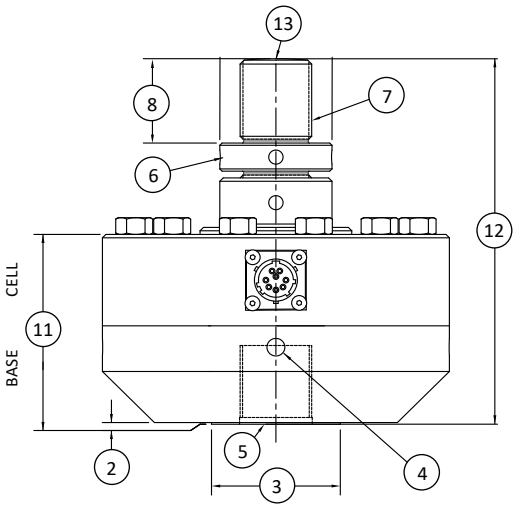
1600 GOLD STANDARD™ CALIBRATION LOAD CELL (U.S. & METRIC)

FEATURES & BENEFITS

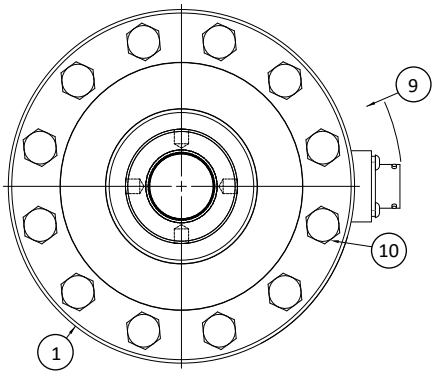
- Capacities from 500 to 200K lbf (2.2 to 900 kN)
- Tension and compression in one unit
- 0.01% creep
- 0.0008%/°F temp. effect on output
- High output – to 4 mV/V
- Eccentric load compensated
- High precision base installed
- Factory installed calibration adapter
- 3 run NIST traceable ASTM E74 calibration
- 4% lower load limit per ASTM E74
- Transducer Electronic Data Sheet (TEDS)

STANDARD CONFIGURATION

Model 1620AJH-50K (Shown)



SIDE VIEW



TOP VIEW

DIMENSIONS

See Drawing	MODEL							
	1610		1620		1632		1640	
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
	500, 1K, 2K, 5K, 10K	2.2, 4.5, 9, 22, 45	25K, 50K	110, 225	100K	450	200K	900
	in	mm	in	mm	in	mm	in	mm
(1)	4.13	104.7	6.06	153.9	8.00	203.1	11.00	279.3
(2)	0.03	0.80	0.03	0.80	0.03	0.80	0.03	0.80
(3)	1.25	31.8	2.25	57.2	3.00	76.2	4.50	114.3
(4)	Ø 0.25 ↧ 0.29	Ø 6.4 ↧ 7.4	Ø 0.31 ↧ 0.31	Ø 7.9 ↧ 7.9	Ø 0.31 ↧ 0.31	Ø 7.9 ↧ 7.9	Ø 0.31 ↧ 0.31	Ø 7.9 ↧ 7.9
(5)	⅝-18 UNF-3B ↧ 0.87	M16x2-4H ↧ 22.1	1 ¼-12 UNF-3B ↧ 1.40	M33x2-4H ↧ 35.6	1 ¾-12 UN-3B ↧ 1.75	M42x2-4H ↧ 44.4	2 ¾-8 UN-3B ↧ 2.75	M72x2-4H ↧ 69.8
(6)	CA-101	CA-201	CA-102	CA-202	CA-103	CA-203	Integral	
(7)	⅝-18 UNF-3A	M16x2-4G	1 ¼-12 UNF-3A	M33x2-4G	1 ¾-12 UN-3A	M42x2-4G	2 ¾-8 UN-3A	M72x2-4H
(8)	0.75	19.0	1.50	38.1	2.00	50.8	2.75	69.8
(9)	2.81	71.4	3.52	89.4	4.50	114.3	6.00	152.4
(10)	8 Places		12 Places		16 Places		16 Places	
(11)	2.50	63.5	3.50	88.9	4.50	114.3	6.50	165.1
(12)	4.38 ±0.12	111.3 ±3.1	6.50 ±0.12	165.1 ±3.1	8.75 ±0.12	222.2 ±3.1	10.5 ±0.12	266.7 ±3.1
(13)	6.00	152.4	6.00	152.4	12.00	304.8	18.00	457.2

1600GS v2.7 02-23-2026

1600 GOLD STANDARD™ CALIBRATION LOAD CELL (U.S. & METRIC)

SPECIFICATIONS

PARAMETERS		MODEL					
		1610	1610	1610	1620	1632	1640
		CAPACITY					
U.S. (lbf)		500	1K, 2K	5K, 10K	25K, 50K	100K	200K
Metric (kN)		2.2	4.5, 9	22, 45	110, 225	450	900
ACCURACY – (MAX ERROR)							
Static Error Band – %FS		±0.02		±0.025	±0.025	±0.05	±0.05
Nonlinearity – %FS		±0.03		±0.035	±0.035	±0.05	±0.05
Hysteresis – %FS		±0.02		±0.035	±0.045	±0.05	±0.05
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		±0.1		±0.1	±0.1	±0.1	±0.1
Lower Load Limit – % Cap. (ASTM E74 Class A)		4.0		4.0	4.0	4.0	4.0
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	°F	±0.0004		±0.0004	±0.0004	±0.0004	±0.0004
Effect on Output – % / deg	°F	±0.0008		±0.0008	±0.0008	±0.0008	±0.0008
ELECTRICAL							
Rated Output – mV/V (Nominal)		2.0		4.0	4.0	4.0	4.0
Excitation Voltage – VDC MAX		20		20	20	20	20
Bridge Resistance – Ohm (Nominal)		350		350	350	350	350
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		±150	±150	±150	±150
Deflection @ RO	in	0.002		0.004	0.004	0.006	0.010
	mm	0.05		0.10	0.10	0.15	0.25
Weight	lbs	3.8		8.0	23.5	58.0	171.0
	kg	1.724		3.629	10.659	26.308	77.564
Calibration		Tension & Compression					
Material		Aluminum		Alloy steel			

OPTIONS

- Connector protection
- Standardized output
- Custom calibration
- Multiple bridge
- Special threads
- Special temperature range
- Cable length

CONNECTOR OPTIONS

- PT02E-12-8P bayonet connector

ACCESSORIES

- Mating connector
- Mating cable
- Instrumentation
- Loading hardware
- Calibration software

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.

7418 East Helm Drive • Scottsdale, Arizona 85260 • 480.948.5555 • www.interfaceforce.com