



ALF 268



Description

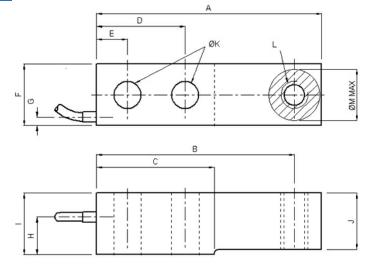
- Measurement ranges 0 ... 5 kN to 0 ... 160 kN
- Tension / compression
- Non-linearity 0.1 % RL
- Output signal rationalised 2.0 mV/V ±0.1 %
- Supply voltage 10 VDC

The ALF268 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.

Features

- Hardened stainless steel body
- Sealed to IP65
- Mounting assembly available
- Output rationalized
- Traceable calibration with certificate

Dimensions



 $\textbf{M:} \ \mathsf{Loading} \ \mathsf{Footprint}$

Rated load	А	В	С	D	E	F	G	Н	1	J	ØK	Thread L	ØM
5/10/20/40 kN	132	116	69	52	18	36	5	22	36	33	16.2	M16 x 2.0	30
80/120/160 kN	240	210	120	90	30	60	8	33	60	55	30.5	M30 x 2.0	60

Dimensions in "mm", approx. values

These drawings are for information only and not intended for construction purpose.

Please contact us for detailed drawings.



Specifications

Rated load:	5 kN / 10 kN / 20 kN / 40 kN / 80 kN / 120 kN / 160 kN
Non-linearity, terminal:	±0.1 % RL
Hysteresis:	±0.1 % RL
Creep, 20 min:	±0.05 % AL
Repeatability:	±0.02 % RL
Rated output, rationalised:	2.0 mV/V ±0.1 % RL Rationalisation tolerance applies to single direction calibrations only
Zero load output:	±4 % RL
Temperature effect on rated output:	±0.002 % AL/K
Temperature effect on zero load output:	±0.005 % RL/K
Compensated temperature range:	-10 +50 °C
Operating temperature range:	-10 +80 °C
Supply voltage, recommended:	10 V
Supply voltage, max.:	10 V
Bridge resistance:	350 Ω Insulation
resistance, minimum at 50 VDC:	500 ΜΩ
Overload, safe:	150 % RL
Overload, ultimate:	200 % RL
Dynamic load capacity:	70 % RL
Environmental sealing:	IP65
Material	Stainless steel

Rated load	Structural stiffness, nom.	Rated load	Structural stiffness, nom.	Rated load	Structural stiffness, nom.
5 kN	1.3 x 10 ⁸ N/m	40 kN	6.6 x 10 ⁸ N/m	160 kN	1.7 x 10 ⁹ N/m
10 kN	2.0 x 10 ⁸ N/m	80 kN	8.5 x 10 ⁸ N/m		
20 kN	3.3 x 10 ⁸ N/m	120 kN	1.3 x 10 ⁹ N/m		

Notes:

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

Electrical Connections

For ranges up to 40 kN the load cell is fitted with 2 m of PVC insulated 4-core screened cable type 7-2-4C. Ranges above 40 kN are fitted with 16-2-4C cable.

Reverse the signal connections to obtain a positive signal in tension mode.

Wiring:	
red	+ supply voltage:
blue	- supply voltage:
yellow	+ output signal:
green	- output signal:
orange	screen:

The screen is not connected to the load cell body.

Ordering Codes

ALF268CFR0HN	Compression, IP65, rationalised	ALF268TFR0HN	Tension, IP65, rationalised
ALF268UFROHN	bi-directional, IP65, rationalised		

Please add range in the required units.

Safety note:

When using the load cell in tension mode it is essential to provide additional safety precautions like safety chains etc. for catching the load in a breakage, which cannot be excluded completely.

Due to continuous product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.

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The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification.

Althen stands for pioneering measurement and custom sensor solutions. In addition we offer services such as calibration, design & engineering, training and renting of measurement equipment.