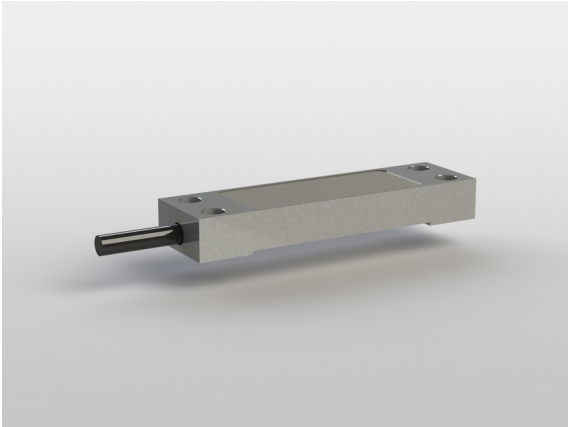


## Strain Sensor DA90e 010

Item number: 3649



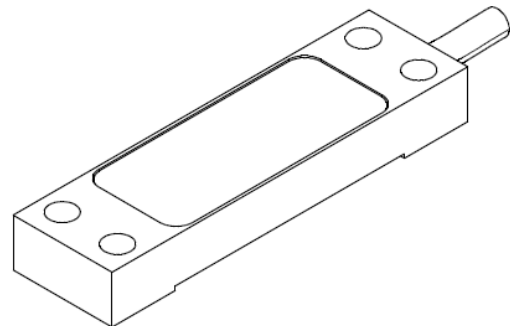
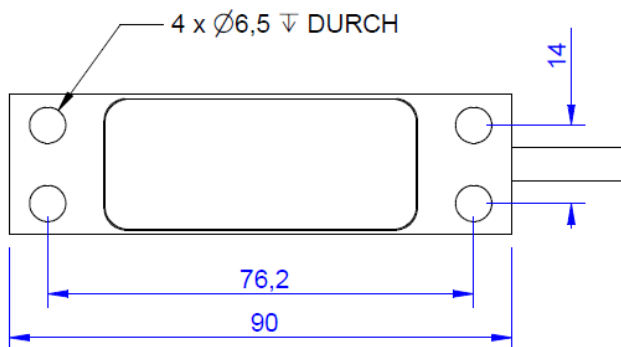
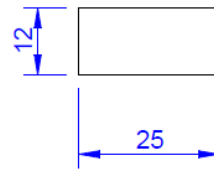
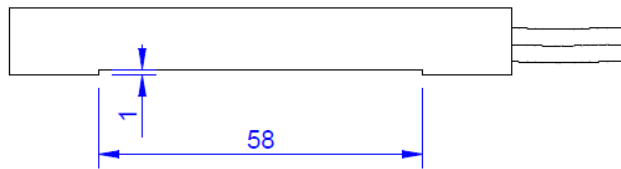
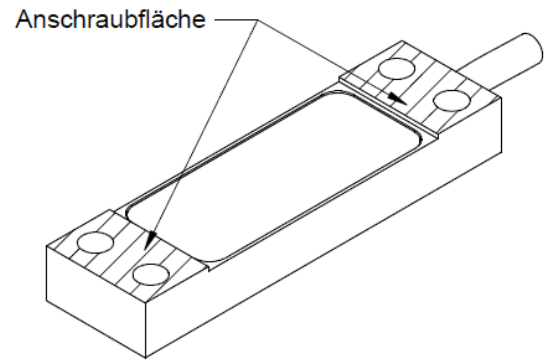
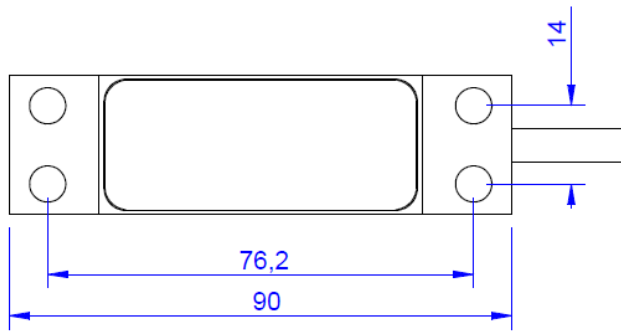
Thanks to its closed construction and stainless steel design, the DA90 strain sensor is suitable for measuring strain and force on machine elements and components in harsh environments.

Install by screwing on with 4 M6 screws. 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.

### Technical Drawing



## Technical Data

Basic Data		Unit
Type	Dehnungsaufnehmer	
Nominal strain	100	µm/m
Operating strain	400	µm/m
Material	tool steel	
Surface	electrogalvanized	
Dimensions	90 mm x 25 mm x 12 mm	

Electrical Data		Unit
Input resistance	350	Ohm
Tolerance input resistance	1	Ohm
Insulation resistance	5	GOhm

Accuracy Data		Unit
---------------	--	------

Analog Output		Unit
Voltage output from	0	V
Voltage output to	10	V
Zero adjustment to	0	V

Measuring Frequency		Unit
Data frequency from	5	Hz
Data frequency to	105	Hz
Sampling frequency	105	Hz

Supply		Unit
Supply voltage from	14	v
Supply voltage to	30	V
Current consumption from	15	mA

## Pin assignment

Channel	Symbol	Description	Wire color	PIN
	Ub	Supply voltage (24V or 12V DC)	brown	1
	GND	Connect ground, supply voltage	white	2
	Ua	Output signal 4...20mA / 0...10V	green	3
	Tara	Control input for zero balance	yellow	4
	Scale	Control input for amplification factor	grey	5
	SW	Threshold output	pink	6
	GND	Connect ground, signal	blue	7
		shiled (is not connected with the housing)	transparent	

With integrated electronics GSV-15L / GSV-6L. Ground signal connected to ground supply internally.