

AAA TECHNOLOGY

& SPECIALTIES CO., INC.

HARDWARE CATALOG

TOTAL SOLUTION SERVICE

For the Industrial Piping Marketplace





HANGER PARTS OVERVIEW

PIPE HANGER HARDWARE



FIG. 400 ALL THREAD ROD

PAGE 9



FIG. 403 MACHINE THREAD RODS

PAGE 9

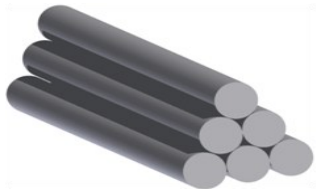


FIG. 406 BAR STOCK

PAGE 10



FIG. 409 STRAIGHT ROD COUPLING

PAGE 11



FIG. 412 STEEL ROD COUPLING

PAGE 11



FIGS. 415, 415IL, 415S FORGED STEEL CLEVIS

PAGE 12

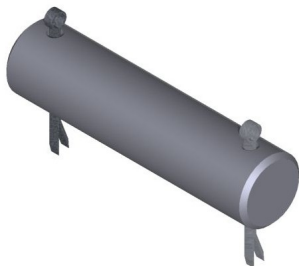


FIG 416 CLEVIS PIN

PAGE 13

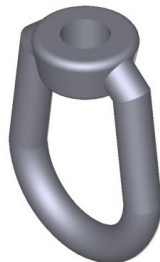


FIG. 418 WELDLESS EYE NUT

PAGE 14



FIG. 421 EYE SOCKET

PAGE 15



FIGS. 424, 424S, 424L FORGED STEEL

PAGE 16



HANGER PARTS OVERVIEW



FIG. 427 TURNBUCKLE W/ SWIVEL

PAGE 16

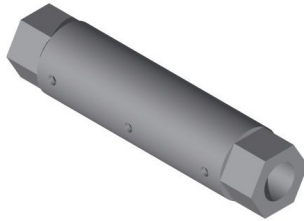


FIG. 430 FABRICATED TURNBUCKLE

PAGE 17

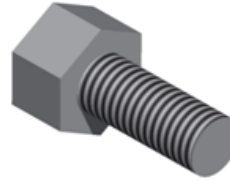


FIG.433 HEX HEAD MACHINE BOLT

PAGE 18

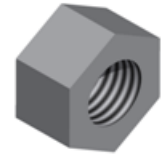


FIG. 436 STANDARD HEX NUT

PAGE 18

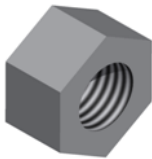


FIG. 439 HEAVY HEX NUT

PAGE 19



FIG.442 FLAT ROUND WASHER

PAGE 20



FIG. 445 LOCK WASHER

PAGE 20



FIG. 448 SQUARE WASHER

PAGE 21



FIG. 451 BELVELED WASHER

PAGE 21



FIG. 454 OVERSIZED ROUND WASHER

PAGE 22



FIGS.457, 457L, 457N EYE ROD (NOT WELDED)

PAGE 23



FIGS. 460, 460L, 460N WELDED EYE ROD

PAGE 24



FIGS. 463, 463L, 463N LINKED EYE RODS (NOT WELDED)

PAGE 25



FIGS. 466, 466L, 466N LINKED WELDED EYE ROD (WELDED)

PAGE 26



FIG. 469 PADDLE EYE ROD

PAGE 27



FIG. 500 SIDE BEAM BRACKET

PAGE 28



HANGER PARTS OVERVIEW



FIG. 503 ANGLE BRACKET
PAGE 29



FIG. 506 ADJUSTABLE BEAM ATTACHMENTS
PAGE 29



FIG. 509 WASHER PLATE
PAGE 30



FIG. 512 THREADED SIDE BEAM BRACKET
PAGE 30



FIG. 515 BEAM BRACKET
PAGE 31

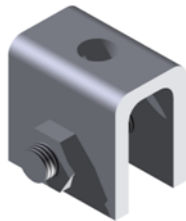


FIG. 518 BEAM BRACKET W/HEX HEAD MACHINE BOLT
PAGE 32

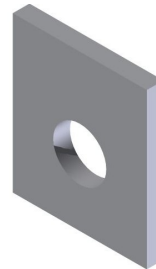


FIG. 521 STRUCTURAL WELDING LUG
PAGE 33

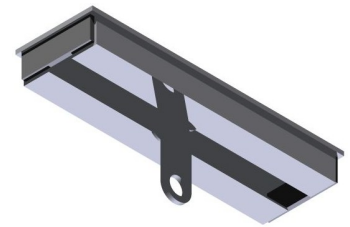


FIG. 524 HORIZONTAL TRAVELER
PAGE 34

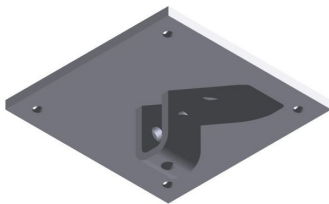


FIG. 527 CONCRETE ATTACHMENT PLATE W / BEAM BRACKET
PAGE 35



FIG. 530 CONCRETE ATTACHMENT PLATE W / BEAM BRACKET
PAGE 36

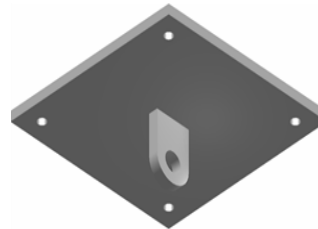


FIG. 533 CONCRETE ATTACHMENT PLATE W / WELDING LUG
PAGE 37



FIG. 542 TOP BEAM CLAMP
PAGE 38



FIG. 545 TOP BEAM HOOK
PAGE 38

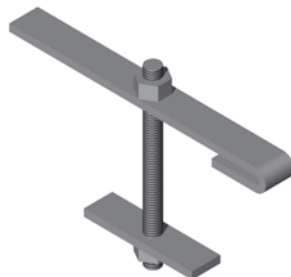


FIG. 548 THREADED TOP HOOK
PAGE 39

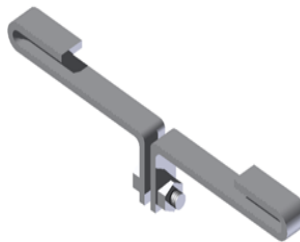


FIG. 551 CENTER LOAD BEAM CLAMP
PAGE 39

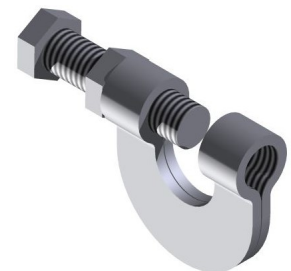


FIG. 554 STEEL "C" CLAMP W / LOCK
PAGE 40



HANGER PARTS OVERVIEW



FIG. 560 STEEL REVERSIBLE "C" CLAMP
W / NUT 3/4" OPENING

PAGE 41

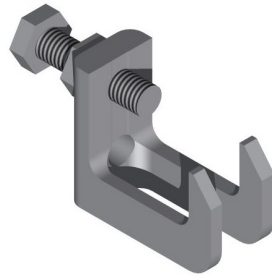


FIG. 560 STEEL REVERSIBLE "C" CLAMP
W / NUT 1 1/4" OPENING

PAGE 41

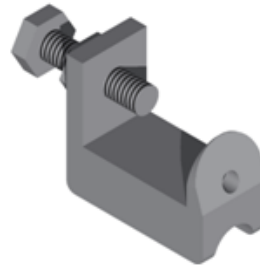


FIG. 563 WIDE THROAT BEAM "C"
CLAMP W / LOCK NUT

PAGE 41



FIG. 566 BEAM CLAMP RETAINING STRAP

PAGE 42

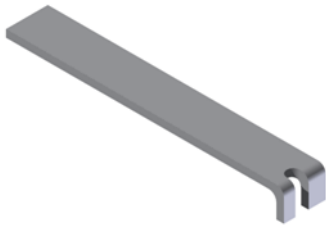


FIG. 567 BEAM CLAMP RETAINING
CLIP

PAGE 41

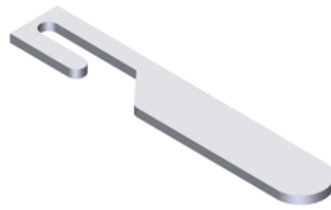


FIG. 569 RETROFIT CAPABLE BEAM
CLAMP RETAINING STRAP

PAGE 42

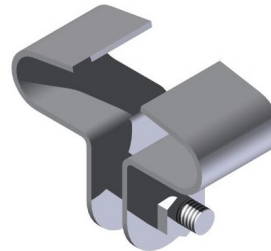


FIG. 572 BEAM CLAMP W / BOLT
& NUT

PAGE 43



FIG. 575 ADJUSTABLE HOOK BEAM
CLAMP

PAGE 43



FIG. 581 EXTENSION PIECE

PAGE 44

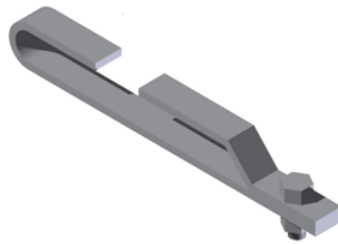


FIG. 584 ADJUSTABLE SIDE BEAM CLAMP

PAGE 45

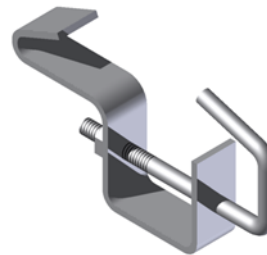


FIG. 587 ADJUSTABLE BEAM CLAMP

PAGE 45



FIG. 600 CLEVIS HANGER - LIGHT DUTY

PAGE 46



FIG. 603 CLEVIS HANGER - STANDARD

PAGE 47



FIG. 606 CLEVIS HANGER
WITH WELDED SHIELD

PAGE 48



FIG. 609 ELONGATED CLEVIS HANGER

PAGE 49

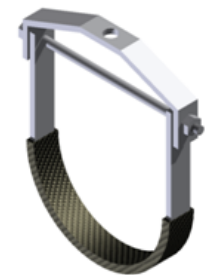


FIG. 612 CLEVIS HANGER - STANDARD PVC
COATED

PAGE 50



HANGER PARTS OVERVIEW



FIG. 615 ADJUSTABLE BAND HANGER
PAGE 51



FIG. 618 ADJUSTABLE BAND HANGER
PAGE 52



FIG. 621 PVC COATED ADJUSTABLE BAND
PAGE 53



FIG. 624 J HANGER FOR PIPE OR
PAGE 54



FIG. 627 PVC COATED J HANGER FOR
PAGE 55



FIG. 639 STRAIGHT "J" HOOK
PAGE 56



FIG. 642 OFFSET "J" HOOK
PAGE 56



FIG. 645 STANDARD PIPE STRAP
PAGE 57



FIG. 648 FLUSH MOUNT PIPE STRAP
PAGE 57



FIG. 700 STANDARD U-BOLT
PAGE 58



FIG. 703 LIGHT DUTY U-BOLT
PAGE 59



FIG. 706 HEAVY DUTY U-BOLT
PAGE 60



FIG. 712 STANDARD 2 BOLT PIPE CLAMP
PAGE 61



FIG. 715 INTERMEDIATE 2 BOLT PIPE CLAMP
PAGE 62



FIG. 718 HEAVY 2 BOLT PIPE CLAMP
PAGE 63



FIG. 721 EXTRA HEAVY 2 BOLT PIPE CLAMP
PAGE 64



HANGER PARTS OVERVIEW



FIG. 724 STANDARD 3 BOLT PIPE CLAMP

PAGE 65



FIG. 727 INTERMEDIATE 3 BOLT PIPE CLAMP

PAGE 66



FIG. 733 HEAVY 3 BOLT PIPE CLAMP

PAGE 67



FIG. 733 EXTRA HEAVY 3 BOLT PIPE CLAMP

PAGE 68



FIG. 736 STANDARD 3 BOLT ALLOY

PAGE 69



FIG. 739 INTERMEDIATE 3 BOLT ALLOY

PAGE 70

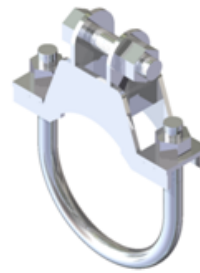


FIG. 748 STANDARD ALLOY YOKE

PAGE 71



FIG. 751 HEAVY ALLOY YOKE PIPE CLAMP

PAGE 72



FIG. 754 EXTENSION PIPE OR RISER CLAMP

PAGE 73



FIG. 763 OFFSET PIPE CLAMP

PAGE 74

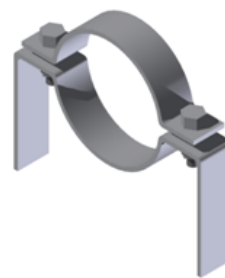


FIG. 766 EXTENDED PIPE CLAMP

PAGE 75

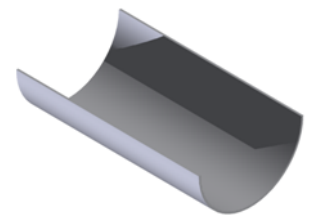


FIG. 800 INSULATION PROTECTION

PAGE 76

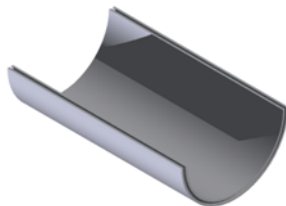


FIG. 803 RIBBED INSULATION PROTECTION SHIELD

PAGE 77

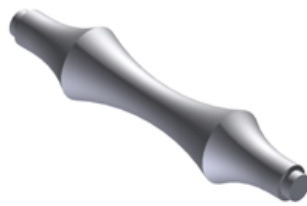


FIG. 806 CONTOURED CAST IRON PIPE ROLL

PAGE 77



FIG. 809 CLEVIS ROLLER HANGER

PAGE 78

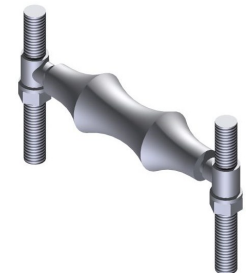


FIG. 812 TWO ROD ROLL TYPE HANGER

PAGE 79



HANGER PARTS OVERVIEW

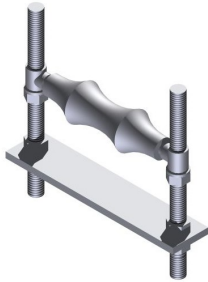


FIG. 815 ADJUSTABLE SUPPORT ROLLER
PAGE 80



FIG. 818 ALTERNATE ADJUSTABLE
PAGE 81

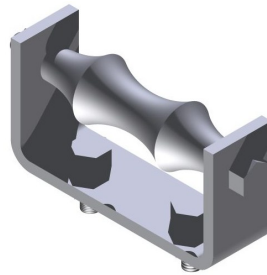


FIG. 821 PIPE ROLLER CHAIR
PAGE 82



FIG. 824 CAST IRON PIPE ROLL
PAGE 83

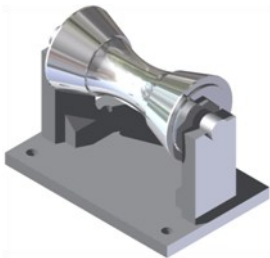


FIG. 827 PIPE ROLLER & STAND
PAGE 84

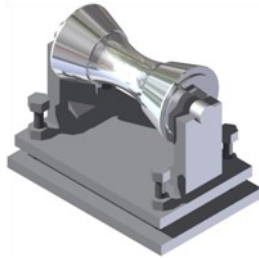


FIG. 830 ADJUSTABLE PIPE ROLLER & STAND
PAGE 85

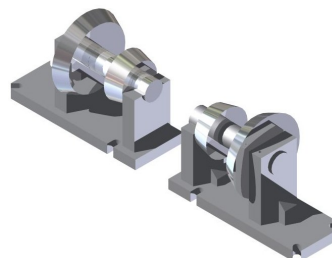


FIG. 833 LARGE DIAMETER PIPE ROLLER SUPPORT STAND
PAGE 86

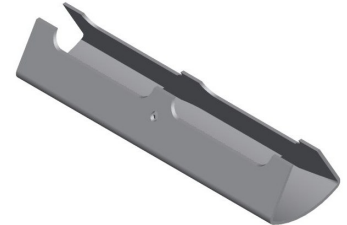


FIG. 842, 845, 848, 851, 854, 857 PIPE COVERING PROTECTION SADDLE 1" TO 3" THK. INSULATION
PAGE 87-89

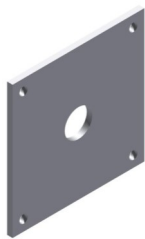


FIG. 900 CONCRETE INSERT PLATE FOR ANCHOR BOLT
PAGE 90

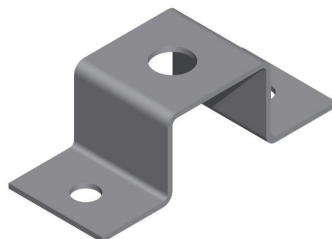


FIG. 903 CONCRETE INSERT FRAME FOR ANCHOR BOLT
PAGE 90

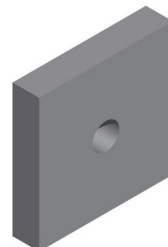


FIG. 909 STEEL SPOT INSERT NUT
PAGE 91

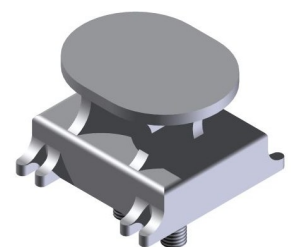


FIG. 912 CB-UNIVERSAL CONCRETE INSERT
PAGE 91

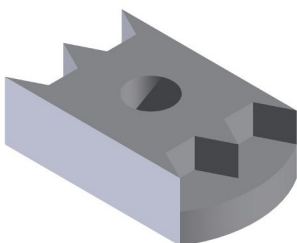


FIG. 915 CB-UNIVERSAL CONCRETE INSERT NUT
PAGE 92



FIG. 927 EXTERNAL PLUG DROP-IN
PAGE 92

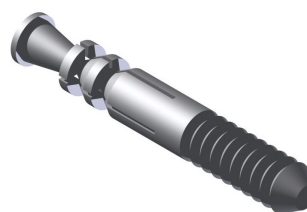


FIG. 930 SET-BOLT
PAGE 93

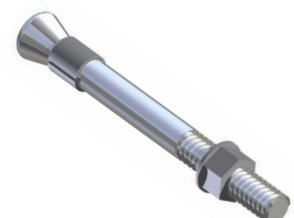


FIG. 936 WEDGE ANCHOR
PAGE 93



HANGER PARTS OVERVIEW



FIG. 945 ANCHOR BOLT—L—THREADED
ONE END

PAGE 94



FIG. 948 ANCHOR BOLT—L—THREADED
BOTH ENDS

PAGE 94



FIG. 951 ANCHOR BOLT—J—THREADED
ONE END

PAGE 95



PIPE SUPPORTS and HARDWARE

FIG. 400

ALL THREAD ROD



APPLICATION: All Thread Rod is the most versatile type of hanger rod. Since All Thread Rod is threaded for the entire length of the rod, it may be cut to any length and used without additional threading being required.

CONSTRUCTION: All Thread Rod is made of mild low carbon steel, SA-36, and is available in 6 ft., 10 ft. and 20 ft. lengths.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter X rod length, name and finish, if other than black.

EXAMPLE: Fig. 400, 3/8" diameter X 10 ft. long, All Thread Rod,

ROD SIZE	MAX. REC. LOAD LBS., 650 F	MAX. REC. LOAD LBS., 750 F	Wt PER FT.
1/4	240	215	0.12
3/8	610	540	0.29
1/2	1130	1010	0.53
5/8	1810	1610	0.85
3/4	2710	2420	1.22
7/8	3770	3360	1.65
1	4960	4420	2.21
1 1/8	6230	5560	2.80
1 1/4	8000	7140	3.55
1 1/2	11630	10370	5.10
1 3/4	15700	14000	8.16
2	20700	18460	10.68
2 1/4	28200	24260	13.32
2 1/2	33500	29880	16.68
2 3/4	41580	37066	20.88
3	50580	45085	26.04

FIG. 403

MACHINE THREADED ROD



FIG. 403 - Right Hand Threads Both Ends

FIG. 403L - Left Hand Threads Both Ends

FIG. 403RL - Right Hand Threads one end, Left Hand Threads other end.

APPLICATION: Machine Thread Rod is designed to be used as a hanger rod and is threaded on each end to allow adjustment of overall hanger length when used with end attachments like Fig. 424 Turnbuckles, Fig. 418 Eynuts, etc.

CONSTRUCTION: Machine Thread Rod is furnished in diameters from 3/8 inch through 4 inches. The standard thread lengths for each rod diameter are listed in the table. Machine Thread Rod can be furnished in any specified length. Machine Thread Rod shorter than 16 inches will be furnished in All Thread Rod.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter X rod length, name and finish, if other than black.

EXAMPLE: Fig. 403RL, 5/8" diameter X 38" long, Machine Thread Rod, HDG.

ROD SIZE	STD. ROD THREAD LENGTH	MAX. REC. LOAD LBS., 650 F	MAX. REC. LOAD LBS., 750 F	WT EA
3/8	2 1/2	610	540	0.44
1/2	2 1/2	1130	1010	0.79
5/8	2 1/2	1810	1610	1.27
3/4	3	2710	2420	1.83
7/8	3 1/2	3770	3360	2.48
1	4	4960	4420	3.31
1 1/8	4 1/2	6230	5560	4.20
1 1/4	5	8000	7140	5.33
1 1/2	6	11630	10370	7.65
1 3/4	7	15700	14000	12.24
2	8	20700	18460	16.02
2 1/4	9	27200	24260	19.98
2 1/2	10	33500	29880	25.02
2 3/4	11	41600	37104	31.32
3	12	50600	45131	39.06



PIPE SUPPORTS and HARDWARE

FIG. 406
BAR STOCK



APPLICATION: Bar Stock is used for hanger rod applications and can be cut to any length and threaded on the jobsite.
CONSTRUCTION: Bar Stock is made of mild low carbon steel, SA-36, and is available in 6 ft, 10 ft. and 20 ft. lengths.
FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.
ORDERING: Specify figure number, rod diameter X rod length, name and finish, if other than black.
EXAMPLE: Fig. 406, 5/8" diameter X 6 ft. long, Bar Stock, painted.

ROD DIA.	MAX. REC. LOAD LBS., 650 F	MAX. REC. LOAD LBS., 750 F	Wt PER FT.
1/4	240	215	0.17
3/8	610	510	0.38
1/2	1130	940	0.67
5/8	1810	1510	1.04
3/4	2710	2260	1.50
7/8	3770	3150	2.04
1	4960	4150	2.67
1 1/8	6230	5560	3.38
1 1/4	8000	6660	4.17
1 1/2	11630	9700	6.01
1 3/4	15700	14000	8.18
2	20700	18460	10.68
2 1/4	27200	24260	13.52
2 1/2	33500	29880	16.69
2 3/4	41600	37104	20.21
3	50600	45131	24.05



PIPE SUPPORTS and HARDWARE

FIG. 409

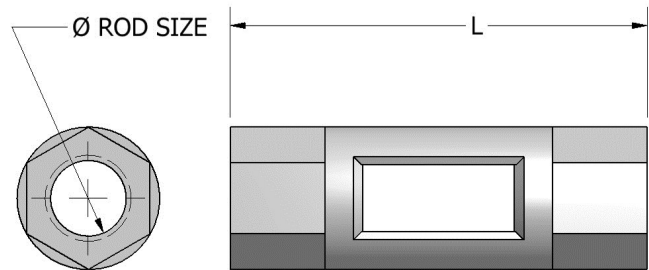
STRAIGHT ROD COUPLING

APPLICATION: Straight Rod Couplings are used to connect two hanger rods of the same diameter. The opening in the middle of the coupling provides for visual inspection of the rod engagement.

CONSTRUCTION: Straight Rod Couplings are made of malleable iron.

FINISHES AVAILABLE: Black or Electro-Plated.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



ROD TAP- PING SIZE	MAX. REC. LOAD (LBS)	OVERALL LENGTH (L)	WT EA
1/4	230	7/8	0.02
3/8	610	1 3/4	0.11
1/2	1130	1 3/4	0.10
5/8	1810	2 1/8	0.18
3/4	2710	2 1/4	0.28
7/8	3770	2 1/2	0.55
1	4960	2 3/4	0.71

FIG. 412

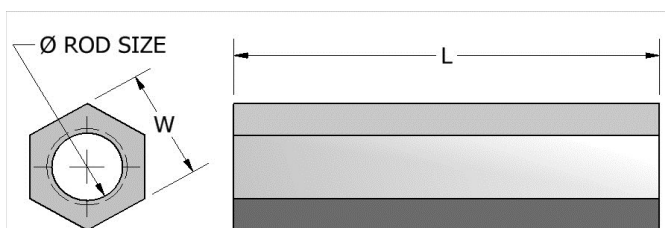
STEEL ROD COUPLING

APPLICATION: Steel Rod Couplings are used to connect two hanger rods of the same diameter. The coupling is tapped right hand straight U.S. standard thread.

CONSTRUCTION: Steel Rod Couplings are made of steel.

FINISHES AVAILABLE: Black or Electro-Plated.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



ROD SIZE	L	W	MAX. REC. LOAD (LBS.)	WT EA
1/4	7/8	3/8	230	0.02
3/8	1 3/4	5/8	610	0.11
1/2	1 3/4	11/16	1130	0.10
5/8	2 1/8	13/16	1810	0.18
3/4	2 1/4	1	2710	0.28
7/8	2 1/2	1 1/4	3770	0.55
1	2 3/4	1 3/8	4960	0.71
1 1/8	3	1 1/2	6230	0.86
1 1/4	3	1 5/8	8000	0.95
1 1/2	3 1/2	2	11630	1.88
1 3/4	5 1/4	2 3/4	15700	6.14
2	6	3	20700	7.95
2 1/4	6	3	20700	10.10
2 1/2	7 1/2	3 1/2	33500	15.83
2 3/4	7 1/2	3 1/2	33500	25.00
3	8	4 1/2	50600	36.00
3 1/4	9	5	60500	37.26
3 1/2	10 1/4	5 3/8	71260	48.59
3 3/4	11	5 3/4	82900	59.18
4	11 1/2	6 1/8	95500	69.92

PIPE SUPPORTS and HARDWARE

FIG. 415
FORGED STEEL CLEVIS

- FIG. 415 - Right Hand Tap Thread
- FIG. 415L - Left Hand Tap Thread
- FIG. 415WP - Right Hand Tap Thread With Pin
- FIG. 415LWP - Left Hand Tap Thread With Pin

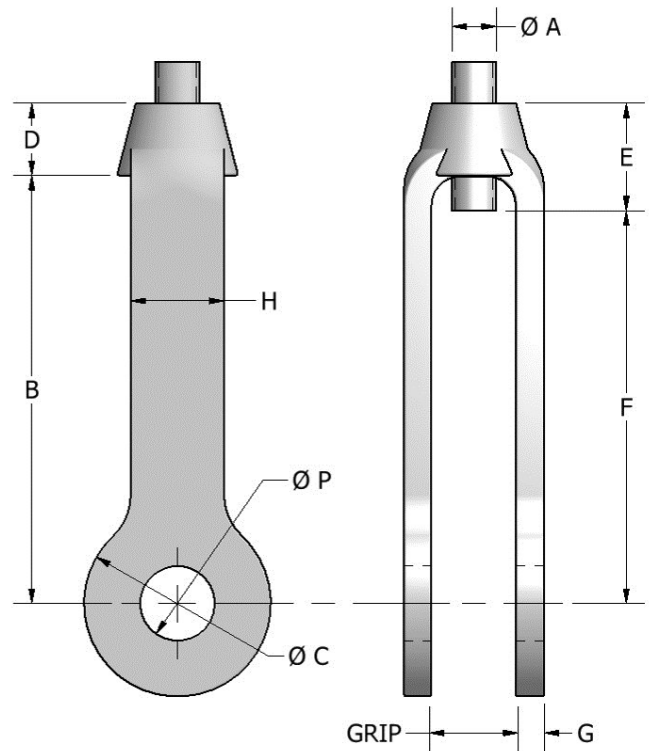
APPLICATION: Fig. 415 Forged Steel Clevises are used to attach hanger rods to pipe lugs, T-shapes, angles and other structural members. The most typical use of a Fig. 415 Forged Steel Clevis is with a Welding Lug, Fig. 521. Fig. 415 Forged Steel Clevis will support at least the same load that the attached hanger rod will support.

CONSTRUCTION: Fig. 415 Forged Steel Clevises are made of Drop Forged Carbon Steel and are threaded at the connection to the hanger rod. Pins are made of mild carbon steel and supplied with a cotter pin.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, name, rod diameter and finish, if other than black.

EXAMPLE: Fig. 415WP, Forged Steel Clevis, 1 1/4" rod diame-

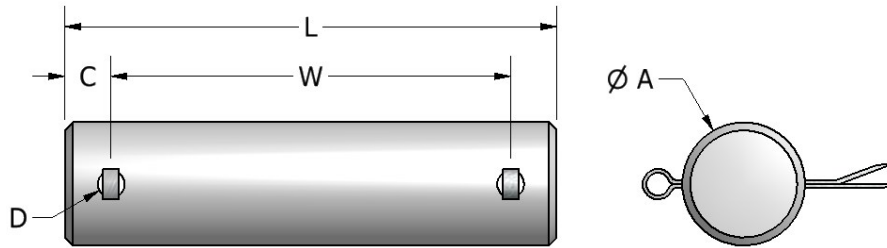


TAP SIZE A	MAX. REC. LOAD (LBS.) 650 F	MAX. REC. LOAD (LBS.) 750 F	B	C	D	E	F	PIN SIZE P	G	H	MAX. GRIP	SIZE NO.	WT EA W/ OUT PIN	WT EA W/ PIN
3/8	730	572	3 11/16	1 7/16	5/8	1 1/2	3	1/2	5/16	1 1/16	1/2	2	0.9	1
1/2	1350	1057	3 11/16	1 7/16	5/8	1 1/2	3	5/8	5/16	1 1/16	1/2	2	0.7	0.9
5/8	2160	1695	3 11/16	1 7/16	5/8	1 1/2	3	3/4	5/16	1 1/16	5/8	2	0.7	0.9
3/4	3230	2530	5	2	7/8	1 1/8	4	7/8	3/8	1 1/4	3/4	2 1/2	2.5	3
7/8	4480	3508	5	2	7/8	1 1/8	4	1	3/8	1 1/4	7/8	2 1/2	2.5	3.4
1	5900	4620	5	3	1 5/16	2 5/16	4	1 1/8	1/2	1 1/2	1	3	4	5.1
1 1/8	6230	5560	5	3	1 5/16	2 5/16	4	1 1/4	1/2	1 1/2	1 1/4	3	391	548
1 1/4	9500	7440	5	3	1 5/16	2 5/16	4	1 3/8	1/2	1 1/2	1 1/4	3	3.8	5.5
1 1/2	13800	10807	6	3 1/2	1 5/8	3 5/8	4	1 5/8	1/2	1 3/4	1 1/2	3 1/2	6	8.5
1 3/4	18600	14566	6	4	1 3/4	3 3/4	4	1 7/8	1/2	2	2 1/2	4	8	12.9
2	24600	19265	7	5	2 1/4	4 1/4	5	2 1/4	5/8	2 1/2	2 1/2	5	16	23.3
2 1/4	32300	25295	8	6	2 3/4	4 3/4	6	2 1/2	3/4	3	2 1/2	6	26	35.1
2 1/2	39800	31169	8	6	2 3/4	4 3/4	6	2 3/4	3/4	3	2 1/2	6	25.5	36
2 3/4	49400	38687	9	7	3	5	7	3	7/8	3 1/2	2 1/2	7	36	5
3	60100	47066	9	7	3	5	7	3 1/4	7/8	3 1/2	2 1/2	7	35	51.5
3 1/4	71900	56307	9	8	4	7	8	3 1/2	1 1/2	4	4	8	90	116
3 1/2	84700	66331	10	8	4	7	8	3 3/4	1 1/2	4	4	8	88	118
3 3/4	98500	77139	10	8	4	7	8	4	1 1/2	4	4	8	86	120
4	113400	88807	10	8	4	7	8	4 1/4	1 1/2	4	4	8	84	122



PIPE SUPPORTS and HARDWARE

FIG. 416
CLEVIS PIN



PIN DIAM (A)	MAX LOAD 650°F	MAX LOAD 750°F	L	W	C	D	COTTER PIN SIZE	WT EA
1/2	730	572	2 7/8	2 1/8	3/8	5/32	1/8 X 1 1/4	0.12
5/8	1350	1057	3 1/8	2 3/8	3/8	7/32	1/8 X 1 1/4	0.18
3/4	2160	1691	3 5/8	2 7/8	3/8	7/32	3/16 X 1 1/2	0.29
7/8	3230	2529	4	3 1/4	3/8	7/32	3/16 X 1 1/2	0.47
1	4480	3508	4	3 1/4	3/8	7/32	3/16 X 2	0.67
1 1/8	5900	4620	4 3/4	4	3/8	7/32	3/16 X 2	1.00
1 3/8	9500	7439	5 3/8	4 3/8	1/2	9/32	1/4 X 2	2.10
1 5/8	13800	10805	6	5	1/2	9/32	1/4 X 2	3.30
1 7/8	18600	14564	7 1/8	5 7/8	5/8	3/8	3/8 X 3	4.80
2 1/4	24600	19262	7 1/8	5 7/8	5/8	3/8	3/8 X 4	7.20
2 1/2	32300	25291	7 5/8	6 3/8	5/8	3/8	3/8 X 4	9.30
2 3/4	39800	31163	7 7/8	6 5/8	5/8	3/8	3/8 X 4	12.50
3	49400	38680	8 1/4	6 3/4	3/4	1/2	1/2 X 5	16.60
3 1/4	60100	47058	8 1/2	7	3/4	1/2	1/2 X 5	20.00
3 1/2	71900	56298	8 3/4	7 1/4	3/4	1/2	1/2 X 5	23.90
3 3/4	84700	66320	9 1/2	8	3/4	1/2	1/2 X 6	25.10
4	98500	77125	9 3/4	8 1/4	3/4	1/2	1/2 X 6	34.80



PIPE SUPPORTS and HARDWARE

FIG. 421

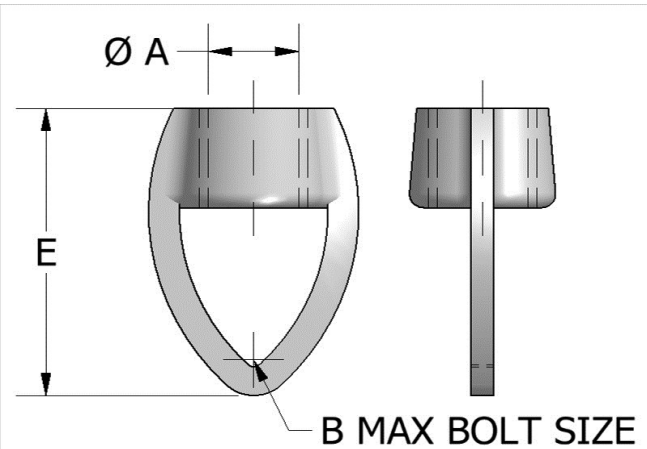
EYE SOCKET

APPLICATION: A Fig. 421 Eye Socket is used to join a right hand threaded rod to a pinned connection such as a split ring hanger or various building attachments.

