

# Strain Gauge Solid Load Cell SGLC-7050 Series

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





### Strain Gauge Solid Load Cell SGLC-7050 Series

#### 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



## Strain Gauge Load Solid Cell SGLC-7050 Series

# 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

### Strain Gauge Solid Load Cell SGLC-7050 Series

### **Specifications**



#### LOAD DISTRIBUTION PLATES

LOND DISTRIBUTI	OIVI E/IIES		
Capacity(kN)	OD(mm)	Height(mm)	
1000	100	100	
2000	125	100	
3000	138	100	
5000	165	100	
1000	276	100	
ANCILLARY EQUIF	PMENT		
MP12 readout			
Data loggers			
Load distribution pla	ates		
Cable - Type 910 - M	ulti-core with Foil Scree	ո & Drain Wire	
Centraliser bushings	if required		
Fly Connector			
Cable End Protector			
Jump Cables			
ORDERING INFOR	MATION		
Capacity			
Cable length			
Readout			
Load distribution	olate		
Connectors			



### **WWW.HOSKIN.CA**

• ENVIRONMENTAL • INSTRUMENTATION • MATERIALS TESTING

• INTEGRATED SYSTEMS • RENTALS • SERVICE