## **Seismic Bracing**

## Fig. 1000 - "Fast Clamp" Sway Brace Attachment

Size Range: Pipe size to be braced: 1" (25mm) thru 6" (150mm) Schedule 10

thru 40 IPS.

Pipe size used for bracing: 1" (25mm) and 1<sup>1</sup>/<sub>4</sub>" (32mm) Schedule 40 IPS.

Material: Steel

Function: A restraint device intended for lateral bracing.

Features: Field adjustable, making critical pre-engineering of bracing pipe unnecessary. Unique design requires no threading of bracing pipe. Can be used as a component of a 4-way riser brace. Can be used as longitudinal brace with Fig. 907. Steel leaf spring insert provided to assure installer and inspector necessary minimum torque has been achieved.

Installation: Fig. 1000 is the "braced pipe" attachment component of a lateral sway brace assembly. It is intended to be combined with the "bracing pipe" and TOLCO structural attachment component, Fig. 980, 910 or 909 to form a complete bracing assembly. Follow NFPA 13 and/or OSHPD guidelines.

To Install: Place the Fig. 1000 over the pipe to be braced, insert bracing pipe through opening leaving a minimum of 1" extension. Brace pipe can be installed on top or bottom of pipe to be braced. Tighten hex nuts until leaf spring is flat. It is recommended that the brace angle be adjusted before hex nuts are fully tightened.

Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL). Approved for use with Allied Dyna Flow sprinkler pipe up to 2" as a restraint device. Maximum horizontal design load is 655 lbs. (2.91kN) Torque requirement is 6-8 ft./lbs. (8-10Nm) Approved by Factory Mutual Engineering (FM). Included in our Seismic Restraints Catalog 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 the TOLCO Seismic Restraint Systems Guidelines.

Application Note: Position Fast Clamp and tighten two hex nuts until leaf spring flattens. A minimum of 1" pipe extension beyond the Fig. 1000 is recommended.

Finish: Plain. Contact B-Line for alternative finishes and materials.

Order By: Order first by pipe size to be braced, followed by pipe size used for bracing, figure number and finish.

Component of State of California OSHPD Approved Seismic Restraints System

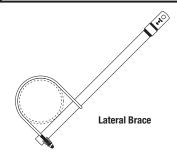








**UL Listed Design Load** 1" (25mm) thru 2" (50mm) pipe size -655 lbs. (2.91kN)



Pipe Size		Part Number & Approx. Wt./100							Design Load - Allowable Horizontal Capacity (lbf) Per Installation 1, 2, 3							
		1" (24mm) Brace Pipe			1 <sup>1</sup> /4" (32mm) Brace Pipe			30°-44°		45°-59°		60°-74°		75°-90°		
in.	(mm)		Lbs.	(kg)		Lbs.	(kg)	Lbs.	(kN)	Lbs.	(kN)	Lbs.	(kN)	Lbs.	(kN)	
1"	(25)	1000-1 X 1	71.6	(32.5)	1000-1 X 1 <sup>1</sup> / <sub>4</sub>	75.8	(34.4)	200	(0.89)	280	(1.24)	340	(1.51)	380	(1.69)	
1 <sup>1</sup> /4"	(32)	1000-1 <sup>1</sup> /4 X 1	74.8	(33.9)	1000-1 <sup>1</sup> /4 X 1 <sup>1</sup> /4	79.1	(35.9)	200	(0.89)	280	(1.24)	340	(1.51)	380	(1.69)	
1 <sup>1</sup> /2"	(40)	1000-1 <sup>1</sup> / <sub>2</sub> X 1	77.8	(35.3)	1000-1 <sup>1</sup> / <sub>2</sub> X 1 <sup>1</sup> / <sub>4</sub>	82.1	(37.2)	200	(0.89)	280	(1.24)	340	(1.51)	380	(1.69)	
2"	(50)	1000-2 X 1	84.1	(38.1)	1000-2 X 1 <sup>1</sup> / <sub>4</sub>	88.4	(40.1)	200	(0.89)	280	(1.24)	340	(1.51)	380	(1.69)	
21/2"	(65)	1000-2 <sup>1</sup> / <sub>2</sub> X 1	90.2	(40.9)	1000-2 <sup>1</sup> / <sub>2</sub> X 1 <sup>1</sup> / <sub>4</sub>	94.6	(42.9)	200	(0.89)	280	(1.24)	340	(1.51)	380	(1.69)	
3"	(80)	1000-3 X 1	97.3	(44.1)	1000-3 X 1 <sup>1</sup> / <sub>4</sub>	101.7	(46.1)	230	(1.02)	320	(1.42)	400	(1.78)	450	(2.00)	
31/2"	(90)	1000-3 <sup>1</sup> / <sub>2</sub> X 1	104.0	(47.2)	1000-3 <sup>1</sup> /2 X 1 <sup>1</sup> /4	108.4	(49.2)	230	(1.02)	320	(1.42)	400	(1.78)	450	(2.00)	
4"	(100)	1000-4 X 1	110.3	(50.0)	1000-4 X 1 <sup>1</sup> / <sub>4</sub>	114.6	(52.0)	230	(1.02)	320	(1.42)	400	(1.78)	450	(2.00)	
5"	(125)	1000-5 X 1	123.1	(55.8)	1000-5 X 1 <sup>1</sup> / <sub>4</sub>	127.4	(57.8)									
6"	(150)	1000-6 X 1	136.5	(61.9)	1000-6 X 1 <sup>1</sup> / <sub>4</sub>	140.8	(63.8)									

<sup>&</sup>lt;sup>1</sup> FM Approved when used with 1, 11/4, 11/2, or 2 inch NPS Schedule 40 GB/T 3091,EN 10255H, or JIS G3451 steel pipe as the brace member.

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

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



<sup>&</sup>lt;sup>2</sup> Load rating for LW above refers to FM Approved Lightwall Pipe commonly referred to as "Schedule 7". These ratings may also be applied when EN 10220 and GB/T 8163 steel pipe.

<sup>3</sup> Load rating for Schedule 10 above may be applied to GB/T 3092,EN 10255M and H, or JIS G3454, FM Approved Thinwall, or Schedule 40 steel pipes. Note: See UL load ratings in UL Listed Design Load chart shown under drawing.