



Strainstall

THE WORLD of load measurement and stress analysis

Product Load Cell Shackles



The Load Cell Shackle provides a simple and reliable method of measuring a wide range of weights and loads. Two basic designs make up the range –

Type 4991: 3 – 35 tonne rating

Type 2791: 50 – 1000 tonne rating

- **Easy to use**
- **Robust construction**
- **Specifically designed for a harsh marine environment or general industrial use**

Strainstall load cell shackles are used worldwide from the arctic to the desert, even immersed in sea water hundreds of metres deep.

The options include “D” or “Bow” shackle bodies, load centralising bobbins, plug and socket cable extensions, displays and signal conditioning units, carrying cases (up to 35 tonne rating) and deep sea protection. They are supplied with a full calibration certification.

For applications where interconnecting cables would be impracticable, Strainstall can offer a telemetry link between the load cell shackle and the display. A radio link system enables the user to stand further away from the load, therefore offering increased safety and maximum convenience.



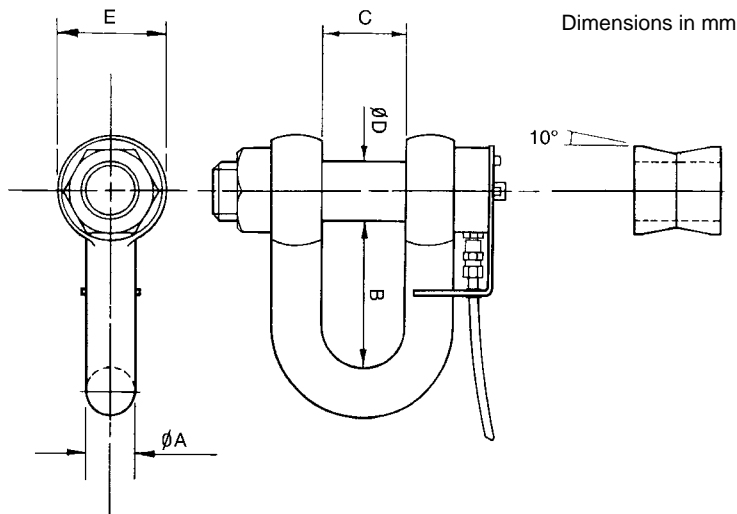
Typical Specification

Rated Load	3, 6, 10, 17, 25, 35, 50, 75, 100 tonnes 150-1000te on request.
Proof Load	See table below
Nominal Output	2.0mV/V nominal.
Recommended Excitation Voltage	10V
Maximum Excitation Voltage	15V
Zero Balance	± 2% of rated load
Bridge Resistance	700 ohm nominal. Full bridge.
Operating Temperature	-20 to +80°C.
Accuracy	Typically better than ±0.75% of rated load. As calibrated in a BS EN ISO 7500-1 test machine traceable to National Standards.
Non-Repeatability	±0.1% of rated load
Electrical Connection	Up to 35te rating – standard 4 metres 4 core screened polyurethane sheathed braided steel armoured cable and 2 nd outer sheath. From 50te rating standard 4 core cable with outer heavy duty “Hose” protection. Red +ve Supply. Green +ve Signal. Blue –ve Supply. Yellow –ve Signal.
Environmental Sealing	Equivalent to IP67.

Note: Where particular requirements are critical or load cells of a higher specification are required, we would be delighted to assist.

Full Load Tonnes	Max. Proof Load Tonnes	Nom. Size “A”	Inside Length “B”	Inside Width “C”	Bolt Diam. “D”	Outside Eye “E”	Unit Weight Kg
3	4.2	25	85	43	28	60	3
6	8	25	85	43	28	60	3
10	14	32	95	51	35	76	6
17	23	38	125	60	41	92	10
25	34	45	150	74	51	105	15
35	47	50	170	83	57	127	22
50	67	65	200	105	70	152	40
75	100	75	230	127	83	165	60
100	134	89	270	146	95	205	100
200	280	120	500	175	130	264	235

150 tonne and above are based on elongated bow style shackles, dimension available upon request.



STRAINSTALL's team of experienced engineers operates from offices in Cowes, Bath and Aberdeen (UK) and Tønsberg (Norway). For further information, please contact:

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Due to continuous development, Strainstall UK reserve the right to change specification without notice.

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