F216

Loadcell

Standard Ranges 0.5, 1, 2 and 4tonne (5 to 40kN)

- **Hardened stainless steel body**
- **Standard 2 year warranty**
- **High mechanical stiffness**
- **Flying lead**
- **Small size**

Geometry: Axial strain cylinder in weather sealed case, with raised end load bearing faces. For use in compression.

The F216 is ideally suited to engineering force measurements. It is designed for easy installation, usually between two flat faces bearing on its loading rings.

The small size of this loadcell makes it an ideal force sensor for mounting in existing machinery. It has been used in presses and printing machines.

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.		
F216CFR0K0	Compression, IP65, unrationalised	F216CFR0KN	Compression, IP65, rationalised

F216 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	1.2	mV/V
Rated output - Rationalised	1.0	mV/V
Rationalisation tolerance	±0.5	% RL
Zero load output	±4	% RL
Temperature effect on rated output per ºC	±0.005	% AL
Temperature effect on zero load output per ºC	±0.03	% RL
Temperature range - Compensated	-10 to +50	ºC
Temperature range - Safe	-10 to +80	ºC
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	400	% RL
Sealing	IP65	
Weight - Nominal (excluding cable)	90 to 100	g

All standard ranges are manufactured in stainless steel.

Structural stiffness - Nominal					
Range (kN)	Stiffness (N/m)	Range (kN)	Stiffness (N/m)	Range (kN)	Stiffness (N/m)
5	2.4×10^8	20	9.6×10^8		
10	4.8×10^8	40	1.9×10^9		

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.

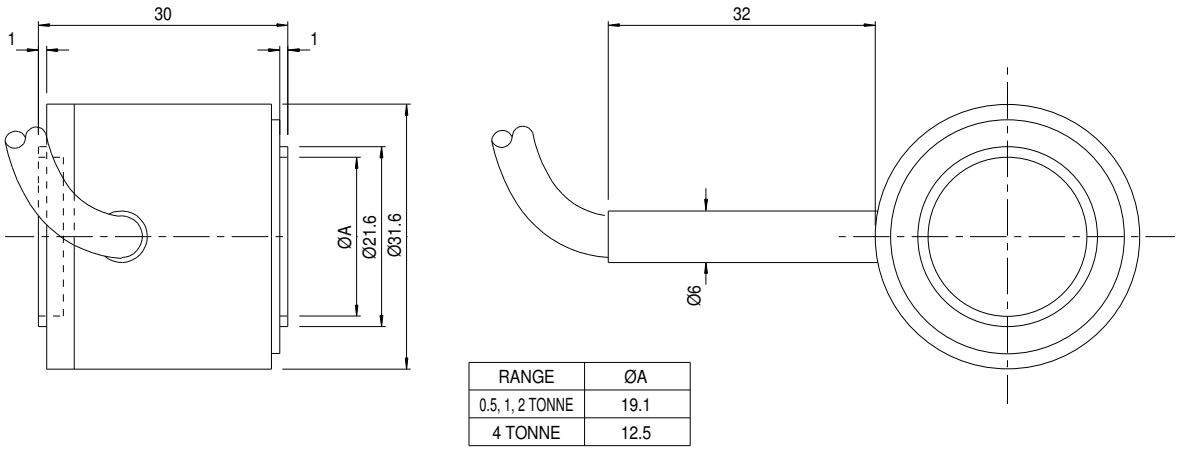
Connections

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.



RANGE	ØA
0.5, 1, 2 TONNE	19.1
4 TONNE	12.5

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