



**N** ALF 323

**Description**

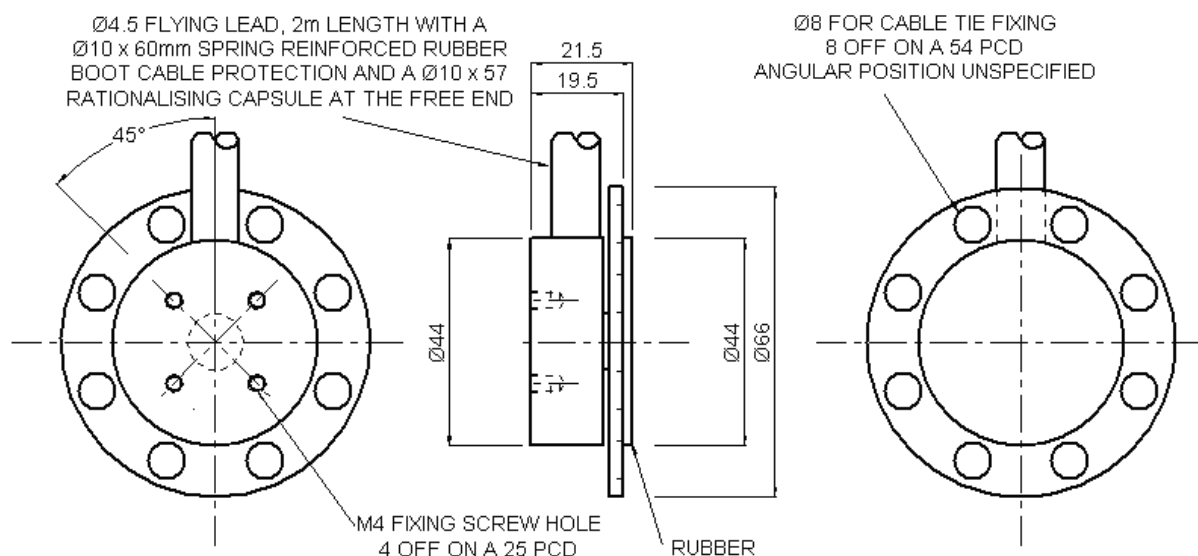
- Measurement range 0 ... 1 kN
- Compression
- Non-linearity 0.05 % RL
- Output signal rationalised 2.0 mV/V ±0.1 %
- Supply voltage 10 VDC, max. 20 VDC



The ALF323 is a compact, high accuracy low profile load cell for measuring clutch pedal application forces. The load cell is robust in construction with a maximum force range of 1 kN. Its multi-hole fixing allows simple attachment to any shape pedal using screws or cable ties. The low profile design maintains the clutch pedals ergonomic geometry. Low mass aluminium alloy construction reduces the mass influence upon the clutch pedal in dynamic testing.

If you require other force ranges the ALF304 or ALF322 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:	1 kN
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:	±10 % 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:	1.5 x 10 <sup>7</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.

## 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

ALF323CFROKN-1000N	Compression, IP65, rationalised, rated load 1 kN
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Due to continuous product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.