

This Dynarope HF 36 is an electronic load cell that has been designed to measure the effort applied in a wire rope. The resulting signal is used in a digital remote display (model HF 87/T/LPT) controlled by a microprocessor, which corrects the force information according to the wire rope specification and displays the result of the measurement on a LCD display. Several wire ropes specifications are logged in a data bank.

The standard data bank includes several wire rope dimensions and specifications that are identified by a "Reference Number" which corresponds to a calibration process carried out on a particular sample. Others optional specific calibrations can be added on customer's request.

OPERATING PRINCIPLE

The Dynarope uses strain gauges to measure the movement of the load cell. It gives an electrical signal relative to the load applied. The deviation of the wire rope around the load cell produces forces proportional to the forces transmitted through the wire rope.

The measured strain is assumed to be equal to the strain generated by a suspended load.

The measurement wire rope is deemed to have a minimum length of 26 ft. (8 m), and is assumed to be tensioned between a fixed end and a "flexible" end (e.g. an aerial mast) in order to render negligible the influence of placing the sensor on the cable. Placing the sensor on the wire rope causes a "shorting" of the wire rope by approximately $\frac{1}{16}$ in. (1.5 mm).

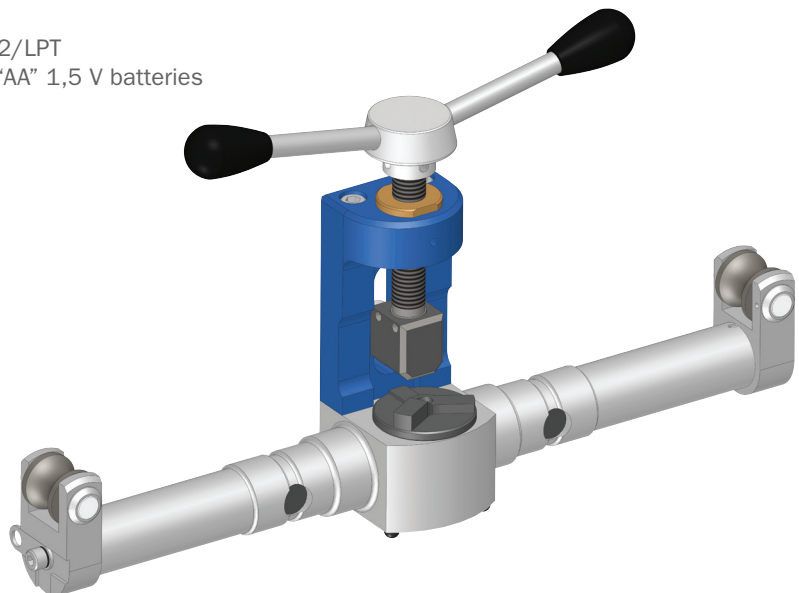


TECHNICAL SPECIFICATIONS

- Capacity from 400 to 40,000 lbs. (200 to 20,000 kg)
- Wire rope sizes from $\frac{3}{16}$ to $1\frac{1}{8}$ in. (5 to 28 mm)
- Accuracy: $\pm 2\%$ of full scale
- Power supply: three "AA" alkaline cells (located in display)
- Autonomy: 200 h
- Operating temperature from -4°F to 140°F (-20°C to 60°C)
- Protection: IP 65 (NEMA 4)
- Weight:
 - Dynarope HF 36/1/LPT: 5.3 lbs. (2.4 kg)
 - Dynarope HF 36/2/LPT: 11.5 lbs. (5.2 kg)
 - HF 87/T/LPT display: 1.3 lbs. (0.6 kg)
- Size and weight of the packaging
 - Dynarope HF 36/1/LPT: 17.7 x 13 x 5.5 in. (450 x 330 x 140 mm), 26.5 lbs. (12 kg)
 - Dynarope HF 36/2/LPT: 26.4 x 20.1 x 10.3 in. (670 x 510 x 262 mm), 24.3 lbs. (11 kg)

