



N ALF 303

Description

- Measurement ranges 0 ... 20 kN and 0 ... 40 kN
- Compression
- Non-linearity 2.0 % RL
- Output signal 2 mV/V or rationalised 2.0 mV/V ± 1.0 %
- Supply voltage 10 VDC

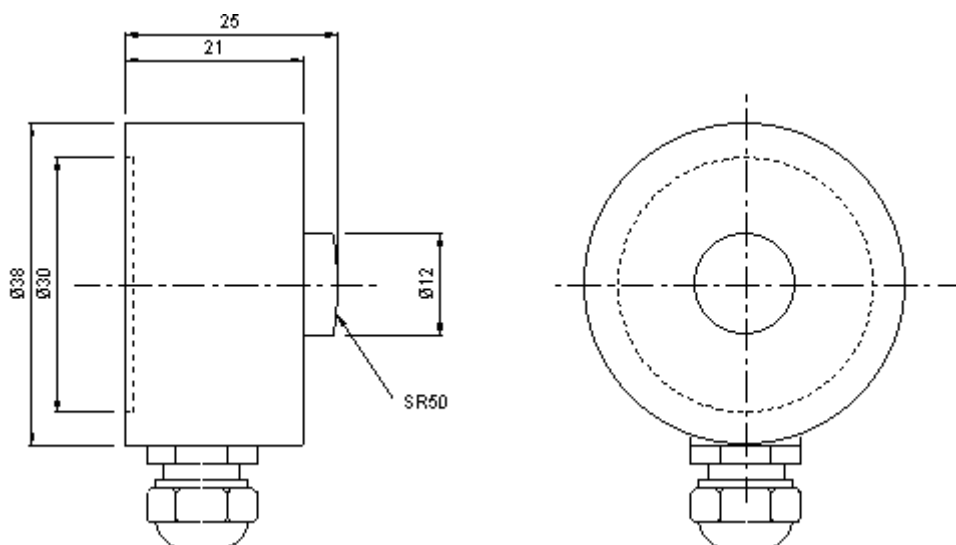
The ALF303 is aimed at the volume OEM user who requires a reliable high quality axial sensor at a low price for low accuracy compressive force measurement in equipment. It is manufactured from stainless steel and sealed to IP65 for long life in typical industrial operating conditions. The sensor is designed for simple mounting on a smooth flat surface.

Each sensor is labelled with its output for full range. A calibration certificate is not supplied as standard.

Features

- Low profile
- Hardened stainless steel
- Low cost
- Sealed to IP65

Dimensions



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:	20 kN, 40 kN
Non-linearity, terminal:	±2.0 % RL
Hysteresis:	±2.0 % RL
Creep, 20 min:	±0.1 % AL
Repeatability:	±0.1 % RL
Rated output, nominal:	2 mV/V ±20 %
Rated output, rationalised:	2.0 mV/V ±1 % RL
Zero load output:	±6 % RL
Temperature effect on rated output:	±0.04 % AL/K
Temperature effect on zero load output:	±0.05 % 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 MΩ
Overload, safe:	150 % RL
Overload, ultimate:	300 % RL
Dynamic load capacity:	70 % RL
Environmental sealing:	IP65
Weight (excl. cable):	approx. 120 g
Material	Stainless steel

Rated load	Structural stiffness, nom.	Rated load	Structural stiffness, nom.
20 kN	9.9 x 10 ⁹ N/m	40 kN	2.1 x 10 ¹⁰ N/m

Notes:

1. RL = rated load
2. AL = applied load
3. Temperature coefficients apply over the compensated range.
4. The load must be applied directly through the central loading axis.
5. Use rationalised output in parallel mode with several load cells!
6. When this load cell is rationalised the resistors are housed in a capsule located in the load cell cable 100 mm from the free end. Capsule dimensions are Ø10 mm by 57 mm.

Electrical Connections

The load cell is fitted with 2 m of PVC insulated 4 core screened cable type 7-2-4C.

The screen is not connected to the load cell body

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

Ordering Codes

ALF303CFR0H0	Compression, IP65	ALF303CFR0HN	Compression, IP65, rationalised
--------------	-------------------	--------------	---------------------------------

Please add range in the required units.

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