

FMS Tension Control / Measuring Amplifiers

EMGZ310-Series Compact, digital measuring amplifier

- **3 key operation with LCD, simple procedures for offset and calibration**
Simple operation, quick configuration
- **Detachable terminal blocks, standardized current and power outputs**
Simple start-up and integration
- **14 bit resolution, cycle time 1 ms**
Highly precise results, for high process speeds

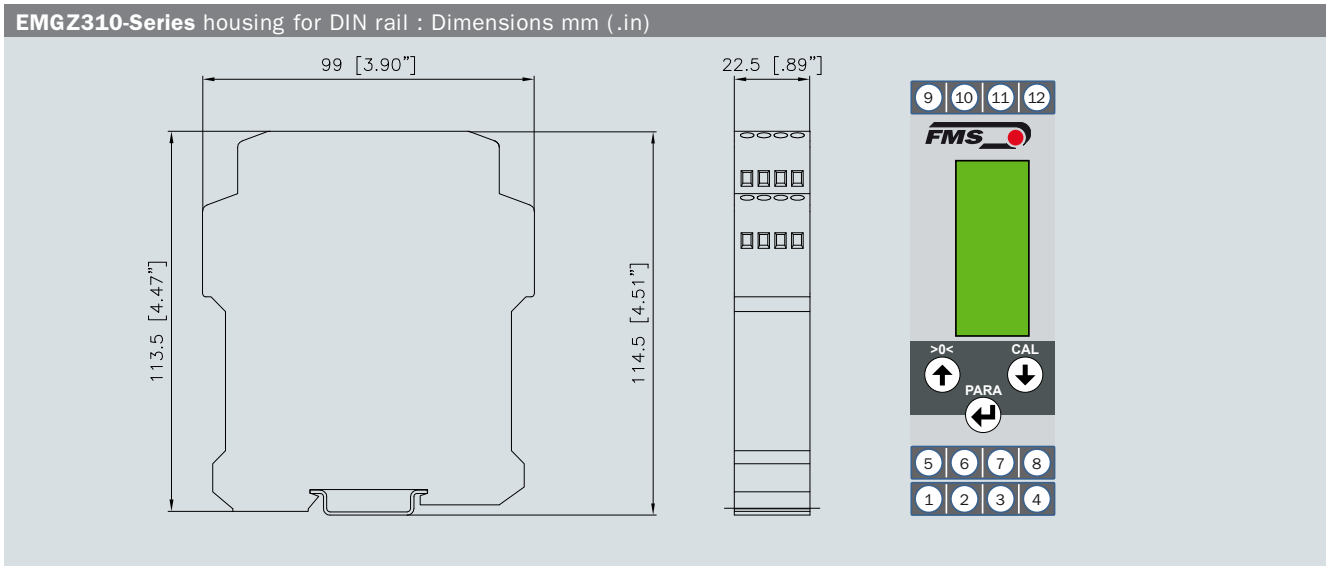
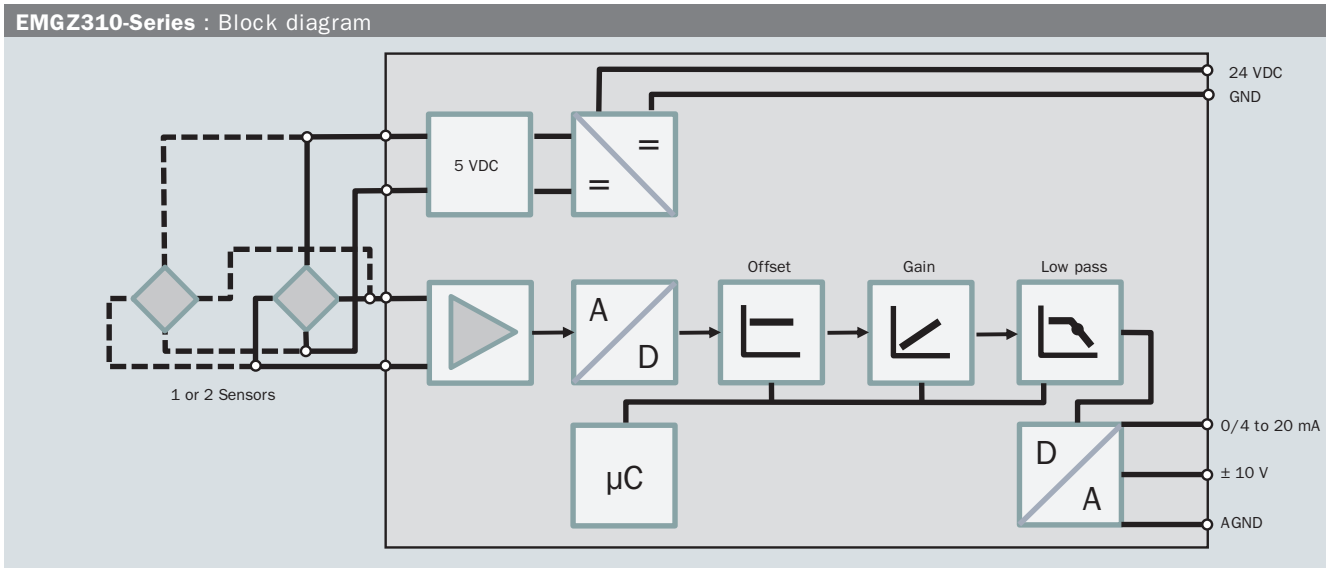


