

Flat scale PW 200x100 8kg



The PW 200x100 is a small flat scale to measure weights up to 8 kg.

General

As in all DIGI SENS transducers, a vibrating wire sensor is used to convert the force/load into an electrical signal. This patented element is able to deliver a signal that can be directly processed by a computer.

Application

Surveying any liquids, powder or items in industrial machines or processes.

Description

The PW 200x100 is using DIGI SENS vibrating wire technology instead of a strain gauge. This technology offers an extremely high resolution. The long-term stability is very good, even under load, since no organic material is involved in the measurement chain. An



other benefit is that creeping and other similar effects are reduced to the minimum.

The PW 200x100 delivers a 5V-TTL frequency signal, proportional to the measured load. The frequency is a square root function of the displacement. In most applications it can be considered linear.

A temperature sensor is also integrated in the PW 200x100, providing a frequency proportional to the temperature.

This frequency signals are easy to transmit, immune to perturbations and can

be treated directly by any processor.

The conditioning electronic 4W-MUX transforms these frequencies into a load. The load can then be accessed over a serial communication line.

Fit and function

The PW 200x100 can be fixed with four M3 screws on almost every ground plate. The directly integrated silent blocks uncouples the scale from the environment.

Just tighten the screw and you are ready to measure.

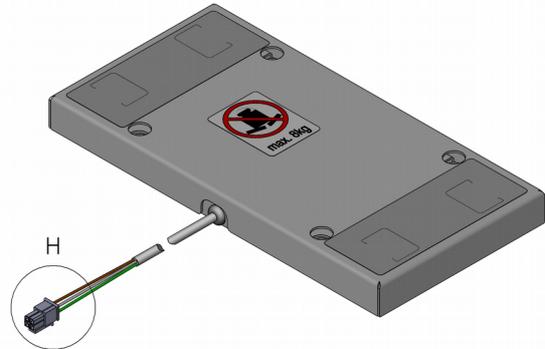
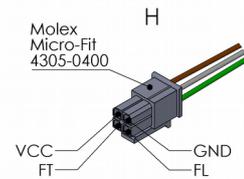
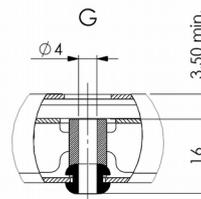
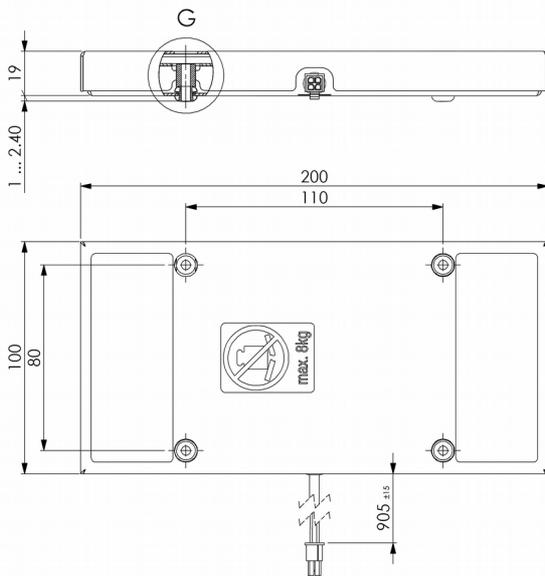
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Technical Data

1. Technical specifications				3. Standards	
Capacity	8 kg	Temperature drift (max)	±1 g/K @0 kg ±8 g/K @8 kg	Protection	IP20
Overload capacity	100 %	Zero point drift (approx.)	+40 g/year	Impact	IK10
Sensitivity error (max)	100 g @≤4 kg ±2.5 % @>4 kg	Length	200 mm	Displacements	>10'000
Linearity error (max)	±1 % f.s.	Width	100 mm	Tilt ²	≤30 %
Repeatability (st. dev.)	±5 g @≤4 kg ±15 g @8 kg	Platform height	ca. 20 mm	Functional temperature range	+15 to +35 °C
Reproducibility (st. dev.)	±1 %	Weight	1 kg	Relative Air Humidity	≤98 % not condensing
Corner load error ¹ (max)	3 %	Operational environment	Indoor use	Pollution degree	2
Display resolution	1 g	2. Interface			
		Connector	Molex Micro-Fit 4305-0400		

Dimensional drawing



- 1 At translations of 60 % of diagonal
2 Compensation according to document K363

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