

BUTTON LOAD CELL

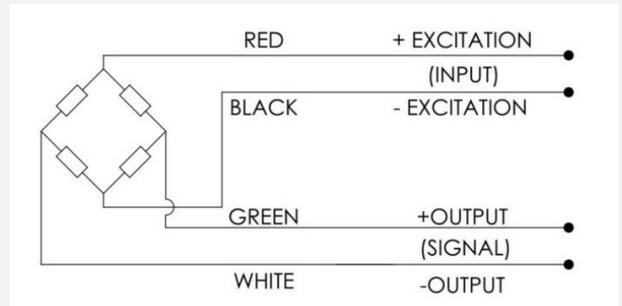
Button Load Cells are strain gauge based transducers with temperature compensation and excellent overall performance.

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.

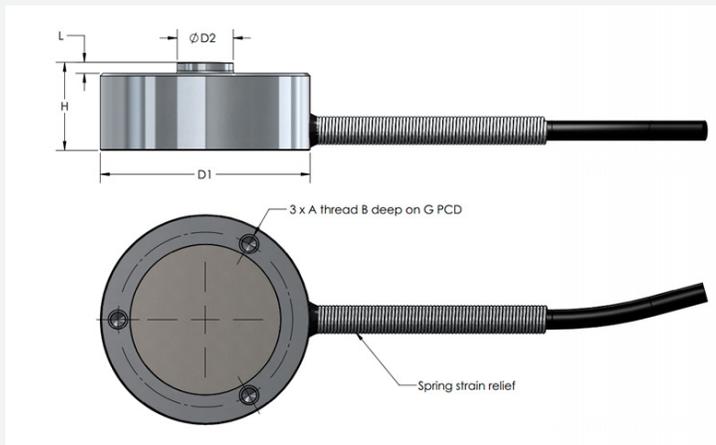


WIRING

- 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)	D2 (MM) [IN]	H (MM) [IN]	L (MM) [IN]	A (IN)	B (MM) [IN]	G (MM) [IN]
ALBM-1M	100N							
ALBM-1M	200N	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]
ALBM-1M	500N							
ALBM-1U	25lbf							
ALBM-1U	50lbf	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]
ALBM-1U	100lbf							
ALBM-2M	1kN							
ALBM-2M	2kN	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]
ALBM-2M	5kN							
ALBM-2M	10kN							
ALBM-2U	250lbf							
ALBM-2U	500lbf	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]
ALBM-2U	1klbf							
ALBM-2U	2klbf							
ALBM-3M	15kN							
ALBM-3M	20kN	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]
ALBM-3M	50kN							
ALBM-3U	5klbf							
ALBM-3U	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]
ALBM-3U	10klbf							
ALBM-4M	100kN	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]
ALBM-4M	150kN							
ALBM-4U	20klbf	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]
ALBM-4U	30klbf							
ALBM-4M	200kN	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]
ALBM-4U	50klbf	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) (N)	100, 200, 500, 1K, 2K, 5K, 10K, 15K, 20K, 50K, 100K, 150K, 200K	With metric threads as standard
Capacity (lb)	25, 50, 100, 250, 500, 1K, 2K, 3K, 4K, 5K, 7.5K, 10K, 15K, 20K, 30K, 50K	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 Temperature Coefficient (%)	0.01 FS/°C	
Span Temperature Coefficient (%)	0.02 of load/°C	
Compensated Temperature (°C)	-15 to +70	Wider range available to order
Operating Temperature (°C)	-20 to +80	Wider range available to order
Output (mV/V)	2 nominal (1 for 100N and 25lbf)	Amplified and digitised versions available to order.
IP Rating	IP64 – Bonded Cover	Bonded cover is standard
Excitation (V)	5, 10	
Bridge Resistance (ohms)	350 nominal – (100N – 500N) & (25lbf – 100lbf) 700 nominal – above 1kN & 250lbf	

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