



## Standard Features

- » ASTM E74 performance: Lower Limit Factor (LLF) better than 0.02 %, Class A better than 8 % of capacity when used only in a single direction.<sup>1</sup>
- » ISO 376 Class 1 or better
- » Compression and/or tension modes
- » Capacities from 500 – 112,000 lbf, or equivalent kgf/Newton
- » Direct reading calibration accuracy is typically around 0.1 % of capacity
- » Available accessories such as Morehouse adapters, custom-cut protective cases, various indicators

<sup>1</sup>When the directions are combined, there may be a reduction in the loading range. The reduction varies by capacity, and the verified range of forces could increase to 40 % of capacity.

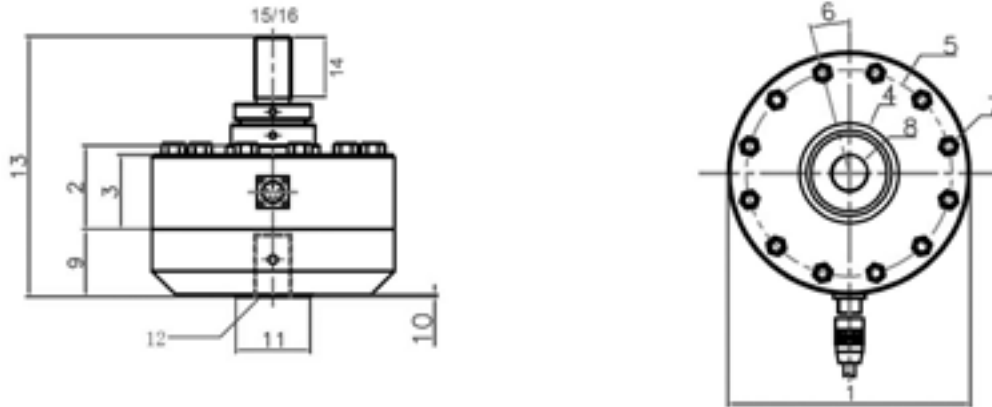
## Technical Specifications

Specifications	Model - Capacity (lbf / kN)						
	0.5K, 1K, 2K / 2.5, 5, 10	5K / 25	10K / 50	20K / 100	50K / 250	60K / 300	100K / 500
<b>Accuracy</b>							
Static Error Band, % R.O.	± 0.03	± 0.03	± 0.03	± 0.04	± 0.04	± 0.04	± 0.04
Non-Linearity, % R.O.	± 0.03	± 0.03	± 0.03	± 0.03	± 0.03	± 0.03	± 0.03
Hysteresis, % R.O.	± 0.04	± 0.04	± 0.04	± 0.04	± 0.04	± 0.04	± 0.04
Non-Repeatability, % R.O.	± 0.01	± 0.01	± 0.01	± 0.01	± 0.01	± 0.01	± 0.01
Creep, % Rdg / 20 Min.	± 0.03	± 0.03	± 0.03	± 0.03	± 0.03	± 0.03	± 0.03
Off-Center Load Sensitivity, %/in	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10
Side Load Sensitivity, %	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10
Zero Balance, % R.O.	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0
<b>Temperature</b>							
Range, Compensated, °F	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115
Range, Operating, °F	-25 to +180	-25 to +180	-25 to +180	-25 to +180	-25 to +180	-25 to +180	-25 to +180
Sensitivity Effect, % Rdg / 100°F	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Zero Effect, % R.O. / 100°F	0.08	0.08	0.08	0.08	0.08	0.08	0.08
<b>Electrical</b>							
Recommended Excitation, VDC	10	10	10	10	10	10	10
Input Resistance, Ω	1400 +40/-3.5	1400 +40/-3.5	1400 +40/-3.5	1400 +40/-3.5	1400 +40/-3.5	1400 +40/-3.5	1400 +40/-3.5
Output Resistance, Ω	1400 ± 3.5	1400 ± 3.5	1400 ± 3.5	1400 ± 3.5	1400 ± 3.5	1400 ± 3.5	1400 ± 3.5
Sensitivity (R.O.), mV/V, Nominal	4	4	4	4	4	4	4
Insulation Bridge/Case, MegΩ	5000 @ 50 VDC	5000 @ 50 VDC	5000 @ 50 VDC	5000 @ 50 VDC	5000 @ 50 VDC	5000 @ 50 VDC	5000 @ 50 VDC
<b>Mechanical</b>							
Safe Overload, % R.O.	120	120	120	120	120	120	120
Weight, lbs	5	8	8	24	24	30	50
Flexure Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel

