

Beam Clamps

B3037 - Z-Purlin Malleable C-Clamp

Material: Malleable Iron

Function: Designed for attaching a $\frac{3}{8}$ "-16 hanger rod to the bottom flange of a Z-purlin.

Approvals: Underwriters Laboratories Listed (cULus) for up to 4" (100mm) pipe. Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 23 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 23.

Finish: Plain or Electro-Galvanized

Order By: Figure number and finish.

Weight: Approx. Wt./100 90 Lbs. (40.8kg)

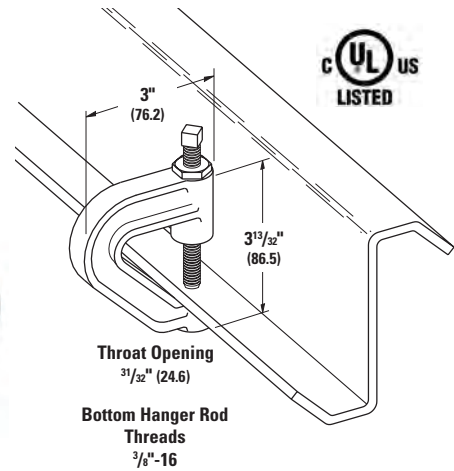
Design Load: 400 Lbs. (1.78kN)

Setscrew Torque: Per MSS SP-58 14.2.5

$\frac{3}{8}$ " -16 set screws = 5 ft./lbs. (7 Nm)

Caution should be taken not to over-tighten set screws.

Set Screw and
Locknut Included



B3033 - Wide Jaw Reversible C-Clamp

Size Range: $\frac{3}{8}$ "-16 thru $\frac{3}{4}$ "-10 rod

Material: Cast Malleable Steel with hardened cup point set screw and jam nut

Function: For attachment to structural shapes requiring wider throat especially under roof with bar joist construction. This clamp may be used with the set screw in the up or down position.

Approvals: Underwriters Laboratories Listed (cULus) and Factory Mutual Engineering Approved (FM) for $\frac{3}{8}$ "-16 and $\frac{1}{2}$ "-13 rod sizes. Conforms to Federal Specification WW-H-171E Type 19 & A-A-1192A, Type 19 & 23 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 19 & 23. Factory Mutual Engineering Approved only with the setscrew in the down position.

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Figure number, rod size and finish

Setscrew Torque: Per MSS SP-58 14.2.5

$\frac{3}{8}$ " -16 set screws = 5 ft./lbs. (7 Nm)

$\frac{1}{2}$ " -13 set screws = 11 ft./lbs. (15 Nm)

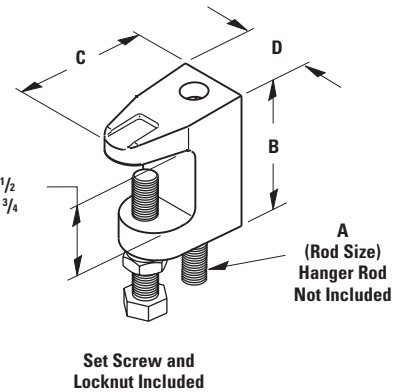
$\frac{5}{8}$ " -11 set screws = 21 ft./lbs. (28 Nm)

Caution should be taken not to over-tighten set screws.

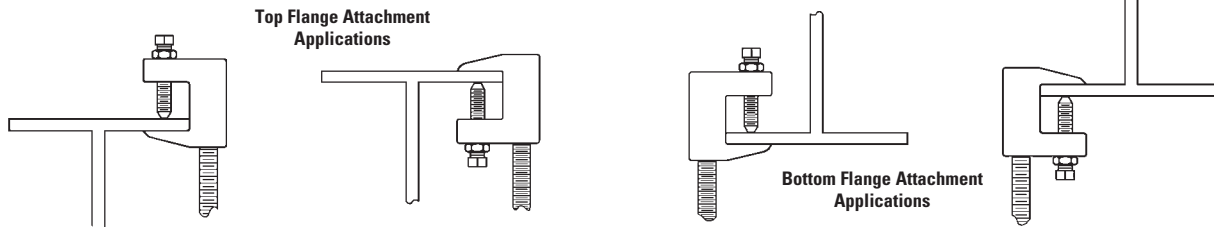
Designed to meet or exceed requirements of FM DS 2-0.



Throat Opening
 $1\frac{1}{4}$ " (31.7) for B3033- $\frac{3}{8}$ & $\frac{1}{2}$ "
 $1\frac{5}{16}$ " (33.3) for B3033- $\frac{5}{8}$ & $\frac{3}{4}$ "



Set Screw and
Locknut Included



Part No.	Rod Size A	Set Screw Size	B in. (mm)	C in. (mm)	D in. (mm)	Maximum Iron Pipe Size Per UL in. (mm)	Approx. Wt./100 Lbs. (kg)
B3033- $\frac{3}{8}$	$\frac{3}{8}$ "-16	$\frac{3}{8}$ "-16 x 2"	2 $\frac{1}{4}$ " (57.1)	2" (50.8)	1 $\frac{1}{8}$ " (28.6)	4" (100)	54 (24.5)
B3033- $\frac{1}{2}$	$\frac{1}{2}$ "-13	$\frac{1}{2}$ "-13 x 2 $\frac{1}{2}$ "	2 $\frac{5}{16}$ " (58.7)	2 $\frac{3}{16}$ " (55.6)	1 $\frac{1}{4}$ " (31.7)	8" (200)	51 (23.1)
B3033- $\frac{5}{8}$	$\frac{5}{8}$ "-11	$\frac{1}{2}$ "-13 x 2 $\frac{1}{2}$ "	2 $\frac{5}{8}$ " (66.7)	2 $\frac{1}{2}$ " (63.5)	1 $\frac{3}{8}$ " (34.9)	8" (200)	70 (31.7)
B3033- $\frac{3}{4}$	$\frac{3}{4}$ "-10	$\frac{5}{8}$ "-11 x 2 $\frac{1}{2}$ "	2 $\frac{11}{16}$ " (68.3)	2 $\frac{1}{2}$ " (63.5)	1 $\frac{7}{16}$ " (36.5)	10" (250)	98 (44.4)

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

B3034 - C-Clamp

Size Range: $\frac{3}{8}$ "-16 thru $\frac{3}{4}$ "-10 rod

Material: Cast Malleable Steel with hardened cup point set screw and jam nut

Function: Recommended for hanging from steel beam where flange thickness does not exceed $\frac{3}{4}$ " (19.0mm).

Features: May be used on top or bottom flange of the beam. Beveled lip allows hanging from top flange where clearance is limited. May be installed with the set screw in the up or down position. Offset design permits unlimited rod adjustment by allowing the rod to be threaded completely through the clamp. The rear window design permits inspection of thread engagement.

Approvals: Underwriters Laboratories Listed (cULus) and Factory Mutual Engineering Approved (FM) for $\frac{3}{8}$ "-16 and $\frac{1}{2}$ "-13 rod sizes. Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 23 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 19. $\frac{3}{8}$ "-16 is (cULus) Listed to support up to 4" (100mm) pipe with the set screw in the down position, up to 3" (75mm) pipe with the set screw in the up position. $\frac{1}{2}$ "-13 is (cULus) Listed to support up to 8" (200mm) pipe with the set screw in the down position, up to 6" (150mm) pipe with the set screw in the up position. Factory Mutual Engineering Approved only with the setscrew in the down position.

Finish: Plain. Contact customer service for alternative finishes and materials.

