Introduction

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

Application

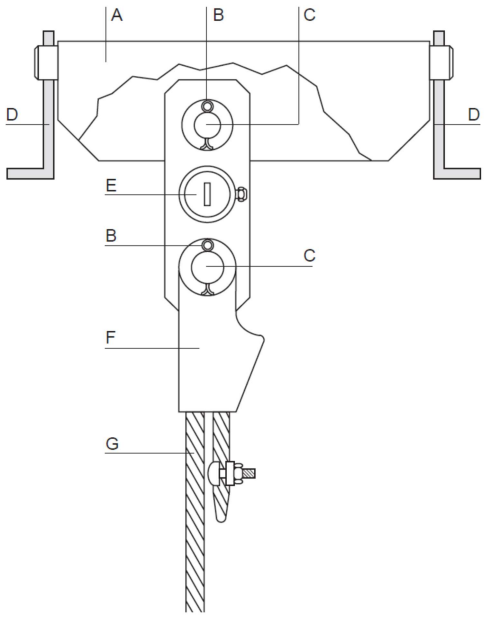
The analogue signal may be used by the user depending on his requirements e.g.:

- 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

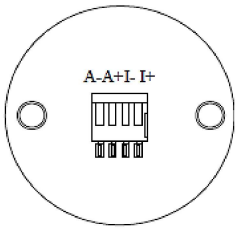
Capacity	See table page 2
Overload coefficient	1,5
Safety coefficient	5
Global error	0,3 % of FS
Sensitivity	1,5 mV

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

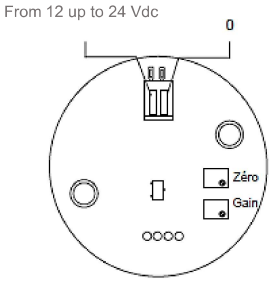
Output signal, associated equipment and wiring

- 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



Type 1



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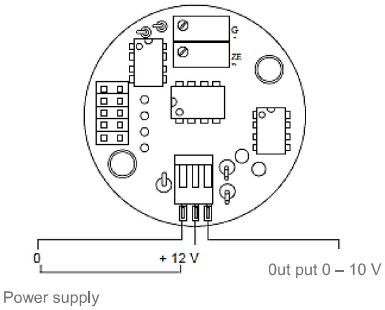

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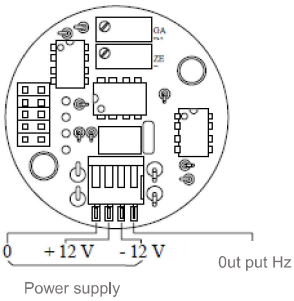
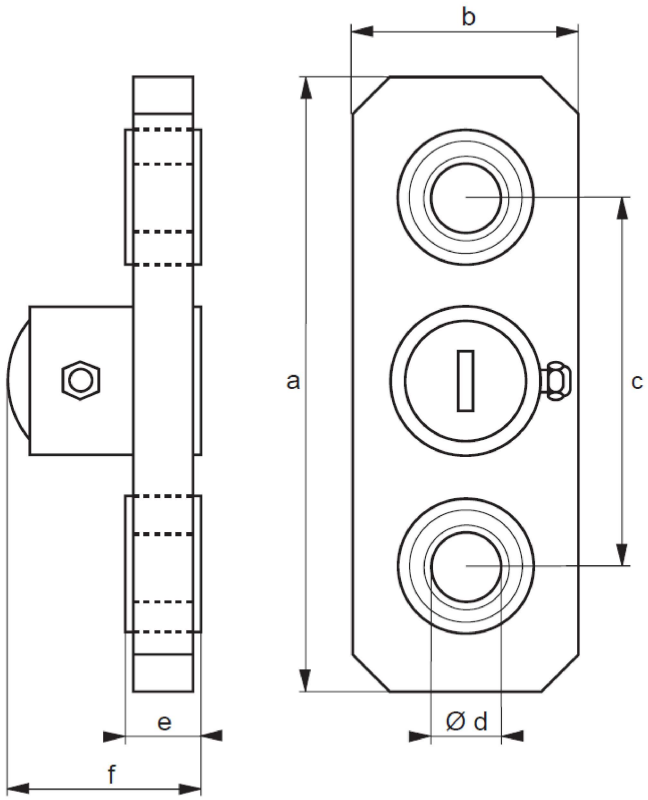


Type 4

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