

EMGZ 309 Tension Measuring Amplifier

Digital microprocessor controlled
High performance at fastest speeds

3 key operation and two-line LCD
Easy to setup and operate

3 housing/mounting types
DIN Rail, wall mount (IP 65),
and panel mount

Plug & Play or utilize Web Browser
connection
Easy to operate and provides flexible set-up



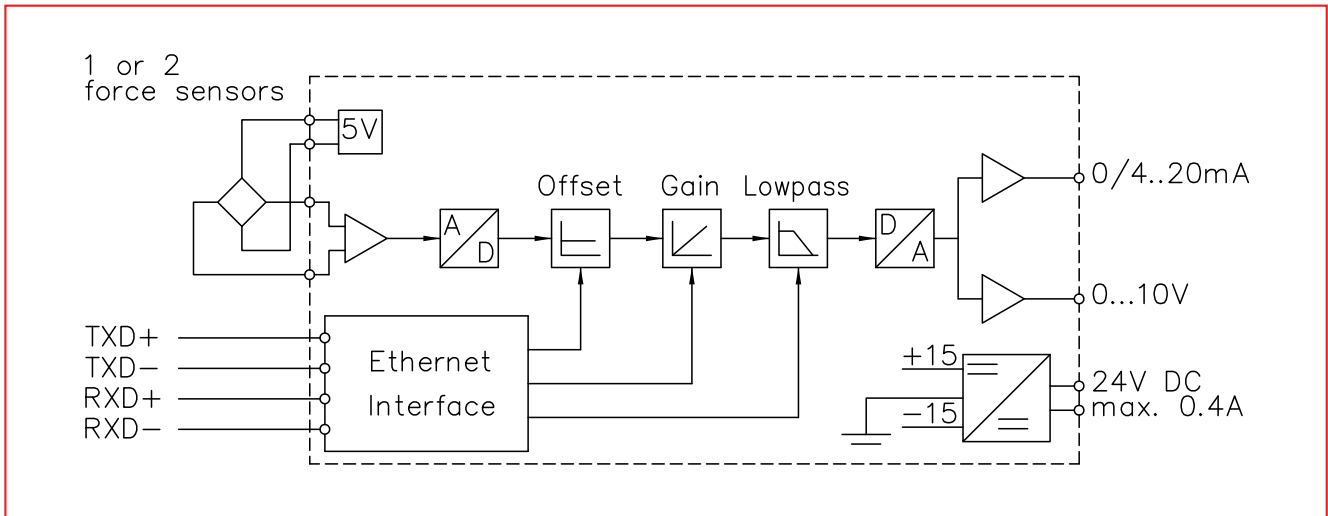
● EMGZ 309

The digital tension measuring amplifiers of the EMGZ 309 Series are suitable for tension measurement with all FMS force sensors. This versatile product comes as a plug & play replacement for analogue pot twisting units and is very easy to setup. More advanced users can access all the internal parameters via the 3 keys or through a Web Browser.

● Functional Description

The mV signal generated by the sensors is amplified and fed directly to a high resolution A/D-converter. Both Volt and Current outputs are provided standard. Functions like signal filtering, automatic offset compensation, and gain calculation are all part of the versatility of EMGZ 309 digital amplifier series. The Web Browser provides an efficient and fast way for parameter setting.