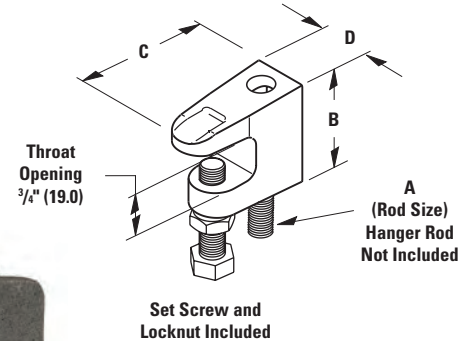
Order By: Figure number, rod size and finish

Setscrew Torque: Per MSS SP-58 14.2.5

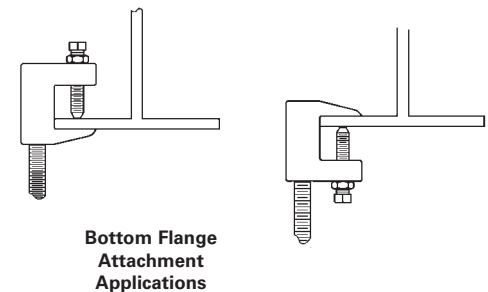
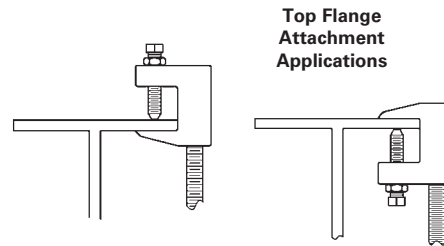
$\frac{3}{8}$ " -16 set screws = 5 ft./lbs. (7 Nm)

$\frac{1}{2}$ " -13 set screws = 11 ft./lbs. (15 Nm)

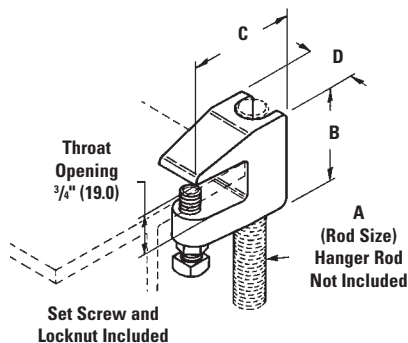
Caution should be taken not to over-tighten set screws.



B3034- $\frac{3}{8}$ " shown.



B3034- $\frac{5}{8}$ " and B3034- $\frac{3}{4}$ " sizes
Attach only as shown.



Part No.	Rod Size A	Set Screw Size	B		C		D		Maximum Iron Pipe Size Per UL		Approx. Wt./100	
			in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	Lbs.	(kg)
B3034- $\frac{3}{8}$	$\frac{3}{8}$ "-16	$\frac{3}{8}$ "-16 x $1\frac{1}{2}$ "	$1\frac{5}{8}$ "	(41.3)	2"	(50.8)	$\frac{7}{8}$ "	(19.0)	4"	(100)	30	(13.6)
B3034- $\frac{1}{2}$	$\frac{1}{2}$ "-13	$\frac{1}{2}$ "-13 x $1\frac{1}{2}$ "	$1\frac{13}{16}$ "	(46.0)	$2\frac{3}{16}$ "	(55.6)	$1\frac{3}{16}$ "	(30.2)	8"	(200)	47	(21.3)
B3034- $\frac{5}{8}$	$\frac{5}{8}$ "-11	$\frac{1}{2}$ "-13 x 2"	$1\frac{3}{4}$ "	(44.5)	$2\frac{1}{8}$ "	(54.0)	$1\frac{1}{4}$ "	(31.7)	—	—	58	(26.3)
B3034- $\frac{3}{4}$	$\frac{3}{4}$ "-10	$\frac{1}{2}$ "-13 x 2"	2"	(50.8)	$2\frac{1}{4}$ "	(57.2)	$1\frac{1}{4}$ "	(31.7)	—	—	77	(35.0)

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

TOLCO Fig. 65 - Reversible Steel C-Type Beam Clamp $\frac{3}{4}$ " (19.0mm) Throat Opening

Size Range:

Fig. 65 - $\frac{1}{2}$ "-13 rod sizes, and $\frac{5}{8}$ "-11 rod sizes

Fig. 65XT - $\frac{3}{8}$ "-16 rod size (see below)

Material: Steel with hardened cup point set screw and jam nut

Function: Recommended for hanging from steel beam where flange thickness does not exceed $\frac{3}{4}$ " (19.0mm).

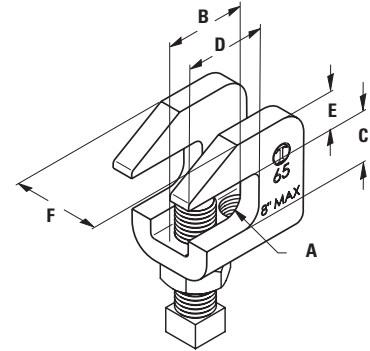
Features: All steel construction eliminates structural deficiencies associated with casting type beam clamps. May be used on top or bottom flange of beam. (Beveled lip allows hanging from top flange where clearance is limited.) May be installed with set screw in up or down position. Offset design permits unlimited rod adjustment by allowing the rod to be threaded completely through the clamp. Open design permits inspection of thread engagement.

Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL). Exceeds requirements of the National Fire Protection Association (NFPA), pamphlet 13, $\frac{3}{8}$ "-16 rod will support $\frac{1}{2}$ " (15mm) thru 4" (100mm) pipe
 $\frac{1}{2}$ "-13 rod will support thru 8" (200mm) pipe

Finish: Plain or Electro-Galvanized. Contact customer service for alternative finishes and materials.

Order By: Figure number and finish

Fig. 65 Patent #4,570,885



Set Screw and Locknut Included



Part No.	Rod Size A	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)
65- $\frac{1}{2}$	$\frac{1}{2}$ "-13	1 $\frac{1}{2}$ " (38.1)	$\frac{3}{4}$ " (19.0)	1" (25.4)	$\frac{9}{16}$ " (14.3)
65- $\frac{5}{8}$	$\frac{5}{8}$ "-11	1 $\frac{1}{2}$ " (38.1)	$\frac{3}{4}$ " (19.0)	1" (25.4)	$\frac{9}{16}$ " (14.3)

Part No.	F in. (mm)	Approx. Wt./100 Lbs. (kg)
65- $\frac{1}{2}$	1 $\frac{1}{4}$ " (31.7)	55 (24.9)
65- $\frac{5}{8}$	1 $\frac{1}{4}$ " (31.7)	55 (24.9)

TOLCO Fig. 65XT - Reversible Steel C-Type Beam Clamp $\frac{3}{4}$ " (19.0mm) Throat Opening

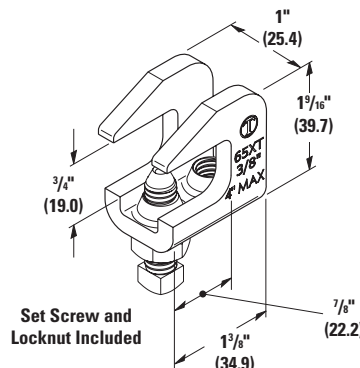
Feature: Extruded holes allows for more thread engagement of threaded rod and set screw.

Finish: Plain or Electro-Galvanized

Order By: Figure number and finish

Approvals: Underwriters Laboratories Listed (cULus) and FM Approved (FM) for up to 4" (100mm) pipe.

Designed to meet or exceed requirements of FM DS 2-0 and NFPA 13.



Set Screw and Locknut Included



Part No.	For Rod Size	Approx. Wt/100 Lbs. (kg)
65XT	$\frac{3}{8}$ "-16	28.0 (12.7)

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

TOLCO Fig. 66 - Reversible Steel C-Type Beam Clamp 1 1/4" (31.7mm) Throat Opening

Size Range: 3/8"-16, 1/2"-13 rod sizes, and 5/8"-11 rod sizes

Material: Steel with hardened cup point set screw and jam nut

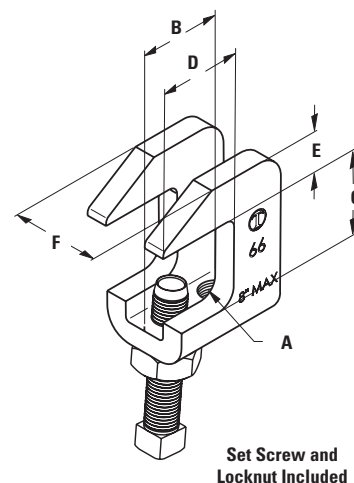
Function: Recommended for hanging from steel beam where flange thickness does not exceed 1 1/4" (31.7mm).

Features: All steel construction eliminates structural deficiencies associated with casting type beam clamps. May be used on top or bottom flange of beam. (Beveled lip allows hanging from top flange where clearance is limited.) May be installed with set screw in up or down position. Offset design permits unlimited rod adjustment by allowing the rod to be threaded completely through the clamp. Open design permits inspection of thread engagement.

Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL). Exceeds requirements of the National Fire Protection Association (NFPA), pamphlet 13, 3/8"-16 rod will support 1/2" (15mm) thru 4" (100mm) pipe
1/2"-13 rod will support thru 8" (200mm) pipe

Finish: Plain or Electro-Galvanized. Contact customer service for alternative finishes and materials.

