

N ALF 304



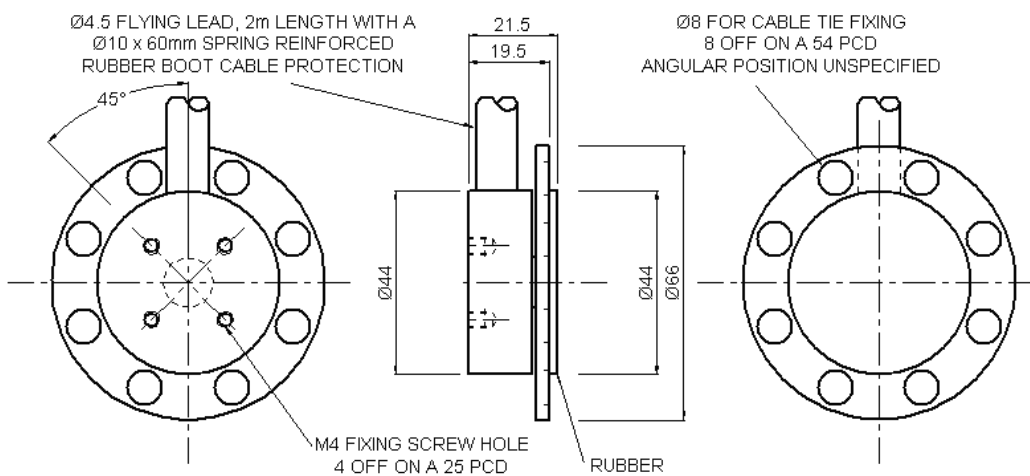
Description

- Measurement range 0 ... 2500 N
- Compression
- Non-linearity 0.05 % RL
- Output signal rationalised 2.0 mV/V ± 0.1 %
- Supply voltage 10 VDC, max. 20 VDC

The ALF304 is a compact, low profile load cell for measuring brake pedal application forces. The load cell is robust in construction with a maximum force range of 2500 N (250 kg). Its multi-hole fixing allows simple attachment to any shape pedal using screws or cable ties. The low profile stainless steel design maintains the brake pedals ergonomic geometry.

If you require other force ranges the ALF322 or ALF323 may be suitable.

Dimensions



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:	2500 N
Calibration:	Compression
Non-linearity, terminal:	±0.05 % RL
Hysteresis:	±0.05 % RL
Creep, 20 min:	±0.05 % AL
Repeatability:	±0.02 % RL
Rated output, rationalised:	2.0 mV/V ±0.1 % RL
Zero load output:	±4 % RL
Temperature effect on rated output:	±0.002 % AL/K
Temperature effect on zero load output:	±0.005 % RL/K
Compensated temperature range:	-10 ... +50 °C
Operating temperature range:	-10 ... +80 °C
Supply voltage, recommended:	10 V
Supply voltage, max.:	20 V
Bridge resistance:	700 Ω
Insulation resistance, minimum at 50 VDC:	500 MΩ
Inclined load error – concentric at 3°:	±0.25 % RL
Structural stiffness:	3.9 x 10 ⁷ N/m
Overload, safe:	150 % RL
Overload, ultimate:	300 % RL
Dynamic load capacity:	70 % RL
Sideload, safe:	100 % RL
Environmental sealing:	IP65
Weight (excl. cable):	approx. 210 g
Material:	Stainless steel

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 flexible polyurethane jacketed 4 core screened cable.

The screen is not connected to the load cell body.

Wiring:

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

Ordering Codes

ALF304CFR0KN-2500N | Compression, IP65, rationalised, rated load 2.5 kN

If a non-standard cable length is required add this to the description and change the F to B. If bottom cable entry is required add this information to the description. 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.