



Main features

- Amplifies the strain between the 2 mounting areas mechanically
- Ideal for tension mode
- With analog amplifier (active)
- Dynamic applications
- Presses and injection moulding machines
- Solid steel housing (IP54)
- Analog amplifiers are economical

Strain link sensors picks up surface-strain between the 2 mounting locations.

The strain occurring between the mounting areas is mechanically amplified inside of the sensor.

The integrated amplifier amplifies the signal on the spot, avoiding EMC problems.

Thanks to the rugged design, this sensors are used in heavy industrial environment. In case of overload, this sensor may get an offset. After replacing a SL-Sensor, they need to be recalibrated.

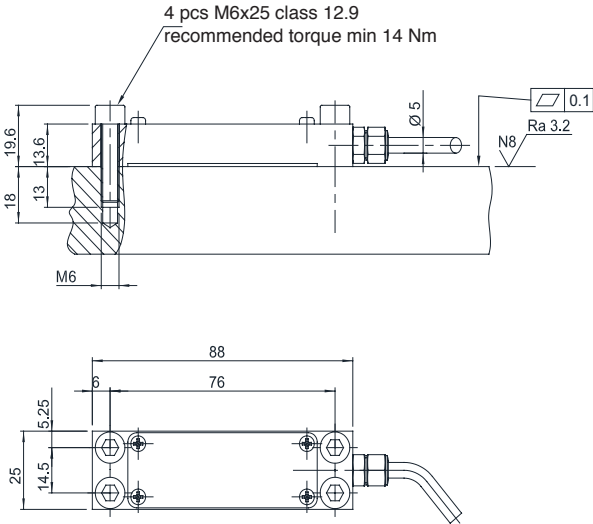
They need a cyclical reset (for cycles >1min.). Our amplifier can handle the occurring large offset range.

TECHNICAL DATA

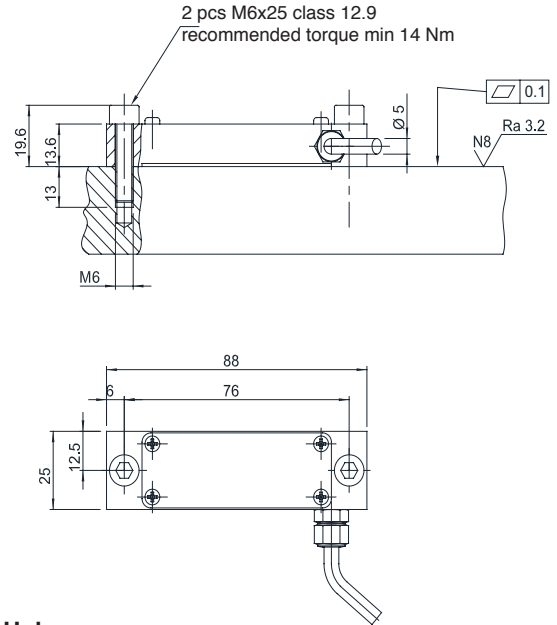
Strain gauge type	Foil (GF ~130)
Bridge resistance	350Ω
Measuring range	100...800µε, -100...-250µε
Span adjustment	±15% FS
Zero adjustment	±50% FS
Low-pass filter	150Hz
Output signal	0...±10VDC
Noise	< 10mV
Sensitivity tolerance	± 1%
Accuracy	< ± 1% FS
Accuracy of zero point	< ± 0,5% FS
Linearity	< ± 0,5% FS
Hysteresis	< ± 0,3% FS
Repeatability	< 1% (max 2%)
Output resistance	10Ω
Reset time	> 1ms
Reset voltage	0VCC
Supply voltage	20...28VDC
Supply current	< 20mA
Inverse polarity protection	Yes
Accidental short-circuit protection	Yes
Operating temperatur range	-10...65°C
Storage temperatur range	-10...65°C
Temperature coefficient at 10°C	< 0,2 (0,01 typical)
Overload capability	indefinite (offset occurs)
Protection class	IP54
EMC	2014/30/EU
Case material	Steel
Cover material	Aluminium
Weight, including cable	110g

