

**Overview**

- Measuring range  $\pm 500 \mu\text{m/m}$
- IO-Link interface for individual, application specific parameterisation
- Integrated amplifier electronics
- Output signal 4...20 mA, IO-Link, 2 x I/O
- 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	320 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 $\varnothing 5.2 \text{ mm}$ , shielded, drag chain capable, oil resistant, $5 \times 0.14 \text{ mm}^2$ , open cable end, bending radius min. $10 \times \varnothing$ , length 6 m

**Environmental conditions**

Operating temperature range	-20 °C ... 70 °C
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 <sup>2</sup> /Hz
Shock IEC 60068-2-27	50 g / 11 ms, 100 g / 6 ms

**Electrical data**

Output signal	4 ... 20 mA IO-Link
Signal polarity positive	Tension
Bridge resistance	350 $\Omega$

**Electrical data**

Supply voltage	18 ... 30 VDC
Current consumption	< 40 mA
Reverse polarity protection	Yes
Short circuit protection	Yes
SIO Input high	$\geq 13 \text{ VDC}$
SIO Input low	$\leq 8 \text{ VDC}$
Measuring resolution	14 bit
Sampling rate input	8 kS/s
Sampling rate output analog	8 kS/s
Cut-off frequency (3 db)	1000 Hz

**IO-Link interface**

IO-Link version	1.1
IO-Link port type	Class A
Baud rate	230,4 kbaud (COM3)
Process data length	32 bit
Cycle time	$\geq 1 \text{ ms}$
SIO-mode	Yes
Process data (cyclic)	Process Value Scale exponent SSC 1 SSC 2 Quality Alarm

**IO-Link features**

Parameterizable	Unit (N, kg, $\mu\text{m/m}$ ) selectable Teach-in Offset/ Tare Correlation to known force Analog output signal Output range analog signal Alarm state analog signal Functions I/O's selectable
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# DST76-B500I

Standard strain sensor with current output and IO-Link

Article number: 11242294

## Technical data

### IO-Link features

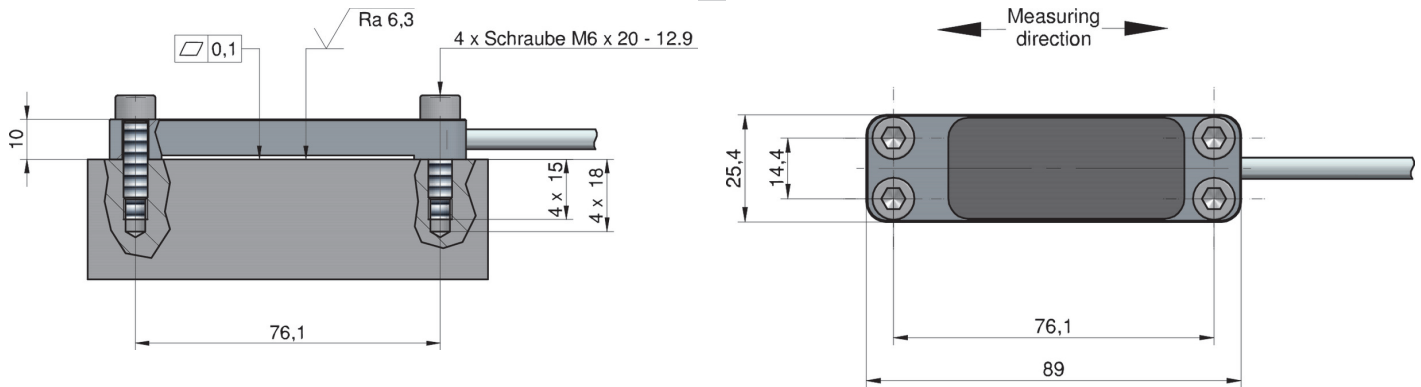
Additional functions      Low pass filter  
                                  Peak value memory  
                                  Sample and hold  
                                  Two digital switching points (SSC)  
                                  Remote operation

Additional data              Diagnostic data  
                                  Error detection

### Compliance and approvals

Conformity                  CE  
                                  UL

## Dimensional drawings (mm)



## Electrical connection

wire colour	signal
brown	+Vs / L+
white	DI/DQ
green	Vout / Iout
yellow	0V / L-
pink	C/Q
shield	ground