

TOLCO Fig. 4L - sway brace attachment (FM approved)

Size Range: 1" (25mm) through 12" (300mm) IPS.

Material: Steel.

Function: For bracing pipe against sway and seismic disturbance.

Approvals: Approved by Factory Mutual Engineering (FM), 1" (25mm) through 12" (300mm) pipe. For UL Listed information refer to UL Listed page 74. Included in our Seismic Engineering Guidelines approved by the State of California Office of Statewide Health Planning and Development (OSHPD). For additional load, spacing and placement information relating to OSHPD projects, please refer to our Seismic Engineering Guidelines, OPM-0052-13.

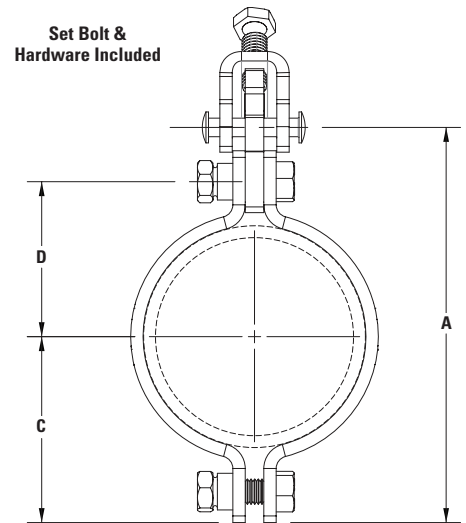
Installation Instructions: Fig. 4L is the "braced pipe" attachment component of a longitudinal and lateral sway brace assembly. It is intended to be combined with the "bracing pipe" and TOLCO™ structural attachment component to form a complete bracing assembly. NFPA 13 and/or FM guidelines should be followed.

To Install: Place the Fig. 4L over the pipe to be braced and tighten bolts. Then engage "bracing pipe" into jaw opening and tighten set bolt until head snaps off. Jaw attachment can pivot for adjustment to proper brace angle. (For complete detailed instructions see instruction sheet [IL309015EN](#)).

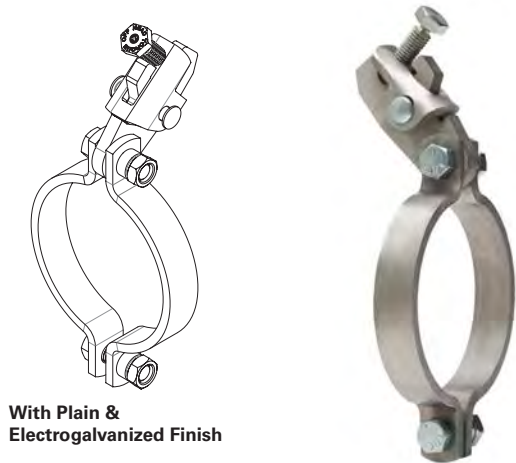
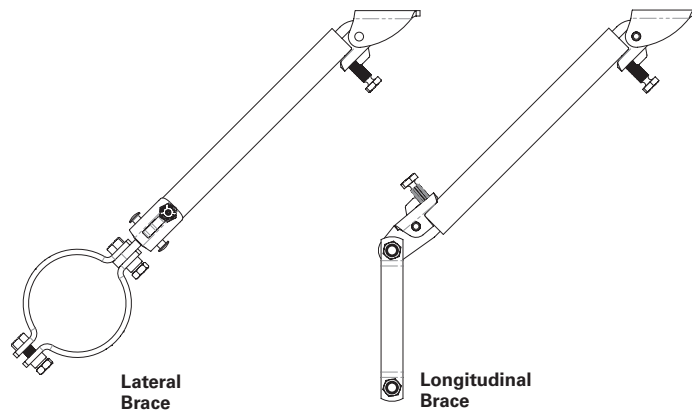
Finish: Plain, Electrogalvanized.

Order By: Figure number, pipe size and finish.

Designed to meet or exceed requirements of FM DS 2-8.



