

## PBLC1 PILLOW BLOCK LOAD BEARING LOAD CELL (U.S. & METRIC)

The PBLC1 Pillow Block Load Bearing Load Cell series has been developed to measure the force of a pillow block bearing. The force measurement is performed at this load cell between two supports. This force sensor is suitable for the measurement of forces under pillow block bearings for diameter  $\varnothing$  20mm ( $\varnothing$  0.79 in) and for the measurement of axle weight in test stands for trains and vehicles. Product is compatible with INA Pillow Block Bearings.

### FEATURES & BENEFITS

- Capacities from 5 to 30 kN (1.1K to 6.7K lbf)
- Compatible with INA pillow block bearings
- IP65 moisture protection
- Rugged electro-galvanized surface

### SPECIFICATIONS

ACCURACY – (MAX ERROR)		
Nonlinearity – %FS		0.1
Hysteresis – %FS		0.1
Creep %FS		0.1
TEMPERATURE		
Compensated Range	°C	-10 to 70
	°F	14 to 158
Operating Range	°C	-10 to 85
	°F	14 to 185
Effect on Output % / deg	°C	0.02
Effect on Zero – %RO / deg		0.01
ELECTRICAL		
Rated Output – mV/V / FS		1
Zero Balance – mV/V		0.05
Bridge Resistance – Ohm		350
Excitation Voltage – VDC MAX		15
Insulation Resistance – Ohm		2 G
MECHANICAL		
Calibration		Compression
Safe Overload – lbf		150
Material		Stainless Steel
Cable Length	m	5
	ft	16.4

### STANDARD CONFIGURATION



Model PBLC-30kN-150 (Shown)

### ELECTRICAL

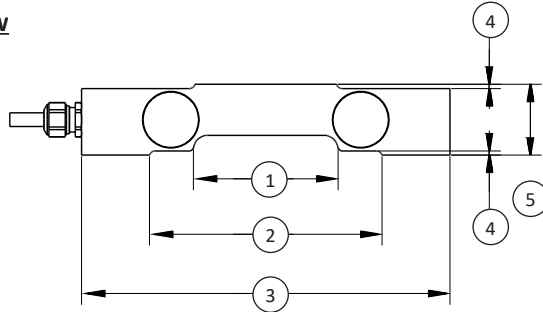
SYMBOL	DESCRIPTION	WIRE COLOR
+Us	Positive Bridge Supply	Brown
-Us	Negative Bridge Supply	White
+Ud	Positive Bridge Output	Green
-Ud	Negative Bridge Output	Yellow

### OPTIONS

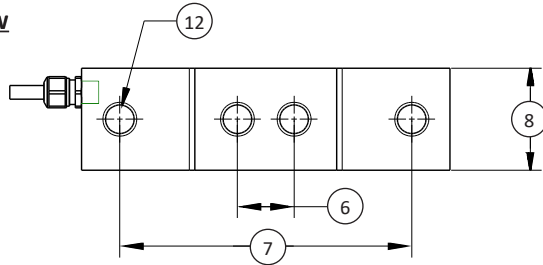
- Optional 780 (+/-80) Ohm Configuration
- 2-Axis Option Available

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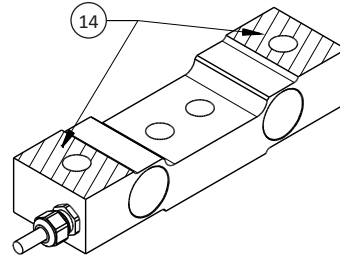
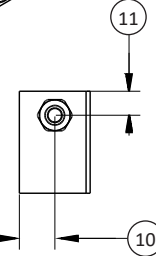
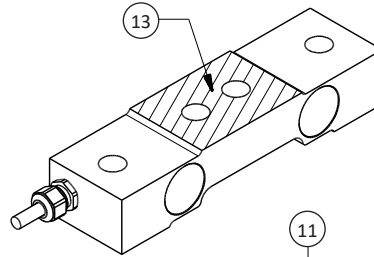
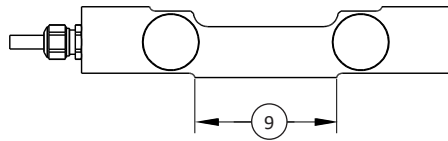
**SIDE VIEW**



**TOP VIEW**



**SIDE VIEW**



### DIMENSIONS

See Drawing	CAPACITY													
	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)
	5, 15	1.1K, 3.3K	5, 15	1.1K, 3.3K	20	4.4K	5, 20	1.1K, 4.4K	10, 30	2.2K, 6.7K	10, 30	2.2K, 6.7K	30	6.7K
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
(1)	51	2.01	51	2.01	48	1.89	50	1.97	60	2.36	60	2.36	60	2.36
(2)	82	3.23	82	3.23	100	3.94	100	3.94	110	4.33	110	4.33	115	4.53
(3)	130	5.12	130	5.12	158	6.22	163	6.42	179	7.05	192	7.56	200	7.87
(4)	1.5	0.06	1.5	0.06	2	0.08	1.5	0.06	2	0.08	2	0.08	2	0.08
(5)	25	0.98	25	0.98	34	1.34	34	1.34	34	1.34	34	1.34	34	1.34
(6)	20	0.79	20	0.79	20	0.79	20	0.79	26	1.02	26	1.02	26	1.02
(7)	97	3.81	103	4.06	118	4.65	126	4.96	138	5.43	150	5.91	158	6.22
(8)	32	1.26	36	1.42	40	1.57	45	1.77	48	1.89	48	1.89	54	2.13
(9)	50	1.97	50	1.97	53	2.09	53	2.09	66	2.60	66	2.60	66	2.60
(10)	12.5	0.49	12.5	0.49	17	0.67	17	0.67	17	0.67	17	0.67	17	0.67
(11)	6	0.24	8.5	0.33	8.5	0.33	8.5	0.33	10	0.39	10	0.39	10	0.39
(12)	4 x M12x1.75 ↓												4 x M16x2 ↓	
(13)	Bolting Surface / Measuring Platform													
(14)	Bolting Surface													

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U.S. dimensions and capacities are provided for conversion only. Standard products have International System of Units (SI) capacities and dimensions.