

Low Profile Compression Disk

FEATURES

- Capacities: 5k, 10k, 25k, 50k, 100k lbs
- Electroless nickel-plated alloy tool steel
- Compact size with low profile
- Surge protection optional for 5k–100k lbs
- **Optional**
 - Stainless steel available
 - FM approval available
 - LCD-TT/M/MH with different loading holes

APPLICATIONS

- Truck/rail scales
- Silo/hopper/tank weighing
- Universal material tester
- Tensile/pulling force measurement

DESCRIPTION

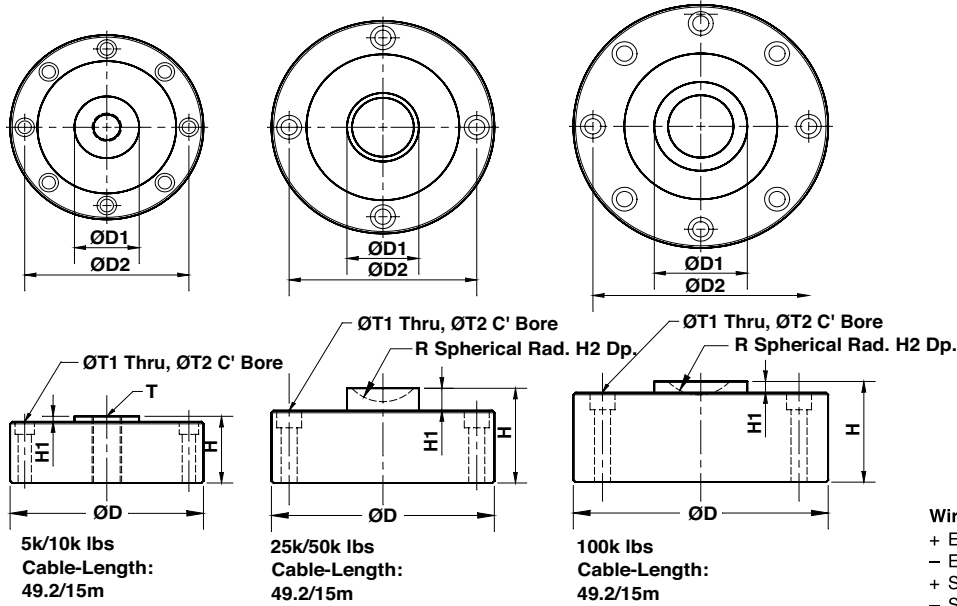
The low profile compression disk is designed as the ultimate solution for some difficult applications with critical height for safety reasons. The shear web design



provides excellent performance even when the side force inevitably exists in normal operations. The typical example for side force resistance is the applications in motor truck scales.

LCD is constructed of alloy steel and fully potted with special chemical compounds to IP67 providing excellent protection against moisture and humidity.

OUTLINE DIMENSIONS



| CAPACITY | | D | D ₁ | D ₂ | H | H ₁ | H ₂ | R | T | T ₁ | T ₂ |
|-------------|--------|-------|----------------|----------------|------|----------------|----------------|------|-----------|----------------|----------------|
| 5k/10k lbs | mm | 104.7 | 32.0 | 88.9 | 34.8 | 3.05 | --- | --- | 5/8-18UNF | 7.2 | 10.5 x 7.2DP |
| | (inch) | 4.12 | 1.26 | 3.50 | 1.37 | 0.12 | --- | --- | --- | 0.28 | 0.41 x 0.28DP |
| 25k/50k lbs | mm | 120.7 | 38.9 | 101.6 | 53.8 | 12.7 | 7.6 | 22.2 | --- | 8.7 | 13.5 x 9.7DP |
| | (inch) | 4.75 | 1.53 | 4.00 | 2.12 | 0.50 | 0.30 | 0.87 | --- | 0.34 | 0.53 x 0.38DP |
| 100k lbs | mm | 138 | 50.4 | 116.8 | 57.2 | 6.4 | 7.6 | 2.2 | --- | 10.13 | 16.5 x 11.0DP |
| | (inch) | 5.43 | 1.98 | 4.60 | 2.25 | 0.25 | 0.30 | 0.87 | --- | 0.41 | 0.65 x 0.43DP |

Low Profile Compression Disk

| SPECIFICATIONS | | |
|---|---------------------------|-----------------------|
| PARAMETER | VALUE | UNIT |
| NTEP/OIML accuracy class | Non-Approved | |
| Maximum no. of intervals (n) | 2000 | |
| $Y = E_{max}/V_{min}$ | 5000 | Maximum available |
| Standard capacities (E_{max}) | 5k, 10k, 25k, 50k, 100k | lbs |
| Rated output—R.O. | 4.0 | mV/V |
| Rated output tolerance | 0.25 | ±% of rated output |
| Zero balance | 1 | ±% of rated output |
| Non-linearity | 0.050 | ±% of rated output |
| Hysteresis | 0.050 | ±% of rated output |
| Non-repeatability | 0.020 | ±% of rated output |
| Creep error (20 minutes) | 0.030 | ±% of rated output |
| Zero return (20 minutes) | 0.030 | ±% of rated output |
| Temperature effect on min. dead load output | 0.0026 | ±% of rated output/°C |
| Temperature effect on sensitivity | 0.0015 | ±% of applied load/°C |
| Compensated temperature range | -10 to +40 | °C |
| Operating temperature range | -20 to +60 | °C |
| Safe sideload | 150 | % of R.C. |
| Ultimate overload | 300 | % of R.C. |
| Excitation, recommended | 10 | VDC or VAC RMS |
| Excitation, maximum | 15 | VDC or VAC RMS |
| Input impedance | 385±5* | Ω |
| Output impedance | 350±3** | Ω |
| Insulation resistance | >5000 | MΩ |
| Construction | Nickel-plated alloy steel | |
| Environmental protection | IP67 | |

* 770±10 Ohms for 100k lbs

** 700±5 Ohms for 100k lbs

All specifications subject to change without notice.

FM Approval

Intrinsically Safe: Class I, II, III; Div. 1 Groups A-G

Non-Incendive: Class I; Div. 2 Groups A-D



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