

# ALC 240 T - Loadcell / Anchor loadcell



The ALC 240 T is a Fiber Bragg Grating based anchor loadcell that can be used as: an anchor loadcell in applications as bolt constructions, pre-strained constructions, quay walls etc. Or as a normal loadcell for heavy loads.

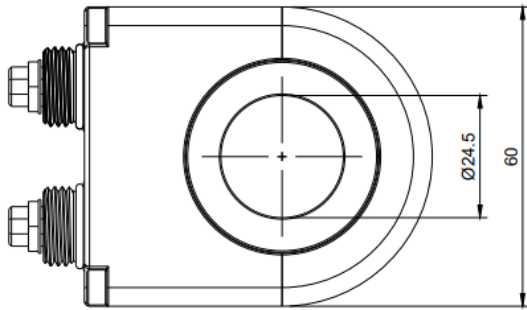
The highly sensitive fiber optic anchor loadcell sensor is designed for a nominal load of 240kN and is temperature compensated to ensure high stability.



- Very high sensitivity
- Exceptionally long-term stability and durability
- Double ended
- Robust stainless-steel design for harsh environment
- Intrinsically temperature compensated

Performance	Parameter
Sensitivity	30 pm/kN. $\pm$ 5 pm/kN.
Resolution	50 N
Accuracy	1 kN
Measurement range <sup>1</sup>	50kN-320kN
Nominal load	240kN
Weight	0.65 kilograms
Material	1.4404 (SS 316L) /17 4PH
Anchor diameter	M24 / $\varnothing$ 24mm
Operational temperature range	-30 to +80 °C
Protection	IP 67
FWHM	< 0.5 nm
Reflectivity	> 40 %
Insertion loss	< 0.5 dB
FBGs	4
Connection	FC/APC

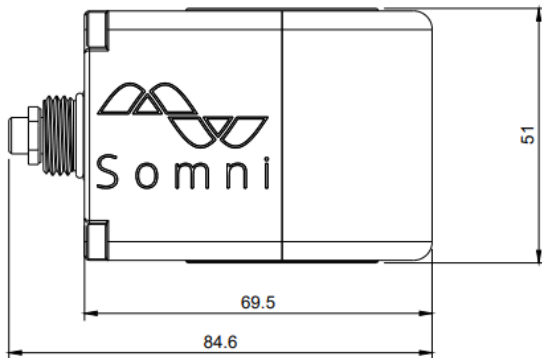
1. Other measurement range on request.



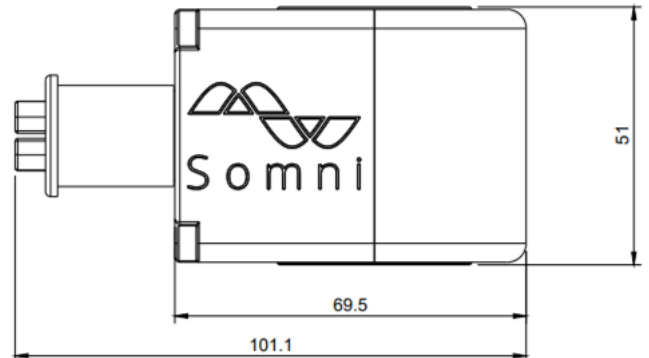
## Mounting instructions

The sensor must be clamped between two flat parallel planes (maximum deviation 0.2°)

The load can be applied no more than 0.5 mm out of the center of the load cell, for optimal performance



Dimensions in mm without connected cable and without protective connector cap



Dimensions with supplied protective connector caps

