

F322 Accelerator Pedal Force Loadcell

Standard Range 250N (25kgf)

- ✓ Off centre loading compensation
- ✓ Simple cable tie or screw fixing
- ✓ Anti-slip rubber pad
- ✓ Removable loading plate
- ✓ Output rationalised to 1mV/V
- ✓ Lightweight aluminium alloy construction
- ✓ Traceable calibration with certificate included in the standard price



Specification

Parameter	Value	Unit
Non-linearity - Terminal	±0.05	% RL
Hysteresis	±0.05	% RL
Creep - 20 minutes	±0.05	% AL
Repeatability	±0.02	% RL
Rated output - Rationalised	1.0	mV/V
Rationalisation tolerance	±0.1	% RL
Zero load output	±10	% RL
Temperature effect on rated output per $\hat{A}^{\circ}\text{C}$	±0.005	% AL
Temperature effect on zero load output per $\hat{A}^{\circ}\text{C}$	±0.01	% RL
Temperature range - Compensated	-10 to +50	$^{\circ}\text{C}$
Temperature range - Safe	-10 to +80	$^{\circ}\text{C}$
Excitation voltage - Recommended	10	V
Excitation voltage - Maximum	20	V
Bridge resistance	700	$\hat{\Omega}$
Insulation resistance - Minimum at	500	M $\hat{\Omega}$

50Vdc		
Inclined load error - concentric at 3°	±0.25	% RL
Structural stiffness	8 x 106	N/m
Overload - Safe	50	% RL
Overload - Ultimate	200	% RL
Sideload - Safe	100	% RL
Sealing	IP65	
Weight - Nominal (excluding cable)	80	g
The standard range is manufactured in aluminium.		

The F322 is a compact, low profile loadcell for measuring accelerator pedal application forces.

The loadcell is robust in construction with a maximum force range of 250N (25kgf). 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 F304 or F323 may be suitable. We are happy to design variants of this loadcell to meet your specific requirements.

Order Codes

Code	Description
F322CFR0KN	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.

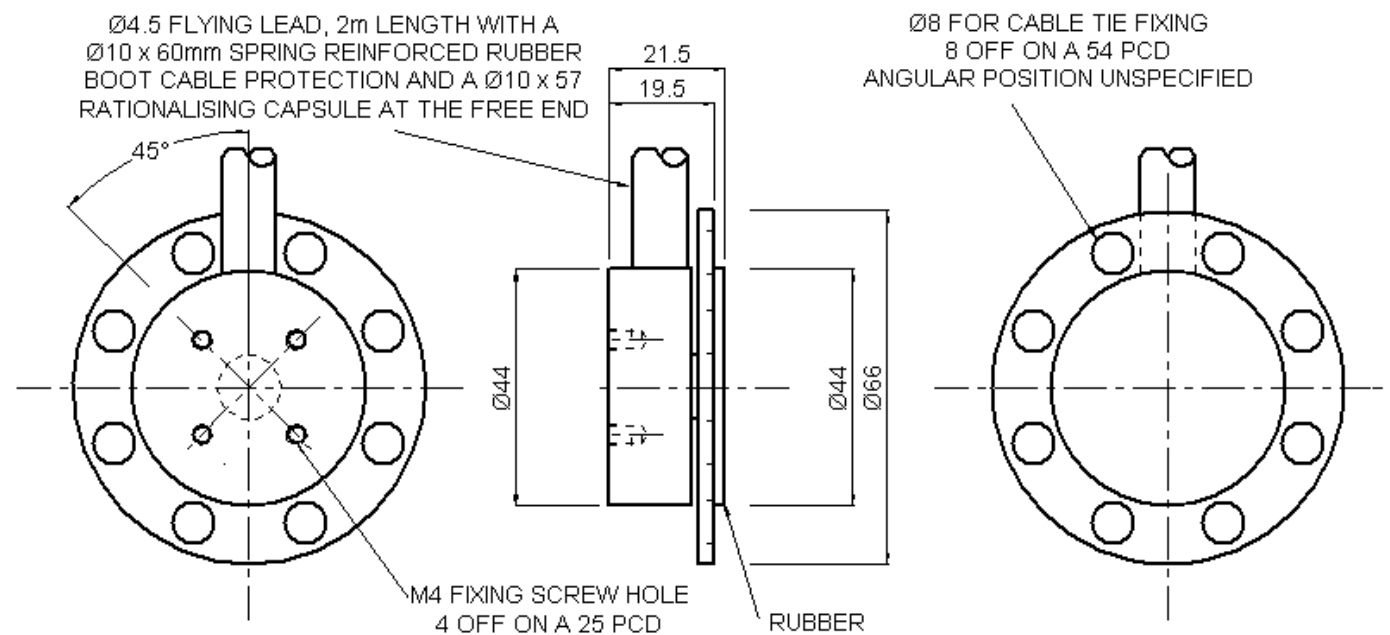
The screen is not connected to the loadcell body.

When this loadcell is rationalised the resistors are housed in a capsule located in the loadcell cable 100mm from the free end. Capsule dimensions are $\text{\O}10\text{mm}$ by 57mm.

Files

Type	Title	Download
STEP File	F322UFR0K0 250N (25kgf)	Download

Outline



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