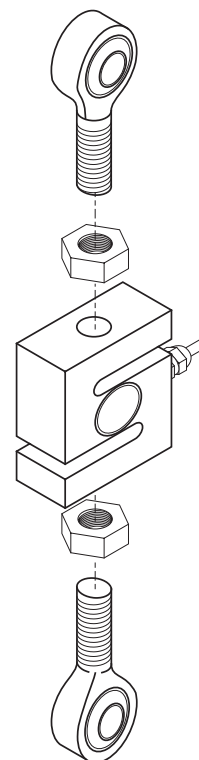




Applications

Mechanical assembly

The TVN load cell is installed using two ball joints with lock nuts*.



Range of use

- Suspended hoppers for Non-Trade use only.

General

The TVN load cell is composed of a nickel-plated steel body and is fully sealed by welded dishes. The TVN load cell is leak tight (according to IP 67) and compact. It is available in 7 capacities, namely : 50, 100, 200, 500, 1 000, 2 000 and 5 000 kg.

Description

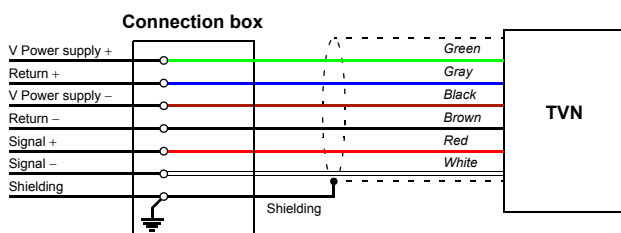
The principle used by the TVN load cell is measurement of the deformation of a beam to which a shear force is applied. It uses strain gauges installed as a Wheatstone bridge to convert the force into an electrical signal.

Electrical assembly

The load cell outputs a low amplitude analogue electrical signal. Therefore, some particular precautions need to be taken for the electrical connection.

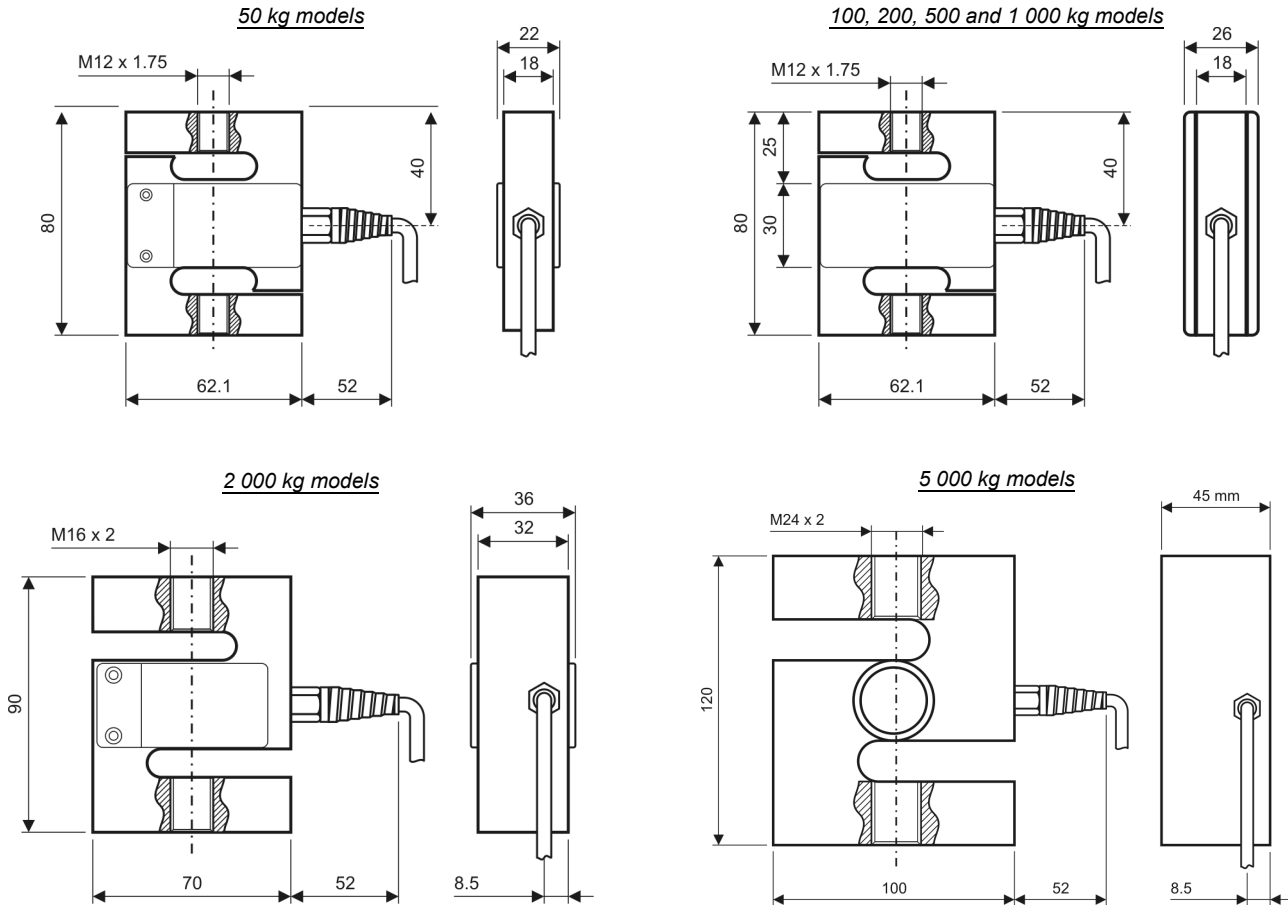
- Systematically connect the shielding of the load cell in the connection box or onto the indicator.
- Keep the load cell cable away from elements that could cause serious electromagnetic disturbances. Avoid routing the power cable and measurement cable adjacent to each other.
- Keep the measurement part away from any heat source, or protect it.

Wiring



* Optional.

Dimensions



Weight (approximately without accessories)

- 50 to 1 000 kg 0.580 kg
- 2 000 kg 0.900 kg
- 5 000 kg 1.900 kg

Mechanical characteristics

- Load limit : 150 % of the nominal capacity
- Breaking load : 300 % of the nominal capacity
- Deflection under nominal capacity 0.4 mm

Electrical characteristics

- Power supply voltage (AC or DC)
 - recommended 10 V
 - maximum 15 V
- Input impedance 380 Ω ± 20 Ω
- Output impedance 350 Ω ± 3 Ω
- Insulation > 2 000 MΩ
- Sensitivity 2 mV/V ± 0.1%
- Non-repeatability < 0.05%
- Sensitivity drift with temperature < 0.003 % / °C
- Zero drift with temperature < 0.01 % / °C
- Maximum precision class C1
(Trade use)
- Shielded cable, black PVC jacket
 - Number of wires 6
 - Length
 - 50/100/200/500 and 1 000 kg 3 m
 - 2 000 and 5 000 kg 5 m

Environment

- Temperature range
 - Recommended - 10 °C / + 40 °C
 - Without alteration - 30 °C / + 70 °C
- Leak tightness : IP 67

Optional assembly accessories

Set of 2 ball joints for assembly in tension.



Your weighing specialist



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