

Certified according to DIN EN ISO 9001

## Technical Datasheet



## FAW100 Series

Remote Wall Mount Display for pickups with frequency output

## Description

The FAW100 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 FAW100 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 24v 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 (FAW111, 151) provides the possibility to display also strongly nonlinear signals with high accuracy.

The RS485 interface (FAW111, 151) makes the implementation in an automatic system easy.

Additionally to the standard 24V DC power supply, also a wide input range 100 – 240V AC mains supply is available (FAW141, 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
- 24V Sensor Supply from the mains
- Normalizing of frequency signals
- Limit control with up to 2 limits
- Batching

### Highlights

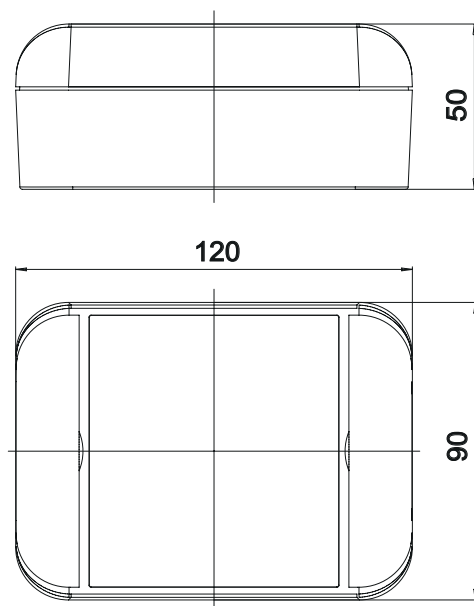
- 20 point linearization
- RS 485 interface
- 100 to 240 V mains supply built in

## Technical Data

Input	
Input Signal	Frequency
Frequency range	1 Hz – 5 kHz
Input level	< 5V / > 13V at 24V Supply
Input Resistance	≥ 10 kΩ
Display and Manual Control	
Display	Graphic, 132 x 32 dot
Viewing Area	15mm * 50mm
Backlight	Yellow / green
Status Indicators	2 LED for Operation and Error
Programming	4 softkeys
Analog Output	
Type	4-20 mA, active
Error Signal	3mA / 21mA
Resolution	5 µA
Linearity	± 0.05% of full scale
Temperature drift	0.05% per 10K
Load	< 800 Ω (at 24V 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 – 1000 Hz (normalized frequency)
Output Levels	<2 V / > 22 V (at 24V supply, no load)
Output Resistance	220 $\Omega$
Output Current	20 mA max, internally limited
Output signal (A, FAS101)	Input Frequency
Output signal (A, FAS111)	Input Frequency, normalized Frequency,
Total Count, flow limit, batch limit	< 100 ppm/K
Output signal (B)	flow limit, batch limit
Control Input	
Type	24V digital (IEC 946)
Min pulse duration	25 ms
Input level	< 5V / > 13V at 24V Supply
Input Resistance	> 10 k $\Omega$
Interface	
Type	RS 485 (FAW111, 151)
General	
Supply voltage DC	24 V DC nominal, operating range: 11 – 30V
Supply Current DC	< 20 mA (at 24V supply, without pickup and load)
Sensor Supply (with DC supply)	Applied supply voltage minus 1V
Supply voltage AC	100 – 240V AC nominal, operating range: 90 – 264V AC
Supply Current AC	< 20 mA (at 230V supply, without pickup and load)
Sensor Supply (with AC supply)	24V DC
Reaction time	< 250ms @ input frequency > 5Hz
Connections	Cage Clamp Terminals for 0.14 to 1.5 mm <sup>2</sup>
EMC	according to EN 50 081-2 and EN 50 082-2
Temperature	operation: 0 to 50°C storage and transport: -20 up to 70°C
FAW100	
Dimensions	120mm x 90mm x 50mm (h * w * d)
Material	Noryl
Weight	approx. 500g
Protection class	IP 65

## Dimensional Drawing (mm)



## Ordering Code

FAW101	Wall mount display with digital input for 24V signals, 24V DC supply
FAW111	FAW101 with RS485 interface and linearization
FAW141	FAW101 with additional 100 – 240V AC mains supply
FAW151	FAW111 with additional 100 – 240V AC mains supply



# Contact

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