

# ZX Series

## Stainless Steel Tension Load Cells

- Capacities from 250-lb/113-kg to 20,000-lb/9,072-kg
- Threaded holes on each end for hanger assemblies (metric available)
- NTEP certified for use in commerce
- Welded stainless steel cup on most models (see back page)
- Integral shielded cable
- 2 year warranty



These waterproof USA-made ZX series tension load cells are ideally suited for single or multiple load cell tension applications. When caustic or corrosive environments are encountered, the ZX series is ideal, since it is manufactured of stainless steel and offers the ultimate in protection. Each load cell comes with 30 ft / 9 m of multiconductor cable.



### MECHANICAL DATA

Rated Capacity, (R.C.) E <sub>max</sub>	113, 226, 453, 1134, 1360, 2268, 4536, 6804 & 9072 kg
Minimum Dead Load	4.5 kg
Safe Load Limit	150% R.C.
Ultimate Load	300% R.C.
Deflection at R.C.	0.2 to 0.6 mm
Spring Element Material	17-4 stainless steel
Net Weight	0.55 to 6.4 kg

### CERTIFICATE DATA

Issuing Body	NTEP
Certificate Number	92-192A2
Accuracy Class	III/IIIL
Maximum Number of Load Cell Intervals, n <sub>max</sub>	III - 5,000 IIIL - 10,000
Single/Multiple	S/M
Minimum Load Cell Verification Interval V <sub>min</sub>	III - 0.012, 0.024, 0.046, 0.12, 0.28, 0.46, 0.9, 1.36, & 1.8 kg IIIL - 0.009, 0.018, 0.036, 0.09, 0.11, 0.18, 0.36, 0.54 & 0.72 kg

### ELECTRICAL DATA

Rated Output	3 mV/V ± 0.1%
Excitation Voltage, Minimum	12 VDC
Excitation Voltage, Maximum	20 VDC
Cable Length	30 ft / 9 m
Terminal Resistance	
Excitation	389 ± 20 ohms
Signal	350 ± 5 ohms
Zero Load Output	± 1% R.C.
Insulation Resistance	>5000 megohms at 50 VDC

### ENVIRONMENTAL DATA

Temperature Compensation Range	-10 to +40°C
Operating Temperature Range	-25 to +50°C
Construction & Protection Code	CP-67 HU, IP67, (2500 - 20000) CP-55 HU (250 - 1000)
Barometric Pressure Effect on Zero Load Output	<1 v (min)/1kPa

LOAD CELL S

# MADE IN USA

# ZX Series Load Cells

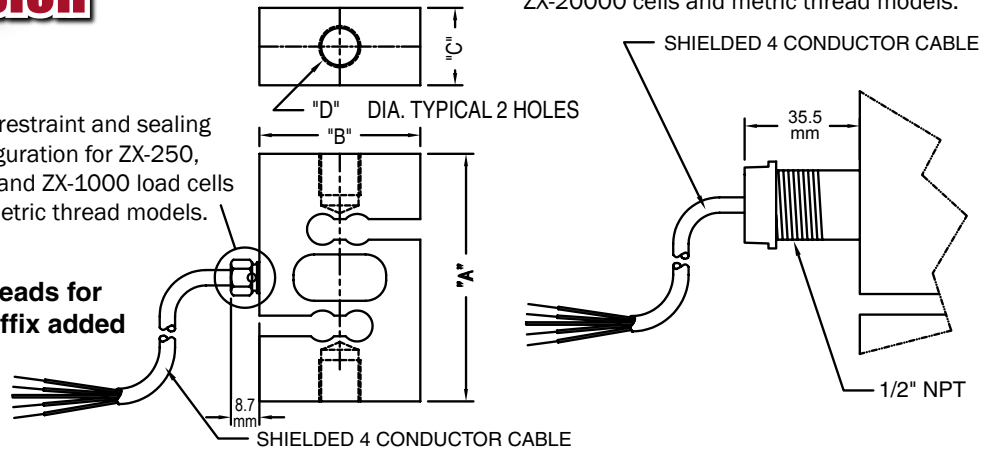


## USA-Made Stainless Steel Waterproof Tension

Cable restraint and sealing configuration for ZX-2500, ZX-3000, ZX-5000, ZX-10000, ZX-15000 and ZX-20000 cells and metric thread models.

