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Supplier of Quality Force Measuring & Weighing Equipment Since 1932

Application Note

No.6

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 By: KRD

Load Cell Resolution of Lloyd XLC Load Cells

The following is a table of resolutions for various values of load cell.

Lloyd systems have an accuracy of +/- 0.5% of reading between 2% and 100% of the load cell capacity and +/- 1.0% of reading below 2% down to 1% of load cell capacity.

Generally, the best results are obtained when the load cell is sized between 10% and 90% of expected maximum load so that results with good accuracy and resolution are obtained and there risk of accidental overload is minimized.

| Loadcell Value | Scale Intervals | Specified Load Range For Grade 0.5 |
|----------------|------------------------|--|
| 10N | 0.0004N 0.00009 lbf | 0.2N to 10N 0.04 lbf to 2 lbf |
| 20N 50N | 0.0002N 0.0004 lbf | 0.4N to 20N, 0.1 lbf to 4.5 lbf 1N to 50N 0.2 lbf to 10 lbf |
| 100N | 0.004N 0.0009 lbf | 2N to 100N 0.4 lbf to 20 lbf |
| 500N | 0.02N 0.004 lbf | 10N to 500N 2 lbf to 100 lbf |
| 1000N | 0.04N 0.009 lbf | 20N to 1000N 4 lbf to 200 lbf |
| 2500N | 0.1N 0.02 lbf | 50N to 2500N 10 lbf to 500 lbf |
| 5kN | 0.2N 0.04 lbf | 100N to 500N 20 lbf to 1000 lbf |
| 10kN | 0.4N 0.09 lbf | 200N to 10kN 40 lbf to 2000 lbf |
| 30kN | 1N 0.3 lbf | 600N to 30kN 120 lbf to 6000 lbf |
| 50kN | 2N 0.4 lbf | 1000N to 50kN 200 lbf to 10,000 lbf |