

## F304 Brake Pedal Force Loadcell

### Standard Range 2.5kN (250kgf)

- ✓ Off centre loading compensation
- ✓ Simple cable tie or screw fixing
- ✓ Anti-slip rubber pad
- ✓ Removable loading plate
- ✓ Output rationalised to 2mV/V
- ✓ Traceable calibration with certificate included in the standard price



### Specification

Parameter	Value	Unit
Non-linearity - Terminal	$\hat{A}\pm 0.05$	% RL
Hysteresis	$\hat{A}\pm 0.05$	% RL
Creep - 20 minutes	$\hat{A}\pm 0.05$	% AL
Repeatability	$\hat{A}\pm 0.02$	% RL
Rated output - Rationalised	2.0	mV/V
Rationalisation tolerance	$\hat{A}\pm 0.1$	% RL
Zero load output	$\hat{A}\pm 4$	% RL
Temperature effect on rated output per $\hat{A}^{\circ}\text{C}$	$\hat{A}\pm 0.005$	% AL
Temperature effect on zero load output per $\hat{A}^{\circ}\text{C}$	$\hat{A}\pm 0.005$	% RL
Temperature range - Compensated	-10 to +50	$\hat{A}^{\circ}\text{C}$
Temperature range - Safe	-10 to +80	$\hat{A}^{\circ}\text{C}$
Excitation voltage - Recommended	10	V
Excitation voltage - Maximum	20	V
Bridge resistance	700	$\hat{A}\Omega$
Insulation resistance - Minimum at 50Vdc	500	M $\hat{A}\Omega$

Inclined load error - concentric at 3°	±0.25	% RL
Structural stiffness	3.9 x 10 <sup>7</sup>	N/m
Overload - Safe	50	% RL
Overload - Ultimate	200	% RL
Sideload - Safe	100	% RL
Sealing	IP65	
Weight - Nominal (excluding cable)	210	g
The standard range is manufactured in stainless steel.		

## The F304 is a compact, low profile loadcell for measuring brake pedal application forces.

The loadcell is robust in construction with a maximum force range of 2500N (250kgf). 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. Additional information can be found in Engineering Sheet E030. If you require other force ranges the F322 or F323 may be suitable. We are happy to design variants of this loadcell to meet your specific requirements. Versions can be manufactured for fully compensated operation up to +250°C. Please consult our engineering department.

### Order Codes

Code	Description
F304CFR0KN	Compression, IP65, rationalised

### Notes

- AL = Applied load.
- RL = Rated load.
- Temperature coefficients apply over the compensated range.

### Connections

The loadcell is fitted with 2 metres of flexible polyurethane jacketed 4 core screened cable.

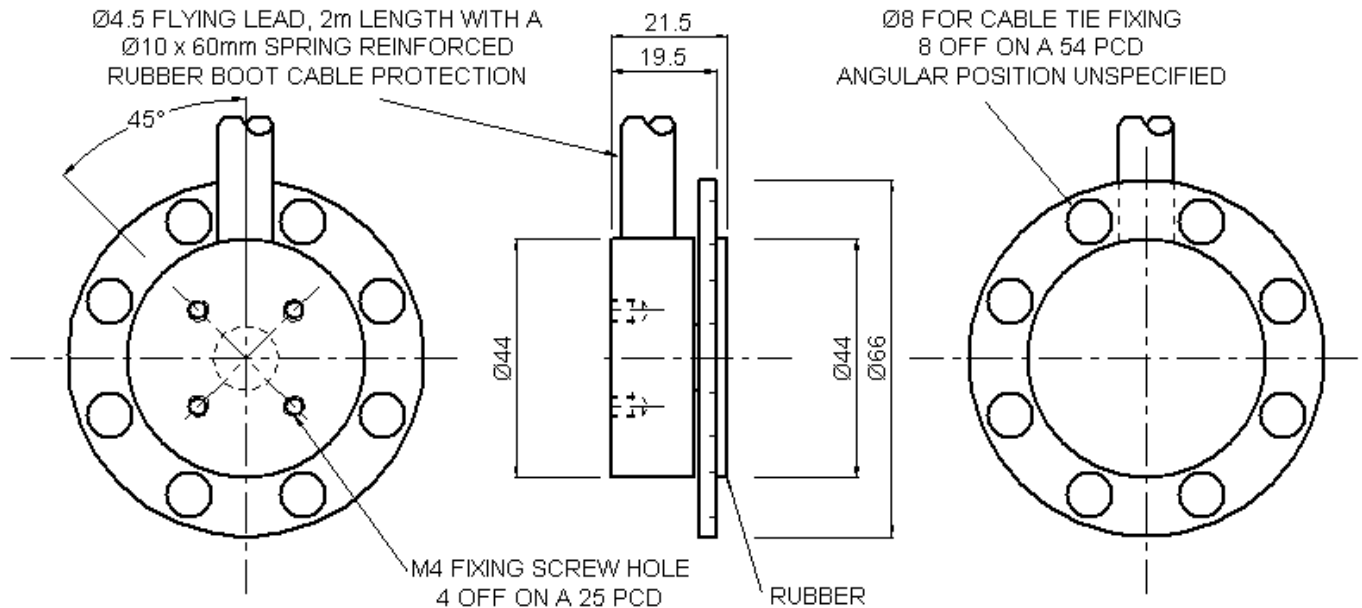
Excitation + = Red, Excitation - = Blue, Signal + = Yellow, Signal - = Green, Screen = Orange.

The screen is not connected to the loadcell body.

## Files

Type	Title	Download
STEP File	F304CFR0KN 2.5kN (250kgf)	<a href="#">Download</a>

## Outline



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