

Introduction

- This electronic load cell has been designed for measuring the effort applied in lifting systems which have a dead end wire rope.

Application

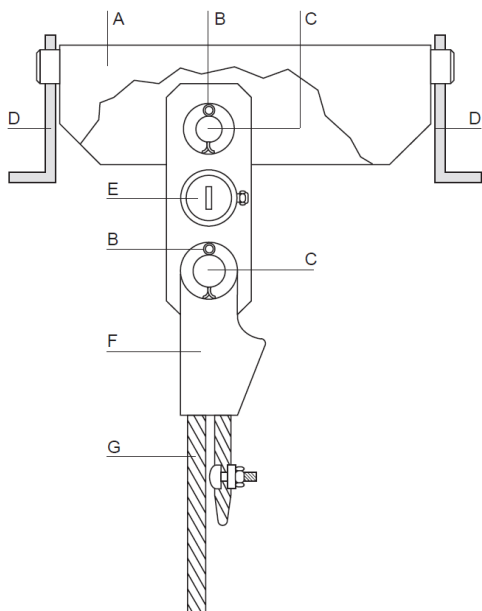
The analogue signal may be used by the user depending on his requirements e.g.:

- For monitoring one or more trip points or thresholds (slack wire rope, intermediate trip points, warning trip points, overload limiting, etc. . .).
- For displaying the load applied.
- This load cell is recommended for installations where a high degree of accuracy is required.
- It also offers the advantage of only adding slightly to the lost headroom.

Operating principle

- The load cell operates by the movement of metal within its elastic limits.
- The strain gauges integrated in the load cell measure the force applied through the wire rope, 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.

Description of the load cell in his environment



| | |
|---|-----------------------|
| A | Suspension bar |
| B | Safety pin |
| C | Anchor pin |
| D | Bracket |
| E | Electronics housing |
| F | Wedge end fitting |
| G | Wire rope |
| H | Self-lubricating bush |

Specification

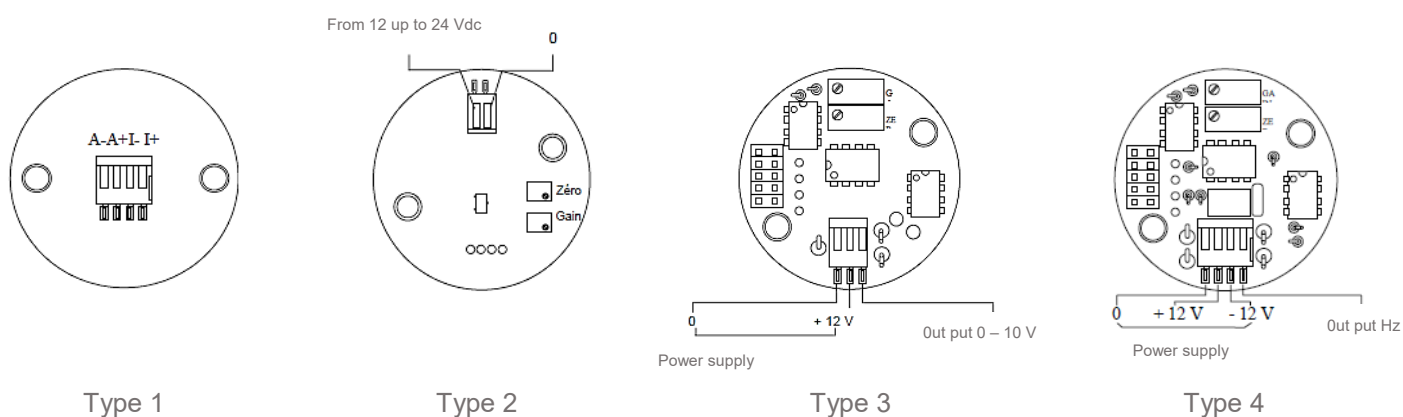
| | |
|----------------------|------------------|
| Capacity | See table page 2 |
| Overload coefficient | 1,5 |
| Safety coefficient | 5 |
| Global error | 0,3 % of FS |
| Sensitivity | 1,5 mV |

| | |
|--------------------------|-----------------------|
| Material | Aluminium 7075 |
| Temperature of use | From -20 up to +80° C |
| Temperature compensation | From -20 up to +60° C |
| Protection rate | IP 65 |
| Certification | 2006/42/EC |

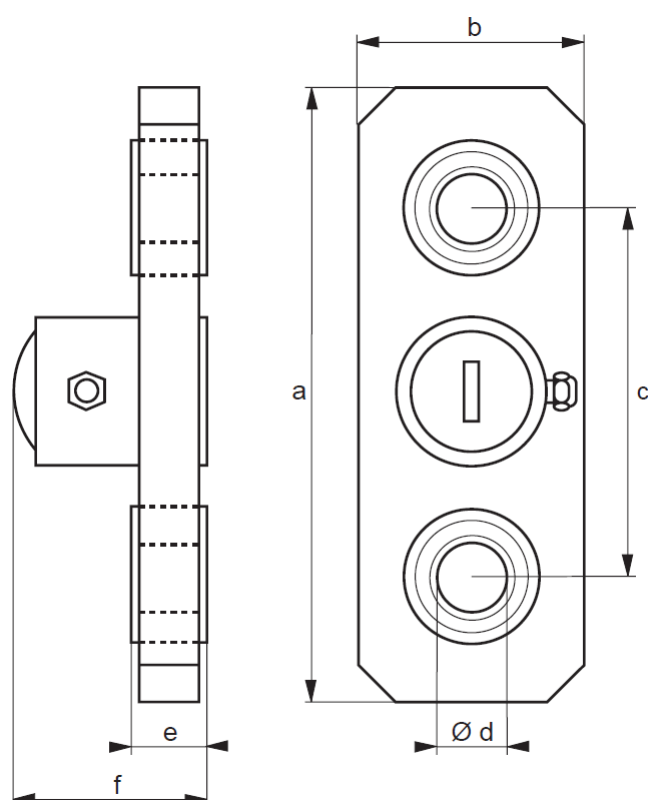
Output signal, associated equipment and wiring

- The output signal is defined according to the associated equipment's.

| Type | Signal | Associated equipment |
|------|-----------|---|
| 1 | mV/V | Dynafor™ Transmitter Module for AL63, and DMU |
| 2 | 4 – 20 mA | Industrial standard |
| 3 | 0 – 10 V | Industrial standard |
| 4 | Hz | HF 80 Monitor |



Dimensions



| model | maximum capacity daN | dimensions (mm) | | | | | |
|--------|----------------------|-----------------|-----|-----|----|----|----|
| | | a | b | c | d | e | f |
| HF10/1 | 1600 | 185 | 62 | 124 | 20 | 16 | 51 |
| HF10/2 | 2500 | 200 | 66 | 130 | 25 | 20 | 55 |
| HF10/3 | 3250 | 200 | 66 | 130 | 25 | 20 | 55 |
| HF10/4 | 5000 | 230 | 86 | 140 | 30 | 22 | 57 |
| HF10/5 | 8000 | 255 | 104 | 150 | 35 | 25 | 60 |
| HF10/6 | 12000 | 300 | 130 | 170 | 40 | 28 | 63 |