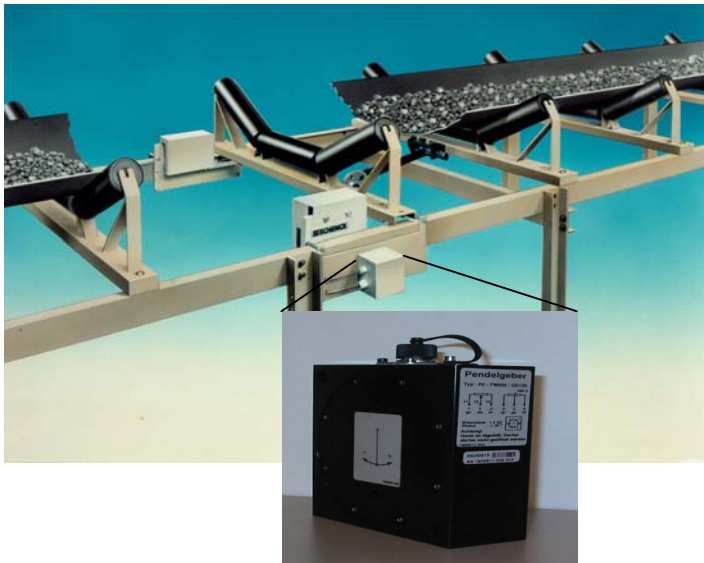


Cosinus Pendulum for Correction of Scales with variable Weigher Inclination



- Suited for any scales such as belt weighers or platform scales
- Specially matched to the load cell
- Angle range: +/- 2° to +/- 30°
- Robust structure, IP 65

Application

The cosine pendulum is used for correcting the measuring signal of a weighing unit if the inclination has changed. It is preferred for use with belt weighers.

Structure

The device comprises an oil-dampened and compensated pendulum system in an aluminium IP 65 protection class casing. It is mounted at a location with the same inclination as the scale to be corrected. The system is factory-aligned to the side surfaces at an error <math>< 0.5^\circ</math>.

Function

An inclined scale only measures a weight of the mass to be measured that is reduced by the cosine of the angle. The pendulum corrects this fault on the electrical output of a strain gauge load cell. Whether it functions correctly depends upon the load cell model and number while the design of the electronic measuring unit is not important to correct functioning.

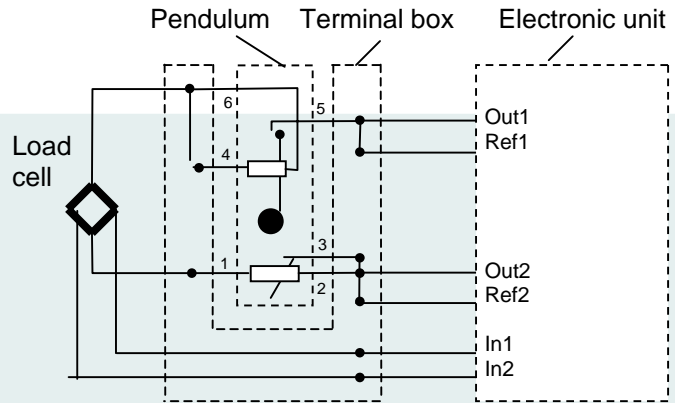
Technical Specifications

Linearity error	+/- 0.2% of full scale
Temperature range	-10 °C ... +70°C
Temperature coefficient	+/- 0.2%/10 K of full scale
Mating plug	7-pin socket series 723 Manufacturer: Binder

Uncorrected readings

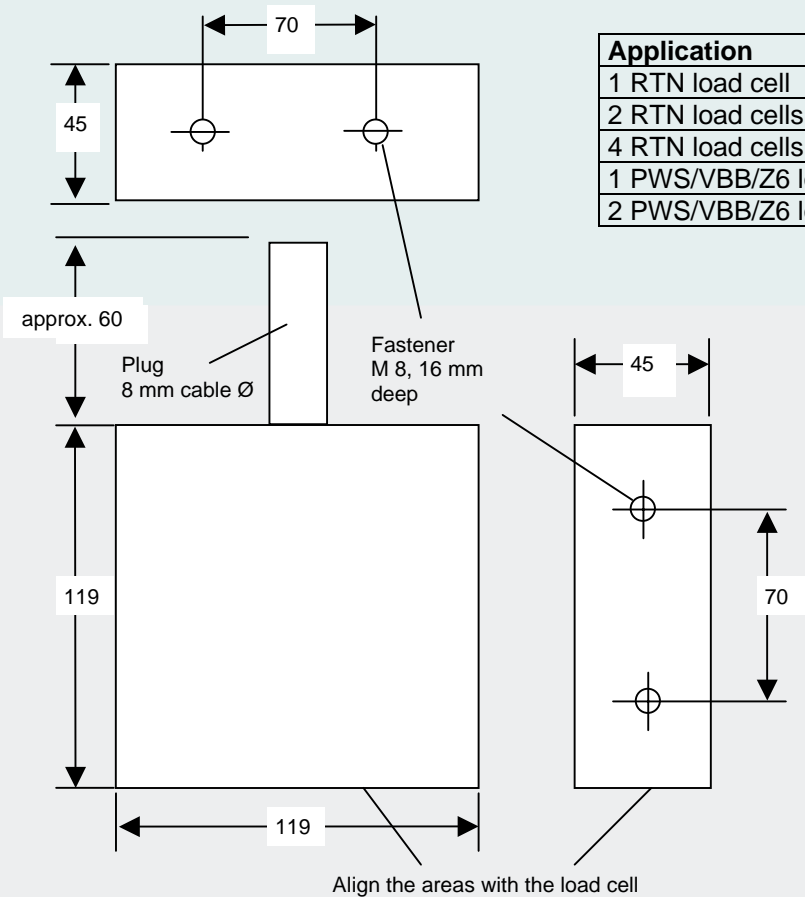
Inclination	Reading error
2,5°	-0,1%
5,0°	-0,4%
10,0°	-1,5%
15,0°	-3,4%
20,0°	-6,0%

Example of how to connect it



Variants

Application	Material No.
1 RTN load cell	E011638.02
2 RTN load cells	E011638.01
4 RTN load cells	E011638.04
1 PWS/VBB/Z6 load cell	E011638.05
2 PWS/VBB/Z6 load cells	E011638.03



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