Order By: Figure number and finish



Part No.	Rod Size A	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)
66-3/8	3/8"-16	1 3/16" (30.2)	1 1/4" (31.7)	1" (25.4)	7/16" (11.1)
66-1/2	1/2"-13	1 1/2" (38.1)	1 1/4" (31.7)	1" (25.4)	9/16" (14.3)
66-5/8	5/8"-11	1 1/2" (38.1)	1 1/4" (31.7)	1" (25.4)	9/16" (14.3)

Part No.	F in. (mm)	Approx. Wt./100 Lbs. (kg)
66-3/8	1" (25.4)	28 (12.7)
66-1/2	1 1/4" (31.7)	55 (24.9)
66-5/8	1 1/4" (31.7)	55 (24.9)

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

Beam Clamps

TOLCO Fig. 67SS - Stainless Steel Reversible C-Type Beam Clamp $\frac{3}{4}$ " (19.0mm) Throat Opening

TOLCO Fig. 68SS - Stainless Steel Reversible C-Type Beam Clamp Wide Mouth

Size Range: $\frac{3}{8}$ "-16 and $\frac{1}{2}$ "-13 rod sizes

Material: Stainless Steel (Type 316 or 304)

Function: Recommended for hanging from steel beams where flange thickness does not exceed $\frac{3}{4}$ " (19.0mm) for Fig. 67SS or $1\frac{1}{4}$ " (31.7mm) for Fig. 68SS.

Features: All steel construction eliminates structural deficiencies associated with casting type beam clamps. May be used on top or bottom flange of beam. May be installed with set screw in up or down position. Offset design permits unlimited rod adjustment by allowing the rod to be threaded completely through the clamp.

Approvals: Conforms to Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 19.

$\frac{3}{8}$ "-16 rod will support $\frac{1}{2}$ " (15mm) thru 4" (100mm) pipe at maximum NFPA 13 spacing

$\frac{1}{2}$ "-13 rod will support thru 8" (200mm) pipe at maximum NFPA 13 spacing

Order By: Figure number and stainless steel type.

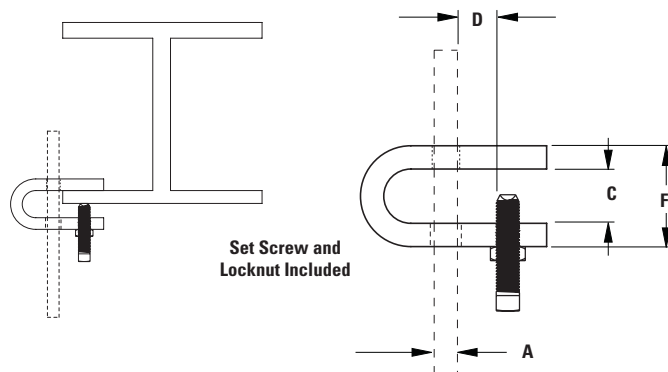
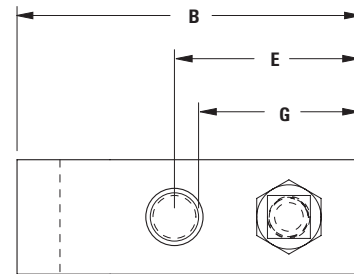


Fig. 67SS

Part No.	Rod Size A	Pipe Size in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)
67SS- $\frac{3}{8}$	$\frac{3}{8}$ "-16	$\frac{1}{2}$ " - 4" (15 - 100)	3" (76.2)	$\frac{7}{8}$ " (22.2)	1" (25.4)	$1\frac{5}{8}$ " (41.3)
67SS- $\frac{1}{2}$	$\frac{1}{2}$ "-13	5" - 8" (125 - 200)	3" (76.2)	$\frac{7}{8}$ " (22.2)	1" (25.4)	$1\frac{5}{8}$ " (41.3)

Part No.	F in. (mm)	G in. (mm)	Approx. Wt./100 Lbs. (kg)
67SS- $\frac{3}{8}$	$1\frac{5}{8}$ " (41.3)	$1\frac{1}{8}$ " (28.6)	84 (38.1)
67SS- $\frac{1}{2}$	$1\frac{5}{8}$ " (41.3)	$1\frac{1}{8}$ " (28.6)	170 (77.1)



Fig. 68SS

Part No.	Rod Size A	Pipe Size in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)
68SS- $\frac{3}{8}$	$\frac{3}{8}$ "-16	$\frac{1}{2}$ " - 4" (15 - 100)	$2\frac{1}{16}$ " (52.4)	$1\frac{1}{8}$ " (28.6)	$\frac{3}{4}$ " (19.0)	$1\frac{1}{4}$ " (31.7)
68SS- $\frac{1}{2}$	$\frac{1}{2}$ "-13	5" - 8" (125 - 200)	$2\frac{1}{4}$ " (57.1)	$1\frac{1}{4}$ " (31.7)	$\frac{13}{16}$ " (20.6)	$1\frac{1}{4}$ " (31.7)

Part No.	F in. (mm)	Approx. Wt./100 Lbs. (kg)
68SS- $\frac{3}{8}$	2" (50.8)	84 (38.1)
68SS- $\frac{1}{2}$	$2\frac{1}{4}$ " (57.1)	170 (77.1)



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

TOLCO Fig. 69 - Beam Clamp Retaining Strap

Size Range: $\frac{3}{8}$ "-16 thru $\frac{3}{4}$ "-10 rod
 4" (101.6mm) thru 16" (406.4mm) lengths
 Note: longer lengths are available consult factory

Material: Pre-Galvanized Steel

Function: To offer more secure fastening of various types of beam clamps to beam where danger of movement might be expected. NFPA 13 requires the use of retaining straps with all beam clamps installed in earthquake areas. Satisfies requirements of NFPA 13.

Important Note: Good installation practice of a retaining strap requires that the strap be held tightly and securely to all component parts of the assembly. Therefore a locking mechanism of some kind, such as a hex nut for the Fig. 69 or the beveled locking slot of the Fig. 69R will provide a more secure reliable installation.

Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL). Approved for use with any listed B-Line series or Tolco beam clamp.

Finish: Pre-Galvanized

Order By: Figure number, length (L), and finish.

Note: Minimum return on strap is 1" (25.4mm).
 Lengths over 16" (406mm) are not UL Listed.

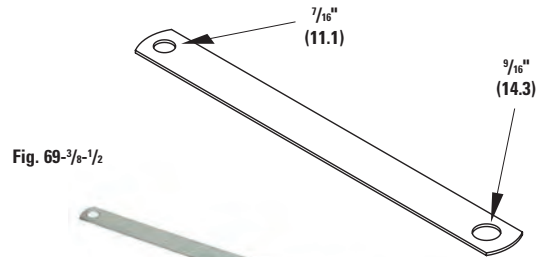


Fig. 69- $\frac{3}{8}$ - $\frac{1}{2}$

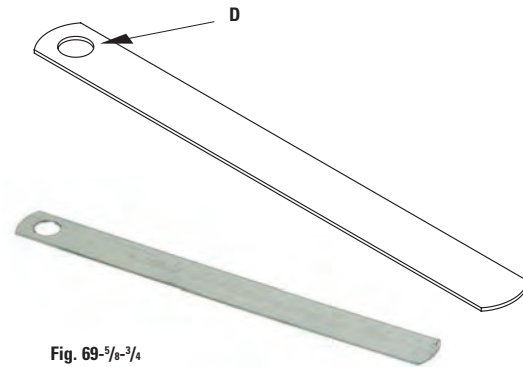
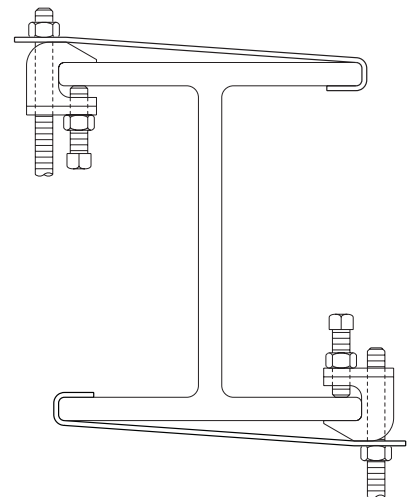


