

F218

Column Loadcell

Standard Ranges 10, 20 and 40tonne (100 to 400kN)

- ◆ Hardened stainless steel body
- ◆ Low profile
- ◆ Sealed to IP65
- ◆ Bottom or side cable entry
- ◆ Standard 2 year warranty



Geometry: Small column in a sealed case, with a domed top load bearing face. For use in compression.

The F218 is ideally suited to engineering force measurements. Its high structural load capacity and the frequency response characteristic of this principle of strain sensing make this loadcell ideal for non-sacrificial impact load measurements.

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.		
F218CFR0K0	Compression, IP65, unrationalised	F218CFR0KN	Compression, IP65, rationalised
If a non-standard cable length is required add this to the description and change the F to B.			
If bottom cable entry is required add this to the description and change the F to B.			

F218 Specification

Parameter	Value	Unit
Non-linearity - Terminal	±0.5	% RL
Hysteresis	±0.5	% RL
Creep - 20 minutes	±0.05	% AL
Repeatability	±0.02	% RL
Rated output - Nominal	2.3	mV/V
Rated output - Rationalised	2.0	mV/V
Rationalisation tolerance	±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	±0.005	% 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	300	% RL
Sealing	IP65	
Weight - Nominal (excluding cable)	0.75 to 1	kg

Structural stiffness - Nominal					
Range (kN)	Stiffness (N/m)	Range (kN)	Stiffness (N/m)	Range (kN)	Stiffness (N/m)
100	1.7 x 10 ⁹	200	3.4 x 10 ⁹	400	6.8 x 10 ⁹

Notes

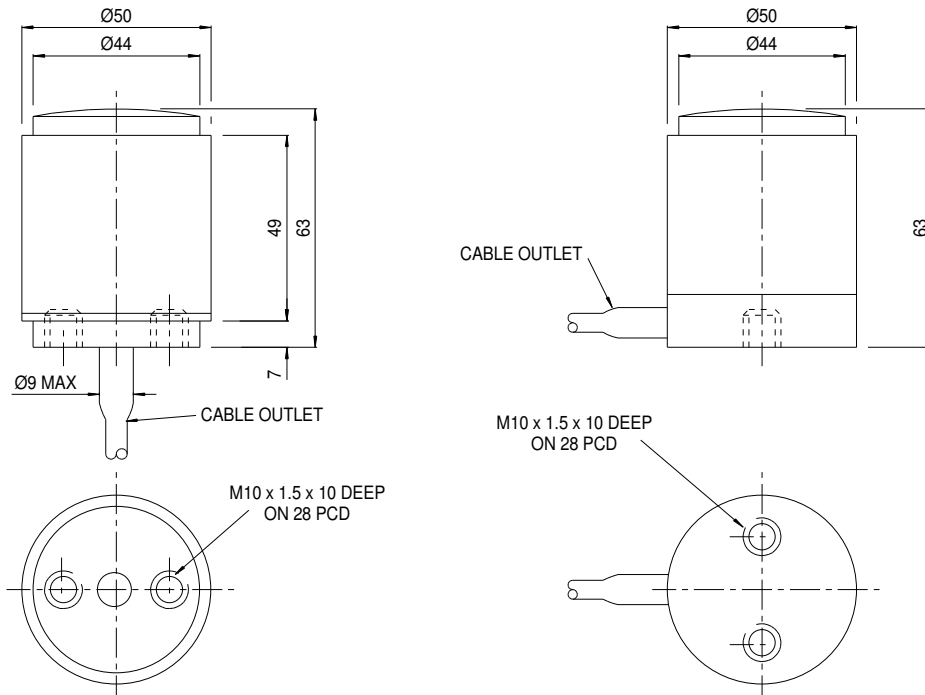
1. AL = Applied load.
2. RL = Rated load.
3. Temperature coefficients apply over the compensated range.
4. The load must be applied directly through the central loading axis.

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

The screen is not connected to the loadcell body.



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

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