CONSTRUCTION: Fig. 421 Eye Sockets are made of malleable iron and are available for rod diameters of 1/4 inch through 7/8 inches.

FINISHES AVAILABLE: Black or Electro-Plated.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



PIPE SIZE (IN)	ROD SIZE A (IN)	B (IN)	E (IN)	MAX.REC . LOAD	WT EA
3/8	1/4	1/4	1 3/8	230	0.05
1/2 - 2	3/8	1/4	1 5/16	610	0.07
2 1/2 - 3 1/2	1/2	1/4	1 1/2	1000	0.14
4 - 5	5/8	3/8	1 3/4	1400	0.22
6	3/4	1/2	2 1/8	2200	0.32
8	7/8	1/2	2 3/8	2300	0.53



PIPE SUPPORTS and HARDWARE

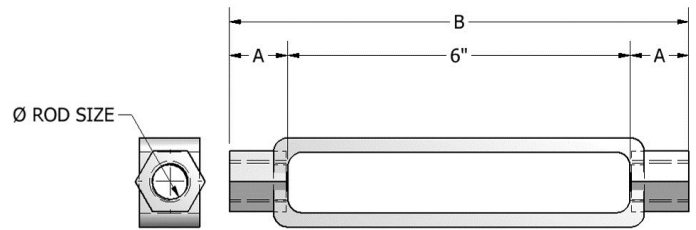
FIG. 424
FORGED STEEL TURNBUCKLE

APPLICATION: Fig. 424, 424S, and 424L Forged Steel Turnbuckles are used to connect two threaded hanger rods and to provide for relational adjustment of the hanger rod ends to or from each other. Turnbuckles are tapped right hand thread on one end and left hand thread on the other end. Thus, when the turnbuckle is twisted clockwise about the rod centerlines, the two hanger rod ends are pulled closer together and when the turnbuckle is twisted counterclockwise, the rod ends are moved apart from each other.

CONSTRUCTION: Turnbuckles are made of Drop Forged Carbon Steel and are available for rod diameters of 3/8 inch, to 3 inches. The Fig. 424S provides for 3 inches of adjustment and is only available for rod diameters 1/2 inch through 1 inch. Fig. 424 provides for 6 inches of adjustment and Fig. 424L provides for 12 inches of adjustment.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



ROD SIZE	MAX REC LOADS, LBS, 650 F	MAX REC LOADS, LBS, 750 F	WT EA (IN)	A (IN)	B (IN)	ROD TAKE OUT (IN)
3/8	610	540	0.42	9/16	7 1/8	3.00
1/2	1130	1010	0.65	3/4	7 1/2	3.00
5/8	1810	1610	0.98	15/16	7 7/8	3.00
3/4	2710	2420	1.50	1 1/8	8 1/4	3.00
7/8	3770	3360	1.90	1 5/16	8 5/8	3.00
1	4960	4420	2.60	1 1/2	9	3.00
1 1/8	6230	5560	4.00	1 9/16	9 1/8	3.00
1 1/4	8000	7140	4.50	1 9/16	9 1/8	3.00
1 1/2	11630	10370	6.40	1 7/8	9 3/4	3.00
1 3/4	15700	14000	11.00	2 3/16	10 3/8	3.00
2	20700	18460	14.90	2 1/2	11	3.00
2 1/4	27200	24260	19.60	3 3/4	13 1/2	3.00
2 1/2	33500	29880	26.90	3 3/4	13 1/2	3.00

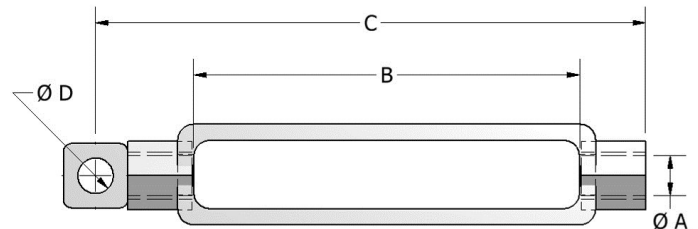
FIG. 427
TURN BUCKLE W/ SWIVEL—SHORT PATTERN

APPLICATION: Fig. 427 Turnbuckles with Swivel – Short Pattern are used to connect a threaded hanger rod and a split ring hanger.

CONSTRUCTION: Turnbuckles with swivels are made of malleable iron.

FINISHES AVAILABLE: Black or Electro-Plated.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



PIPE SIZE (IN)	ROD SIZE (IN)	B (IN)	C (IN)	D (IN)	MAX REC LOAD LBS	WT EA
1/2 - 2	3/8	2	3 3/4	7/16	610	28
2 1/2 - 3 1/2	1/2	2	3 3/4	7/16	725	31
4 - 5	5/8	2 1/2	5	9/16	710	72
6	3/4	2 1/2	5	9/16	860	70



PIPE SUPPORTS and HARDWARE

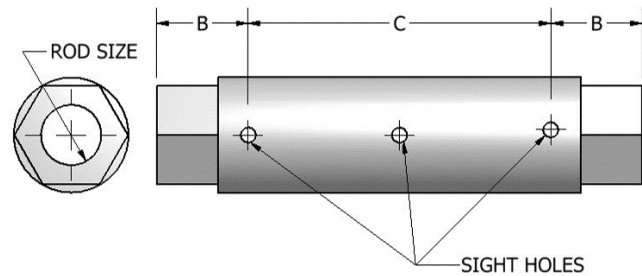
FIG. 430
FABRICATED TURNBUCKLE

APPLICATION: Fig. 430 Fabricated Turnbuckles are used to connect two threaded hanger rods and to provide for relational adjustment of the hanger rod ends to or from each other. Fabricated Turnbuckles provide right hand threads on one end and left hand threads on the other end. Thus, when the turnbuckle is twisted clockwise about the rod centerlines, the two hanger rod ends are pulled closer together and when the turnbuckle is twisted counterclockwise, the rod ends are moved apart from each other. Adjustments of 6", 12", 18" and 24" are available.

CONSTRUCTION: Turnbuckles are made of carbon steel pipe and heavy hex nuts and are available for rod diameters of 1 inch to 4 1/4 inches.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



ROD DIAM A	MAX. REC. LOAD (LBS.)	C = 6" WT EA (LBS.)	C = 12" WT EA (LBS.)	C = 18" WT EA (LBS.)	C = 24" WT EA (LBS.)	B
1	4960	2.30	3.62	4.94	6.26	1 3/8
1 1/8	6230	2.87	4.37	5.87	7.37	1 9/16
1 1/4	8000	3.73	5.54	7.36	9.17	1 7/8
1 1/2	11630	6.46	9.70	12.94	16.18	2 1/8
1 3/4	15700	9.43	13.94	18.44	22.95	2 3/8
2	20700	12.13	17.14	22.14	27.15	2 3/4
2 1/4	27200	15.45	21.21	28.96	32.72	3
2 1/2	33500	20.08	27.23	34.39	41.54	3 1/4
2 3/4	41580	25.00	33.33	41.66	49.99	3 1/2
3	50580	32.85	44.10	55.36	66.62	3 3/4
3 1/4	60480	44.85	61.35	77.85	94.35	4 1/8
3 1/2	71280	50.14	65.57	81.01	96.44	4 3/8
3 3/4	82890	60.42	79.44	98.47	117.49	4 5/8
4	95400	70.32	91.34	112.37	133.39	4 7/8
4 1/4	109000	73.84	95.91	117.99	140.06	5 1/8



PIPE SUPPORTS and HARDWARE

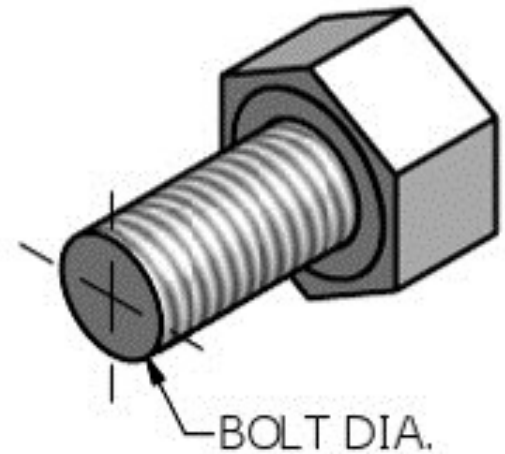
FIG. 433
HEX HEAD MACHINE BOLT

APPLICATION: These bolts are used in all types of fastening applications and are stocked in various lengths in diameters of 3/8 inch thru 2 inches.

CONSTRUCTION: Hex Head Machine Bolts are furnished in SA-307, Gr. B.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, bolt diameter X bolt length, name (Hex Head Machine Bolt) and finish, if other than black.



DIA. OF BOLT	LENGTH OF BOLT (IN.)									
	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	5
5/8	36	38	40	42	44	46	48	50	52	60
3/4	57	60	62	65	68	71	74	77	80	92
7/8	86	90	94	99	103	107	111	115	118	135
1	127	133	138	143	148	153	158	163	169	190

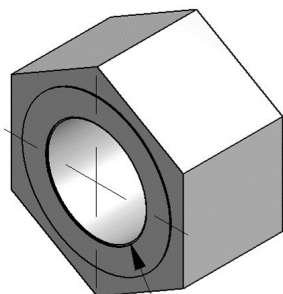
FIG. 436
STANDARD HEX NUT

APPLICATION: Standard Hex Nuts can be used with Hex Head Machine Bolts, Flange Bolts and hanger rods.

CONSTRUCTION: All Standard Hex Nuts are furnished with right hand threads unless otherwise specified.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nut size, name and finish, if other than black.



ROD SIZE

ROD SIZE (IN)	WIDTH ACROSS FLATS (IN)	WIDTH ACROSS CORNERS	THICKNESS (IN)	WT EA
1/4	7/16	0.505	0.219	0.01
5/16	1/2	0.577	0.266	0.01
3/8	9/16	0.65	0.328	0.01
7/16	11/16	0.794	0.375	0.03
1/2	3/4	0.866	0.438	0.03
9/16	7/8	1.01	0.484	0.06
5/8	15/16	1.083	0.547	0.07
3/4	1 1/8	1.299	0.641	0.19
7/8	1 5/16	1.516	0.750	0.19
1	1 1/2	1.732	0.859	0.28
1 1/8	1 11/16	1.949	0.969	0.40
1 1/4	1 7/8	2.165	1.063	0.54
1 3/8	2 1/16	2.382	1.172	0.73
1 1/2	2 1/4	2.598	1.290	0.94



PIPE SUPPORTS and HARDWARE

FIG. 439

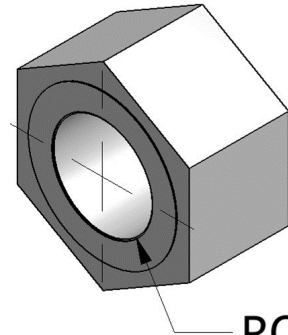
HEAVEY HEX NUT

APPLICATION: Heavy Hex Nuts can be used with Hex Head Machine Bolts, Flange Bolts, and hanger rods.

CONSTRUCTION: All Heavy Hex Nuts are furnished with right hand threads unless otherwise specified.

FINISHES AVAILALE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nut size, name and finish, if other than black.



ROD SIZE

ROD SIZE (IN)	WIDTH ACROSS FLATS (IN)	WIDTH ACROSS CORNERS	THICKNESS (IN)	WT EA
1/4	1/2	0.577	0.234	0.01
1/3	9/16	0.65	0.297	0.01
3/8	11/16	0.794	0.359	0.01
4/9	3/4	0.866	0.422	0.03
1/2	7/8	1.01	0.484	0.03
4/7	15/16	1.083	0.547	0.06
5/8	1 1/16	1.227	0.609	0.07
3/4	1 1/4	1.443	0.734	0.20
7/8	1 7/16	1.66	0.859	0.30
1	1 5/8	1.876	0.984	0.43
1 1/8	1 13/16	2.093	1.109	0.59
1 1/4	2	2.309	1.219	0.79
1 3/8	2 3/16	2.526	1.355	1.02
1 1/2	2 3/8	2.742	1.469	1.20
1 5/8	2 9/16	2.959	1.594	1.65
1 3/4	2 3/4	3.175	1.719	1.70
1 7/8	2 15/16	3.392	1.844	2.20
2	3 1/8	3.608	1.969	2.28
2 1/4	3 1/2	4.041	2.203	2.85
2 1/2	3 7/8	4.474	2.453	3.56
2 3/4	4 1/4	4.907	2.703	4.45
3	4 5/8	5.34	2.953	5.57
3 1/4	5	5.774	3.188	5.76
3 1/2	5 3/8	6.207	3.438	6.76
3 3/4	5 3/4	6.64	3.688	7.76
4	6 1/8	7.073	3.875	10.00

PIPE SUPPORTS and HARDWARE

FIG. 442

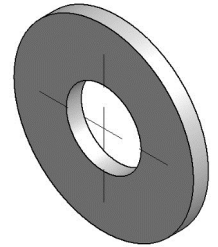
FLAT ROUND WASHER

APPLICATION: Flat Round Washers are often used as spacers and may also be used to bridge oversized holes when attaching hanger rods or bolts to structural members.

CONSTRUCTION: Steel Round Washers are made of SA-36 mild low carbon steel and are available for 1/4 inch thru 1 1/2 inch diameter bolts or hanger rods.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, size of bolt or hanger rod, name and finish, if other than black.



ROD SIZE	O.D. (IN)	ID (IN)	WT EA
1/4	3/4	5/16	0.01
3/8	1	7/16	0.02
1/2	1 3/8	9/16	0.04
5/8	1 3/4	11/16	0.08
3/4	2	13/16	0.11
7/8	2 1/4	15/16	0.15
1	2 1/2	1 1/16	0.19
1 1/8	2 3/4	1 1/4	0.22
1 1/4	3	1 3/8	0.26
1 1/2	3 1/2	1 5/8	0.39
1 3/4	4	1 7/8	0.65
2	4 1/2	2 1/8	0.93
2 1/4	4 3/4	2 3/8	1.16
2 1/2	5	2 5/8	1.45
2 3/4	5 1/4	2 7/8	1.82
3	5 1/2	3 1/8	2.27

FIG. 445

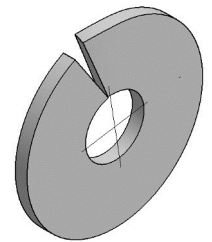
LOCK WASHER

APPLICATION: Lock Washers are placed under closure nuts in order to provide axial tension on a nut and thereby reduce the likelihood of the nut becoming loose.

CONSTRUCTION: Lock Washers are made of SA-36 mild low carbon steel and are available for 1/4 inch thru 3/4 inch diameter bolts or hanger rods.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, size of bolt or hanger rod, name and finish, if other than black.



ROD SIZE (IN)	OD (IN)	WT EA
1/4	3/8	0.01
3/8	11/16	0.01
1/2	7/8	0.01
5/8	1	0.02
3/4	1 1/4	0.03
7/8	1 3/8	0.07
1	1 1/2	0.10
1 1/2	2 1/4	0.28
1 3/4	2 5/8	0.32
2	2 3/4	0.39
2 1/4	3 3/8	0.47
2 1/2	3 5/8	0.51
2 3/4	4 1/8	0.65
3	4 3/8	0.70



PIPE SUPPORTS and HARDWARE

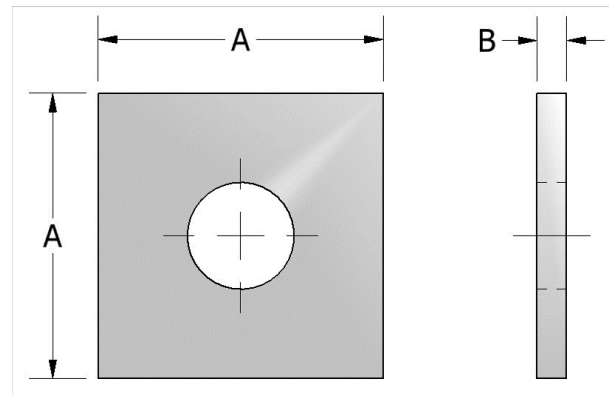
FIG. 448
SQUARE WASHER

APPLICATION: Square Washers are used on back-to-back channels or angles for supporting pipe with rods or U-Bolts. A Square Washer is a lighter version of the Figure 509 Washer Plate.

CONSTRUCTION: Square Washer are made of carbon steel with the hole located in the center of the plate.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



ROD SIZE (IN)	HOLE SIZE (IN)	A (IN)	B (IN)	WT EA
3/8	7/16	2	1/4	0.27
1/2	9/16	2	1/4	0.27
5/8	11/16	2 1/2	1/4	0.47
3/4	13/16	2 1/2	1/4	0.42
7/8	15/16	3	3/8	0.82
1	1 1/8	4	3/8	1.60

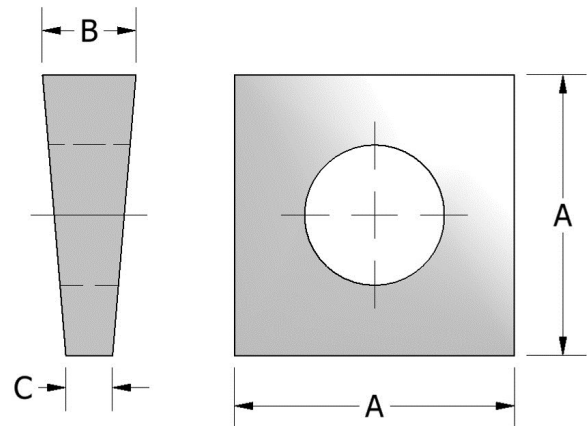
FIG. 451
BEVELED WASHER

APPLICATION: Beveled Washers are designed to match the taper of the flange of an I-beam or channel in order to provide a perpendicular surface for a nut or a bolt to seat properly.

CONSTRUCTION: Beveled Washers are made of malleable iron and are available for 3/8 inch thru 7/8 inch diameter bolts or hanger rods.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, size of bolt or hanger rod, name and finish, if other than black.



BOLT SIZE	A (IN)	B (IN)	C (IN)	WT EA
3/8	1 1/4	11/32	5/32	0.09
1/2	1 1/4	11/32	5/32	0.09
5/8	1 1/2	13/32	5/32	0.14
3/4	1 1/2	15/32	7/32	0.16
7/8	2	9/16	7/32	0.34

PIPE SUPPORTS and HARDWARE

FIG. 454

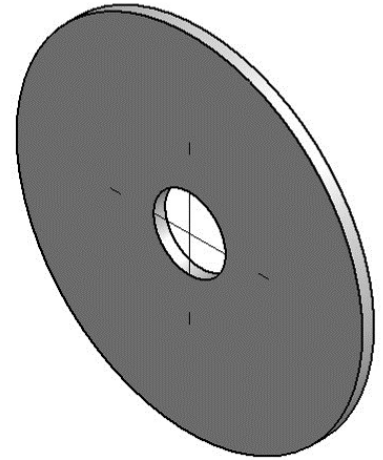
OVERSIZED ROUND WASHER

APPLICATION: Oversized Round Washers are often used as spacers and may also be used to bridge oversized holes when attaching hanger rods or bolts to structural members. They provide a greater bearing surface than regular flat round washers, but not as much load bearing capacity as square washers.

CONSTRUCTION: Oversized Round Washers are made of SA-36 mild low carbon steel and are available for 1/4 inch thru 1/2 inch diameter bolts or hanger rods.

FINISHES AVAILABLE: Electro-Plated.

ORDERING: Specify figure number, size of bolt or hanger rod, name.



ROD SIZE (IN)	ID (IN)	OD (IN)	WT EA
1/4	5/16	1 1/2	0.03
3/8	7/16	1 1/2	0.03
1/2	9/16	2	0.03



PIPE SUPPORTS and HARDWARE

FIG. 457
EYE ROD

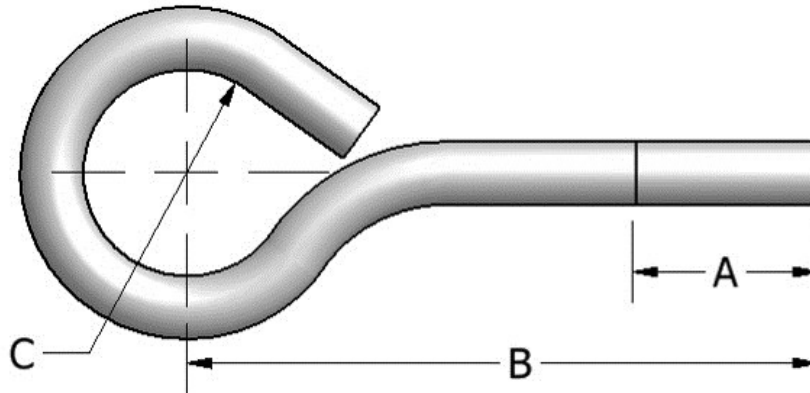


FIG. 457 - Right Hand Thread
FIG. 457L - Left Hand Thread
FIG. 457N - Not Threaded

APPLICATION: A Fig. 457 Eye Rod provides a means of attachment without the use of a Weldless Eye Nut. A Fig. 457 Eye Rod and a Fig. 518 Beam Bracket with a Hex Head Machine Bolt are frequently used for the upper attachment of pipe hanger assemblies.

CONSTRUCTION: Eye Rods (not welded) are available in diameters of 3/8 inch thru 2 1/2 inches. The inside diameter of the eye is designed to accommodate a bolt with a diameter equal to the value shown in the table column "A". Eye Rods are furnished with the standard thread lengths shown in the table column "B". Eye Rods can be furnished in any length, so long as adequate threading can be provided on the straight rod.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter X Eye Rod length (center of eye to tip of rod), name and finish, if other than black.

ORDERING NOTE: Specify if non-standard thread lengths are required.

EXAMPLE: Fig. 457, 3/4" diameter X 18" long, Eye Rod (not welded), painted.

ROD SIZE (IN)	A (IN)	B (IN)	C (ID) (IN)	MAX. REC. LOAD LBS. FOR SERVICE TEMPS.
3/8	2 1/2	4 1/4	1/2	240
1/2	2 1/2	4 1/4	5/8	440
5/8	2 1/2	4 1/2	3/4	705
3/4	3	5 1/2	7/8	1050
7/8	3 1/2	6 1/2	1	1470
1	4	7 1/4	1 1/8	1940
1 1/8	4 1/2	7 3/4	1 1/4	2430
1 1/4	5	8 1/4	1 3/8	3120
1 1/2	6	10	1 5/8	4650
1 3/4	7	12	2 1/4	6380
2	8	14	2 1/2	8280
2 1/4	9	15 1/2	2 3/4	10900
2 1/2	10	17	3	13400



PIPE SUPPORTS and HARDWARE

FIG. 460

WELDED EYE ROD

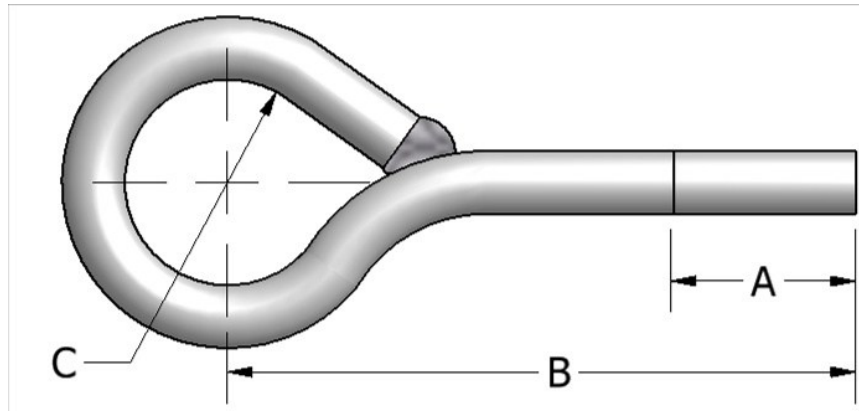


FIG. 460 - Right Hand Thread
 FIG. 460L - Left Hand Thread
 FIG. 460N - Not Threaded

APPLICATION: Welded Eye Rods are specified where loads exceed the recommended ratings for Eye Rods (non-welded). A Fig. 460 Eye Rod and a Fig. 518 Beam Bracket with a Hex Head Machine Bolt are frequently used for the upper attachment of pipe hanger assemblies.
CONSTRUCTION: Welded Eye Rods are manufactured identically to the non-welded type except that the eye is seal welded giving the eye

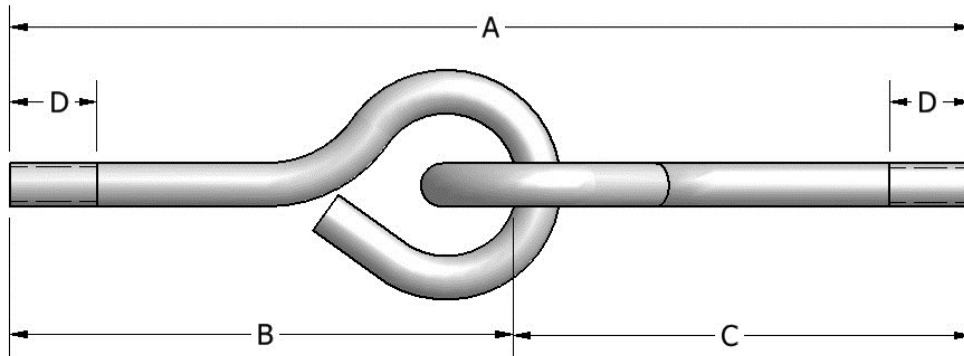
ROD SIZE (IN)	A (IN)	B (IN)	C (ID) (IN)	MAX. REC. LOAD LBS. FOR SERVICE TEMPS. 650F	MAX. REC. LOAD LBS. FOR SERVICE TEMPS. 750F
3/8	2 1/2	4 1/4	1/2	610	540
1/2	2 1/2	4 1/4	5/8	1130	1010
5/8	2 1/2	4 1/2	3/4	1810	1610
3/4	3	5 1/2	7/8	2710	2420
7/8	3 1/2	6 1/2	1	3770	3360
1	4	7 1/4	1 1/8	4960	4420
1 1/8	4 1/2	7 3/4	1 1/4	6230	5560
1 1/4	5	8 1/4	1 3/8	8000	7140
1 1/2	6	10	1 5/8	11630	10370
1 3/4	7	12	2 1/4	18600	14566
2	8	14	2 1/2	24600	19265
2 1/4	9	15 1/2	2 3/4	32300	25295
2 1/2	10	17	3	39800	31169
1 1/4	1 1/2	5	8000	7140	



PIPE SUPPORTS and HARDWARE

FIG. 463

LINKED EYE RODS, NOT WELDED



APPLICATION: Linked Eye Rods are designed to provide for the universal joint styled movement at the point where the eye rods are linked. Given two hinged or universal joint styled points in a hanger assembly, horizontal movement of the piping system will be allowed without causing the hanger rod to be bent.

CONSTRUCTION: Linked Eye Rods - Not Welded are a combination of two standard non-welded Eye Rods linked together at the eyes, forming one complete unit.
FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, lengths "A", "B" & "C", name and finish, if other than black.

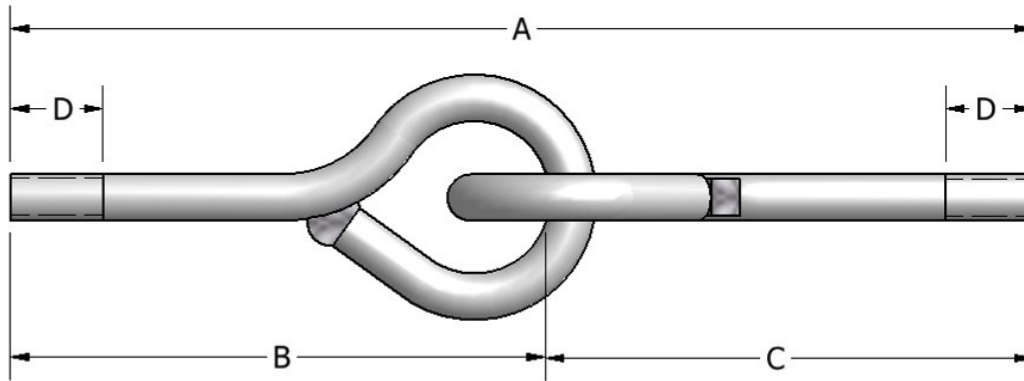
EXAMPLE: Fig. 463, $\frac{3}{4}$ " diameter rod, "A" = 48", "B" =

ROD SIZE (IN)	D (IN)	MAX. REC. LOAD LBS. FOR SERVICE TEMPS. 650F	MAX. REC. LOAD LBS. FOR SERVICE TEMPS. 750F
3/8	2 1/2	610	540
1/2	2 1/2	1130	1010
5/8	2 1/2	1810	1610
3/4	3	2710	2420
7/8	3 1/2	3770	3360
1	4	4960	4420
1 1/8	4 1/2	6230	5560
1 1/4	5	8000	7140
1 1/2	6	11630	10370
1 3/4	7	18600	14566
2	8	24600	19265
2 1/4	9	32300	25295
2 1/2	10	39800	31169



PIPE SUPPORTS and HARDWARE

FIG. 466
LINKED EYE RODS, WELDED



APPLICATION: Linked Welded Eye Rods are designed to provide for the universal joint styled movement at the point where the eye rods are linked. Given two hinged or universal joint styled points in a hanger assembly, horizontal movement of the piping system will be allowed without causing the hanger rod to be bent.

CONSTRUCTION: Linked Welded Eye Rods are a combination of two standard Welded Eye Rods linked together at the eyes, forming one complete unit.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, lengths "A", "B" & "C", name and finish, if other than black.

EXAMPLE: Fig. 466, 1" diameter rod, "A" = 66", "B" =

ROD SIZE (IN)	D (IN)	MAX. REC. LOAD LBS. FOR SERVICE TEMPS. 650F	MAX. REC. LOAD LBS. FOR SERVICE TEMPS. 750F
3/8	2 1/2	610	540
1/2	2 1/2	1130	1010
5/8	2 1/2	1810	1610
3/4	3	2710	2420
7/8	3 1/2	3770	3360
1	4	4960	4420
1 1/8	4 1/2	6230	5560
1 1/4	5	8000	7140
1 1/2	6	11630	10370
1 3/4	7	18600	14566
2	8	24600	19265
2 1/4	9	32300	25295
2 1/2	10	39800	31169



PIPE SUPPORTS and HARDWARE

FIG. 469

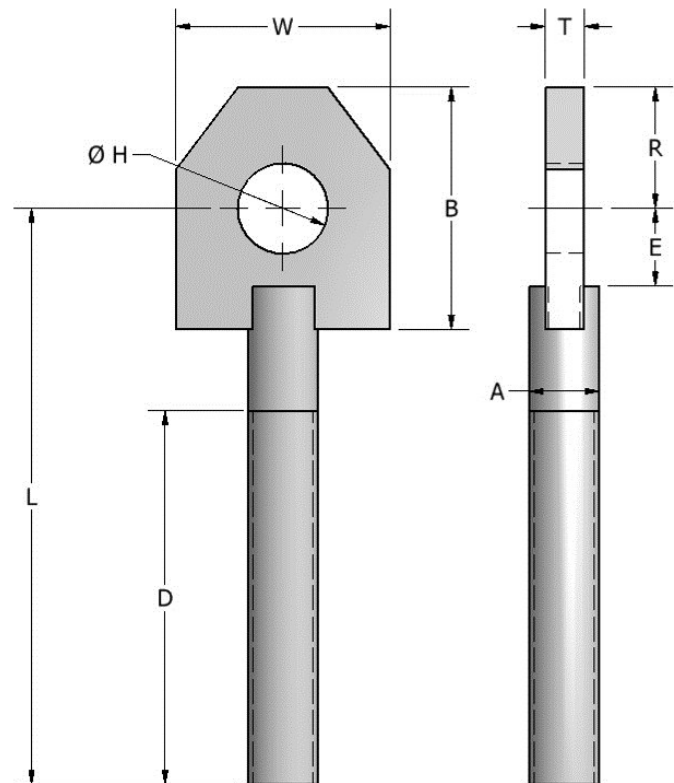
PADDLE EYE ROD

APPLICATION: Paddle Eye Rods are designed for service where extreme loading is required and are ideally suited for use with our large Variable or Constant Effort Spring hangers.