Fig. 69- $\frac{5}{8}$ - $\frac{3}{4}$

Part No.	Hole Dia. D in. (mm)	For Use With	Length
69- $\frac{3}{8}$ - $\frac{1}{2}$ -L	see Detail A	B3033- $\frac{3}{8}$, B3034- $\frac{3}{8}$, B3031- $\frac{3}{8}$, 65- $\frac{3}{8}$, 65XT- $\frac{3}{8}$, 66- $\frac{3}{8}$ B3033- $\frac{1}{2}$, B3034- $\frac{1}{2}$, 65- $\frac{1}{2}$, 66- $\frac{1}{2}$	Specify
69- $\frac{5}{8}$ -L	$\frac{11}{16}$ " (17.5)	B3033- $\frac{5}{8}$, 65- $\frac{5}{8}$, 66- $\frac{5}{8}$	Specify
69- $\frac{3}{4}$ -L	$\frac{13}{16}$ " (20.6)	B3033- $\frac{3}{4}$	Specify



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

Beam Clamps

TOLCO Fig. 69R - Retrofit Capable Beam Clamp Retaining Strap

Size Range: $\frac{3}{8}$ "-16 & $\frac{1}{2}$ "-13 rod
4" (101.6mm) thru 16" (406.4mm) lengths
Note: longer lengths are available consult factory



Material: Pre-Galvanized Steel

Function: To offer more secure fastening of various types of beam clamps to beam where danger of movement might be expected. NFPA 13 requires the use of retaining straps with all beam clamps installed in earthquake areas. Satisfies requirements of NFPA 13.

Features: Beveled locking slot* is precisely formed to align with the threaded section of a hanger rod or set screw and engage the unit securely. May be used as shown in Section "A-A" or inverted. Allows easy installation for new construction or retrofit applications.

Important Note: Good installation practice of a retaining strap requires that the strap be held tightly and securely to all component parts of the assembly. Therefore the beveled locking slot of the Fig. 69R will provide a secure reliable installation.

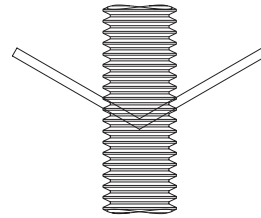
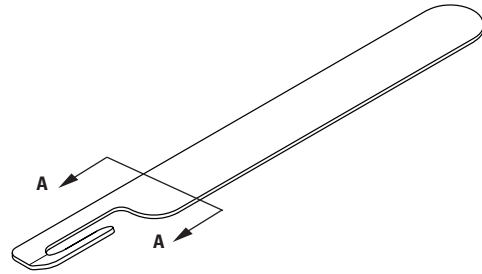
Approvals: Underwriters Laboratories Listed in the USA (UL) and Canada (cUL). Approved for use with any listed B-Line series or Tolco beam clamp.

Finish: Pre-Galvanized

Order By: Figure number, length, and finish.

Note: Minimum return on strap is 1" (25.4mm)

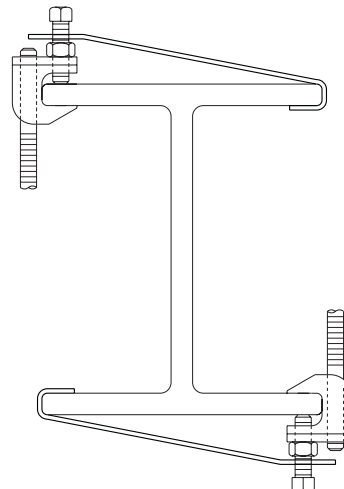
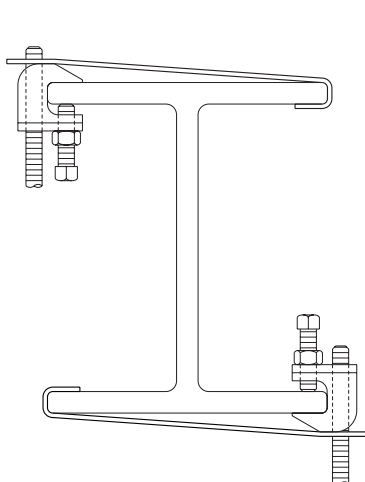
* Patent #5,947,424



A - A



Part No.	Slot Width in. (mm)	For Use With	Length
69R- $\frac{3}{8}$ -L	$\frac{7}{16}$ " (11.1)	B3033- $\frac{3}{8}$, B3034- $\frac{3}{8}$, 65- $\frac{3}{8}$, 65XT- $\frac{3}{8}$, 66- $\frac{3}{8}$	Specify
69R- $\frac{1}{2}$ -L	$\frac{9}{16}$ " (14.3)	B3033- $\frac{1}{2}$, B3034- $\frac{1}{2}$, 65- $\frac{1}{2}$, 66- $\frac{1}{2}$	Specify



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

B3042T - Bar Joist Hanger

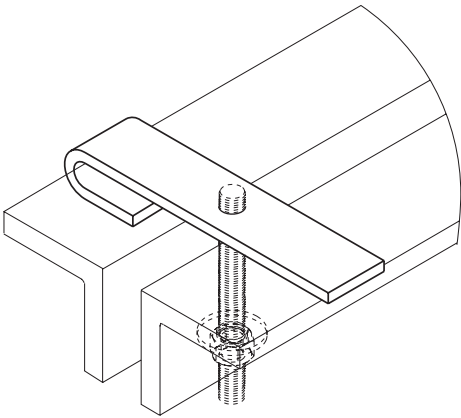
Size Range: 3/8"-16 and 1/2"-13 rod

Material: Steel

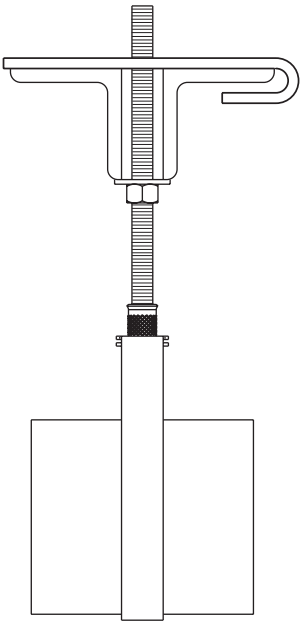
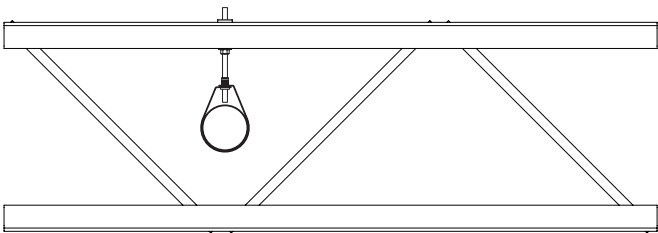
Function: Designed to hook on top chord of metal bar joist. Hanger rod is threaded into product and secured with a washer and nut.

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Figure number, rod size, width and thickness of bar joist, and finish.



Part No.	Rod Size Size	For Pipe Size in.	(mm)	Approx. Wt./100 Lbs. (kg)
B3042T-3/8	3/8"-16	Up to 4"	(up to 100)	50.6 (22.9)
B3042T-1/2	1/2"-13	6"	(150)	50.0 (22.7)



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

Beam Clamps

TOLCO Fig. 130 - Composite Wood Joist Clamp

Size Range: 130-1 = TJI 35 or equivalent
 130-2 = —
 130-3 = TJI 25 or equivalent
 130-4 = TJI 55, TJI 65, & TJI 560D or equivalent
 130-5 = TJI 75 & TJI H90 or equivalent
 130-6 = TJI 96 or equivalent

Material: Steel

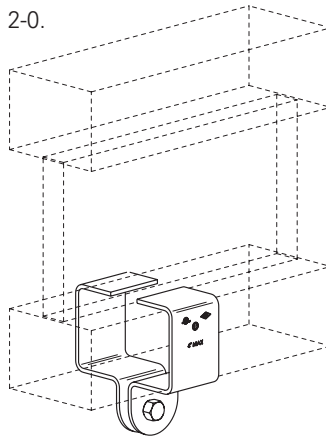
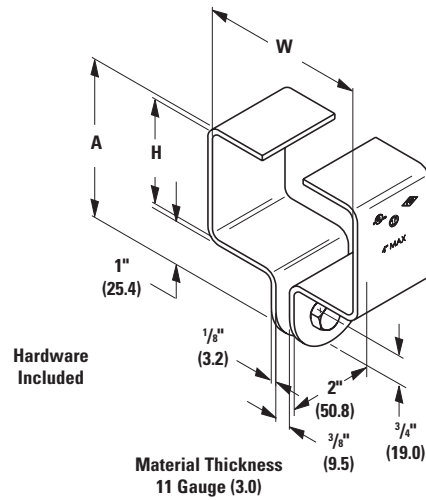
Function: Designed for attachment to composite wood joist beams. Use with eye rods, eye sockets, or angle bracket.

