KM KISTLER-MORSE® Measure of Success

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 II™ 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 II™ 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

C1 – ___ – ___ – ___ – ___ – ___ – ___

FINISH
- P = Polished Finish
- X = Brushed Finish

CABLE LENGTH
- 015 = 15 ft (4.57 m) Cable
- 015T = 15 ft (4.57 m) Cable (For Operating Temps C & F)
- 025 = 25 ft (7.62 m) Cable
- 025T = 25 ft (7.62 m) Cable (For Operating Temps C & F)
- 050 = 50 ft (15.24 m) Cable
- 050T = 50 ft (15.24 m) Cable (For Operating Temps C & F)
- 100 = 100 ft (30.48 m) Cable
- 100T = 100 ft (30.48 m) Cable (For Operating Temps C & F)

OPERATING TEMPERATURE
- C = High-Range Temp, 150° to 250° F (66° to 121° 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 lb (68 kg)
- 250 = 250 lb (113 kg)
- 500 = 500 lb (226 kg)
- 01K = 1,000 lb (454 kg)
- 02K = 2,000 lb (907 kg)
- 03K = 3,000 lb (1,361 kg)
- 05K = 5,000 lb (2,268 kg)
- 07K = 7,500 lb (3,402 kg)
- 10K = 10,000 lb (4,536 kg)
- 15K = 15,000 lb (6,804 kg)
- 20K = 20,000 lb (9,072 kg)
- 25K = 25,000 lb (11,340 kg)

Higher Capacty Load Cell
- 35K = 35,000 lb (15,880 kg)
- 50K = 50,000 lb (22,680 kg)
- 75K = 75,000 lb (34,020 kg)
- 100K =100,000 lb (45,360 kg)

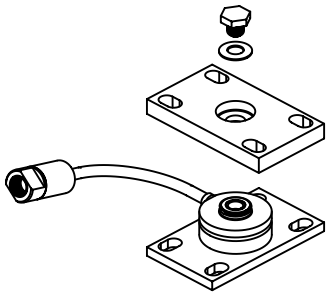
TRANSDUCER ACCURACY
- 1 = ± 0.1% of Rated Load
- 2 = ± 0.2% of Rated Load

LOAD DISC® II

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 ± 1.4% High temperature range: 20 mV/V ± 1.25%
PHYSICAL	
Temperature Range	Std: 0° to 100° F (-18° to 38° C) 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%
Rating	NEMA 6P (includes NEMA 4, NEMA 4X and NEMA 6); hermetically sealed for high-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
Conduit Fitting	304 SS, ½" female NPT
Shipping Weight	150 to 25,000 lbs rated load: 5 lbs (2.3 kg) 35,000 to 100,000 lbs rated load: 17 lbs (7.7 kg)

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)