

Delphi Measurement manufactures a diverse variety of tension measuring sensors to fit our customers equipment. This experience has allowed Delphi to develop standard products like the 103 series of aluminium tension cells. These cells are used in many industries, where measurement of a pulling or tension force is required. Our simple, rugged design makes them suitable for the harshest environments. These load cells are manufactured from high quality Aircraft Grade Aluminium. Ongoing development of the designs has resulted in lightweight load cells with high safety factors making them suitable for lifting applications.

The load cells are available in cabled or wireless versions. The cabled versions are usually used in permanent mount installations and the wireless versions are typically used in portable applications. The combination of wireless technology and high strength materials make the 103TW series a lightweight, highly versatile and portable load measuring solution.

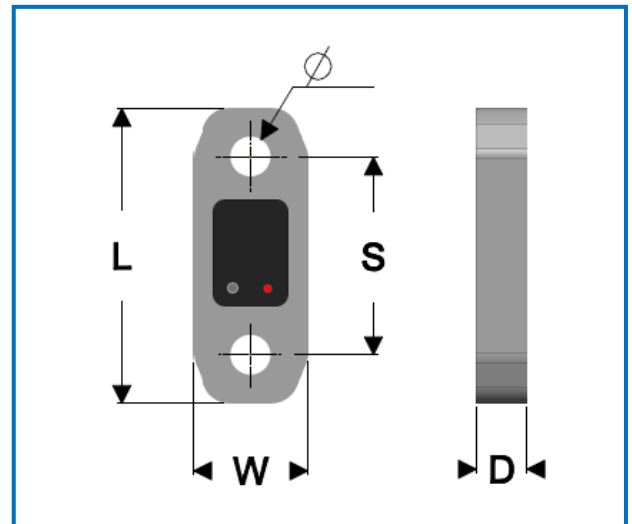
103T SERIES

The Delphi 103T series Aluminium tension cell range are designed for a wide range of load monitoring, weighing, lifting, winching and towing applications. The cell width and hole diameter of the load cell is designed to match the standard sizes of Grade S Bow shackles*.

*As per AS2741, compatible with: Green Pin™ G-4163(85t & below), G-6036(120t & above) and Crosby™ 2130 series.

High strength aircraft grade aluminium
Safety design features
IP67 rated load cell
High Safety Factor to AS4991
Portable & Wireless kits available
Made In Australia

Model No.	Range (t)	L (mm)	W (mm)	D (mm)	S (mm)	Ø (mm)	Cell (kg)
103T-4.75	4.75	262	96	28.5	186	24	2
103T-6.5	6.5	278	100	33.8	194.7	27.5	2
103T-12	12	320	124	47.5	220	38	4
103T-17	17	328	127	56	220	44.3	5
103T-25	25	370	140	69	230	55.2	8
103T-35	35	425	146	78	260	62	10
103T-55	55	490	179	95	292	75.6	18
103T-85	85	580	210	110	340	90	30
103T-120	120	620	255	130	340	102.5	46
103T-150	150	685	250	148	380	112	55
103T- >150	On Request						



Accuracy	Better than 0.5% of range Typically ±0.1% BSL
Proof Loaded To	10t and under :- 2xMWL Over 10t :-(1.04xMWL)+9.6t
Overload	Size dependant
Thermal	0.005%/°C on output or zero shift
Temperature	10°C to +60°C (compensated) -10°C to +80°C (operating)
Excitation	<12V DC
Output	Wireless (up to 800m)
S - Shackle Pin Centres	
Ø - Hole Mount Diameter	
# - To suit selected shackle	
Accuracy includes linearity, hysteresis and creep	
All sizes available as cabled versions with matching cabled handset	



Basic Model Information for Cell 103-XXX-XXX*

103	XXX	XXX	*
Product Variation			
Tension Cell (Cabled)	T		
Tension Cell (Wireless)	TW		
Tension Cell Wireless Kit (Carry Case)	TWK		
Range of Cell			
4.75t		4.75	
6.5t		6.5	
12t		12	
17t		17	
25t		25	
35t		35	
55t		55	
85t		85	
120t		120	
150t		150	
200t		200	
250t		250	
Carry Case Option			
*			Excludes Carry Case

The properties of Aluminium make it ideal for wireless transmission of tension load, especially useful where connection cables are not practical or where portability is required. By using the 103T series load cell body and a wireless transmitter, the tension cell is transformed into a Model 103TW wireless load device capable of mating with a range of digital hand held indicators, USB receivers (for logging on a computer), alarm relays and displays.

The 103TW series is also available as a kit form – 103TWK - which includes a load cell with integral transmitter, hand held readout, battery charger and foam cut carry case to suit. Load information can be read up to 200m from the load cell. To increase battery life, the wireless indicator (or USB device) can turn the load cell on and off or be set up to turn itself off automatically after a set time. Multiple units are useable in the same location without interference. A single receiver has the capability of connecting with up to 20 wireless load cell transmitters and indicate/log/print/store load readings.

103TWK WIRELESS SERIES

The Delphi 103TWK Wireless Series includes a load cell with integral transmitter, hand held readout, battery charger, carry case with foam cut out to suit, making it ideal for portable applications.

103TWK CASE SIZES

Model No.	Case Model	L (mm)	W (mm)	D (mm)	Kit (kg)
103TWK-4.75	350 CC-S	305	228	115	4.5
103TWK-6.5	350 CC-S	305	228	115	5
103TWK-12	350 CC-M	305	228	115	6
103TWK-17	350 CC-M	305	228	115	7
103TWK-25	350 CC-M	305	228	115	8
103TWK-35	350 CC-L	515	365	190	12
103TWK-55	350 CC-XL	860	560	355	58
103TWK-85*	350 CC-XL	860	560	355	58
103TWK-120*	350 CC-XL	860	560	355	58
103TWK-150*	350 CC-XL	860	560	355	67
103TWK-200*	350 CC-XXL	On Request	On Request	On Request	On Request
103TWK-250*	350 CC-XXL	On Request	On Request	On Request	On Request

*Excludes carry case, can be supplied as an option



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NOTE

Delphi Measurement reserves the right to modify specifications and features without notice. For information on the latest revision of any informative document please contact Delphi Measurement using the details provided.



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