

# BUTTON LOAD CELL

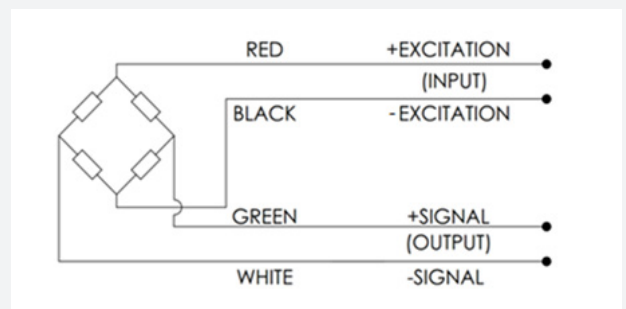
Button Load Cells are strain gauge based transducers with temperature compensation and excellent overall performance.

This type provides a range of capacities up to 200 kN or 50 klb with better than  $\pm 0.5\%$  (full scale) non-linearity. Three tapped holes are provided on the underside for ease of mounting. Amplified and digitised versions are available upon request.

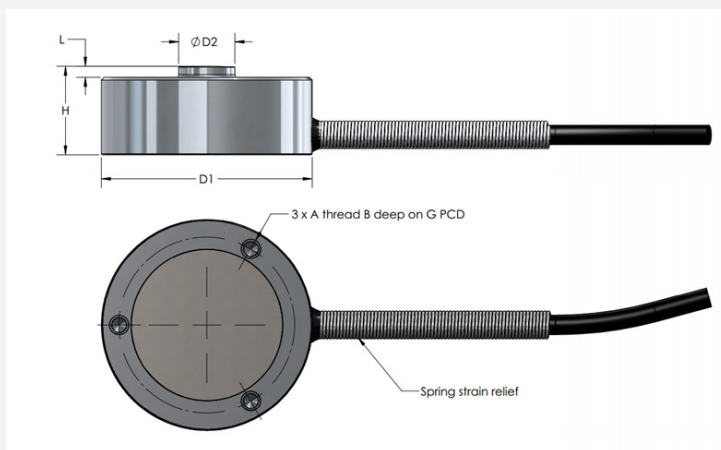


## WIRING

- The load button is provided with 4x32 AWG (100N -500N & 25lb – 100lb), 4x28 AWG (1kN-200kN & 250lbf – 50klbf) wiring within a braided shielded cable (overall cable length 2m).
- Connector with integrated TEDS chip is available to order.



## DIMENSIONS



Dimensions continued on next page.

CAPACITY	DEFLECTION (NOM.) (MM) [IN]
100N	0.02 [.001]
200N	0.04 [.002]
500N	0.03 [.001]
1kN	0.03 [.001]
2kN	0.03 [.001]
5kN	0.03 [.001]
10kN	0.03 [.001]
15kN	0.04 [.002]
20kN	0.05 [.002]
50kN	0.06 [.002]
100kN	0.08 [.003]
150kN	0.09 [.003]

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## DIMENSIONS CONTINUED

RANGE	CAPACITY	D1 (MM) [IN]	D2 (MM) [IN]	H (MM) [IN]	L (MM) [IN]	A (IN)	B (MM) [IN]	G (MM) [IN]
3010-10	100 N							
3020-10	200 N	24.9 [0.98]	5,33 [0.21]	8.13 [0.32]	1,27 [0.05]	M3	5,59 [0.22]	19,05 [0.75]
3030-10	500 N							
3015-10	25 lbf							
3025-10	50 lbf	24.9 [0.98]	5,33 [0.21]	8.13 [0.32]	1,27 [0.05]	#4-40 UNC	5,59 [0.22]	19,05 [0.75]
3035-10	100 lbf							
3040-10	1 kN							
3050-10	2 kN	31,75 [1.25]	8,13 [0.32]	9,91 [0.39]	1,27 [0.05]	M4	6,35 [0.25]	25,4 [1.000]
3060-10	5 kN							
3070-10	10k N							
3045-10	250 lbf							
3055-10	500 lbf	31,75 [1.25]	8,13 [0.32]	9,91 [0.39]	1,27 [0.05]	#6-32 UNC	6,35 [0.25]	25,4 [1.000]
3065-10	1 klbf							
3075-10	2 klbf							
3080-10	15 kN							
3090-10	20 kN	38,1 [1.50]	10,16 [0.40]	16,0 [0.63]	2,03 [0.08]	M4	6,35 [0.25]	31,75 [1.250]
3100-10	50 kN							
3085-10	5 klbf							
3095-10	7.5klbf	38,1 [1.50]	10,16 [0.40]	16,0 [0.63]	2,03 [0.08]	#6-32 UNC	6,35 [0.25]	31,75 [1.250]
3105-10	10 klbf							
3110-10	100 kN	50.3 [1.98]	15.24 [0.60]	25.4 [1.00]	3.05 [0.12]	M4	6,35 [0.25]	41.3 [1.625]
3120-10	150 kN							
3115-10	20 klbf	50.3 [1.98]	15.24 [0.60]	25.4 [1.00]	3.05 [0.12]	#6-32 UNC	6,35 [0.25]	41.3 [1.625]
3125-10	30 klbf							
3130-10	200 kN	75.7 [2.98]	19.8 [0.78]	38.1 [1.50]	4.6 [0.18]	M4	6.4 [0.25]	60.5 [2.375]
3135-10	50 klbf	75.7 [2.98]	19.8 [0.78]	38.1 [1.50]	4.6 [0.18]	#6-32 UNC	6.4 [0.25]	60.5 [2.375]

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## SPECIFICATION

PARAMETER	RANGE	NOTES
Capacity (metric)	100, 200, 500, 1000, 2000, 5k, 10k, 15k, 20k, 50k, 100k, 150k, 200 k N	With metric threads as standard
Capacity (lb)	25, 50, 100, 250, 500, 1000, 2000, 3k, 4k, 5, 7.5k, 10k, 15k, 20k, 30k, 50k lbf	With UNF threads as standard
Allowable Maximum Load	150% full scale	No effect on performance
Non-Linearity	± 0.5% FS max.	
Hysteresis	± 0.3% FS max.	
Repeatability	± 0.1% FS max.	
Total Error	± 0.8% FS max.	Non-linearity and hysteresis
Zero Balance	2% FS max.	
Zero Temp. Coefficient	0.01% FS/°C	
Span Temp. Coefficient	0.02% of load/°C	
Compensated Temp. Range	-15°C to 70°C	Wider range available to order
Operating Temp. Range	-20°C to 80°C	Wider range available to order
Output	2mV/V nominal (1mV/V for 100N and 25lbf)	Amplified and digitised versions available to order.
IP Rating	IP64 – Bonded Cover	Bonded cover is standard
Excitation	5V, 10V	
Bridge Resistance	350 Ohms Nom. – (100N – 500N) & (25lbf – 100lbf) 700 Ohms Nom. – above 1kN & 250lbf	

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