EMGZ310-Series

The EMGZ310 is a compact, digital strain gauge amplifier. It is designed for applications that involve the measurement or control of web tension in coating, laminating, printing, extrusion, or other similar roll to roll processes. The quick and flexible device configuration is straightforward with the extensive range of parameters being set using the three easily accessible keys and the integrated LCD.

Funktional description

The mV signal generated by the force sensors is amplified and fed directly to a high-resolution A/D-converter. Both voltage and current outputs are provided as standard. Functions like signal filtering, automatic offset compensation, and gain calculation are all part of the versatility of the EMGZ310 series digital amplifier.



EMGZ310-Series : Technical Data	
Number of channels	1 channel for 2 sensors
Cycle time	1 ms
Power supply for force sensor	5 VDC, highly stable
Sensor feedback signal	± 9 mV (max. 11.25 mV); with option .V05 ± 2.5 mV
Voltage output	± 10 VDC, min. 1000 Ω , 12 bit
Current output	0/4 to 20 mA, max. 500 Ω , 12 bit
Resolution A/D converter	± 10000 Digit (14 Bit)
Measuring error	< 0.05 % FS
Configuration	3 keys, 4-digit LCD
Protection class	IP 20
Power supply	24 VDC (18 to 36 VDC)
Power consumption	3 W
Temperature range	-10 to +50 °C (14 to 122 °F)
Weight	370 g (0.82 lbs)

EMGZ310-Series : Order Code	
EMGZ310	.V05
	.V05 sensor feedback signal ± 2.5 mV (max. ± 3.125 mV)
	Series

EMGZ310-Series : Options	
.V05	Sensor feedback signal ± 2.5 mV (max. ± 3.125 mV) for force sensors with a sensitivity of 0.5 mV/V

EMGZ310-Series : Scope of supply	
 Measuring Amplifier	

EMGZ310-Series : Typical Application



Other products : Tension Control

Force Sensors	Tension Controllers	ATEX
		

About FMS

FMS Force Measuring Systems AG is the market leader in the field of web tension measurement, control and specialist for web guiding solutions. For the wire industry we are the only manufacturer offering a complete range of technologies for force measurement, data processing and radio transmission of signals.

Our in house developed products are used in the manufacturing industry, converting, metals, paper, textiles, as well as in cable and wire rope production. Utilising the latest technology, high quality components and a firm understanding of customer applications, FMS supports customers worldwide in the effort to maximize the productivity of their machines. Since 1993, our highly qualified employees have been creating high-end solutions for machine builders and plant operators. As an owner-managed company, we pride ourselves on being personal and approachable with the ability to make decisive moves fast.

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