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Description

These Flow Monitors operate on the calorimetric principle and are suitable for small pipe sizes with flow rates as low as 0.1 ... 10 l/min for liquids and 2.5 ... 250 l/min for gases. Self-contained sensor head with integral electronic circuitry in Ermeto housing sealed to IP65.

Features

- Adjustable to a wide range of flow rates
- No moving parts in the flow
- LED status indication
- Relay output for flow rate
- Suitable for very small pipe diameters
- Fast response time
- Suitable for liquids (SFW120-E) and gases (SLW120-E)
- MIN or MAX switch point

SFW120-E / SLW120-E

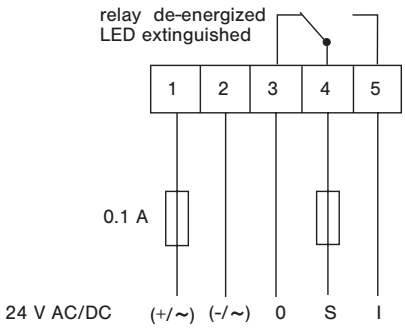
TECHNICAL DATA			
General Data		**SFW120-E**	**SLW120-E**
Suitable for		water and liquids with similar viscosities	air and non-aggressive gases
Monitoring function	flow rate	1 switch point (MIN oder MAX)	1 switch point (MIN oder MAX)
Display	flow rate	1 LED (green)	1 LED (green)
Temperature range	gas/liquid + monitoring head	-10 ... +60 °C/+14 ... +140 °F	-10 ... +60 °C/+14 ... +140 °F
	electronic control unit	-10 ... +60 °C/+14 ... +140 °F	-10 ... +60 °C/+14 ... +140 °F
Electrical Data			
Input voltage		DC 24 V (18 ... 32 V)	DC 24 V (18 ... 32 V)
		AC 24 V (+10 %/-15 %)	AC 24 V (+10 %/-15 %)
Power consumption		approx. 55 mA	approx. 30 mA
Relay outputs	flow rate	1 SPDT contact, AC/DC 28 V, max. load 1 A	1 SPDT contact, AC/DC 28 V, max. load 1 A
Flow Monitoring			
Flow response level adjustment (steplessly by means of a potentiometer)		0,1 l/min ... 10 l/min	2,5 l/min ... 250 l/min
Repeatability (1)		± 5 %	± 10 %
Response delay (2)		2,5 s with water	18 s with air
Switch point drift through temperature change of the medium		approx. ± 1 %/°C / ±1,8 %/°F	approx. ± 2 %/°C / ± 3,6 %/°F
Mechanical Data			
Type and size of monitoring head		EF 6 ... EF 12, 1/4"NPT, G3/8A	EF 10, EF 12, 1/4"NPT, G3/8A
		inside pipe diameter 10 mm/3.98 in.	inside pipe diameter 10 mm/3.98 in.
Pressure resistance (3)		20 bar/290 psi	20 bar/290 psi
Degree of Protection	monitoring head	IP65	IP65
Materials	fitting/sensor support	PVDF	PVDF
	sensor	stainless steel 1.4571/AISI 316Ti	stainless steel 1.4571/AISI 316Ti
	sealing	Viton®	Viton®
	pipe connection EF...	brass	brass
	electronic control unit	ABS	ABS
Housing dimensions (electronic control unit)		50 x 65 x 35 mm/ 1.97 x 2.56 x 1.38 in. (l x w x h)	50 x 65 x 35 mm/ 1.97 x 2.56 x 1.38 in. (l x w x h)
Cable		none	none

(1) Of the set value, at constant temperature and flow conditions, and stable thermal conductivity.
(2) Delay with the switch point set to 1 m/s / 3.28 fps and the flow at 2 m/s / 6.56 fps, after a sudden complete stop.
(3) Admissible operating pressure to DIN 2401, measured at the max. admissible temperature (= max. medium temperature)
Viton® is a registered trade name of Dupont de Nemours.

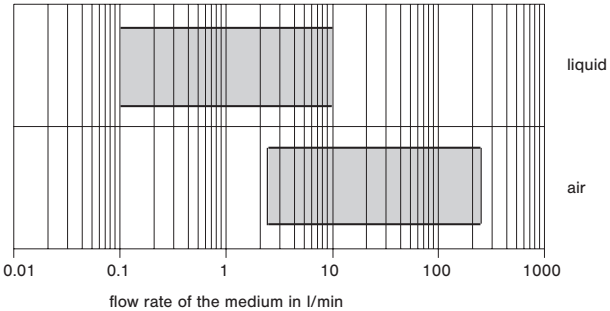
Ordering information

Flow Monitor			
SFW120-E	for water and liquids with similar viscosities, with Ermeto head		
SLW120-E	for gases, with Ermeto head		
	Input voltage		
	AC/DC 24 V		
		Pipe connections, diameter	
		EF 6	(SFW120-E only)
		EF 8	(SFW120-E only)
		EF 10	(SFW and SLW)
		EF 12	(SFW and SLW)
		1/4"NPT	internal thread (SFW and SLW)
		G3/8A	external thread (SFW and SLW)
SFW120-E -	**AC/DC 24 V -**	**EF10**	ordering example

Connection diagram

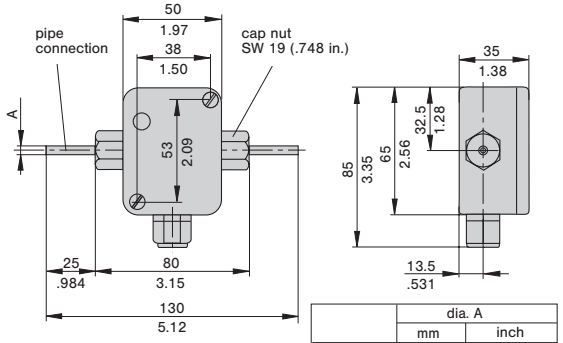


Flow ranges



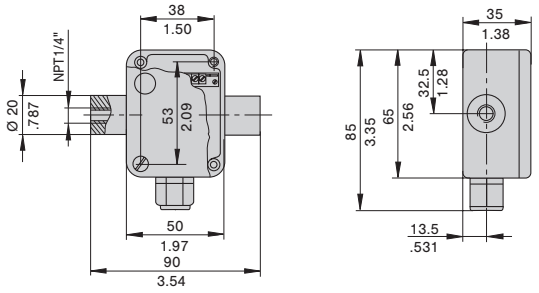
Dimensions

EF-process connection

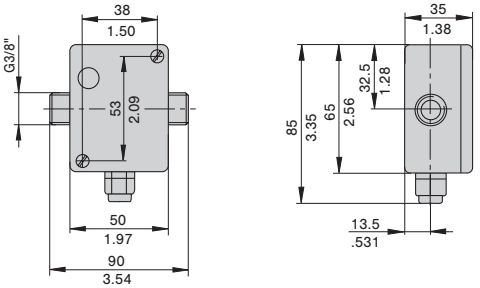


	dia. A	
	mm	inch
SFW 120-E	6 ... 12	.236 ... .472
SLW 120-E	12	.472

NPT 1/4" process connection - internal thread



G3/8" process connection - external thread



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