



#### Main features

- Mounts strain gages in seconds on tie bars or cylinders with 2 magnets, without wires
- Integrated strain gage amplifier and wireless transmission of signals (2.4GHz)
- no more messy cables
- High accuracy and linearity on tension and compression
- Can be used on any diameter and even on flat surfaces
- For dynamic applications
- Used on tie bars and frames of Presses and injection moulding and die-casting machines
- Can not be overloaded (offset may occur)
- Connects to the DU-4D or DU-1D monitor
- Dynamic applications
- One system for all tie bar diameters
- Quick and easy mounting

The magnet-press-on strain sensors QE1008W measure the surface-strain directly at the mounting location, similar to bonded strain gages. The signals of the integrated amplifier are transmitted wirelessly.

The QE1008W is mounted in seconds and presses strain gages under the stainless protective foil that strongly onto the surface to be measured that friction replaces the bonding normally used to fix strain gages.

The mounting is very fast, and the strain gage is protected. The sensor can not be overloaded.

The integrated amplifier and wireless module make this unit a state-of-the-art sensor with unsurpassed features and ease of use. One charge of the battery lasts 8 hours. The module can also be used for other strain gage sensors.

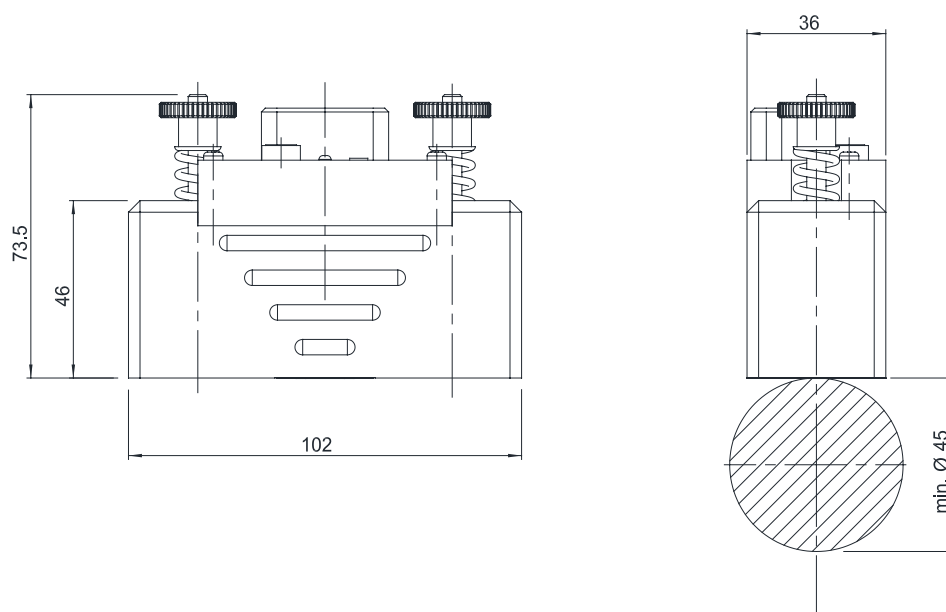
#### TECHNICAL DATA

|                                    |                            |
|------------------------------------|----------------------------|
| Strain gauge type                  | Foil (GF = 2.0)            |
| Bridge resistance                  | 350Ω                       |
| Measuring range                    | ±800με                     |
| Output signal Wireless             | IEEE 802.15.4              |
| Signal transmission distance (air) | 30...100m                  |
| Sensitivity tolerance              | ± 0.2%                     |
| Transverse sensitivity             | 0.9 ± 0.2%                 |
| Accuracy                           | < ± 0.5% FS                |
| Linearity                          | < ± 0.5% FS                |
| Hysteresis                         | < ± 0.5% FS                |
| Repeatability                      | < 0.2% FS                  |
| Nominal input resistance           | 350Ω                       |
| Supply voltage (operation)         | 2xAAA for 8 h              |
| Supply voltage (charging)          | 100...230 VAC              |
| Operating temperature range        | 5...50°C                   |
| Storage temperature range          | 0...50°C                   |
| Overload capability                | indefinite (offset occurs) |
| Protection class                   | IP40                       |
| Case material                      | Aluminium                  |
| Cover material                     | Plastic                    |
| Weight, including cable            | 530g                       |

## TECHNICAL DATA TRANSCEIVER-MODULE

|   |   |
|---|---|
| Frequency   | 2.405-2.480 GHz (ISM-Band)              |
| Protocol standard   | IEEE 802.15.4™                          |
| TX-power  | 0dBm / 1 mW (max.)                      |
| Range   | Up to 20m (depending to operating area) |
| <b>Main features:</b> - Hardware CSMA-CA Mechanism - Automatic ACK response<br>- Hardware security engine (AES-128) - Automatic packet retransmit capable<br>The transceiver-module is FCC (USA), IC (Canada) and ETSI (Europe) certified. Especially the QE1008W is also certified for Japan (TELEC) |   |

## MECHANICAL DIMENSIONS



### Mounting

The single magnet extensometer should be placed carefully on the steel surface by pressing the single fixing screws towards the steel surface to be measured.

Please take care that the moveable magnets of the sensor stands absolutely in axial line on the surface.

The pressing force of the sensors can be adjusted by turning on the nuts to reduce or increase the force of the magnets (the highest force is generated just before the lift-off of the magnets).

## ORDER CODE

The magnet mount strain gage **QE1008** - ☐

| Connection |          |
|------------|----------|
| Wireless   | <b>W</b> |

Example: **QE1008 - W**

Single precision wireless extensometer with magnet clamp (always including rechargeable batteries)

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



**GEFRAN**

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