

## F268

### Shear Beam Loadcell

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

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



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 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 Product List and the Loadcell Specifier Guide. If you require copies please contact our sales department or look on our web site at [www.novatechloadcells.co.uk](http://www.novatechloadcells.co.uk).

<b>Ordering Codes:</b>		See the loadcell ordering code sheet for more details. Add range in the required units.	
F268CFR0HN	Compression, IP65, rationalised	F268TFR0HN	Tension, IP65, rationalised
F268UFR0HN	Bi-directional, IP65, rationalised		

# F268 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 °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	V
Excitation voltage - Maximum	10	V
Bridge resistance	350	Ω
Insulation resistance - Minimum at 50Vdc	500	MΩ
Overload - Safe	50	% RL
Overload - Ultimate	100	% RL
Sealing	IP65	

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	1.3 x 10 <sup>8</sup>	40	6.6 x 10 <sup>8</sup>	160	1.7 x 10 <sup>9</sup>
10	2.0 x 10 <sup>8</sup>	80	8.5 x 10 <sup>8</sup>		
20	3.3 x 10 <sup>8</sup>	120	1.3 x 10 <sup>9</sup>		

### Notes

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

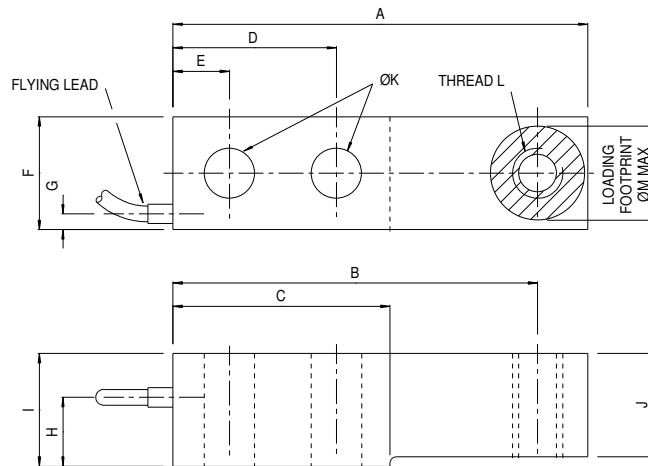
### Connections

For ranges up to 4 tonnes the F268 loadcell is fitted with 2 metres of PVC insulated 4 core screened cable type 7-2-4C. Ranges above 4 tonnes are fitted with 16-2-4C cable.

Excitation + = Red    Signal + = Yellow    Screen = Orange

Excitation - = Blue    Signal - = Green

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



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

## NOVATECH MEASUREMENTS LTD

\*\*\* Manufacturing loadcells since 1972 \*\*\*

83 CASTLEHAM ROAD, ST LEONARDS ON SEA, EAST SUSSEX, TN38 9NT, ENGLAND

Tel: 01424 852744

email: info@novatechloadcells.co.uk

Fax: 01424 853002

www.novatechloadcells.co.uk