

## General

The LC230 load cells are designed for measuring load and changes of load in machines on which are made load test.

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 can also provide, upon request, a couple of spherical joints to allow the connection of the cell. 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, NATUN system 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

Testing machines, cranes, ropes etc.

**Up to 100 KN**

**Strain gauges technology**

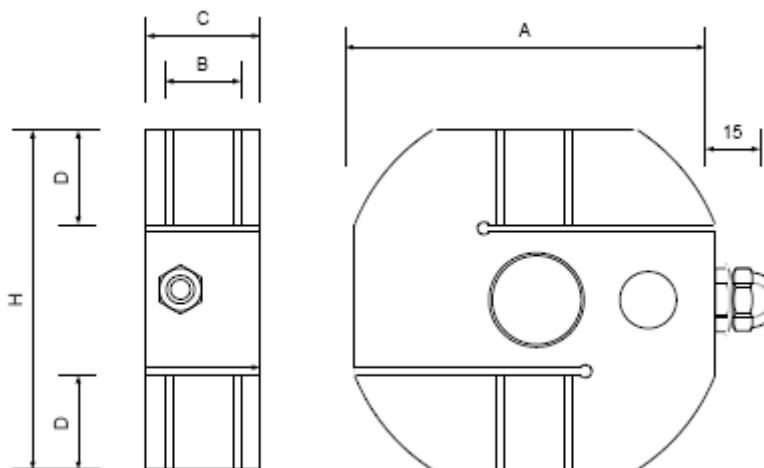
**Stainless steel material**

**Rugged design**



# SIM

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



Model	KN	A	B	C	D	H	Kg
LC230 - 01	1	61	M12 x 1.75	23	14	60	0.5
LC230 - 02	2	61	M12 x 1.75	23	14	60	0.5
LC230 - 05	5	78	M12 x 1.75	25	20	75	1.0
LC230 - 10	10	78	M12 x 1.75	25	20	75	1.0
LC230 - 25	25	78	M20 x 1.50	30	20	75	1.5
LC230 - 50	50	95	M24 x 2.00	30	23	90	2.5
LC230 - 00	100	130	M36 x 3.00	45	38	140	5.0

Technical features	
Load	1 ÷ 100 KN
Supply	5 Vcc
Output	2 mV/V
Zero temperature coeff.	±0.005% F.S./°C
F.S. temperature coeff.	±0.005% F.S./°C
Linearity	0.05% FS
Repeatability	0.02% FS
Input resistance	350 ± 20 Ohm
Output resistance	350 ± 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	0.3 mm
Material	Stainless steel
Protection	IP67
Accessories & spare parts	
LC230 - SGS1 – MOD*	Couple of spherical bearings
LC230 - SGS2 –MOD*	Couple of mounting bearings
LC230 - BEMA	4-20 mA Converter
*MOD - Indicate the model of the load cell (-01 -02 -05 -10 -25 -50 -00)	

LC230\_EN ED01/14



SIM STRUMENTI SNC  
 Via Merendi 42  
 20010 Cornaredo (MI) - ITALY  
 Tel .: +39 02 97003039  
 Fax : +39 02 97290167  
 www.simstrumenti.com  
 sim@simstrumenti.com



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