

## 1201 STANDARD LOAD CELL COMPRESSION-ONLY (U.S. & METRIC)

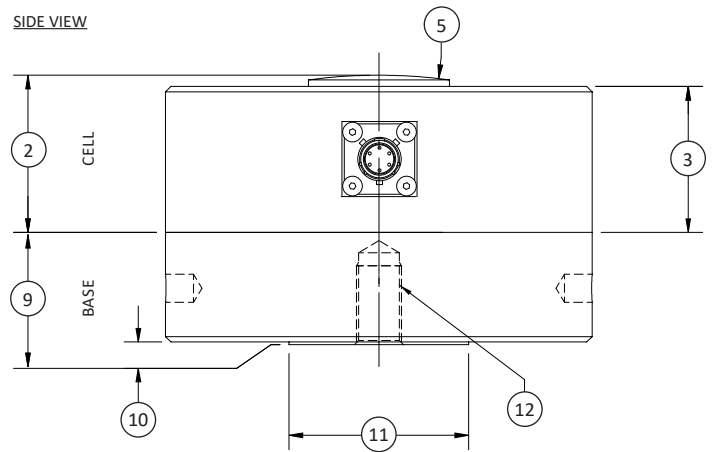
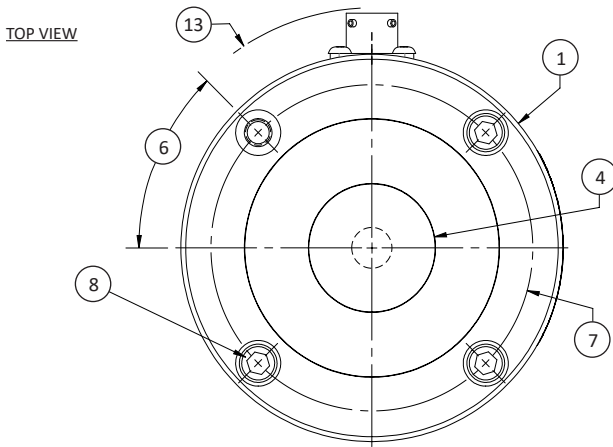
### FEATURES & BENEFITS

- Capacities from 1K to 400K lbf (5 to 1800 kN)
- Performance to 0.03%
- High output – to 4 mV/V
- Eccentric load compensated
- 0.0008%/°F (0.0015%/°C) temp. effect on output
- Low deflection
- Shunt calibration
- Barometric compensation
- Compact size
- Counterbored mounting holes

### STANDARD CONFIGURATION



Model 1221BAY-50K (Shown without base)



### DIMENSIONS

See Drawing	MODEL									
	1211		1221		1231		1241		1243	
	CAPACITY									
	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)
	1K, 2K, 5K, 10K	5, 10, 25, 50	25K, 50K	125, 250	100k	450	200K	900	300K 400K	1350 1800
	in	mm	in	mm	in	mm	in	mm	in	mm
(1)	Ø4.13	Ø104.8	Ø4.75	Ø120.7	Ø7.50	Ø190.5	Ø8.25	Ø210	Ø11.00	Ø279.0
(2)	1.38	34.9	1.75	44.5	2.25	57.2	3.25	82.5	3.50	88.9
(3)	1.25	31.7	1.63	41.4	2.00	50.8	3.00	76.2	3.00	76.2
(4)	Ø1.34	Ø34.0	Ø1.57	Ø39.9	Ø3.13	Ø79.5	Ø3.16	Ø80.3	Ø4.81	Ø122.2
(5)	SR 6.00	SR 152.4	SR 6.00	SR 152.4	SR 8.00	SR 203.2	SR 12.00	SR 304.8	SR 18.00	SR 457.0
(6)	22.5°	22.5°	45.0°	45.0°	15.0°	15.0°	15.0°	15.0°	11.25°	11.25°
(7)	Ø3.50	Ø88.9	Ø4.00	Ø101.6	Ø6.25	Ø158.8	Ø6.75	Ø171.5	Ø9.00	Ø229.0
(8)	¼-28x1 ¼		⅜-24x1 ¾		⅜-20x2		⅜-18x3		⅜-18x3	
	8 places		4 places		12 places		12 places		16 places	
(9)	1.13	28.7	1.25	31.8	2.00	50.8	2.50	63.5	3.50	88.9
(10)	0.03	0.8	0.03	0.8	0.03	0.8	0.03	0.8	0.03	0.8
(11)	Ø1.25	Ø31.8	Ø2.00	Ø50.8	Ø3.00	Ø76.2	Ø3.00	Ø76.2	Ø4.50	Ø114.0
(12)	⅜-18 UNF-3B ↓ 0.87		½-20 UNF-3B ↓ 0.88		1 ¼-12 UNF-3B ↓ 1.75		⅜-16 UNF-3B ↓ 1.50		1 ½-12 UNF-2B ↓ 2.00	
	M16 x 2-4H ↓ 22.1		M16 x 2-6H ↓ 22.4		M27 x 2-6H ↓ 44.5		M27 x 2-6H ↓ 38.1		M42 x 2-6H ↓ 50.8	
(13)	2.52	64	3.00	76.2	4.34	110.2	4.71	119.6	6.44	163.6

