



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)

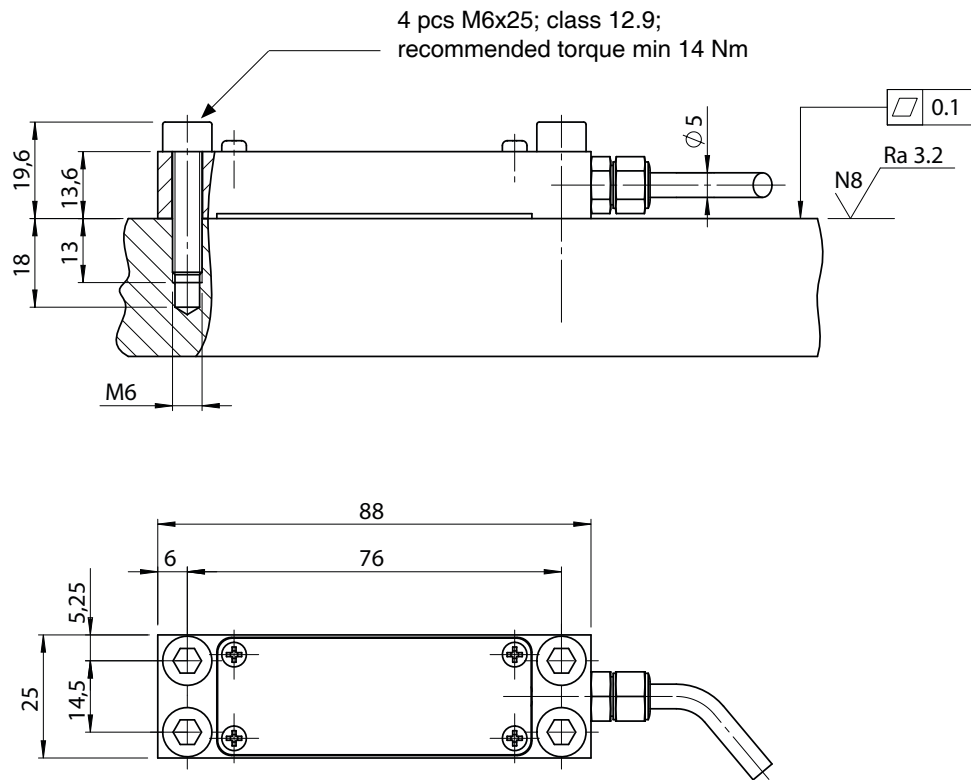
The strain link sensor SL76-AC picks up surface-strain between the 2 mounting locations. The strain occurring between the mounting areas is mechanically amplified inside of the sensor. The integrated AC amplifier supplies a signal that needs no reset -> the signal drops even if the load remains present. Ideal for very fast cycles where a reset between the cycles is not possible. The controller 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 | 100...800με, -100...-250με |
| 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 | 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 (0,1 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

SL76-AC



Accessories include:

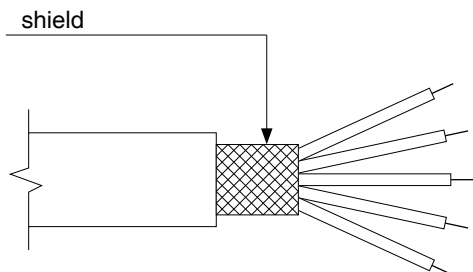
4 mounting screw M6x25; class 12.9

Dimension in mm

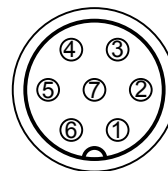
ELECTRICAL CONNECTIONS

PUR screened cable (standard); 5 x 0.14mm²; Ø 5mm; bending = 10 x Ø

Option O



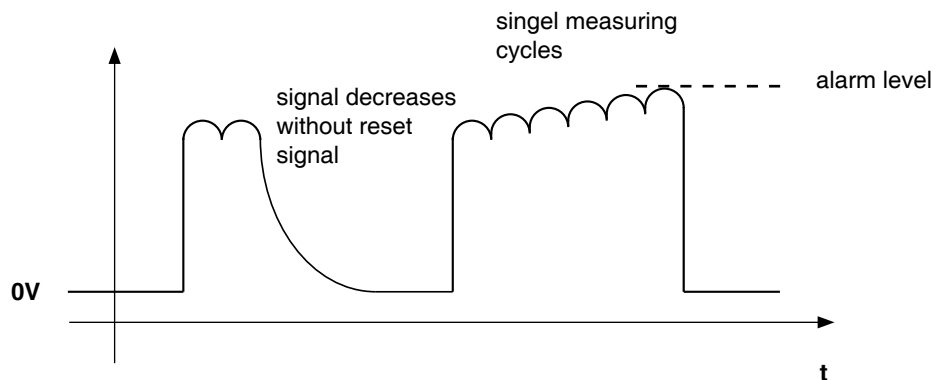
Option C



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

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

AC-COUPLING



ORDER CODE

Strain link sensor with amplifier
and AC-coupling

SL76-AC - 4 - [] [] [] [] - 2 - [] [] [] - []

| Measuring range | |
|-------------------|------|
| 100 $\mu\epsilon$ | 0100 |
| 250 $\mu\epsilon$ | 0250 |
| 500 $\mu\epsilon$ | 0500 |
| 800 $\mu\epsilon$ | 0800 |

| Bridge configuration | |
|----------------------|---|
| 2/4 bridge | 2 |

| Cable lenght | |
|--------------|-----|
| 0.5 m | 005 |
| 3 m | 030 |
| 5 m | 050 |
| 10 m | 100 |

| Connection | |
|----------------------|---|
| Open leads | O |
| Cable with connector | C |

Example: SL76-AC - 4 - 0250 - 2 - 030 - C

Strain link SL76-AC, Measuring range = 250 $\mu\epsilon$, 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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