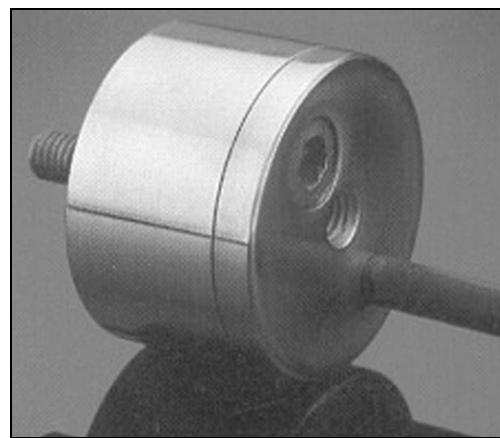


F245

Axial Compensated Loadcell

Standard Ranges 100, 200, 400 and 800N (10 to 80kgf)

- ◆ High accuracy
- ◆ Compact axial geometry
- ◆ Misalignment error compensation
- ◆ Standard 2 year warranty
- ◆ Low deflection at full load
- ◆ Traceable calibration with certificate included in the standard price



Geometry: Flexure strain assembly in cylindrical housing, open or weather sealed with end internal fixing. For universal use in tension and compression, with compensation for off axis load inputs.

The F245 is ideally suited to low range engineering force measurements and process weighing. When precision and easy installation are required various configurations allow the loadcell to be used in both tensile and compressive applications.

We are happy to design variants of this loadcell to meet your specific requirements. Versions can be manufactured for higher temperature operation. 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. | |
| F245CF00H0 | Compression, unrationalised | F245CF00HN | Compression, rationalised |
| F245TF00H0 | Tension, unrationalised | F245TF00HN | Tension, rationalised |
| F245UF00H0 | Bi-directional, unrationalised | F245UF00HN | Bi-directional, rationalised |
| Change the first 0 to an R for the IP65 version. | | | |

F245 Specification

| Parameter | Value | Unit |
|--|------------|------|
| Non-linearity - Terminal | ±0.1 | % RL |
| Hysteresis | ±0.1 | % RL |
| Creep - 20 minutes | ±0.1 | % AL |
| Repeatability | ±0.02 | % RL |
| Rated output - Nominal | 2.2 | mV/V |
| Rated output - Rationalised | 2.0 | mV/V |
| Rationalisation tolerance (applies to single direction calibrations) | ±0.1 | % RL |
| Zero load output | ±4 | % RL |
| Temperature effect on rated output per °C | ±0.002 | % AL |
| Temperature effect on zero load output per °C | ±0.005 | % RL |
| Temperature range - Compensated | -10 to +50 | °C |
| Temperature range - Safe | -10 to +80 | °C |
| Excitation voltage - Recommended | 10 | V |
| Excitation voltage - Maximum | 10 | V |
| Bridge resistance | 350 | Ω |
| Insulation resistance - Minimum at 50Vdc | 500 | MΩ |
| Overload - Safe | 20 | % RL |
| Overload - Ultimate | 100 | % RL |
| Weight - Nominal (excluding cable) | 40 to 50 | g |

Standard ranges up to 200N have an aluminium body and stainless steel case. Ranges above 200N have stainless steel bodies and cases.

| Structural stiffness - Nominal | | | | | |
|--------------------------------|-------------------|-----------|-------------------|-----------|-----------------|
| Range (N) | Stiffness (N/m) | Range (N) | Stiffness (N/m) | Range (N) | Stiffness (N/m) |
| 100 | 3.2×10^6 | 400 | 3.0×10^6 | | |
| 200 | 6.4×10^6 | 800 | 6.0×10^6 | | |

Notes

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

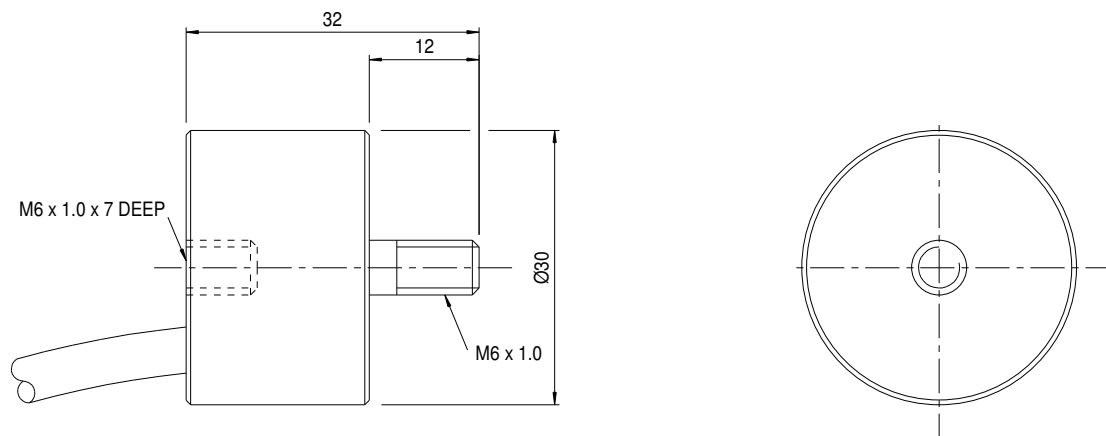
Connections

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 reserves the right to vary the foregoing details without prior notice

01/2013

NOVATECH MEASUREMENTS LTD

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