

Load Disc II[™]

For in-process applications that require a stainless steel load cell that is easy to keep clean. Vessel is locked in place to protect the product and operators from vessel movement or seismic events.

TECHNICAL SPECIFICATIONS



The Load Disc IITM weight transducer has the lowest profile for its load ranges in the industry. Utilizing the proven Kistler-Morse semiconductor strain gage technology, the Load Disc IITM continuously measures the weight of material for in-process and bulk storage vessels. It is suitable for use with mixing and blending vessels, surge hoppers, and vessels with agitators. Standard load ranges are from 150 to 100,000 pounds (68 to 45,360 kg) per vessel support.

Low-profile design for low clearance installations keeps the vessel's center of gravity low and stable. Vessel tipping, walking or overturning while agitating is eliminated. Installation and setup is simplified with less hardware. No external vessel hold-downs are necessary, even in areas of high wind or seismic activity. There are no moving parts that can wear out or require replacement.

FEATURES & BENEFITS

Single Footprint & Low Profile Height Range

Single system design and installation keeps the vessel locked down and secure from tipping. For 150 to 25K and 35 to 100K pound rated output.

Minimal Deflection

Only 0.004 inch at rated output minimizes piping & plumbing influences for reliable results.

NEMA-6P Stainless Steel Submersion Rating

Incorporates NEMA 4 & 4X in a stainless steel hermetically sealed package for protection in high pressure, caustic wash downs.

High Output Rugged Design

Greater electrical noise immunity provides long term reliability under a wide range of operating conditions with cable runs up to 2000 feet.

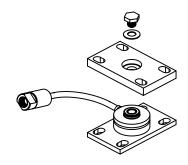
HOW TO ORDER

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FINISH
                                 P = Polished Finish
                                 X = Brushed Finish
                           CABLE LENGTH
                          015 = 15 \text{ ft } (4.57 \text{ m}) \text{ Cable}
                          015T = 15 ft (4.57 m) Cable (For Operating Temps C & F)
                          025 = 25 \text{ ft } (7.62 \text{ m}) \text{ Cable}
                          025T = 25 ft (7.62 m) Cable (For Operating Temps C & F)
                          050 = 50 \text{ ft } (15.24 \text{ m}) \text{ Cable}
                          050T = 50 ft (15.24 m) Cable (For Operating Temps C & F)
                           100 = 100 \text{ ft } (30.48 \text{ m}) \text{ Cable}
                           100T = 100 ft (30.48 m) Cable (For Operating Temps C & F)
                    OPERATING TEMPERATURE
                    C = High-Range Temp, 150^{\circ} to 250^{\circ} F (66^{\circ} to 121^{\circ} C)
                    F = Mid-Range Temp, 50° to 150° (10° to 66° C)
                    X = Ambient Temp, 0° to 100° F (-18° to 38° C)
             RATED LOAD
             Lower Capacity Load Cell
                   150 = 150 \text{ lb } (68 \text{ kg})
                   250 = 250 \text{ lb } (113 \text{ kg})
                   500 = 500 \text{ lb } (226 \text{ kg})
                   01K = 1,000 \text{ lb} (454 \text{ kg})
                   02K = 2,000 \text{ lb } (907 \text{ kg})
                   03K = 3,000 \text{ lb } (1,361 \text{ kg})
                   05K = 5,000 \text{ lb } (2,268 \text{ kg})
                   07K = 7,500 \text{ lb } (3,402 \text{ kg})
                   10K = 10,000 \text{ lb } (4,536 \text{ kg})
                   15K = 15,000 \text{ lb } (6,804 \text{ kg})
                   20K = 20,000 \text{ lb } (9,072 \text{ kg})
                   25K = 25,000 \text{ lb } (11,340 \text{ kg})
             Higher Capacty Load Cell
                   35K = 35,000 \text{ lb} (15,880 \text{ kg})
                   50K = 50,000 \text{ lb } (22,680 \text{ kg})
                   75K = 75,000 \text{ lb } (34,020 \text{ kg})
                   100K = 100,000 \text{ lb } (45,360 \text{ kg})
       TRANSDUCER ACCURACY
       1 = \pm 0.1\% of Rated Load
       2 = \pm 0.2\% of Rated Load
-LOAD DISC° II
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SPECIFICATIONS

| FUNCTIONAL | |
|---|---|
| Excitation Voltage - Operating Range | 10 to 30 VDC |
| Maximum Current | 4 mA @ 12 VDC excitation |
| Resistance | 7.5K ohms ± 1% |
| Recommended Supply Voltage | 12 VDC |
| Compression | 150 to 25,000 lbs: 4 X rated load 35,000 to 100,000 lbs: 2.5 X rated load |
| Functional Integrity | 2 X rated load (compression) |
| PERFORMANCE | |
| Non-linerity/ Hysteresis Combined | 0.2% performance: 0.2% rated output 0.1% performance: 0.1% rated output |
| Return to Zero | 0.1% rated output |
| Zero Balance | 6.9% rated capacity |
| Rated Output | Std/Mid temperature range: 30 mV/V \pm 1.4% High temperature range: 20 mV/V \pm 1.25% |
| PHYSICAL | |
| Temperature Range | Std: 0° to 100° F (-18° to 38° C) |

Load Disc[®] II with UA1 Top Adapter Plate



150 to 25K lb Minimum Height: 2.7" (68.6 mm) 35K to 100K lb Minimum Height: 5.5" (139.7 mm)

Mid: 50° to 150° F (10° to 66° C) up to 300° F High: 150° F to 250° F (66° to 121° C) up to 300° F during CIP/SIP Sensitivity Change: 0.015% /° F (0.027% /° C) 0° to 100° F (-18° to 38° C) Zero Shift: Std/mid temp ranges: 0.008% /° F (0.015% /° C) Humidity 100% NEMA 6P (includes NEMA 4, NEMA 4X and NEMA 6); hermetically sealed for high-Rating pressure caustic washdown and prolonged submergence in water. Watertight conduit provided by customer Construction 17-4 PH 900 heat-treated stainless steel; all welds full penetration weldment in accordance with Uniform Building Code (UBC) criteria per specification AWS B2.1.009-90) Signal Cable Armor 12" (305 mm) sanitary food grade tubing Cable 3-conductor, 22 gage unshielded, 15 ft (4.6 m) long, with tinned pigtail termination 304 SS, 1/2" female NPT Conduit Fitting 150 to 25,000 lbs rated load: 5 lbs (2.3 kg) Shipping Weight 35,000 to 100,000 lbs rated load: 17 lbs (7.7 kg)