STRAIN LINK SENSOR WITH ANALOG AMPLIFIER AND AC-COUPLING

SL76-AC





GEFRAN

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		
Strain gauge type	Foil (GF = 2.0)	
Bridge resistance	1000Ω	
Measuring range	100800με, -100250με	
Low-pass filter	150Hz	
Output signal	0±10VDC	
Noise	< 10mV	
Sensitivity tolerance	± 1%	
Accuracy	<± 1% FS	
Linearity	<± 0,5% FS	
Hysteresis	<± 0,3% FS	
Repeatability	<± 1% (max. 2%)	
Output resistance	10Ω	
Time constant AC-coupling (97%)	68 s	
Supply voltage	2028VDC	
Supply current	< 20mA	
Inverse polarity protection	Yes	
Accidental short-circuit protection	Yes	
Operating temperatur range	-1065°C	
Storage temperatur range	-1065°C	
Temperature coefficient at 10°C	< 0,2 (0,1 typical)	
Overload capability	max. 1200µɛ (offset occurs)	
Protection class	IP54	
EMC	2014/30/EU	
Case material	Stainless steel	
Cover material	Aluminum	
Weight, incl cable	110g	

DIMENSION





Dimension in mm

ELECTRICAL CONNECTIONS

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



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 --2 4 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.



Sensormate AG Steigweg 8, - CH-8355 Aadorf, Switzerland ph: +41(0)52-2421818 - fax: +41(0)52-3661884 Internet: http://www.sensormate.ch

GEFRAN spa via Sebina, 74 - 25050 PROVAGLIO D'ISEO (BS) - ITALY ph. +39 030 9888.1 - fax. +39 030 9839063 Internet: http://www.gefran.com