



Strain Gauge Load Cells



Strain Gauge Load Cells incorporate from 8 to 16 high output electrical resistance strain gauges in a full bridge configuration that are bonded to a high strength steel or stainless steel spool. This arrangement compensates for both temperature effects and off center loading. Strain Gauge Load Cells are available in virtually any size, in both annular and solid styles. Gauge waterproofing utilizes the latest application techniques and protective materials. The rugged design includes heavy duty protective cover, sealed construction, and low deflection under load.

Mounting surfaces should be flat and parallel for optimum performance. RST recommends the use of top & bottom loading platens for best performance with annular load cells.



RST Instruments Ltd.
200 - 2050 Hartley Ave.
Coquitlam, BC
Canada V3K 6W5

Telephone: 604 540 1100
Facsimile: 604 540 1005
Toll Free: 1 800 665 5599



info@rstinstruments.com

www.rstinstruments.com

applications

Measure load/strain in various applications.

features

Compatible with any conventional strain indicator instrument.

Optional readout instrument in engineering units (model IR-2840.)

High resistance strain gauges to minimize cable effects.

High sensitivity.

Long term reliability.

Heat treated and stress relieved load element.

Available with either a plug connector, or with cable attached to load cells per client specified length.

Accommodates off center loading.

Custom manufactured to fit project requirements.

Matched calibration for readout in engineering units.

Temperature compensated.



specifications + ordering info

Strain Gauge Load Cells



standard dimensions

MODEL	CAPACITY		I.D.		O.D.		HEIGHT	
	KIPS	KN	INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
SGA-50-1	50	233	1.0	25	4.0	102	3.0	76
SGA-100-1	100	445	1.0	25	4.0	102	3.0	76
SGA-136-1.4	136	605	1.4	36	4.5	114	3.5	89
SGA-200-1.75	200	890	1.75	44	5.0	127	5.0	127
SGA-255-2.0	255	1135	2.0	51	5.5	140	5.25	133
SGA-300-2.0	300	1334	2.0	51	5.5	140	5.25	133
SGA-300-3.0	300	1334	3.0	76	6.0	152	6.25	159
SGA-400-2.5	400	1779	2.5	63	6.0	152	6.25	159
SGA-400-3.5	400	1779	3.5	89	7.0	178	7.25	184
SGA-600-3.0	600	2669	3.0	76	7.0	178	7.5	190
SGA-600-4.0	600	2669	4.0	102	7.75	197	8.5	216
SGS-1665-LC	1665	7406	N/A	N/A	8.5	216	11.8	300

NOTE: These dimensions are typical only and may be modified to suit project requirements.

The model number is determined as follows: eg. SGA - 200 - 1.5

SGA – Strain Gauge Annular Cell

200 – Maximum capacity in Kips

1.5 – Hole size in inches

specifications

ITEM	DESCRIPTION
Capacity	22.5 kN to 10675 kN (5,000 lbs to 2,400,000 lbs).
Hole Size	16 mm to 356 mm (5/8 in. to 14 in.), as required.
Material	High strength steel or stainless elements.
Temperature Compensation	-40°F to +107°F (-40°C to +40°C)
Overrange	100% FS
Sensitivity	±2.0 mV/V

accessories

Digital strain indicator.

Cable.

Load and bearing plates.

Terminal stations.

Centralizer bushings if required.

optional equipment

Armored cable.

Metal military, or plastic connectors (connectors not recommended in waterproof applications).

ordering info

Application.

Annular or solid cell.

Maximum capacity and smallest increment required.

Environmental data.

Size limitations.

Cable connection and length.

Loading Platens.

Options.



GEOTECHNICAL . MINING . ENVIRONMENTAL . STRUCTURAL