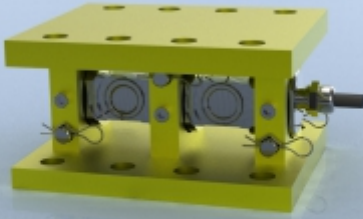


## TYPE: SWA-1



# SWA-1 Double Shear Beam Silo Weighing Assembly

## Description

The SWA-1 series of products uses a stainless steel double ended shear beam design, sealed to IP68, and is supplied as a complete assembly with mounting brackets. The mounting bracket assembly enables simple mounting for the engineer on site. It incorporates a number of key features that allows the best installed accuracy to be realised. These include an anti-lift off mechanism, compensation for thermal expansion and for off-axis loading.

The SWA-1 is available in 5 different sizes (full details are shown on the reverse of this data sheet). The standard mounting assembly is of a painted alloy steel construction, with a stainless steel option available for food, hygienic or corrosive applications.

The SWA-1 series can be supplied on its own or combined with our extensive range of instrumentation to provide a complete load monitoring or control system.

## Specification

Rated load (tonnes)	0.5, 1, 2, 5, 7.5, 10, 15, 20, 30, 50, 75, 100	
Proof load	150% of rated load	
Ultimate breaking load	<300% of rated load	
Output	2mV/V ( $\pm 0.25\%$ )	
Accuracy	< $\pm 0.05\%$ of rated load	
Non-repeatability	< $\pm 0.01\%$ of rated load	
Excitation voltage	10vdc recommended, 15vdc maximum	
Bridge resistance	750 $\Omega$ input, 700 $\Omega$ output	
Insulation resistance	>500M $\Omega$ @ 100vdc	
Operating temperature range	-20 to +60°C	
Compensated temperature range	-10 to +40°C	
Zero temperature coefficient	< $\pm 0.005\%$ of rated load/°C	
Span temperature coefficient	< $\pm 0.003\%$ of rated load/°C	
Environmental protection level	IP68	
Connection type	10 metres PUR screened cable, via gland cable	
Wiring connections	+supply: Red	-supply: Blue
	+signal: Green	-signal: Yellow

## Available Options

- Stainless steel mounting assembly
- TEDS option (when used with TR150 handheld display)

## Features

- Ranges: 0.5 to 100 tonnes
- Stainless steel fully welded construction
- Environmentally sealed to IP68
- Painted alloy steel mounting assembly (stainless steel option also available)
- High accuracy
- Low height
- Anti-lift off mechanism
- Integral earth strap
- High resistance to off-axis loading