CONSTRUCTION: Paddle Eye Rods are available in diameters of 1 ½ inches thru 5 inches, and are fabricated from SA-36 plate and bar stock. Threads are UNC, class 2 fit, four threads per inch for 2 ½ inch diameter and larger. A special bearing may be pressed into the paddle to allow for universal movement.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter X Eye Rod length (center of eye to tip of rod), name, with or without Bearing and finish,



ROD SIZE A (IN)	MAX. REC. LOAD (LBS.)	WT EA, MIN , LBS	WT/FT ADDITION- AL L	B (IN)	D (IN)	E (IN)	H (IN)	WITH STD. THREAD L (MIN.) (IN)	R (IN)	T (IN)	W (IN)
1 1/2	11630	10	6	6	12	2	1 7/8	17	2 1/2	3/4	5
1 3/4	15700	13	8	6 1/2	12	2 1/4	2 1/8	17	2 1/2	3/4	5
2	20700	18	11	7 1/2	12	2 3/4	2 3/8	18	2 3/4	1	5 1/2
2 1/4	27200	22	14	7 3/4	12	3	2 5/8	18	2 3/4	1	5 1/2
2 1/2	33500	27	17	8 1/2	12	3 1/4	2 7/8	19	3	1 1/2	5
2 3/4	41580	35.9	20	9	12	3 3/4	3 1/8	19	3	1 1/2	5
3 1/4	60480	54.7	28	11 1/2	12	4	3 5/8	21	3 1/2	1 1/2	7
3 1/2	71280	97.3	33	11 1/2	15	4 3/4	3 7/8	24	3 1/2	2	7
3 3/4	82890	80	37	12 3/4	15	5	4 1/8	25	3 3/4	2	7 1/2
4	95400	97	43	14 1/4	15	5	4 3/8	26	4 1/4	2	8 1/2
4 1/4	109000	127	48	15 1/2	18	5 1/4	4 5/8	30	4 3/4	2	9 1/2
4 1/2	123000	131	54	14 1/2	18	5 3/4	4 7/8	30	4 1/4	2 1/2	8 1/2
4 3/4	138000	154	60	15 3/4	18	5 3/4	5 1/8	31	4 3/4	2 1/2	9 1/2
5	154000	175	67	17 1/2	18	6 1/4	5 3/8	32	5	2 1/2	10



PIPE SUPPORTS and HARDWARE

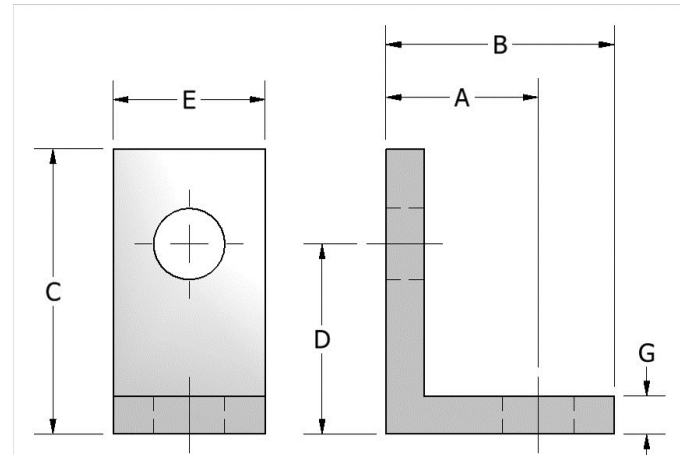
FIG. 500
SIDE BEAM BRACKET

APPLICATION: Side Beam Brackets are used to attach hanger rod to the side of beams, columns and joists, etc. Side Beam Brackets are attached to a support structure by bolting or welding.

CONSTRUCTION: Side Beam Brackets are cut from carbon steel angle with holes centered and punched.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



Size (IN)	MAX LOAD, LOG SCREW, LBS	MAX LOAD, BOLT TO STEEL, LBS	For Pipe Sizes	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	G (IN)	HOLES (IN)	WT EA
3/8	390	580	3/4" to 2"	7/8	1 3/8	1 7/8	1 1/4	1 1/4	1/4	7/16	0.25
1/2	640	960	2 1/2" to 3 1/2"	1 3/16	1 7/8	2 3/8	1 5/8	1 1/2	1/4	9/16	0.4
3/4	830	2500	6"	1 11/16	2 1/2	3 1/4	2 1/8	2	3/8	13/16	1.07
7/8	830	3600	8" to 12"	2	3	3 3/4	2 1/2	2	1/2	15/16	1.64



PIPE SUPPORTS and HARDWARE

FIG. 503

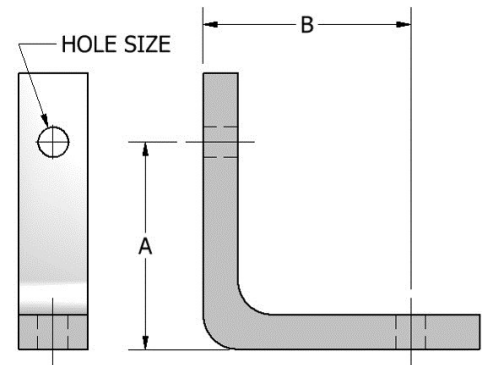
ANGLE BRACKET

APPLICATION: Angle Brackets are used to attach hanger rod to the side of beams, columns or joists, etc. Angle Brackets are attached to a support structure by bolting.

CONSTRUCTION: Angle Brackets are cut from flat bar and bent to a right angle. Holes are punched as shown on the sketch.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, size, name and finish, if other than black.



Size	A (IN)	B (IN)	HOLE SIZE	MAX REC LOAD	WT EA
1	3	2	11/16	180	0.43
2	4	3	11/16	180	0.59
3	3	2	11/16	390	0.87
4	4	3	11/16	390	1.18
5	6	4	11/16	180	0.83
6	6	4	11/16	190	1.65

FIG. 506

ADJUSTABLE BEAM ATTACHMENT

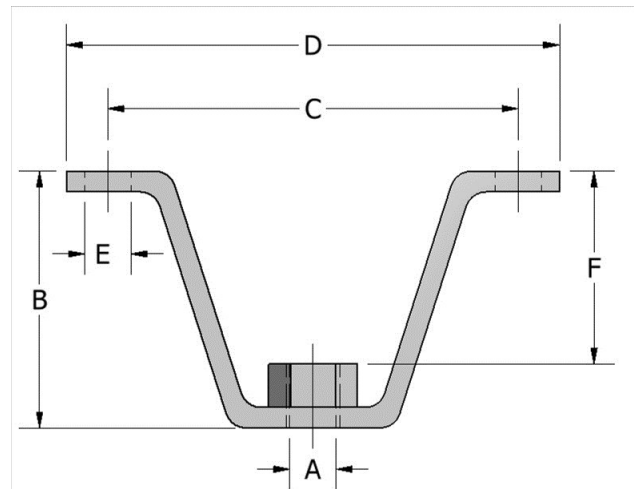
APPLICATION: Adjustable Beam Attachments are used to attach hanger rod to the bottom flange of beams, etc. Adjustable Beam Attachments are attached to a support structure by bolting and provide for vertical adjustment of the hanger rod.

CONSTRUCTION: Adjustable Beam Attachments are cut from flat bar and bent to shape. Holes are punched as shown on the sketch.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.

EXAMPLE: Fig. 506, 5/8" dia. Rod, Adjustable Beam Attachment,



Rod Size A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	STOCK SIZE	Max. Rec. Load Lbs.	WT EA
3/8	2 3/4	3 7/8	4 7/8	7/16	2 1/8	1/4 X 1 1/4	610	0.53
1/2	3 1/8	4 3/4	6	9/16	2 5/16	3/8 X 1 1/2	1130	1.29
5/8	3 1/8	4 3/4	6	9/16	2 3/16	3/8 X 1 1/2	1810	1.28
3/4	3 11/16	6 1/4	7 3/4	11/16	2 11/16	1/2 X 2	2710	1.96
7/8	3 3/4	6 3/8	8 1/4	13/16	2 1/2	1/2 X 2	3770	2.82



PIPE SUPPORTS and HARDWARE

FIG.509

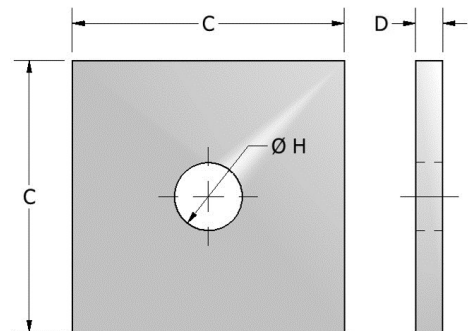
WASHER PLATE

APPLICATION: Washer Plates are used on back to back channels or angles for supporting pipe with rods or U-Bolts.

CONSTRUCTION: Washer Plates are made of carbon steel with the hole located in the center of the plate.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



ROD DIA.	C (IN)	D (IN)	H DIA. (IN)	WT EA
3/8	3	1/4	1/2	0.60
1/2	3	1/4	5/8	0.60
5/8	3	3/8	3/4	0.90
3/4	4	3/8	7/8	1.60
7/8	4	1/2	1	2.20
1	4	1/2	1 1/4	2.10
1 1/8	4	1/2	1 3/8	2.23
1 1/4	5	1/2	1 1/2	3.30
1 1/2	5	3/4	1 3/4	1.80
1 3/4	5	3/4	2	1.47
2	6	3/4	2 1/4	1.50
2 1/4	6	3/4	2 1/2	6.60
2 1/2	6	3/4	2 3/4	6.40
2 3/4	6	3/4	3	6.20
3	6	3/4	3 1/4	5.90

FIG.512

THREADED SIDE BEAM BRACKET

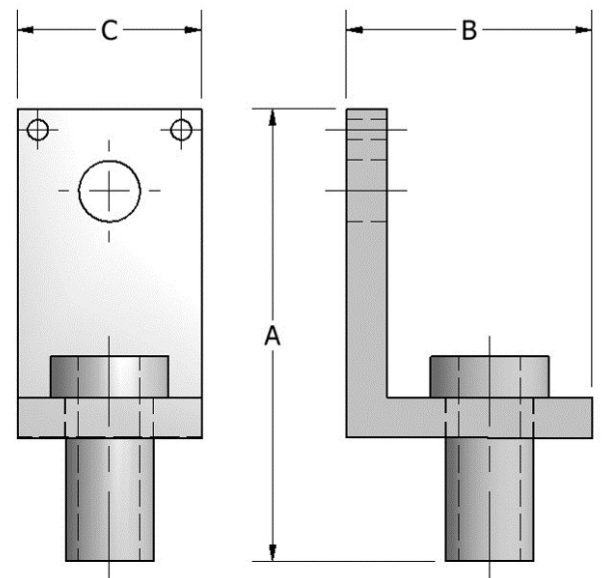
APPLICATION: Threaded Side Beam Brackets are used to attach hanger rod to the side of wood, concrete or steel members. Threaded Side Beam Brackets are attached to a support structure by bolting. The offset design allows for virtually unlimited thread adjustment.

The rod diameter that can be supported from this bracket is 3/8". To attach the bracket to support member for 1/2" thru 2" pipe, use a 3/8" fastener. To attach the bracket to support member for 2 1/2" thru 4" pipe, use a 1/2" fastener.

CONSTRUCTION: Threaded Side Beam Brackets are cut from carbon steel flat bar with holes centered and punched.

FINISHES AVAILABLE: Black or Electro-Plated.

ORDERING: Specify figure number, name and finish, if other than black.



PIPE SIZE	ROD SIZE (IN)	A (IN)	B (IN)	C (IN)	MAX. REC. LOAD	WT EA
1/2 thru 4	3/8	2 3/4	1 1/2	1 1/4	300	0.14

*Safety Factor of 5



PIPE SUPPORTS and HARDWARE

FIG. 515

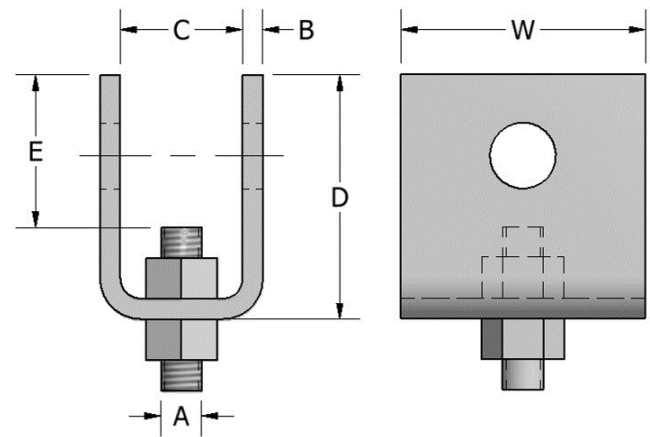
WELDED BEAM BRACKET

APPLICATION: Beam Brackets are designed to provide for the economical attachment of hanger rods to beams regardless of beam size.

CONSTRUCTION: Beam Brackets are manufactured of wrought steel.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



ROD SIZE A (IN)	MAX LOAD 650°F	MAX LOAD 750°F	B (IN)	C (IN)	D (IN)	E (IN)	W (IN)	WT EA
3/8	730	572	1/4	1 1/4	2 7/8	1 7/8	2	0.96
1/2	1350	1057	1/4	1 1/4	2 7/8	1 3/4	2	0.96
5/8	2160	1692	1/4	1 1/4	2 7/8	1 3/4	2	0.96
3/4	3230	2530	3/8	1 7/8	3 1/8	1 3/4	2 1/2	1.90
7/8	4480	3508	3/8	2	4 1/4	3	2 1/2	2.50
1	5900	4620	1/2	2 1/2	4 1/2	3	3	4.30
1 1/8	6200	5900	5/8	2 1/4	4 3/4	3	4	8
1 1/4	9500	7440	5/8	2 1/2	5	3	4	8.10
1 1/2	13800	10807	3/4	3	6 1/2	4	5	15.60
1 3/4	18600	14566	3/4	3 3/4	7 3/4	5	5	18.70
2	24600	19265	3/4	3 1/2	8 1/4	5	6	22.80
2 1/4	32300	25295	3/4	3 1/2	9 1/2	6	6	26.40
2 1/2	39800	31169	3/4	3 3/4	9 3/4	6	6	26.70
2 3/4	49400	38687	1	3 3/4	10	5 3/4	6	26.80
3	60100	47066	1	3 3/4	11	6 1/4	7	32.60

PIPE SUPPORTS and HARDWARE

FIG. 518

**WELDED BEAM BRACKET W/ HEX
HEAD MACHINE BOLT OR PIN**

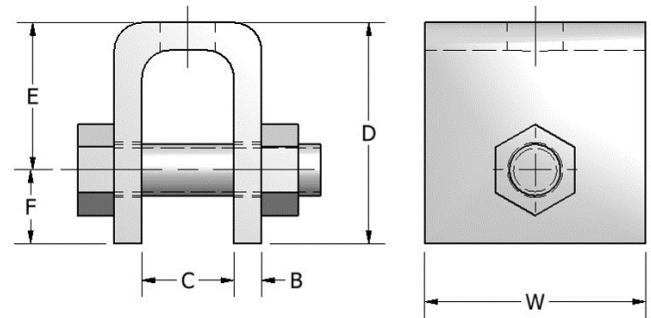
APPLICATION: Beam Brackets with Hex Head Machine Bolts when welded to the bottom flange of the I Beam, takes full advantage of the load carrying capability of the beam. It also allows the attached rod to swing in all directions according to the movement of the piping supported.

CONSTRUCTION: Beam Brackets with Hex Head Machine Bolts are manufactured of wrought steel.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, rod diameter, name and finish, if other than black.

EXAMPLE: Fig. 518, 3/8", Beam Bracket with Hex Head Machine Bolt.



ROD SIZE A (IN)	BOLT SIZE	MAX LOAD 650°F	MAX LOAD 750°F	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	W (IN)	WT EA W/ BOLT
3/8	1/2 x 2 1/2	730	572	1/4	1 1/4	2 7/8	2	7/8	2	1.20
1/2	5/8 x 2 1/2	1350	1057	1/4	1 1/4	2 7/8	2	7/8	2	1.30
5/8	3/4 x 2 3/4	2160	1692	1/4	1 1/4	2 7/8	2	7/8	2	1.60
3/4	7/8 x 4	3230	2530	3/8	1 7/8	3 1/8	2	1 1/8	2 1/2	2.80
7/8	1 x 4	4480	3508	3/8	2	4 1/4	3	1 1/4	2 1/2	3.90
1	1 1/8 x 5	5900	4620	1/2	2 1/2	4 1/2	3	1 1/2	3	6.30
1 1/8	1 1/4 x 5	6200	5900	5/8	2 1/4	4 3/4	3	1 3/4	4	7 1/2
1 1/4	1 3/8 x 5 3/8	9500	7440	5/8	2 1/2	5	3	2	4	10.20
1 1/2	1 5/8 x 6	13800	10807	3/4	3	6 1/2	4	2 1/2	5	19.00
1 3/4	1 7/8 x 6 7/8	18600	14566	3/4	3 3/4	7 3/4	5	2 3/4	5	24.20
2	2 1/4 x 6 7/8	24600	19265	3/4	3 1/2	8 1/4	5	3 1/4	6	30.60
2 1/4	2 1/2 x 7 3/8	32300	25295	3/4	3 1/2	9 1/2	6	3 1/2	6	36.80
2 1/2	2 3/4 x 7 5/8	39800	31169	3/4	3 3/4	9 3/4	6	3 3/4	6	39.70
2 3/4	3 x 7	49400	38687	1	3 3/4	10	6	4	6	40.80
3	3 1/4 x 7	60100	47066	1	3 3/4	11	7	4	7	46.70



PIPE SUPPORTS and HARDWARE

FIG. 521

STRUCTURAL WELDING LUG, SHORT

FIG. 522

STRUCTURAL WELDING LUG, LONG

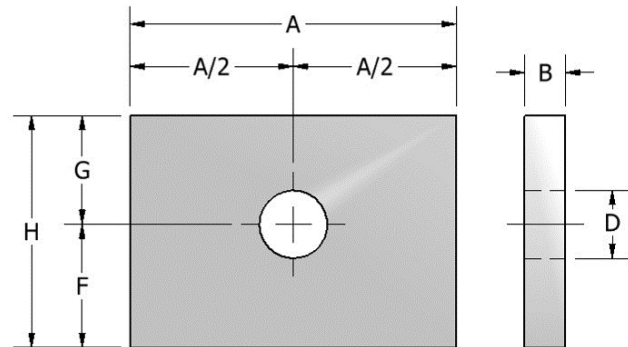
APPLICATION: A Fig. 521 or 522 Welding Lug is commonly used for welding to the underside of a structural member in order to provide an attachment to the structure for a Type "C" Variable Spring Hanger or a Fig. 415 Forged Steel Clevis. In addition, a Fig. 521 or 522 Welding Lug is sometimes welded to the outer surface of a pipe to facilitate the attachment to the pipe of a Fig. 415 Forged Steel Clevis. Side by side Fig. 521 or 522 Welding Lugs may also be used to provide an attachment for a Type "B" Variable Spring Hanger, a Fig. 418 Weldless Eye Nut or a Fig. 457 or 460 Eye Rod. The Fig. 521 and 522 Welding Lugs are sized to insure that the load carrying capability of the lug equals or exceeds the load carrying capability of the bolt.

CONSTRUCTION: A Fig. 521 or 522 Welding Lug is made from SA-36 carbon steel plate to the dimensions given in the table.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, name, bolt diameter to be accommodated and finish, if other than black.

EXAMPLE: Fig. 521 or Fig. 522, Welding Lug, 1 1/2" bolt diameter.

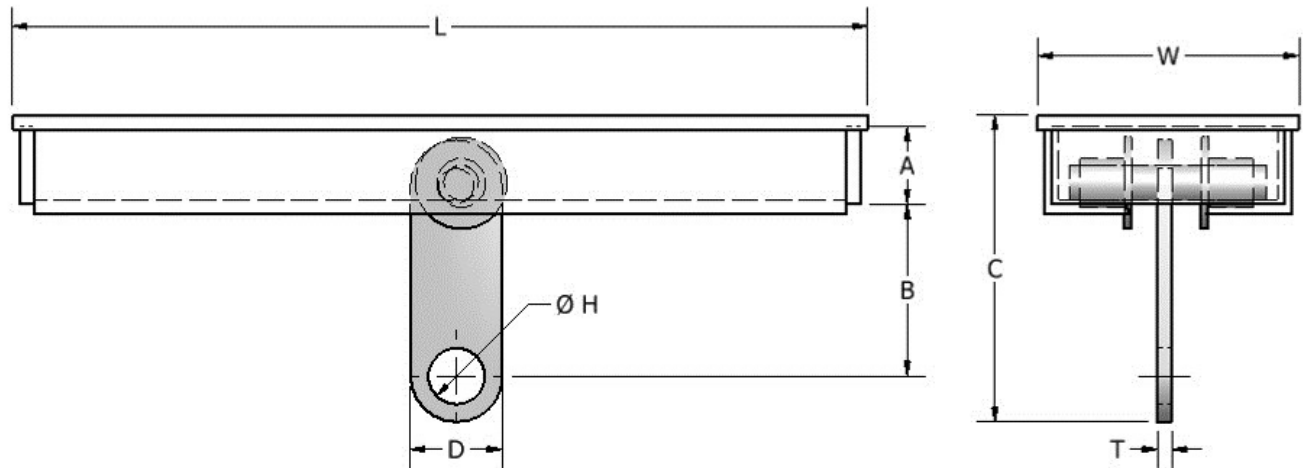


ROD SIZE (IN)	PIN OR BOLT DIAM (IN)	A (IN)	B (IN)	D (IN)	F (IN)	G (SHORT LUG) (IN)	G (LONG LUG) (IN)	H (SHORT LUG) (IN)	H (LONG LUG) (IN)	MAX. REC. LOAD 650°F LBS.	MAX. REC. LOAD 750°F LBS.	WT EA (SHORT LUG)	WT EA (SHORT LUG)
3/8		2 1/2	1/2	9/16	1 1/4	1 1/2		2 3/4		2950	2950	0.04	
1/2	5/8	2 1/2	1/4	9/16	1 1/4	1 1/2	3	2 3/4	4 1/4	1350	1057	0.48	0.75
5/8	3/4	2 1/2	1/4	13/16	1 1/4	1 1/2	3	2 3/4	4 1/4	2160	1692	0.41	0.68
3/4	7/8	2 1/2	3/8	15/16	1 1/4	1 1/2	3	2 3/4	4 1/4	3230	2530	0.6	1
7/8	1	2 1/2	3/8	1 1/8	1 1/4	2	3	3 1/4	4 1/4	4480	3508	0.74	0.98
1	1 1/8	3	1/2	1 1/4	1 1/2	2	3	3 1/2	4 1/2	5900	4620	1.2	1.6
1 1/8	1 1/4	3	1	1 3/8	1 1/2	3	3	4 1/2	4 1/2	6230	6230	1.6	2.5
1 1/4	1 3/8	4	5/8	1 1/2	2	3	4	5	6	9500	7440	3	3.7
1 1/2	1 5/8	5	3/4	1 3/4	2 1/2	3	4 1/2	5 1/2	7	13800	10807	4.8	6.4
1 3/4	1 7/8	5	3/4	2	2 1/2	3	4 1/2	5 1/2	7	18600	14566	4.7	6.3
2	2 1/4	6	3/4	2 3/8	3	4	4 1/2	7	7 1/2	24600	19265	7.2	8.8
2 1/4	2 1/2	6	3/4	2 5/8	3	4 1/2		7 1/2		32300	25295	7.6	
2 1/2	2 3/4	8	1	2 7/8	4	4 1/2		8 1/2		39800	31169	15.5	
2 3/4	3	8	1	3 1/8	4	4 1/2		8 1/2		49400	38687	15.1	
3	3 1/4	8	1	3 3/8	4	5		9		60100	47066	16	

PIPE SUPPORTS and HARDWARE

FIG. 524

HORIZONTAL TRAVELER



APPLICATION: Fig, 524 Horizontal Traveler facilitates the supporting of piping systems subject to linear horizontal movements where head-room is limited. Design for use with EQUAL Variable Spring Hangers or Constant Supports it can also be used in conjunction with a rigid type hanger assembly.

ORDERING: Specify figure number, size number, name and "H" dimension. If required, Horizontal Travelers will be designed for special loads, travels or dual directional travel, upon request.

SIZE	MAXIMUM LOAD	WT	A (IN)	B (IN)	C (IN)	D (IN)	H MAX (IN)	L (IN)	T (IN)	W (IN)
1	3880	15	2 1/2	1 5/8	5 3/8	2 1/2	1 1/8	15 1/8	3/4	4 5/8
2	6300	37	3 1/2	2 5/8	7 7/8	3 1/2	1 3/8	16 3/8	3/4	6 7/8
3	11700	69	5	3	10 1/2	5	1 3/4	17 7/8	1	8 7/16
4	21000	102	3	3 1/2	12 1/2	6	2 3/8	19 1/8	1 1/2	9 7/8



PIPE SUPPORTS and HARDWARE

FIG. 527 CONCRETE ATTACHMENT PLATE W/ BEAM BRACKET

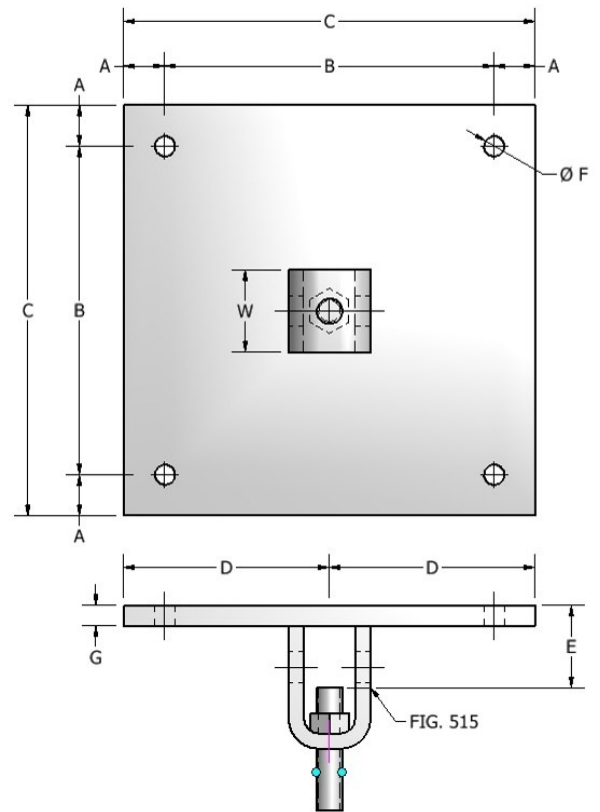
APPLICATION: Concrete Rod Attachment Plates are used to attach pipe hanger rods to concrete ceilings. Fig. 527 provides for limited vertical adjustment of the hanger rod.

CONSTRUCTION: Carbon Steel - A-36, Special materials available upon request.

FINISHES AVAILABLE: Carbon Steel - Black, Painted, or Hot Dipped Galvanized. Stainless Steel - Plain.

ORDERING: Specify figure number (Fig. 527), name (concrete rod attachment plate), rod size, and finish.

EXAMPLE: Fig. 527 concrete rod attachment plate, 1/2" dia. rod,



ROD SIZE (IN.) (IN)	MAX. REC. LOAD (LBS.)	WT EA	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G (IN)	W (IN)
3/8	610	11.66	1	8	10	5	2 1/4	9/16	3/8	2
1/2	1130	11.66	1	8	10	5	2 1/8	9/16	3/8	2
5/8	1810	15.16	1	8	10	5	2 1/4	9/16	1/2	2
3/4	2710	16.12	1	8	10	5	2 1/4	11/16	1/2	2 1/2
7/8	3770	16.73	1	8	10	5	3 1/8	11/16	1/2	2 1/2
1	4960	34.99	2	8	12	6	3 1/2	13/16	3/4	3



PIPE SUPPORTS and HARDWARE

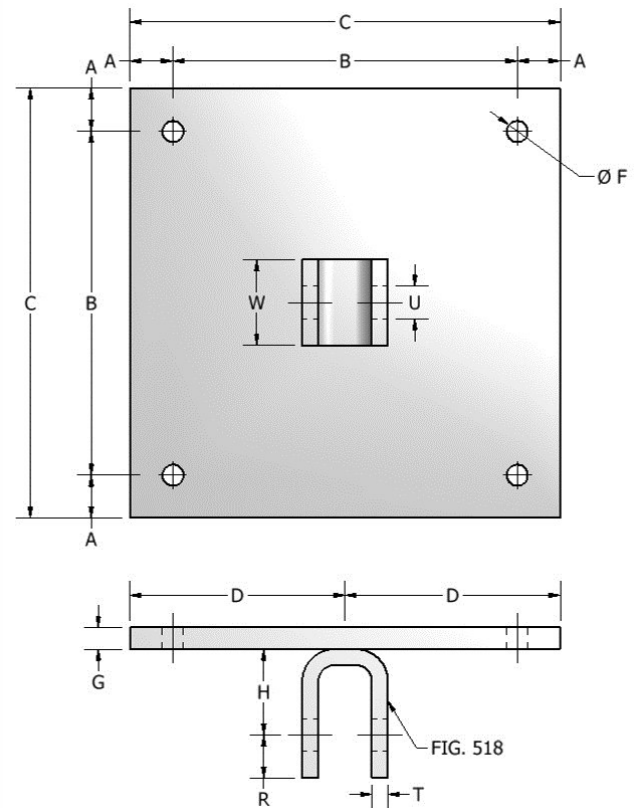
FIG. 530
**CONCRETE ATTACHMENT PLATE W/
 BEAM BRACKET W/ PIN**

APPLICATION: Concrete Clevis Plates are used to attach pipe hanger rods to concrete ceilings where rotational flexibility at the clevis plate is desired. Fig. 530 provides for vertical adjustment of the hanger rod.

CONSTRUCTION: Carbon Steel - A-36, Special materials available upon request.

FINISHES AVAILABLE: Carbon Steel - Black, Painted, or Hot Dipped Galvanized. Stainless Steel - Plain.

ORDERING: Specify figure number (Fig. 530), name (concrete clevis plate), rod size, and finish.



ROD DIA. (IN.)	MAX. REC. LOAD (LBS.)	WT EA	A (IN)	B (IN)	C (IN)	D (IN)	F (IN)	G (IN)	H (IN)	R (IN)	T (IN)	U	W (IN)
3/8	610	11.87	1	8	10	5	9/16	3/8	2	7/8	1/4	1/2 x 2 1/2	2
1/2	1130	12.01	1	8	10	5	9/16	3/8	2	7/8	1/4	5/8 x 2 1/2	2
5/8	1810	15.75	1	8	10	5	9/16	1/2	2	7/8	1/4	3/4 x 2 3/4	2
3/4	2710	16.99	1	8	10	5	11/16	1/2	2	1 1/8	3/8	7/8 x 4	2 1/2
7/8	3770	18.14	1	8	10	5	11/16	1/2	3	1 1/4	3/8	1 x 4	2 1/2
1	4960	37.01	2	8	12	6	13/16	3/4	3	1 1/2	1/2	1 1/8 x 5	3
1 1/8	6230	37.9	2	8	12	6	15/16	3/4	3	1 3/4	5/8	1 1/4 x 5	3
1 1/4	8000	40.72	2	8	12	6	15/16	3/4	3	2	5/8	1 3/8 x 5 3/8	4
1 1/2	11630	60	2	8	12	6	1 1/8	1	4	2 1/2	3/4	1 5/8 x 6	5



PIPE SUPPORTS and HARDWARE

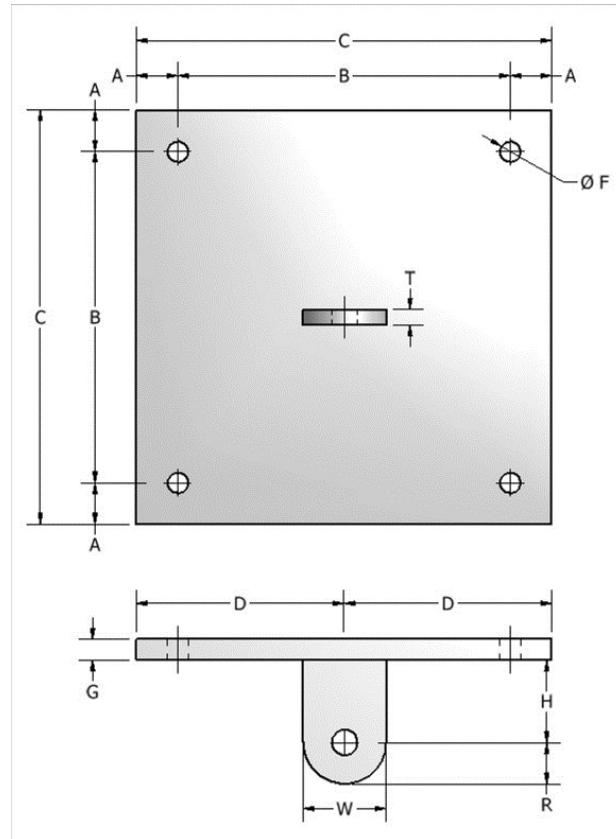
FIG. 533
CONCRETE ATTACHMENT PLATE W/ WELDING LUG

APPLICATION: Concrete Single Lug Plates are used in conjunction with Fig. 415 Forged Steel Clevises to attach pipe hanger rods to concrete ceilings. Fig. 533 provides for limited vertical adjustment of the hanger rod and allows for rotation about the axis of the pin.

CONSTRUCTION: Carbon Steel - A-36, Special materials available on request.

FINISHES AVAILABLE: Carbon Steel - Black, Painted or Hot Dip Galvanized. Stainless Steel - Plain

ORDERING: Specify figure number (Fig. 533), name (concrete single lug plate), rod diameter and finish.



