

General

The LC210 load cells are designed for measuring loads and changes of loads in tie roads, with high precision and accuracy. Submitted to an external load, the cell sustains a deformation that is measured from the internal strain-gauges bridge and converted to an electrical output signal. The strain-gauges, connected with a configuration of a Wheatstone bridge, detect the deformations in compression and automatically compensate the flexion effect. In addition, the instrument compensates thermal changes.

The load cells are well protected to meet all necessary requirements of extreme weather conditions without any the risk of malfunction or damage. Along with the load cells SIM STRUMENTI can also provide load distribution plates to insert between the instrument and the comparison surface, to further increase the accuracy of the measurement and rule out all errors of alignment with the tie road.

Since the output of the instrument is electrical, the signal can be read with a manual read out unit like the DATAVIEW, automatically, with a data logger such as the MINILOG,MYLOG or any other data logger provided by SIM STRUMENTI.

Every load cell is provided with a calibration certificate that attests the results of the test performed and all electromechanical features.

Applications

Measure of loads in tie roads, used in dams, retaining walls, bridges, underground constructions, pile load test, tunnels etc..

Up to 3000 KN

Strain gauges technology

**Stainless steel
Corrosion-proof**

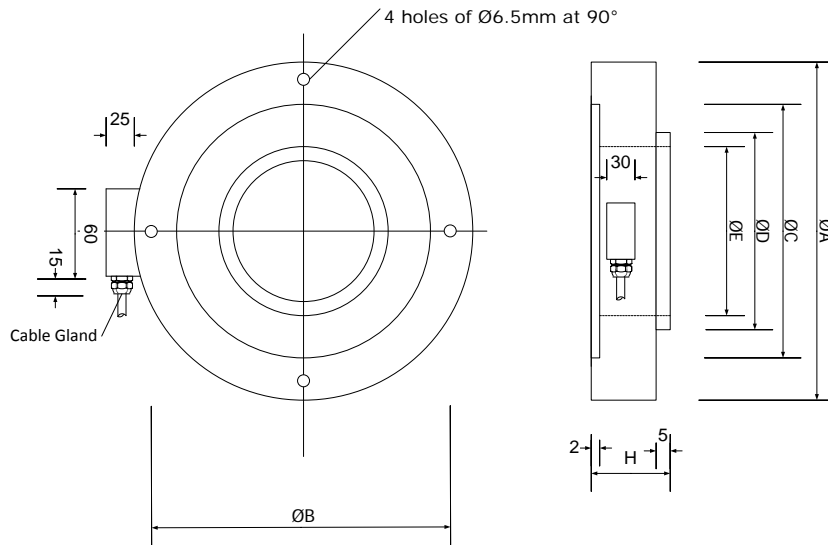
Waterproof

Rugged design

**Reliability for long
term monitoring**



SIN
Strumenti e sistemi
per la geotecnica
per il controllo
di strutture e la
salvaguardia
dell'ambiente



Model	Load (KN)			Ø A	Ø B	Ø C	Ø D	Ø E	H	Wt
LC210-050-KN	300	500	750	163	145	131	95	50	45	5
LC210-075-KN	500	750	1000	163	145	131	95	75	45	5
LC210-120-KN	750	1000	1250	229	207	186	150	120	45	9
LC210-165-KN	1250	1500	1800	275	252	231	195	165	45	14
LC210-225-KN	1800	2500		320	302	285	250	225	55	20
LC210-300-KN	2500	3000		230	208	186	150	120	55	15

Technical features

Load	300 ÷ 3000 KN
Supply	5 ÷ 10 Vcc
Output	2 mV/V
Zero temperature coeff.	±0.005% F.S./°C
F.S. temperature coeff.	±0.005% F.S./°C
Linearity	0.1% FS
Repeatability	0.02% FS
Input resistance	700 ± 20 Ohm
Output resistance	700 ± 5 Ohm
Insulation	> 5000 MΩ
Overload	150% FS
Breaking overload	300% FS
Temperature compensation	-10 ÷ +50 °C
Operating temperature	-20 ÷ +70 °C
Deflection at rated capacity	0.4 mm
Material	SS 17-4 PH
Protection	IP67

Accessories & spare parts

LC210 - AX - DS-MOD**	Plates
LC210 - AX - BEMA	4-20 mA Converter

*KN – Indicate the Range

**MOD - Indicate the model of the load cell (-050 -070 -120 -165 -225 -300)

SIM STRUMENTI SNC reserves the right to make any kind of design or functional modification without prior notice

LC210_EN ED01/14



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