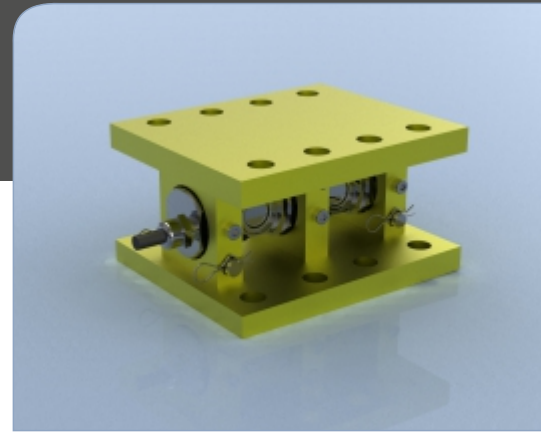
## Typical Applications

- Vessel weighing
- Silo weighing
- Process weighing & control
- Tank weighing

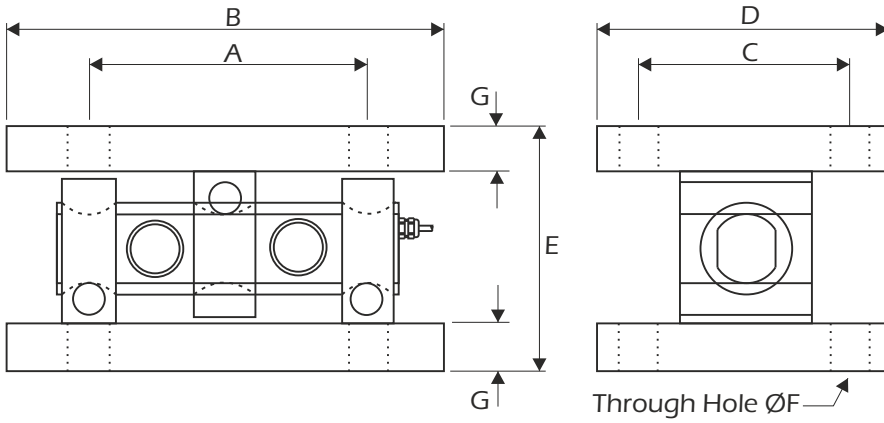
### LCM Systems Ltd

Unit 15, Newport Business Park  
Barry Way, Newport  
Isle of Wight PO30 5GY UK  
Tel: +44 (0)1983 249264  
Fax: +44 (0)1983 249266  
sales@lcm systems.com  
www.lcm systems.com

# SWA-1 Double Shear Beam Silo Weighing Assembly

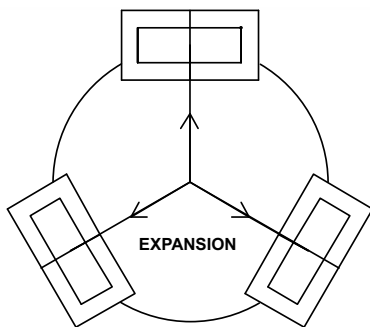


## Dimensions

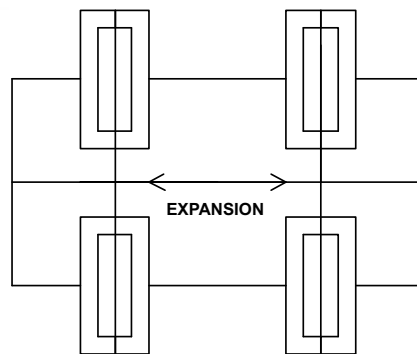


All dimensions are in mm

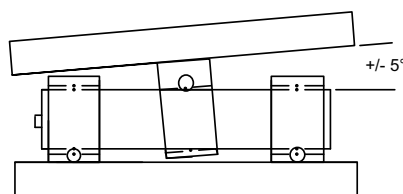
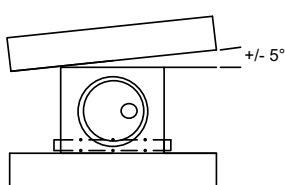
Size	Rating (tonnes)	A	B	C	D	E	ØF	G	Weight (kg)	Resolution (tonne)
1	0.5	105	150	94	124	88	13.5	14	5	0.0001
	1	105	150	94	124	88	13.5	14	5	0.0002
	2	105	150	94	124	88	13.5	14	5	0.0005
	5	105	150	94	124	88	13.5	14	5	0.001
2	7.5	140	200	125	165	115	17.5	18	14	0.002
	10	140	200	125	165	115	17.5	18	14	0.002
	15	140	200	125	165	115	17.5	18	14	0.005
	20	140	200	125	165	115	17.5	18	14	0.005
3	10	175	280	175	230	160	22	25	35	0.002
	15	175	280	175	230	160	22	25	35	0.005
	20	175	280	175	230	160	22	25	35	0.005
	30	175	280	175	230	160	22	25	35	0.01
	50	175	280	175	230	160	22	25	35	0.01
4	75	240	300	190	250	182	26	25	62	0.02
5	100	250	320	230	300	202	26	28	75	0.02



SILO MOUNT 3 LOAD CELL INSTALLATION



SILO MOUNT 4 LOAD CELL INSTALLATION



Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

www.lcmsystems.com

Issue No. 1

Issue date: 05/12/2014

APPROVED

(unapproved if printed)