ROD DIA. (IN.)	MAX. REC. LOAD (LBS.)	WT EA	A (IN)	B (IN)	C (IN)	D (IN)	F (IN)	G (IN)	H (IN)	R (IN)	T (IN)	U (IN)	W (IN)
1/2	1350	11.1	1	8	10	5	9/16	3/8	1 1/2	1 1/4	1/4	5/8	2 1/2
5/8	2160	14.6	1	8	10	5	9/16	1/2	1 1/2	1 1/4	1/4	3/4	2 1/2
3/4	3230	14.8	1	8	10	5	11/16	1/2	1 1/2	1 1/4	3/8	7/8	2 1/2
7/8	44480	22	1	8	10	5	11/16	3/4	2	1 1/4	3/8	1	2 1/2
1	5900	31.9	2	8	12	6	13/16	3/4	2	1 1/2	1/2	1 1/8	3
1 1/4	9500	43.8	2	8	12	6	15/16	1	3	2	5/8	1 3/8	4
1 1/2	13800	45.6	2	8	12	6	1 1/8	1	3	2 1/2	3/4	1 5/8	5
1 3/4	18600	55.7	2	8	12	6	1 3/8	1 1/4	3	2 1/2	3/4	1 7/8	5
2	24600	58.2	2	8	12	6	1 3/8	1 1/4	4	3	3/4	2 1/4	6



PIPE SUPPORTS and HARDWARE

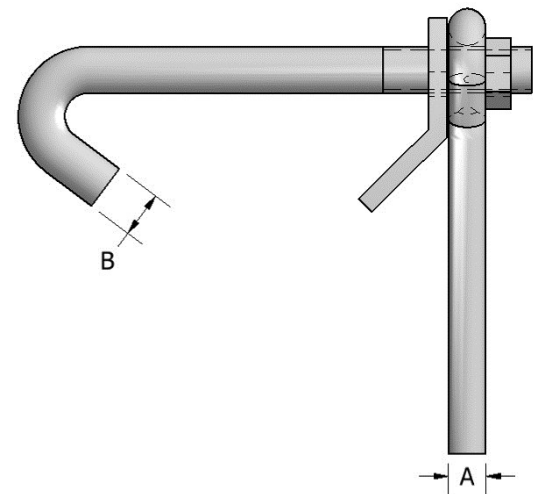
FIG. 542
TOP BEAM CLAMP

APPLICATION: Fig. 542 Top Beam Clamps are recommended for use on the top flange of standard wide flange beams, I-beams and roof trusses where the top flange thickness does not exceed .81 inches. Custom Top Beam Clamps can be provided through special order.

CONSTRUCTION: A Fig. 542 Top Beam Clamp consists of an attachment rod, a washer, a lock washer and a standard hex nut, all made of SA-36 carbon steel.

FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA.	MAX. REC. LOAD (LBS)	EYEROD DIA. A (IN)	HOOK ROD DIA. B (IN)	WT EA
1/2 - 2	730	3/8	3/8	0.38
2 1/2 - 3 1/2	940	1/2	1/2	0.67
4 & 5	940	5/8	1/2	0.67
6	940	3/4	1/2	0.67

FIG. 545
TOP BEAM HOOK

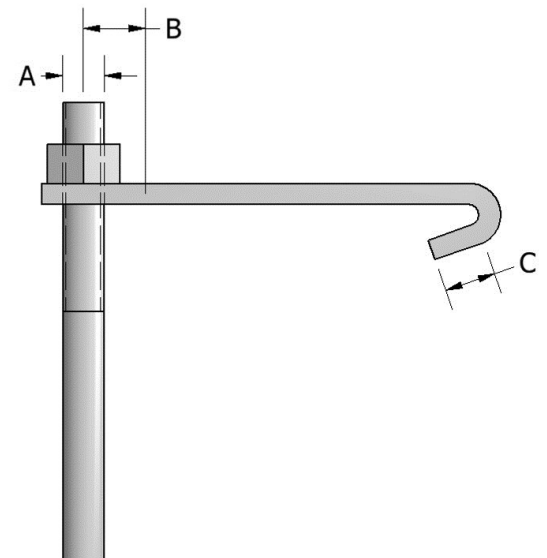
APPLICATION: Fig. 545 Top Beam Hooks are recommended for use on the top flange of standard wide flange beams, I-beams, tees and angle trusses. Top Beam Hooks are not recommended where upward movement of the pipe may occur from surge or seismic loading.

CONSTRUCTION: A Fig. 545 Top Beam Hook consists of a bent flat bar with a hook on one end and an attachment hole for the support rod in the other end of the flat bar.

FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.

ORDERING: Specify figure number, type, name and finish, if other than black.

EXAMPLE: Fig. 545, 4, Top Beam Hook, HDG.



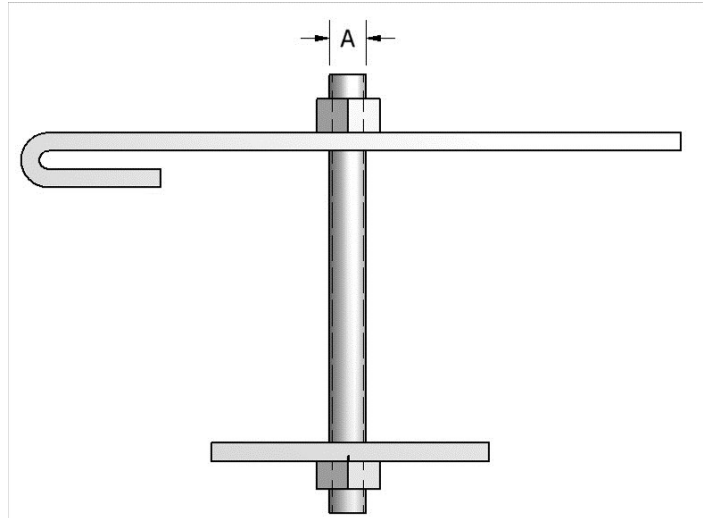
TYPE	MAX. REC. LOAD (LBS)	A (IN)	B (IN)	C (IN)
1	300	3/8	5/16	1
2	500	1/2	3/8	1
3	700	5/8	7/16	1
4	1000	3/4	1/2	1 1/2
5	2000	7/8	9/16	1 1/2



PIPE SUPPORTS and HARDWARE

FIG. 548
THREADED TOP HOOK

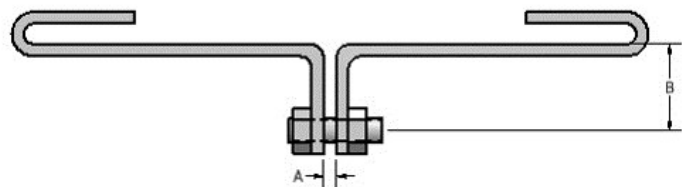
APPLICATION: Fig. 548 Threaded Top Hooks are recommended for use over back to back angles or the top chord of metal bar joists.
CONSTRUCTION: A Fig. 548 Threaded Top Hook consists of a bent flat bar with a hook on one end and a threaded attachment hole for the support rod in the middle of the flat bar. The washer and nut are provided separately.
FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.
ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA.	MAX. REC. LOAD (LBS)	ROD DIA. A (IN)
1/2 - 4	300	3/8
5 & 6	600	3/4

FIG. 551
CENTER LOAD BEAM CLAMP

APPLICATION: Fig. 551 Center Load Beam Clamps are recommended for use in suspending hanger rods from the center of an overhead support beam.
CONSTRUCTION: A Fig. 551 Center Load Beam Clamp consists of two bent flat bars as shown in the diagram above. One end of each flat bar is hooked and the other is bent and a hole is punched in the flat bar. Both bent flat bars are attached with a support bolt and hex nut to which a hanger rod can be attached.
FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.
ORDERING: Specify figure number, type, width of flange, name and finish, if other than black.
EXAMPLE: Fig. 551, type 4, Flange width = 8", Center Load Beam



TYPE	MAX. REC. LOAD (LBS)	A (IN)	B* (IN)	BOLT DIA. D (IN)
5	1000	5/8	1 1/8	1/2
6	3000	7/8	1 5/8	3/4



PIPE SUPPORTS and HARDWARE

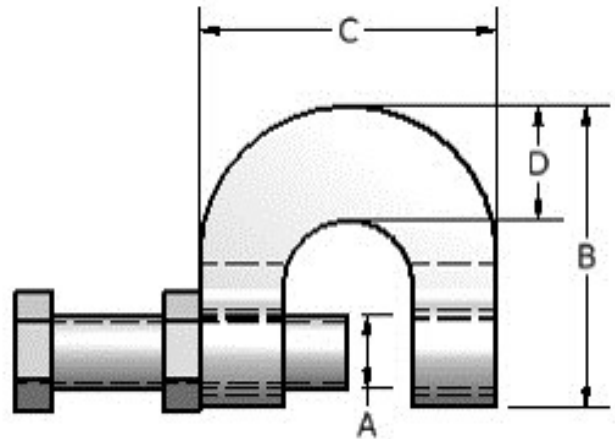
FIG. 554
STEEL "C" CLAMP W/ LOCK NUT

APPLICATION: Steel C-Clamps with Locknuts are used to mechanically attach hanger rods to supporting structural members where the welding of Beam Brackets or Side Beam Brackets is not desired or allowed. The structural member may be I beams, wide flange beams, channels, tees or angles where the thickness does not exceed 3/4". The locking nut when tightened prevents loosening of the "set screw" from vibration. In piping systems where vibration is of a concern, the Steel C-Clamp with Locknut is highly recommended.

CONSTRUCTION: Steel C-Clamps are made of carbon steel. Hardened steel cup point "set screws" with carbon steel locknuts are also provided.

FINISHES AVAILABLE: Black, Electro-Plated or HDG.

ORDERING: Specify figure number, rod diameter, name and finish.



MAX. PIPE DIA.	ROD DIA. A (IN)	B (IN)	C (IN)	D (IN)	MAX. REC. LOAD	WT EA
4	3/8	2 3/8	2 3/8	5/8	400	0.40
4	1/2	2 3/8	2 3/8	5/8	500	0.40
5	5/8	2 5/16	2 3/8	3/4	550	0.60
6	3/4	2 5/16	2 3/8	3/4	630	0.68
8	7/8	3 5/16	3	1 3/8	1200	1.88

FIG. 557
STEEL REVERSIBLE "C" CLAMP W/ LOCK NUT (3/4" OPENING)

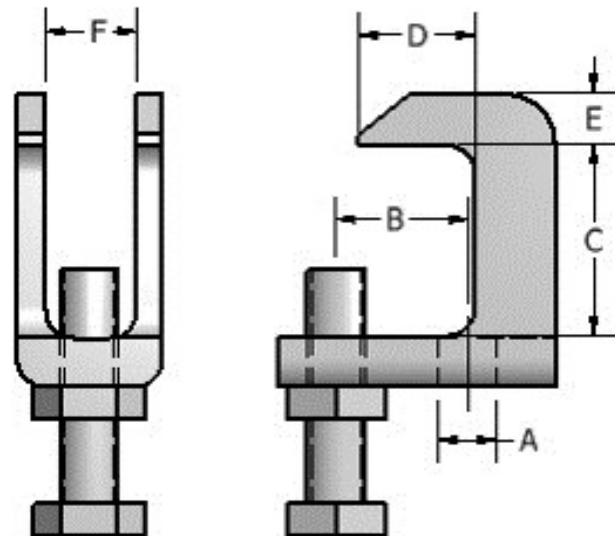
APPLICATION: Reversible C-Type Beam Clamps with Locknuts are used to mechanically attach hanger rods to supporting structural members where the welding of Beam Brackets or Side Beam Brackets is not desired or allowed. The structural member may be I beams, wide flange beams, channels, tees or angles where the thickness does not exceed 3/4". The locking nut when tightened prevents loosening of the "set screw" from vibration. In piping systems where vibration is of a concern, the Reversible C-Type Beam Clamp with Locknut is highly recommended. The offset design permits unlimited rod adjustment. The hanger rod may be threaded completely through the clamp. The open design allows easy inspection of the thread engagement.

CONSTRUCTION: Reversible C-Type Beam Clamps are made of carbon steel. Hardened steel cup point "set screws" with carbon steel locknuts are also provided.

FINISHES AVAILABLE: Black, Electro-Plated or HDG.

ORDERING: Specify figure number, rod diameter, name and finish.

EXAMPLE: Fig. 557, 1/2", Reversible C-Type Beam Clamp with



ROD DIA. A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	MAX. REC. LOAD (LBS)*	WT EA
3/8	1 3/16	3/4	1	7/16	1	610	0.28
1/2	1 1/2	3/4	1	9/16	1 1/4	1130	0.55
5/8	1 1/2	3/4	1	9/16	1 1/4	1130	0.55



PIPE SUPPORTS and HARDWARE

FIG. 560
**STEEL REVERSIBLE "C" CLAMP W/
 LOCK NUT (1 1/4" OPENING)**

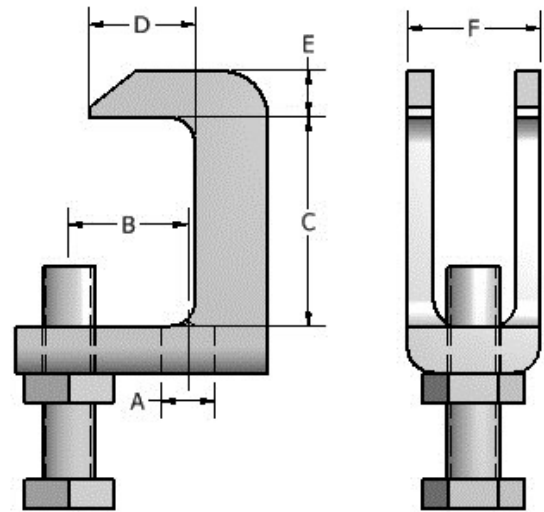
APPLICATION: Reversible C-Type Beam Clamps with Locknuts are used to mechanically attach hanger rods to supporting structural members where the welding of Beam Brackets or Side Beam Brackets is not desired or allowed. The structural member may be I beams, wide flange beams, channels, tees or angles where the thickness does not exceed 1 1/4". The locking nut when tightened prevents loosening of the "set screw" from vibration. In piping systems where vibration is of a concern, the Reversible C-Type Beam Clamp with Locknut is highly recommended. The offset design permits unlimited rod adjustment. The hanger rod may be threaded completely through the clamp. The open design allows easy inspection of the thread engagement.

CONSTRUCTION: Reversible C-Type Beam Clamps are made of carbon steel. Hardened steel cup point "set screws" with carbon steel locknuts are also provided.

FINISHES AVAILABLE: Black, Electro-Plated or HDG.

ORDERING: Specify figure number, rod diameter, name and finish.

EXAMPLE: Fig. 560, 3/8", Reversible C-Type Beam Clamp with Lock-



ROD DIA. A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	MAX. REC. LOAD (LBS)*	WT EA
3/8	1 3/16	1 1/4	1	7/16	1	610	0.28
1/2	1 1/2	1 1/4	1	9/16	1 1/4	1130	0.55
5/8	1 1/2	1 1/4	1	9/16	1 1/4	1130	0.55

FIG. 563
**WIDE THROAT BEAM "C" CLAMP W/
 LOCK NUT**

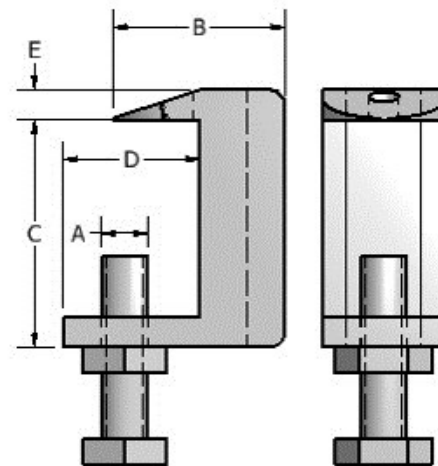
APPLICATION: Wide Throat Top Beam "C" Clamps with Locknuts are used to mechanically attach hanger rods to supporting structural members where wider throats are required for proper attachment. This design is particularly useful under roofs with bar joists. This "C" Clamp must be used with the set screw on the bottom side of the beam.

CONSTRUCTION: Wide Throat Top Beam "C" Clamps with Locknuts are made of carbon steel. Hardened steel cup point "set screws" with carbon steel locknuts are also provided.

FINISHES AVAILABLE: Black, Electro-Plated or HDG.

ORDERING: Specify figure number, rod diameter, name and finish.

EXAMPLE: Fig. 563, 1/2", Wide Throat Top Beam "C" Clamp with



ROD DIA. A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	MAX. REC. LOAD	WT EA
3/8	1 11/16	3/4	29/32	3/8	400	0.34
1/2	1 11/16	1 1/8	7/8	3/8	500	0.5
5/8	2 1/4	1 1/4	1	1/2	600	0.53
3/4	2 3/8	1 1/4	1 1/8	9/16	800	0.86



PIPE SUPPORTS and HARDWARE

FIG. 566

BEAM CLAMP RETAINING STRAP

APPLICATION: Fig. 566 Beam Clamp Retaining Straps are recommended for use with various types of beam clamps in order to provide a more secure means of fastening to the structural member.

CONSTRUCTION: A Fig. 566 Beam Clamp Retaining Strap consists of a bent flat bar with a hook on one end and an attachment hole for the support rod or the beam clamp in the other end of the flat bar.

FINISHES AVAILABLE: Electro-Plated.

ORDERING: Specify figure number, type, name and finish.



TYPE	ROD DIA. A (IN)	HOLE DIAM	B (IN)
1	3/8	7/16	Specify
1a	1/2	9/16	Specify
2	5/8	11/16	Specify
2a	3/4	13/16	Specify
3	3/8 - 7/8	Specify	Specify

FIG. 567

C CLAMP RETAINING CLIP

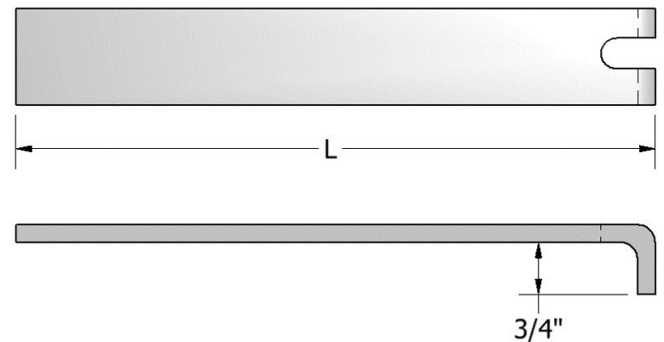
APPLICATION: Fig. 567 C Clamp Retaining Clip is designed for use with Figs. 554, 557, 560, & 563 to eliminate movement of the beam clamp due to vibration.

MATERIAL: Carbon Steel

FINISHES AVAILABLE: Plain or Electro-Plated.

ORDERING: Specify figure number, length and finish.

EXAMPLE: Fig. 567, 10in, Electro-Plated.



MATERIAL	WT EA (LBS)					
	LENGTH "L"					
	4 1/2"	6	8	10	12	14
11GA X 1 1/4	0.22	0.3	0.36	0.44	0.48	0.66

FIG. 569

RETROFIT-CAPABLE BEAM CLAMP RETAINING STRAP

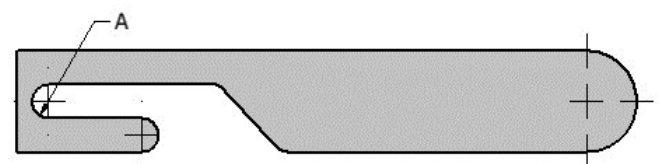
APPLICATION: Fig. 569 Retrofit Capable Beam Clamp Retaining Straps are recommended for use with various types of beam clamps in order to provide a more secure means of fastening to the structural member. This design enables the installation of the unit on a retrofit basis. NFPA #13 requires the use of retaining straps with all beam clamps installed in regions susceptible to earthquakes.

CONSTRUCTION: A Fig. 569 Retrofit Capable Beam Clamp Retaining Strap consists of a bent flat bar with a hook on one end and an attachment hole for the support rod or the beam clamp in the other end of the flat bar.

FINISHES AVAILABLE: Electro-Plated.

ORDERING: Specify figure number, rod diameter, name and finish.

EXAMPLE: Fig. 569, 1/2", Retrofit Capable Beam Clamp Retaining



ROD DIA. A (IN)	LENGTH (IN)
3/8	Specify
1/2	Specify



PIPE SUPPORTS and HARDWARE

FIG. 572

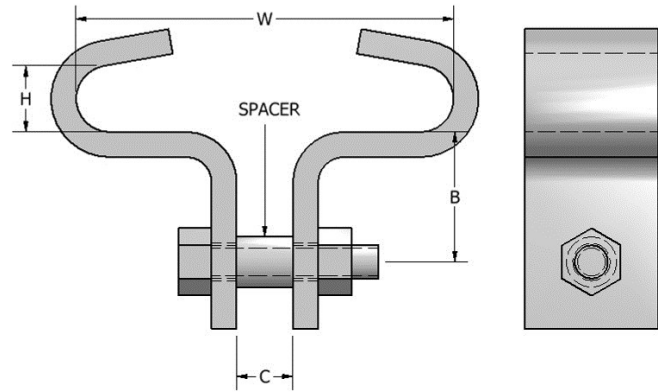
STANDARD & HEAVY BEAM CLAMP W/ BOLT & NUT

APPLICATION: Fig. 572 Beam Clamps with Bolts and Nuts are recommended for use in suspending hanger rods from the center of an overhead Truss Joist support beams.

CONSTRUCTION: A Fig. 572 Beam Clamp with Bolt and Nut consists of two bent flat bars as shown in the diagram above. Each flat bar is bent to go around the structural member and the other end of the flat bar is punched to accommodate an attachment bolt. Both bent flat bars are connected with a support bolt and hex nut to which a hanger rod can be attached.

FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.

ORDERING: Specify figure number, size, name and finish.



SIZE	B (IN) STANDARD	B (IN) HEAVY	C (IN) STANDARD	C (IN) HEAVY	BEAM DIM. H (IN)	BEAM DIM. W (IN)	WT EA STANDARD	WT EA HEAVY
1	1 3/8	2 1/4	1/2	3/4	1/2	4	0.91	3.82
2	1 3/8	2 1/4	1/2	3/4	5/8	5	1	4.35
3	1 3/8	2 1/4	1/2	3/4	3/4	6	1.15	4.52
4	1 3/8	2 1/4	1/2	3/4	7/8	7	1.29	4.84
5	1 3/8	2 1/4	1/2	3/4	7/8	8	1.44	5.1
6	1 3/8	2 1/4	1/2	3/4	1	9		5.83
7	1 3/8	2 1/4	1/2	3/4	1	10		6.25
8	1 3/8	2 1/4	1/2	3/4	1	11		6.67
9	1 3/8	2 1/4	1/2	3/4	1	12		7.09

FIG. 575

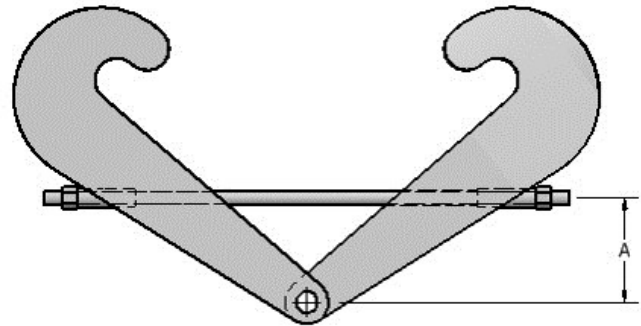
ADJUSTABLE HOOK BEAM CLAMP

APPLICATION: Fig. 575 Adjustable Hook Beam Clamps are recommended for use in suspending hanger rods from the center of overhead support beams where the flange thickness does not exceed .60 inches and where the flange widths are between 2 3/8" and 7".

CONSTRUCTION: A Fig. 575 Adjustable Hook Beam Clamp consists of two malleable iron hook units connected at the bottom by a support bolt and at the widest span of the two hooks by an all thread rod with two hex nuts. All components are carbon steel.

FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.

ORDERING: Specify figure number, size, name and finish.



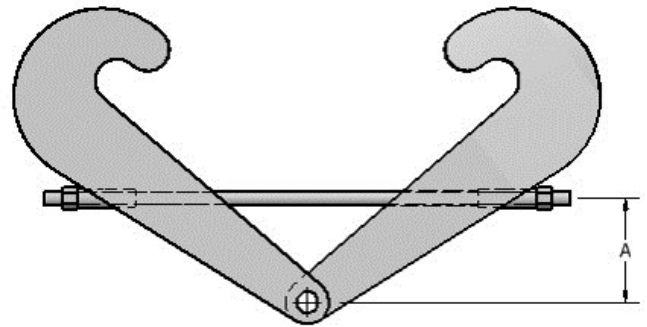
A (7/8" MAX ROD)	ROD TAKE OUT FOR WIDTH OF BEAM FLANGE (IN)						BOLT DAIM	WT EA	MAX REC LOAD (LBS)
	2 3/8	3	4	5	6	7			
CLAMP ONLY	3 1/2	3 7/16	3 5/16	2 15/16	2 9/16	1 7/8	7/16	2.46	1365



PIPE SUPPORTS and HARDWARE

FIG. 576
HEAVY ADJUSTABLE HOOK BEAM CLAMP

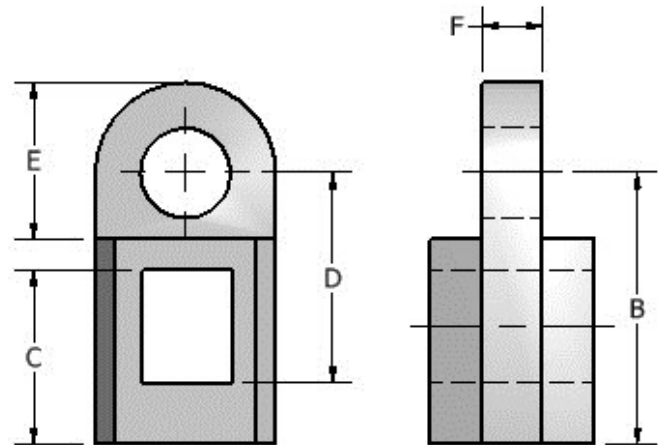
APPLICATION: Fig. 576 Heavy Hook Beam Clamp Assemblies are designed to be used for the suspension of heavy loads from beams up to 16 inches wide and up to 1 inch thick. Normally used with Fig. 457, 460 eye rods or Fig. 418 weldless eye nut.
FINISHES AVAILABLE: Plain, electro-galvanized or painted.
ORDERING: Specify clamp size, figure number, rod size and finish.



SIZE	FLANGE WIDTH (IN)	FLANGE MAX THICKNESS (IN)	MAX ROD (IN)	WT EA	MAX LOAD (LBS)
1	3-8	5/8	3/4	8	2800
2	7-12	5/8	3/4	12	2800
3	3-8	3/4	1	11	5000
4	7-15	3/4	1	16	5000
5	5-11	1	1 1/2	30	11500
6	8-16	1	1 1/2	48	11500

FIG. 581
EXTENSION PIECE USED W/ FIG. 575

APPLICATION: Fig. 581 Extension Pieces are recommended for use in suspending hanger rods from overhead support bolts or pins.
CONSTRUCTION: A Fig. 581 Extension Piece consists of a malleable iron threaded collar with a support hole in the other end of the unit. The unit is carbon steel.
FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.
ORDERING: Specify figure number, rod diameter, name and finish.



PIPE SIZE (IN)	ROAD DIAM (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	MAX REC LOAD (LBS)	WT EA
1/2 - 2	3/8	2 1/16	1 5/16	1 3/16	9/16	1/2	610	0.19
2 1/2 - 3 1/2	1/2	2 5/16	1 7/16	1 5/16	11/16	5/8	1130	0.42
4 - 5	5/8	2 7/16	1 9/16	1 7/16	3/4	5/8	1810	0.42
6	3/4	2 7/8	1 7/8	1 9/16	7/8	5/8	2710	0.68
8 - 12	7/8	3 1/16	2	1 11/16	7/8	3/4	2950	0.78



PIPE SUPPORTS and HARDWARE

FIG. 584

ADJUSTABLE SIDE BEAM CLAMP

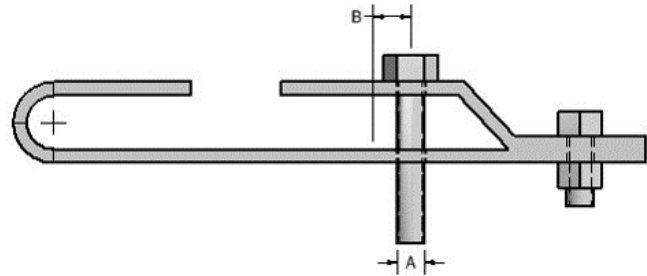
APPLICATION: Fig. 584 Adjustable Side Beam Clamps are recommended for use in suspending hanger rods from the edge of the overhead support beams. The support members are I-beams or wide flange beams.

CONSTRUCTION: A Fig. 584 Adjustable Side Beam Clamp consists of two bent flat bars as shown in the diagram above. One end of one flat bar is hooked and the other end of the flat bar has a hole and a slot punched in it as shown. The second flat bar is offset as shown in the diagram and has a hole and a slot punched in it as shown. Both bent flat bars are attached with a bolt and hex nut as shown. The flat bars are carbon steel.

FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.

ORDERING: Specify figure number, rod diameter, width and thickness of flange, name and finish, if other than black.

EXAMPLE: Fig. 584, 5/8", Flange width = 5.25" & thickness = .330",



SIZE	STOCK SIZE	A (IN)	B (IN)
1	1 1/4 X 1/4	3/8	5/16
2	1 1/4 X 1/4	1/2	5/16
3	1 1/2 X 3/8	5/8	7/16
4	2 X 3/8	3/4	1/2
5	2 1/2 X 1/2	7/8	9/16

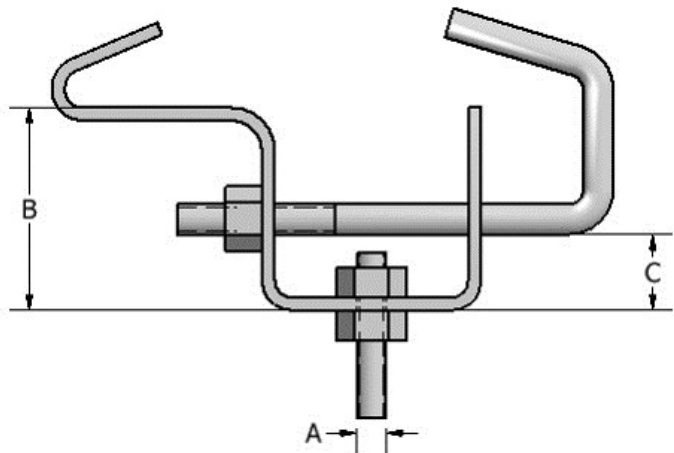
FIG. 587

ADJUSTABLE BEAM CLAMP

APPLICATION: Fig. 587 Adjustable Beam Clamps are recommended for use in suspending hanger rods from the center of overhead support beams. The support members are I-beams or wide flange beams with a flange width from 3 1/2" to 8" and a flange thickness up to 1/2".

CONSTRUCTION: A Fig. 587 Adjustable Beam Clamp consists of one bent flat bar and one bent rod as shown in the diagram above. One end of the flat bar is bent to hook around the flange member and the one end of the rod is bent to hook around the other edge of the flange member. The flat bar and rod are made of carbon steel.

FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.
ORDERING: Specify figure number, rod diameter, name and finish, if other than black.



ROD DIA. A (IN)	MATERIAL	FLANGE WIDTH MIN	FLANGE WIDTH MAX	B (IN)	C (IN)	MAX. REC. LOAD (LBS)	WT EA
0.375	3ga x 1 1/4	3.5	8	2 3/4	1	300	0.98
0.5	3ga x 1 1/2	3.5	8	2 3/4	1	700	1.38
0.625	3ga x 1 3/4	3.5	8	2 3/4	7/8	1000	1.86

PIPE SUPPORTS and HARDWARE

FIG. 600

CLEVIS HANGER—LIGHT DUTY

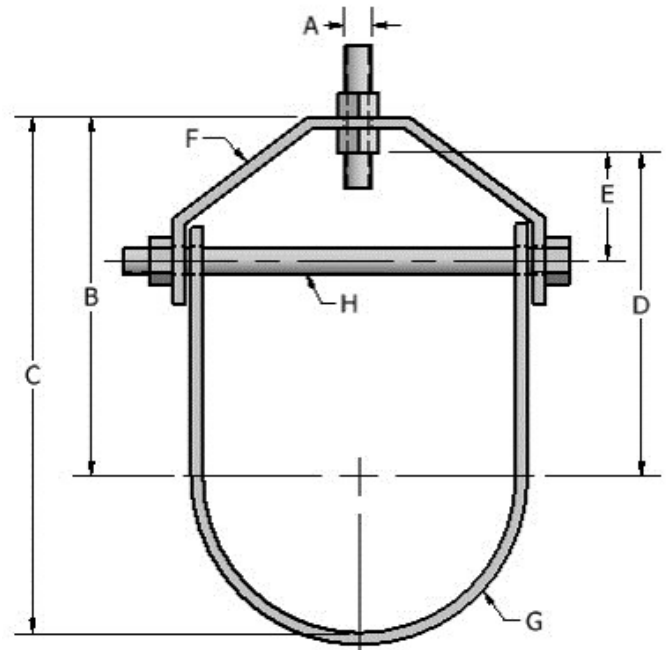
APPLICATION: A Light Duty Clevis Hanger provides for small vertical loads to be supported and for elevation adjustment of 1 1/16 inches to 2 1/4 inches depending upon the pipe diameter/hanger size. Temporary support is not required for the piping while elevation changes are being made. The lower nut adjusts the piping to the proper elevation and the upper nut, when locked into position, prevents loosening due to vibration.

CONSTRUCTION: A Fig. 600 Light Duty Clevis Hanger consists of a yoke and a support strap made from shaped carbon steel plate or bar stock and a joining bolt.