Approvals: Sizes 1 - 6 are Underwriters Laboratories Listed in the USA (**UL**) and Canada (**cUL**) list through 4" (100mm) pipe. All Fig. 130 Beam Clamps meet requirements of Factory Mutual Engineering (**FM**) and NFPA 13, through 4" (100mm) pipe.

Finish: Electro-Galvanized or Hot-Dip Galvanized

Order By: Figure number and finish.

Designed to meet or exceed requirements of FM DS 2-0.



Part No.	Hardware Size	A in. (mm)	H in. (mm)	W in. (mm)	Approx. Wt./100 Lbs. (kg)
130-1	3/8"-16	3 1/4" (82.5)	1 1/2" (38.1)	2 5/16" (58.7)	65 (29.5)
130-2	3/8"-16	3 1/2" (88.9)	1 3/4" (44.4)	2 1/2" (63.5)	70 (31.7)
130-3	3/8"-16	3 1/4" (82.5)	1 1/2" (38.1)	1 3/4" (44.4)	58 (26.3)
130-4	3/8"-16	3 1/2" (88.9)	1 1/2" (38.1)	3 1/2" (88.9)	83 (37.6)
130-5†	1/2"-13	3 5/8" (92.1)	1 3/4" (44.4)	3 1/2" (88.9)	86 (39.0)
130-6†	1/2"-13	4 1/2" (114.3)	2 1/2" (63.5)	3 7/8" (98.4)	101 (45.8)

† 'H' and 'W' are beam dimensions.

† Larger bolts and I-rods are required for 5" (125mm) and 6" (150mm) pipe sizes

B3100 - Clevis Hanger for NFPA Sizes 3/4" (20mm) thru 2" (50mm) TOLCO Fig. 1NFPA - Clevis Hanger for NFPA Sizes 2 1/2" (65mm) thru 12" (300mm)

Size Range: 3/4" (20mm) to 12" (300mm)

Material: Steel

Function: Recommended for the suspension of non-insulated pipe or insulated pipe with a B3151 shield.

Note: When an oversized clevis is used, a pipe spacer should be placed over the cross bolt to assure that the lower U-strap will not move in on the bolt. When attaching seismic bracing to the clevis hangers, a 1CBS (clevis bolt spacer) must be installed.

Order pipe sleeves Fig. 1CBS-(pipe size) separately.

Approvals: Underwriter's Laboratories Listed in the USA (**UL**) and Canada (**cUL**) for sizes 3/4" (20) thru 12" (300). Factory Mutual Engineering Approved (**FM**) for 3/4" (20mm) thru 8" (200mm) pipe. Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 1 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 1. Rod sizes per National Fire Protection Association (**NFPA**) Pamphlet 13.

Maximum Temperature: 650°F (343°C).

Standard Finish: Plain, Electro-Galvanized, DURA-GREEN™, or Hot-Dip Galvanized also available in Stainless Steel

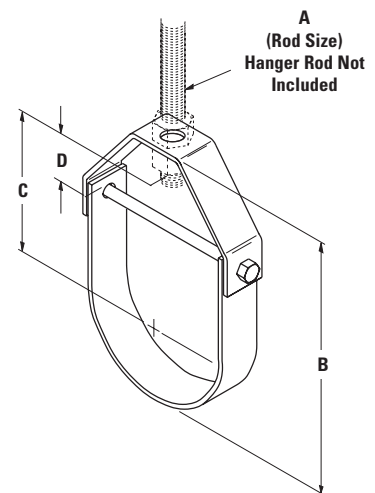
Order By: Figure number and finish

For pipe sizes under 2 1/2" (65mm) order B3100 Clevis Hanger, see chart below.

Designed to meet or exceed requirements of FM DS 2-0.



B
Overall Height.
C
Bottom of hanger rod nut
to center of pipe.
D
Bottom of hanger rod nut
to top clevis bolt.



Part No.	Nominal Pipe Size in. (mm)	Rod Size A	B in. (mm)	C in. (mm)	D in. (mm)	Approx. Wt./100 Lbs. (kg)
B3100-3/4	3/4" (20)	3/8"-16	2 5/8" (66.7)	1 9/16" (39.7)	9/16" (14.3)	29 (13.1)
B3100-1	1" (25)	3/8"-16	2 11/16" (68.3)	1 9/16" (39.7)	1 1/16" (17.5)	35 (15.9)
B3100-1 1/4	1 1/4" (32)	3/8"-16	3 3/16" (81.0)	1 7/8" (47.6)	1 5/16" (29.8)	40 (18.1)
B3100-1 1/2	1 1/2" (40)	3/8"-16	3 3/8" (85.7)	1 15/16" (49.2)	1 1/4" (31.7)	42 (19.0)
B3100-2	2" (50)	3/8"-16	4 9/16" (115.9)	2 7/8" (73.0)	1 1/8" (28.6)	52 (23.6)
1NFPA-2 1/2	2 1/2" (65)	3/8"-16	5 5/16" (134.9)	3 1/4" (82.5)	1" (25.4)	124 (56.2)
1NFPA-3	3" (80)	3/8"-16	5 15/16" (150.8)	3 1/2" (88.9)	1 1/4" (31.7)	140 (63.5)
1NFPA-3 1/2	3 1/2" (90)	3/8"-16	6 7/16" (163.5)	3 3/4" (95.2)	1 1/4" (31.7)	152 (68.9)
1NFPA-4	4" (100)	3/8"-16	7 3/8" (187.3)	4 1/4" (107.9)	1 1/2" (38.1)	190 (86.2)
1NFPA-5	5" (125)	1/2"-13	8 15/16" (226.9)	5 1/4" (133.3)	1 1/2" (38.1)	235 (106.6)
1NFPA-6	6" (150)	1/2"-13	9 13/16" (249.2)	5 1/2" (139.7)	1 1/2" (38.1)	317 (143.8)
1NFPA-8	8" (200)	1/2"-13	12 9/16" (319.1)	7 1/8" (181.0)	2" (50.8)	428 (194.1)
1NFPA-10	10" (250)	5/8"-11	16 1/4" (412.7)	9 5/8" (244.5)	3 1/4" (82.5)	918 (416.4)
1NFPA-12	12" (300)	5/8"-11	18 9/16" (471.5)	10 13/16" (268.3)	3 1/8" (79.4)	1086 (492.6)

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

Pipe Hangers

TOLCO Fig. 1CBS - Clevis Bolt Spacer

Size Range: Size 1" (25mm) thru 20" (500mm) clevis hanger

Material: Steel

Function: Used as a spacer at a seismic brace location to keep clevis hanger from collapsing during seismic event.

Approvals: 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, for 2½" - 8" (B3100) only

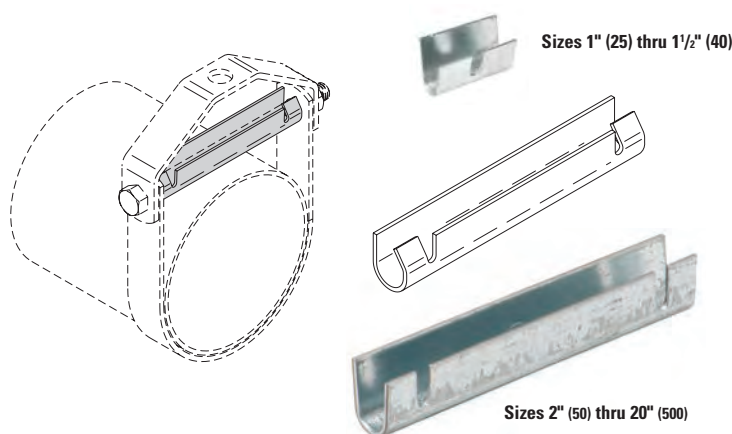
Installation Note: Fig. 1CBS fits easily over the cross bolt and attaches by pinching tabs down.

Finish: Pre-Galvanized. Contact customer service for alternative finishes and materials.

Order By: Figure number and finish.

