

## 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	±4	% RL
Temperature effect on rated output per $\hat{A}^{\circ}\text{C}$	±0.002	% 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	10	V
Bridge resistance	350	$\hat{\Omega}$
Insulation resistance - Minimum at 50Vdc	500	$\text{M}\hat{\Omega}$

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.

### Order Codes

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

### Structural Stiffness - Nominal

Range (kN)	Stiffness (N/m)
5	1.3 x 10 <sup>8</sup>
10	2.0 x 10 <sup>8</sup>
20	3.3 x 10 <sup>8</sup>
40	6.6 x 10 <sup>8</sup>
80	8.5 x 10 <sup>8</sup>
120	1.3 x 10 <sup>9</sup>
160	1.7 x 10 <sup>9</sup>

## 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.

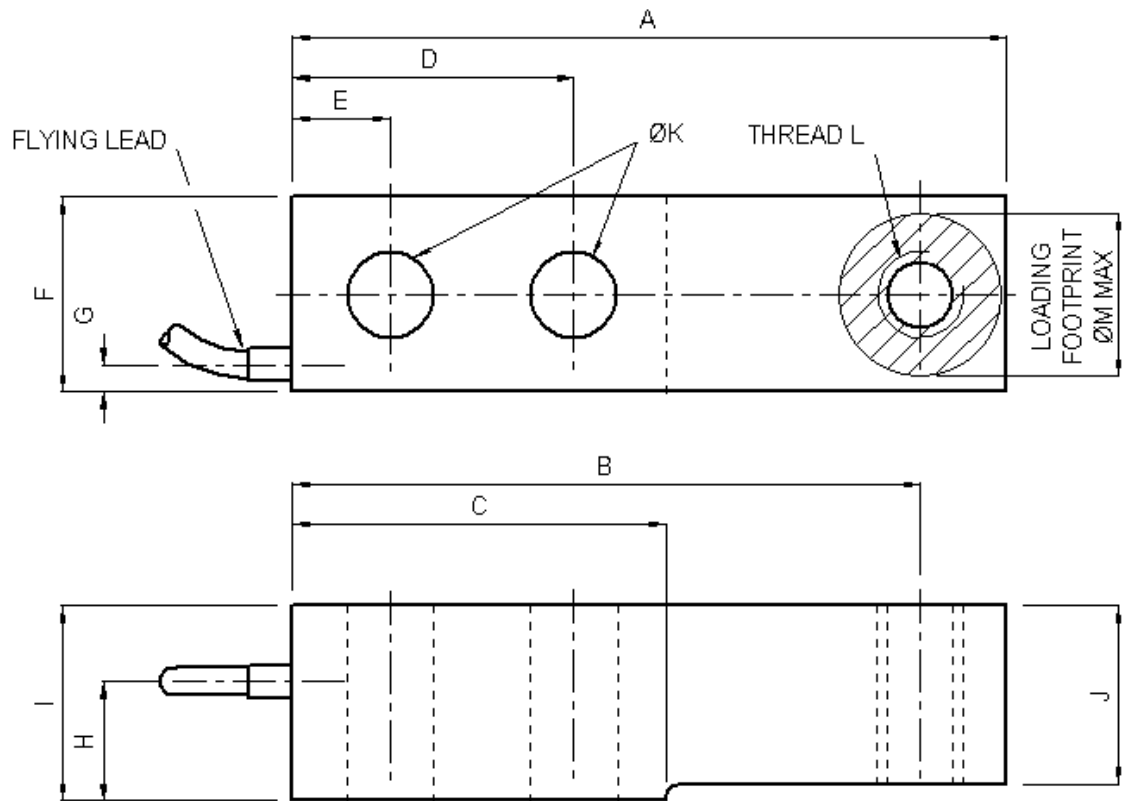
Excitation + = Red, Excitation - = Blue, Signal + = Yellow, Signal - = Green, Screen = Orange.

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

## Files

Type	Title	Download
STEP File	F268-T/C/U-FR0HN 5 to 40kN (500kg to 4tonne)	<a href="#">Download</a>
STEP File	F268-T/C/U-FR0HN 80 to 160kN (8 to 16tonne)	<a href="#">Download</a>

## Outline



RANGE	A	B	C	D	E	F	G	H	I	J	ØK	THREAD L	ØM
5, 10, 20, 40kN	132	116	69	52	18	36	5	22	36	33	16.2	M16 x 2.0	30
80, 120, 160kN	240	210	120	90	30	60	8	33	60	55	30.5	M30 x 2.0	60

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