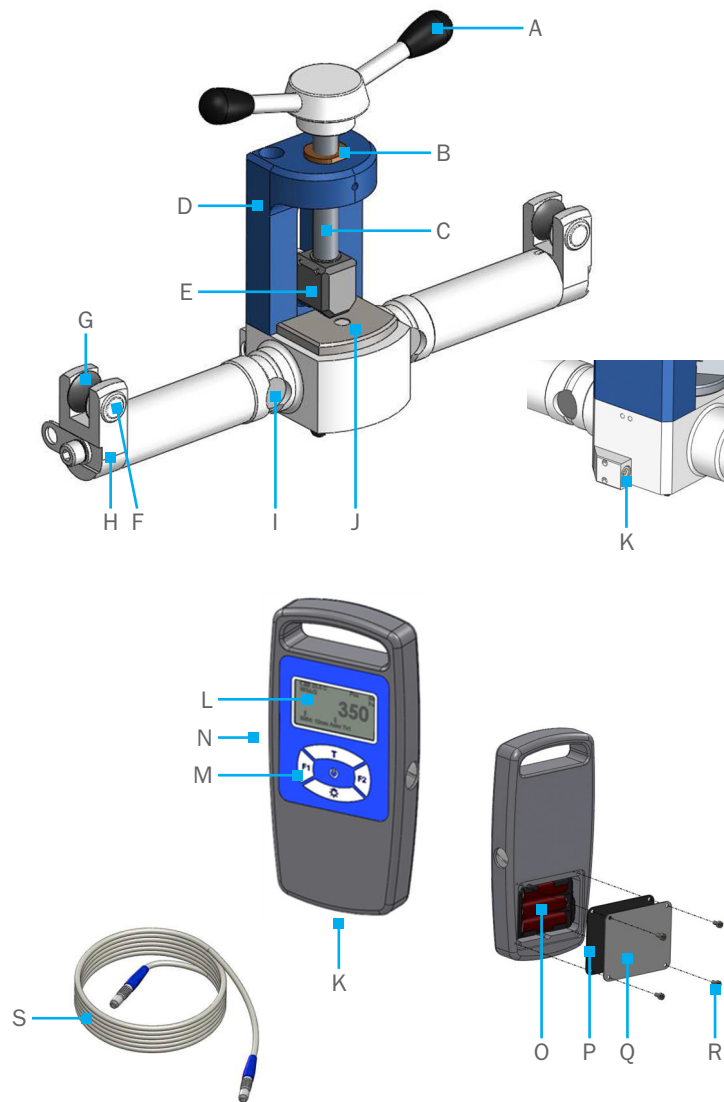
EACH TENSIO METER ORDER IS DELIVERED WITH:

- A Dynarope tensiometer HF 36/1/LPT or HF 36/2/LPT
- A HF 87/T/LPT digital remote display with three "AA" 1,5 V batteries
- A LEMO connection cable with four poles
- A rugged carrying box
- A CE certificate and calibration certificate
- A user manual



DESCRIPTION

A	Crank
B	Bronze nut
C	Tightening Screw
D	Crank support
E	Jaw
F	Axle of the sheave
G	Sheaves
H	Support of the sheave
I	Strain gages
J	Stop block
K	LEMO Plug
L	Display
M	Keyboard
N	USB Plug (option)
O	1.5 V "AA" batteries
P	Gasket
Q	Batteries cover
R	Batteries cover fixing screws
S	LEMO cable



MODEL	WORKING LOAD LIMIT	WIRE ROPE Ø	MINIMUM DISPLAY	INCREMENT	WEIGHT
HF 36/1/LPT	400-10,000 lbs. (200-5,000 kg)	$\frac{3}{16}$ - $\frac{1}{2}$ in. (5-13 mm)	400 lbs. (200 kg)	10 lbs. (5 kg)	5.3 lbs. (2.4 kg)
HF 36/2/LPT	660-40,000 lbs. (300-20,000 kg)	$\frac{3}{8}$ -1½ in. (9-28 mm)	400 lbs. (200 kg)	50 lbs. (25 kg)	11.5 lbs. (5.2 kg)

Specifications are subject to change without notice. Images are for illustrative purposes only.