

TELSHACK-B-HL Wireless Bow Load Shackle

Description

The TELSHACK-B-HL range of telemetry load shackles are manufactured using the GN Rope H10 shackle. Suitable for use in a wide range of industrial and marine heavy lift weighing applications, these load shackles provide a robust and effective method of measuring large tensile loads. They are also particularly suited to offshore applications, as they include 3.1 material certification as standard and the proof load test and calibration can be witnessed by a 3rd party at LCM Systems.

The unique telemetry housing is manufactured from tough high performance polyamide resin making it strong yet light, resulting in a better balanced load shackle when compared to others available on the market. Two clips enable you to open the housing to access and change the two AAA alkaline batteries, while the internal electronics underneath remain completely sealed. This includes the antenna to ensure maximum protection from damage. The built in radio telemetry electronics operates on the 2.4GHz license free frequency.

The TELSHACK-B-HL is supplied as standard without any additional wireless devices to enable greater flexibility with the configuration and ordering of the product. The TELSHACK-B-HL can be used with any of the T24 range of wireless instrumentation, whether this be for a simple display system using the T24-HS-LS, or more complex systems using multiple load cells and multiple wireless devices.

For more sophisticated systems, including datalogging or monitoring/reporting requirements, we are able to offer a robust tablet PC with installed software for use with single or multiple load cell installations. Our sales team will be happy to discuss the best wireless system configuration to suit your requirements.

The TELSHACK-B-HL series can be provided as shown in this datasheet or can be modified to meet a particular application requirement. We are always pleased to discuss any special requirements that can be accommodated.

Specification

Rated load (tonnes)	120, 150, 200, 250, 300, 400, 500, 600, 700, 800, 900, 1000
Proof load	150% of rated load
Ultimate breaking load	300% of rated load
Non-linearity	<±1% of rated load (typically)
Non-repeatability	<±0.1% of rated load
Transmission distance	Up to 600 metres (clear line of sight)
Battery life	>300 hours typically (continuous use with 1.2Ah batteries)
Battery (standard)	2 x AAA Alkaline (supplied with 1.2Ah batteries)
(ATEX)	AAA L92 Lithium x 2 (supplied with 1.2Ah batteries)
Operating temperature range	-20 to +55°C (-20 to +50°C for Ex i)
ATEX certification details	II 2G Ex ib IIC T4 Gb
Environmental protection level	IP67
Telemetry housing	Polyamide resin

Available Options

- Special ranges and capacities up to 2000te
- Hazardous Area certified - Intrinsically Safe (Ex i)
- Centralising load bobbin
- Special telemetry systems available
- Lloyds, ABS, DNV or other third party witnessing
- Various wireless accessories available. See T24 range of wireless products



Features

- Ranges from 120 to 1000 tonnes
- High tensile carbon steel construction
- Environmentally sealed to IP67
- Simple installation and operation
- Shackle and load pin fully certified
- Optional load centralising bobbin
- Many other options available

Typical Applications

- Towing/mooring tension
- Winch load monitoring
- Water bag testing
- Bollard testing