NOTE: Fig. 600 does not include hanger rod or nuts as shown in picture.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA.	MAX. REC. LOAD (LBS.)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	STEEL SIZE F	STEEL SIZE G	BOLT H (IN)	WT EA
3/8	150	3/8	2 7/16	2 7/8	2 1/16	1 1/16	16 ga x 7/8	16 ga x 7/8	1/4	0.11
1/2	150	3/8	2 7/16	2 7/8	2 1/16	1 1/16	16 ga x 7/8	16 ga x 7/8	1/4	0.13
3/4	250	3/8	2 11/16	3 3/16	2 5/16	1 1/8	16 ga x 7/8	16 ga x 7/8	1/4	0.28
1	250	3/8	2 5/8	3 5/16	2 1/4	1 1/8	16 ga x 7/8	16 ga x 7/8	1/4	0.31
1 1/4	250	3/8	3 1/16	3 7/8	2 11/16	1 5/16	16 ga x 7/8	16 ga x 7/8	1/4	0.33
1 1/2	250	3/8	3 1/4	4 1/8	2 7/8	1 3/16	13 ga x 7/8	16 ga x 7/8	1/4	0.36
2	250	3/8	3 13/16	5	3 7/8	1 5/8	13 ga x 7/8	13 ga x 7/8	1/4	0.37
2 1/2	350	1/2	4 1/4	5 1/16	3 11/16	1 7/16	1/8 x 1 1/4	1/8 x 1 1/4	1/4	0.89
3	350	1/2	4 1/4	6	3 11/16	1 1/4	1/8 x 1 1/4	1/8 x 1 1/4	1/4	0.98
3 1/2	350	1/2	4 1/2	6 1/2	3 15/16	1 3/16	1/8 x 1 1/4	1/8 x 1 1/4	5/16	1.07
4	400	5/8	5 9/16	7 13/16	4 13/16	2 1/4	3/16 x 1 1/4	1/8 x 1 1/4	3/8	1.3



PIPE SUPPORTS and HARDWARE

FIG. 603

CLEVIS HANGER—STANDARD

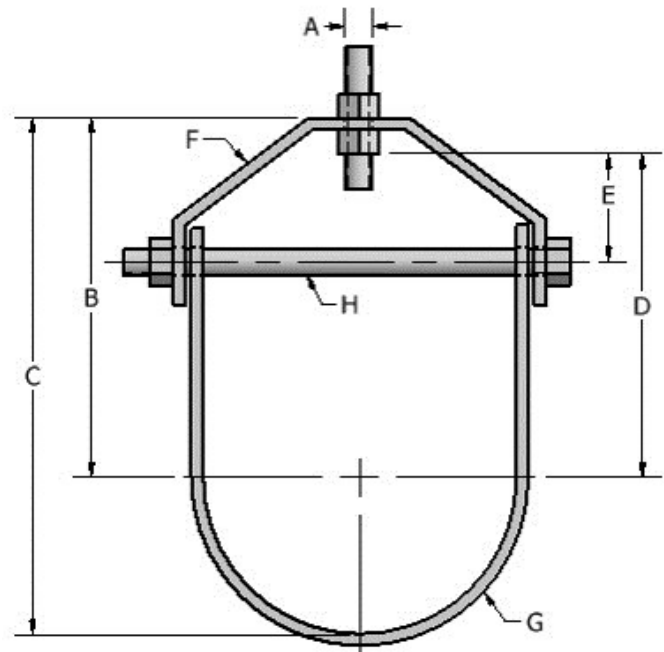
APPLICATION: A standard Clevis Hanger provides for sizeable loads to be supported and for an elevation adjustment of ½ inch to ¾ inches depending upon the pipe diameter/hanger size. Temporary support is not required for the piping while elevation changes are being made. The lower nut adjusts the piping to the proper elevation and the upper nut, when locked into position, prevents loosening due to vibration.

CONSTRUCTION: A Fig. 603 standard Clevis Hanger consists of a yoke and a support strap made from shaped carbon steel plate or bar stock and a joining bolt.

NOTE: Fig. 603 does not include hanger rod or nuts as shown in picture.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name, and finish, if other than black.



NOM. PIPE DIA.	MAX. REC. LOAD (LBS.)	A STD. (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G (IN)	H (IN)	WT EA
1/2	610	3/8	1 11/16	2 1/16	15/16	7/16	13 ga x 7/8	13 ga x 7/8	1/4	0.18
3/4	610	3/8	1 11/16	2 9/16	15/16	7/16	13 ga x 7/8	13 ga x 7/8	1/4	0.18
1	610	3/8	2 1/16	2 11/16	1 1/4	5/8	13 ga x 7/8	13 ga x 7/8	1/4	0.22
1 1/4	610	3/8	2 1/2	3 3/16	1 11/16	7/8	13 ga x 7/8	13 ga x 7/8	1/4	0.26
1 1/2	610	3/8	2 7/8	3 11/16	2 1/16	1 1/16	12 ga x 7/8	12 ga x 7/8	1/4	0.34
2	610	3/8	3 5/16	4 7/16	2 1/2	1 8/31	12 ga x 7/8	12 ga x 7/8	1/4	0.38
2 1/2	1130	1/2	4 1/2	5 7/8	3 3/8	1 15/16	9ga x 1 3/16	10ga x 1 3/16	5/16	0.86
3	1130	1/2	4 3/4	6 1/2	3 11/16	1 3/4	9ga x 1 3/16	10ga x 1 3/16	5/16	0.96
3 1/2	1130	1/2	5 7/8	7 15/16	4 13/16	2 9/16	8ga x 1 3/16	10ga x 1 3/16	3/8	1.14
4	1430	5/8	5 15/16	8 3/16	4 9/16	2 1/8	8ga x 1 3/16	10ga x 1 3/16	1/2	1.26
5	1430	5/8	5 11/16	8 7/16	4 5/16	1 7/16	4ga x 1 1/4	8ga x 1 1/4	1/2	2.04
6	1940	3/4	3 13/16	10 1/8	5 3/16	1 3/4	3ga x 1 1/2	8ga x 1 1/2	1/2	2.80
7	2000	3/4	7 13/16	11 5/8	6 3/16	2	3ga x 1 1/2	8ga x 1 1/2	1/2	3.24
8	2000	3/4	8 1/16	12 7/16	6 1/4	1 7/8	3ga x 1 3/4	8ga x 1 3/4	1/2	4.46
10	3600	7/8	10	15 7/16	8	2 1/4	3/8 x 1 3/4	3ga x 1 3/4	3/4	8.06
12	3800	7/8	11 9/16	18	9 9/16	2 13/16	3/8 x 2	3ga x 2	3/4	10.37
14	4200	1	12 9/16	19 9/16	10 9/16	2 9/16	1/2 x 2	1/4 x 2	7/8	14.80
16	4600	1	13 15/16	21 15/16	11 15/16	2 13/16	1/2 x 2 1/2	1/4 x 2 1/2	1	21.00
18	4800	1	16	25	13 7/8	3 3/4	1/2 x 2 1/2	1/4 x 2 1/2	1 1/8	24.40
20	4800	1 1/4	17 1/2	27 1/2	15 1/8	3 3/4	5/8 x 3	3/8 x 3	1 1/4	47.00
24	4800	1 1/4	19 3/4	31 3/4	17 3/8	4	5/8 x 3	3/8 x 3	1 1/4	54.00
30	6000	1 1/4	24 1/8	39 1/8	21 1/2	4 3/4	5/8 x 3	3/8 x 3	1 1/4	69.50



PIPE SUPPORTS and HARDWARE

FIG. 606

CLEVIS HANGER W/ WELDED SHIELD

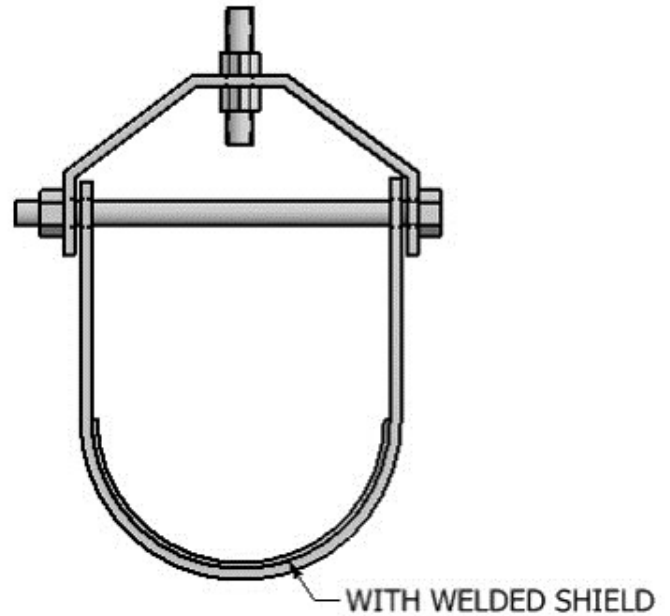
APPLICATION: Fig. 606 Clevis Hangers with Welded Shields are used to support insulated piping while preventing the crushing of the insulation or vapor barrier by the clevis hangers. Elevation adjustment is provided for as with a Standard Clevis Hanger. Temporary support is not required for the piping while elevation changes are being made.

CONSTRUCTION: A Fig. 606 Clevis Hanger with Welded Shield is a combination of the Fig. 603 Clevis Hanger and the Fig. 800 Insulation Protection Shield. The Insulation Protection Shield is rolled carbon steel plate and the Clevis Hanger consists of a yoke and a support strap made from shaped carbon steel plate or bar stock and a joining bolt.

NOTE: Fig. 606 does not include hanger rod or nuts as shown in the picture.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter from chart, name and finish, if other than black.



PIPE SIZE	THICKNESS OF PIPE INSULATION (IN)					
	1/2"	1"	1 1/2"	2"	2 1/2"	3"
1/2	1 1/2	2 1/2	3 1/2	5	6	7
3/4	2	3	3 1/2	5	6	7
1	2	3	4	5	6	7
1 1/4	2 1/2	3 1/2	4	5	6	7
1 1/2	2 1/2	3 1/2	5	6	7	8
2	3	4	5	6	7	8
2 1/2	3 1/2	5	6	7	8	10
3	4	5	6	7	8	10
3 1/2	5	6	7	8	10	10
4	5	6	7	8	10	10
5	6	7	8	10	10	12
6	7	8	10	10	12	12
8	10	10	12	12	14	16
10	12	12	14	16	16	18
12	14	16	16	18	18	20
14	16	16	18	18	20	20
16	18	18	20	20	24	24



PIPE SUPPORTS and HARDWARE

FIG. 609
ELONGATED CLEVIS HANGER

APPLICATION: An Elongated Clevis Hanger for Insulated Lines is used to support insulated piping and will accommodate a 2 inch thickness of insulation on ¾ inch to 1 ½ inches piping and a 4 inch thickness of insulation on 2 inches and larger piping. The insulation is applied around and over the clamp itself. An Elongated Clevis Hanger provides for elevation adjustment of 1 1/16 inches to 3 inches depending upon the pipe size, hanger size and insulation thickness. Temporary support is not required for the piping while elevation changes are being made.

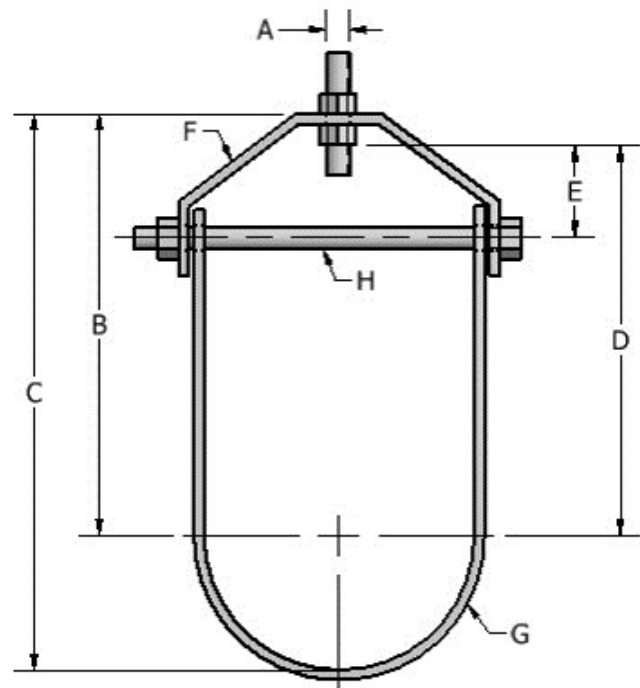
CONSTRUCTION: A Fig. 609 Elongated Clevis Hanger for Insulated Lines consists of a yoke and a support strap made from shaped carbon steel plate or bar stock and a joining bolt.

NOTE: Fig. 609 does not include hanger rod or nuts as shown in the picture.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.

EXAMPLE: Fig. 609, 8", Elongated Clevis Hanger for Insulated



NOM. PIPE DIA.	MAX. REC. LOAD (LBS.)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G (IN)	WT EA
1/2	610	3/8	3 13/16	4 1/4	3	7/16	13ga x 7/8	12ga x 7/8	0.30
3/4	610	3/8	3 3/4	4 3/16	2 15/16	7/16	13ga x 7/8	12ga x 7/8	0.33
1	610	3/8	4 1/8	4 3/4	3 5/16	5/8	13ga x 7/8	12ga x 7/8	0.34
1 1/4	610	3/8	4 7/16	5 1/4	3 5/8	7/8	13ga x 7/8	12ga x 7/8	0.39
1 1/2	610	3/8	4 3/4	5 3/4	3 15/16	1 1/16	12ga x 7/8	12ga x 7/8	0.47
2	610	3/8	7 1/4	8 7/16	6 7/16	1 1/4	12ga x 7/8	12ga x 7/8	0.65
2 1/2	1130	1/2	8 13/16	10 3/16	7 3/4	1 15/16	9ga x 1 3/16	10ga x 1 3/16	1.25
3	1130	1/2	9	10 3/4	7 15/16	1 3/4	9ga x 1 3/16	10ga x 1 3/16	1.34
4	1430	5/8	10 1/8	12 3/8	8 13/16	2 1/8	8ga x 1 3/16	10ga x 1 3/16	1.92
5	1430	5/8	9 7/8	12 9/16	8 7/16	1 7/16	4ga x 1 1/4	8ga x 1 1/4	2.58
6	1940	3/4	10 7/8	14 1/8	9 1/4	1 3/4	3ga x 1 1/2	8ga x 1 1/2	3.36
8	2000	3/4	12 1/4	16 9/16	10 7/16	1 7/8	3ga x 1 3/4	8ga x 1 3/4	5.08
10	3600	7/8	14 1/2	19 7/8	12 1/2	2 1/4	3/8 x 1 3/4	3ga x 1 3/4	9.08
12	3800	7/8	15 7/8	22 1/4	13 39/50	2 13/16	3/8 x 2	3ga x 2	11.54
14	4200	1	19 1/2	26 1/2	15 7/8	2 1/8	1/2 x 2	1/4 x 2	14.80
16	4800	1	23	31	17 1/8	2 5/8	1/2 x 2 1/2	1/4 x 2 1/2	21.00
18	4800	1	24 3/4	33 3/4	19 1/4	3 1/4	1/2 x 2 1/2	1/4 x 2 1/2	24.35

PIPE SUPPORTS and HARDWARE

FIG. 612
CLEVIS HANGER—STANDARD PVC
COATED

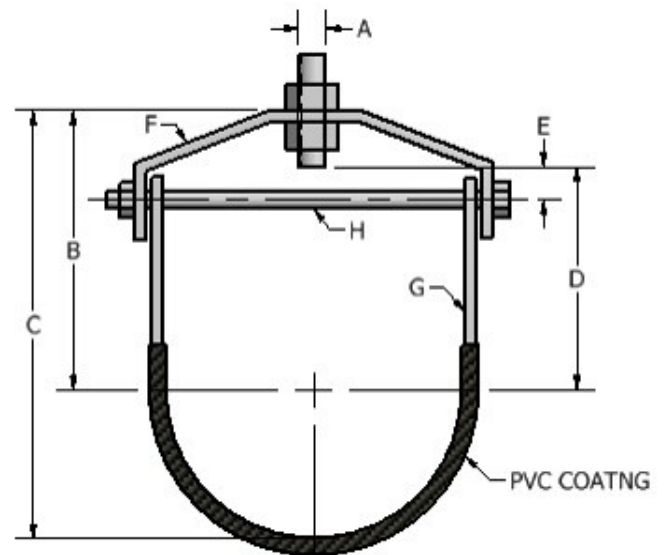
APPLICATION: A PVC Coated Standard Clevis Hanger provides for sizeable loads to be supported and for an elevation adjustment of ½ inch to 3 ¾ inches depending upon the pipe diameter/hanger size. Temporary support is not required for the piping while elevation changes are being made. The lower nut adjusts the piping to the proper elevation and the upper nut, when locked into position, prevents loosening due to vibration. The PVC coating prevents electrolysis between the pipe and the hanger and it reduces transmitted noise and vibration.

CONSTRUCTION: A Fig. 612 PVC Coated Clevis Hanger consists of a yoke and a support strap made from shaped carbon steel plate or bar stock and a joining bolt. The support strap is coated with PVC to a point just above the centerline of the pipe.

NOTE: Fig. 612 does not include hanger rod or nuts as shown in picture.

FINISHES AVAILABLE: Black.

ORDERING: Specify figure number, nominal pipe diameter and name.



NOM. PIPE DIA.	MAX. REC. LOAD (LBS.)	A STD. (IN)	A NFPA (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G (IN)	H (IN)	WT EA
1/2	600	3/8	3/8	2 7/16	2 7/8	1 3/8	1	1/4	1/8 x 1	1/8 x 1	0.33
3/4	600	3/8	3/8	2 9/16	3 1/16	1 3/4	1	1/4	1/8 x 1	1/8 x 1	0.38
1	600	3/8	3/8	2 11/16	3 3/8	1 7/8	1	1/4	1/8 x 1	1/8 x 1	0.42
1 1/4	600	3/8	3/8	2 15/16	3 7/8	2	1	1/4	1/8 x 1	1/8 x 1	0.47
1 1/2	600	3/8	3/8	3 1/8	4 1/8	2 1/4	1	1/4	5/32 x 1	1/8 x 1	0.59
2	600	3/8	3/8	3 5/16	4 1/2	2 5/8	1	1/4	5/32 x 1	1/8 x 1	0.64
2 1/2	1100	1/2	3/8	4 1/16	5 1/2	3 1/8	1	5/16	3/16 x 1 1/4	3/16 x 1 1/4	1.1
3	1100	1/2	3/8	4 3/8	6 1/8	3 1/4	1 1/4	5/16	3/16 x 1 1/4	3/16 x 1 1/4	1.2
3 1/2	1100	1/2	3/8	4 3/4	6 5/8	3 1/2	1 1/4	3/8	3/16 x 1 1/4	3/16 x 1 1/4	1.35
4	1400	5/8	3/8	5 3/8	7 3/4	4 1/8	1 1/2	1/2	1/4 x 1 1/4	3/16 x 1 1/4	2.05
5	1400	5/8	1/2	6 1/8	9	5 1/16	1 1/2	1/2	1/4 x 1 1/4	3/16 x 1 1/4	2.85
6	1900	3/4	1/2	6 11/16	10	5 3/4	1 1/2	5/8	1/4 x 1 1/2	3/16 x 1 1/4	3.7
8	2000	7/8	1/2	8 7/16	12 3/4	6 3/4	2	5/8	1/4 x 1 3/4	3/16 x 1 3/4	5.1



PIPE SUPPORTS and HARDWARE

FIG. 615

ADJUSTABLE BAND HANGER

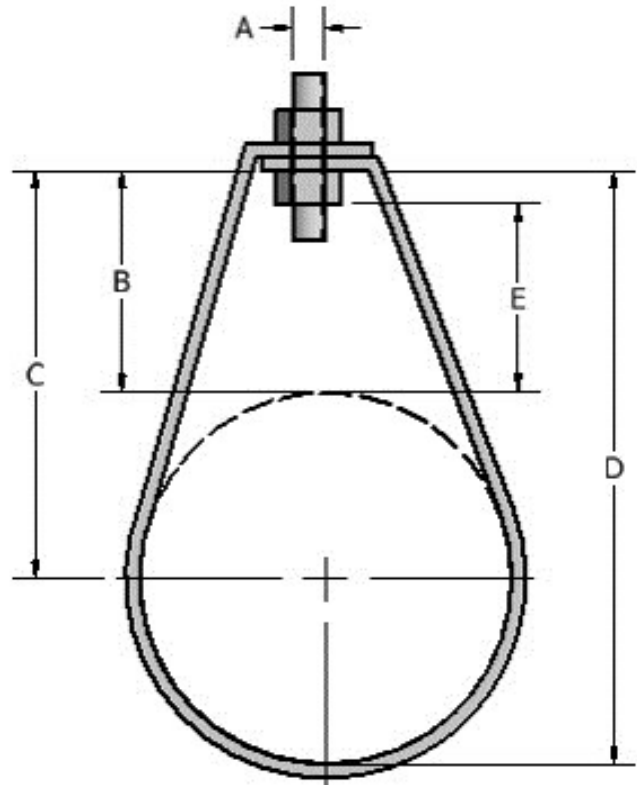
APPLICATION: An Adjustable Band Hanger without Swivel Nut provides for vertical support of small diameter piping systems. The elevation of the piping system may be altered by adjusting the position of the hex nuts on the hanger rod at the top of the hanger. Temporary support is not required for the piping while elevation changes are being made.

CONSTRUCTION: An Adjustable Band Hanger without a swivel nut consists of a piece of carbon steel shaped to the proper configuration.

NOTE: Figure 615 does not include nuts as shown in picture.

FINISHES AVAILABLE: Galvanized before shaped.

ORDERING: Specify figure number, nominal pipe diameter and name.



NOM. PIPE DIA.	MAX REC LOAD (LBS)	A STD. (IN)	B (IN)	C (IN)	D (IN)	E (IN)	STEEL SIZE	WT EA
3/8	610	3/8	1 3/16	2 1/4	2 5/8	1 7/16	16 ga. x 7/8	0.10
1/2	610	3/8	1 3/16	2 1/8	2 5/8	13/16	16 ga. x 7/8	0.10
3/4	610	3/8	1 1/8	2	2 5/8	3/4	16 ga. x 7/8	0.10
1	610	3/8	1 5/16	2 1/8	2 7/8	1	16 ga. x 7/8	0.12
1 1/4	610	3/8	1 3/8	2 1/2	3 3/8	1 1/16	16 ga. x 7/8	0.12
1 1/2	610	3/8	1 9/16	2 1/2	3 1/2	1 1/4	16 ga. x 7/8	0.14
2	610	3/8	1 3/4	2 1/2	3 3/4	1 7/16	14 ga. x 1	0.16
2 1/2	970	1/2	1 5/8	3 1/2	5	1 1/8	14 ga. x 1	0.28
3	970	1/2	1 1/2	3 5/8	5 1/2	1 1/8	1/8 x 1	0.38
3 1/2	970	1/2	1 1/2	4 5/8	6 3/4	1 1/8	1/8 x 1	0.42
4	1130	5/8	1 1/2	4 3/8	6 3/4	1 1/8	1/8 x 1 1/4	0.60
5	1130	5/8	2 3/16	5 5/8	8 1/2	1 3/4	1/8 x 1 1/4	0.70
6	1600	3/4	2 3/8	5 7/8	9 1/4	1 13/16	1/8 x 1 1/2	1.34
8	1800	3/4	2 3/8	7 7/8	12 1/4	1 5/8	1/8 x 1 3/4	1.64

PIPE SUPPORTS and HARDWARE

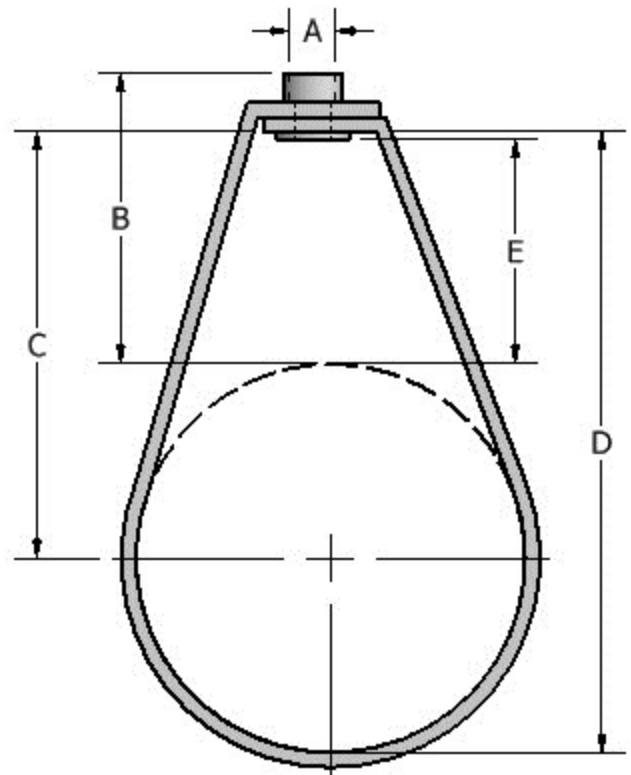
FIG. 618
**ADJUSTABLE BAND HANGER W/
 SWIVEL NUT**

APPLICATION: An Adjustable Band Hanger with Swivel Nut provides for vertical support of small diameter piping systems. The elevation of the piping system may be altered by adjusting the position of the swivel nut on the hanger rod at the top of the hanger. Temporary support is not required for the piping while elevation changes are being made. The swivel nut is knurled to provide a gripping surface for the use of pliers when adjusting the elevation of the pipe. The nut has a retainer to keep it from dropping out of the ring while it is in the open position being fitted onto the pipe.

CONSTRUCTION: An Adjustable Band Hanger with a Swivel Nut consists of a piece of carbon steel shaped to the proper configuration and a swivel nut.

FINISHES AVAILABLE: Galvanized before shaped.

ORDERING: Specify figure number, nominal pipe diameter and name.



NOM. PIPE DIA.	MAX REC LOAD (LBS)	A STD. (IN)	A NFPA (IN)	B (IN)	C (IN)	D (IN)	E (IN)	STEEL SIZE	WT EA
1/2	400	3/8	3/8	2 1/16	1 5/8	3 1/8	1 3/16	18ga x 5/8	0.08
3/4	400	3/8	3/8	1 15/16	1 9/16	3 1/8	1 1/16	18ga x 5/8	0.08
1	600	3/8	3/8	1 15/16	1 3/4	3 3/8	1 1/16	18ga x 5/8	0.08
1 1/4	600	3/8	3/8	1 3/4	1 11/16	3 3/4	7/8	18ga x 5/8	0.1
1 1/2	600	3/8	3/8	1 3/4	1 13/16	3 7/8	7/8	18ga x 5/8	0.1
2	600	3/8	3/8	2 3/16	2 1/2	4 1/4	1 5/16	18ga x 5/8	0.12
2 1/2	600	1/2	3/8	2 5/16	2 3/4	5 3/4	1 1/4	14 ga. x 3/4	0.32
3	600	1/2	3/8	2 3/16	3 1/8	6	1 1/8	14 ga. x 3/4	0.35
3 1/2	600	1/2	3/8	2 9/16	3 5/8	6 3/4	1 1/2	14 ga. x 3/4	0.39
4	1000	5/8	3/8	2 3/8	3 7/8	7 3/8	1 1/4	13ga x 3/4	0.43
5	1000	5/8	1/2	2 1/2	6 1/8	9	1 3/8	12ga x 1	0.65
6	1250	3/4	1/2	3 3/8	5 5/16	9 3/8	2	12ga x 1	1.09
8	1250	3/4	1/2	4	6 15/16	12 1/4	2 5/8	11ga x 1	1.24



PIPE SUPPORTS and HARDWARE

FIG. 621

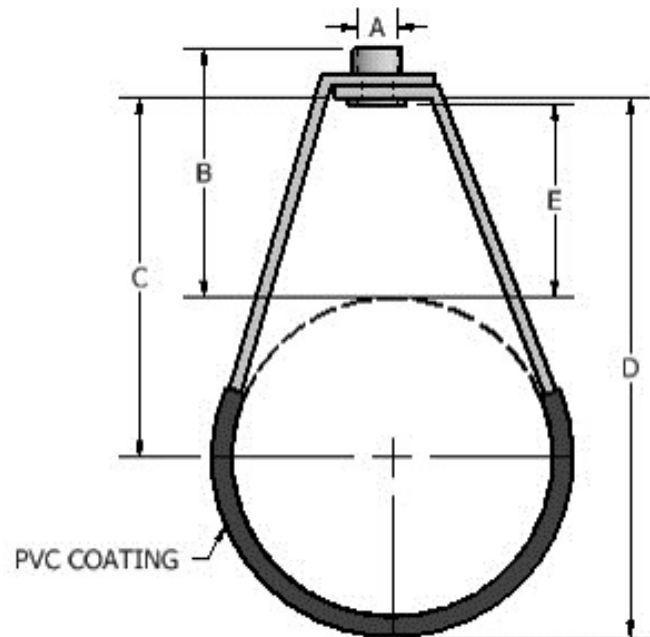
PVC COATED ADJUSTABLE BAND HANGER W/ SWIVEL NUT

APPLICATION: A PVC Coated Adjustable Band Hanger with Swivel Nut provides for vertical support of small diameter piping systems. The elevation of the piping system may be altered by adjusting the position of the swivel nut on the hanger rod at the top of the hanger. Temporary support is not required for the piping while elevation changes are being made. The swivel nut is knurled to provide a gripping surface for the use of pliers when adjusting the elevation of the pipe. The nut has a retainer to keep it from dropping out of the ring while it is in the open position being fitted onto the pipe. The PVC coating prevents electrolysis between the pipe and the hanger and it reduces transmitted noise and vibration.

CONSTRUCTION: An Adjustable Band Hanger with a Swivel Nut consists of a piece of carbon steel shaped to the proper configuration and a swivel nut. The support strap is coated with PVC to a point just above the centerline of the pipe.

FINISHES AVAILABLE: Galvanized before shaped then PVC coated.
ORDERING: Specify figure number, nominal pipe diameter and name.

EXAMPLE: Fig. 621, 3", PVC Coated Adjustable Band Hanger w/



NOM. PIPE DIA.	MAX. REC. LOAD (LBS.)	A STD. (IN)	A NFPA (IN)	B (IN)	C (IN)	D (IN)	E (IN)	STEEL SIZE	WT EA
1/2	400	3/8	3/8	0	1 5/8	3 1/8	1 3/16	18ga x 5/8	0.08
3/4	400	3/8	3/8	0	1 9/16	3 1/8	1 1/16	18ga x 5/8	0.08
1	600	3/8	3/8	0	1 3/4	3 3/8	1 1/16	18ga x 5/8	0.08
1 1/4	600	3/8	3/8	0	1 11/16	3 3/4	7/8	18ga x 5/8	0.1
1 1/2	600	3/8	3/8	0	1 13/16	3 7/8	7/8	18ga x 5/8	0.1
2	600	3/8	3/8	0	2 1/2	4 1/4	1 5/16	18ga x 5/8	0.12
2 1/2	600	1/2	3/8	0	2 3/4	5 3/4	1 1/4	14 ga. x 3/4	0.32
3	600	1/2	3/8	0	3 1/8	6	1 1/8	14 ga. x 3/4	0.35
3 1/2	600	1/2	3/8	0	3 5/8	6 3/4	1 1/2	14 ga. x 3/4	0.39
4	1000	5/8	3/8	0	3 7/8	7 3/8	1 1/4	13ga x 3/4	0.43
5	1000	5/8	1/2	0	6 1/8	9	1 3/8	12ga x 1	0.65
6	1250	3/4	1/2	0	5 5/16	9 3/8	2	12ga x 1	1.09
8	1250	3/4	1/2	0	6 15/16	12 1/4	2 5/8	11ga x 1	1.24



PIPE SUPPORTS and HARDWARE

FIG. 624

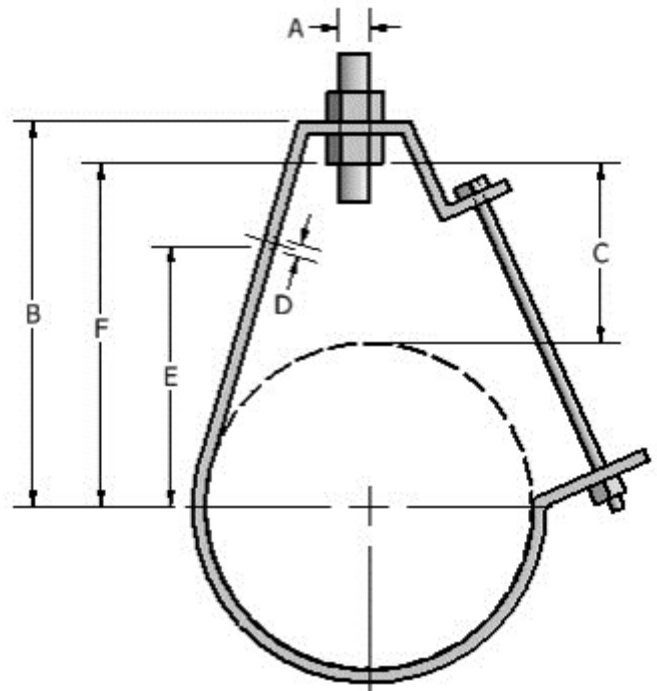
J HANGER FOR PIPE OR CONDUIT

APPLICATION: A J-Hanger for Pipe or Conduit is recommended for the suspension of non-insulated piping systems or insulated piping systems with an insulation protection shield. The side closure bolt enables contractors to easily insert pipe into the hanger and make the closure.

CONSTRUCTION: A J-Hanger for Pipe or Conduit consists of a piece of carbon steel shaped to the proper configuration and a side bolt with a nut.

FINISHES AVAILABLE: Electro-Plated.

ORDERING: Specify figure number, nominal pipe diameter and name.



