

Technical Datasheet



FAW 100

Wall Mount Displays
with analog and frequency output

Description

The FAW 100 are compact, intelligent wall mount displays for all flow meters with frequency output.

They can be adjusted to any flow meter, as the K- factor is freely settable. The selectable dimensions include virtually all worldwide used dimensions.

As an option the FAW 100 can be used to display other measuring values like frequency, rpm, temperature, pressure and so on, as long, as these values are available as a frequency signal.

The frequency input is a 24 V digital input according to IEC946.

With the built in 4 to 20 mA output the FAW100 can be used as frequency to current converters with settable frequency response as well.

The 20 point linearization of the input signal (FAW 111, 151) provides the possibility to display also strongly nonlinear signals with high accuracy.

The RS485 interface (FAW 111, 151) makes the implementation in an automatic system easy.

Additionally to the standard 24 V DC power supply, also a wide input range 100 - 240 V AC mains supply is available (FAW 141, 151).

For fast test setups in the lab and easy setup of individual parameters, the PC based control SW EasyControl for WINDOWS® XP and VISTA is available free of charge.

Applications

- Remote display for process parameters
- Translation of frequency signals into 4 - 20 mA
- 24 V Sensor Supply from the mains
- Normalizing of frequency signals
- Limit control with up to 2 limits
- Batching

Features

- 20 point linearization
- RS485 interface
- 100 to 240 V mains supply built in

Technical Data

Input

Input Signal	Frequency
Frequency Range	1 Hz - 5 kHz
Input Level	< 5 V / > 13 V at 24 V supply
Input Resistance	≥ 10 kΩ

Display and Manual Control

Display	Grafic, 132 x 32 dots
Viewing Area	15 mm * 50 mm
Backlight	Yellow/green
Status Indicators	2 LED for operation and error
Programming	4 softkeys

Analog Output

Type	4 - 20 mA, active
Error Signal	3 mA/21 mA
Resolution	5 μA
Temperature Drift	0.05 % per 10K
Load	< 800 Ω (at 24 V supply)
Output Signal	Flow rate

Digital Outputs A and B

Type	Push pull, short circuit prove, (IEC946)
Frequency Range	0.5 - 10,000 Hz (input frequency) 1.2 - 1,000 Hz (normalized frequency)
Output Levels	<2 V / > 22 V (at 24 V supply, no load)
Output Resistance	220 Ω
Output Current	20 mA max, internally limited
Output Signal (A, FAW 101)	Input frequency
Output Signal (A, FAW 111)	Input frequency, normalized frequency,
Total Count, Flow Limit, Batch Limit	< 100 ppm/K
Output Signal (B)	Flow limit, batch limit

Control Input

Type	24 V digital (IEC946)
Min Pulse Duration	25 ms
Input Level	< 5 V / > 13 V at 24 V supply
Input Resistance	≥ 10 kΩ

Interface

Type	RS485 (FAW 111, 151)
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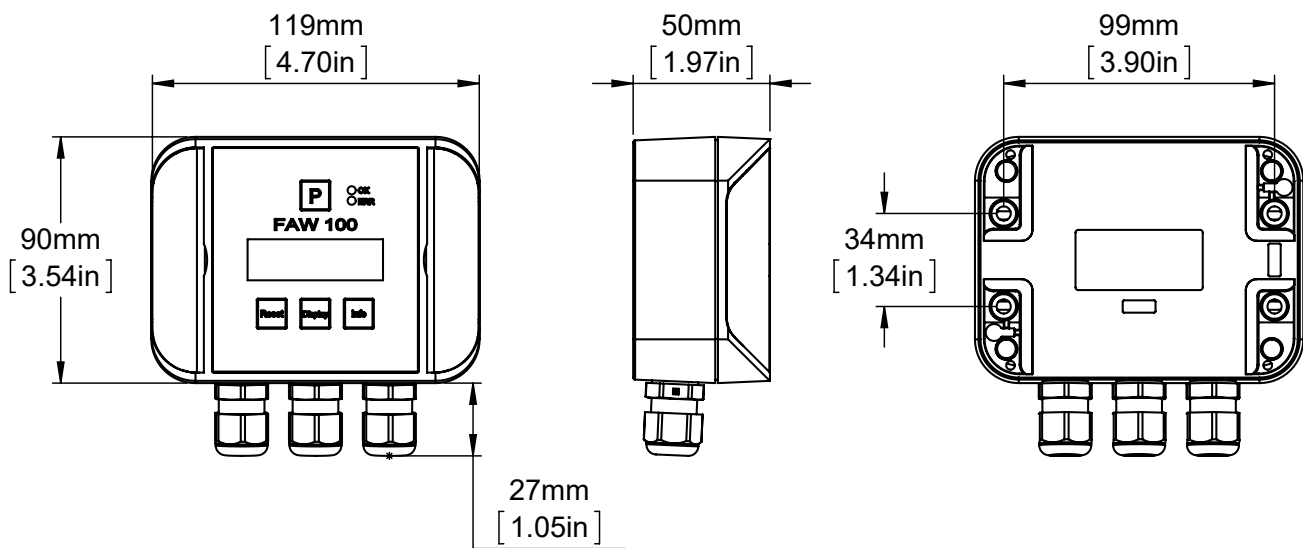
General

Supply Voltage DC	24 V DC nominal, operating range: 11 - 30 V
Supply Current DC	< 20 mA (at 24 V supply, without pickup and load)
Sensor Supply (with DC supply)	Applied supply voltage minus 1 V
Supply Voltage AC	100 - 240 V AC nominal, operating range: 90 - 264 V AC
Supply Current AC	< 20 mA (at 230 V supply, without pickup and load)
Sensor Supply (with AC supply)	24 V DC
Reaction Time	< 250 ms @ input frequency > 5 Hz
Connections	Cage clamp terminals for 0.14 to 1.5 mm ²
EMC	According to EN 50 081-2 and EN 50 082-2
Temperature	Operation: 0 °C up to 50 °C [+32 °F up to 122 °F] Storage and transport: -20 °C up to 70°C [-4 °F up to 158 °F]

FAW 100

Dimensions:	120 mm x 90 mm x 50 mm (h * w * d)
Material	Noryl
Weight	Approx. 500 g
Protection Class:	IP65

Dimensional Drawing



Ordering Code

FAW 101	Wall mount display with digital input for 24V signals, 24V DC supply
FAW 111	FAW 101 with RS485 interface and linearization
FAW 141	FAW 101 with additional 100 - 240 V AC mains supply
FAW 151	FAW 111 with additional 100 - 240 V AC mains supply



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