

**INSTALLATION INSTRUCTIONS:**

**GENERAL:**  
THE MODULES CAN PREFERABLY BE WELDED TO LOAD CARRIER AND FOUNDATION, WHICH ELIMINATES PROBLEMS OF GETTING HOLES ON TOP AND BOTTOM LINED UP. OR, FOR EXAMPLE, BOLTED ON TOP AND WELDED ON BOTTOM. THE MODULES ARE DELIVERED PRE-ASSEMBLED EXCL. LOAD CELLS AND LOADING CUPS AS SHOWN ON FIGURE 1.

- INSTALLATION:**
1. POSITION THE PRE-ASSEMBLED MODULES ON THE FOUNDATION PLATES AND PUT ON THE LOAD CARRIER AS SHOWN IN FIGURE 1.
  2. WELD MODULES ON TOP AND BOTTOM AS SHOWN ON FIGURE 1. ALSO SEE NOTE 2. ALTERNATIVELY BOLT AS SHOWN ON FIGURE 3.
  3. APPLY A LAYER OF GREASE TO THE O-RINGS PROVIDED INSIDE THE UPPER AND LOWER LOAD CUPS AND ASSEMBLE CUPS WITH THE LOAD SENSOR. SLIDE LOAD SENSOR WITH CUPS INTO POSITION. MOUNT THE LOWER CLAMP AND TORQUE THE SCREWS TO 11LB-FT [15NM]. ALSO MOUNT THE UPPER CLAMP BUT TORQUE SCREWS LOOSELY AT THIS STAGE. **IMPORTANT!** THE LOWER LOAD CUP IS TALLER THAN THE UPPER LOAD CUP AND IS DESIGNED TO PREVENT LOAD SENSOR ROTATION. THE LOWER LOAD CUP SHOULD ALWAYS BE POSITIONED AT THE LOW SIDE LOCATION OF THE WEIGH MODULE.
  4. REMOVE THE 2 FIXATION SCREWS ON ALL WEIGH MODULES. CHECK THAT THE GAP BETWEEN THE LIFT OFF WASHER AND THE BOTTOM UNIT IS AT 10 MM.
  5. FOR ONE MODULE AT A TIME, LIFT THE LOAD CARRIER SLIGHTLY 1-3 MM TO ALLOW REMOVAL OF THE SPACERS. LIFTING IS PREFERABLY DONE WITH A HYDRAULIC JACK POSITIONED IN SUITABLE POSITION CLOSE TO THE MODULE.
  6. LOWER THE LOAD CARRIER ONTO LOAD SENSOR AND REMOVE THE JACK. NOW TORQUE THE SCREWS FOR THE UPPER CLAMP TO 11LB-FT [15NM]. SET THE "LIFT OFF GAP" TO 1-3 MM AND LOCK THE LIFT OFF SCREW WITH THE LOCKING SCREW.
  7. REPEAT THE PROCEDURE DESCRIBED IN NOTES 5-6 FOR ALL WEIGH MODULES.

8. FOR VERY STIFF LOAD CARRIERS, SHIMMING MIGHT BE NECESSARY TO OBTAIN EVEN LOAD DISTRIBUTION. THIS SHOULD BE PLANNED AND PREPARED PRIOR TO INSTALLATION.
9. SEE DRAWING SHEET 2 FOR MOUNTING PLATE OFFSET DIMENSIONS.

**NOTE 1.**  
\* IN TANK/SILO APPLICATIONS WITH 3 RESPECTIVELY 4 WEIGH MODULES CAN BE ASSUMED THAT MINIMUM 2 MODULES WILL EQUALLY SHARE ACTUAL SIDE FORCE (WIND) ON THE TANK/SILO. ACTUAL LIFT OFF FORCE SHALL, FOR WORST CASE, BE ASSUMED BEING TAKEN BY ONE MODULE. FOR STAINLESS MODULES, REDUCE "MAX LIFT OFF FORCE" AND "MAX SIDE FORCE" STATED IN TABLE TO 60%.