Capacity (lbf)	500	1,000	2,000	5,000	10,000	25,000	50,000	60,000	100,000
Capacity (kN)	2.5	5	10	25	50	100	250	300	500
Part No.	BLC-500	BLC-1k	BLC-2k	BLC-5k	BLC-10k	BLC-20k	BLC-50k	BLC-60k	BLC-100k



## Dimensions



Dimensions	Model - Capacity (lbf / kN)						
	0.5K, 1K, 2.25K / 2.5, 5, 10	5K / 25	10K / 50	25K / 100	50K / 250	60K / 300	100K / 500
1 – Cell & Base Diameter (in/mm)	3.5 / 90.00	4.12 / 104.65	4.12 / 104.65	6.06 / 153.92	6.06 / 153.92	6.06 / 153.92	8 / 203
2 – Cell Height to Hub (in/mm)	1.10 / 28	1.41 / 36	1.41 / 36	2.04 / 52	2.04 / 52	2.28 / 58	2.55 / 65
3 – Cell Body Height (in/mm)	0.98 / 25	1.29 / 33	1.29 / 33	1.81 / 46	1.81 / 46	2.00 / 51	2.24 / 57
4 – Hub Diameter (in/mm)	1.10 / 28	1.57 / 40	1.57 / 40	2.67 / 68	2.67 / 68	2.67 / 68	3.5 / 90
5 – Mounting B.C. Diameter (in/mm)	2.95 / 75	3.54 / 90	3.54 / 90	5.11 / 130	5.11 / 130	5.11 / 130	6.61 / 168
6 – Symmetric B.C. Offset	15 Degrees	15 Degrees	15 Degrees	15 Degrees	15 Degrees	15 Degrees	11.25 Degrees
7 – Mounting Hole Diameter (in/mm)	0.25 / 6.5	0.25 / 6.5	0.25 / 6.5	0.41 / 10.5	0.41 / 10.5	0.41 / 10.5	0.49 / 12.5
8 – Hub Thread Size, Depth (in)	0.625"-18, UNF-3A	0.625"-18, UNF-3A	0.625"-18, UNF-3A	1.25"- 12, UNF-3A	1.25"- 12, UNF-3A	1.5"-12, UNF-3A	1.75"-12, UNF-3A
9 – Base Thickness, Total (in/mm)	1.06 / 27	1.14 / 29	1.14 / 29	1.49 / 38	1.49 / 38	2.00 / 51	2.00 / 51
10 – Base Step Height (in/mm)	0.04 / 1	0.04 / 1	0.04 / 1	0.04 / 1	0.04 / 1	0.04 / 1	0.04 / 1
11 – Base Step Diameter (in/mm)	1.10 / 28	1.25 / 32	1.25 / 32	2.28 / 58	2.28 / 58	2.75 / 70	3.07 / 78
12 – Base Thread Size, Depth (in)	0.625"-18, UNF-3B	0.625"-18, UNF-3A	0.625"-18, UNF-3A	1.25"- 12, UNF-3A	1.25"- 12, UNF-3A	1.5"- 12, UNF-3A	1.75"- 12, UNF-3A
13 – Total Height (in/mm)	3.77 / 96	4.40 / 112	4.40 / 112	6.37 / 162	6.37 / 162	7.38 / 187.5	8.34 / 212
14 – Adapter Thread Length (in/mm)	1 / 25.4	1 / 25.4	1 / 25.4	1.25 / 31.75	1.25 / 31.75	1.5 / 38.1	2.05 / 52.07
15 – Adapter End Radius (in/mm)	Flat	Flat	Flat	Flat	Flat	Flat	Flat
16 – Adapter Thread Size (in)	0.625"-18	0.625"-18	0.625"-18	1.25"- 12	1.25"- 12	1.50"- 12	1.75"- 12

## Wiring

Budget Shear Web	
Connector Pin	Description
Pin A	+ Excitation (Red)
Pin B	- Signal (White)
Pin C	Shield (Bare)
Pin D	- Excitation (Black)
Pin E	+ Signal (Green)

