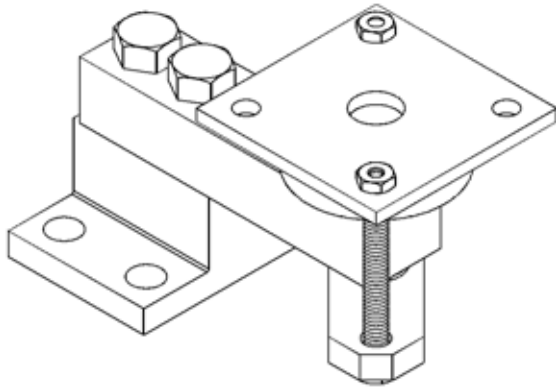


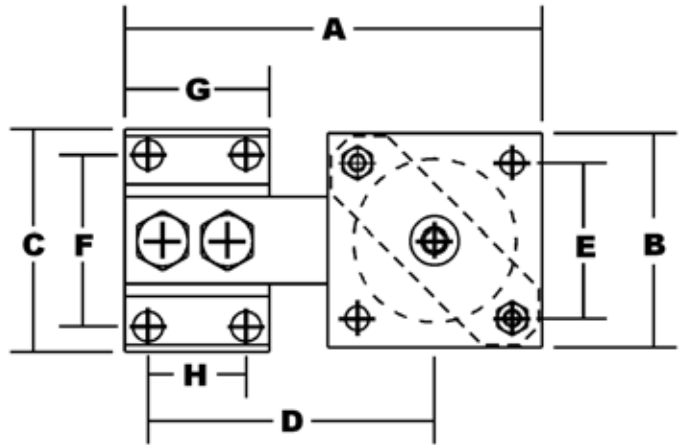
ADVANTAGE LITE SERIES: HI LPRE

INSTALLATION AND ASSEMBLY INSTRUCTIONS



- Never allow moisture to get into any interconnections.
- Keep the Load Point Assembly free of debris.

Physical Dimensions



Model Numbers

CAPACITY		Load Point Model Number	Load Sensor Model Number
LB	KG		
440	200	HI LPRE440-33C	HI SB02-440
1100	500	HI LPRE1.1K-33C	HI SB02-1.1K
2200	1000	HI LPRE2.2K-33C	HI SB02-2.2K
4400	2000	HI LPRE4.4K-33C	HI SB02-4.4K

MODEL #	A	B	C
HI LPRE440-33C	6.13 (155.8)	3.15 (80.0)	3.27 (83.0)
HI LPRE1.1K-33C	6.13 (155.8)	3.15 (80.0)	3.27 (83.0)
HI LPRE2.2K-33C	6.13 (155.8)	3.15 (80.0)	3.27 (83.0)
HI LPRE4.4K-33C	6.13 (155.8)	3.15 (80.0)	3.27 (83.0)

Basic Engineering Principle for Positioning Load Point Assemblies

- Load Point Assemblies should be positioned such that the load (weight) is distributed as evenly as possible between each load point assembly in the scale.

MODEL #	D	E	F
HI LPRE440-33C	4.22 (107.1)	2.28 (58.0)	2.52 (64.0)
HI LPRE1.1K-33C	4.22 (107.1)	2.28 (58.0)	2.52 (64.0)
HI LPRE2.2K-33C	4.22 (107.1)	2.28 (58.0)	2.52 (64.0)
HI LPRE4.4K-33C	4.22 (107.1)	2.28 (58.0)	2.52 (64.0)

Site Preparation

- All foundations for the HI LPRE load point assemblies require a metal base plate adequate to prevent any deformation of the plate when welding the base or spacer of the load point assembly to the foundation.
- All mounting surfaces for the base and loading plate must be level. The Load Point Assemblies in a system must be level to within $\pm 0.5^\circ$.
- Welding should be done prior to the installation of the load sensor. Otherwise disconnect load sensor wiring from the instrument and bypass each load sensor with heavy ground strap from live weight side of each load point to earth ground.

MODEL #	G	H	Height*
HI LPRE440-33C	2.12 (53.9)	1.44 (36.5)	3.37 (84.7)
HI LPRE1.1K-33C	2.12 (53.9)	1.44 (36.5)	3.37 (84.7)
HI LPRE2.2K-33C	2.12 (53.9)	1.44 (36.5)	3.63 (92.1)
HI LPRE4.4K-33C	2.12 (53.9)	1.44 (36.5)	4.59 (116.6)

* Measured from the bottom of the base to the top plate bolts.

Precautions

- Always treat the Load Sensor as a precision instrument. Leave the assembly in its packaging until it is time for installation.
- **NEVER CARRY OR SWING THE LOAD SENSORS BY THEIR CABLE.**