Seismic Bracing



| Part No. | Nom Pipe Size in. (mm) | A (Max) in. | C in. | D in. | Bolt Size in. | FM Max. Rec. Load Longitudinal | | | | FM Max. Rec. Load Lateral | | | | Approx. Wt./100 lbs. | |
|----------------------------------|------------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------|-------------------|-------------------|---------------------------|-------------------|-------------------|-------------------|----------------------|-----|
| | | | | | | 30°-44° lbs. (kN) | 45°-59° lbs. (kN) | 60°-74° lbs. (kN) | 75°-90° lbs. (kN) | 30°-44° lbs. (kN) | 45°-59° lbs. (kN) | 60°-74° lbs. (kN) | 75°-90° lbs. (kN) | | |
| 4L-1 | 1 (25) | 5 | 2 | 1 ³ / ₈ | 1/2-13 | 1060 (4.72) | 1160 (5.16) | 1400 (6.23) | 1500 (6.68) | 1370 (6.10) | 1940 (8.63) | 2380 (10.59) | 2650 (11.79) | 176 | |
| 4L-1 ¹ / ₄ | 1 ¹ / ₄ (32) | 5 ² / ₇ | 2 ¹ / ₁₆ | 1 ⁵ / ₈ | 1/2-13 | 1060 (4.72) | 1160 (5.16) | 1400 (6.23) | 1500 (6.68) | 1370 (6.10) | 1940 (8.63) | 2380 (10.59) | 2650 (11.79) | 182 | |
| 4L-1 ¹ / ₂ | 1 ¹ / ₂ (40) | 5 ¹ / ₂ | 2 ¹ / ₃ | 1 ² / ₃ | 1/2-13 | 740 (3.30) | 1020 (4.54) | 1250 (5.57) | 920 (4.10) | 1370 (6.10) | 1940 (8.63) | 2380 (10.59) | 2650 (11.79) | 187 | |
| 4L-2 | 2 (50) | 6 ² / ₇ | 2 ² / ₃ | 2 | 1/2-13 | 740 (3.30) | 1020 (4.54) | 1250 (5.57) | 920 (4.10) | 1420 (6.32) | 1990 (8.86) | 2440 (10.86) | 2720 (12.10) | 204 | |
| 4L-2 ¹ / ₂ | 2 ¹ / ₂ | — | 6 ⁷ / ₈ | 3 | 2 ¹ / ₃ | 1/2-13 | 520 (2.32) | 650 (2.90) | 790 (3.52) | 1040 (4.63) | 1410 (6.28) | 1990 (8.86) | 2440 (10.86) | 2720 (12.10) | 220 |
| 4L-65mm | — (65) | 6 ⁷ / ₈ | 3 | 2 ¹ / ₃ | 1/2-13 | 520 (2.32) | 650 (2.90) | 790 (3.52) | 1040 (4.63) | 1410 (6.28) | 1990 (8.86) | 2440 (10.86) | 2720 (12.10) | 218 | |
| 4L-3 | 3 (80) | 7 ³ / ₇ | 3 ¹ / ₄ | 2 ⁵ / ₈ | 1/2-13 | 520 (2.32) | 650 (2.90) | 790 (3.52) | 1040 (4.63) | 1410 (6.28) | 1990 (8.86) | 2440 (10.86) | 2720 (12.10) | 323 | |
| 4L-3 ¹ / ₂ | 3 ¹ / ₂ (90) | 8 | 3 ¹ / ₂ | 2 ⁷ / ₈ | 1/2-13 | 520 (2.32) | 650 (2.90) | 790 (3.52) | 1040 (4.63) | 1410 (6.28) | 1990 (8.86) | 2440 (10.86) | 2720 (12.10) | 343 | |
| 4L-4 | 4 (100) | 8 ³ / ₇ | 3 ³ / ₄ | 3 ¹ / ₈ | 1/2-13 | 520 (2.32) | 650 (2.90) | 790 (3.52) | 1040 (4.63) | 1410 (6.28) | 1990 (8.86) | 2440 (10.86) | 2720 (12.10) | 253 | |
| 4L-5 | 5 | — | 9 ⁵ / ₈ | 4 ³ / ₈ | 3 ⁵ / ₈ | 1/2-13 | 520 (2.32) | 650 (2.90) | 790 (3.52) | 1040 (4.63) | 1410 (6.28) | 1990 (8.86) | 2440 (10.86) | 313 | |
| 4L-125mm | — (125) | 9 ⁵ / ₈ | 4 ³ / ₈ | 3 ⁵ / ₈ | 1/2-13 | 520 (2.32) | 650 (2.90) | 790 (3.52) | 1040 (4.63) | 1410 (6.28) | 1990 (8.86) | 2440 (10.86) | 2720 (12.10) | 312 | |
| 4L-6 | 6 | — | 11 ³ / ₇ | 5 ¹ / ₃ | 4 ⁴ / ₇ | 1/2-13 | 870 (3.87) | 1200 (5.34) | 1460 (6.50) | 1630 (7.26) | 1560 (6.94) | 2210 (9.84) | 2710 (12.06) | 3020 (13.44) | 540 |
| 4L-150mm | — (150) | 11 ³ / ₇ | 5 ¹ / ₃ | 4 ⁴ / ₇ | 1/2-13 | 870 (3.87) | 1200 (5.34) | 1460 (6.50) | 1630 (7.26) | 1560 (6.94) | 2210 (9.84) | 2710 (12.06) | 3020 (13.44) | 538 | |
| 4L-8 | 8 | — | 13 ³ / ₅ | 6 ² / ₅ | 5 ² / ₃ | 1/2-13 | 1190 (5.30) | 1440 (6.41) | 1580 (7.03) | 1750 (7.79) | 1560 (6.94) | 2210 (9.84) | 2710 (12.06) | 3020 (13.44) | 645 |
| 4L-200mm | — (200) | 13 ³ / ₅ | 6 ² / ₅ | 5 ² / ₃ | 1/2-13 | 1190 (5.30) | 1440 (6.41) | 1580 (7.03) | 1750 (7.79) | 1560 (6.94) | 2210 (9.84) | 2710 (12.06) | 3020 (13.44) | 643 | |
| 4L-10 | 10 (254) | 17 ³ / ₅ | 8 ¹ / ₄ | 7 ¹ / ₄ | 1/2-13 | 1620 (7.21) | 1660 (7.38) | 1570 (6.98) | 1740 (7.74) | 1620 (7.21) | 2300 (10.23) | 2820 (12.54) | 3140 (13.97) | 1349 | |
| 4L-12 | 12 (300) | 19 ³ / ₅ | 9 ¹ / ₄ | 8 ¹ / ₄ | 1/2-13 | 1620 (7.21) | 1660 (7.38) | 1570 (6.98) | 1740 (7.74) | 1620 (7.21) | 2300 (10.23) | 2820 (12.54) | 3140 (13.97) | 1526 | |

Eaton's B-Line series seismic bracing components are designed to be compatible only with other B-Line series bracing components, resulting in a listed seismic bracing assembly. Eaton B-Line Division warranty for seismic bracing components will be the warranty provided in Eaton B-Line Division standard terms and conditions of sale made available by Eaton, except that, in addition to the other exclusions from Eaton B-Line Division warranty, Eaton makes no warranty relating to B-Line series seismic bracing components that are combined with products not provided by Eaton.

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

Updated 4-2-21