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### SPECIFICATIONS

PARAMETERS		MODEL					
		1211	1211	1221	1231	1241	1243
		CAPACITY					
Measuring Range	U.S. (lbf)	1K, 2K	5K, 10K	25K, 50K	100K	200K	300K, 400K
	Metric (kN)	5, 10	25, 50	125, 250	450	900	1350, 1800
<b>ACCURACY – (MAX ERROR)</b>							
Static Error Band – %FS		±0.03	±0.04	±0.04	±0.04	±0.05	±0.05
Nonlinearity – %FS		±0.03	±0.04	±0.05	±0.05	±0.05	±0.05
Hysteresis – %FS		±0.03	±0.04	±0.05	±0.05	±0.05	±0.05
Non-repeatability – %RO		±0.01	±0.01	±0.01	±0.01	±0.01	±0.01
Creep, in 20 min – %		±0.025	±0.025	±0.025	±0.025	±0.025	±0.025
Side Load Sensitivity – %		±0.25	±0.25	±0.25	±0.25	±0.25	±0.25
Eccentric Load Sensitivity – % / in		±0.25	±0.25	±0.25	±0.25	±0.25	±0.25
<b>TEMPERATURE</b>							
Compensated Range	°F	+15 to +115	+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	-10 to +45
Operating Range	°F	-65 to +200	-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	-55 to +90
Effect on Zero – %RO / deg	°F	±0.0008	±0.0008	±0.0008	±0.0008	±0.0008	±0.0008
	°C	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015
Effect on Output – % / deg	°F	±0.0008	±0.0008	±0.0008	±0.0008	±0.0008	±0.0008
	°C	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015
<b>ELECTRICAL</b>							
Rated Output – mV/V (Nominal)		2.0	4.0	4.0	4.0	4.0	3.0, 4.0
Excitation Voltage – VDC MAX		20	20	20	20	20	20
Bridge Resistance – Ohm (Nominal)		350	350	350	350	350	350
Zero Balance – %RO		±1.0	±1.0	±1.0	±1.0	±1.0	±1.0
Insulation Resistance – Megohm		5000	5000	5000	5000	5000	5000
<b>MECHANICAL</b>							
Safe Overload – %CAP		±150	±150	±150	±150	±150	±150
Deflection @ RO	in	0.001	0.002	0.002	0.003	0.004	0.005
	mm	0.03	0.05	0.05	0.08	0.10	0.13
Optional Base – P/N (Metric)		B101	B102	B106	B104	B108	B124
Natural Frequency – kHz		6.4, 9.0	6.1, 8.6	8.2, 11.7	7.6	6.7	5.0
Weight	lbs	1.5	3.3	6.8	13.5	40	74
	kg	0.7	1.5	3.1	6	18	34
Calibration		Compression					
Material		Aluminum			Alloy Steel		

### OPTIONS

- Base (recommended)
- Connector protection
- 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

- Integral cable – 10 ft (3 m)
- PT02E-10-6P bayonet connector
- PC04E-10-6P screw-type connector

### ACCESSORIES

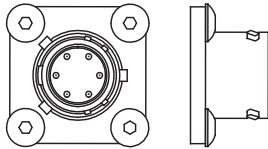
- Mating connector
- Mating cable
- Instrumentation
- Loading hardware

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### BAYONET CONNECTOR



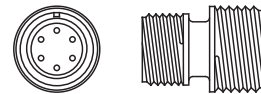
Model 1221BAY-50K (shown)



### SCREW TYPE CONNECTOR



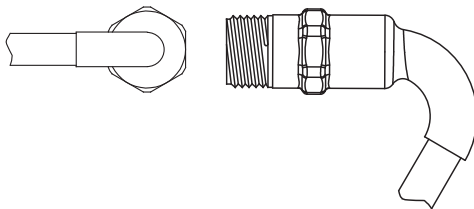
Model 1221HL-50K (shown)



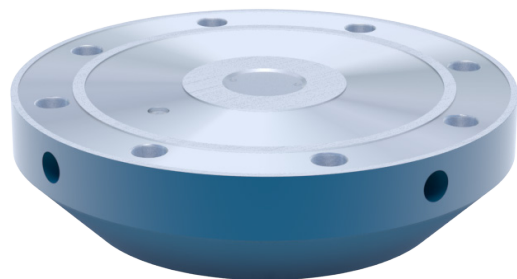
### INTEGRAL 10 FT. CABLE CONNECTOR



Model 1221EX-50K (shown)



### BASE



Model B1XX-1