

Pendelwaage 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

Monitoring 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 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.

These 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.

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Technical Data

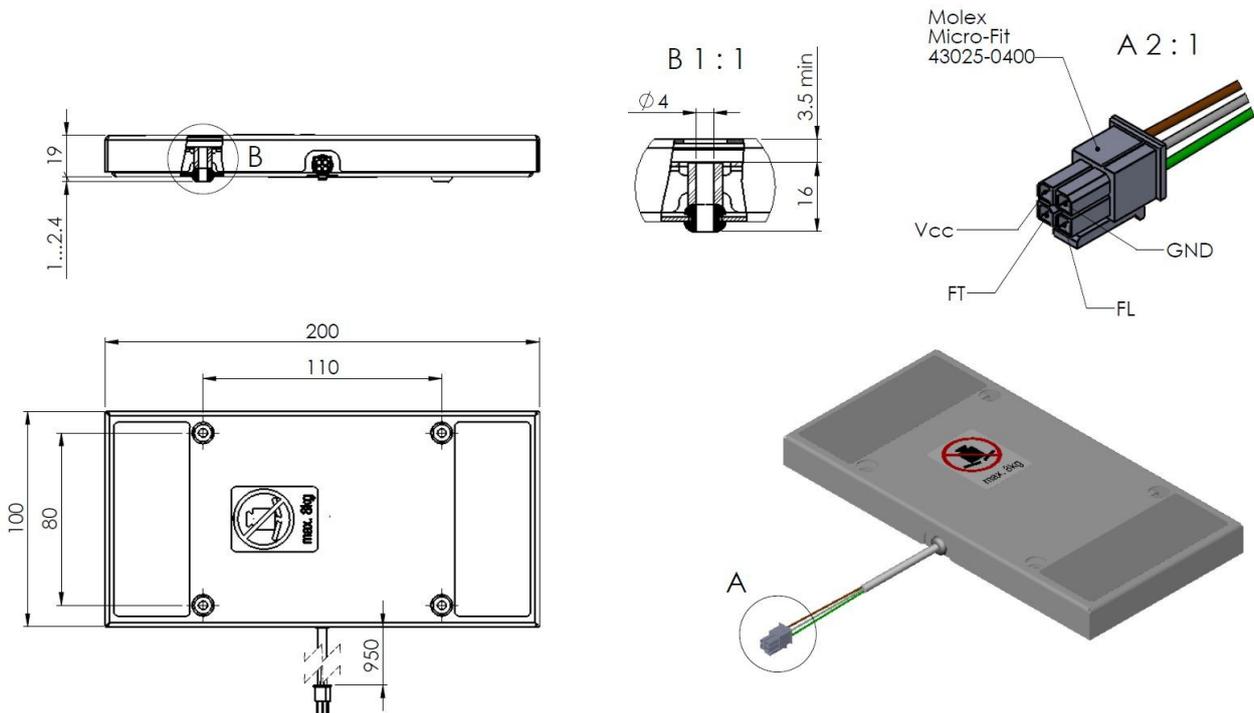
1. Technical specifications				3. Standards	
Capacity	8 kg	Length	200 mm	Protection	IP20
Overload capacity	100 %	Width	100 mm	Impact	IK09
Max error ⁽¹⁾	±100 g @ ≤4 kg ±2.5 % @ >4 kg	Height	ca. 20 mm	Number of loadings	>10'000
Repeatability ⁽²⁾ (typical)	13g	Weight	ca. 620g	Functional temperature range	+15 to +35 °C
Resolution	1 g	Operational environment	Indoor use	Relative Air Humidity	≤98 % not condensing
Temperature drift ⁽³⁾ (max)	±3 g/K @ 0 kg ±8 g/K @ 8 kg	2. Interface		Pollution degree	2
Zero point drift ⁽³⁾ (typical)	±40 g/year	Connector	Molex Micro-Fit 43025-0400		

⁽¹⁾ Tested in the center and at room temperature, number of loadings included

⁽²⁾ Tested at 4kg, in the center and at room temperature

⁽³⁾ Not included in the max error

Dimensional drawing



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