NOM. PIPE DIA.	MAX. REC. LOAD (LBS.)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	WT EA
1/2	400	3/8	2 5/8	1 3/4	7/16	1 1/2	1 15/16	0.18
3/4	400	3/8	2 7/8	1 7/8	7/16	1 11/16	2 1/8	0.21
1	400	3/8	2 15/16	1 15/16	7/16	1 13/16	2 15/16	0.22
1 1/4	400	3/8	3 1/4	2	7/16	2 1/16	2 5/8	0.25
1 1/2	400	3/8	3 9/16	2 3/16	7/16	2 7/16	2 7/8	0.27
2	400	3/8	3 11/16	2 1/8	7/16	2 9/16	3 1/16	0.29
2 1/2	500	1/2	4 7/16	2 7/16	9/16	3 3/16	3 5/8	0.64
3	500	1/2	4 13/16	2 9/16	9/16	3 1/2	4 1/16	0.72
3 1/2	500	1/2	5 1/8	2 5/8	9/16	3 3/4	4 3/8	0.84
4	550	5/8	6 1/8	3 3/16	9/16	4 5/8	5 3/16	1.38
5	550	5/8	6 3/4	3 1/4	9/16	5 1/16	5 3/4	1.62
6	600	3/4	7 3/4	3 9/16	9/16	5 13/16	6 5/8	2.49
8	760	7/8	9 3/16	3 15/16	9/16	6 15/16	8	2.91
10	760	7/8	10 3/4	3 7/8	9/16	7 5/8	9 1/8	3.15



PIPE SUPPORTS and HARDWARE

FIG. 627

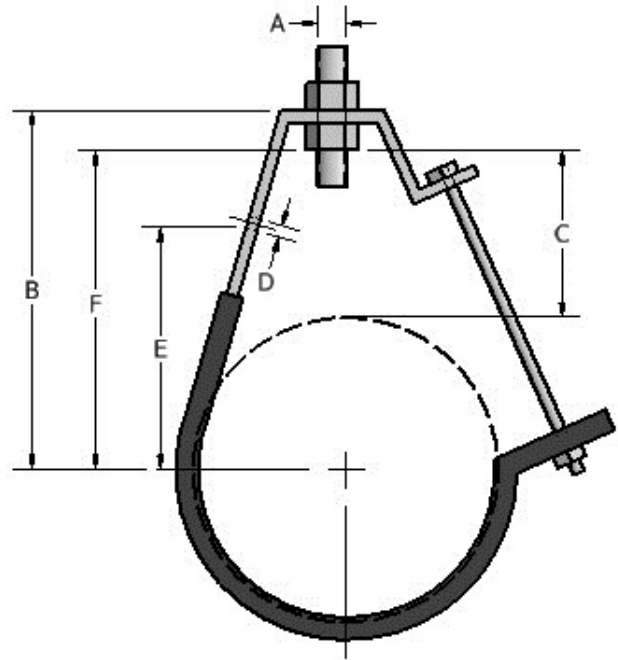
PVC COATED J HANGER FOR PIPE OR CONDUIT

APPLICATION: A PVC Coated J-Hanger for Pipe or Conduit is recommended for the suspension of non-insulated piping systems where: 1.) electrolysis between the pipe and the hanger are of a concern or 2.) noise and/or vibration of the piping system is a problem. The side closure bolt enables contractors to easily insert pipe into the hanger and make the closure.

CONSTRUCTION: A PVC Coated J-Hanger for Pipe or Conduit consists of a piece of carbon steel shaped to the proper configuration and a side bolt with a nut. The support strap is coated with PVC to a point just above the centerline of the pipe.

FINISHES AVAILABLE: Electro-Plated before shaped then PVC coated.

ORDERING: Specify figure number, nominal pipe diameter and name.



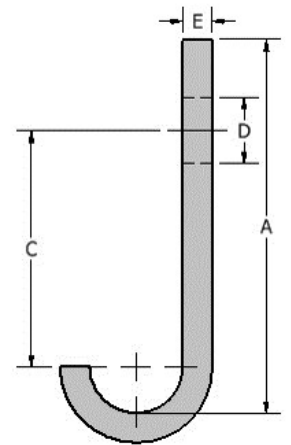
NOM. PIPE DIA.	MAX. REC. LOAD (LBS.)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	WT EA
1/2	400	3/8	2 5/8	1 3/4	7/16	1 1/2	1 15/16	0.18
3/4	400	3/8	2 7/8	1 7/8	7/16	1 11/16	2 1/8	0.21
1	400	3/8	2 15/16	1 15/16	7/16	1 13/16	2 15/16	0.22
1 1/4	400	3/8	3 1/4	2	7/16	2 1/16	2 5/8	0.25
1 1/2	400	3/8	3 9/16	2 3/16	7/16	2 7/16	2 7/8	0.27
2	400	3/8	3 11/16	2 1/8	7/16	2 9/16	3 1/16	0.29
2 1/2	500	1/2	4 7/16	2 7/16	9/16	3 3/16	3 5/8	0.64
3	500	1/2	4 13/16	2 9/16	9/16	3 1/2	4 1/16	0.72
3 1/2	500	1/2	5 1/8	2 5/8	9/16	3 3/4	4 3/8	0.84
4	550	5/8	6 1/8	3 3/16	9/16	4 5/8	5 3/16	1.38
5	550	5/8	6 3/4	3 1/4	9/16	5 1/16	5 3/4	1.62
6	600	3/4	7 3/4	3 9/16	9/16	5 13/16	6 5/8	2.49
8	760	7/8	9 3/16	3 15/16	9/16	6 15/16	8	2.91
10	760	7/8	10 3/4	3 7/8	9/16	7 5/8	9 1/8	3.15



PIPE SUPPORTS and HARDWARE

FIG. 639
STRAIGHT "J" HOOK

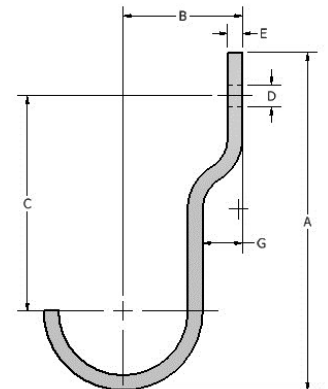
APPLICATION: A Straight J-Hook is recommended for supporting a non-insulated piping system from a wall or similar adjacent member when no clearance is required.
CONSTRUCTION: A Straight J-Hook consists of a piece of carbon steel shaped to the proper configuration as shown in the diagram above.
FINISHES AVAILABLE: Electro-Plated and Hot Dip Galvanized.
ORDERING: Specify figure number, nominal pipe diameter, name and finish.



NOM PIPE SIZE	MAX REC LOAD	A	C	D	MATERIAL SIZE	WT EA
1/2	350	6 3/8	5	9/16	1/4 x 1 1/4	0.55
3/4	350	6 1/2	5	9/16	1/4 x 1 1/4	0.59
1	350	6 11/16	5	9/16	1/4 x 1 1/4	0.82
1 1/4	350	6 13/16	5	9/16	1/4 x 1 1/4	0.84
1 1/2	600	6 15/16	5	9/16	1/4 x 1 1/2	1.09
2	600	7 3/16	5	9/16	1/4 x 1 1/2	1.15
2 1/2	600	7 7/16	5	9/16	1/4 x 1 1/2	1.23
3	600	7 3/4	5	9/16	1/4 x 1 1/2	1.9
3 1/2	600	8	5	9/16	1/4 x 1 1/2	1.48
4	600	8 1/4	5	9/16	1/4 x 1 1/2	1.58

FIG. 642
OFFSET "J" HOOK

APPLICATION: An Offset J-Hook is recommended for supporting a non-insulated piping system from a wall or similar adjacent member when there is a clearance of 1".
CONSTRUCTION: An Offset J-Hook consists of a piece of carbon steel shaped to the proper configuration as shown in the diagram above.
FINISHES AVAILABLE: Electro-Plated and Hot Dip Galvanized.
ORDERING: Specify figure number, nominal pipe diameter, name and finish.



NOM PIPE SIZE	MAX REC LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	MATERIAL SIZE	G	WT EA
1/2	350	6 3/8	1 5/8	5	9/16	1/4 x 1 1/4	1	0.55
3/4	350	6 1/2	1 11/16	5	9/16	1/4 x 1 1/4	1	0.59
1	350	6 11/16	1 15/16	5	9/16	1/4 x 1 1/4	1	0.82
1 1/4	350	6 13/16	2 1/16	5	9/16	1/4 x 1 1/4	1	0.84
1 1/2	600	6 15/16	2 7/16	5	9/16	1/4 x 1 1/2	1	1.09
2	600	7 3/16	2 7/16	5	9/16	1/4 x 1 1/2	1	1.15
2 1/2	600	7 7/16	2 11/16	5	9/16	1/4 x 1 1/2	1	1.23
3	600	7 3/4	3	5	9/16	1/4 x 1 1/2	1	1.39
3 1/2	600	8	3 1/4	5	9/16	1/4 x 1 1/2	1	1.48
4	600	8 1/4	3 1/2	5	9/16	1/4 x 1 1/2	1	1.58
5	700	10	4 3/16	6 1/4	9/16	1/4 x 2	1	2.4
6	700	11	4 11/16	7	9/16	1/4 x 2	1	2.8



PIPE SUPPORTS and HARDWARE

FIG. 645

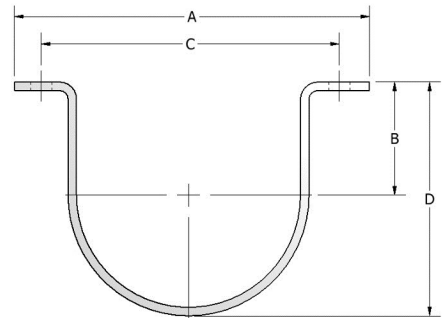
STANDARD PIPE STRAP

APPLICATION: A Standard Pipe Strap is recommended for supporting a piping system with fittings vertically or horizontally to walls or ceilings.

CONSTRUCTION: A Standard Pipe Strap consists of a piece of carbon steel shaped to the proper configuration as shown in the diagram above.

FINISHES AVAILABLE: Electro-Plated and Hot Dip Galvanized.

ORDERING: Specify figure number, nominal pipe diameter, name and finish.



NOM PIPE SIZE	MAX REC LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	HOLE DIA. (IN)	WT EA
1/2	410	2 5/8	3/4	1 7/8	1 5/32	7/32	0.04
3/4	410	2 3/4	13/16	2	1 5/16	7/32	0.07
1	410	3 3/8	7/8	2 5/8	1 1/2	9/32	0.09
1 1/4	410	4 1/4	1	3 1/4	1 7/8	9/32	0.1
1 1/2	410	4 3/8	1 3/16	3 3/8	2 1/8	9/32	0.13
2	410	5	1 7/16	4	2 5/8	9/32	0.18
2 1/2	610	6 1/4	1 11/16	4 3/4	3 1/8	11/32	0.26
3	610	7 1/4	2	5 3/4	3 3/4	11/32	0.32
4	725	8 3/8	2 1/2	6 7/8	4 3/4	11/32	0.4
6	725	11 1/8	3 5/8	9 5/8	6 7/8	11/32	0.75

FIG. 648

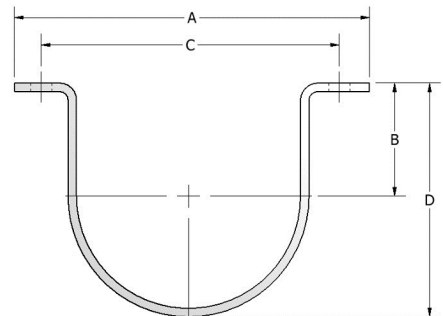
FLUSH MOUNT PIPE STRAP

APPLICATION: A Flush Mount Pipe Strap is recommended for supporting a piping system with fittings vertically or horizontally to walls or ceilings when the mount is desired to be flush with the wall or ceiling.

CONSTRUCTION: A Flush Mount Pipe Strap consists of a piece of carbon steel shaped to the proper configuration as shown in the diagram above.

FINISHES AVAILABLE: Electro-Plated and Hot Dip Galvanized.

ORDERING: Specify figure number, nominal pipe diameter, name and finish.



NOM PIPE SIZE	MAX REC LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	HOLE DIA. (IN)	WT EA
1/2	410	4 1/8	5/16	2 7/8	3/4	7/16	20
3/4	410	4 5/16	7/16	3	15/16	7/16	23
1	410	4 9/16	9/16	3 3/8	1 1/8	7/16	25
1 1/4	410	4 15/16	11/16	3 3/4	1 1/2	7/16	29
1 1/2	410	5 3/16	13/16	4 1/4	1 5/8	7/16	32
2	410	5 3/4	1 1/16	4 3/4	2 1/4	7/16	37
2 1/2	610	6 1/4	1 9/16	5 1/4	2 3/4	7/16	100
3	610	6 7/8	1 5/8	5 7/8	3 3/8	7/16	116
3 1/2	610	7 3/8	1 7/8	6 3/8	3 7/8	7/16	128
4	725	8 3/8	2 1/8	7	4 3/8	9/16	157
5	725	9 7/16	2 5/8	7 7/8	5 3/8	9/16	188
6	725	10 1/2	3 3/16	8 7/8	6 7/16	9/16	230
8	900	14	4 1/4	11 1/2	8 3/8	11/16	440



PIPE SUPPORTS and HARDWARE

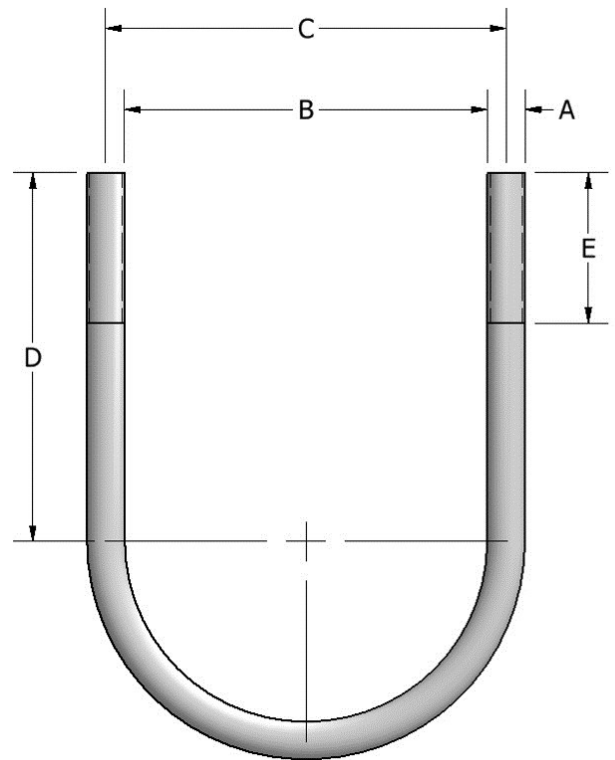
FIG. 700
STANDARD U-BOLT

APPLICATION: Fig. 700 U-Bolts are used to secure piping to structural members. When the piping is below the structural member, the U-Bolt provides vertical support and restricts lateral movement while allowing for axial movement. When the piping system is above the structural member, the U-Bolt restricts lateral movement and upward movement while allowing axial movement of the piping. Custom U-Bolts can be ordered to allow the pipe to be clamped down to a structural member tightly.

CONSTRUCTION: A Fig. 700 U-Bolt is provided with four standard hex nuts and has a longer straight threaded length than the Fig. 703 Light Duty U-Bolt. The Standard U-Bolt is made of SA-36 carbon steel, however, for special requirements, it can be made of alloy or stainless steel, as needed.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM PIPE SIZE	MAX REC LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	WT EA
1/2	580	1/4	7/8	1 1/8	2 1/2	2 1/2	0.1
3/4	580	1/4	1 1/8	1 3/8	2 5/8	2 1/2	0.1
1	580	1/4	1 3/8	1 5/8	2 3/4	2 1/2	0.1
1 1/4	1460	3/8	1 3/4	2 1/8	2 7/8	2 1/2	0.26
1 1/2	1460	3/8	2	2 3/8	3	2 1/2	0.28
2	1460	3/8	2 1/2	2 7/8	3 1/4	2 1/2	0.32
2 1/2	2700	1/2	3	3 1/2	3 3/4	3	0.7
3	2700	1/2	3 5/8	4 1/8	4	3	0.76
3 1/2	2700	1/2	4 1/16	4 9/16	4 1/4	3	0.8
4	2700	1/2	4 5/8	5 1/8	4 1/2	3	0.86
5	2700	1/2	5 5/8	6 1/8	5	3	1
6	4320	5/8	6 3/4	7 3/8	6 1/8	3 3/4	1.98
8	4320	5/8	8 3/4	9 3/8	7 1/8	3 3/4	2.26
10	6460	3/4	10 7/8	11 5/8	8 3/8	4	3.94
12	9960	7/8	12 7/8	13 3/4	9 5/8	4 1/4	6.4
14	9960	7/8	14 1/8	15	10 1/4	4 1/4	8.3
16	9960	7/8	16 1/8	17	11 1/4	4 1/4	9.2
18	11800	1	18 1/8	19 1/8	12 5/8	4 3/4	13.5
20	11800	1	20 1/8	21 1/8	13 5/8	4 3/4	14.6
22	11800	1	22 1/8	23 1/8	14 5/8	4 3/4	16
24	11800	1	24 1/8	25 1/8	15 5/8	4 3/4	16.9
30	11800	1	30 1/8	31 1/8	18 5/8	4 3/4	19.1
36	11800	1	36 1/8	37 1/8	21 5/8	4 3/4	23.2



PIPE SUPPORTS and HARDWARE

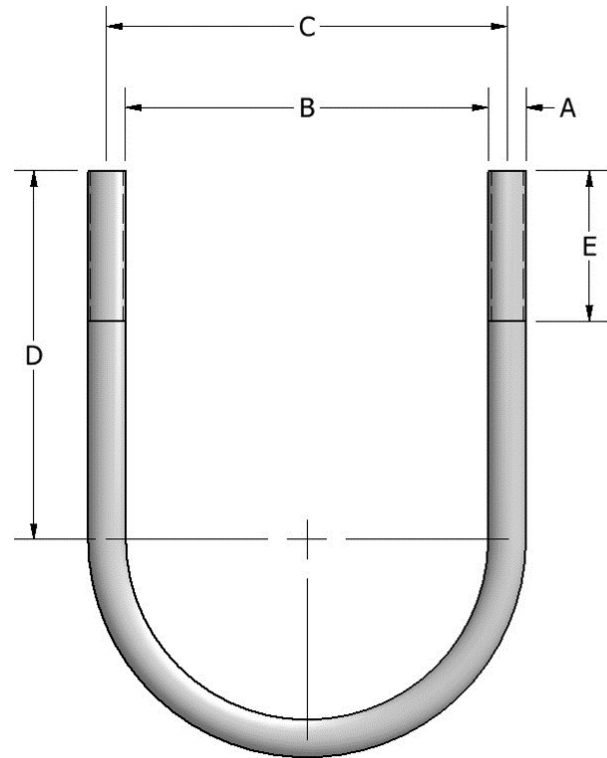
FIG. 703
LIGHT DUTY U-BOLT

APPLICATION: Fig. 703 Light Duty U-Bolts are used to secure piping to structural members. When the piping is below the structural member, the U-Bolt provides vertical support and restricts lateral movement while allowing for axial movement of the piping. When the piping system is above the structural member, the U-Bolt restricts lateral movement and upward movement while allowing axial movement of the piping.

CONSTRUCTION: A Fig. 703 U-Bolt is provided with two standard hex nuts. The Light Duty U-Bolt is made of SA-36 carbon steel, however, for special requirements, it can be made of alloy or stainless steel, as needed.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.

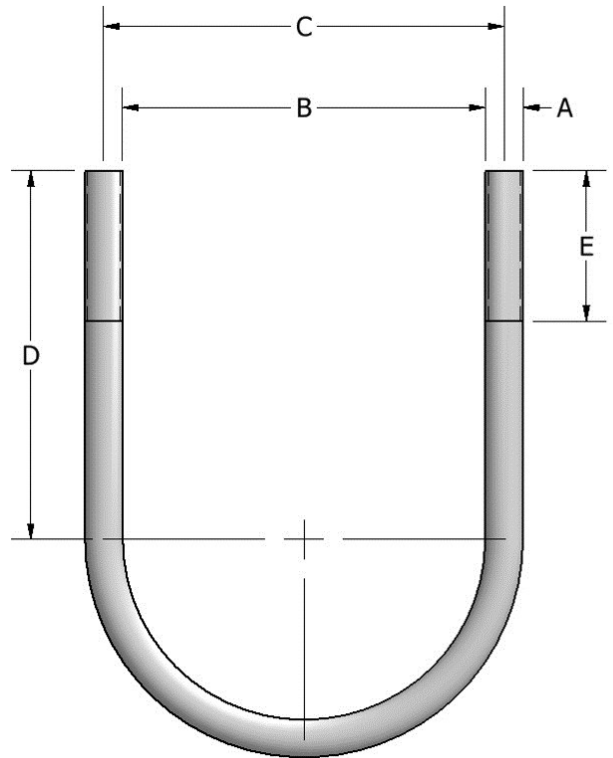


NOM. PIPE DIA.	MAX REC LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	EE	WT EA
1/2	485	1/4	15/16	1 3/16	1 15/16	1 3/4	6
3/4	485	1/4	1 1/8	1 3/8	2 1/16	1 3/4	7
1	485	1/4	1 3/8	1 5/8	2 3/16	1 3/4	7
1 1/4	485	1/4	1 11/16	1 15/16	2 3/8	1 3/4	8
1 1/2	485	1/4	2	2 1/4	2 7/16	1 3/4	9
2	485	1/4	2 7/16	2 11/16	2 11/16	1 3/4	10
2 1/2	1220	3/8	2 15/16	3 5/16	3 1/16	2	28
3	1220	3/8	3 9/16	3 15/16	3 3/8	2	31
3 1/2	1220	3/8	4 1/16	4 7/16	3 5/8	2	35
4	1220	3/8	4 9/16	4 15/16	3 7/8	2	38
5	1220	3/8	5 5/8	6	4 9/16	2 1/4	45
6	2260	1/2	6 3/4	7 1/4	5 1/16	2 1/4	95
8	2260	1/2	8 3/4	9 1/4	6 1/16	2 1/4	117
10	3620	5/8	10 7/8	11 1/2	7 1/4	2 1/2	227



PIPE SUPPORTS and HARDWARE

FIG. 706
HEAVY DUTY U-BOLT



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	A (IN)	B (IN)	C (IN)	D (IN)	EE	WT EA
1/2	480	430	1/4	15/16	1 3/16	2 1/2	2 1/8	0.12
3/4	480	430	1/4	1 1/8	1 3/8	2 5/8	2 1/8	0.13
1	480	430	1/4	1 3/8	1 5/8	2 3/4	2 1/8	0.14
1 1/4	1200	1090	3/8	1 3/4	2 1/16	2 7/8	2 1/4	0.26
1 1/2	1200	1090	3/8	2	2 3/8	3	2 1/2	0.3
2	1200	1090	3/8	2 7/16	2 13/16	3 1/4	2 1/2	0.33
2 1/2	2200	2020	1/2	2 15/16	3 7/16	3 3/4	3	0.85
3	2200	2020	1/2	3 9/16	4 1/16	4	3	0.96
3 1/2	2200	2020	1/2	4 1/16	4 9/16	4 1/4	3	1.03
4	2200	2020	1/2	4 9/16	5 1/16	4 1/2	3	1.11
5	2200	2020	1/2	5 5/8	6 1/8	5	3	1.24
6	3600	3230	5/8	6 3/4	7 3/8	6 1/8	3 3/4	2.2
8	3600	3230	5/8	8 3/4	9 3/8	7 1/8	3 3/4	2.45
10	5400	4830	3/4	10 7/8	11 5/8	8 3/8	4	4.79
12	7500	6730	7/8	12 7/8	13 3/4	9 5/8	4 1/4	7.8
14	7500	6730	7/8	14 1/8	15	10 1/4	4 1/4	8.5
16	7500	6730	7/8	16 1/8	17	11 1/4	4 1/4	9.35
18	9900	8850	1	18 1/8	19 1/8	12 5/8	4 3/4	13.5
20	9900	8850	1	20 1/8	21 1/8	13 5/8	4 3/4	14.6
24	9900	8850	1	24 1/8	25 1/8	15 5/8	4 3/4	17
28	9900	8850	1	28 1/8	29 1/8	17 5/8	4 3/4	18.8
30	9900	8850	1	30 1/8	31 1/8	18 5/8	4 3/4	20.2
36	9900	8850	1	36 1/8	37 1/8	21 5/8	4 3/4	23.2



PIPE SUPPORTS and HARDWARE

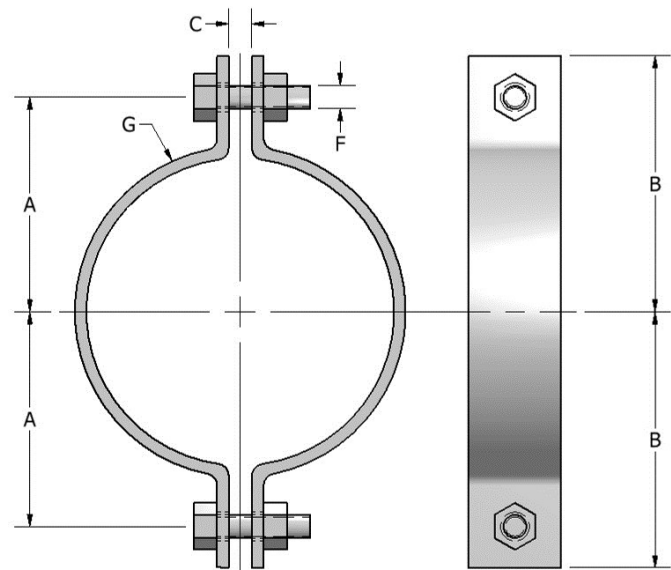
FIG. 712
STANDARD 2-BOLT PIPE CLAMP

APPLICATION: Fig. 712 Standard 2 Bolt Pipe Clamps are recommended for the support of hot or cold piping where little or no insulation is required on the piping and the loads to be carried are not large in magnitude. For insulated low temperature piping, AAA Technology's TRI*FOAM™ rigid urethane saddles may be used with a Fig. 712 Standard Pipe Clamp for loads of a lower magnitude and with a Fig. 715, 718 or 721 2 Bolt Pipe Clamp for loads of a larger magnitude. For high temperature piping with thick insulation, a Fig. 724, 727, 730 or 733 3 Bolt Pipe Clamp may be used. Or, if the temperature dictates, a Fig. 736, 739, 742 or 745 Alloy 3 Bolt Pipe Clamp may be used. The selection of the proper 3 Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried. Alloy pipe clamps and stainless steel pipe clamps are also available.

CONSTRUCTION: Fig. 712 Standard 2 Bolt Pipe Clamps are made from carbon steel plate or bar stock and are provided with two bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
1/2	500	445	1 1/8	1 3/4	3/8	5/16	1/8	1	0.41
3/4	500	445	1 3/16	1 3/4	3/8	5/16	1/8	1	0.42
1	500	445	1 1/4	1 3/4	3/8	5/16	1/8	1	0.44
1 1/4	500	445	1 5/16	2 1/8	3/8	5/16	1/8	1	0.5
1 1/2	800	715	1 5/8	2 1/4	3/8	5/16	1/8	1	0.53
2	1040	930	2 1/8	2 3/4	1/2	3/8	1/4	1	1.18
2 1/2	1040	930	2 5/8	3 1/4	1/2	1/2	1/4	1	1.65
3	1040	930	2 7/8	3 1/2	1/2	1/2	1/4	1	1.78
3 1/2	1040	930	3 3/16	3 13/16	1/2	1/2	1/4	1	1.9
4	1040	930	3 5/8	4 3/8	5/8	5/8	1/4	1 1/4	3
5	1040	930	4 3/16	4 7/8	5/8	5/8	1/4	1 1/4	3.29
6	1600	1440	5	5 7/8	3/4	3/4	3/8	1 1/2	6.88
8	1600	1440	6 1/8	6 7/8	3/4	3/4	3/8	1 1/2	7.87
10	2480	2200	7 7/16	8 1/2	1	7/8	1/2	2	15.8
12	2480	2200	8 7/16	9 1/2	1	7/8	1/2	2	17.64
14	3050	2730	9 1/4	10 1/2	1 1/8	7/8	1/2	2 1/2	23.19
16	3050	2730	10 1/4	11 1/2	1 1/8	7/8	1/2	2 1/2	25.4
18	3050	2730	11 5/8	13	1 1/4	1	5/8	2 1/2	36.12
20	3050	2730	12 3/4	14	1 3/8	1 1/8	5/8	2 1/2	40.69
24	3250	2900	15	16 7/8	1 5/8	1 1/4	5/8	3	58.22
26	3250	2900	16	18	1 5/8	1 1/2	5/8	4	88.23
28	3250	2900	17	19 1/4	1 5/8	1 1/2	5/8	4	93.36
30	3250	2900	19	20 7/8	2	1 1/2	5/8	4	99.14

PIPE SUPPORTS and HARDWARE

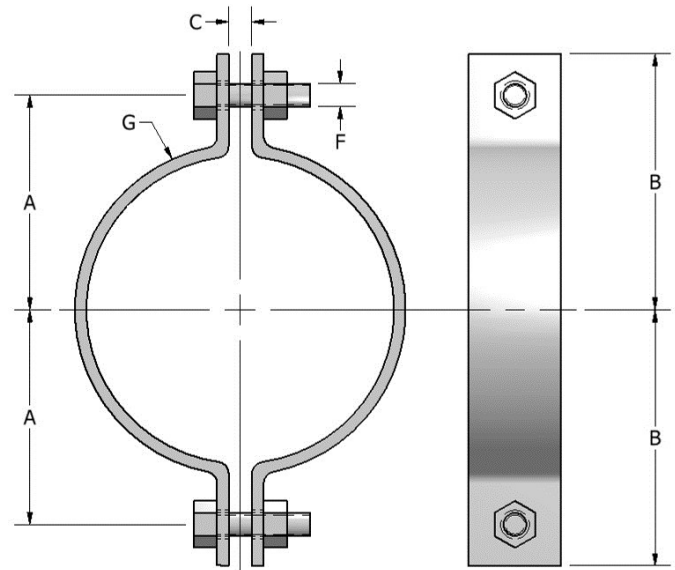
FIG. 715
INTERMEDIATE 2-BOLT PIPE CLAMP

APPLICATION: Fig. 715 Intermediate 2 Bolt Pipe Clamps are recommended for the support of hot or cold piping where little or no insulation is required on the piping and the loads to be carried are larger in magnitude than can be safely carried by Fig. 712 Standard 2 Bolt Pipe Clamps. For insulated low temperature piping, AAA Technology's TRI*FOAM™ rigid urethane saddles may be used with a Fig. 715 Intermediate 2 Bolt Pipe Clamp should the loads be large enough to require it rather than a Fig. 712. For high temperature piping with thick insulation, a Fig. 724, 727, 730 or 733 3 Bolt Pipe Clamp may be used. Or, if the temperature dictates, a Fig. 736, 739, 742 or 745 Alloy 3 Bolt Pipe Clamp may be used. The selection of the proper 3 Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried. Alloy pipe clamps and stainless steel pipe clamps are also available.

CONSTRUCTION: Fig. 715 Intermediate 2 Bolt Pipe Clamps are made from carbon steel plate or bar stock and are provided with two bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
1/2	850	755	1 1/4	1 7/8	5/8	3/8	3/16	1 1/2	0.87
3/4	850	755	1 5/16	1 7/8	5/8	3/8	3/16	1 1/2	0.89
1	850	755	1 3/8	1 7/8	5/8	3/8	3/16	1 1/2	0.91
1 1/4	850	755	1 7/16	2 1/4	5/8	3/8	3/16	1 1/2	1.05
1 1/2	1000	890	1 3/4	2 1/2	5/8	3/8	3/16	1 1/2	1.17
2	1500	1330	2 1/2	3	3/4	4/9	1/4	2	2.53
2 1/2	1500	1330	2 3/4	3 1/2	3/4	4/7	1/4	2	3.36
3	1500	1330	3 1/8	3 3/4	3/4	4/7	1/4	2	3.61
3 1/2	1500	1330	3 3/8	4	3/4	4/7	1/4	2	3.82
4	1500	1330	3 3/4	4 3/4	7/8	2/3	1/4	2	6.71
5	1500	1330	4 5/16	5 1/8	7/8	2/3	1/4	2	7.1
6	2500	2225	5 1/8	6 1/4	1	7/8	7/16	2	11.78
8	2500	2225	6 1/4	7 1/4	1	7/8	7/16	2	13.55
10	3500	3125	7 3/4	8 3/4	1 1/8	1	9/16	2	20.64
12	3500	3125	8 3/4	10	1 1/8	1	9/16	2	23.21
14	4600	4100	9 1/2	10 3/4	1 1/4	1	5/8	3	35.21
16	4600	4100	10 5/8	12 1/8	1 3/8	1	5/8	3	39.22
18	4600	4100	11 3/4	13 5/16	1 3/8	1 1/8	11/16	3	82.85
20	4600	4100	12 7/8	14 1/4	1 1/2	1 1/4	11/16	3	91.43
24	4900	4350	15 1/4	17	1 1/2	1 3/8	3/4	3	77.14
26	4900	4350	16 1/4	18 1/2	1 3/4	1 1/2	3/4	4	103.73
28	4900	4350	17 1/4	19 1/2	1 3/4	1 1/2	3/4	4	109.03
30	4900	4350	18 1/4	20 1/2	2	1 5/8	3/4	4	119.16
32	7000	6250	19 1/4	22	2	1 3/4	7/8	5	173.82
34	7000	6250	20 1/4	23	2	1 3/4	7/8	5	181.57
36	7000	6250	21 1/2	24 1/4	2 1/8	1 3/4	7/8	5	191.3
42	7000	6250	25 3/4	28 3/4	2 1/8	1 3/4	7/8	6	261.9



PIPE SUPPORTS and HARDWARE

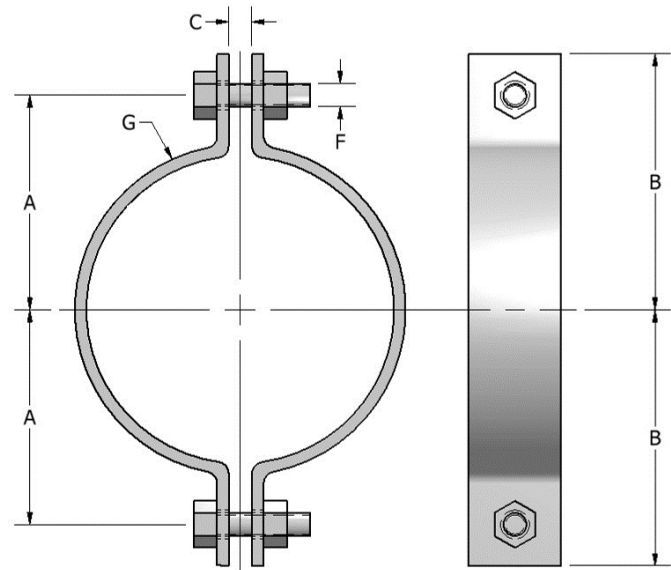
FIG. 718
HEAVY 2-BOLT PIPE CLAMP

APPLICATION: Fig. 718 Heavy 2 Bolt Pipe Clamps are recommended for the support of hot or cold piping where little or no insulation is required on the piping and the loads to be carried are larger in magnitude than can be safely carried by Fig. 712 Standard 2 Bolt Pipe Clamps or Fig. 715 Intermediate 2 Bolt Pipe Clamps. For insulated low temperature piping, AAA Technology's TRI*FOAM™ rigid urethane saddles may be used with a Fig. 718 Heavy 2 Bolt Pipe Clamp should the loads be large enough to require it rather than a Fig. 712 or a Fig. 715. For high temperature piping with thick insulation, a Fig. 724, 727, 730 or 733 3 Bolt Pipe Clamp may be used. Or, if the temperature dictates, a Fig. 736, 739, 742 or 745 Alloy 3 Bolt Pipe Clamp may be used. The selection of the proper Double Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried.

