



**N ALF 325**



**Description**

- Measurement ranges 0 ... 50 N to 0 ... 500 N
- Compression
- Non-linearity 0.03 % RL
- Output signal 1.2 mV/V or rationalised 1.0 mV/V ±0.1 %
- Supply voltage 10 VDC

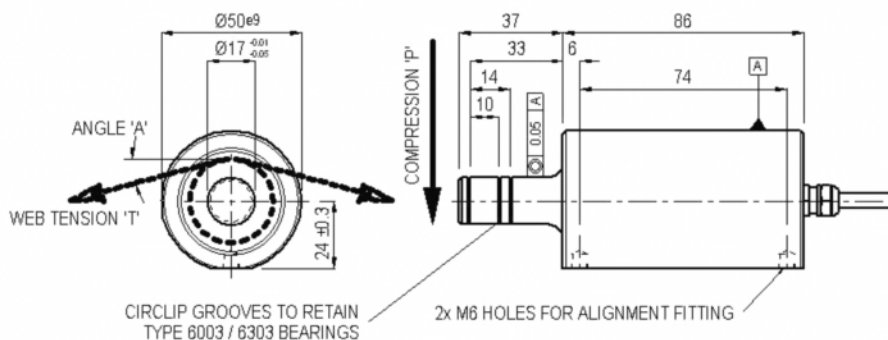
The ALF325 is a high precision web tension load cell designed and built to meet the needs of machine designers, installation fitters and end users by the incorporation of alignment features with maximum flexibility. The high performance of this load cell is not compromised by the relatively large errors that can be produced by imprecise installation.

**Features**

- Overload stop
- Precision alignment tool facility
- Standard bearing mounting
- Optional mounting flange

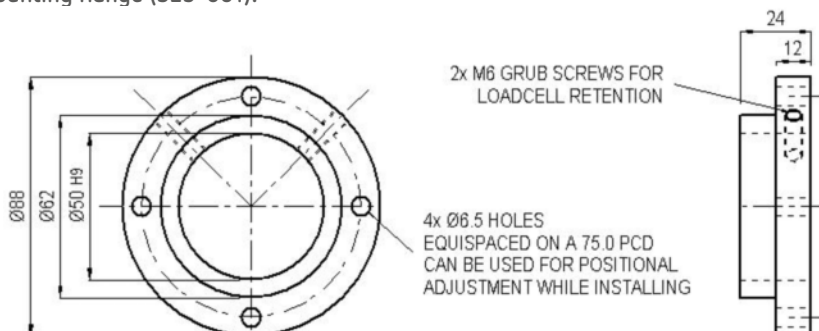
**Dimensions**

Load cell:



$$T = \frac{P}{2 \sin A}$$

Mounting flange (325-601):



Dimensions in „mm“, approx. values

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

## Specifications

Rated load:	50 N / 100 N / 200 N / 500 N
Non-linearity, terminal:	±0.03 % RL
Hysteresis:	±0.03 % RL
Creep, 20 min:	±0.05 % AL
Repeatability:	±0.01 % RL
Rated output, nominal:	1.2 mV/V
Rated output, rationalised:	1.0 mV/V ±0.1 % RL
Zero load output:	±4 % RL
Temperature effect on rated output:	±0.005 % AL/K
Temperature effect on zero load output:	±0.01 % RL/K
Compensated temperature range:	-10 ... +50 °C
Operating temperature range:	-10 ... +80 °C
Supply voltage, recommended:	10 V
Supply voltage, max.:	10 V
Bridge resistance:	350 Ω
Insulation resistance, minimum at 50 VDC:	500 MΩ
Overload, safe:	150 % RL
Overload, ultimate:	300 % RL
Dynamic load capacity:	70 % RL
Weight (excl. cable):	approx. 380 g
Material	Aluminium

Rated load	Structural stiffness, nom.	Rated load	Structural stiffness, nom.
50 N	8.3 x 10 <sup>5</sup> N/m	200 N	1.5 x 10 <sup>6</sup> N/m
100 N	1.1 x 10 <sup>6</sup> N/m	500 N	2.0 x 10 <sup>6</sup> N/m

### Notes:

1. RL = rated load
2. AL = applied load
3. Temperature coefficients apply over the compensated range.

## Electrical Connections

The load cell is fitted with 2 m of PVC insulated 4 core screened cable type 7-2-4C.

The screen is not connected to the load cell body.

### Wiring:

red	+ supply voltage
blue	- supply voltage
yellow	+ output signal:
green	- output signal:
orange	screen

## Ordering Codes

ALF325CF00H0      Compression

Please add range in the required units.

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