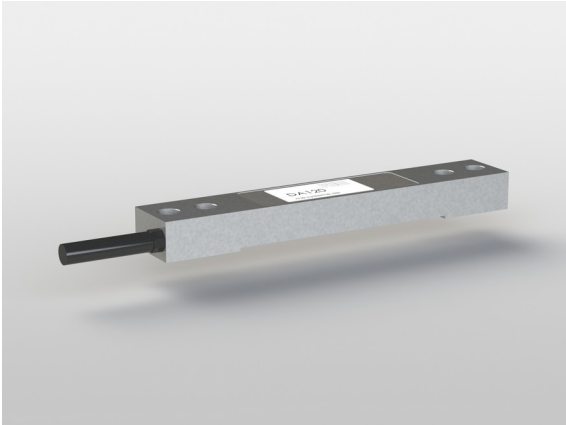


Strain Sensor DA120e 010

Item number: 3214



Highlights

- is suitable for measurements in harsh environments due to its enclosed design
- contains integrated GSV-15L evaluation electronics

Thanks to its closed construction, the DA120 strain sensor is suitable for measuring strain and force on machine elements and components in harsh environments.

Easy installation by screwing on with 4 M6 screws. Mechanical strain on the component is transferred to the strain sensor using via 4 fixing screws and is transformed into an electrical output signal.

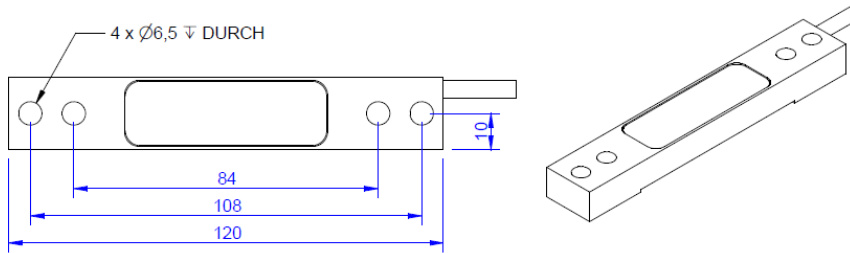
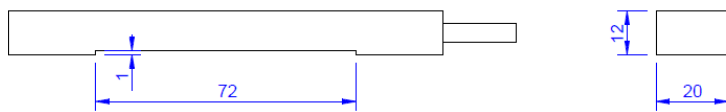
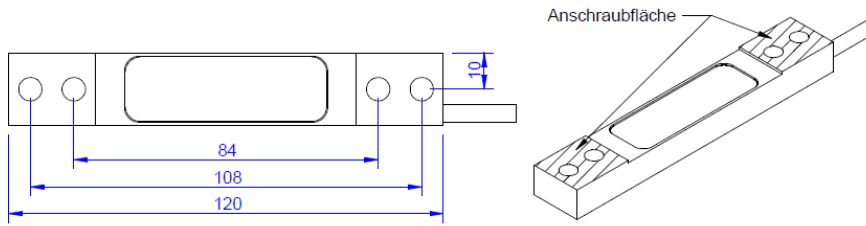
Example applications include force monitoring level measurement.

Output signal, thermal behaviour and transmission ratio depend on the geometry and combination of materials. Therefore, calibration is performed by applying of a force.

The Strain sensor DA120e is implemented for the measurement of loads. Application areas are machines, buildings, vehicles, containers and silos. The strain sensor must be fastened with 4 bolts M6. The strain on the surface of the constructional element is measured by the strain sensor due to the bolted-assembly.

The "DA120e" strain sensor includes an integrated GSV-15L measuring amplifier. The measuring amplifier has a voltage- or current output and a threshold value output. Amplification, zero point and threshold value can each be programmed via a digital input.

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	120 mm x 20 mm x 12 mm	

Electrical Data		Unit
Input resistance	350	Ohm
Tolerance input 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	2.5	V
Operating range of excitation voltage to	10	Ohm

Accuracy Data		Unit
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Analog Output		Unit
Voltage output from	0	V
Voltage output to	10	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.