OPM

Part No.	Pipe Size in. (mm)	Approx. Wt./100 lbs. (kg)	
1CBS-1	1" (25)	3.2	(1.4)
1CBS-1¼	1¼" (32)	4.1	(1.8)
1CBS-1½	1½" (40)	4.8	(2.2)
1CBS-2	2" (50)	9.4	(4.2)
1CBS-2½	2½" (65)	11.4	(5.2)
1CBS-3	3" (75)	13.9	(6.8)
1CBS-3½	3½" (90)	16.0	(7.2)
1CBS-4	4" (100)	18.0	(8.1)
1CBS-5	5" (125)	27.3	(12.4)
1CBS-6	6" (150)	32.5	(14.7)
1CBS-8	8" (200)	42.5	(19.2)
1CBS-10	10" (250)	72.7	(32.9)
1CBS-12	12" (300)	86.3	(39.1)
1CBS-14	14" (350)	157.6	(71.5)
1CBS-16	16" (400)	183.7	(83.3)
1CBS-18	18" (450)	224.6	(101.9)
1CBS-20	20" (500)	254.0	(115.2)



TOLCO Fig. 25 - Surge Restrainer

Size Range: — One size fits ¾" (20mm) thru 2" (40mm) pipe.

Material: — Pre-Galvanized Steel

Function: — Designed to be used in conjunction with Fig. 200 band hangers to restrict the upward movement of piping as it occurs during sprinkler head activation or earthquake type activity. The surge restrainer is easily and efficiently installed by snapping into a locking position on the band hanger. This product is intended to satisfy the requirements as indicated in the National Fire Protection Association NFPA 13, 2016 edition, 9.2.3.4.4.1 and 9.2.3.4.4.4 Can be used to restrain either steel pipe or CPVC plastic Pipe.

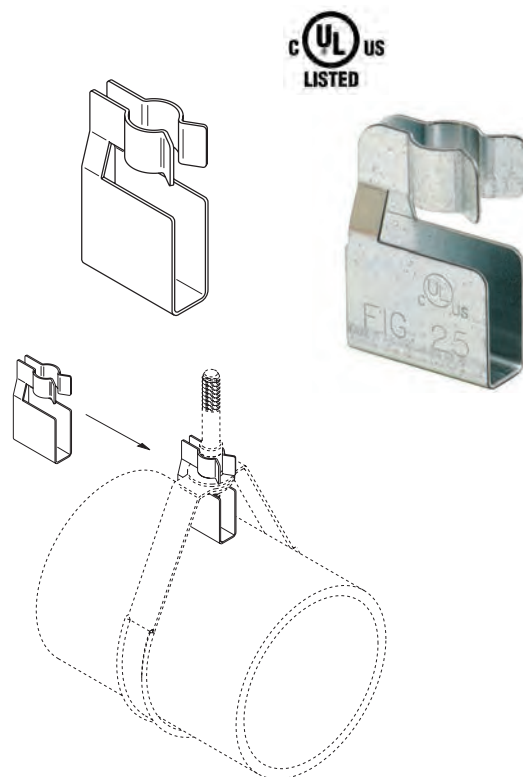
Approvals: — Underwriters Laboratories Listed only when used with band hanger Fig. 200, in the USA (UL) and Canada (cUL).

Finish: Pre-Galvanized

Order By: Figure number and band hanger, size from ¾" (20mm) thru 2" (40mm).

Patent #5,344,108

Part No.	Approx. Wt./100 lbs. (kg)	
25	4.8	(2.2)



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

TOLCO Fig. 200 - "Trimline" Adjustable Band Hanger

TOLCO Fig. 200F - "Trimline" Adjustable Band Hanger with Felt Lining for Copper Tubing

TOLCO Fig. 200C - "Trimline" Adjustable Band Hanger with Plastic Coated

TOLCO Fig. 200S - "Trimline" Adjustable Band Hanger with Removable Nut (For sizes 1" thru 2")

Size Range:

Fig. 200 - 1/2" (15mm) thru 8" (200mm) pipe

Material: Steel, Pre-Galvanized

Function: For fire sprinkler and other general piping purposes. Knurled swivel nut design permits hanger adjustment after installation.

Features:

- 1/2" (15mm) thru 2" (50mm) sizes have flared edges for ease of installation on all pipe types and protects CPVC plastic pipe from abrasion. Captured knurled nut design (flared top) on 1" thru 2" sizes keep nut from separating with hanger. Hanger is easily installed around pipe.
- 1/2" (15mm), 3/4" (20mm), and 2 1/2" (65mm) thru 8" (200mm) Spring tension on nut holds it securely in hanger before installation. Knurled nut is easily removed.
- For 1/2" (15mm) and 3/4" (20mm) sizes with non-captured knurl nuts order Fig. 200S

Approvals: Underwriters Laboratories listed (1/2" (15mm) thru 8" (200mm)) in the USA (**UL**) and Canada (**cUL**) for steel and CPVC plastic pipe and Factory Mutual Engineering Approved (**FM**) (3/4" (20mm) thru 8" (200mm)). Conforms to Federal Specifications WW-H-171E & A-A-1192A, Type 10 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 10.

Maximum Temperature: 650°F (343°C)

Finish: Pre-Galvanized. Stainless Steel materials will be supplied with (2) hex nuts in place of a knurl nut.

Order By: Part number and pipe size

**** Note:** For metric hanger rod sizes add the metric rod size to the figure number.
Example: 200M8-1 1/2 or 200M10-1 1/2

† M8 rod size is not UL Listed or FM Approved

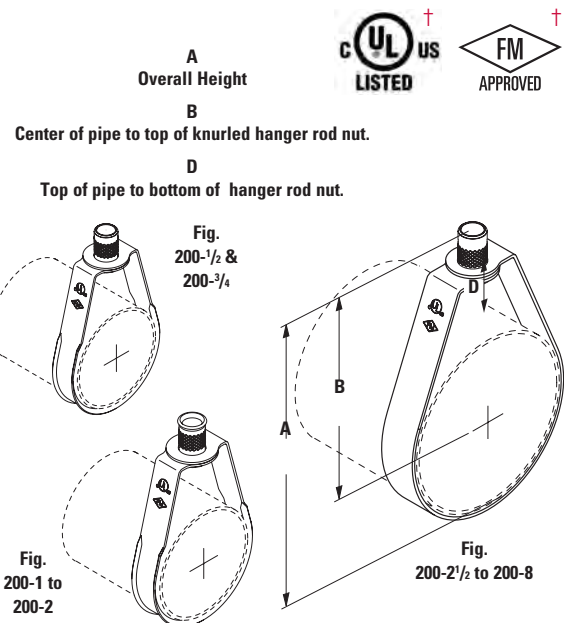


Fig. 200C
200C-1 1/2 shown



Fig. 200F
200F-1 1/2 shown



Fig. 200
shown with captured nut
1" thru 2" sizes only



Fig. 200 & Fig. 200S
shown with
non-captured nut

Part No.**	Pipe Size in. (mm)	Rod Size in. mm**	A in. (mm)	B in. (mm)	D in. (mm)	Max. Rec. Load lbs. (kN)	Approx. Wt./100 lbs. (kg)
200-1/2	1/2" (15)	3/8"-16 M8† or M10	3 1/8" (79.4)	2 5/8" (66.7)	1 11/32" (34.1)	400 (1.78)	11 (5.0)
200-3/4	3/4" (20)	3/8"-16 M8† or M10	3 1/8" (79.4)	2 1/2" (63.5)	1 1/16" (27.0)	400 (1.78)	11 (5.0)
200-1	1" (25)	3/8"-16 M8† or M10	3 3/8" (85.7)	2 5/8" (66.7)	1 1/8" (28.6)	400 (1.78)	12 (5.5)
200-1 1/4	1 1/4" (32)	3/8"-16 M8† or M10	3 3/4" (94.0)	2 7/8" (73.0)	1 5/32" (29.3)	400 (1.78)	13 (5.9)
200-1 1/2	1 1/2" (40)	3/8"-16 M†8 or M10	3 7/8" (98.4)	2 7/8" (73.0)	1 3/16" (30.2)	400 (1.78)	14 (6.4)
200-2	2" (50)	3/8"-16 M8† or M10	4 1/2" (114.3)	3 9/16" (80.8)	1 3/16" (30.2)	400 (1.78)	15 (6.9)
200-2 1/2	2 1/2" (65)	3/8"-16 M10	5 5/8" (142.9)	4 1/8" (104.7)	1 7/16" (36.5)	600 (2.67)	27 (12.3)
200-3	3" (75)	3/8"-16 M10	5 7/8" (149.1)	4" (101.6)	1 1/4" (31.7)	600 (2.67)	29 (13.3)
200-3 1/2	3 1/2" (90)	3/8"-16 M10	7 3/8" (187.3)	5 1/4" (133.3)	2 3/16" (55.6)	600 (2.67)	34 (15.6)
200-4	4" (100)	3/8"-16 M10	7 3/8" (187.3)	5" (127.0)	1 3/8" (34.9)	1000 (4.45)	35 (16.0)
200-5	5" (125)	1/2"-13 M12	9 1/8" (231.8)	6 1/4" (158.7)	3 11/32" (84.9)	1250 (5.56)	66 (30.2)
200-6	6" (150)	1/2"-13 M12	10 1/8" (257.2)	6 3/4" (171.4)	2 7/32" (56.3)	1250 (5.56)	73 (33.4)
200-8	8" (200)	1/2"-13 M12	13 1/8" (333.4)	8 3/4" (222.2)	3 7/32" (81.7)	1250 (5.56)	136 (62.3)

