

Load Cell LC-01

Description

The load cell LC-01 consists of an oil filled pad connected to the pressure sensor P-01. When subjected to load, the oil inside the pad is pressurised and this pressure change is transferred to the pressure sensor.



Features

- Pressure ranges from 1 up to 150 bar
- Temperature compensation by means of a second FBG

Applications

The load cell can be applied to measure underground loads and stresses

Standard specifications

Parameter	Unit	Value
Load range	bar	1/5/10/20/50/100/150
Load accuracy ¹	-	1% FS
Load sensitivity	nm/FS	>1
Temperature range	$_{\mathbb{C}}$	-10 to +60
FBG wavelength ²	nm	1510 to 1590
Sensing head thread	-	M 18 x 1.0
Load cell dimensions (W x H)	mm	100 x 200
Housing material	-	SS316
Pigtail diameter	mm	3
Pigtail length ³	m	1.5
Pigtail material	-	LDPE
Connector type	-	FC/APC
Water tightness ⁴	-	IP68

The sensor accuracy does not contain error sources originating from the read-out equipment.

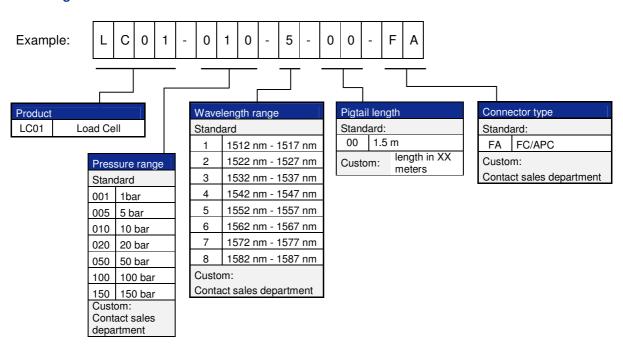
² The FBG is in fact a Draw Tower Grating (DTG) i.e. written in the fibre while drawing it, see www.fbgs-technologies.com for further information.

³ Extended on request.

⁴ Watertight at 10 bar for 12 hours



Ordering information



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