CONSTRUCTION: Fig. 718 Heavy 2 Bolt Pipe Clamps are made from carbon steel plate or bar stock and are provided with two bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	F (IN)	"G" Thk. (IN)	"G" Width (IN)	WT. EA. (LBS)
1	1200	1050	1 7/16	2 5/16	3/4	1/2	1/4	1 1/2	1.62
1 1/4	1200	1050	1 5/8	2 1/2	3/4	1/2	1/4	1 1/2	1.75
1 1/2	1200	1050	2 1/8	3	3/4	1/2	1/4	1 1/2	1.99
2	1900	1700	2 5/8	3 1/2	3/4	1/2	5/16	2	3.4
2 1/2	1900	1700	2 13/16	3 11/16	13/16	5/8	5/16	2	4.13
3	1900	1700	3 1/4	4 1/8	13/16	5/8	5/16	2	4.58
3 1/2	1900	1700	3 7/16	4 5/16	13/16	5/8	5/16	2	4.8
4	1900	1700	3 13/16	4 11/16	7/8	3/4	5/16	2 1/2	7.1
5	1900	1700	4 3/8	5 5/16	7/8	3/4	5/16	2 1/2	7.93
6	3500	3100	5 5/16	6 3/8	1	7/8	1/2	2	12.12
8	3500	3100	6 3/8	7 5/8	1	7/8	1/2	2	14.17
10	4900	4300	7 7/8	9 3/8	1 1/8	1 1/8	5/8	2	23.75
12	4900	4300	9	10 3/4	1 1/8	1 1/8	5/8	2	26.49
14	6500	5700	9 3/4	11 5/8	1 1/4	1 1/8	3/4	3 1/2	51.87
16	6500	5700	10 7/8	12 3/4	1 3/8	1 1/8	3/4	3 1/2	56.72
18	6500	5700	11 7/8	13 3/4	1 3/8	1 1/4	3/4	3 1/2	64.01
20	6500	5700	13 1/4	15 3/8	1 1/2	1 3/8	3/4	3 1/2	78.94
24	10000	8900	15 3/8	17	1 1/2	1 1/2	7/8	5	133.79
26	10000	8900	16 3/8	18 3/8	1 3/4	1 5/8	7/8	5	148.02
28	10000	8900	17 3/8	19 3/8	1 3/4	1 5/8	7/8	5	155.77
30	11600	10300	18 3/8	20 1/2	2	1 3/4	1	5	185.02
32	11600	10300	19 1/2	21 5/8	2	1 3/4	1	5	194.59
34	11600	10300	20 1/2	22 5/8	2	1 3/4	1	5	203.44
36	11600	10300	21 5/8	23 3/4	2 1/8	1 3/4	1	5	213.71
42	11600	10300	25 1/4	26 3/4	2 1/8	1 3/4	1	6	283.01



PIPE SUPPORTS and HARDWARE

FIG. 721

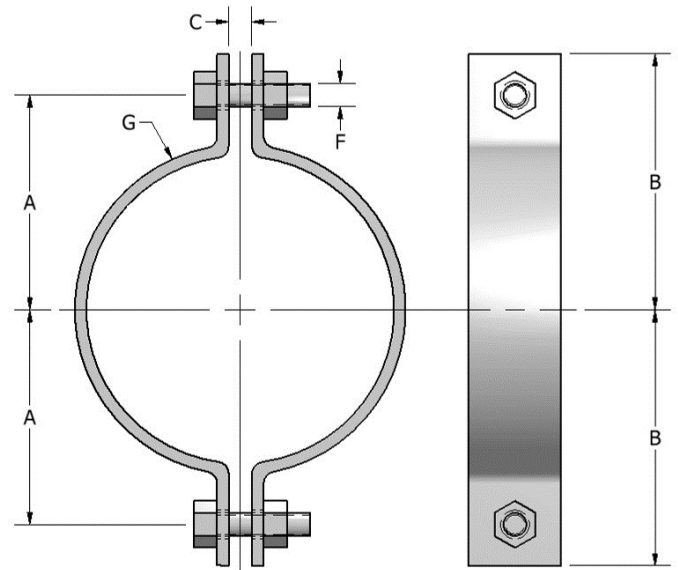
EXTRA HEAVY 2-BOLT PIPE CLAMP

APPLICATION: Fig. 721 Extra Heavy 2 Bolt Pipe Clamps are recommended for the support of hot or cold piping where little or no insulation is required on the piping and the loads to be carried are larger in magnitude than can be safely carried by Fig. 712 Standard 2 Bolt Pipe Clamps, Fig. 715 Intermediate 2 Bolt Pipe Clamps or Fig. 718 Heavy 2 Bolt Pipe Clamps. For insulated low temperature piping, AAA Technology's TRI*FOAM™ rigid urethane saddles may be used with a Fig. 728 Extra Heavy 2 Bolt Pipe Clamp should the loads be large enough to require it rather than a Fig. 712, a Fig. 715 or a Fig. 718. For high temperature piping with thick insulation, a Fig. 724, 727, 730 or 733 3 Bolt Pipe Clamp may be used. Or, if the temperature dictates, a Fig. 736, 739, 742 or 745 Alloy 3 Bolt Pipe Clamp may be used. The selection of the proper Double Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried.

CONSTRUCTION: Fig. 721 Extra Heavy 2 Bolt Pipe Clamps are made from carbon steel plate or bar stock and are provided with two bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
1	2000	1750	1 3/4	2 5/8	3/4	5/8	5/16	2	3.06
1 1/4	2000	1750	1 15/16	2 13/16	3/4	5/8	5/16	2	3.28
1 1/2	2000	1750	2 7/16	3 5/16	3/4	5/8	5/16	2	3.68
2	2750	2420	3	3 7/8	3/4	3/4	3/8	2	5.77
2 1/2	2750	2420	3 1/4	4 3/16	13/16	3/4	3/8	2	6.09
3	2750	2420	3 11/16	4 5/8	13/16	3/4	3/8	2	6.63
3 1/2	2750	2420	3 7/8	4 7/8	13/16	3/4	3/8	2	6.94
4	3500	3100	4 3/8	5 7/16	1	7/8	3/8	2	8.36
5	3500	3100	5	6 1/8	1	7/8	3/8	2	9.21
6	4850	4300	6 1/8	7 3/8	1 1/8	1	1/2	2 1/2	17.01
8	4850	4300	7 1/8	8 1/4	1 1/8	1	1/2	2 1/2	19.05
10	6000	5300	8 3/4	10 1/4	1 1/4	1 1/4	5/8	2 1/2	31.41
12	8700	7650	9 7/8	11 5/8	1 1/4	1 1/2	3/4	3	55.69
14	9100	8000	10 3/4	12 1/2	1 3/8	1 1/2	3/4	3 1/2	65.45
16	9100	8000	12	13 3/4	1 1/2	1 1/2	3/4	3 1/2	70.69
18	13800	12100	13 1/4	15 1/4	1 1/2	1 3/4	3/4	6	123.26
20	15200	13400	14 3/4	16 3/4	1 3/4	2	1	5	159.71
22									208.98
24	16200	14250	17 1/8	19 1/4	1 3/4	2	1	6	208.98
26	16200	14250	18 1/8	20 1/4	1 7/8	2	1	8	280.32
28	16200	14250	19 1/8	21 1/4	1 7/8	2	1	8	294.47
30	20500	18000	20 1/4	22 1/2	2 1/8	2 1/4	1 1/4	7	350.25
32	20500	18000	21 1/2	23 7/8	2 1/8	2 1/4	1 1/4	8	415.16
34	20500	18000	22 1/2	24 7/8	2 1/8	2 1/4	1 1/4	8	432.85
36	32300	28300	23 3/4	26	2 1/4	3	1 1/2	8	587.03
42	32300	28300	27 1/4	29 3/4	2 1/4	3	1 1/2	9	731.49



PIPE SUPPORTS and HARDWARE

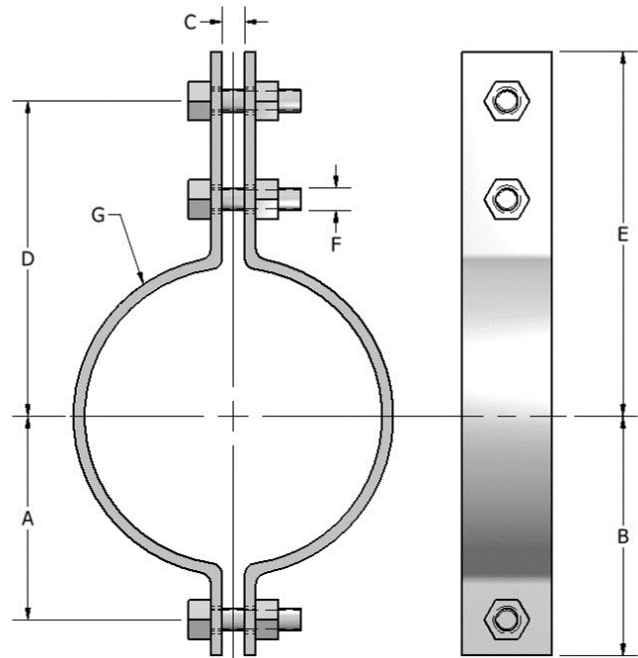
FIG. 724
STANDARD 3-BOLT PIPE CLAMP

APPLICATION: Fig. 724 Standard 3 Bolt Pipe Clamps are recommended for the support of hot piping with insulation. Fig. 724 Standard 3 Bolt Pipe Clamps have been designed to carry loads that are not large in magnitude. The 3 bolt design enables the attachment to the pipe clamp outside of the insulation. For high temperature piping with thick insulation and a loading larger than this clamp will carry, a Fig. 727, 730 or 733 3 Bolt Pipe Clamp may be used. Or, if the temperature dictates, a Fig. 736, 739, 742 or 745 Alloy 3 Bolt Pipe Clamp may be used. The selection of the proper 3 Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried. Alloy pipe clamps and stainless steel pipe clamps are also available. The loads shown on the data chart are listed for 750 oF and 650 oF service.

CONSTRUCTION: Fig. 724 Standard 3 Bolt Pipe Clamps are made from carbon steel plate or bar stock and are provided with three bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	"D" CTRLINE TO TOP BOLT (IN)	"E" CTRLINE TO TOP END (IN)	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
1/2	300	270	1 1/8	1 3/4	5/8	4 1/8	4 3/4	3/8	1/8	1	0.73
3/4	300	270	1 1/4	1 7/8	5/8	4 1/4	4 7/8	3/8	1/8	1	0.76
1	300	270	1 3/8	2	5/8	4 3/8	5	3/8	1/8	1	0.78
1 1/4	300	270	1 9/16	2 1/8	5/8	4 1/2	5 1/8	3/8	1/8	1	0.82
1 1/2	620	550	1 5/8	2 1/4	5/8	4 5/8	5 1/4	1/2	3/16	1 1/4	1.68
2	620	550	2 1/8	2 3/4	5/8	5 1/8	5 3/4	1/2	3/16	1 1/4	1.85
2 1/2	620	550	2 5/8	3 1/4	5/8	5 5/8	6 1/4	1/2	3/16	1 1/4	2.01
3	620	550	2 7/8	3 1/2	5/8	5 7/8	6 1/2	1/2	3/16	1 1/4	2.13
3 1/2	620	550	3 3/16	3 13/16	3/4	6 1/8	6 13/16	1/2	3/16	1 1/4	2.28
4	850	750	3 5/8	4 3/8	3/4	6 5/8	5 1/8	5/8	1/4	1 1/4	3.19
5	850	750	4 3/16	4 15/16	7/8	7 1/8	5 5/8	5/8	1/4	1 1/4	3.53
6	1900	1675	5	5 7/8	1	8	8 7/8	3/4	5/16	2	8.70
8	1900	1675	6 1/8	7	1	9 1/8	10	3/4	5/16	2	9.89
10	2400	2100	7 7/16	8 1/2	1 1/8	10 3/8	11 3/8	7/8	3/8	2 1/2	16.79
12	2400	2100	8 7/16	9 1/2	1 1/8	11 3/8	12 3/8	7/8	3/8	2 1/2	18.44
14	2400	2100	9 1/8	10 1/4	1 1/8	12	13	7/8	3/8	2 1/2	19.50
16	2400	2100	10 1/8	11 1/4	1 1/8	13	14	7/8	3/8	2 1/2	21.16
18	3000	2650	11 3/8	12 5/8	1 1/4	14 1/4	15 3/8	1	1/2	3	36.81
20	3000	2650	12 3/8	14	1 3/8	16 1/4	17 5/8	1 1/8	1/2	3	42.97
24	3000	2650	14 1/2	16 1/8	1 1/2	18 1/4	19 3/4	1 1/4	1/2	3	50.34
26	3450	3000	15 3/4	17 3/8	1 1/2	19 1/2	21	1 1/4	1/2	4	68.36
28	3450	3000	16 3/4	18 1/2	1 1/2	20 1/2	22	1 1/4	1/2	4	72.04
30	3450	3000	17 3/4	19 3/4	1 1/2	21 1/2	23	1 1/4	1/2	4	76.00



PIPE SUPPORTS and HARDWARE

FIG. 727

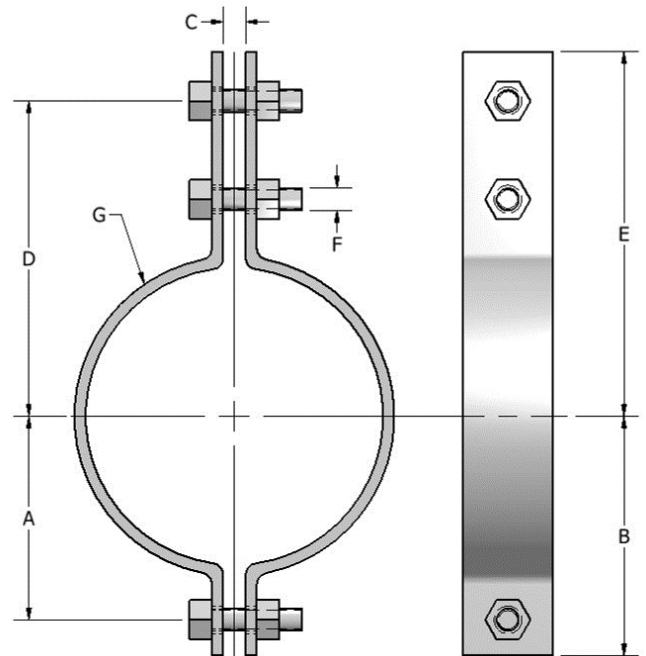
INTERMEDIATE 3-BOLT PIPE CLAMP

APPLICATION: Fig. 727 Intermediate 3 Bolt Pipe Clamps are recommended for the support of hot piping with insulation. Fig. 727 Intermediate 3 Bolt Pipe Clamps have been designed to carry loads that are larger in magnitude than can be carried by the Fig. 724 Standard 3 Bolt Pipe Clamp. The 3 bolt design enables the attachment to the pipe clamp outside of the insulation. For high temperature piping with thick insulation and a loading larger than this clamp will carry, a Fig. 730 or 733 3 Bolt Pipe Clamp may be used. Or, if the temperature dictates, a Fig. 736, 739, 742 or 745 Alloy 3 Bolt Pipe Clamp may be used. The selection of the proper 3 Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried. Alloy pipe clamps and stainless steel pipe clamps are also available. The loads shown on the data chart are listed for 750 oF and 650 oF service.

CONSTRUCTION: Fig. 727 Standard 3 Bolt Pipe Clamps are made from carbon steel plate or bar stock and are provided with three bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	"D" CTRLINE TO TOP BOLT (IN)	"E" CTRLINE TO TOP END (IN)	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
1/2	950	850	1 1/8	1 5/8	5/8	2 3/8	2 7/8	3/8	3/16	1	0.77
3/4	950	850	1 1/4	1 3/4	5/8	2 3/8	2 7/8	3/8	3/16	1	0.80
1	950	850	1 3/8	1 7/8	5/8	2 1/2	3	3/8	3/16	1	0.84
1 1/4	950	850	1 9/16	2 1/8	5/8	2 9/16	3 1/8	3/8	3/16	1	0.91
1 1/2	1540	1380	1 13/16	2 1/4	1 1/16	4 3/8	4 7/8	5/8	1/4	1 1/4	2.54
2	1540	1380	2 1/8	2 3/4	1 1/16	5 1/4	5 7/8	5/8	1/4	1 1/4	2.87
2 1/2	1540	1380	2 5/16	2 15/16	1 1/16	5 1/2	6 1/8	5/8	1/4	1 1/4	2.98
3	1540	1380	2 7/8	3 1/2	1 1/16	6	6 11/16	5/8	1/4	1 1/4	3.24
3 1/2	1540	1380	3 3/16	3 15/16	1 1/16	6 3/8	7 1/8	3/4	1/4	1 1/4	4.42
4	2500	2230	3 1/2	4 3/8	1 1/16	6 7/8	7 5/8	3/4	5/16	2	7.24
5	2500	2230	3 15/16	4 15/16	1 1/16	7 3/8	8 1/8	3/4	5/16	2	7.86
6	2860	2550	5	6 1/8	1 7/16	8 1/2	9 5/8	7/8	3/8	2	11.33
8	2860	2550	6	7 1/8	1 7/16	9 1/2	10 5/8	7/8	3/8	2	12.66
10	3240	2880	7	8 1/4	1 7/16	10 3/4	12	1	1/2	2 1/2	23.25
12	3240	2880	8	9 1/4	1 7/16	11 3/4	13	1	1/2	2 1/2	25.46
14	4300	3830	9 1/8	10 5/8	2	12 3/4	14 1/4	1 1/4	5/8	3	44.08
16	4300	3830	10 1/8	11 5/8	2	13 3/4	15 1/4	1 1/4	5/8	3	47.40
18	4300	3830	11 1/8	12 5/8	2	14 3/4	16 1/4	1 1/4	5/8	3	50.72
20	5480	4900	12 3/8	14	2	16 1/8	17 5/8	1 3/8	3/4	3	72.16
24	4500	4010	14 1/2	16 1/8	2	18 1/8	19 5/8	1 3/8	3/4	3	80.28
26	4250	3800	15 3/4	18	2 1/4	20	22 1/4	1 3/8	3/4	3	87.34
28	5800	5100	17 1/2	20	2 1/4	21 3/4	24 1/4	1 3/8	3/4	4	119.20
30	7400	6600	18 1/2	21 1/4	2 1/2	23 1/2	26 1/4	1 3/8	3/4	5	154.96
32	8200	7300	19 5/8	22 5/8	2 1/2	25	28	1 1/2	3/4	6	192.86
34	9800	8700	21 1/2	25	3	27 3/4	31 1/4	1 3/4	1	5	238.37
36	10400	9300	22 1/2	26	3	28 3/4	32 1/4	1 3/4	1	5	247.58



PIPE SUPPORTS and HARDWARE

FIG. 730
HEAVY 3-BOLT PIPE CLAMP

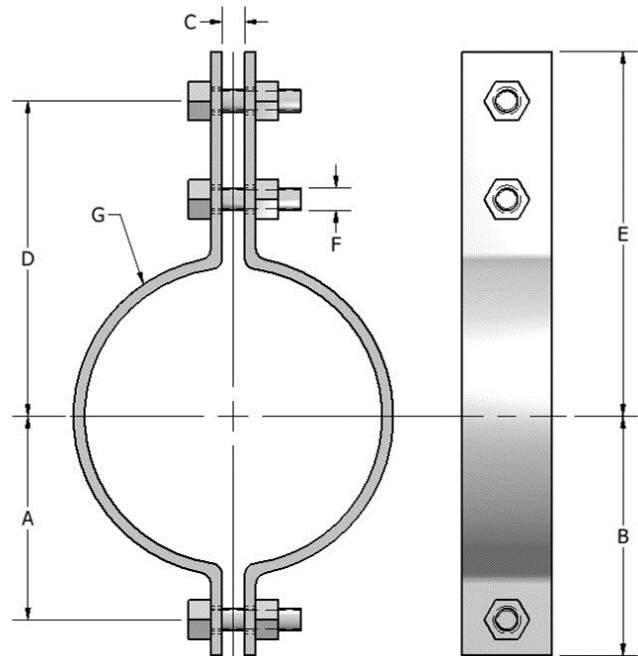
APPLICATION: Fig. 730 Heavy 3 Bolt Pipe Clamps are recommended for the support of hot piping with insulation. Fig. 730 Heavy 3 Bolt Pipe Clamps have been designed to carry loads that are larger in magnitude than can be carried by the Fig. 727 Intermediate 3 Bolt Pipe Clamp. The 3 bolt design enables the attachment to the pipe clamp outside of the insulation. For high temperature piping with thick insulation and a loading larger than this clamp will carry, a Fig. 733 3 Bolt Pipe Clamp may be used. Or, if the temperature dictates, a Fig. 736, 739, 742 or 745 Alloy 3 Bolt Pipe Clamp may be used.

The selection of the proper 3 Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried. Alloy pipe clamps and stainless steel pipe clamps are also available. The loads shown on the data chart are listed for 750 oF and 650 oF service.

CONSTRUCTION: Fig. 730 Heavy 3 Bolt Pipe Clamps are made from carbon steel plate or bar stock and are provided with three bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	"D" CTRLINE TO TOP BOLT (IN)	"E" CTRLINE TO TOP END (IN)	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
1/2	1200	1080	1 5/16	1 13/16	1	2 9/16	3 1/16	1/2	1/4	1 1/2	1.71
3/4	1200	1080	1 7/16	1 15/16	1	2 9/16	3 1/16	1/2	1/4	1 1/2	1.76
1	1200	1080	1 9/16	2 1/16	1	2 11/16	3 1/4	1/2	1/4	1 1/2	1.86
1 1/4	1200	1080	1 3/4	2 5/16	1	2 3/4	3 3/8	1/2	1/4	1 1/2	1.97
1 1/2	1900	1720	2	2 7/16	1 1/8	4 9/16	5 1/8	11/16	5/16	2	6.76
2	1900	1720	2 5/16	2 15/16	1 1/8	5 7/16	6 1/4	11/16	5/16	2	7.43
2 1/2	1900	1720	2 1/2	3 3/16	1 1/8	5 11/16	6 3/8	11/16	5/16	2	7.65
3	1900	1720	3 1/16	3 3/4	1 1/8	6 3/16	6 15/16	11/16	5/16	2	8.18
3 1/2	1900	1720	3 3/8	4 3/16	1 1/8	6 9/16	7 3/8	11/16	5/16	2	8.58
4	3000	2700	3 3/4	4 5/8	1 3/4	7 1/8	7 7/8	3/4	3/8	2	8.62
5	3000	2700	4 3/16	5 3/16	2	7 5/8	8 3/8	3/4	3/8	2	9.24
6	3500	3150	5 3/16	6 3/8	2	8 3/4	9 7/8	1	3/8	2 1/2	14.94
8	4800	4300	6 3/8	7 1/2	2	9 7/8	11	1 1/8	1/2	2 1/2	22.76
10	5400	4900	7 3/8	8 5/8	2	11 1/8	12 3/8	1 1/4	1/2	3 1/2	35.28
12	5400	4900	8 3/8	9 5/8	2	12 1/8	13 3/8	1 1/4	1/2	3 1/2	38.38
14	5400	4900	9 1/2	11	2 1/4	13 1/8	14 5/8	1 3/8	3/4	3	59.96
16	5400	4900	10 1/2	12	2 1/4	14 1/8	15 5/8	1 3/8	3/4	3	63.94
18	6500	5900	11 1/2	13	2 1/4	15 1/8	16 5/8	1 1/2	3/4	3 1/2	77.99
20	6500	5900	12 3/8	14 3/8	2 1/4	16 1/2	18	1 1/2	3/4	3 1/2	83.76
24	6500	5900	15	16 5/8	2 1/4	18 5/8	20 1/4	1 1/2	7/8	4	119.27
26	6500	5900	16 1/4	18 1/2	2 1/2	20 1/2	22 7/8	1 1/2	7/8	4	130.01
28	6500	5900	18	20 1/2	2 1/2	22 1/4	24 7/8	1 1/2	7/8	4	140.17
30	9600	8750	19	21 3/4	2 3/4	24	26 7/8	1 3/4	1	5	210.00
32	10500	9500	21 1/8	23 1/8	2 3/4	25 1/2	28 5/8	1 3/4	1	6	261.13
34	11600	10500	22	25 1/2	3 1/4	28 1/4	31 7/8	1 3/4	1	6	283.53
36	12400	11300	23	26 1/2	3 1/4	29 1/4	32 7/8	1 3/4	1	6	294.57
42	12400	11300	29	32 3/4	3 1/4	35 3/8	39 3/8	1 3/4	1	6	349.34



PIPE SUPPORTS and HARDWARE

FIG. 733

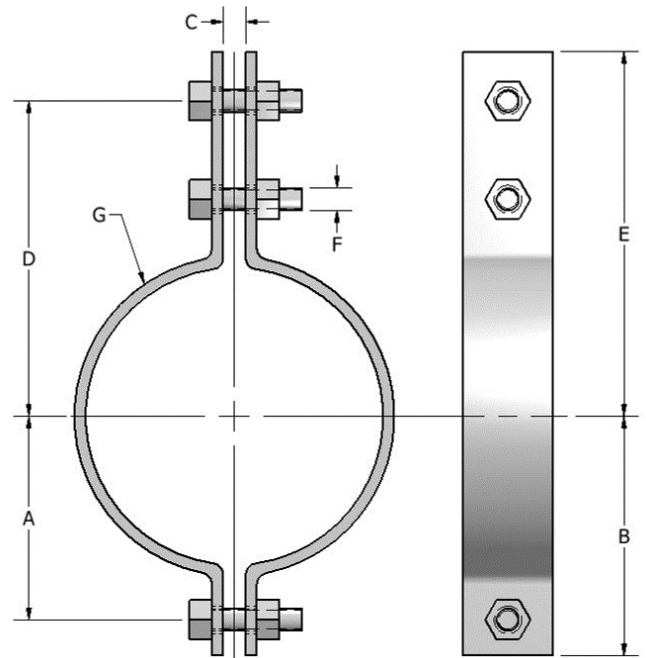
EXTRA HEAVY 3-BOLT PIPE CLAMP

APPLICATION: Fig. 733 Extra Heavy 3 Bolt Pipe Clamps are recommended for the support of hot piping with insulation. Fig. 733 Extra Heavy 3 Bolt Pipe Clamps have been designed to carry loads that are larger in magnitude than can be carried by the Fig. 730 Heavy 3 Bolt Pipe Clamp. The 3 bolt design enables the attachment to the pipe clamp outside of the insulation. For high temperature piping with thick insulation and a loading larger than this clamp will carry, contact AAA Technology for a custom fabricated clamp to fit your requirements. If the temperature dictates, a Fig. 736, 739, 742 or 745 Alloy 3 Bolt Pipe Clamp may be an option for your application. The selection of the proper 3 Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried. Alloy pipe clamps and stainless steel pipe clamps are also available. The loads shown on the data chart are listed for 750 °F and 650 °F service.

CONSTRUCTION: Fig. 733 Extra Heavy 3 Bolt Pipe Clamps are made from carbon steel plate or bar stock and are provided with three bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



NOM. PIPE DIA. (IN)	MAX LOAD 650°F	MAX LOAD 750°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	"D" CTRLINE TO TOP BOLT (IN)	"E" CTRLINE TO TOP END (IN)	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
1	1900	1690	1 5/8	2 3/8	1	4 5/8	5 3/8	5/8	5/16	2	4.13
1 1/4	1900	1690	1 3/4	2 1/2	1	4 3/4	5 1/2	5/8	5/16	2	4.30
1 1/2	2300	2050	2	2 3/4	1 1/8	4 3/4	5 1/2	3/4	3/8	2	6.17
2	2300	2050	2 5/16	3	1 1/8	5 7/16	6 3/16	3/4	3/8	2	6.70
2 1/2	2300	2050	2 1/2	3 3/8	1 1/8	5 11/16	6 7/16	3/4	3/8	2	7.07
3	2300	2050	3 1/16	3 7/8	1 1/8	6 3/16	6 15/16	3/4	3/8	2	7.65
3 1/2	2300	2050	3 3/8	4 1/4	1 1/8	6 9/16	7 3/8	3/4	3/8	2	8.13
4	3600	2700	3 3/4	4 3/4	1 3/4	7 1/8	7 7/8	7/8	3/8	2	9.41
5	3600	2700	4 3/16	5 3/16	1 3/4	7 5/8	8 3/8	7/8	3/8	2	10.05
6	4500	4000	5 3/16	6 1/4	1 3/4	8 15/16	10 1/4	1	1/2	2 1/2	18.79
8	6000	5300	6 3/8	7 3/8	2	10 1/8	11 3/8	1 1/8	5/8	2 1/2	27.62
10	6750	6000	7 3/8	9	2 1/4	11 3/8	13 1/8	1 1/4	5/8	3 1/2	43.81
12	7000	6250	8 5/8	10 1/4	2 1/2	12 9/16	14 5/16	1 3/8	5/8	3 1/2	55.96
14	9500	8450	9 5/8	11 5/8	2 1/2	13 1/2	15 1/2	1 1/2	3/4	4	77.85
16	10000	8920	10 7/8	13 1/8	3	14 7/8	17 1/8	1 3/4	3/4	4 1/2	98.23
18	13800	12300	12 1/2	14 1/2	3 1/2	16 1/4	18 1/4	2	1	4	134.50
20	15300	13650	13 1/2	16	3 1/2	17 1/4	19 3/4	2	1	5	169.91
24	16300	14500	15 1/2	18 1/2	3 1/2	19 1/4	22 5/16	2	1	6	220.74
26	17500	15600	16 7/8	20 7/8	3 1/2	25 1/4	29 5/8	2 1/4	1	7	307.04
28	18000	16000	18 7/8	23 3/8	4	27 1/4	31 5/8	2 1/4	1	7	331.00
30	20500	18250	19 7/8	24 3/8	4 1/4	28 1/4	32 3/4	2 1/4	1	8	383.86
32	23750	21150	21 3/4	26 3/4	4 1/4	31	35 3/4	2 1/2	1 1/4	8	522.98
34	25000	22250	23 3/8	28 3/8	4 1/4	32 1/2	37 1/2	2 1/2	1 1/2	7	575.12
36	28000	25000	24 5/8	30	4 1/2	34 3/4	40 1/8	2 3/4	1 1/2	8	724.55
42	32300	28750	29	35 1/2	4 1/2	35 3/8	40 3/4	2 3/4	1 1/2	9	873.05



PIPE SUPPORTS and HARDWARE

FIG. 736

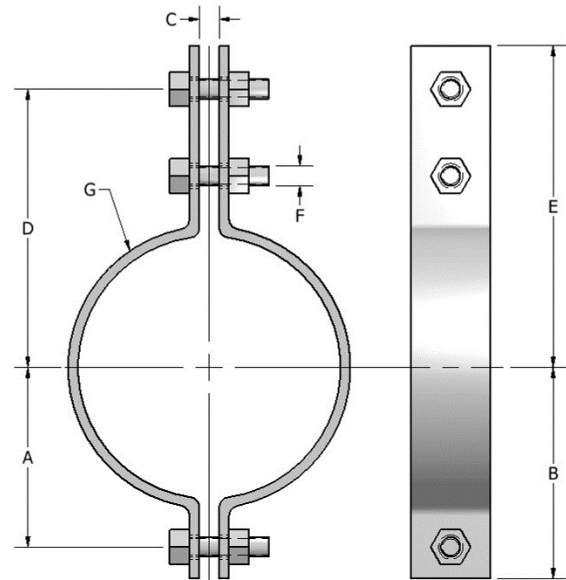
STANDARD 3-BOLT ALLOY PIPE CLAMP

APPLICATION: Fig. 736 Standard 3 Bolt Alloy Pipe Clamps are recommended for the support of hot piping with insulation when the temperature exceeds 750 °F and is less than 1050 °F. Fig. 736 Standard 3 Bolt Alloy Pipe Clamps have been designed to carry loads that are not large in magnitude. The 3 bolt design enables the attachment to the pipe clamp outside of the insulation. For high temperature piping with thick insulation and a loading larger than this clamp will carry, a Fig. 739, 742 or 745 3 Bolt Alloy Pipe Clamp may be used. Or, if the temperature and loads dictate, Alloy Yoke Clamps, Fig. 748 or 751, may be used. The selection of the proper 3 Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried. The loads shown on the data chart are listed for 950 °F, 1000 °F and 1050 °F service.

CONSTRUCTION: Fig. 736 Standard 3 Bolt Alloy Pipe Clamps are made from ASTM A387-Gr. 22 steel plate or bar stock and are provided with three alloy bolts and nuts.

FINISHES AVAILABLE: Black.

ORDERING: Specify figure number, nominal pipe diameter, name.