**NOTE 2.**  
MATERIAL OF MILD STEEL WEIGH MODULE IS S355JR. IF WELDING IS TO BE DONE, MATERIALS MUST BE BROUGHT UP TO SUITABLE TEMPERATURES BEFORE WELDING. AFTER WELDING, CLEAN, APPLY PRIMER AND PROTECTIVE PAINT.

STAINLESS STEEL WEIGH MODULE BOTTOM UNITS ARE MADE OF DIN 1.4436 (SS 2343) OR ASTM-A240 TYPE 316 (S31600)  
STAINLESS STEEL WEIGH MODULE TOP PLATES ARE MADE OF DIN 1.4301 (SS 304) OR ASTM-A240 TYPE 304 (S30400)

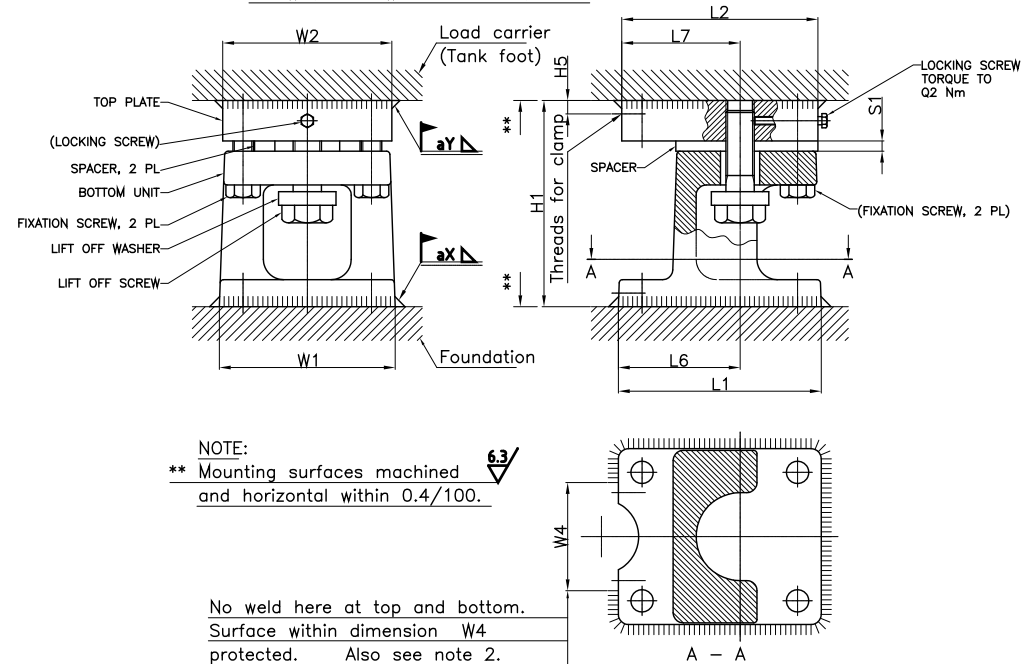
**NOTE 3:**  
OPERATING TEMPERATURE RATING FOR LOAD POINT MODULES IS -40°C TO +80°C. USAGE OF LOAD POINT MODULE AT TEMPERATURES BELOW -40°C REQUIRES THAT THE ENTIRE LOAD POINT MODULE ASSEMBLY AND LOAD SENSOR CABLE BE TEMPERATURE CONTROLLED.

REV.	ECO/DDC	DESCRIPTION	DATE	DRAFT	CHECK	APV'D
C	11041	REVISED PER ECN.	11-17-11	V.J.C.	D.M.	V.J.C.

