

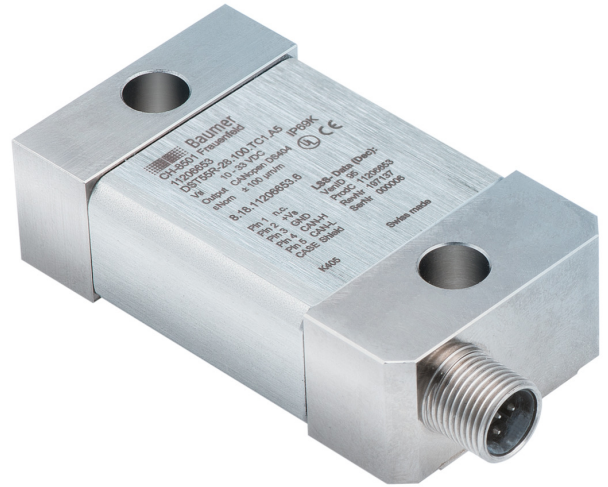
DST55R-28.202.TC1.A5

Strain sensor for harsh outdoor environment with CANopen output

Article number: 11236366

Overview

- Measuring range $\pm 2000 \mu\text{m/m}$
- Highest protection class IP 68/69K
- Tested long term seal according to proTect+
- Corrosion protection C5-M
- Output signal CANopen
- Integrated amplifier electronics



Technical data

General data

| | |
|---------------------|----------------------------|
| Nominal strain | 0 ... 2000 $\mu\text{m/m}$ |
| Non-linearity | < 0.5 % |
| Repeatability | < 0.1 % |
| Mechanical mounting | 2 x M8 screws |

Mechanical data

| | |
|---|----------------------------------|
| Overload | 150 % |
| Sensor stiffness | 400 N @ 2000 $\mu\text{m/m}$ |
| Weight | 330 g |
| Material sensor body | 1.7225, chemically nickel plated |
| Material housing | Stainless steel, 1.4301 |
| Material sealing | NBR |
| Compensated for thermal expansion coefficient | $11.1 \cdot 10^{-6} 1/\text{K}$ |
| Electrical connection | M12, 5 pin, male |

Environmental conditions

| | |
|-------------------------------------|---|
| Operating temperature range | -40 ... 85 °C |
| Storage temperature range | -40 ... 85 °C |
| Protection class EN 60529, ISO20653 | IP 68, 168h @ 1m H ₂ O IP 69K ProTect+ |

Environmental conditions

| | |
|---|--|
| Corrosion protection IEC 60068-2-52 salt spray test | C5-M (ISO 12944-5: protective paint systems) |
| Vibration IEC 60068-2-6 | 10 ... 57 Hz: 1.5 mm p-p, 58 ... 2000 Hz: 10 g |
| Random IEC 60068-2-64 | 20 ... 1000 Hz: 0.1 g ² /Hz |
| Shock IEC 60068-2-27 | 50 g / 11 ms, 100 g / 6 ms |

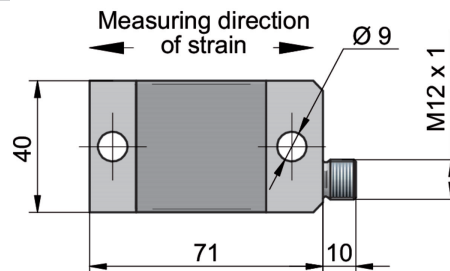
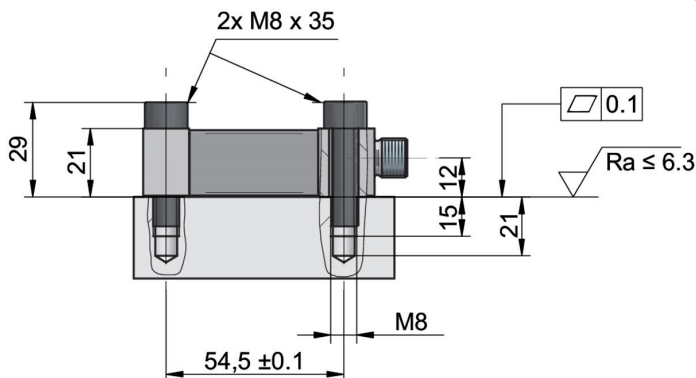
Electrical data

| | |
|--------------------------|---------------------|
| Output signal | CANopen DS404 |
| Signal polarity positive | Tension |
| Bridge resistance | 350 Ω |
| Supply voltage | 10 ... 33 VDC |
| Current consumption | < 60 mA |
| Measuring resolution | 0.1 $\mu\text{m/m}$ |
| Cut-off frequency (3 db) | 1000 Hz |

Compliance and approvals

| | |
|-----------|--|
| EMC | EN 61000-6-2 EN 61000-6-3 EN 61326-2-3 |
| UL listed | E217824 |

Dimensional drawings (mm)



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Electrical connection

| Pin-number | Signals |
|------------|-----------------|
| 1 | n.c. |
| 2 | +V _s |
| 3 | GND |
| 4 | CAN-H |
| 5 | CAN-L |
| CASE | shield |

