

# 3200 STANDARD STAINLESS STEEL LOAD CELL (U.S. & METRIC)

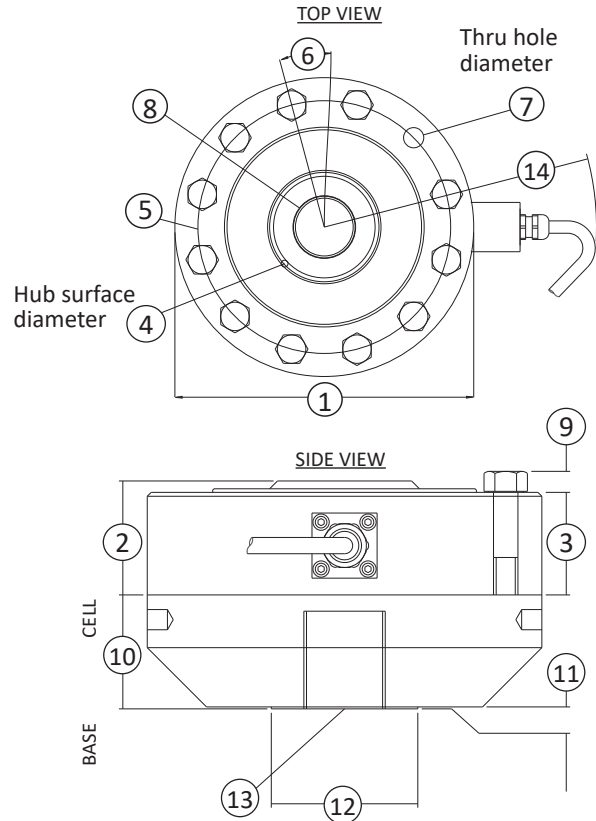
## FEATURES & BENEFITS

- Capacities from 2.5K to 100K lbf (12.5 to 445 kN)
- Proprietary Interface temperature compensated strain gages
- Hermetically sealed cell
- Performance to 0.05%
- Compact size
- High 4 mV/V output
- Eccentric load compensated
- 0.0008%/°F temp. effect on output
- Low deflection
- Shunt calibration
- Barometric compensation

## STANDARD CONFIGURATION



Model 3220BFG-50K (Shown)



## DIMENSIONS

See Drawing	MODEL					
	3210		3220		3232	
	CAPACITY					
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
	2.5K, 5K, 10K	12.5, 25, 50	25K, 50K	111, 222	100K	445
	in	mm	in	mm	in	mm
(1)	Ø4.13	Ø104.9	Ø6.06	Ø153.9	Ø8.00	Ø203.2
(2)	1.38	35.1	1.75	44.5	2.50	63.5
(3)	1.20	30.5	1.58	40.0	2.20	55.9
(4)	Ø0.90	Ø22.9	Ø1.97	Ø50.0	Ø3.14	Ø79.8
(5)	Ø3.50	Ø88.9	Ø5.13	Ø130.3	Ø6.50	Ø165.1
(6)	22.5°	22.5°	15.0°	15.0°	11.25°	11.25°
(7)	Ø0.28	Ø7.10	Ø0.41	Ø10.4	Ø0.53	Ø13.5
	8 places		12 places		16 places	
(8)	¼-18 UNF-3B		1 ¼-12 UNF-3B		1 ¼-12 UNF-3B	
	↓ 1.12	↓ 28.45	1.40	35.56	2.15	54.61
(9)	0.20	5.10	0.30	7.60	0.31	7.90
(10)	1.13	28.6	1.75	44.5	2.00	50.8
(11)	0.03	0.80	0.03	0.80	0.03	0.80
(12)	Ø1.25	Ø31.8	Ø2.25	Ø57.2	Ø3.00	Ø76.2
(13)	¼-18 UNF-3B		1 ¼-12 UNF-3B		1 ¼-12 UNF-3B	
	↓ 0.87	↓ 22.1	↓ 1.40	↓ 35.56	↓ 1.75	↓ 44.45
(14)	4.80	121.9	5.52	140.2	5.30	134.6

\* Metric dimensions and capacities are provided for conversion only. Standard product will be sold in lbf and U.S. dimensions. Metric capacities available upon special request and at an additional cost.

## 3200 STANDARD STAINLESS STEEL LOAD CELL (U.S. & METRIC)

### SPECIFICATIONS

PARAMETERS		MODEL				
		3210	3210	3220	3220	3232
		CAPACITY				
Measuring Range	U.S. (lbf)	2.5K, 5K	10K	25K	50K	100K
	Metric (kN)	12.5, 25	50	111	222	445
<b>ACCURACY – (MAX ERROR)</b>						
Static Error Band – %FS		±0.05	±0.05	±0.05	±0.05	±0.06
Nonlinearity – %FS		±0.05	±0.05	±0.05	±0.05	±0.05
Hysteresis – %FS		±0.06	±0.06	±0.06	±0.06	±0.06
Nonrepeatability – %RO		±0.01	±0.01	±0.01	±0.01	±0.01
Creep, 20 min – %		±0.025	±0.025	±0.025	±0.025	±0.025
Side Load Sensitivity – %		±0.25	±0.25	±0.25	±0.25	±0.25
Eccentric Load Sensitivity – % / in		±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
	°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		±0.0008	±0.0008	±0.0008	±0.0008	±0.0008
Effect on Output – % / deg		±0.0008	±0.0008	±0.0008	±0.0008	±0.0008
<b>ELECTRICAL</b>						
Rated Output – mV/V (Nominal)		2.0 / 4.0	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
<b>MECHANICAL</b>						
Safe Overload – %CAP		±150	±150	±150	±150	±150
Deflection @ RO	in	0.002	0.002	0.002	0.002	0.003
	mm	0.05	0.05	0.05	0.05	0.08
Optional Base – P/N		B302	B302	B303	B303	B312
Natural Frequency – kHz		6.6	9.4	6.5	7.0	5.8
Weight	lbs	3.3	3.3	9.5	9.5	26
	kg	1.5	1.5	4.3	4.3	11.8
Calibration		T & C				
Material		Stainless steel				

### OPTIONS

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

### CONNECTOR OPTIONS

- Integral Cable – 20 ft (6 m)

### ACCESSORIES

- Instrumentation
- Loading hardware

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.

## 3200 STANDARD STAINLESS STEEL LOAD CELL (U.S. & METRIC)

INTEGRAL 20 FT. CABLE CONNECTOR

BASE



Model 3220XXX



Model B32XX