

Strain Gauge Amplifier Model 781H for top rail assembly



- Tare function via control line
- 250 Hz filter in standard execution
- 2,5 kHz or 10 kHz filter optional
- Amplification configurable
- ± 5 V / ± 10 V output signal
- Optional 4...20mA output signal

Main features

The measuring amplifier 781H for assembly to mounting rails (EN 50022) is available with a voltage output ± 5 V, ± 10 V and power output 4... 20 mA.

The force sensor is connected with the terminals 1 to 4.

The voltage supply (11-28 V) is connected with terminal 5 and 8 (ground).

For zero setting the terminal 6 is connected with the power supply or a control signal is applied between 5 and 24 Volts.

The amplification can be switched 1-2-4-10-fold with internal jumpers.

If the input signal is negative for power output 4... 20 mA, output follows up to 0 mA.

Strain Gauge Amplifier Model 781H

Technical data		
<i>Execution</i>	<i>781H</i>	<i>Unit</i>
Accuracy class	0,1	
Measuring range	± 2 optional $\pm 1,0$ and $\pm 3,5$	mV/V mV/V
Connectable bridge	4 piece 350 (87) up to 1 x 5000	Ohm
Bridge supply voltage	5	V
Input impedance	$>20 / 300\text{pF}$	MOhm
Linearity deviation	$<0,02$	% f.e.
Influence of temperature to the zero point per 10K apply to the measuring range (f.e.)	$< 0,2$ typ. 0,05	% f.s. % f.s.
Influence of temperature to the measuring sensitivity per 10K apply to the measuring range (f.s.)	$< 0,1$ typ. 0,05	% f.s. % f.s.
Analogue Output filter 3dB cut-off-frequency analog, Bessel, 2.order	250 (20) (2k5) (10k)	Hz
Resolution	>20000	Teile
Analogue output Nominal range Operating range Output resistor optional for 781H	± 5 ± 10 47 4...20, 0...20	V V Ohm mA
Operating voltage Nominal range Operating range	12,0...24 10,5...28	V V
Current consumption 781H For option 4...20mA	55..75 90	mA mA
Zero balancing Tolerance Duration Triggering on falling edge after min. 4ms high level (3.5 V ... 30 V, or supply voltage)	<5 , typ. $<2,5$ <90	mV ms
Memory	Last zero point value	
Nominal temperature range Storage temperature range	-10...+65 -40...+85	°C °C
Amplification level for 781H	1x, 2x, 4x, 10x (2, 1, 0,5 0,2)	mV/V
Dimensions	99 x 12,5 x 114,5 (H x B x T)	mm

Subject to change: All data describe our products in general form. They do not place characteristic warranties in the sense to § 459, Abs. 2 BGB and does not justify adhesion.
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