F268 Shear Beam Loadcell

Standard Ranges 5, 10, 20, 40, 80, 120 and 160kN (0.5 to 16tonnef)

- ⊘ Hardened stainless steel construction
- ⊘ Sealed to IP65
- ⊘ Mounting assemblies available
- Output rationalised to 2mV/V
- ✓ Traceable calibration with certificate included in the standard price
- Standard 1 year warranty

Specification

Parameter	Value	Unit
Non-linearity - Terminal	±0.1	% RL
Hysteresis	±0.1	% RL
Creep - 20 minutes	±0.05	% AL
Repeatability	±0.02	% RL
Rated output - Rationalised	2.0	mV/V
Rationalisation tolerance (applies to single direction calibrations)	±0.1	% RL
Zero load output	<u>+</u> 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	\vee
Excitation voltage - Maximum	10	\vee
Bridge resistance	350	Ω
Insulation resistance - Minimum at 50Vdc	500	MΩ



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Loadcell Design & Manufacture

Overload - Safe	50	% RL	
Overload - Ultimate	100	% RL	
Sealing	IP65		
All standard ranges are manufactured in stainless steel.			

Geometry: Shear strain beam for use in all process weighing applications and also engineering force measurement in compression or tension.

The F268 is ideally suited to process weighing applications which have harsh environmental requirements. The design configuration allows it to be used for installations for tank, hopper, weigh platforms or weigh bridges. We are happy to design shear or bending beams to meet your specific requirements. Versions can be manufactured for fully compensated operation up to +250°C. Please consult our engineering department.

Grder Codes

Code	Description
F268CFR0HN	Compression, IP65, rationalised
F268UFR0HN	Bi-directional, IP65, rationalised
F268TFR0HN	Tension, IP65, rationalised

\odot Structural Stiffness - Nominal

Range (kN)	Stiffness (N/m)
5	1.3 × 108
10	2.0 × 108
20	3.3 x 108
40	6.6 × 108
80	8.5 × 108
120	1.3 × 109
160	1.7 × 109

C_{Notes}

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

Connections

For ranges up to 4tonnef the loadcell is fitted with 2 metres of PVC insulated 4 core screened cable type 7-2-4C. Ranges above 4 tonnefs are fitted with 16-2-4C cable.

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

Reverse the signal connections to obtain a positive signal in tension mode. The screen is not connected to the loadcell body.

⇔Files

STEP File F268-T/C/U-FR0HN 5 to 40kN (500kg to 4tonne)	
STEP File Download STEP File Download	

Outline



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