

1800 PLATINUM STANDARD™ CALIBRATION LOAD CELL (U.S. & METRIC)

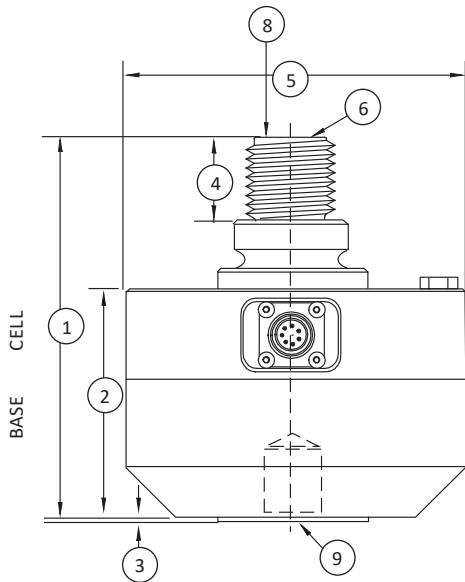
FEATURES & BENEFITS

- Capacities from 1.1K to 55K lbf (5 to 250 kN)
- Handcrafted excellence for the most demanding calibration requirements
- Tension and compression in one unit
- 0.005% nonrepeatability
- Capable of 2% lower load limit per ASTM E74
- High precision base installed
- ASTM E74 calibration standard
- Eccentric load compensated
- 0.0008%/°F temp. effect on output
- Connector protector standard

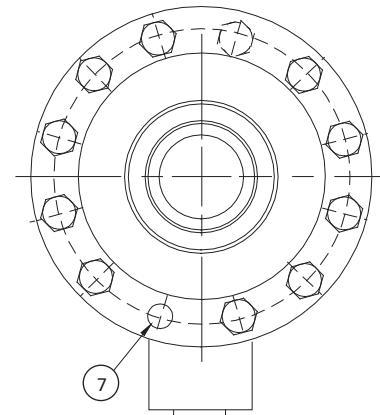
STANDARD CONFIGURATION



Model 1820CJY-50K (Shown)



SIDE VIEW



TOP VIEW

DIMENSIONS

See Drawing	MODEL					
	1810		1820		1830	
	CAPACITY					
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
	1.1K, 2.2K, 3.3K, 5.5K	5, 10, 15, 25	11K, 22K	50, 100	55K	250
in	mm	in	mm	in	mm	
(1)	4.65	118.1	6.85	174.0	8.26	209.7
(2)	3.28	83.3	4.13	104.9	5.00	127.0
(3)	0.03	0.8	0.03	0.8	0.03	0.8
(4)	0.75	19.1	1.50	38.1	1.88	47.8
(5)	4.13	104.9	6.06	154.0	8.00	203.2
(6)	6.00	152.4	6.00	152.4	8.00	203.2
(7)	8 Places		12 Places		16 Places	
(8)	¾-18 UNF-3A	M16x2 - 4H	1¼-12 UNF - 3A	M33x2 - 4H	1¼-12 UNF - 3A	M42x2 - 4H
(9)	¾-18 UNF - 3B ↓ 0.75	M16x2 - 4H ↓ 19.1	1¼-12 UNF - 3B ↓ 1.25	M33x2 - 4H ↓ 31.8	1¼-12 UNF - 3B ↓ 2.00	M42x2 - 4H ↓ 50.8

1800PS v2.2 01-27-2021

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SPECIFICATIONS

PARAMETERS		MODEL				
		1810	1810	1810	1820	1830
		CAPACITY				
Measuring Range	U.S. (lbf)	1.1K	2.2K, 3.3K	5.5K	11K, 22K	55K
	Metric (kN)	5	10, 15	25	50, 100	250
ACCURACY – (MAX ERROR)						
Static Error Band – %FS		±0.020	±0.020	±0.020	±0.020	±0.025
Nonlinearity – %FS		±0.020	±0.020	±0.020	±0.020	±0.020
Hysteresis – %FS		±0.020	±0.025	±0.025	±0.025	±0.030
Nonrepeatability – % RO		±0.005	±0.005	±0.005	±0.005	±0.005
Creep, in 20 min – %		±0.01	±0.01	±0.01	±0.01	±0.01
Side Load Sensitivity – %		±0.1	±0.1	±0.1	±0.1	±0.1
Eccentric Load Sensitivity – % / in		±0.05	±0.05	±0.05	±0.05	±0.05
Lower Load Limit – % Cap. (ASTM E74 Class A)		2.0	2.0	2.0	2.0	2.0
TEMPERATURE						
Compensated Range	°F	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115
	°C	-10 to +45	-10 to +45	-10 to +45	-10 to +45	-10 to +45
Operating Range	°F	-65 to +200	-65 to +200	-65 to +200	-65 to +200	-65 to +200
	°C	-55 to +90	-55 to +90	-55 to +90	-55 to +90	-55 to +90
Effect on Zero – %RO / deg		±0.0004	±0.0004	±0.0004	±0.0004	±0.0004
Effect on Output – % / deg		±0.0008	±0.0008	±0.0008	±0.0008	±0.0008
ELECTRICAL						
Rated Output – mV/V (Nominal)		2.0	2.0	2.0	2.0	2.0
Excitation Voltage – VDC MAX		20	20	20	20	20
Bridge Resistance – Ohm (Nominal)		700	700	700	700	700
Zero Balance – %RO		±1.0	±1.0	±1.0	±1.0	±1.0
Insulation Resistance – Megohm		5000	5000	5000	5000	5000
MECHANICAL						
Safe Overload – %CAP		±150	±300	±300	±300	±300
Deflection @ RO	in	0.002	0.002	0.002	0.002	0.004
	mm	0.05	0.05	0.05	0.05	0.10
Weight	lbs	3.8	9	9	25	62
	kg	1.7	4.1	4.1	11.3	28.1
Calibration		Tension & Compression				
Material		Alloy steel				

OPTIONS

- Standardized output
- Transducer Electronic Data Sheet (TEDS)
- Custom calibration
- Multiple bridge
- Special threads
- Dual diaphragm
- Special temperature range
- Cable length
- Add connector to cable

CONNECTOR OPTIONS

- PT02E-12-8P bayonet connector

ACCESSORIES

- Mating connector
- Mating cable
- Instrumentation

International System of Units (SI) dimensions and capacities are provided for conversion only. Standard products have U.S. capacities and dimensions. SI capacities available upon special request and at an additional cost.