

SG-PSB Series

Precision Shear Beam



... better loadcells by design



Specifications

Nominal Capacity	0-250kg to 0-10t
Nominal Output at capacity	2.0mV/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 matched \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	18VDC
Environmental protection	IP67

Capacities: 0-250kg to 0-10t

Tool Steel Construction

Electroless nickel plated

Simple installation

Corrosion resistant

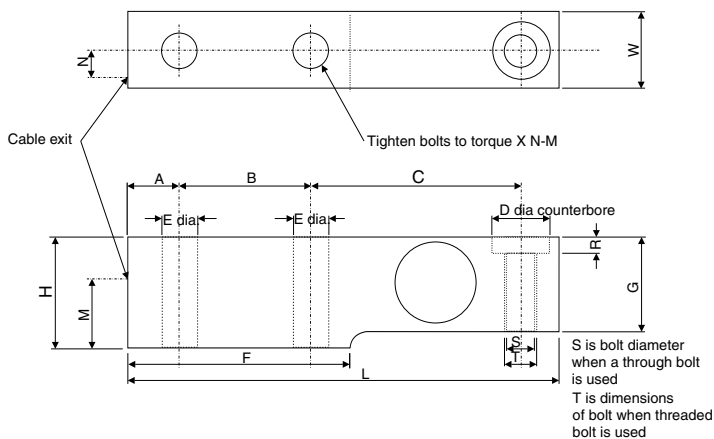
Fully encapsulated

Trade accuracy (OIML)

Output matched to simplify corner adjustment

Full range of mounting accessories

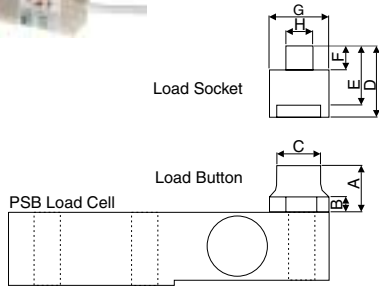
Suitable for single or multi-point weighting



Capacity	Order Code
0-250kg	SG-PSB-250
0-500kg	SG-PSB-500
0-1t	SG-PSB-1T
0-2.5t	SG-PSB-2.5T
0-5t	SG-PSB-5T
0-10t	SG-PSB-10T
Stainless steel option available in the following capacities	
0-250kg	SG-PSB-250-SS
0-500kg	SG-PSB-500-SS
0-1t	SG-PSB-1T-SS
0-2.5t	SG-PSB-2.5T-SS

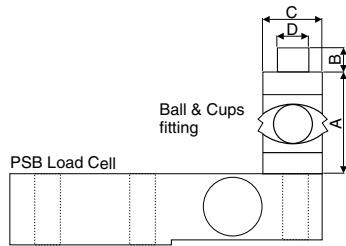
SG-PSB	A	B	C	D	E	F	G	H	L	M	N	R	S	T	W	X
0-250	15	38	61.5	12	10.3	65	20	28.5	125	17	7.6	2	10.3	M12 x 1.75	26.5	45
0-500	15	38	61.5	12	10.3	65	26	28.5	125	14.25	7.6	2	10.3	M12 x 1.75	26.5	45
0-1T	15	38	61.5	12	10.3	65	26	28.5	125	14.25	7.6	2	10.3	M12 x 1.75	26.5	45
0-2.5T	20	60	88	30	20.25	105	40	48	187	28	14	3	21	NONE	40	365
0-5T	20	60	88	30	20.25	105	40	48	187	28	14	3	21	NONE	40	365
0-10T	24	60	117	40	26	120	58	68	225	39	17	5	26	NONE	48	815

SG-PSB Series Accessories and Wiring Specifications



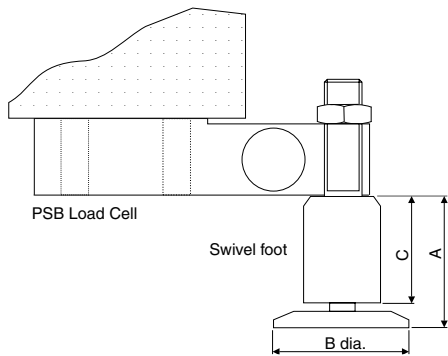
SG-PSB	250kg - 1T	2.5T - 5T	10T
A	12	18	22
B	5	8	10
C	14 dia	20 dia	30 dia
D	22	33	36
E	18	28	30
F	8	12	12
G	20 dia	30 dia	40 dia
H	10 dia	16 dia	25 dia

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



SG-PSB	250kg - 1T	2.5T - 5T	10T
A	36.5	82	80
B	11	23	20
C	20 dia	40 dia	30 dia
D	12 dia	25 dia	17 dia

The ball and cup fitting is used with the SG-PSB 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-PSB	250kg - 1T	Although the swivel foot is not used with possible above 1t, other accessories are available.
A	53	
B	51	
C	42	

The swivel foot is used with the SG-PSB 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-PSB	250kg - 1T	2.5T	5T	10T
Load button	SG-A-LBM12	SG-A-LB30	SG-A-LB30	SG-A-LB40
Load socket	SG-A-LS20	SG-A-LS30	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-BC40	SG-A-BC40	SG-A-BC40
Complete mount	SG-M-PSB-1	SG-M-PSB-5	SG-M-PSB-5	SG-M-PSB-10
Rod End Bearings	SG-A-REM12N	N/A	N/A	N/A

WIRING SPECIFICATIONS

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

LOPT_PSB-3.0-0

CABLE LENGTH

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

SG-PSB	250KG - 1T	3 metres
SG-PSB	2.5t - 10t	5 metres