

F218 Column Loadcell

- ✓ Hardened stainless steel body
- ✓ Low profile
- ✓ Sealed to IP65
- ✓ Bottom or side cable entry
- ✓ Traceable calibration with certificate included in the standard price
- ✓ Standard 1 year warranty



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 $\hat{A}^{\circ}\text{C}$	±0.005	% AL
Temperature effect on zero load output per $\hat{A}^{\circ}\text{C}$	±0.005	% RL
Temperature range - Compensated	-10 to +50	$^{\circ}\text{C}$
Temperature range - Safe	-10 to +80	$^{\circ}\text{C}$
Excitation voltage - Recommended	10	V
Excitation voltage - Maximum	20	V
Bridge resistance	700	$\hat{\Omega}$
Insulation resistance - Minimum at 50Vdc	500	$\text{M}\hat{\Omega}$

Overload - Safe	50	% RL
Overload - Ultimate	300	% RL
Sealing	IP65	
Weight - Nominal (excluding cable)	0.75 to 1	kg
All standard ranges are manufactured in stainless steel.		

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.

Order Codes

Code	Description
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	

Structural Stiffness - Nominal

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

Notes

- AL = Applied load.
- RL = Rated load.
- Temperature coefficients apply over the compensated range.
- 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.

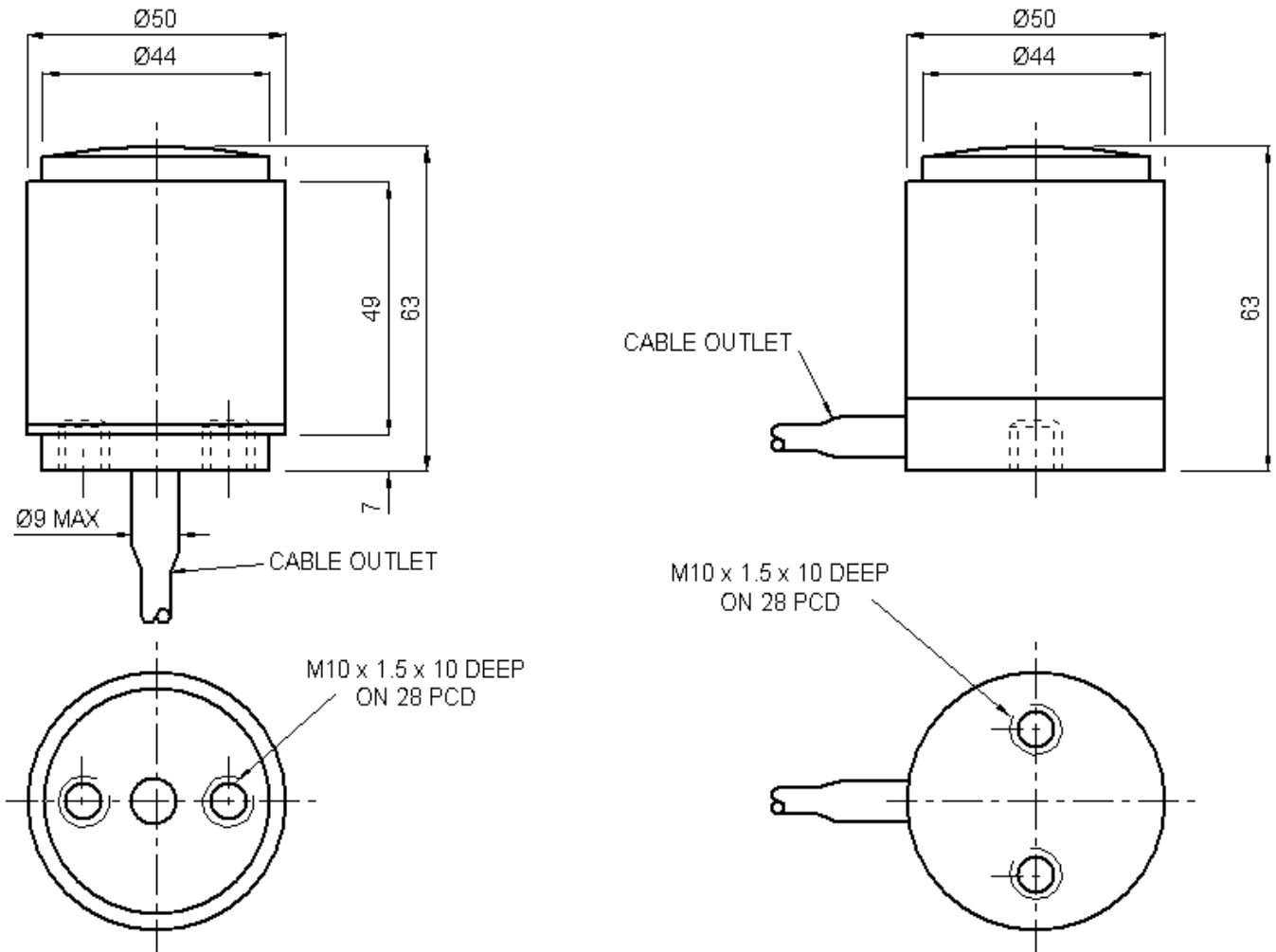
Excitation + = Red, Excitation - = Blue, Signal + = Yellow, Signal - = Green, Screen = Orange.

The screen is not connected to the loadcell body.

Files

Type	Title	Download
STEP File	F218CBR0K0 All standard ranges, axial cable	Download
STEP File	F218CFR0K0 All standard ranges, radial cable	Download

Outline



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