

**Capacity and dimensions:**

For reasons of installation, all the dynamometric axles are custom-made.

Note: the accuracy of these units is improved where the following proportions are respected:

Diameter	Capacity
36 mm	2,000 kg
40 mm	4,000 kg
44 mm	6,000 kg
50 mm	8,000 kg
54 mm	10,000 kg
60 mm	16,000 kg
70 mm	25,000 kg
80 mm	40,000 kg
95 mm	60,000 kg
105 mm	80,000 kg
115 mm	110,000 kg

**Critical dimensions of a load pin**

A	=
B	=
C	=
D	=
E	=
F	=
G	=
Force in kg	=
Force direction	=
Lubrication	=
Other	=

**Designation:**

HF50  
Code: See price list

**Associated equipment:**

HF50 electronic load cells are normally used in conjunction with the intelligent monitors and scoreboard displays:

- HF80/1 intelligent monitor\*.
- HF80/2 intelligent monitor with F.E.M. control\*.
- HF87/./.

Models of scoreboard displays incorporating the intelligent monitor or the intelligent monitor with F.E.M. control\*\*.

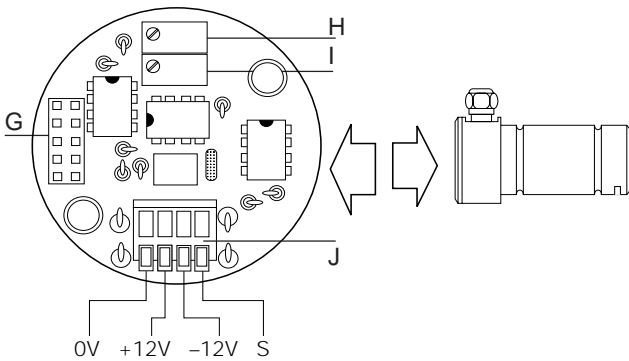
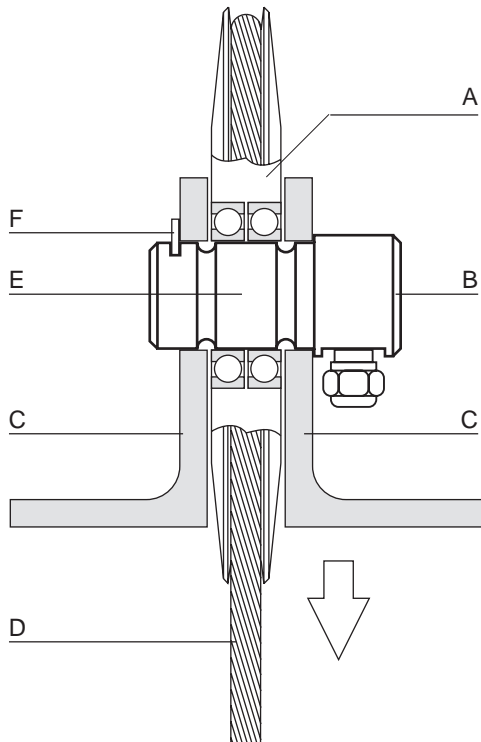
\*see technical data sheet T 2023 GB

\*\*see technical data sheet T 2024 GB

**NOTE:**

If required, the electronics (J) may be mounted separately from the load cell, in an aluminium housing.

**For requirements not set out above,  
please contact us.**



- |                         |                          |
|-------------------------|--------------------------|
| A - Pulley              | F - Fixing pin           |
| B - Electronics housing | G - Diagnostic socket    |
| C - Bracket             | H - Gain potentiometer   |
| D - Wire rope           | I - Zero potentiometer   |
| E - Dynamometric axle   | J - Connection terminals |

**Application:**

This electronic load cell has been designed for replacing the original axle or shackle pin and for those applications where there is no dead end wire rope, (i.e. where the sheaving arrangement prevents a load cell being fitted at a fixed point). The analog signal may be used by the user depending on his requirements e.g.:

- for monitoring one or more trip points or thresholds (slack wire rope, intermediate trip points, warning trip points, overload limiting, linking several load cells together, etc. . .).
- for displaying the load applied.

This type of load cell has the advantage of not increasing the lost headroom.

**Operating principle:**

The load cell operates by the movement of metal within its elastic limits. The strain gauges integrated in the dynamometric axle measure the force applied through the pulley, giving an electrical signal relative to the load applied. The resulting signal may then be passed via a monitor mounted in the control box or via a display mounted on the crane itself.

**Technical specifications:**

- Capacity: made to measure
- Overload coefficient: 1.5
- Safety coefficient: 5
- Accuracy:  $\pm 0.5\%$
- Temperature range: from  $-20^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$
- Température compensation: from  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- Material: treated alloy steel
- Protection class: IP65
- Connections: to connection terminal (J)
- The unit is supplied with 3 m of cable (4x0.34 armoured) for wiring to the connection terminals
- Power supply: from the associated equipment (monitor or display)
- Output signal: from 500 to 10,000 Hertz (Hz)
- The electrical signal produced by the strain gauges within the load cell is a frequency signal in Hertz (Hz). This allows the transfer of the signal to the associated equipment without risk of interference.