

SG-LS Series

Low Profile Shear Beam



... better loadcells by design



Capacities: 0-50kg to 0-10t

Tool Steel Construction

Electroless nickel plated

Extra low profile

Corrosion resistant

Fully encapsulated

Trade accuracy (OIML)

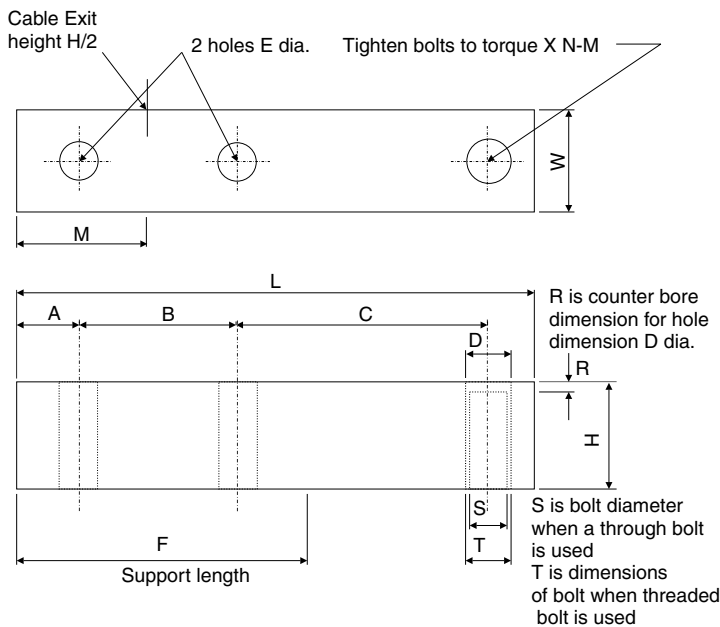
Output matched to simplify corner adjustment

Full range of mounting accessories

Simple installation

Capacity	Order Code
0-50kg	SG-LS-50
0-100kg	SG-LS-100
0-250kg	SG-LS-250
0-500kg	SG-LS-500
0-1t	SG-LS-1T
0-2.5t	SG-LS-2.5T
0-5t	SG-LS-5T
0-10t	SG-LS-10T

Specifications



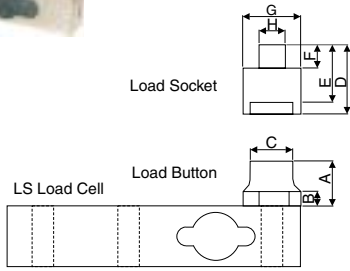
Nominal Capacity	0- 50kg to 0-10t
Nominal Output at capacity	2mV/V \pm 0.1%
Factory calibration mode	Compression
Linearity error	<0.017% FSO
Non-Repeatability	<0.01% FSO
Zero return/creep (30 mins)	<0.017%/0.023% FSO
Temp effect span/10°C	<0.01% FSO
Temp effect zero/10°C	<0.015% capacity
Insulation resistance - bridge to ground	>5000M Ω
Insulation resistance - cable to ground	>1000M Ω
Compensated temperature range	-10° to 50°C
Output resistance	352.2 Ω \pm 0.2 Ω
Input resistance	410 Ω nominal
Service load	100% of capacity
Safe load	150% of capacity
Mechanical failure	300% of capacity
Recommended excitation	5V to 15V AC/DC
Maximum Excitation	15VDC
Environmental protection	IP65

All specifications are a maximum, as a % of full load, unless otherwise stated

SG-LS	A	B	C	D	E	F	H	L	M	R	S	T	W	X
50	10	35	72	12	11	55	20	127	24	2	10.3	M12 x 1.75	20	45
100	10	35	72	12	11	55	20	127	24	2	10.3	M12 x 1.75	20	45
250	10	35	72	12	11	55	18	127	24	2	10.3	M12 x 1.75	20	45
500	10	35	72	12	11	55	24	127	24	2	10.3	M12 x 1.75	20	45
1T	10	35	72	12	11	55	24	127	24	2	10.3	M12 x 1.75	20	45
2.5T	15	64	88	20	13	94	38	182	43	5	13	NONE	25	75
5T	20	76	109	30	17	115	47.5	225	63	7.5	17	NONE	35	210
10T	25	90	112	40	26	115	65	252	78	10	26	NONE	48	710

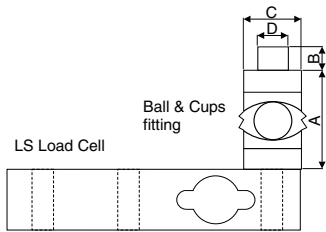


LS Series Accessories and Wiring Specifications



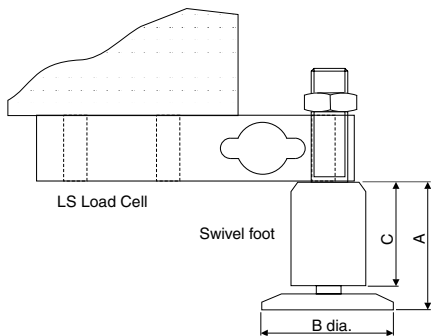
SG-LS	0-50kg to 0-1T	0-2.5T	0-5T	0-10T
A	12	12	18	22
B	5	5	8	10
C	14 dia	14 dia	20 dia	30 dia
D	21	22	29	36
E	18	18	25	30
F	8	8	9	12
G	20 dia	20 dia	30 dia	40 dia
H	10 dia	10 dia	16 dia	25 dia

A load button and hardened socket is used with the LS in compression applications. With the load cell rigidly fixed at the base, load is applied through the socket.



SG-LS	0-50kg to 0-1T	2.5T	5T	10T
A	36.5	36.5	85	85
B	11	11	23	23
C	20 dia	20 dia	40 dia	40 dia
D	M12 x 1.75	M12 x 1.75	M10 x 1.5	M10 x 1.5

The ball and cup fitting is used with the LS load cell for applications requiring optimum performance. The fitting can provide a self aligning action to accommodate deflections and mounting imperfections which might otherwise degrade performance.



SG-LS	50kg - 1T
A	53
B	51
C	42

The swivel foot is used with the LS to provide simple yet effective installation in platform scales and compression load applications. The self aligning foot has hardened and plated internal components and a stainless steel body.

SG-LS	50kg - 1T	2.5T	5T	10T
Load button	SG-A-LBM12	SG-A-LB20	SG-A-LB30	SG-A-LB40
Load socket	SG-A-LS20	SG-A-LS20	SG-A-LS30	SG-A-LS40
Swivel foot	SG-A-SF	N/A	N/A	N/A
Ball and cup	SG-A-BC20	SG-A-BC20	SG-A-BC40	SG-A-BC40
Complete mount	SG-MLS-1	SG-MLS-2.5	SG-MLS-5	SG-MLS-10
Spherical washer	SG-A-SW8/20	SG-A-SW12/20	SG-A-SW16/30	SG-A-SW20/40
Rod End Bearing	SG-A-REM12	N/A	N/A	N/A

WIRING SPECIFICATIONS

RED	+ Excitation
BLACK	- Excitation
GREEN	+ Signal
WHITE	- Signal
BROWN	+ Sense
BLUE	- Sense

LOPT_LS-3.0-0

CABLE LENGTH

Cable is 6 core silver grey quality PVC sheathed with screen and has a length as follows.

SG-LS 50KG - 2.5T	3 metres
SG-LS 5t - 10T	5 metres