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

Pipe Hangers

TOLCO Fig. 200H - Heavy Duty Band Hanger (For Trapeze)

Size Range: 2" (50mm) thru 4" (100mm) trapeze pipe size.

Material: Steel — Pre-Galvanized

Function: Designed primarily to support substantially heavier loads than is normally intended for the nominal hanger size. Used extensively to support trapeze installations and the increased loads from both above and below the trapeze assembly.

Features: Furnished with $\frac{3}{8}$ "-16 or $\frac{1}{2}$ "-13 adjusting threaded ring nut.

Approvals: Underwriters Laboratories listed in the USA (UL) and Canada (cUL). Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 10 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 10.

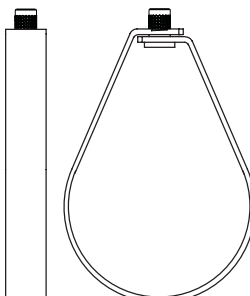
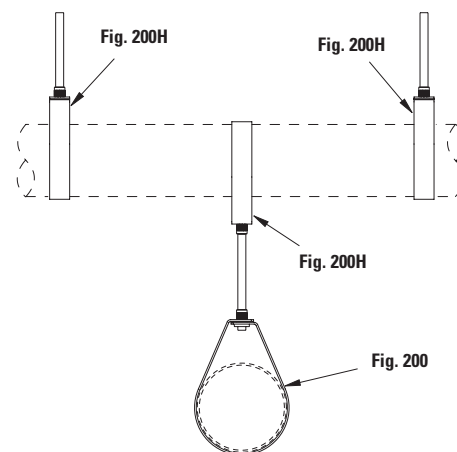
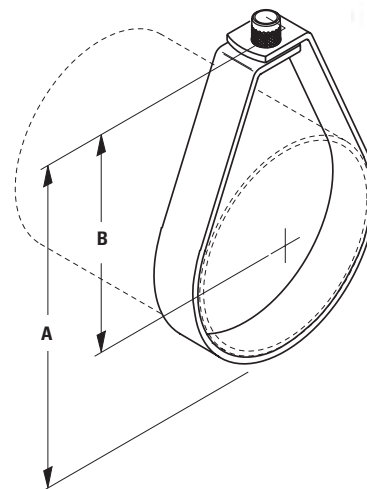
Maximum Temperature: 650°F (343°C)

Finish: Pre-Galvanized

Order By: Figure number, pipe size and rod size.

Important Design Note. Because of the increased loads applied to the trapeze assembly, both the upper trapeze supports as well as the lower hanging unit must be able to hold the maximum loads intended.

† If using metric rods the M8 rod size is not UL Listed



Part No.	Pipe Size in. (mm)	Rod Size	A in. (mm)	B in. (mm)	Approx. Wt./100 lbs. (kg)
200H-2- $\frac{3}{8}$	2" (50)	$\frac{3}{8}$ "-16†	$4\frac{9}{16}$ " (115.9)	$3\frac{7}{32}$ " (81.7)	48 (21.8)
200H-2- $\frac{1}{2}$	2" (50)	$\frac{1}{2}$ "-13	$4\frac{23}{32}$ " (119.8)	$3\frac{3}{8}$ " (85.7)	45 (20.4)
200H-2 $\frac{1}{2}$ - $\frac{3}{8}$	2 $\frac{1}{2}$ " (65)	$\frac{3}{8}$ "-16†	$5\frac{5}{16}$ " (134.9)	$3\frac{23}{32}$ " (94.4)	59 (26.7)
200H-2 $\frac{1}{2}$ - $\frac{1}{2}$	2 $\frac{1}{2}$ " (65)	$\frac{1}{2}$ "-13	$5\frac{15}{32}$ " (138.9)	$3\frac{7}{8}$ " (98.3)	56 (25.4)
200H-3- $\frac{3}{8}$	3" (75)	$\frac{3}{8}$ "-16†	$5\frac{3}{4}$ " (146.0)	$3\frac{27}{32}$ " (97.6)	63 (28.6)
200H-3- $\frac{1}{2}$	3" (75)	$\frac{1}{2}$ "-13	$5\frac{7}{8}$ " (148.1)	$3\frac{31}{32}$ " (100.8)	60 (27.2)
200H-4- $\frac{3}{8}$	4" (100)	$\frac{3}{8}$ "-16†	$6\frac{7}{8}$ " (174.6)	$4\frac{7}{16}$ " (112.7)	76 (34.5)
200H-4- $\frac{1}{2}$	4" (100)	$\frac{1}{2}$ "-13	$7\frac{1}{32}$ " (178.6)	$4\frac{19}{32}$ " (116.7)	73 (33.1)

Select trapeze pipe size based on section modulus required for span of trapeze per information provided in NFPA 13.

All sizes are UL Listed to support up to 8" pipe at max spacing per NFPA 13.

For 6" (150mm) and 8" (200mm) trapeze pipe, consult factory.

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

B3198H - Hinged Extension Split Pipe Clamp

Size Range: 3/8" (10mm) to 3" (80mm) pipe

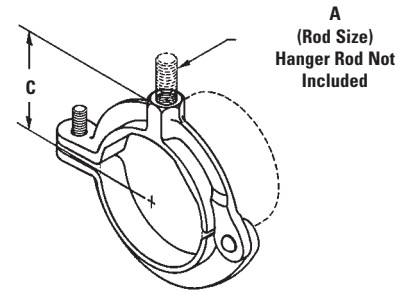
Material: Malleable Iron

Function: Designed for suspending non-insulated pipe horizontally or vertically.

Approvals: Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 25 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 12.

Standard Finish: Plain or Electro-Galvanized

Order By: Figure number and finish.



Part No.	Pipe Size in. (mm)	Rod Size A	C in. (mm)	Design Load Lbs. kN	Approx. Wt./100 Lbs. kg
B3198H-3/8	3/8" (10)	3/8"-16	31/32" (24.6)	180 (.80)	9 (4.1)
B3198H-1/2	1/2" (15)	3/8"-16	11/16" (27.0)	180 (.80)	12 (5.4)
B3198H-3/4	3/4" (20)	3/8"-16	17/32" (30.9)	180 (.80)	12 (5.4)
B3198H-1	1" (25)	3/8"-16	111/32" (34.1)	180 (.80)	13 (5.9)
B3198H-11/4	11/4" (32)	3/8"-16	119/32" (39.7)	180 (.80)	18 (8.1)
B3198H-11/2	11/2" (40)	3/8"-16	123/32" (43.6)	180 (.80)	21 (9.5)
B3198H-2	2" (50)	3/8"-16	2" (50.8)	180 (.80)	44 (19.9)
B3198H-21/2	21/2" (65)	1/2"-13	211/32" (59.5)	300 (1.33)	73 (33.1)
B3198H-3	3" (80)	1/2"-13	223/32" (69.0)	300 (1.33)	95 (43.1)



B3198HCT - Hinged Extension Split Pipe Clamp

Size Range: 1/2" (15mm) to 2" (50mm) copper tubing

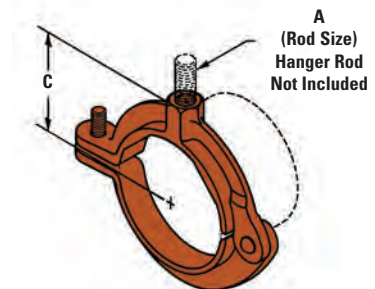
Material: Malleable Iron

Function: A rigid support to suspend tubing horizontally or vertically.

