

F241

Axial Compensated Loadcell

Standard Ranges 3, 5, 10 and 30kg (30 to 300N)

- ◆ High accuracy
- ◆ Easy installation
- ◆ Misalignment error compensation
- ◆ Integral overload protection option
- ◆ Standard 2 year warranty



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

The F241 is ideally suited to low range engineering force measurement. 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.

Ordering Codes:		See the loadcell ordering code sheet for more details. Add range in the required units.	
F241CF00H0	Compression, unrationalised	F241CF00HN	Compression, rationalised
F241TF00H0	Tension, unrationalised	F241TF00HN	Tension, rationalised
F241UF00H0	Bi-directional, unrationalised	F241UF00HN	Bi-directional, rationalised
Change the C to a D for compression with thread fitting.			
If the overload stop option is required add this to the description.			

F241 Specification

Parameter	Value	Unit
Non-linearity - Terminal	±0.05	% RL
Hysteresis	±0.05	% RL
Creep - 20 minutes	±0.05	% 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)	240 to 260	g

All standard ranges are manufactured in aluminium.

Structural stiffness - Nominal					
Range (N)	Stiffness (N/m)	Range (N)	Stiffness (N/m)	Range (N)	Stiffness (N/m)
30	1.5×10^5	100	5.0×10^5		
50	2.5×10^5	300	1.5×10^6		

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

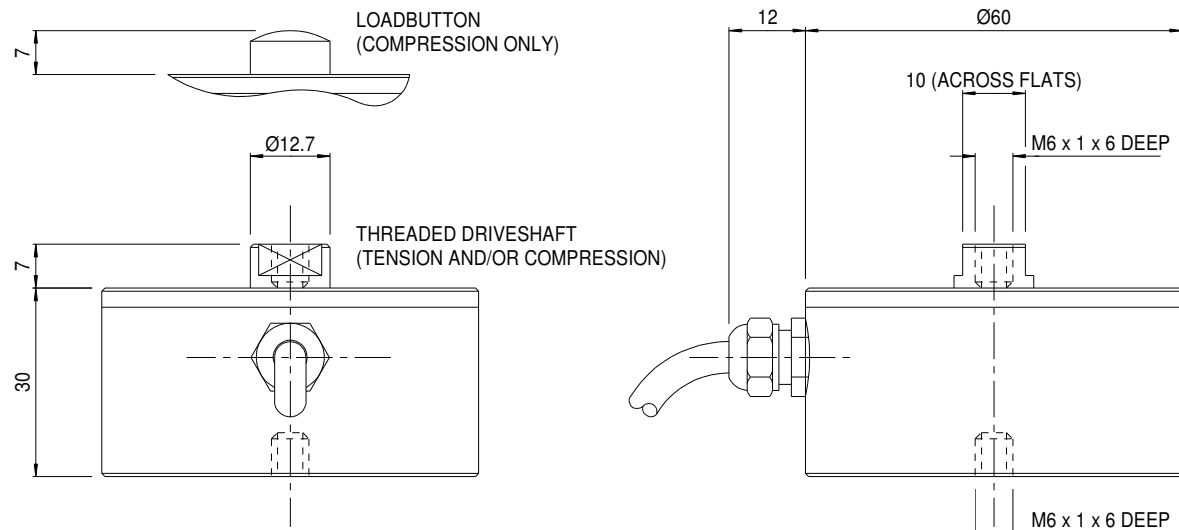
Signal + = Yellow

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.



NB: The case height increases to 42mm on the overload stop version.

Novatech reserves the right to vary the foregoing details without prior notice

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