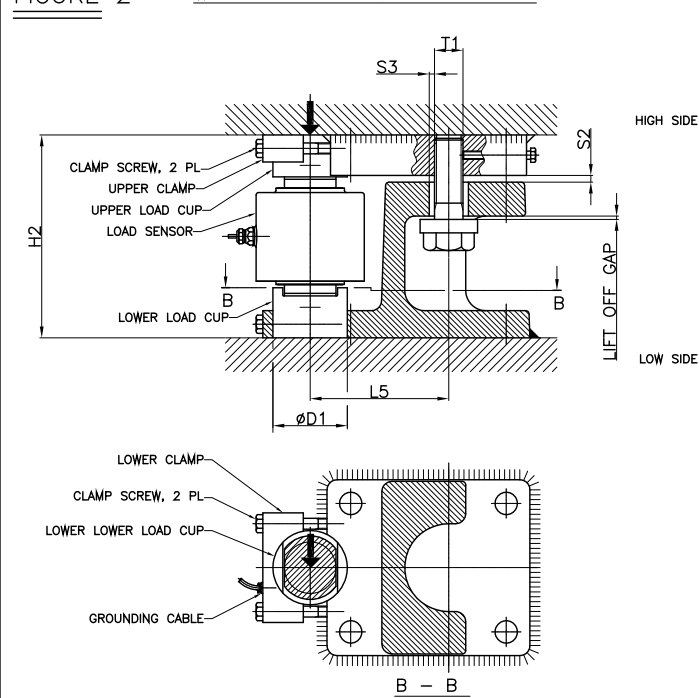
CAPACITY LBS [T]	MODEL NUMBER STAINLESS STEEL	MODEL NUMBER PAINTED STEEL	LOAD SENSOR MODEL NUMBER	LOAD SENSOR CABLE LENGTH	MAXIMUM LIFT-OFF FORCE KLB [KN] *	MAXIMUM SIDE FORCE KLB [KN] *	WEIGHT - EXCLUDING LOAD SENSOR
110KLB [50T]	HI LPRC03-110K-43C	HI LPRC03-110K-41C	HIRCHC03-110K	30FT [9.1M]	67.4 [300]	33.7 [150]	143LB [65KG]
220KLB [100T]	HI LPRC03-220K-43C	HI LPRC03-220K-41C	HIRCHC03-220K	50FT [15.2M]			
330KLB [150T]	HI LPRC03-330K-43C	HI LPRC03-330K-41C	HIRCHC03-330K	50FT [15.2M]	89.9 [400]	44.9 [200]	249LB [113KG]
660KLB [300T]	HI LPRC03-660K-43C	HI LPRC03-660K-41C	HIRCHC03-660K	50FT [15.2M]	134.9 [600]	67.4 [300]	496LB [225KG]

CAPACITY LBS [T]	DIMENSIONS IN [MM]																				BOLT THREAD		TORQUE LB-FT [NM]		WELD SIZE IN [MM]		
	D1	D2	H1	H2	H3	H4	H5	L1	L2	L3	L4	L5	L6	L7	S1	S2	S3	W1	W2	W3	W4	T1	T2	Q1	Q2	X	Y
110KLB [50T]	3.35 [85]	1.02 [26]	10.00 [254]	9.84 [250]	1.34 [34]	1.97 [50]	.59 [15]	10.24 [260]	9.84 [250]	7.87 [200]	1.77 [45]	6.50 [165]	5.91 [150]	5.71 [145]	.47 [12]	.31 [8]	.28 [7]	8.27 [210]	7.87 [200]	5.91 [150]	5.12 [130]	M36	M24	516 [700]	25 [34]	.47 [12]	.28 [7]
220KLB [100T]	4.33 [110]	1.30 [33]	12.01 [305]	11.81 [300]	1.57 [40]	2.36 [60]	.79 [20]	11.81 [300]	11.42 [290]	9.06 [230]	2.36 [60]	8.07 [205]	7.09 [180]	68.70 [175]	.59 [15]	.39 [10]	.31 [8]	10.24 [260]	9.84 [250]	7.48 [190]	6.30 [160]	M42	M30	959 [1300]	50 [68]	.59 [15]	.31 [8]
660KLB [300T]	5.31 [135]	1.53 [39]	15.95 [405]	15.75 [400]	2.36 [60]	2.76 [70]	.98 [25]	14.57 [370]	13.78 [350]	11.02 [280]	2.56 [65]	9.25 [235]	8.46 [215]	8.07 [205]	.79 [20]	.39 [10]	.39 [10]	12.60 [320]	11.81 [300]	9.06 [230]	7.87 [200]	M56	M36	1696 [2300]	110 [149]	.79 [20]	.39 [10]

