

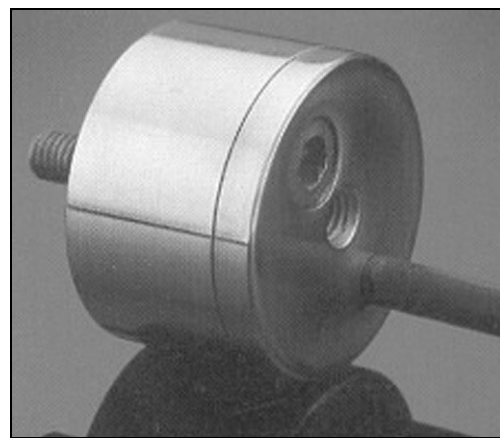


# F245

## Axial Compensated Loadcell

Standard Ranges 10, 20, 40 and 80kg (100 to 800N)

- ◆ High accuracy
- ◆ Compact axial geometry
- ◆ Misalignment error compensation
- ◆ Standard 2 year warranty
- ◆ Low deflection at full load



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 Loadcell Specifier Guide. If you require a copy please contact our sales department or look on our web site at [www.novatechloadcells.co.uk](http://www.novatechloadcells.co.uk).

<b>Ordering Codes:</b>	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	±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

All standard ranges are manufactured in stainless steel.

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

### Notes

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

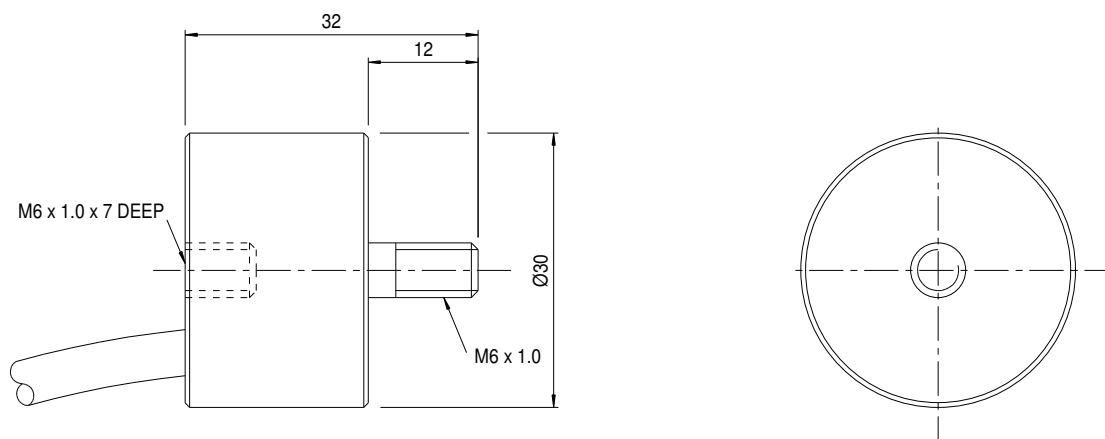
### Connections

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 MEASUREMENTS LTD

83 CASTLEHAM ROAD, ST LEONARDS ON SEA, EAST SUSSEX, TN38 9NT, ENGLAND

Tel: 01424 852744

email: info@novatechloadcells.co.uk

Fax: 01424 853002

www.novatechloadcells.co.uk