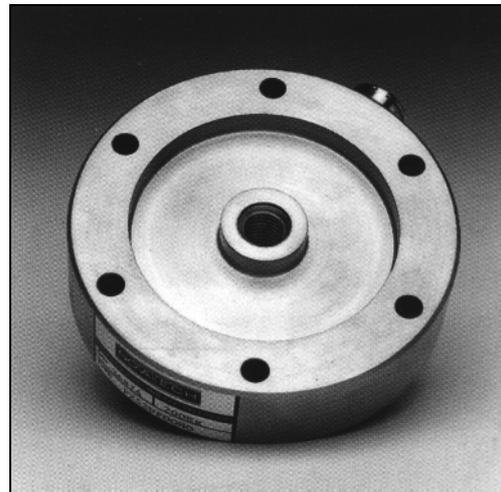


F252

Pancake Loadcell

Standard Ranges 1, 2, 4, 8 and 10kN (100kgf to 1tonnef)

- ◆ Tension / compression / bi-directional calibration
- ◆ Compact size
- ◆ Low deflection
- ◆ Hardened stainless steel body
- ◆ Traceable calibration with certificate included in the standard price
- ◆ Standard 2 year warranty



Geometry: Low profile axial loadcell for use in force measurements in tension and compression.

With bi-directional versions there is a small difference between the output signal for compression and tension. All standard bi-directional loadcells are calibrated in both modes and the output for each direction is stated on the test / calibration certificate.

The F252 is ideal for engineering force measurements particularly in applications where there is a limit on the height of the loadcell. It can be used for test machines and a wide range of general industrial applications.

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.

Details of our other loadcell families can be found in the Product List and the Loadcell Specifier Guide. If you require copies please contact our sales department or look on our web site at www.novatechloadcells.co.uk.

Ordering Codes:		See the loadcell ordering code sheet for more details. Add range in the required units.	
F252CF00K0	Compression, unrationalised	F252CF00KN	Compression, rationalised
F252TF00K0	Tension, unrationalised	F252TF00KN	Tension, rationalised
F252UF00K0	Bi-directional, unrationalised	F252UF00KN	Bi-directional, rationalised

F252 Specification

Parameter	Value	Unit
Non-linearity - Terminal	±0.1	% RL
Hysteresis	±0.1	% RL
Creep - 20 minutes	±0.05	% AL
Repeatability	±0.02	% RL
Rated output - Nominal	1.6	mV/V
Rated output - Rationalised	1.5	mV/V
Rationalisation tolerance (applies to single direction calibrations)	±0.5	% RL
Zero load output	±4	% RL
Temperature effect on rated output per °C	±0.005	% AL
Temperature effect on zero load output per °C	±0.02	% RL
Temperature range - Compensated	-10 to +50	°C
Temperature range - Safe	-10 to +80	°C
Excitation voltage - Recommended	10	V
Excitation voltage - Maximum	20	V
Bridge resistance	700	Ω
Insulation resistance - Minimum at 50Vdc	500	MΩ
Overload - Safe	50	% RL
Overload - Ultimate	100	% RL
Weight - Nominal (excluding cable)	840 to 940	g

All standard ranges are manufactured in stainless steel.

Structural stiffness - Nominal					
Range (kN)	Stiffness (N/m)	Range (kN)	Stiffness (N/m)	Range (kN)	Stiffness (N/m)
1	3.0×10^6	4	1.2×10^7	10	3.0×10^7
2	6.0×10^6	8	2.4×10^7		

Notes

1. AL = Applied load.
2. RL = Rated load.
3. Temperature coefficients apply over the compensated range.
4. 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

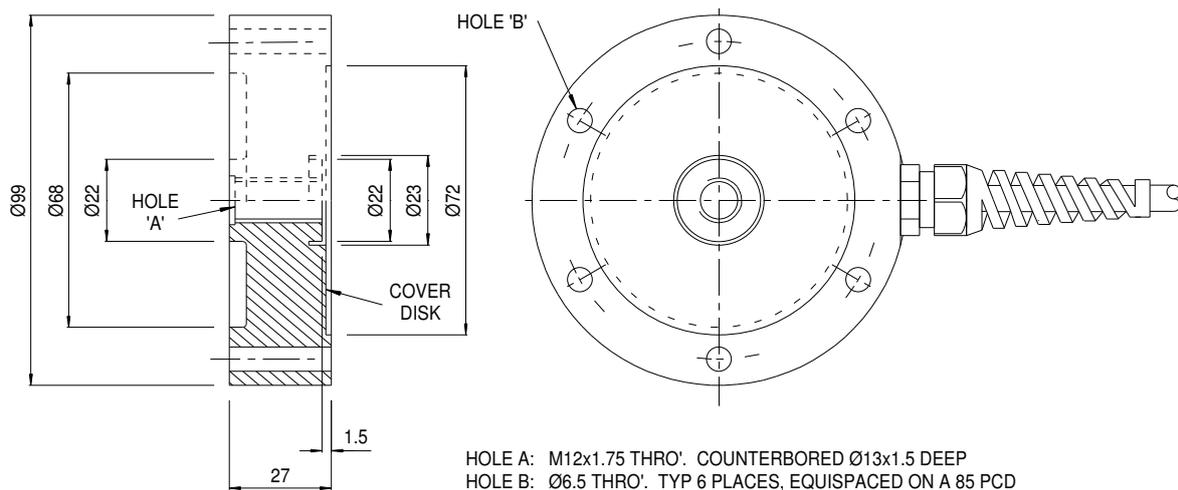
Signal + = Yellow

Screen = Orange

Excitation - = Blue

Signal - = Green

Reverse the signal connections to obtain a positive signal in tension mode. The screen is not connected to the loadcell body.



NOVATECH MEASUREMENTS LTD

*** Manufacturing loadcells since 1972 ***

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