**TOLCO™ Fig. 828 - Universal Sway Brace Attachment**

**Size Range:** One size accommodates all Fig. 900 Series sway brace attachments. Fits from 3/8” (9.4mm) to 7/8” (22.2mm) thick steel structure. For thicknesses less than 3/8” (9.4mm) refer to Fig. 825 and Fig. 825A.

**Material:** Steel

**Function:** To attach sway bracing to various types of steel structural members.

**Features:** Permits secure non-friction connection without drilling or welding. Unique design allows offset placement on wide flange beam, I-beam, C-channel, open web, welded steel trusses, etc. Secures brace to structure either across or along the beam. Break-off set screws allow for visual verification of proper installation torque.

**Approvals:** Underwriters Laboratories Listed in the USA (UL) and Canada (cUL). Factory Mutual Approved (FM).

**Installation Instructions:** The Fig. 828 is the structural attachment component of a longitudinal or lateral sway brace assembly. It is intended to be combined with a TOLCO transitional attachment, "bracing pipe" and a TOLCO "braced pipe" attachment to form a complete bracing assembly. NFPA 13 and/or OSHPD guidelines should be followed.

**To Install:** Place the Fig. 828 on the flange of the beam, truss, or girder. Be sure the attachment is fully engaged to the rear of the opening. Tighten the cone point set screws (A) until the heads break off. Tighten the cone point set screw (B) until the head breaks off. Remove the flange nut from set screw (B). Install a TOLCO swivel fitting (Fig. 909, 910, 980, 986). Use flange nut to secure the swivel fitting.

**Finish:** Plain or Electro-Galvanized

**Approx. Weight/100:** 275 Lbs. (124.7kg)

**Order By:** Figure number and finish

**Patent:** Patent #6,098,942, #8,534,625

**Canada Patent:** #2,286,659

**Patent Pending**

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### Max. Horizontal Design Load (FM)

**With Brace Perpendicular To The Beam**

<table>
<thead>
<tr>
<th>Brace Angle (degrees from vertical)</th>
<th>30°-44°</th>
<th>45°-59°</th>
<th>60°-74°</th>
<th>75°-90°</th>
</tr>
</thead>
<tbody>
<tr>
<td>1570</td>
<td>2220</td>
<td>1210</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>(6.98kN)</td>
<td>(9.87kN)</td>
<td>(5.38kN)</td>
<td>(3.11kN)</td>
<td></td>
</tr>
</tbody>
</table>

### Max. Horizontal Design Load (FM)

**With Brace Parallel To The Beam**

<table>
<thead>
<tr>
<th>Brace Angle (degrees from vertical)</th>
<th>30°-44°</th>
<th>45°-59°</th>
<th>60°-74°</th>
<th>75°-90°</th>
</tr>
</thead>
<tbody>
<tr>
<td>690</td>
<td>970</td>
<td>1210</td>
<td>1330</td>
<td></td>
</tr>
<tr>
<td>(3.07kN)</td>
<td>(4.31kN)</td>
<td>(5.38kN)</td>
<td>(5.91kN)</td>
<td></td>
</tr>
</tbody>
</table>

FM Approved design loads are based on ASD design method.

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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.

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