

Aluminum Transformer Base

The in service limitations of the aluminum transformer bases as charted below and detailed on the adjoining page are in compliance with the Federal Highway Administration's (FHWA) acceptance for use stipulations as they have issued for each base and Valmont's full scale testing of each base to satisfy the structural requirements of the 1994 edition of the American Association of State Highway and Transportation Officials' (AASHTO) 'Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals'. All other field controlled breakaway requirements are the responsibility of the purchaser or his/her representative.

DISCLOSURE	M093 (TB1-17)	M104 (TB2-17)	M098 (TB3-17)
Maximum Lum. Mtg. Ht.	55' - 5"	40' - 10"	55' - 5"
Maximum Pole, Mast Arm & Luminaire Combined Wt.	950 lbs.	550 lbs.	900 lbs.
Transformer Base Bottom Bolt Circle	Load Case #1: 15" Load Case #2: 14"	Load Case #1: 12" Load Case #2: 11" Load Case #3: 10"	Load Case #1: 17 1/4' Load Case #2: 15'
Transformer Base Bottom Anchor Bolt Diameter	1" Maximum	1" Maximum	1 1/4" Maximum
Transformer Base Bottom Anchor Bolt, Steel Washer Size	2 3/4" ± 1/16" O.D. x 1/2" ± 1/32" Thick	2 3/4" ± 1/16" O.D. x 1/2" ± 1/32" Thick	2 3/4" ± 1/16" O.D. x 1/2" ± 1/32" Thick
Transformer Base Top Bolt Circle	Load Case #1: 13 1/2" Load Case #2: 12'	Load Case #1: 12" Load Case #2: 11" Load Case #3: 10"	Load Case #1: 15 1/8' Load Case #2: 13'
Transformer Base Top Connecting Bolt Diameter	1" Maximum	1" Maximum	1 1/4" Maximum
Transformer Base Top Connecting Bolt, Steel Washer Size	2 1/2" ± 1/16" O.D. x 3/8" ± 1/32" Thick	2 1/2" ± 1/16" O.D. x 3/8" ± 1/32" Thick	2 1/2" ± 1/16" O.D. x 3/8" ± 1/32" Thick
Maximum Allowable Moment That Can Be Applied At Top of Base	Load Case #1: 24,100 ft.-lbs. Load Case #2: 18,830 ft.-lbs.	Load Case #1: 21,450 ft.-lbs. Load Case #2: 17,800 ft.-lbs. Load Case #3: 14,160 ft.-lbs.	Load Case #1: 32,850 ft.-lbs. Load Case #2: 22,410 ft.-lbs.
Pole Base Plate Thickness	Load Case #1: 1.25" Min. Load Case #2: 1.25" Min.	Load Case #1: 1.00" Min. Load Case #2: 0.88" Min. Load Case #3: 0.88" Min.	Load Case #1: 1.25" Min. Load Case #2: 1.00" Min.
Pole Base Plate Square	Load Case #1: 13.13" Min. Load Case #2: 12.00" Min.	Load Case #1: 12.00" Min. Load Case #2: 11.50" Min. Load Case #3: 10.88" Min.	Load Case #1: 15.13" Min. Load Case #2: 12.50" Min.

BREAKAWAY NOTES:

1. All designs above - level with shims only - **DO NOT USE LEVELING NUTS.**
2. As noted within the above documentation there are specific limitations to aluminum breakaway transformer bases and the lighting standards that can be used in conjunction with these devices. It is recommended you consult Valmont when evaluating their use.