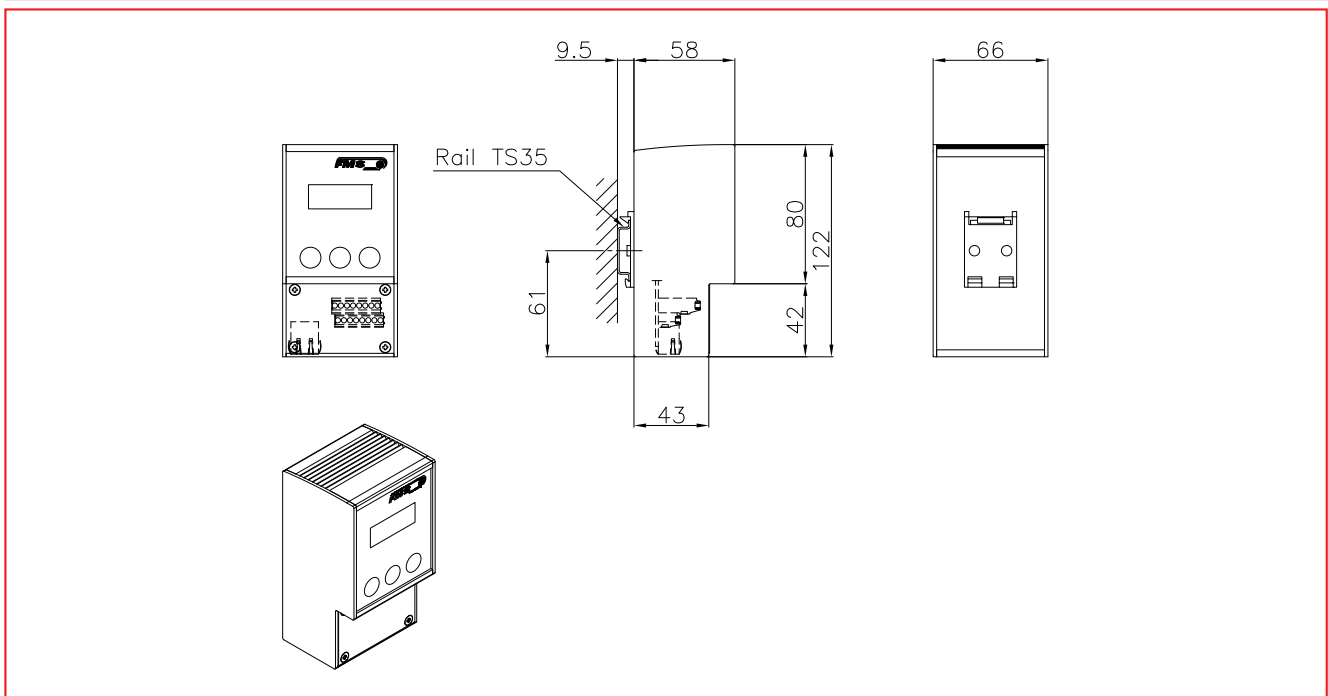
EMGZ 309 • Block Diagram



EMGZ 309 • Technical Data

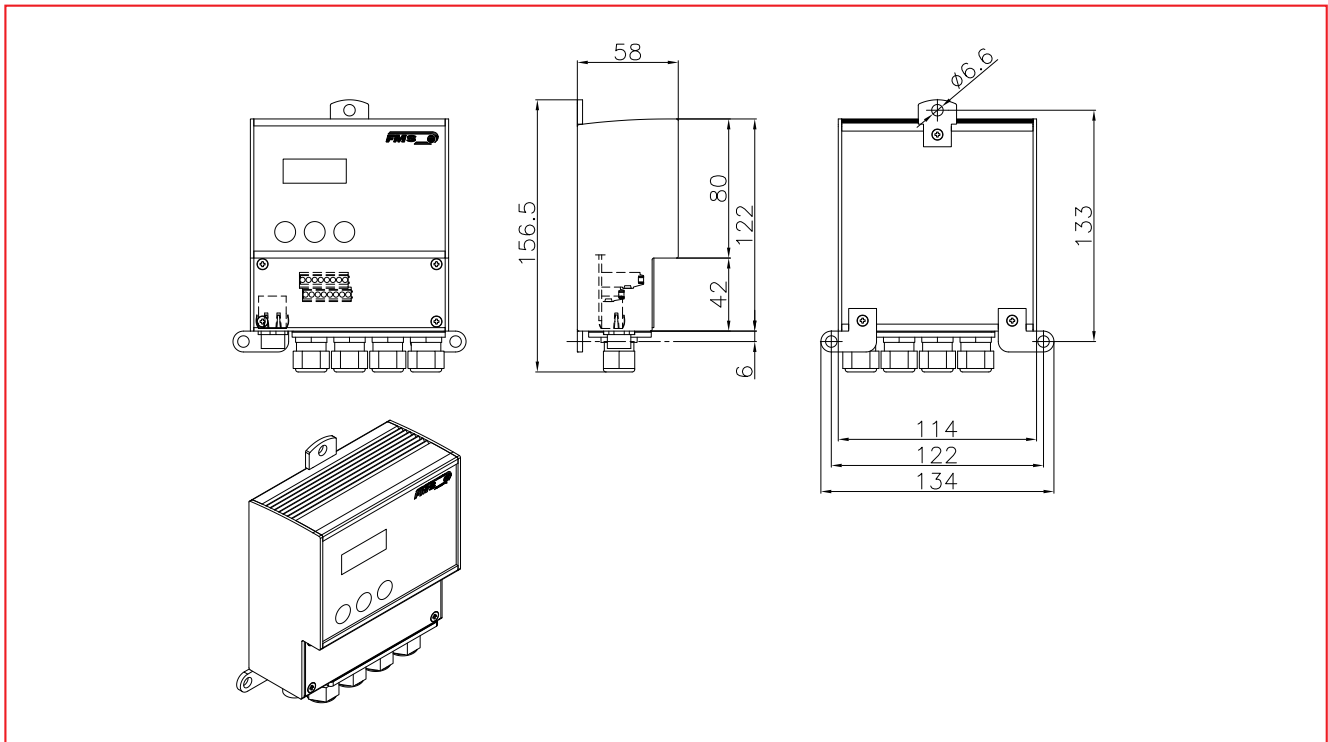
Number of channels	1 channel for 1 or 2 force sensors @ 350 Ω
Sensor excitation	5 VDC; max. 60 mA; high precision
Temperature drift offset	< 0.01%/K [0.006%/°F]
Linearity error	< 0.1%
Tension output	0...10 VDC; min. 1.2 kΩ
Current output	0/4...20 mA; max. 500 Ω
Power supply	24 VDC (18...36 VDC) max. 0.3 A
Power consumption	max. 6.0 W
Temperature range	- 10...+60 °C [14...140 °F]

