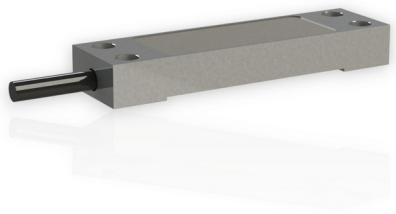
Strain Sensor DA90

Item number: 3728



Thanks to its closed construction and stainless steel design, the DA90 strain sensor is suitable for measuring strain and force on machine elements and components in harsh environments.

The strain sensor must be screwed with 4 bolts M6. Example applications include force supervision, fill level measurement and strain analysis on steel components. Mechanical strain on the component is transferred to the strain sensor using forced closure via the 4 fixing screws and transformed into an electrical output signal.

Output signal and thermal behaviour and transmission ratio depend on the geometry and combination of materials of the strain sensor and component. Therefore, the sensor is calibrated by subjecting the component to a certain degree of force.

The DA90e strain sensor contains a 0...10V or 4...20mA measuring amplifier with zero-setting and scale function, as well as threshold value output.

Optional special version

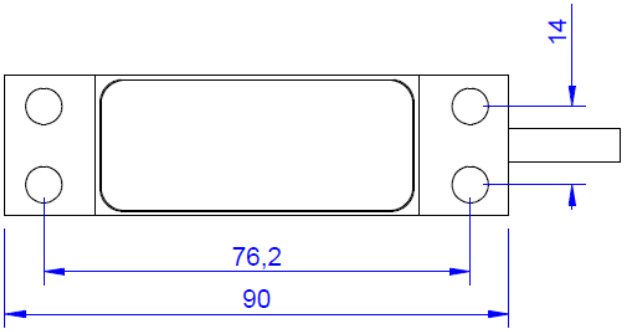
- Protection class IP68: from rated force 200 N
- Pressure range up to 8 bar

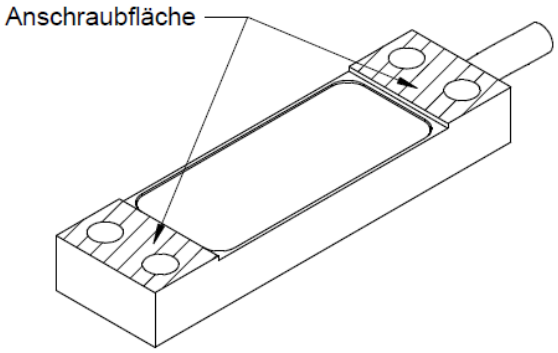
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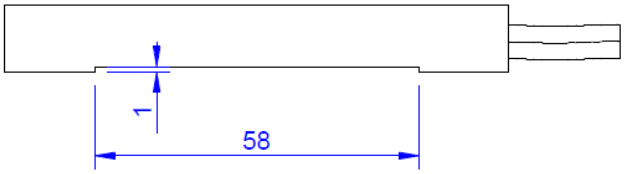
Tel: +49 (0)3302 8982 4 10
Mail: vertrieb@me-systeme.de
Web: www.me-systeme.de

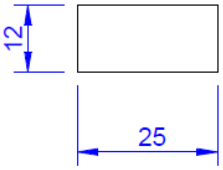
Stand: 27.08.2026

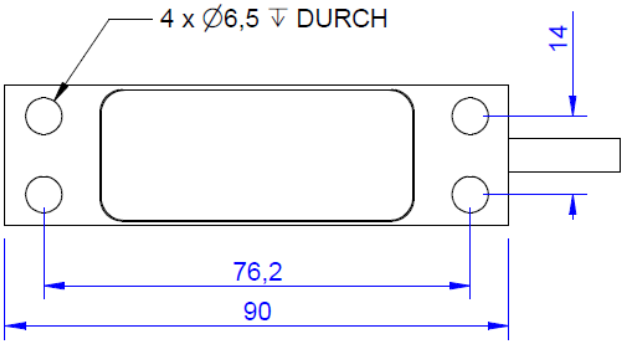
Technical Drawing

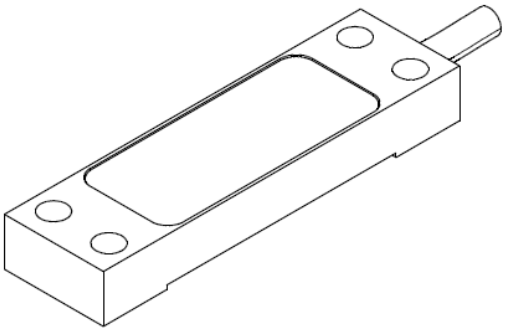












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Technical Data

Basic Data		Unit
Type	Dehnungsaufnehmer	
Nominal strain	100	µm/m
Operating strain	400	µm/m
Material	tool steel	
Surface	electrogalvanized	
Dimensions	90 x 25 x 11 mm³	

Electrical Data		Unit
Input resistance	350	Ohm
Tolerance input resistance	1	Ohm
Output resistance	350	Ohm
Tolerance output resistance	1	Ohm
Insulation resistance	5	GOhm
Rated range of excitation voltage from	2.5	V
Rated range of excitation voltage to	5	V
Operating range of excitation voltage from	1	V
Operating range of excitation voltage to	10	V
Characteristic value range from	0.3	mV/V
Characteristic value range to	0.4	mV/V

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Accuracy Data		Unit
Relative linearity error	1	%FS
Relative zero signal hysteresis	1	%FS
Temperature effect on zero signal	0.5	%FS/10K
Temperature effect on characteristic value	1	%RD/10K
Relative creep	1	%FS

Pin assignment

Channel	Symbol	Description	Wire color	PIN
	+Us	positive bridge supply	brown	
	-Us	negative bridge supply	white	
	+Ud	positive bridge output	green	
	-Ud	negative bridge output	yellow	

Pressure load: positive output signal.
Shield- transparent.

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