

DST76-B500P

Standard strain sensor without amplifier

Article number: 11242292

Overview

- Measuring range $\pm 500 \mu\text{m/m}$
- Cost-effective force measurement of large forces
- Output signal mV/V
- Bore hole distance 76 mm
- Cable outlet



Technical data

General data

Nominal strain	0 ... 500 $\mu\text{m/m}$
Non-linearity	< 0.4 %
Repeatability	< 0.2 %
Mechanical mounting	4 x M6 screws

Mechanical data

Overload	150 %
Fatigue strength	>10 Mio cycles at 0...100% FS
Sensor stiffness	2600 N @ 500 $\mu\text{m/m}$
Weight	180 g
Material sensor body	1.7225, chemically nickel plated
Material potting compound	Siliconfree, PUR based
Compensated for thermal expansion coefficient	$11.1 \cdot 10^{-6} 1/\text{K}$
Electrical connection	Cable outlet, PUR cable, grey $\varnothing 3.0 \text{ mm}$, shielded, oil resistant, 4 x 0.08 mm ² , open cable end, bending radius min. 10 x \varnothing , length 6 m

Environmental conditions

Operating temperature range	-20 °C ... 70 °C
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Environmental conditions

Storage temperature range	-40 °C ... 85 °C
Protection class EN 60529, ISO20653	IP 65
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	mV/V
Signal polarity positive	Tension
Nominal sensitivity	1.0 mV/V
Bridge resistance	350 Ω
Supply voltage	0.5 ... 12 VDC
Reverse polarity protection	Yes
Short circuit protection	Yes

Compliance and approvals

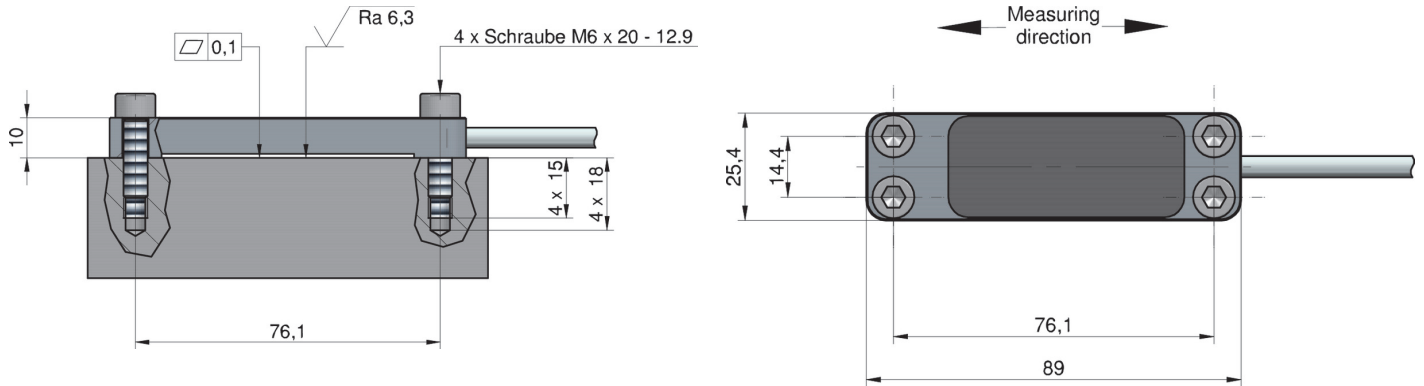
Conformity	CE UL
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Dimensional drawings (mm)



Electrical connection

wire colour	signal
brown	+Vs
blue	-Vs
white	Sig+
black	Sig-
shield	ground