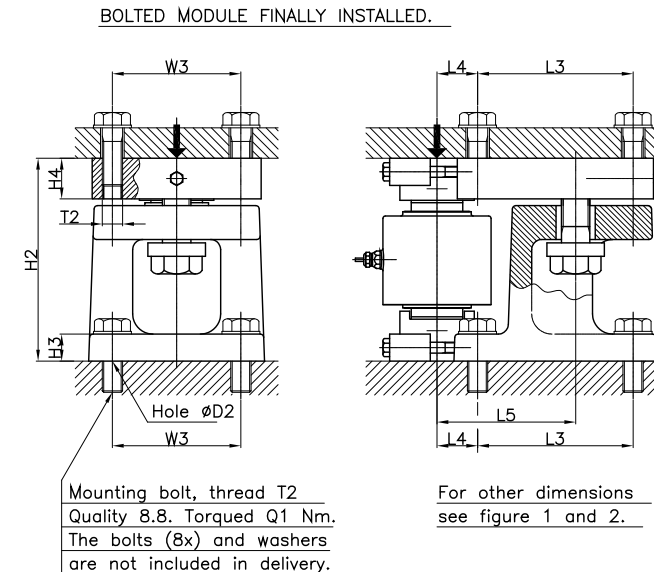
**FIGURE 1** MODULE ASSEMBLED FOR SHIPMENT, POSITIONED ON SITE AND SHOWING THE WELDED ALTERNATIVE.



