

SL76-AC

STRAIN LINK SENSOR WITH ANALOG AMPLIFIER AND AC-COUPLING





Main features:

- Amplifies the strain between the 2 mounting areas mechanically
- · Integrated analog amplifier (active) with AC-coupling
- · Ideal for tension mode
- · For Dynamic applications (even fast)
- · Ideal on fast running Presses
- Solid steel housing (IP54)

The strain link sensor SL76-AC picks up surface-strain between the 2 mounting locations. The strain occuring between the mounting areas is mechanically amplified inside of the sensor. The integrated AC amplifier supplies a signal that needs no reset -> the signal drops even if the load remains present. Ideal for very fast cycles where a reset between the cycles is not possible. The controler only needs to measure the output signal periodically. Thanks to the rugged design, this sensors are used in heavy industrial environment.

TECHNICAL DATA Foil (GF = 2.0) Strain gauge type Bridge resistance 1000Ω 100...800με, -100...-250με Measuring range 150Hz Low-pass filter Output signal 0...±10VDC Noise < 10mV Sensitivity tolerance ± 1% Accuracy <± 1% FS Linearity <± 0,5% FS Hysteresis <± 0,3% FS Repeatability <± 1% (max. 2%) 10Ω Output resistance Time constant AC-coupling (97%) 68 s 20...28VDC Supply voltage < 20mA Supply current Yes Inverse polarity protection Accidental short-circuit protection Yes -10...65°C Operating temperatur range Storage temperatur range -10...65°C Temperature coefficient at 10°C < 0,2 (0,1 typical) Overload capability max. 1200με (offset occurs) Protection class IP54 **EMC** 2014/30/EU Case material Stainless steel Cover material Aluminum Weight, incl cable 110g

DIMENSION

4 pcs M6x25; class 12.9; recommended torque min 14 Nm Ra 3.2 88 76

Dimension in mm

Accessories include:

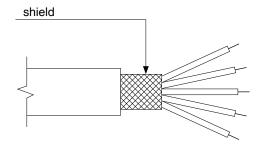
4 mounting screw M6x25; class12.9

ELECTRICAL CONNECTIONS

PUR screened cablel (standard); 5×0.14 mm²; Ø 5mm; bending = $10 \times Ø$

Option O

Option C

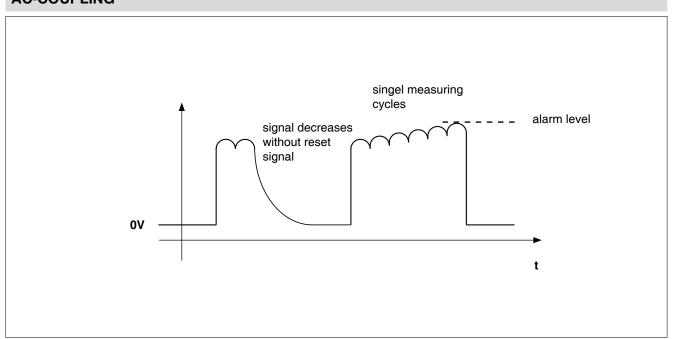




Option O Open leads	Option C Connector output	Function
white	1	Power 24VDC
brown	2	Signal -
yellow	3-7-6	GND (0V
green	4	Reset
grey	5	Signal +

Stretching (positive strain) gives positive signal. Commpression (negative strain) gives negative signal.

AC-COUPLING



ORDER CODE Strain link sensor with amplifier SL76-AC and AC-coupling Measuring range 0100 100 με 0250 250 με 500 με 0500 800 με 0800 **Bridge configuration** 2 2/4 bridge Cable lenght 0.5 m 005 3 m 030 5 m 050 10 m 100 Connection Open leads 0 Cable with connector С Example: SL76-AC - 4 - 0250 - 2 - 030 - C Strain link SL76-AC, Measuring range = 250με, cable lenght = 3m, cable with connector

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice.



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