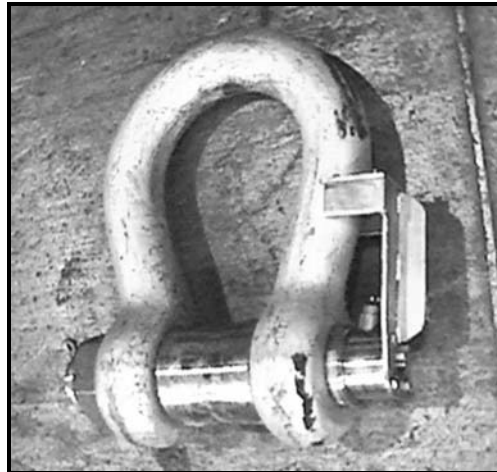


## Shackle Load Cell

Model: STLC

### Features

- ✓ Ranges 1 tonne to 400 tonne
- ✓ High Tensile Carbon Steel Construction
- ✓ Environmentally Sealed to IP65 (IP67 can also be offered)
- ✓ Simple installation and operation
- ✓ Shackle and load pin fully certified
- ✓ Optional load centralising bobbin
- ✓ Can be supplied with amplified output
- ✓ Many other options available



### Description

The Load Cell Central STLC range of Shackle Load Cells are designed for lifting and weighing in harsh industrial environments.

The shackle pins are forged from high tensile carbon steel and are machined to an exacting specification.

This range of load cells is Proof Loaded to 150% of the normal rated load.

The STLC series are available in a range from 1 tonne to 400 tonne. The integral cable is normally enclosed in an armoured rubber hydraulic hose to give physical and environmental protection. The STLC is internally gauged and the whole instrumented area is sealed to IP65, to protect it in service.

They are simple to install and are available in standard shackle sizes. As an option, a rotating bobbin can be supplied, to centralise the load and to minimise any point-load effects when the shackle is placed under load. We are always pleased to discuss any special requirements that can be accommodated. The STLC series can be supplied on it's own or combined with our extensive range of instrumentation to provide a complete load monitoring system.

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# Load Cell Central

**1-800-LOADCEL**

## Shackle Load Cell

## Model: STLC

### Specification (standard shackle)

Rated Load (tonnes):	1, 2, 3¼, 4¾, 6½, 9½, 12, 17 25, 40, 55, 85, 120, 200, 300, 400
Proof Load:	150% of Rated Load
Ultimate Breaking Load:	300% of Rated Load
Output:	1.5 mV/V at Rated Load (nominal)
Non-Linearity:	<±1.0% of Rated Load (typically)
Non-Repeatability:	<±0.10% of Rated Load
Excitation Voltage:	10vdc recommended, 15vdc maximum
Bridge Resistance:	350Ω
Insulation Resistance:	>500MΩ @ 500vdc
Operating Temperature Range:	-20 to +70°C
Compensated Temperature Range:	-10 to +50°C
Zero Temperature Coefficient:	<±0.010% of Rated Load/°C
Span Temperature Coefficient:	<±0.010% of Rated Load/°C
Environmental Protection Level:	IP65 (IP67 optional)
Connection Type:	10 metres 4-conductor screened cable (glanded exit)
Wiring Connections:	Red +Excitation                      Blue -Excitation Green +Signal                         Yellow -Signal
Options Available:	Special ranges available Special electrical connections Integral signal conditioning Centralising Bobbin Subsea and Offshore versions

### Specification (for options)

*All specifications for options are as detailed for the standard shackle, unless otherwise stated*

<b>Special Ranges</b>	The STLC can be supplied in any range, between 1te and 400te and calibrated as required. Usually we will choose the nearest standard shackle size. We can also offer special design shackles up to 2000te. Consult our design team for more details.	
<b>Special Electrical Connections</b>	The standard STLC cable exits the shackle pin via a gland and is restrained using the anti-rotation bracket. We can offer variations to the electrical connection method. For example, integral connectors, special cable length etc. For more details contact our office.	
<b>Integral Signal Conditioning</b>	We can offer various integral signal conditioning options, including:-	
	<u>Analog Signals</u>	4-20mA 2-wire current output (7.5 to 28vdc supply) 4-20mA 3-wire current output (13 to 28vdc supply) 0-5vdc 3-wire voltage output (8.5 to 14vdc supply) 0-10vdc 3-wire voltage output (13 to 30vdc supply)
	<u>Digital Signals</u>	RS232 digital - various protocols (5.4 to 18vdc supply) RS485 digital - various protocols (5.4 to 18vdc supply)
	<b>Centralising Bobbin</b>	We can offer an optional centralising bobbin. This can help improve the overall accuracy in certain cable tension applications. The bobbin is shown pictorially in the drawing below. For further information, please contact our design team.
<b>Subsea or Offshore versions</b>	We are able to offer fully submersible versions, which are normally supplied with underwater mateable connectors. These versions can also be pressure tested by a 3rd party and comes complete with a certificate of conformance.	
<b>Radio Telemetry</b>	We have a version available that requires no cable connection, using radio telemetry to transmit data. There is a separate data sheet available for this product.	