**FIGURE 2** WELDED MODULE FINALLY INSTALLED.



**FIGURE 3** BOLTED MODULE FINALLY INSTALLED.

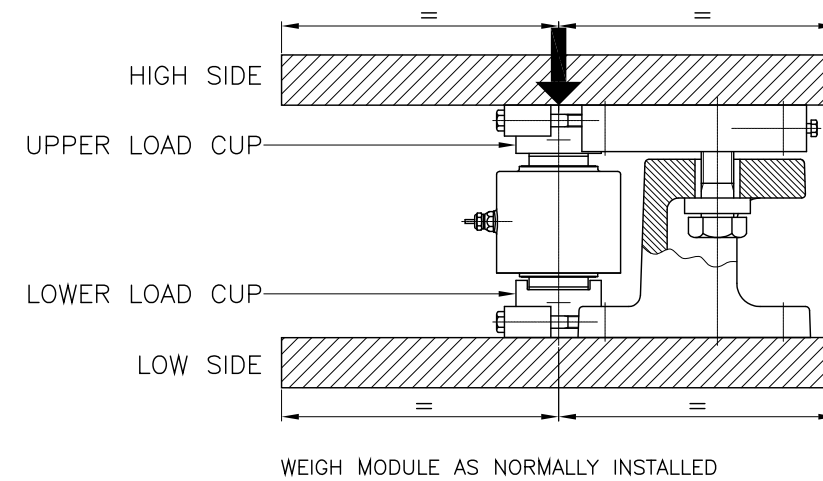
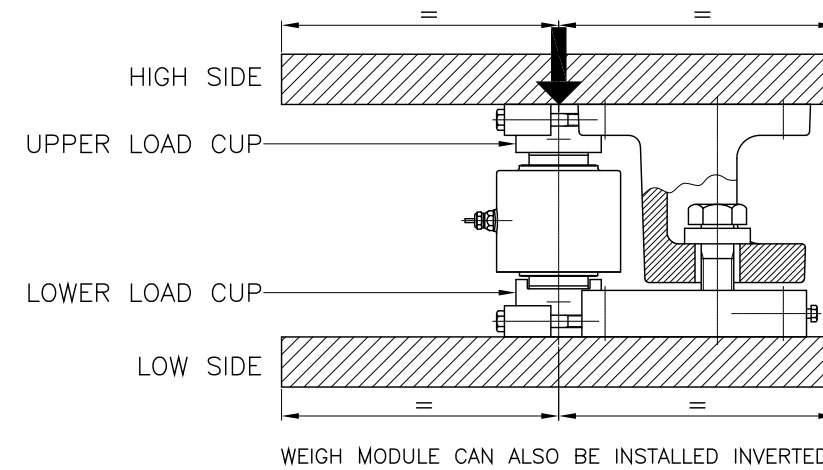
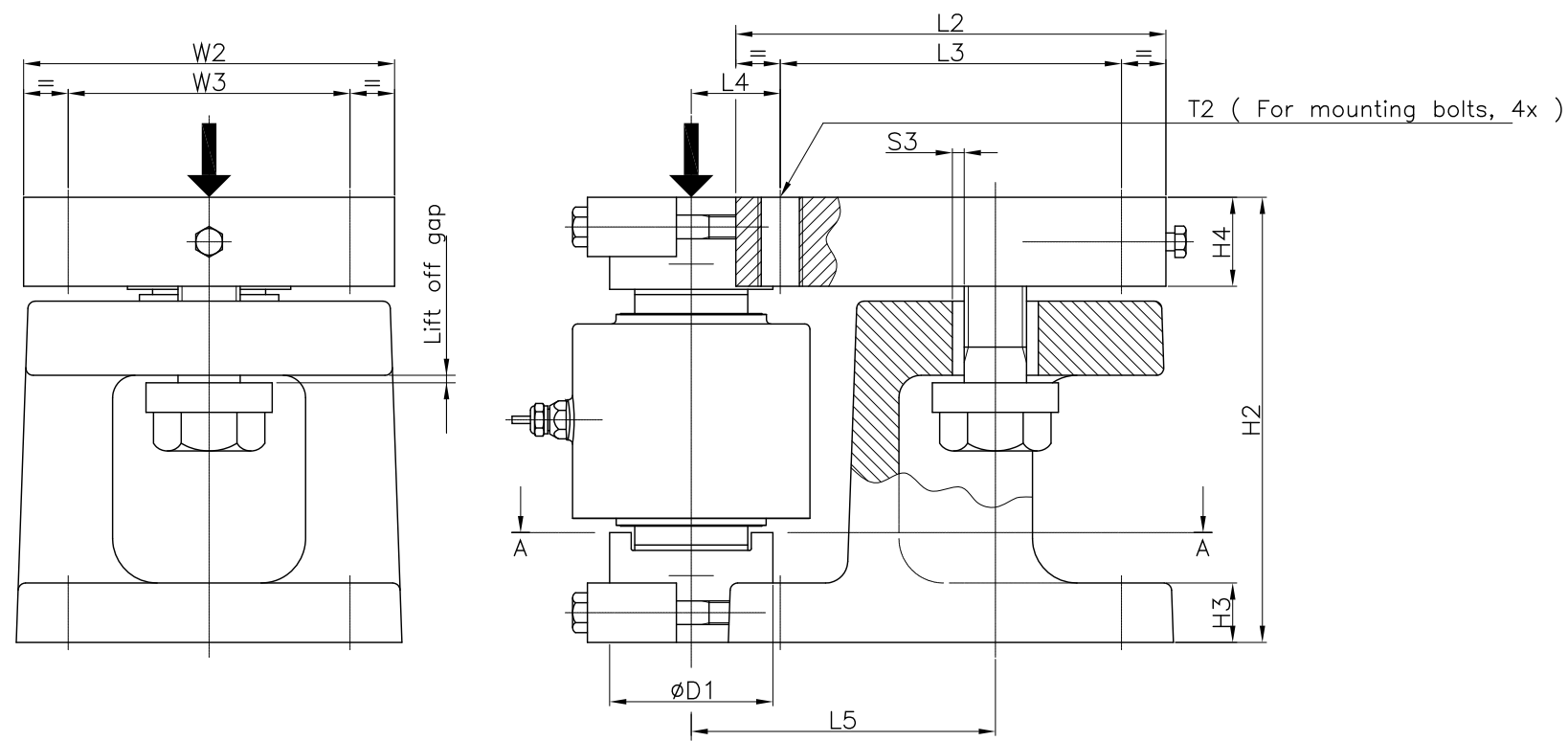


↓ CENTER POINT - THIS CENTER POINT OF THE UPPER LOAD CUP SHOULD BE CENTERED ON THE LOAD CARRIER FOOT PLATE.