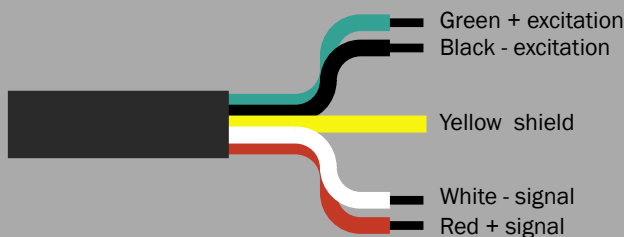
Cable restraint and sealing configuration for ZX-250, ZX-500, and ZX-1000 load cells and metric thread models.

Also available with metric threads for most sizes. Designated by M suffix added to model number.



Model	Capacity	Finish	"A"	"B"	"C"	"D"	Metric Thread
ZX-250	250 lb / 113.4 kg	Potted sealant	3 in / 76.2 mm	1.9 in / 49.5 mm	.4 in / 11.9 mm	1/4"-28 NF	M6 x 1
ZX-500	500 lb / 226.8 kg	Potted sealant	3 in / 76.2 mm	1.9 in / 49.5 mm	.9 in / 23.8 mm	1/2"-20 NF	M14 x 2
ZX-1000	1000 lb / 453.6 kg	Potted sealant	3 in / 76.2 mm	1.9 in / 49.5 mm	.9 in / 23.8 mm	1/2"-20 NF	M14 x 2
ZX-2500	2500 lb / 1134 kg	Welded cup	4.2 in / 107.9 mm	2.9 in / 74.7 mm	1.4 in / 36.8 mm	1/2"-20 NF	M14 x 2
ZX-3000	3000 lb / 1360.8 kg	Welded cup	4.2 in / 107.9 mm	2.9 in / 74.7 mm	1.4 in / 36.8 mm	1/2"-20 NF	M14 x 2
ZX-5000	5000 lb / 2268 kg	Welded cup	4.2 in / 107.9 mm	2.9 in / 74.7 mm	1.4 in / 36.8 mm	3/4"-16 NF	M20 x 1.5
ZX-10000	10000 lb / 4536 kg	Welded cup	4.2 in / 107.9 mm	3.4 in / 87.3 mm	1.4 in / 36.8 mm	3/4"-16 NF	M20 x 1.5
ZX-15000	15000 lb / 6804 kg	Welded cup	5.5 in / 139.7 mm	4.0 in / 100.8 mm	1.7 in / 43.4 mm	1"-14 NF	Not available
ZX-20000	20000 lb / 9071.9 kg	Welded cup	6.5 in / 165.1 mm	4.4 in / 112.8 mm	1.9 in / 49.2 mm	1 1/4"-12 NF	M30 x 2

### ELECTRICAL INFORMATION



### State-of-the-Art Load Cell Manufacturing Facility ISO 9001 Quality Environment



### CERTIFICATIONS

The Model ZX Series Load Cell meets or exceeds Class III/IIIL, 10,000 division accuracy requirements in accordance with NIST Handbook 44. A Certificate of Conformance (Number 92-192A2) has been issued under the National Type Evaluation Program (NTEP) of the National Conference on Weights and Measures.



### VCAP CERTIFIED

Cardinal Scale has been formally audited and found to be fully compliant with the Verified Conformity Assessment Program (VCAP) administered by the National Type Evaluation Program (NTEP) of the National Conference on Weights and Measures (NCWM).

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