MECHANICAL DIMENSIONS

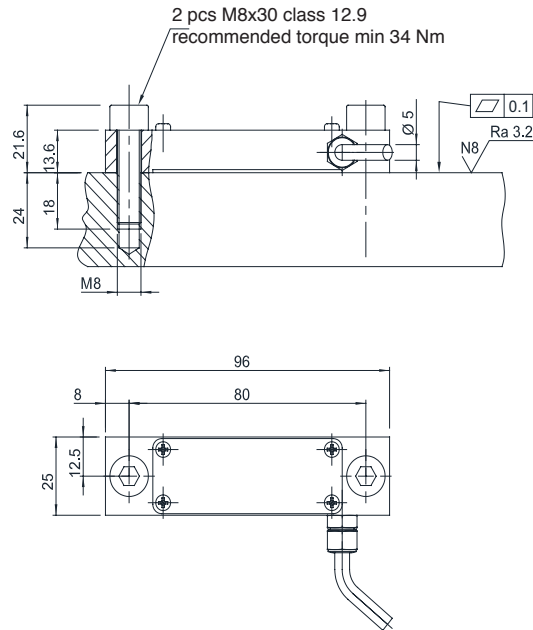
SL76 / 4 Holes



SL76 / 2 Holes



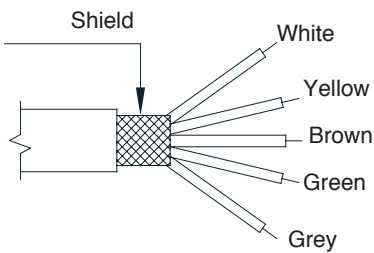
SL80 / 2 Holes



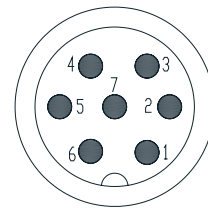
ELECTRICAL CONNECTIONS

Option O :

PUR screened cable (standard); 5 x 0,14; Ø 5mm; bending 10xØ

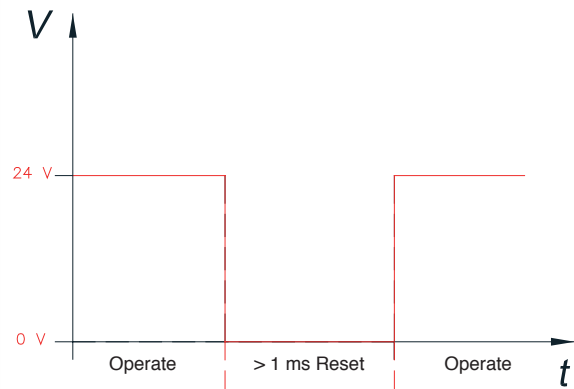


Option C : connector 6 Pin



OPTION O: (CABLE OUTPUT)	OPTION C (CONNECTOR OUTPUT)	FUNCTION
White	1	Power (24V)
Brown	2	Test-Out
Green	4	Reset
Yellow	3-7-6	GND (0V)
Grey	5	Signal +

RESET FUNCTION



Reset control input	Reset	0V
	Operate	5...28V/open
Minimum reset pulse duration	>1ms	

ORDER CODE

Strain link sensor **SL**

□ - AA - □ - □ - □ - □ - □ - □ - □ - □

Screw distance	
76 mm	76
80 mm	80

Mounting hole	
Two holes	2
Four holes	4

Measurement range	
100 $\mu\epsilon$	0100
250 $\mu\epsilon$	0250
500 $\mu\epsilon$	0500
800 $\mu\epsilon$	0800
Define your own range (100 $\mu\epsilon$..800 $\mu\epsilon$)	XXXX

Strain-gauges	
2 strain gauges (for cyclical applications)	2
4 strain gauges (for cyclical applications and static measurements)	4

Tipo Reset	
LO	External reset (0V), without power-on reset
ST	Static (no external reset)

Connection	
O	Open leads
C	Cable and connector

Cable length	
005	0.5m
030	3m
050	5m
100	10m
XXX	Define your own length (0,5m..15m)

Example: **SL76-AA-4-0800-2-030-O-S**

It is an SL76-AA strain link sensor with 4 holes, 2/4 bridges and 3m cable length.

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



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