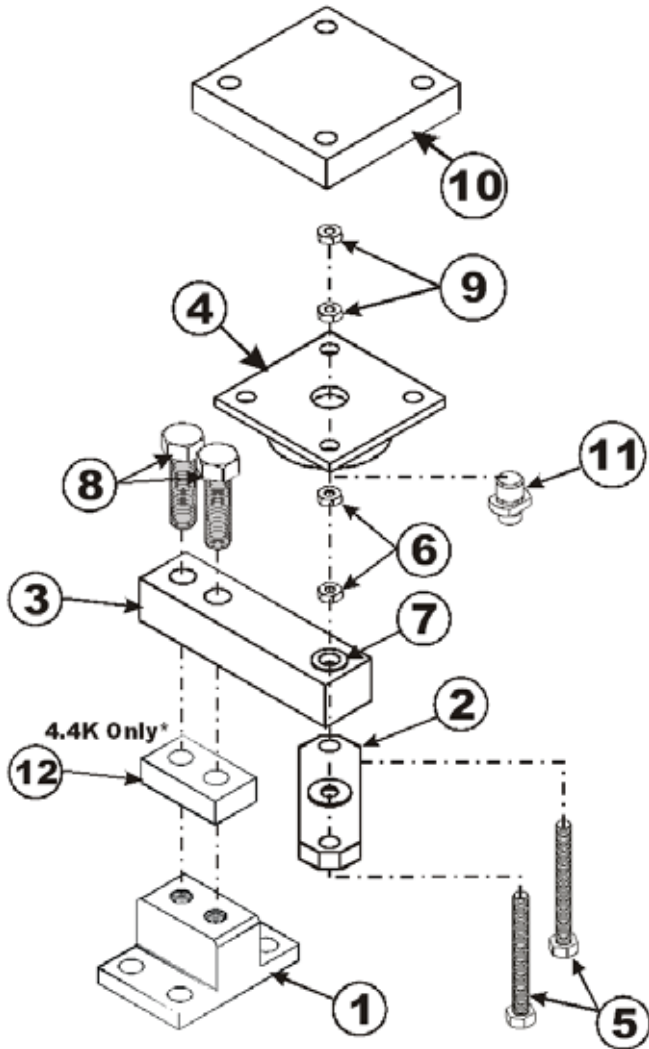
Electrical Termination Cable Color Codes

WARNING: Load cell cable length has been calculated into C2 calibration data. Hardy Process Solutions recommends that you do not cut your Advantage or Advantage Lite load sensor cable, as your C2 accuracy will be affected and the warranty will be voided.

The cable is 6 conductor, shielded (floating) and 20 feet in length.

EXC+	Red	EXC -	Black
SHIELD	Yellow	C2+	Gray
C2-	Violet	SIG +	Green
SIG -	White		

ISO Exploded View



Part Numbers

1. Base, Load Point - Prt. # 5504-0001-01
2. Lift Off Plate - 440 & 1.1K (Prt. # 5504-0018-01) 2.2K (5504-0018-02) 4.4K (Prt. # 5504-0018-03)
3. Load Sensor (See Front Page)
4. Rubber Element - 5504-0015-01
5. Lift Off Hex Bolts:
 - 5/16" - 18 x 3.5" - A4 - 80 (Stainless) 4.4 K
 - 5/16" - 18 x 3.0 - A4 - 80 (Stainless) 2.2 K
 - 5/16" - 18 x 2.75 - A4 - 80 (Stainless) 440 & 1100
6. Lift Off Hex Nuts - 5/16" - 18 - A4 - 80 (Stainless)
7. Load Cup - 440 & 1.1K (Prt. # 5504-0017-01) 2.2K (Prt. # 5504-0017-02) 4.4K (Prt. # 5504-0017-03)
8. Load Sensor Hex Bolts:
 - 440lb. (1.1K) K - M12 x 35mmL - A4 - 80 (Stainless)
 - 2.2 K - M12 x 45mmL - A4 - 80 (Stainless)
 - 4.4 K - M12 x 60mmL - A4 - 80 (Stainless)

9. Upper Hex Nuts - 5/16" - 18 - A4 - 80 (For Shipping Only)
10. Optional Top Plate for Bolting or Welding
11. Load Pin - Prt. # 5504-0016-01
12. *Spacer (4.4 K Only)

Recommended Fasteners and Torque Specifications - Use when attaching the load point assembly with fasteners to a vessel or support base plate.

- Fasteners - 3/8" - 16 with washer or 7/16" - 14 without washer, or M10 with washer. 3/8 bolts allow for more adjustments.
- Torque - HI LPRE440
 - Minimum - 15 ft-lb (20 Nm)
 - Maximum - 35 ft-lb (45 Nm)
- Torque - HI LPRE1.1K
 - Minimum - 15 ft-lb (20 Nm)
 - Maximum - 35 ft-lb (45 Nm)
- Torque - HI LPRE2.2K
 - Minimum - 25 ft-lb (35 Nm)
 - Maximum - 35 ft-lb (45 Nm)
- Torque - HI LPRE4.4K - 90 ft-lb (125 Nm)

Specifications

- Load Cell Material - 17-4 PH Stainless Steel
- Sealing - Potted
- Mount Material - Stainless Steel
- Capacities - 440, 1.1k, 2.2k, 4.4k
- C2 Second Generation Calibration
- Matched mV/V/ohm - Yes
- Rate Output mV/V - 2 ± 0.002
- Hysteresis - < ± 0.025%
- Non-Linearity - < ± 0.025%
- Temp. Effect on Output% of Output /C - <= ± 0.002
- Temp. Effect on Zero Balance% of R.O/C - <= ± 0.002
- Zero Balance - <= ± 1.0%
- Comp Temp C -10 to +40
- Operating Temp -40 to +80
- Safe Load - % of Rated Load - 150
- Ultimate Load - % of Rated Load - 150
- Input Resistance - 1050 to 1200 Ohms ± 50
- Output Resistance - 1001 ± 1.0%
- Washdown - IP67



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