

LOAD CELLS FOR ELECTROPULS SYSTEMS

250 N - 10 kN







Instron® load cells are a key part of a materials testing system. Among our competitors, Instron is the only global materials testing supplier that designs and manufactures its own load cells. This ensures that Instron load cells meet the unique requirements of materials testing such as; high accuracy over a wide measurement range, high stiffness, resistance to offset loads, accurate alignment and excellent zero stability.

The 2527 Series load cells are designed for use with ElectroPuls testing systems; offering exceptional performance with the ability to measure forces as low as 1/100th of the force capacity to an accuracy of 0.5% of reading. Automatic transducer recognition and electrical calibration, makes them easy to use. The load cells can withstand loads up to 150% of their force capacity without damage and 300% without mechanical failure. All Instron load cells are individually temperature-compensated and tested for accuracy and repeatability on calibration apparatus that is traceable to international standards, with a measurement uncertainty that does not exceed one-third of the permissible error of the load cell.

FEATURES AND BENEFITS

- Force capacities from ±250 N to ±10 kN (56 -2250 lbf)
- Torque capacities from ±25 Nm to ±100 Nm (225 880 in-lb)
- Suitable for a range of test types, including tension, compression, cyclic and reverse stress
- Automatic recognition with electronic serial number and electrical calibration allows for simple, error-free operation
- 150% of force capacity overload capability -reduces the possibility of damage
- Precision machining and construction along with high axial and lateral stiffness helps to maintain system alignment
- Low sensitivity to offset loads improves consistency of results
- Complies with all international force measurement standards, including BS1610 Part 1 1992 Grade 0.5, ASTM E4, ISO 7500-1 class 0.5, EN10002-2 class 0.5 and JIS B7721, B7733

SPECIFICATIONS

Force Capacity		Torque	Capacity	Mechanical Fitting (Frame)	Mechanical Fitting (Load String)	Effective Length (A)		Diameter (B)		Weight	
kN	lbf	Nm	in-lb			mm	in	mm	in	kg	lb
±0.25	56	-	-	3x M6 on 57 mm PCD	Central M6 x 1	42	1.65	75	2.95	1	2.2
±1	225	-	-	3x M6 on 57 mm PCD	Central M6 x 1	42	1.65	75	2.95	1	2.2
±1	225	±25	±225	3x M6 on 75 mm PCD	3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD	68	2.68	94	3.7	1.3	2.87
±2	450	-	-	3x M6 on 57 mm PCD	Central M6 x 1	42	1.65	75	2.95	1	2.2
±5	1,125	-	-	3x M6 on 75 mm PCD	3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD	68	2.68	94	3.7	2	4.4
±5	1,125	±25	±225	3x M6 on 75 mm PCD	3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD	68	2.68	94	3.7	2	4.4
±10	2250	-	-	6 x M6 on 75 mm PCD	Central M20 x 1.5	71	2.8	107	4.2	4	8.8
±10	2250	±100	±880	6 x M8 on 75 mm PCD	6 x M8 on 75 mm PCD	86	3.38	94	3.7	2.5	5.5
	±1. ±1 ±2 ±5 ±5	±0.25 56 ±1 225 ±1 225 ±2 450 ±5 1,125 ±10 2250	±0.25 56 - ±1 225 - ±1 225 ±25 ±2 450 - ±5 1,125 - ±5 1,125 +25 ±10 2250 -	±0.25 56 - - ±1 225 - - ±1 225 ±25 ±225 ±2 450 - - ±5 1,125 - - ±5 1,125 ±25 ±225 ±10 2250 - -	±0.25 56 - - 3x M6 on 57 mm PCD ±1 225 - - 3x M6 on 57 mm PCD ±1 225 ±25 ±225 3x M6 on 75 mm PCD ±2 450 - - 3x M6 on 57 mm PCD ±5 1,125 - - 3x M6 on 75 mm PCD ±5 1,125 ±25 ±225 3x M6 on 75 mm PCD ±10 2250 - - 6 x M6 on 75 mm PCD	±0.25 56 - - 3x M6 on 57 mm PCD Central M6 x 1 ±1 225 - - 3x M6 on 57 mm PCD Central M6 x 1 ±1 225 ±25 ±225 3x M6 on 75 mm PCD 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD ±2 450 - - 3x M6 on 57 mm PCD Central M6 x 1 ±5 1,125 - - 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD or 3x M6 on 57 mm PCD ±5 1,125 ±25 ±225 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD or 3x M6 on 57 mm PCD or 3x M6 on 57 mm PCD ±10 2250 - - 6 x M6 on 75 mm PCD Central M20 x 1.5	±0.25 56 - - 3x M6 on 57 mm PCD Central M6 x 1 42 ±1 225 - - 3x M6 on 57 mm PCD Central M6 x 1 42 ±1 225 ±25 ±225 3x M6 on 75 mm PCD 3x M6 on 57 mm PCD or 3x M6 on 57 mm PCD 68 ±2 450 - - 3x M6 on 57 mm PCD Central M6 x 1 42 ±5 1,125 - - 3x M6 on 75 mm PCD 3x M6 on 57 mm PCD or 3x M6 on 57 mm PCD 68 ±10 2250 - - 6x M6 on 75 mm PCD or 75 mm PCD Central M20 x 1.5 71 ±10 2250 + + 6x M8 on 6x	±0.25 56 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 ±1 225 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 ±1 225 ±25 ±225 3x M6 on 75 mm PCD 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD 68 2.68 ±2 450 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 ±5 1.125 - - 3x M6 on 75 mm PCD 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD or 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD or 75 mm PCD or 75 mm PCD 3x M6 on 57 mm PCD or 3x M6 on 57 mm PCD or 75 mm PCD or 75 mm PCD or 75 mm PCD or 75 mm PCD 6x M6 on 57 mm PCD or 75 mm	±0.25 56 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 ±1 225 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 ±1 225 ±25 ±225 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD or 3x M6 on 57 mm PCD 68 2.68 94 ±2 450 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 ±5 1,125 - - 3x M6 on 75 mm PCD 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD 68 2.68 94 ±5 1,125 ±25 ±225 3x M6 on 75 mm PCD or 3x M6 on 75 mm PCD or 3x M6 on 75 mm PCD 68 2.68 94 ±10 2250 - - 6x M6 on 75 mm PCD Central M20 x 1.5 71 2.8 107	±0.25 56 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 2.95 ±1 225 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 2.95 ±1 225 ±25 ±225 3x M6 on 75 mm PCD 0r 3x M6 on 57 mm PCD 0r 3x M6 on 57 mm PCD 68 2.68 94 3.7 ±2 450 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 2.95 ±5 1,125 - - 3x M6 on 75 mm PCD 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD or 3x M6 on 75 mm PCD 68 2.68 94 3.7 ±10 2250 - - 6x M6 on 75 mm PCD Central M20 x 1.5 71 2.8 107 4.2	±0.25 56 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 2.95 1 ±1 225 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 2.95 1 ±1 225 ±25 ±225 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD or 3x M6 on 57 mm PCD 68 2.68 94 3.7 1.3 ±2 450 - - 3x M6 on 57 mm PCD Central M6 x 1 42 1.65 75 2.95 1 ±5 1,125 - - 3x M6 on 75 mm PCD 3x M6 on 75 mm PCD or 3x M6 on 57 mm PCD or 3x M6 on 75 mm PCD or 3x M6 on 57

