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Technical Datasheet

FAS100 Series

Remote Panel Mount Display for Pickups with frequency output

Description

The FAS100 are intelligent panel 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 FAS100 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 FAS100 can be used as frequency to current converters with settable frequency response as well.

The 20 point linearization of the input signal (FAS111) provides the possibility to display also strongly nonlinear signals with high accuracy.

The RS485 interface (FAS111) makes the implementation in an automatic system easy.

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
- Normalizing of frequency signals
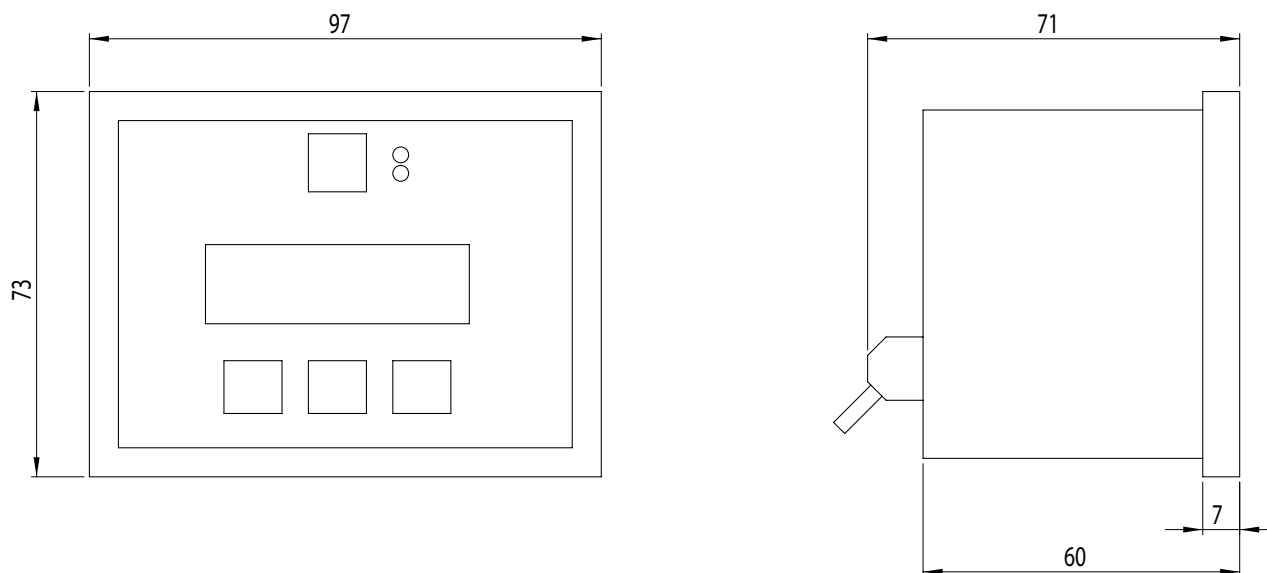- Limit control with up to 2 limits
- Batching

Highlights

- 20 point linearization
- RS 485 interface
- Intuitive user interface

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 Ω
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 kΩ
Interface	
Type	RS 485 (FAS111)
General	
Supply voltage	24 V DC nominal, operating range: 11 – 30V
Supply Current	< 20 mA (at 24V supply, without pickup and load)
Sensor Supply	Applied supply voltage minus 1V
Reaction time	< 250ms @ input frequency > 5Hz
Connections	Cage Clamp Terminals for 0.14 to 1.5 mm²
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
FAS100	
Dimensions:	72mm x 96mm x 70mm (h * w * d)
Material:	Noryl
Weight:	approx. 500g
Protection class:	front: IP 40 (IP65 with IPS7-9), rear: IP 30

Dimensional drawing (mm)

Ordering Code

FAS101	Panel mount display with digital input for 24V signals, 24V DC supply
FAS111	FAS101 with RS485 interface and linearization

Accessories

Ordering Code	Description
HSA72	DIN Rail Adaptor for FAS100
IPS7-9	Protective front cover IP65 for FAS100
EWS*	Intrinsically safe pickup supply with isolation amplifier

По вопросам продаж и поддержки обращайтесь:
Волгоград (844)278-03-48; Воронеж (473)204-51-73; Екатеринбург (343)384-55-89; Казань (843)206-01-48;
Краснодар (861)203-40-90; Красноярск (391)204-63-61; Москва (495)268-04-70; Нижний Новгород (831)429-08-12;
Новосибирск (383)227-86-73; Ростов-на-Дону (863)308-18-15; Самара (846)206-03-16; Санкт-Петербург (812)309-46-40;
Саратов (845)249-38-78; Уфа (347)229-48-12
Единый адрес: kmk@nt-rt.ru

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