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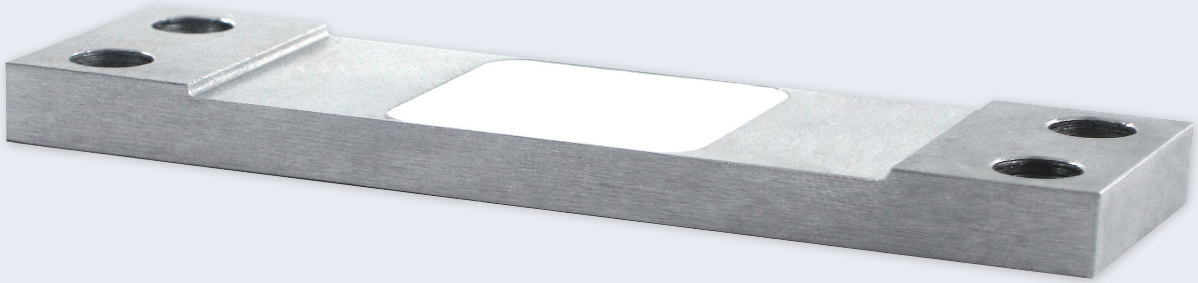
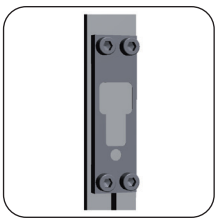
Strain Transducers *T10N*



Features



- Material: stainless steel
- Nominal load: 100 - 200 kg
- Protection class: IP65
- Construction: The measuring element is cast
- Load introduction: lug with hole - on both sides
- Particularly robust for tough
- continuous use in the industrial sector

Scope of application:

- Measurement of strains on rigid structures
- Monitoring of presses
- Monitoring of rollers
- Monitoring of cranes
- Monitoring of frames
- Monitoring of load cranes
- Monitoring of bridges

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Strain Transducers *T10N*

Sensor for measuring strains on steel structures

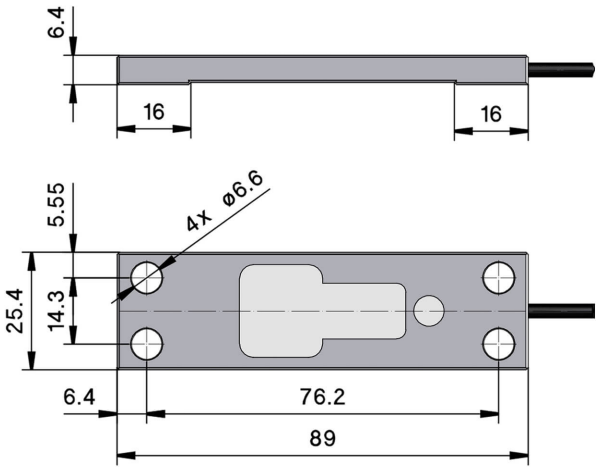
Extensometry can be used to measure structural deformations and the strains that cause them. The strain transducer / extensometer T10N was specially designed for measuring static and dynamic strains and compressions on steel structures. This system is an indirect load measurement via structural deformation, which has the advantage of being easy to install. The strain sensor is firmly screwed onto the component, creating a non-positive connection between the strain transducer and the measured object. When the measured object is mechanically loaded, strains and compressions occur. These are then transmitted to the strain transducer by means of a frictional connection and converted into an electrical output signal proportional to the change in length.

The load cells are made of stainless steel, the measuring element is encapsulated and meets the requirements of protection class IP65. Simple mounting with four screws offers many integration options, even in existing constructions. Due to the small space requirement and the simple mounting, the T10N are ideal for retrofitting a force measurement or load monitoring system.

TECHNICAL DETAILS

Accuracy class according to OIML R 60		G1
Nominal load (E_{max})	kg	100, 200
Number of division values (n_{LC})		1000
Nominal value (C_n) / Characteristic tolerance	mV/V	1,0 ± 0,15
Minimum preload (E_{min})		0
Grenzlast (E_L) **Bruchlast (E_d)**	% from Emax	150 200
Recommended supply voltage (U_{ref}) **Maximum permissible supply voltage (B_U)**	V	5 - 12 15
Zero adjustment	% v. Cn	2
Input resistance (R_{LC}) at reference temperature **Output resistance (R_O) at reference temperature**	Ω	1000 ± 10 1005 ± 3
Insulation resistance	MΩ	>5.000
Nominal temperature range (B_T)	°C	- 10 ... + 40
Protection class according to (DIN 40.050 / EN 60529)		IP65
Cable length		6 m
Material		Stainless steel

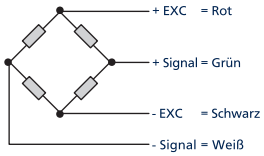
TECHNICAL DRAWINGS



Einbaubeispiel

The strain sensor should be mounted on a straight, machined surface. The measuring surface should preferably have the same coefficient of thermal expansion as the strain sensor.

Elektrischer Anschluss
4 -Leiter - Kabel



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