## NOTES:

1. All materials and construction shall conform to the manufacturer's requirements and to the project specifications.
2. The hardware used to connect the pole to the base, and the base to the foundation, shall meet all applicable structural and installation requirements as prescribed by the pole and Breakaway base manufacturer.
3. Poles shall be mounted on a breakaway base with 4 high-strength bolts (ASTM F3125 GR A325), utilizing 1 hex nut, 1 flat washer, and 1-2¾" OD x 1 1/16" ID x ½" thick steel washer per bolt, all furnished with the breakaway base.

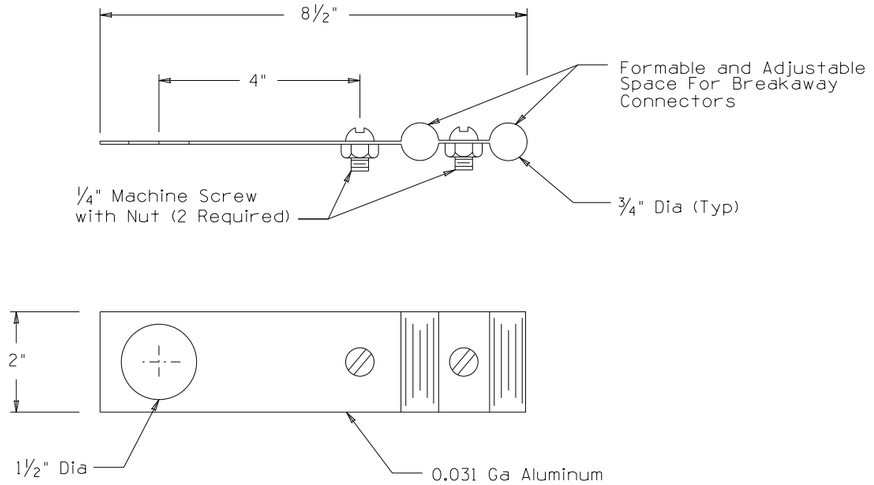
| Base Type | Bolt Size | Pole Types | Bottom Bolt Circle |
|---|---|---|---|
| 2 | 1" Dia x 4" | Aluminum S, G and Steel A and S | 12" |
| 3 | 1¼" Dia x 4½" | Aluminum H, I and T | 17¼" |

4. A bolt circle smaller than specified shall not be used except when specifically approved by the Engineer. If a smaller bolt circle is approved, stack pack washers shall be used in a manner approved by the manufacturer.
5. All bolts shall be installed and torqued according to the breakaway base manufacturer's requirements.
6. The base shall be installed such that the base access door or cover is positioned under the mast arm, or 180 degrees to the mast arm. (behind the mast arm side of the pole). The door or cover opening shall always be perpendicular to the direction of traffic.
7. An un-fused connector shall be used for each conductor in the breakaway base, except for the bond which shall be connected directly to the base ground lug. For details see T.S. Series 1. The fused connections shall be in the junction or pull box adjacent to the pole foundation.
8. The base door or cover shall have the base and/or pole manufacturer's name on it. The door shall be secured with standard ¼"-20 stainless steel hex screws or vandal-resistant screws. All screws shall be furnished with the base. The door can be hinged, or be a removable panel.
9. All 2¾" OD x 1 1/16" ID x ½" thick washers and 2¾" OD x 1 5/16" ID x ½" thick washers shall be zinc mechanically coated per ASTM B 695-85 class 50, with a smooth outer surface, or shall be galvanized per the requirements of ASTM F2329. All other bolts, nuts & washers shall be galvanized per ASTM F2329.
10. The bases shown are two piece weldments that are in conformance to ASTM B 108 aluminum alloy permanent mold castings.
11. Certifications shall be provided by pole and breakaway base manufacturer when requested. Certifications shall cover materials used, FHWA crash worthiness approval, and conformance to loading criteria stated herein.
12. The caution and use instructions label shall be secured inside the base on the wall opposite of the access door plate or on the cover itself.
13. The base, as supplied and installed, shall conform to all applicable AASHTO, NCHRP and FHWA requirements for frangibility bases for roadway light poles.
14. The base depicted in these drawings is made by the Akron Foundry. This is not intended to limit or restrict competition, but to establish the needed performance and function of breakaway bases.
15. These bases may be used for non-breakaway applications.
16. Prior to installation, the Contractor shall consult with the manufacturer regarding loading, installation and application.
17. Top bolt circles less than 12" shall use 2½" OD x 1 1/16" ID x ½" thick steel washers. Bottom bolt circles of 12" diameter shall use 2¾" OD x 1 1/16" ID or 1 5/16" x ½" thick steel washers.

| BASE LOADING CRITERIA | | | | |
|---|---|---|---|---|
| Base Type | Max Total Weight (See Notes 1 & 2 below) | Pole | Mast Arm and Luminaire | Akron Designations |
| 2 | 550 lb | 350 lb | 200 lb | TB2-17 |
| 3 | 900 lb | 600 lb | 300 lb | TB3-17 |

## LOADING CRITERIA NOTES:

1. The loading criteria should be regarded as minimum. Actual criteria shall be as determined by the base and/or pole manufacturer.
2. Highway Light Pole & Mast Arm/Luminaire combinations which exceed this loading criteria must be tested and FHWA certified in accordance with the applicable AASHTO Specifications, NCHRP, and FHWA requirements.




DETAIL A

(In-Line Connector Clamp exact configuration can vary if needed function can be achieved)

Note to Designer:
The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability by a licensed professional engineer. Contents within the inner border line shall not be altered.

| PRIOR DISTRIBUTION DATE | 04/19 |
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| GROUP MANAGER<br>M. HANNA<br>APPROVED | TYPE 2 AND 3<br>CAST ALUMINUM BREAK-AWAY BASES |
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