Approvals: Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 25 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 12.

Standard Finish: DURA-COPPER™

Order By: Figure number and finish.



Part No.	Tubing Size in. (mm)	Rod Size A	C in. (mm)	Design Load Lbs. (kN)	Approx. Wt./100 Lbs. (kg)
B3198HCT-1/2	1/2" (15)	3/8"-16	5/8" (15.9)	180 (.80)	8 (3.6)
B3198HCT-3/4	3/4" (20)	3/8"-16	13/16" (20.6)	180 (.80)	10 (4.5)
B3198HCT-1	1" (25)	3/8"-16	15/16" (23.8)	180 (.80)	10 (4.5)
B3198HCT-11/4	11/4" (32)	3/8"-16	11/8" (28.6)	180 (.80)	14 (6.3)
B3198HCT-11/2	11/2" (40)	3/8"-16	19/16" (39.7)	180 (.80)	18 (8.1)
B3198HCT-2	2" (50)	3/8"-16	17/8" (47.6)	180 (.80)	23 (10.4)

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

Pipe Hangers

TOLCO Fig. 120 - "U" Hanger

Size Range: Size 3/4" (20mm) thru 8" (200mm) pipe

Material: Steel

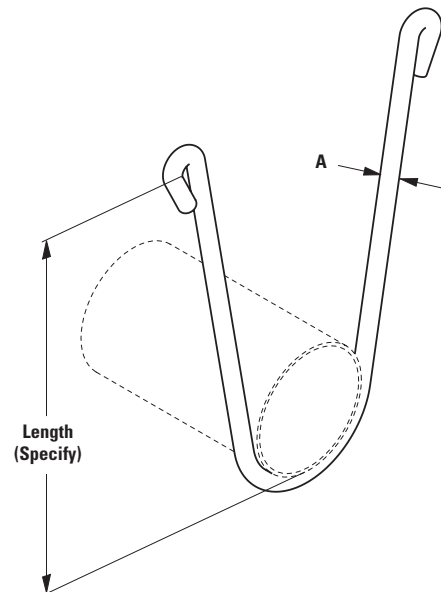
Function: Used to support piping from wood beams where no contraction is expected. Used extensively in automatic fire sprinkler systems.

Approvals: Complies with requirements of National Fire Protection Association (NFPA), Pamphlet 13.

Maximum Temperature: 750°F (399°C)

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Figure number, pipe size, length and finish



Part No.	Pipe Size in. (mm)	A in. (mm)	Fastener Size
120-3/4	3/4" (20)	5/16" (7.9)	16 x 2*
120-1	1" (25)	5/16" (7.9)	16 x 2*
120-1 1/4	1 1/4" (32)	5/16" (7.9)	16 x 2*
120-1 1/2	1 1/2" (40)	5/16" (7.9)	16 x 2*
120-2	2" (50)	5/16" (7.9)	16 x 2*
120-2 1/2	2 1/2" (65)	3/8" (9.5)	3/8 x 2 1/2**
120-3	3" (80)	3/8" (9.5)	3/8 x 2 1/2**
120-3 1/2	3 1/2" (90)	3/8" (9.5)	3/8 x 2 1/2**
120-4	4" (100)	3/8" (9.5)	1/2 x 3**
120-5	5" (125)	1/2" (12.7)	1/2 x 3**
120-6	6" (150)	1/2" (12.7)	1/2 x 3**
120-8	8" (200)	1/2" (12.7)	5/8 x 3**

* Drive Screw

** Lag Bolt

Note: 30° leg style for some sizes. Consult factory for availability.

TOLCO Fig. 120MJ - Mutt & Jeff "U" Hanger

Size Range: Size $\frac{3}{4}$ " (20mm) thru 8" (200mm) pipe

Material: Steel

Function: Used to support piping from wood beams where no contraction is expected. Used extensively in automatic fire sprinkler systems. Fig. 120MJ is used when the wood beam is on a diagonal.

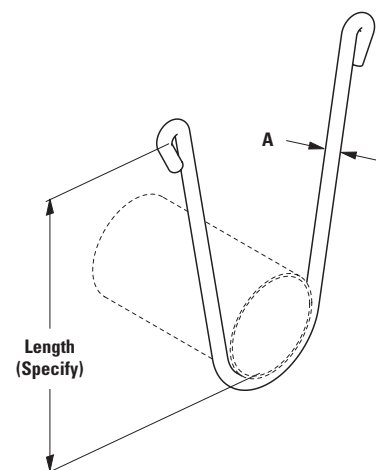
Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Figure number, side length and finish

Part No.	Pipe Size		A		Fastener Size
	in.	(mm)	in.	(mm)	
120MJ- $\frac{3}{4}$	$\frac{3}{4}$ "	(20)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120MJ-1	1"	(25)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120MJ-1 $\frac{1}{4}$	1 $\frac{1}{4}$ "	(32)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120MJ-1 $\frac{1}{2}$	1 $\frac{1}{2}$ "	(40)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120MJ-2	2"	(50)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120MJ-2 $\frac{1}{2}$	2 $\frac{1}{2}$ "	(65)	$\frac{3}{8}$ "	(9.5)	$\frac{3}{8}$ x 2 $\frac{1}{2}$ **
120MJ-3	3"	(80)	$\frac{3}{8}$ "	(9.5)	$\frac{3}{8}$ x 2 $\frac{1}{2}$ **
120MJ-3 $\frac{1}{2}$	3 $\frac{1}{2}$ "	(90)	$\frac{3}{8}$ "	(9.5)	$\frac{3}{8}$ x 2 $\frac{1}{2}$ **
120MJ-4	4"	(100)	$\frac{3}{8}$ "	(9.5)	$\frac{1}{2}$ x 3**
120MJ-5	5"	(125)	$\frac{1}{2}$ "	(12.7)	$\frac{1}{2}$ x 3**
120MJ-6	6"	(150)	$\frac{1}{2}$ "	(12.7)	$\frac{1}{2}$ x 3**
120MJ-8	8"	(200)	$\frac{1}{2}$ "	(12.7)	$\frac{5}{8}$ x 3**

* Drive Screw

** Lag Bolt



TOLCO Fig. 120W - Wrap Around "U" Hanger

Size Range: Size $\frac{3}{4}$ " (20mm) thru 2" (50mm) pipe

Material: Steel

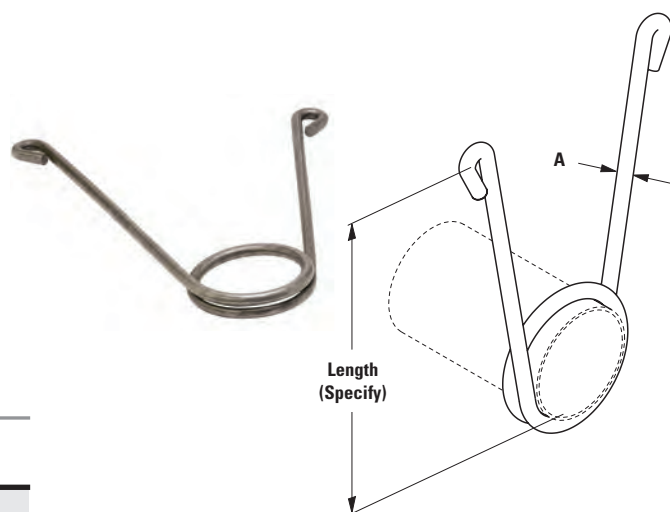
Function: Required for automatic fire protection agencies to be used on the end of branch lines to prevent pipe from whipping vertical and striking ceiling or beam.

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Figure number, side length and finish

Part No.	Pipe Size		A		Fastener Size
	in.	(mm)	in.	(mm)	
120W- $\frac{3}{4}$	$\frac{3}{4}$ "	(20)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120W-1	1"	(25)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120W-1 $\frac{1}{4}$	1 $\frac{1}{4}$ "	(32)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120W-1 $\frac{1}{2}$	1 $\frac{1}{2}$ "	(40)	$\frac{5}{16}$ "	(7.9)	16 x 2*
120W-2	2"	(50)	$\frac{5}{16}$ "	(7.9)	16 x 2*

* Drive Screw



Note: 30° leg style for some sizes. Consult factory for availability.

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