

## AWLFN2 Rope Tension Load Cell

- ▀ Measurement ranges from 0 ... 500 kg up to 0 ... 10 t per rope
- ▀ Tension
- ▀ Non-linearity 1.0 % RO
- ▀ Output signal approx. 1.0 mV/V
- ▀ Supply voltage 10 VDC, max. 15 VDC

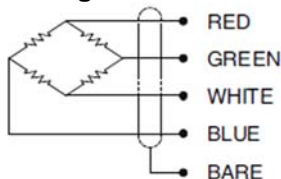


Specially designed for protecting cranes from overload and for measuring the tension of wire ropes. In many industrial applications the tension in wire rope needs to be carefully and continuously monitored. Usually load cells are placed in series with the rope, either at a point along its length or more commonly between the end of the rope and the fixture. The problem is that such a load cell is best suited to new applications where it is designed in at an early stage.

### ▀ Specifications

Rated capacity (RC):	500 kg / 1 t / 1.5 t / 2.5 t / 4 t / 8 t / 10 t
Non-linearity:	≤1.0 % RO
Hysteresis:	≤1.0 % RO
Creep, 20 min:	≤1.0 %
Non-repeatability:	≤1.0 % RO
Rated output (RO):	1.0 mV/V
Zero balance:	≤1 % RO
Temperature effect on rated output:	≤0.05 % load/10 K
Temperature effect on zero balance:	≤0.05 % RO/10 K
Compensated temperature range:	-10 ... +70 °C
Operating temperature range:	-20 ... +80 °C
Supply voltage, recommended:	10 VDC
Supply voltage max.:	15 VDC
Terminal input resistance:	400 Ω ±10 Ω
Terminal output resistance:	350 Ω ±5 Ω
Insulation resistance, min.:	2000 MΩ at 50 VDC
Safe overload:	200 % RC
Ultimate overload:	400 % RC
Environmental sealing:	Meets IP64
Electrical connection:	Ø 7 mm x 6 m (22AWG x 4-core, shielded)

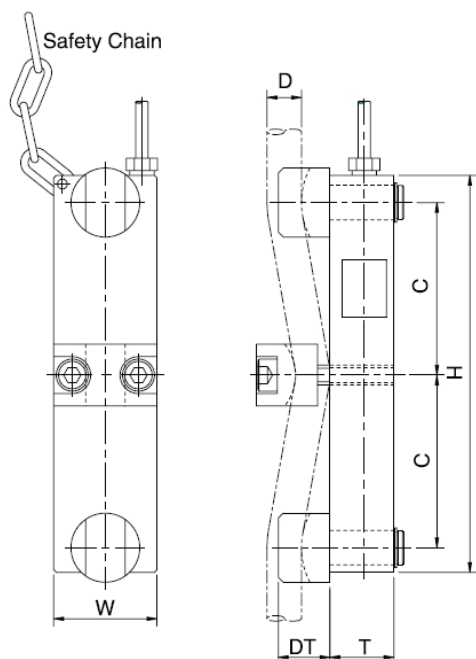
### ▀ Wiring Information



#### Wiring

red	+ supply voltage
green	+ output signal
white	- supply voltage
blue	- output signal
bare	screen

## ■ Dimensions



Dimensions in „mm“, approx. values

These drawings are for information only and not intended for construction purpose.  
Please contact us for detailed drawings!

Rated capacity*	C	DT	H	T	W	Ø D (rope)	Weight
0.5 t, 1 t	60	15.5	145	20	34	Ø 6 ... 8	1.6 kg
1.5 t	70	21	167	22	42	Ø 10 ... 14	2.1 kg
2.5 t	75	27	180	22	48	Ø 14 ... 20	2.6 kg
4 t	90	35	215	25	62	Ø 18 ... 28	3.7 kg
8 t, 10 t	100	45	250	35	80	Ø 25 ... 35.5	7.0 kg

\*max. load per rope

## ■ Ordering Information

AWLFN2-xx	Rated capacity xx per rope:	
	500 = 500 kg	4T = 4 t
	1T = 1 t	8T = 8 t
	1.5T = 1.5 t	10T = 10 t
	2.5T = 2.5 t	

### Safety note:

It is essential to provide additional safety precautions like safety chains etc. for catching the load in a breakage, which cannot be excluded completely.

Due to continual product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.