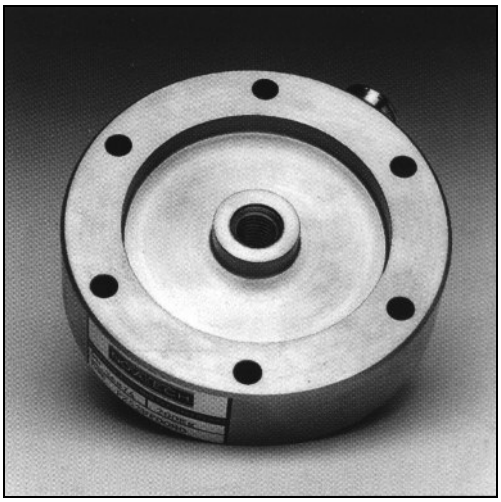
F252

Pancake Loadcell

Standard Ranges 100, 200, 400, 800 and 1000kg (1 to 10kN)

- **Tension / compression / bi-directional calibration**
- **Compact size**
- **Low deflection**
- **Hardened stainless steel body**
- **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 Loadcell Specifier Guide. If you require a copy 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	±0.5	% RL
Zero load output	±4	% RL
Temperature effect on rated output per ºC	±0.005	% AL
Temperature effect on zero load output per ºC	±0.02	% RL
Temperature range - Compensated	-10 to +50	ºC
Temperature range - Safe	-10 to +80	ºC
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.

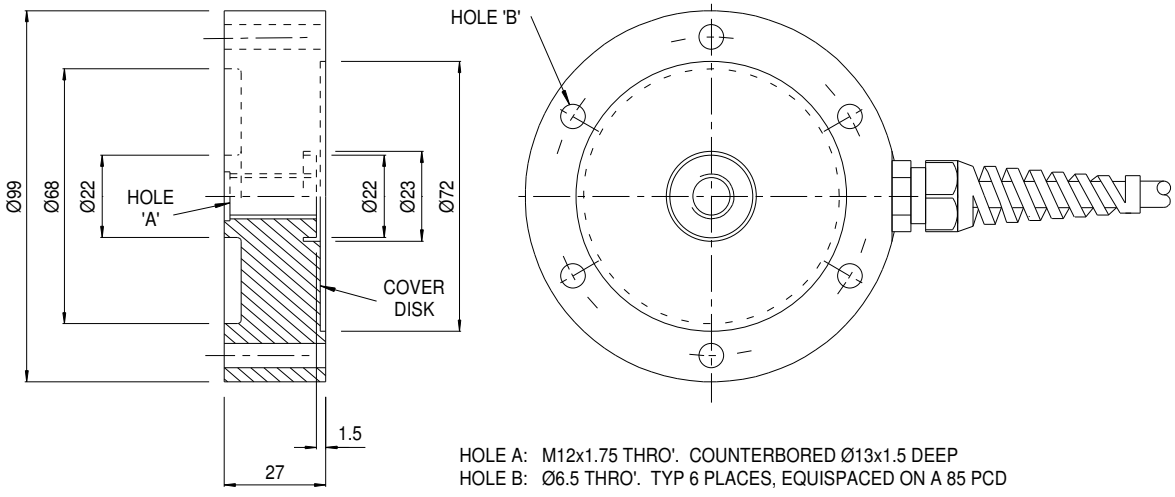
Connections

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.



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