

EMGZ 308 Series Tension Measuring Amplifier

Digital-Display

Simple readable tension signals

Up to 2 channels (4 sensors) in one amplifier

Multiple tension zones visual from one unit

No programming required

Easy to setup

Standardised analog outputs

Multiconnectable with PLC, Display etc.

Galvanically isolated

Protected against electrical noise



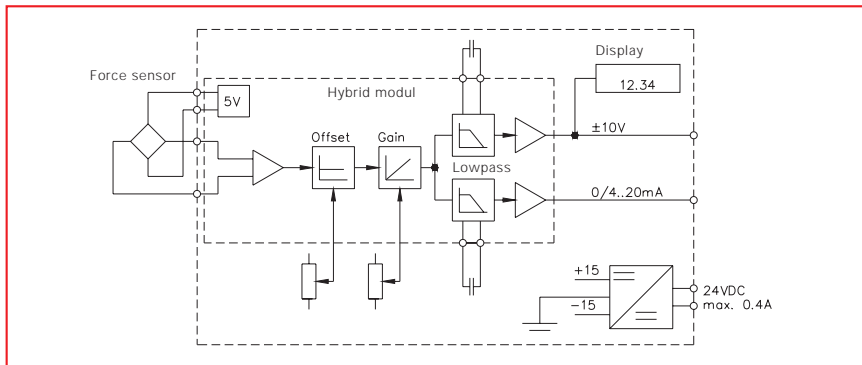
● **EMGZ 308 Series**

The EMGZ 308 Series is a single or double channel analog Tension Measuring Amplifier with digital display based on a hybrid circuit. It is specially designed for applications in which the tension values have to be shown direct or beside the measuring roller. The IP54 housing is designed specifically for these needs.

There can be 2 or 4 force sensors connected. Offset and gain are done

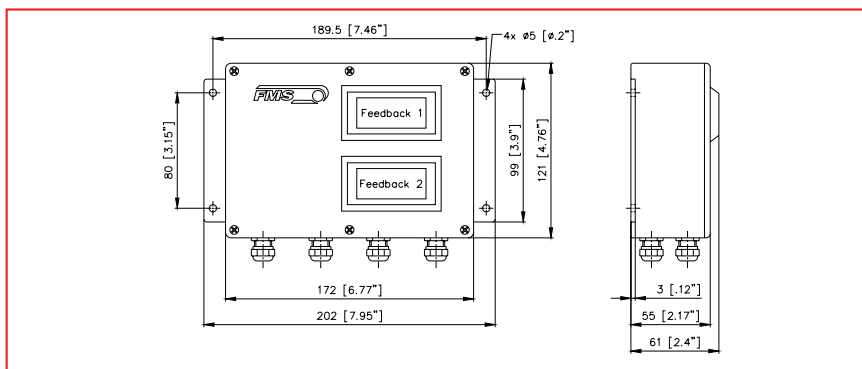
with 10-turn trimmers which are easily accessible. The digital-display is set with a 10-turn trimmer and a jumper. Additional jumpers allow the system to operate with fixed gain and offset (when operating with PLC or PC). For filtering the output signals, capacitors can be added. Optional 10VDC sensor supply voltage (order code EMGZ 308/ 10 V) is available.

EMGZ 308 Series • Block diagram



The block diagram shows the single channel version EMGZ308

EMGZ 308 Series • Dimensions in mm [inch]



EMGZ 308 Series • Order code

Order code FMS	Channels	Displays	Supply Voltage
EMGZ308	1	1	24 VDC (18...36 VDC), galvanically isolated
EMGZ308.AC.V	1	1	100...230 VAC
EMGZ308-2	2	2	24 VDC (18...36 VDC), galvanically isolated
EMGZ308-2.AC.V	2	2	100...230 VAC

EMGZ 308 Series • Technical Data

Sensor supply voltage	5 VDC ± 11 ppm/°F [± 20 ppm/K] max. 30 mA
Offset range	fix: 0 mV; variable: ± 9 mV
Gain factor range	fix: 1111; variable: 500...5000
Linearity error	< 0.1 %
Temperature drift offset	< 28 ppm/°F [50 ppm/K]
Tension output per channel	± 10 V min. 1000 Ω
Current output per channel	0/4...20 mA max. 500 Ω
Lowpass cut-off frequency	adjustable, ca. 1...1000 Hz
Power consumption	max. 2.5 W, per channel
Temperature range	14...140 °F [- 10...+60 °C]
Protection class	IP 54

World Headquarters:

FMS Force Measuring Systems AG
 Aspstrasse 6
 8154 Oberglatt (Switzerland)
 Tel. ++ 41 1 852 80 80
 Fax ++ 41 1 850 60 06
 info@fms-technology.com

FMS USA, Inc.
 925 East Rand Road · Suite 207
 Arlington Heights, IL 60004
 Phone 847 392 7872
 Fax 847 392 7873
 fmsusa@fms-technology.com

FMS UK
 Highfield, Atch Lench Road
 Church Lench
 Evesham WR 11 4UG
 Phone ++ 44 1386 871023
 Fax ++ 44 1386 871021
 fmsuk@fms-technology.com