
Strain Gauge Solid Load Cell SGLC-7050 Series

Typically used to measure and monitor compressive load or force in structural members, struts and piles



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Overview



The Geosense® SGLC 7050 series load cell consists of a solid cylinder of high strength stainless steel with a series of electrical resistance strain gauges connected around the periphery as a Wheatstone Bridge that compensates for unevenly distributed loads and provides a single mV/V signal output.

When the load cell is subjected to load the resistance of the strain gauges will change and the output signal is directly proportional to the applied load. Mounting surfaces should be flat and parallel for optimum performance and the use of loading cap for strut monitoring is recommended.

Connection to the load cell is via a heavy duty multi-core sheathed cable which can be connected to a direct portable readout, data logging or Wi-SOS 400 system.

APPLICATIONS

Measurement of load acting on:

Piles

Struts

Arch Supports

Props

FEATURES

High strength steel construction

Load distribution plates available

Proven long term accuracy

Accommodates eccentric loading

Multiple gauge system

Data logger compatible

Available with plug connector or cable



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Specifications

LOAD CELL

Range (kN)	1000, 2000, 3000, 5000, 10000
Non linearity	± 1% FS
Over range	150%
Excitation	10V DC
Output	1.5mV/V
Bridge resistance	1400 Ohms
Number of sensors	16
Material	Stainless steel
Temperature range	-20 to + 70°C
Temperature effect on output	0.01% applied load/°C

DIMENSIONS

Capacity (kN)	Diameter (mm)	Height (mm)
1000	100	150
2000	125	180
3000	138	185
5000	165	250
10000	276	400

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Specifications

LOAD DISTRIBUTION PLATES

Capacity(kN)	OD(mm)	Height(mm)
1000	100	100
2000	125	100
3000	138	100
5000	165	100
10000	276	100

ANCILLARY EQUIPMENT

MP12 readout

Data loggers

Load distribution plates

Cable - Type 910 - Multi-core with Foil Screen & Drain Wire

Centraliser bushings if required

Fly Connector

Cable End Protector

Jump Cables

ORDERING INFORMATION

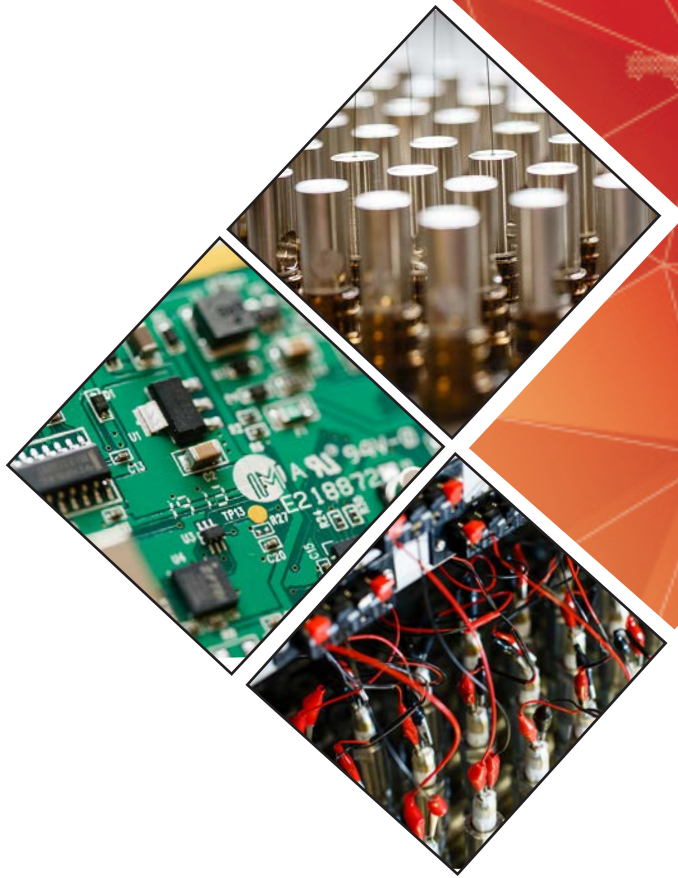
Capacity

Cable length

Readout

Load distribution plate

Connectors



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