EMGZ 309.R Rail Mount Housing • Dimensions in mm



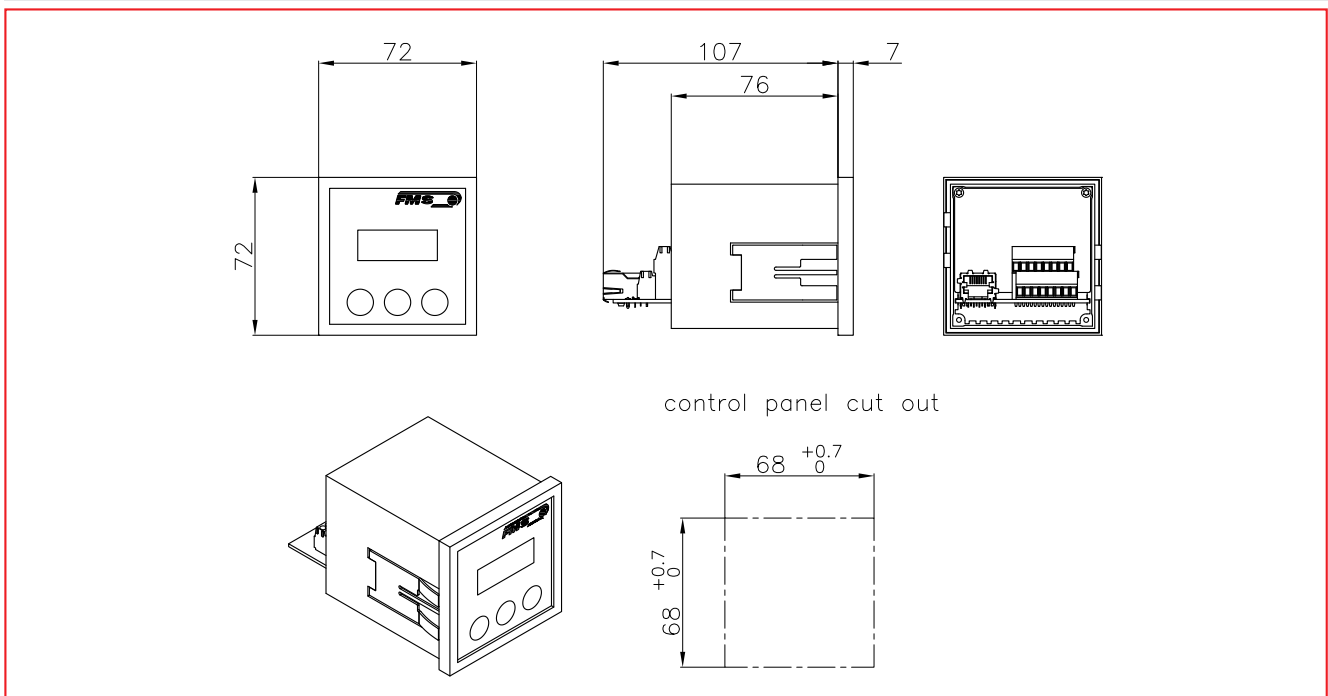
Wiring is realised via cable terminals.

EMGZ 309.W Wall Mount Housing • Dimensions in mm



With PG-Gland cable connector. Protection class IP 65.

EMGZ 309.S Panel Mount Housing • Dimensions in mm



Wiring is realised via cable terminals.



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