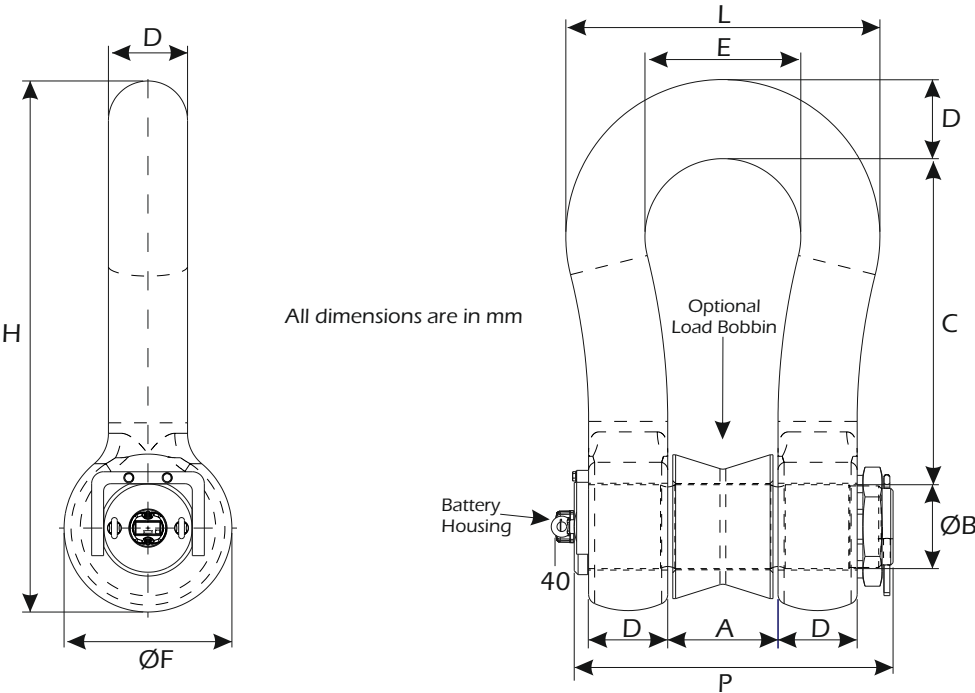


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Special Options

Special ranges	The TELSACK-B-HL can be supplied in any load rating, between 120te and 2000te and calibrated as required. Usually we will choose the nearest standard shackle size. We can also offer special design shackles up to 2000te.
Centralising bobbin	We can offer an optional centralising bobbin. This helps improve the overall load cell accuracy in certain cable tension applications. The bobbin is shown pictorially in the drawing below.
Multi-shackle systems	It is possible with the T24-HA handheld telemetry display to use up to 12 shackles with a single handheld. Each shackle is paired with the handheld and can be used to view individual load cells or summated load cells. These values can be sent to a printer or a PC.
Hazardous Area	We can supply ATEX/IECEx certified load shackles for use in Zone 1 and Zone 2 hazardous areas.

Dimensions



Rating (tonnes)	A	ØB	C	D	E	ØF	H	L	P	Weight (kgs)	Resolution (tonnes)
120	150	95	380	89	238	200	617	416	420	110	0.1
150	170	108	400	102	275	230	671	479	475	160	0.1
200	180	125	500	120	290	260	813	530	520	235	0.2
250	205	140	540	125	305	260	865	555	560	285	0.2
300	205	150	600	130	305	305	958	565	570	340	0.5
400	230	175	680	165	325	350	1108	655	655	560	0.5
500	255	185	700	180	350	370	1158	710	720	685	0.5
600	285	205	700	195	375	405	1200	765	815	880	0.5
700	310	217	700	205	400	435	1231	810	860	980	1
800	310	217	700	210	400	435	1236	820	870	1100	1
900	330	230	700	220	420	465	1268	860	910	1280	1
1000	350	240	750	230	420	480	1290	880	950	1460	1

Note 1: Part numbers for ATEX versions will be suffixed with -ATEX-I e.g.TELSACK-B-HL-500T-ATEX-I.

Note 2: Dimensions may change for hazardous area versions.

A summary of available wireless devices that can be used to enhance the AWLL in your application can be viewed on the next page of this datasheet.

For further assistance on system configuration, please call us or email your requirements to sales@lcmsystems.com.

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Wireless Receivers/Display Options



T24-HS-LS
Simple wireless display for connecting to 1 load cell



T24-HA
Wireless display for connection to up to 12 load cells



T24-HR
Wireless display for connecting to multiple load cells



X24-HD
ATEX Wireless display for connection to up to 24 load cells

Wireless Base Station Options



T24-BSu
Wireless USB connected base station



T24-Bsd
Wireless compact USB connected dongle base station



T24-BSue
Wireless USB extended range base station



T24-BSi
Wireless USB, RS485, RS232 connected base station

Wireless Output Module Options



T24-RM1
Wireless relay, switch output module



T24-SO
Wireless serial ASCII output module



T24-AO1
Wireless analogue output module



T24-PR1
Wireless surface mounting tally roll printer



T24-AR
Wireless range extender repeater module

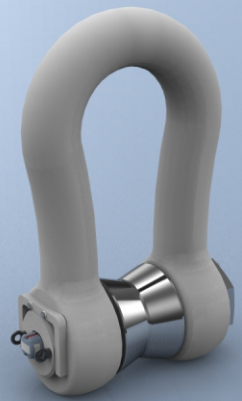
Wireless Software Options



LCM Systems are able to offer various software solutions for our wireless range of load cells. We encourage you to speak to our sales team to discuss any standalone software requirements you may have.

The solutions we regularly offer include centre of gravity weighing and reporting, multiple load cell display & reporting and PC based datalogging. Other solutions can also be offered.

For more detailed information regarding wireless instrumentation visit www.lcmsystems.com/T24



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

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