**NOTES: UNLESS OTHERWISE SPECIFIED**

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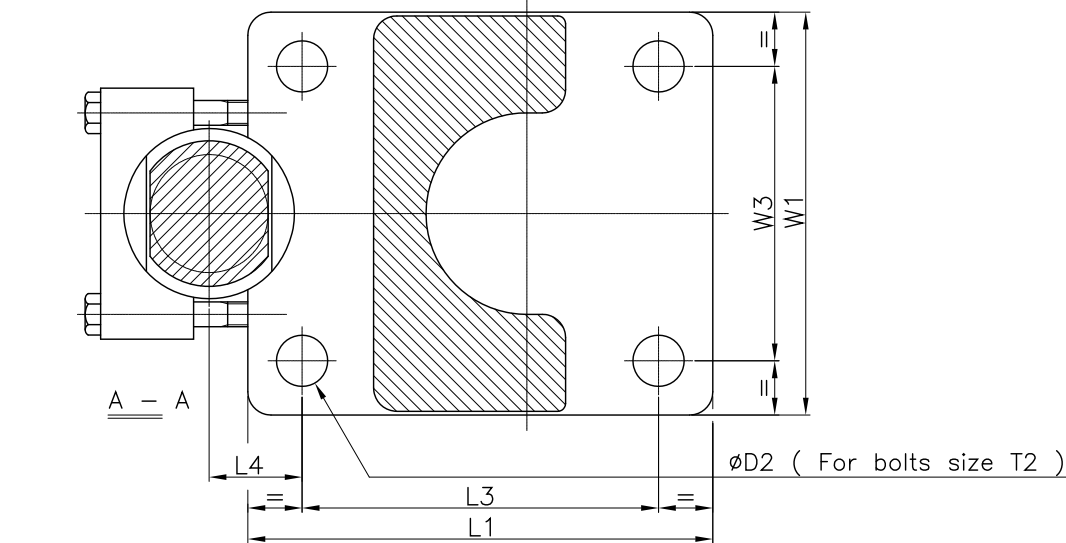
ITEM	QTY	0588-0140	OUTLINE DRAWING, LOAD POINT, HI LPRC03 SERIES, 110KLB-660KLB	SEE NOTES
ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
<b>PARTS LIST</b>				
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [MM] TOLERANCES ARE: FRACTIONS: N/A DECIMALS: .XX = ±.03 .XXX = ±.010 ANGLES: ±0°, 30'		CONTRACT NO.		
MATERIAL		APPROVALS		
FINISH		DRAWN V. CHULA DATE 04-24-09		
DO NOT SCALE DRAWING		CHECKED D. DRAKE DATE 04-24-09		
		APPROVED V. CHULA DATE 04-24-09		
		ISSUED V. CHULA DATE 04-24-09		
		PRODUCTION DATE		
		<b>HARDY PROCESS SOLUTIONS</b>		
<b>OUTLINE DRAWING, LOAD POINT, HI LPRC03 SERIES, 110KLB-660KLB</b>				
SIZE	FSCM	DRAWING NO.	REV.	
D	21316	0588-0140	C	
FILE NAME: 588140C1.DWG		SCALE: NONE		SHEET 1 OF 2



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**HARDY**  
PROCESS SOLUTIONS

TITLE  
**OUTLINE DRAWING, LOAD POINT,  
HI LPRC03 SERIES, 110KLB-660KLB**

SIZE	FSCM	DRAWING NO.	REV.
D	21316	0588-0140	C
FILE NAME:	588140C1.DWG	SCALE: NONE	SHEET 2 OF 2