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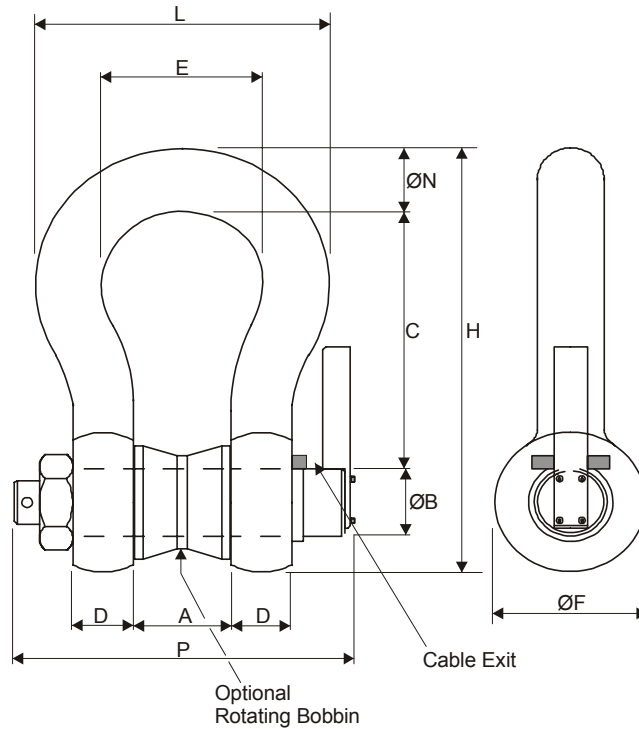
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## Shackle Load Cell

## STLC

All dimensions in millimetres



Dimensions in millimeters  
Capacities in metric tons

Model	Range working load (te)	A	ØB	C	ØD	ØE	ØF	H	L	N	P	Weight (kg)
STLC-1	1	16.8	11.2	36.6	9.65	26.2	23.1	63.0	45.2	9.65	55.0	2
STLC-2	2	20.6	16.0	47.8	12.7	33.3	30.2	83.5	58.5	12.7	71.0	2.3
STLC-3.25	3¼	26.9	19.1	60.5	16.0	42.9	38.1	106	74.5	17.5	89.5	2.8
STLC-4.75	4¾	31.8	22.4	71.5	19.1	51.0	46.0	126	89.0	20.6	103	3
STLC-6.5	6½	36.6	25.4	84.0	22.4	58.0	53.0	148	102	24.6	120	3.2
STLC-9.5	9½	46.0	31.8	108	28.7	74.0	68.5	190	131	31.8	150	5.2
STLC-12	12	51.5	35.1	119	31.8	82.5	76.0	210	146	35.1	165	8
STLC-17	17	60.5	41.4	146	38.1	98.5	92.0	254	175	41.1	196	12
STLC-25	25	73.0	51.0	178	44.5	127	106	313	225	57.0	230	18
STLC-40	40	73.0	51.0	178	44.5	127	106	313	225	57.0	230	18
STLC-55	55	82.5	57.0	197	51.0	146	122	348	253	61.0	264	25
STLC-85	85	105	70.0	267	66.5	184	145	453	327	79.0	344	45
STLC-120	120	127	82.5	330	76.0	200	165	546	365	92.0	419	85
STLC-150	150	133	95.5	372	95.5	229	203	625	419	105	483	125
STLC-200	200	184	121	397	95.5	279	267	743	533	152	521	215
STLC-300	300	213	152	495	121	330	305	895	635	172	618	364
STLC-400	400	210	178	572	165	330	356	1022	660	184	710	520

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