven calorimetric principle and is designed to operate with air or inert gases. Self-contained sensor head with integral electronic circuitry.

Features

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



SW 112 (without mounting flange)

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Technical data

General data		
Media		air, inert gases
Monitoring function	flow rate	1 switch point (MIN)
Display	flow rate	1 LED (green)
Temperature range	medium and monitoring head	-20 °C...+60 °C / -4 °F...+140 °F
	electronic control unit	-20 °C...+50 °C / -4 °F...+122 °F
Electrical data		
Input voltage		AC 24 V +10 %/-15 % / DC 19 ... 32 V
Power consumption		approx. 20 ... 50 mA
Relay outputs	flow rate	1 NO contact, AC/DC 24 V - 0.7 A
Max. load		
Flow monitoring		
Flow response adjustment (steplessly by means of a potentiometer)		0.5 m/s...20 m/s (1.6 FPS...66 FPS)
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		18 s (contacts closed)
Mechanical data		
Type and size of monitoring head		ø18 mm for mounting flange or PG
Pressure resistance of monitoring head		1 bar/14.7 PSI (relative pressure)
Environmental protection	monitoring head	IP60 between medium and control unit
	electronic control unit	IP40
Material	fitting/sensor support	polyamide, aluminium
	sensor	ceramics, glass-passivated
	electronic control unit	PVC/polyamide
Housing dimensions	electronic control unit	ø18 mm, 162 mm long
Mass		84 g
Cable length	standard	2 m AWG 24 (3x0.20 mm ²)
	max. length	25 m

⁽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 and the flow at 10 m/s, after a sudden complete stop.

E-T-A® Miniature Flow Monitor SW 112 for air and inert gases

Ordering information

Miniature Flow Monitor

SW112-RE Flow Monitor for air/inert gases, with relay output

Input voltage

AC/DC 24 V

Cable length

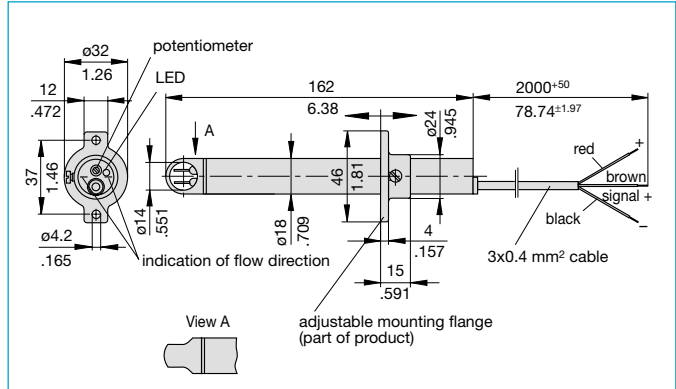
2 m standard
or specify length up to 25 m max.*

SW112-RE AC/DC24 V - 2 m ordering example

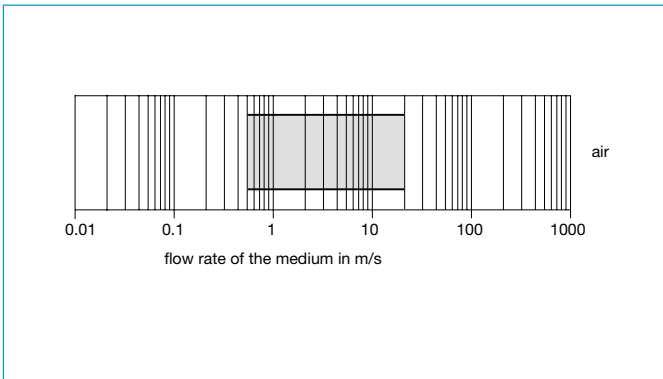
* Available cable lengths: 2 m, 3 m, 5 m, 8 m, 10 m, 15 m, 20 m and 25 m

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Dimensions

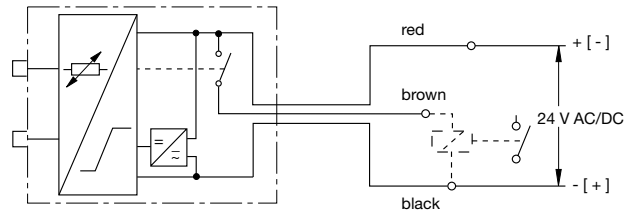


Flow ranges



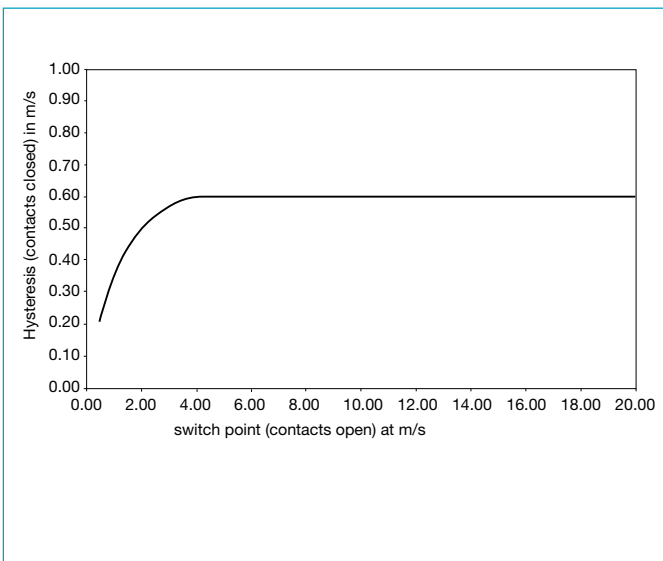
Connection diagram

SW 112-RE



Flow contacts closed, LED ON
No flow or under limits (shown above): contacts open, LED OFF

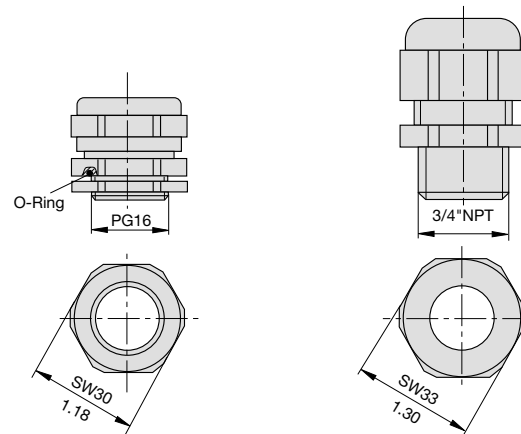
Switch point hysteresis



Accessories

PG16 nickel-plated brass
OZ122Z000128

NPT3/4" moulded, black
OZ122Z000131



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

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.