



Main features

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

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 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 periodicaly.

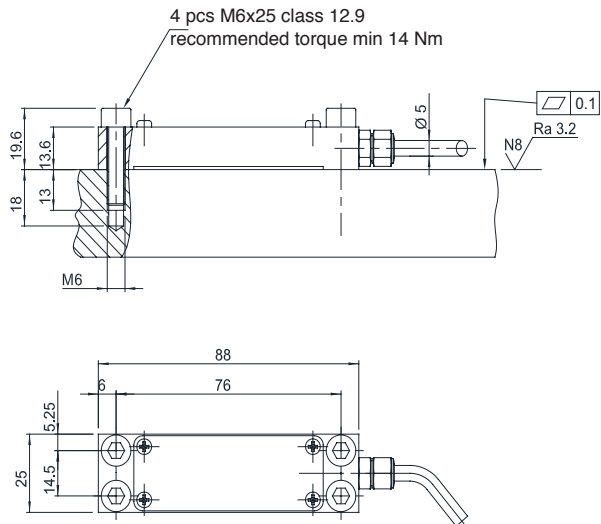
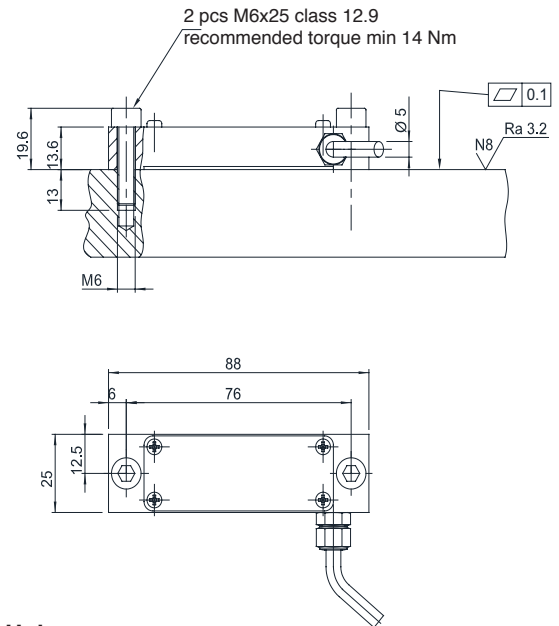
Thanks to the rugged design, this sensors are used in heavy industrial environment.

TECHNICAL DATA

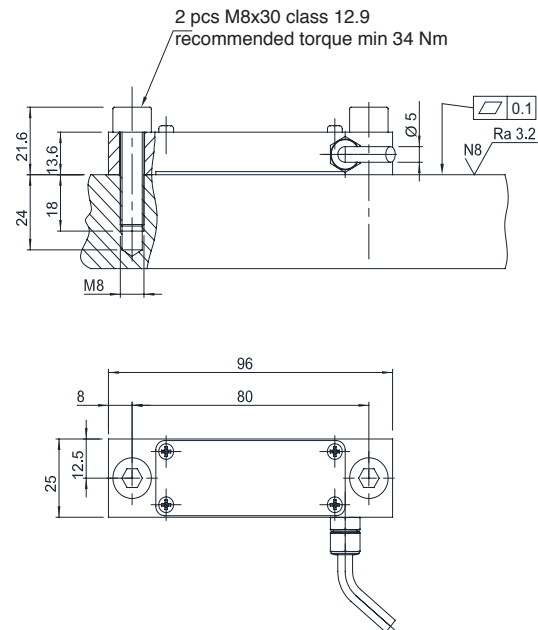
| | |
|-------------------------------------|----------------------------|
| Strain gauge type | Foil (GF = 2.0) |
| Bridge resistance | 350Ω |
| Measuring range | 100...800με, -100...-250με |
| Span adjustment | ±15% FS |
| Zero adjustment | ±50% FS |
| Low-pass filter | 150Hz |
| Output signal | 0...±10VDC |
| Noise | < 10mV |
| Sensitivity tolerance | ± 1% |
| Accuracy | < ± 1% FS |
| Linearity | < ± 0.5% FS |
| Hysteresis | < ± 0.3% FS |
| Repeatability | < 1% (max 2%) |
| Output resistance | 10Ω |
| Time constant AC-coupling (97%) | 68s |
| 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 | 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**

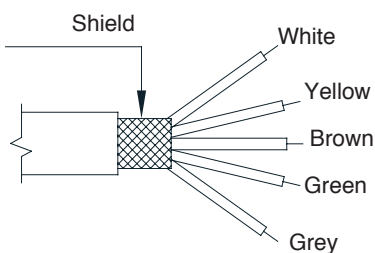
SL80 / 2 Holes



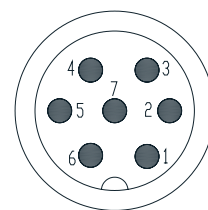
ELECTRICAL CONNECTIONS

Option O :

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

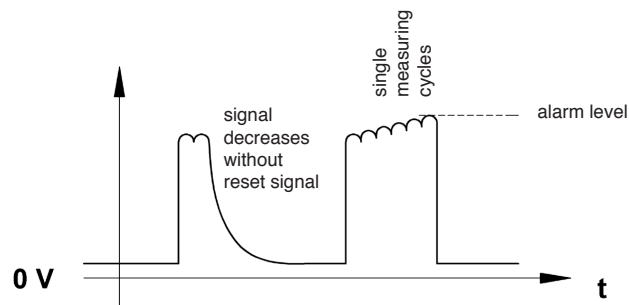


Option C : connector 6 Pin



| 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) |
| Grev | 5 | Signal + |

AC-COUPLING



ORDER CODE

Strain link sensor **SL**

☐ -AC ☐ - ☐ - ☐ - ☐ - ☐ - ☐

| 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 |

| 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-AC-4-0800-2-030-O**

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

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



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