



**N ALF 322**



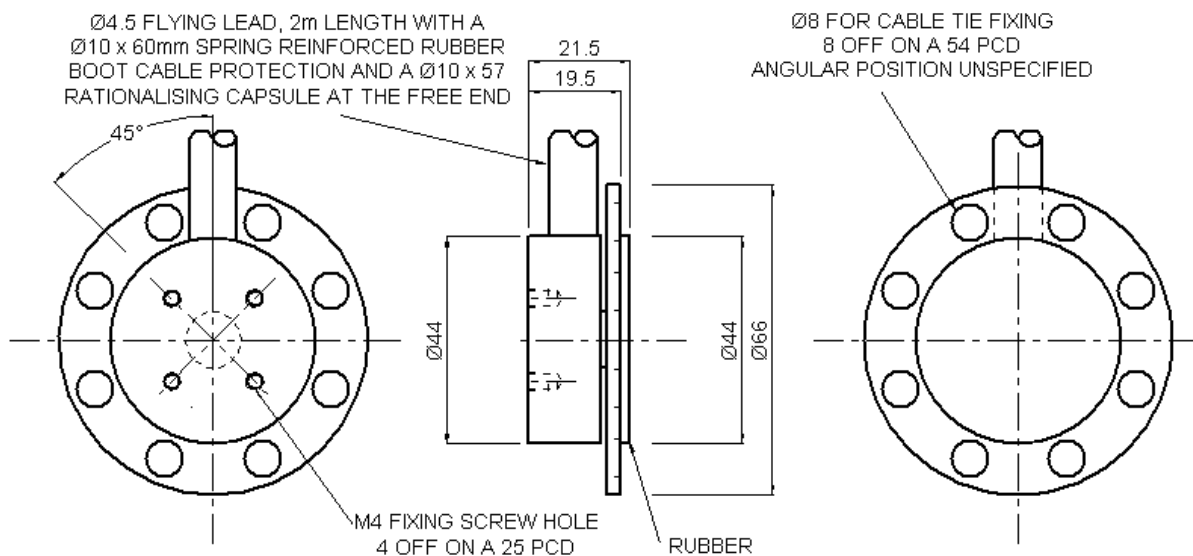
**Description**

- Measurement range 0 ... 250 N
- Compression
- Non-linearity 0.05 % RL
- Output signal rationalised 1.0 mV/V ±0.1 %
- Supply voltage 10 VDC, max. 20 VDC

The ALF322 is a compact, low profile load cell for measuring accelerator pedal application forces. The load cell is robust in construction with a maximum force range of 250 N. Its multi-hole fixing allows simple attachment to any shape pedal using screws or cable ties. The low profile design maintains the accelerator pedals ergonomic geometry. Low mass aluminium alloy construction reduces the mass influence upon the accelerator pedal in dynamic testing.

If you require other force ranges the ALF304 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:	250 N
Non-linearity, terminal:	±0.05 % RL
Hysteresis:	±0.05 % RL
Creep, 20 min:	±0.05 % AL
Repeatability:	±0.02 % RL
Rated output, rationalised:	1.0 mV/V ±0.1 % RL
Zero load output:	±10 % RL
Temperature effect on rated output:	±0.004 % 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.:	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:	8 x 10 <sup>6</sup> 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. 80 g
Material:	Aluminium alloy

### Notes:

1. RL = rated load
2. AL = applied load
3. Temperature coefficients apply over the compensated range.
4. When this load cell is rationalised the resistors are housed in a capsule located in the load cell cable 100 mm from the free end. Capsule dimensions are Ø10 mm by 57 mm.

## 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

ALF322CFROKN-250N	Compression, IP65, rationalised, rated load 250 N
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Due to continuous product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.