

F225 High Load Ultra Low Profile Loadcell

Standard Ranges 50 and 100kN (5 and 10tonnef)

- ✓ Ultra low profile
- ✓ Fail-safe failure mode
- ✓ Hardened stainless steel
- ✓ IP67 sealing option
- ✓ Traceable calibration with certificate included in the standard price
- ✓ Standard 1 year warranty



Specification

Parameter	Value	Unit
Non-linearity - Terminal	±0.5	% RL
Hysteresis	±0.5	% RL
Creep - 20 minutes	±0.05	% AL
Repeatability	±0.02	% RL
Rated output - Nominal	2.3	mV/V
Rated output - Rationalised	2.0	mV/V
Rationalisation tolerance	±0.5	% RL
Zero load output	±4	% RL
Temperature effect on rated output per $\hat{A}^{\circ}\text{C}$	±0.005	% AL
Temperature effect on zero load output per $\hat{A}^{\circ}\text{C}$	±0.005	% 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	10	V

Bridge resistance	350	Ω
Insulation resistance - Minimum at 50Vdc	500	MΩ
Overload - Safe	50	% RL
Overload - Ultimate	300	% RL
Sealing - R option	IP65	
Sealing - S option	IP67	
Weight - Nominal (excluding cable)	0.8	kg

Geometry: Ultra low profile axial loadcell for use in force measurements in compression.

The ultra slim design provides for ease of installation beneath heavy machinery mounts, hydraulic rams or interposed within series mechanical compression assemblies. In the event of structural failure of the loadcell the resulting vertical movement of the supported load including normal deflection will not exceed 2.5mm. We are happy to design variants of this loadcell to meet your specific requirements. Please consult our engineering department.

Order Codes

Code	Description
F225CFR0H0	Compression, IP65, unrationalised
F225CFR0HN	Compression, IP65, rationalised
Change the R to an S for IP67 sealing.	

Structural Stiffness - Nominal

Range (kN)	Stiffness (N/m)
50	2.1 x 10 ¹⁰
100	4.2 x 10 ¹⁰

Notes

- AL = Applied load.
- RL = Rated load.
- Temperature coefficients apply over the compensated range.
- The load must be applied directly through the central loading axis.

Connections

The loadcell is fitted with 2 metres of PVC insulated 4 core screened cable type 7-2-4C.

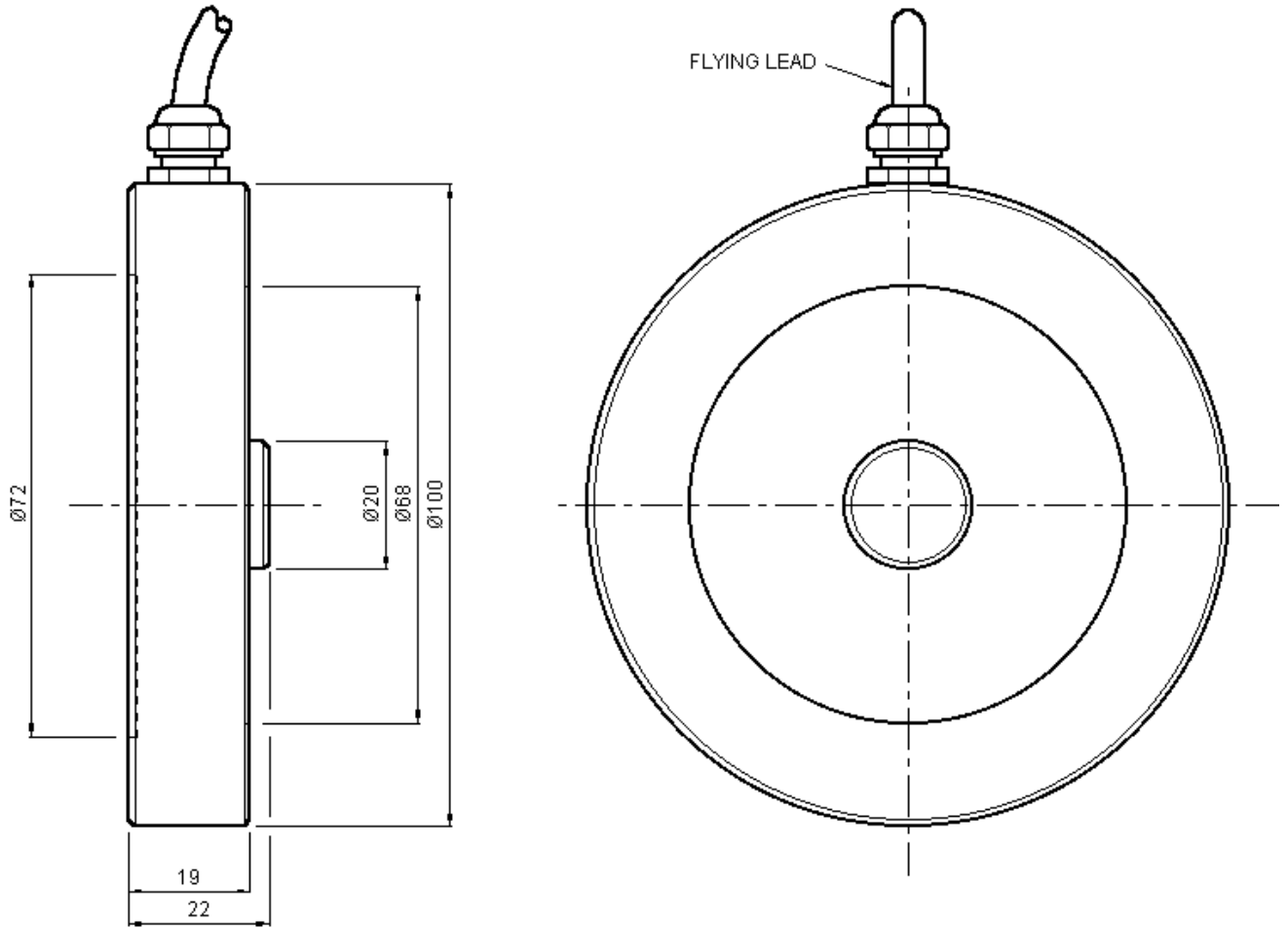
Excitation + = Red, Excitation - = Blue, Signal + = Yellow, Signal - = Green, Screen = Orange.

The screen is not connected to the loadcell body.

Files

Type	Title	Download
STEP File	F225CFR0K0 All standard ranges	Download

Outline



Novatech Measurements Limited

83 Castleham Road, St Leonards on Sea, East Sussex, TN38 9NT, England.

Telephone: +44 (0)1424 852744

Fax: +44 (0)1424 853002

E-mail: info@novatechloadcells.co.uk