NOM. PIPE DIA. (IN)	MAX. REC. LOAD (LBS.) 950°F	MAX. REC. LOAD (LBS.) 1000°F	MAX. REC. LOAD (LBS.) 1050°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	"D" CTRLINE TO TOP BOLT (IN)	"E" CTRLINE TO TOP	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
3/4	1550	1100	810	1 1/4	2	1/2	3 1/16	3 3/4	1/2	1/4	1	1.46
1	1580	1120	830	1 7/16	2 1/8	1/2	3 3/16	3 13/16	1/2	1/4	1	1.51
1 1/4	2000	1410	1050	1 9/16	2 1/2	1	4 1/8	4 7/8	5/8	1/4	1 1/4	2.57
1 1/2	2000	1410	1050	1 5/8	2 5/8	1	4 1/8	4 7/8	5/8	1/4	1 1/4	2.62
2	1930	1360	1010	2	2 7/8	1	5 1/8	5 7/8	5/8	1/4	1 1/4	2.88
2 1/2	1860	1300	970	2 5/16	3 1/8	1	5 3/8	6 1/8	5/8	1/4	1 1/4	3.02
3	1720	1210	900	2 5/8	3 1/4	1	5 7/8	6 11/16	5/8	1/4	1 1/4	3.21
3 1/2	1620	1190	880	3 1/8	3 7/8	1	6 1/4	7 1/8	5/8	1/4	1 1/4	3.46
4	3800	2990	2200	3 1/2	4 1/2	1	6 1/2	7 5/8	3/4	3/8	2	8.39
5	3400	2410	1790	4 1/8	5 1/16	1	7	8 1/8	3/4	3/8	2	9.08
6	3750	2650	1980	4 5/8	6 1/8	1 3/8	8 1/2	9 15/16	7/8	3/8	2 1/2	13.51
8	2850	2040	1520	5 3/4	7 1/8	1 3/8	9 1/2	10 15/16	7/8	3/8	2 1/2	15.16
10	3900	2770	2060	7 1/4	8 1/4	1 3/8	10 5/8	12	1	1/2	2 1/2	23.32
12	3750	2650	1970	8 1/8	9 7/8	2	12 3/8	13 7/8	1	1/2	2 1/2	26.61
14	3800	2800	2050	9 1/8	10 5/8	2	12 11/16	14 3/8	1 1/4	5/8	3	44.21
16	3800	2800	2050	10 1/8	11 5/8	2	13 11/16	15 3/8	1 1/4	5/8	3	47.54
18	3750	2750	2050	11 1/8	12 5/8	2	14 11/16	16 3/8	1 1/4	5/8	3	50.86
20	4650	3550	2620	12 3/8	14	2	15 7/8	17 5/8	1 3/8	3/4	3	72.16
24	3950	2900	2150	14 3/8	16 1/8	2	17 7/8	19 1/2	1 3/8	3/4	3	80.12
26	4500	3300	2450	15 3/4	17 1/4	2	20 1/2	22	1 1/4	3/4	4	101.10
28	4500	3300	2450	16 3/4	18 1/4	2	21 1/2	23	1 1/4	3/4	4	106.41
30	4000	3300	2450	18	19 3/4	2	23	24 3/4	1 1/2	3/4	4	122.81

PIPE SUPPORTS and HARDWARE

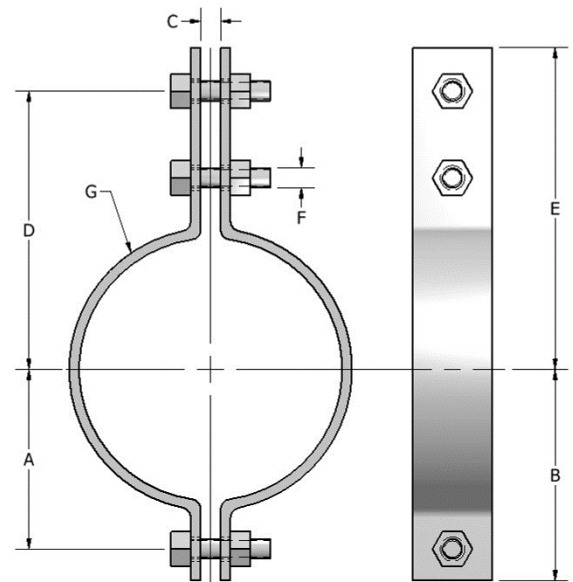
FIG. 739
INTERMEDIATE 3-BOLT ALLOY PIPE CLAMP

APPLICATION: Fig. 739 Intermediate 3 Bolt Alloy Pipe Clamps are recommended for the support of hot piping with insulation when the temperature exceeds 750 °F and is less than 1050 °F. Fig. 739 Intermediate 3 Bolt Alloy Pipe Clamps have been designed to carry loads larger in magnitude than the Fig. 736 Standard 3 Bolt Alloy Pipe Clamp. The 3 bolt design enables the attachment to the pipe clamp outside of the insulation. For high temperature piping with thick insulation and a loading larger than this clamp will carry, a Fig. 742 or 745 3 Bolt Alloy Pipe Clamp may be used. Or, if the temperature and loads dictate, Alloy Yoke Clamps, Fig. 748 or 751, may be used. The selection of the proper 3 Bolt Pipe Clamp depends upon the temperature of the piping system and load to be carried. The loads shown on the data chart are listed for 950 °F, 1000 °F and 1050 °F service.

CONSTRUCTION: Fig. 739 Intermediate 3 Bolt Alloy Pipe Clamps are made from ASTM A387-Gr. 22 steel plate or bar stock and are provided with three alloy bolts and nuts.

FINISHES AVAILABLE: Black.

ORDERING: Specify figure number, nominal pipe diameter, name.



NOM. PIPE DIA. (IN)	MAX. REC. LOAD (LBS.) 950°F	MAX. REC. LOAD (LBS.) 1000°F	MAX. REC. LOAD (LBS.) 1050°F	"A" CTRLINE TO BOLT (IN)	"B" CTRLINE TO END (IN)	"C" GAP (IN)	"D" CTRLINE TO TOP BOLT (IN)	"E" CTRLINE TO TOP (IN)	F (IN)	"G" Th (IN)	"G" W (IN)	WT EA
2	2400	1800	1400	2 5/8	3 5/8	1	6 5/8	7 5/8	3/4	3/8	2	7.49
2 1/2	3600	2700	2100	3	4 1/8	1 1/8	7	8 1/8	7/8	3/8	2 1/2	10.36
3	3600	2700	2100	3 3/8	4 1/2	1 1/8	7 3/8	7 1/2	7/8	3/8	3	11.81
3 1/2	3600	2700	2100	3 5/8	4 3/4	1 1/8	7 5/8	8 3/4	7/8	3/8	3	13.01
4	4700	3500	2700	4 1/4	5 1/2	1 1/4	8 1/4	9 1/2	1	1/2	3	19.20
5	4700	3500	2700	4 3/4	6	1 1/4	8 3/4	10	1	1/2	3	20.58
6	4700	3500	2700	5 3/8	6 5/8	1 1/4	10 3/8	11 5/8	1	1/2	3	23.02
8	7600	5650	4400	7	8 5/8	1 1/2	12	13 5/8	1 1/4	3/4	4	55.46
10	7600	5650	4400	8	9 5/8	1 1/2	13	12	1 1/4	3/4	4	56.53
12	7600	5650	4400	9	10 5/8	1 1/2	14	15 5/8	1 1/4	3/4	4	66.29
14	7600	5650	4400	9 3/4	11 3/8	1 1/2	14 3/4	16 3/8	1 1/4	3/4	4	70.11
16	7600	5650	4400	10 3/4	12 1/4	1 1/2	15 3/4	17 3/8	1 1/4	3/4	4	75.21
18	7600	5650	4400	11 3/4	13 1/4	1 1/2	16 3/4	18 3/8	1 1/4	3/4	4	80.51
20	9500	7050	5450	13	14 3/4	1 3/4	18	19 7/8	1 1/2	3/4	6	134.79
24	11000	8150	6300	15 1/2	17 1/4	1 3/4	20 1/2	22 1/4	1 1/2	1	6	201.60
26	11000	8150	6300	16 1/2	18 1/4	1 3/4	21 1/2	23 3/4	1 1/2	1	6	213.92
28	11000	8150	6300	17 1/2	19 3/4	1 3/4	22 1/2	24 3/4	1 1/2	1	6	226.23
30	14500	10750	8300	18 3/4	21	2 1/8	23 3/4	26	1 3/4	1	8	315.67
32	14500	10750	8300	19 3/4	22	2 1/8	24 3/4	27	1 3/4	1	8	329.82
34	14500	10750	8300	20 3/4	23	2 1/8	25 3/4	28	1 3/4	1	8	343.97
36	14500	10750	8300	21 3/4	24	2 1/8	26 3/4	29	1 3/4	1	8	358.69
42	14500	10750	8300	24 3/4	27	2 1/8	29 3/4	32	1 3/4	1	8	401.14



PIPE SUPPORTS and HARDWARE

FIG. 748

STANDARD ALLOY YOKE PIPE CLAMP

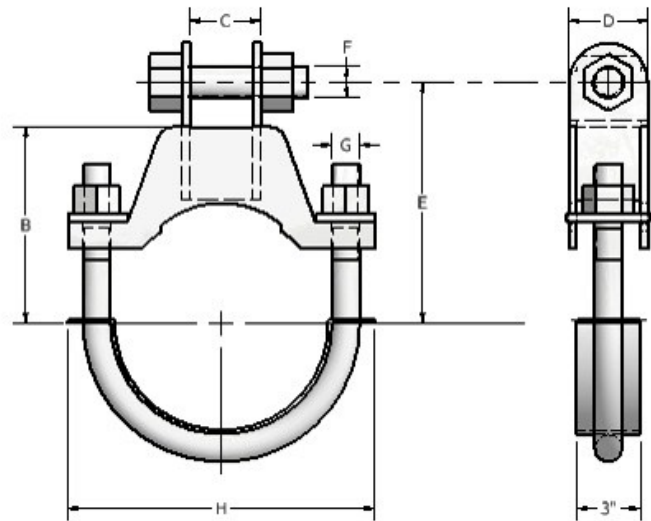
APPLICATION: Fig. 748 Standard Alloy Yoke Pipe Clamps are recommended for the support of hot piping with 4" to 6" of insulation where the support loads are relatively large in magnitude. Note that the maximum recommended service temperature for this pipe clamp is 1,100 °F.

CONSTRUCTION: Fig. 748 Standard Alloy Yoke Pipe Clamps consists of a chrome molybdenum steel frame and a stainless steel u-bolt.

FINISHES AVAILABLE: Black.

ORDERING: Specify figure number, nominal pipe diameter and name.

EXAMPLE: Fig. 748, 12", Standard Alloy Yoke Pipe Clamp.



PIPE DIA. RANGE (IN)	MAX. REC. LOAD (LBS.) 950°F -	MAX. REC. LOAD (LBS.) 1075°F	MAX. REC. LOAD (LBS.) 1100°F	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G (IN)	H (IN)	WT EA
8 5/8 - 10 13/16	9500	9100	8800	9 1/2	2	4	13 3/4	1 1/2	7/8	14 1/2	49
10 7/8 - 12 13/16	9500	9100	8800	10 1/2	2	4	13 3/4	1 1/2	7/8	16 1/2	54
12 7/8 - 14 1/8	9500	9100	8800	11 1/4	2	4	15 1/2	1 1/2	7/8	18	59
14 3/16 - 16 1/8	12500	12000	11500	13	2 1/4	5	16 3/4	1 3/4	1	21	104
16 3/16 - 18 1/8	12500	12000	11500	14	2 1/4	5	17 3/4	1 3/4	1	23	113
18 3/16 - 20 1/4	12500	12000	11500	15	2 1/4	5	18 3/4	1 3/4	1	25	125
20 5/16 - 22 1/4	15500	15000	14500	16 1/2	2 1/4	5	20	2	1 1/8	28	162
22 5/16 - 24 1/4	15500	15000	14500	17 1/2	2 1/4	5	21	2	1 1/8	20	176
24 5/16 - 26 1/4	15500	15000	14500	18 1/2	2 1/4	5	22	2	1 1/8	32	193
26 5/16 - 28 1/4	20000	19200	18500	20	2 1/2	6	23 3/4	2 1/4	1 1/4	34 1/2	274
28 5/16 - 30 1/4	20000	19200	18500	21	2 1/2	6	34 3/4	2 1/4	1 1/4	36 1/2	298



PIPE SUPPORTS and HARDWARE

FIG. 751
HEAVY DUTY ALLOY YOKE PIPE
CLAMP

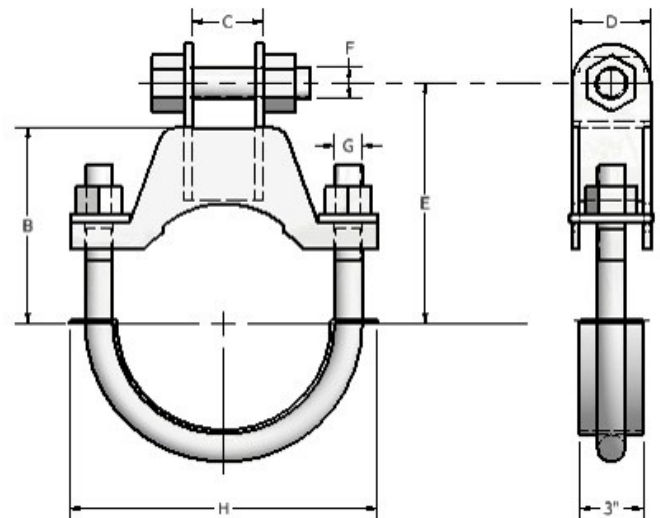
APPLICATION: Fig. 751 Heavy Duty Alloy Yoke Pipe Clamps are recommended for the support of hot piping with 4" to 6" of insulation where the support loads are large in magnitude. Note that the maximum recommended service temperature for this pipe clamp is 1,100 ° F.

CONSTRUCTION: Fig. 751 Heavy Duty Alloy Yoke Pipe Clamps consists of a chrome molybdenum steel frame and a stainless steel u-bolt.

FINISHES AVAILABLE: Black.

ORDERING: Specify figure number, nominal pipe diameter and name.

EXAMPLE: Fig. 751, 16", Heavy Duty Alloy Yoke Pipe Clamp.



PIPE DIA. RANGE (IN)	MAX. REC. LOAD (LBS.) 950°F - 1050°F	MAX. REC. LOAD (LBS.) 1075°F	MAX. REC. LOAD (LBS.) 1100°F	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G (IN)	H (IN)	WT EA
8 5/8 - 10 13/16	12500	12000	11500	10 1/4	2 1/4	5	14	1 3/4	1	15 1/4	72
10 7/8 - 12 13/16	15500	15000	14500	11 3/4	2 1/4	5	15 1/4	2	1 1/8	17 3/4	103
12 7/8 - 14 1/8	15500	15000	14500	12 1/2	2 1/4	5	16	2	1 1/8	19 1/4	110
14 3/16 - 16 1/8	20000	19200	18500	13 3/4	2 1/2	6	17 1/2	2 1/4	1 1/4	22	167
16 3/16 - 18 1/8	20000	19200	18500	14 3/4	2 1/2	6	18 1/2	2 1/4	1 1/4	24	180
18 3/16 - 20 1/4	23700	22700	21900	16	2 3/4	6 1/2	20	2 1/2	1 3/8	26 1/2	228
20 5/16 - 22 1/4	23700	22700	21900	17	2 3/4	6 1/2	21	2 1/2	1 3/8	28 1/2	246
22 5/16 - 24 1/4	29000	28000	27000	18 1/2	3	7	22 3/4	2 3/4	1 1/2	30 3/4	325
24 5/16 - 26 1/4	29000	28000	27000	19 1/2	3	7	23 3/4	2 3/4	1 1/2	32 3/4	340
26 5/16 - 28 1/4	29000	28000	27000	20 1/2	3	7	24 3/4	2 3/4	1 1/2	34 3/4	355
28 5/16 - 30 1/4	29000	28000	27000	21 1/2	3	7	25 3/4	2 3/4	1 1/2	36 3/4	369



PIPE SUPPORTS and HARDWARE

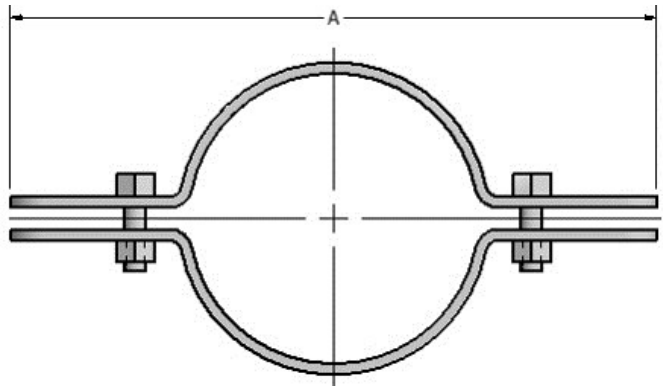
FIG. 754
EXTENSION PIPE OR RISER CLAMP

APPLICATION: Fig. 754 Extension Pipe or Riser Pipe Clamps are recommended for the support and/or restraint of vertical steel pipes. A Fig. 754 Extension Pipe or Riser Pipe Clamp is designed to attach to the pipe and to rest on a structural member or floor; it is not designed to have hanger rods attached to it to support the pipe. Note that the maximum recommended service temperature for this pipe clamp is 650 °F. The clamp should be bolted to the pipe just below support lugs or other attachment that can carry a shear load. Placing the clamp just below adequate support lugs will prevent movement of the clamp along the pipe should the frictional resistance between the clamp and the pipe not be sufficient to support the pipe. See the table of torque values that are provided as a guide for tightening the bolts on the clamp.

CONSTRUCTION: Fig. 754 Extension Pipe or Riser Pipe Clamps consists of two carbon steel flat bars bent to shape and held together by two carbon steel bolts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



PIPE SIZE (IN)	MATERIAL SIZE	A (IN)	C-C (IN)	WT EA	MAX REC LOAD
1/2	8ga x 1.0	8 5/8	2 1/8	0.88	220
3/4	8ga x 1.0	8 13/16	2 5/16	0.92	220
1	8ga x 1.0	9 1/16	2 5/8	0.94	220
1 1/4	8ga x 1.0	9 7/16	2 15/16	1.00	250
1 1/2	8ga x 1.0	10	3 7/16	1.04	250
2	8ga x 1.0	10 9/16	4	1.14	300
2 1/2	3ga x 1.0	11 1/8	4 9/16	1.60	400
3	3ga x 1.0	11 13/16	5 1/4	1.70	500
3 1/2	3ga x 1.0	13	6	2.06	600
4	3ga x 1.0	13 5/8	6 5/8	2.20	750
5	3ga x 1.5	14 1/8	7 5/8	3.40	1500
6	3ga x 1.5	15 3/8	8 7/8	3.72	1600
8	3/8 x 1.5	18 5/8	12	7.22	2500
10	3/8 x 2.0	21	14 1/2	10.94	2500
12	1/2 x 2.0	22 3/4	16 3/4	16.10	2700
14	1/2 x 2.0	24	17 7/8	17.00	2700
16	5/8 x 2.5	26	21	29.16	2900
18	5/8 x 2.5	28	23 1/8	31.91	2900
20	5/8 x 2.5	30	25	35.00	2900
24	5/8 x 2.5	36 3/4	27	41.00	8150

PIPE SUPPORTS and HARDWARE

FIG. 763

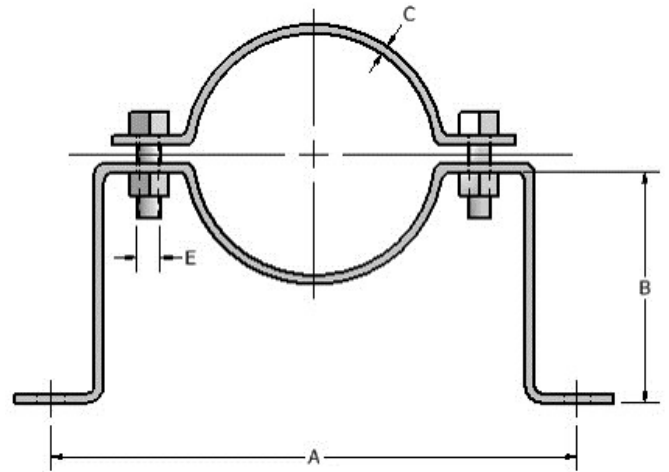
OFFSET PIPE CLAMP

APPLICATION: Fig. 763 Offset Pipe Clamps are recommended for the support of general service piping where little or no insulation is required and where the support attachment point is a nearby wall or floor. The maximum recommended service temperature for this pipe clamp is 650 °F.

CONSTRUCTION: Fig. 763 Offset Pipe Clamps are made from carbon steel plate or bar stock and are provided with two bolts and nuts. For easy attachment to the floor or wall, holes for bolts are provided in the feet. See the data table for the diameter of the holes in each size clamp.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



PIPE DIA. (IN)	MAX. REC. LOAD (LBS)	A (IN)	B (IN)	BAR STOCK DIM. C (IN)	BOLT HOLE DIA. D (IN)	BOLT DIA. & LENGTH E (IN)	WT EA
3/4	200	7 3/16	2 1/2	1/4 x 1 1/4	7/16	3/8 x 1	1.25
1	200	7 9/16	2 5/8	1/4 x 1 1/4	7/16	3/8 x 1	1.33
1 1/4	200	7 7/8	2 13/16	1/4 x 1 1/4	7/16	3/8 x 1	1.42
1 1/2	200	8 1/4	2 15/16	1/4 x 1 1/4	7/16	3/8 x 1	1.49
2	410	9 1/8	3 3/16	1/4 x 1 1/4	7/16	3/8 x 1	2.03
2 1/2	410	10 1/2	3 7/16	1/4 x 1 1/4	7/16	3/8 x 1	2.25
3	410	11 1/8	3 3/4	1/4 x 1 1/4	7/16	3/8 x 1	2.5
3 1/2	410	1 5/8	4	1/4 x 1 1/4	7/16	3/8 x 1	2.75
4	600	12 1/2	4 1/4	1/4 x 1 1/2	9/16	1/2 x 1 1/2	3.68
5	600	13 3/4	4 3/4	1/4 x 1 1/2	9/16	1/2 x 1 1/2	4.25
6	850	16 1/2	5 5/16	3/8 x 1 1/2	9/16	1/2 x 1 1/2	6.8
8	850	18 5/8	6 5/16	3/8 x 1 1/2	9/16	1/2 x 1 1/2	8.2



PIPE SUPPORTS and HARDWARE

FIG. 766

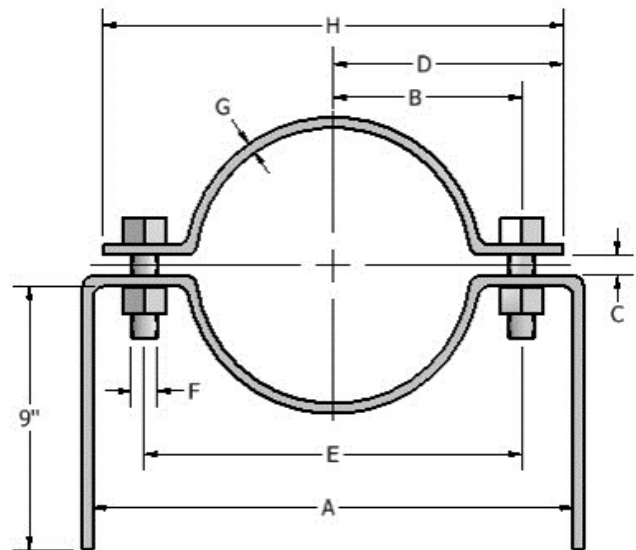
EXTENDED PIPE CLAMP

APPLICATION: Fig. 766 Extended Pipe Clamps are recommended for the support of general service piping where minimal thermal movement of the pipe is anticipated and where the support attachment points are nearby structure to which the legs of the Extended Pipe Clamps can be welded. The maximum recommended service temperature for this pipe clamp is 650 °F.

CONSTRUCTION: Fig. 766 Extended Pipe Clamps are made from carbon steel plate or bar stock and are provided with two bolts and nuts.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.



PIPE DIA. (IN)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	BAR STOCK DIM. G (IN)	H (IN)	I (IN)	WT EA
3/4	4 7/16	1 9/16	1/8	2 1/4	3 1/8	3/8	3/16 x 1 1/4	4 1/2	29 5/8	1.85
1	4 11/16	1 13/16	1/8	2 1/2	3 5/8	3/8	3/16 x 1 1/4	5	30	2.34
1 1/4	5	2 1/16	1/8	2 3/4	4 1/8	3/8	3/16 x 1 1/4	5 1/2	31 1/4	2.4
1 1/2	5 1/4	2 3/16	1/8	2 7/8	4 3/8	3/8	3/16 x 1 1/4	5 3/4	31 3/4	2.45
2	6	2 9/16	1/8	3 7/16	5 1/8	1/2	1/4 x 1 1/4	6 7/8	33 1/8	3.13
2 1/2	7 1/4	2 13/16	1/8	3 11/16	5 5/8	1/2	1/4 x 1 1/4	7 3/8	33 7/8	4.2
3	7 7/8	3 3/8	1/8	4 1/8	6 3/4	1/2	1/4 x 1 1/4	8 1/4	35 3/8	4.47
3 1/2	8 3/4	3 1/2	1/8	4 3/8	7	1/2	1/4 x 1 1/4	8 3/4	35 7/8	4.74
4	9 1/4	3 11/16	1/8	4 9/16	7 3/8	1/2	1/4 x 1 1/2	9 1/8	36 1/2	4.9
5	10 1/2	4 5/16	1/8	5 7/16	8 5/8	5/8	1/4 x 2	10 7/8	38 7/8	5.32
6	12 1/2	4 7/8	1/8	6	9 3/4	5/8	1/4 x 2	12	40 5/8	11.15
8	14 5/8	5 7/8	1/8	7	11 3/4	5/8	1/4 x 2	14	43 3/4	12.65

PIPE SUPPORTS and HARDWARE

FIG. 800 INSULATION PROTECTION SHIELD

APPLICATION: Fig. 800 Insulation Protection Shields are used to distribute a concentrated support load over a larger area and thereby prevent the crushing of insulation at the support point. Fig. 800 Insulation Protection Shields are commonly used on refrigeration and chilled water lines covered with either fiber glass or foam insulation. Since there is no pipe-to-support contact, condensation or ice does not form as found when pipe shoes or clamps are attached directly to the pipe.

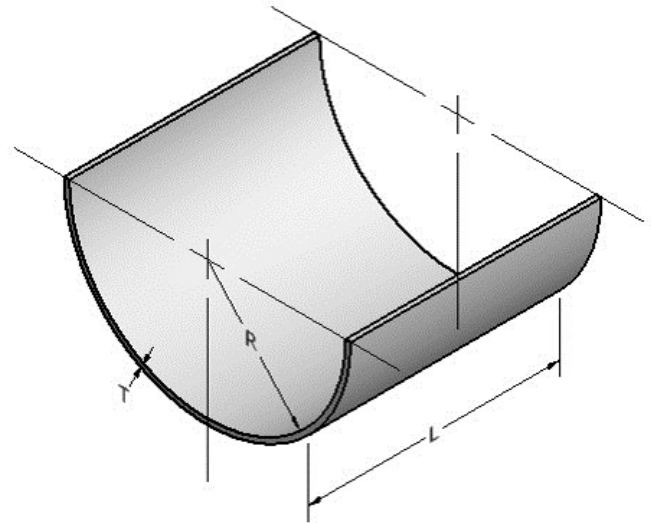
CONSTRUCTION: Depending upon the outside diameter of the insulated piping, the shield is rolled from carbon steel ranging in thickness from 12 gauge to 18 gauge.

ALTERNATIVES: AAA Technology offers Urethane Pipe Saddles, TRI*FOAM supports, as well as machined Wood Blocks, TRI*CAL supports, for the support of chilled water and refrigeration piping. Contact AAA Technology for details.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, exact outside diameter of insulated line by length of shield desired, name and finish, if other than black.

EXAMPLE: Fig. 800, 12.625" Dia. X 14" long, Insulation Protection



SHIELD ID "A" (IN)	SHIELD THK. "T" (IN)	SHIELD LENGTH "L" (IN)	WT EA
2.38	24 ga	12	0.31
2.88	24 ga	12	0.37
3.50	18 ga.	12	0.9
4.00	18 ga	12	0.95
4.50	18 ga	12	1.1
5.00	18 ga	12	1.25
5.56	18 ga	12	1.4
6.63	18 ga	12	1.65
7.65	18 ga	12	1.9
8.63	18 ga	12	2.1
9.63	18 ga	12	2.35
10.75	18 ga	12	2.65
11.75	18 ga	12	2.95
12.75	18 ga	12	3.15
14.00	16 ga	12	4.45
15.00	16 ga	12	4.46
16.00	16 ga	12	4.9
17.00	16 ga	12	5.15
18.00	16 ga	12	5.5
19.00	16 ga	12	5.7
20.00	16 ga	12	6.35
21.00	16 ga	12	6.45
22.00	16 ga	12	6.6
23.00	16 ga	12	7
24.00	16 ga	12	7.85
26.00	16 ga	12	7.9
27.00	16 ga	12	8.05
28.00	16 ga	12	8.6



PIPE SUPPORTS and HARDWARE

FIG. 803
RIBBED INSULATION PROTECTION
SHIELD

APPLICATION: Fig. 803 Ribbed Insulation Protection Shields are used to distribute a concentrated support load over a larger area and thereby prevent the crushing of insulation at the support point. The ribs in a Fig. 803 Ribbed Insulation Protection Shield are intended to provide resistance against the hanger strap moving along the length of the shield.

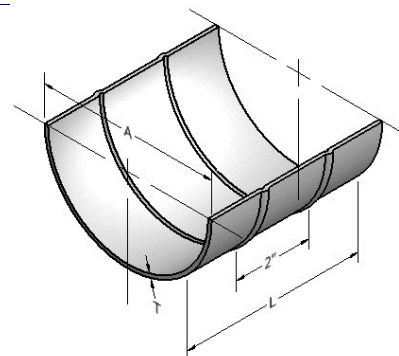
CONSTRUCTION: Depending upon the outside diameter of the insulated piping, the shield is rolled from carbon steel ranging in thickness from 12 gauge to 18 gauge.

ALTERNATIVES: AAA Technology offers Urethane Pipe Saddles, TRI*FOAM supports, as well as machined Wood Blocks, TRI*CAL supports, for the support of chilled water and refrigeration piping. Contact AAA Technology for details.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, exact outside diameter of insulated line by length of shield desired, name and finish, if other than black.

EXAMPLE: Fig. 803, 8.625" Dia. X 12" long, Ribbed Insulation Pro-



SHIELD SIZE	SHIELD ID "A" (IN)	SHIELD THK. "T" (IN)	SHIELD LENGTH "L" (IN)	SPACING BETWEEN RIBS (IN)	WT EA
1	2.38	18 ga.	8	2	0.44
2	2.62	18 ga.	8	2	0.49
3	2.88	18 ga.	8	2	0.52
4	3.50	18 ga.	8	2	0.63
5	4.00	18 ga.	8	2	0.72
6	4.50	18 ga.	8	2	0.8
7	5.00	18 ga.	8	2	0.9
8	5.56	18 ga.	8	2	1
9	6.00	18 ga.	8	2	1.08
10	6.63	18 ga.	12	2	1.2
11	7.65	18 ga.	12	2	2.05
12	8.63	18 ga.	18	2	2.3
13	9.63	18 ga.	18	2	2.2
14	10.75	18 ga.	24	2	2.9

FIG. 806
CONTOURED CAST IRON PIPE ROLL

APPLICATION: A Fig. 806 Cast Iron Pipe Roll is the roll unit in our Fig. 809, 812, 815 and 821 Roller Hanger/Chair units. It can also be used to replace damaged roll units in existing installations as well as being incorporated in custom field fabricated pipe rolls.

CONSTRUCTION: The Fig. 806 Pipe Roll is constructed of Cast Iron. The contoured portion of the pipe roll is intended to fit the outside diameter of the pipe diameters shown in the tables given below.

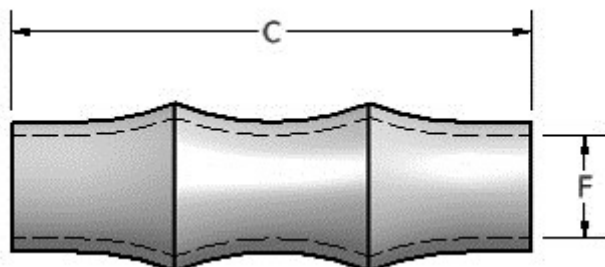
NOTE: Use size selection chart for assistance in determining the appropriate pipe roll for your application. Note that different sizes are used for the same resultant outside pipe diameter depending upon the type or style of hanger or chair unit you have selected.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, nominal pipe diameter, name and finish, if other than black.

EXAMPLE: Fig. 806, Nom. Pipe Dia. 10, Cast Iron Pipe Roll, galva-

NOM. PIPE DIA. / INSULATION O.D. (IN)	ACTUAL O.D. (IN)	C (IN)	F (IN)	WT EA
1	1 23/73	1 1/2	15/32	0.12
1 1/4	1 33/50	1 7/8	15/32	0.15
1 1/2	1 9/10	2 1/8	15/32	0.17
2	2 3/8	2 19/31	15/32	0.35
2 1/2	2 7/8	3 1/8	33/64	0.53
3	3 1/2	3 3/4	9/16	0.66
3 1/2	4	4 3/16	9/16	0.64
4	4 1/2	4 3/4	9/16	0.8
5	5 9/16	5 13/16	3/4	1.15
6	5 5/8	6 7/8	13/16	1.96
7	7 5/8	7 29/32	13/16	2.28
8	8 5/8	8 15/16	15/16	2.96
10	10 3/4	11 1/16	1	5.47
12	12 3/4	13	1 1/16	7
14	14	14 1/4	1 3/16	13.75
16	16	16 1/4	1 3/16	19.24
18	18	18 1/4	1 1/4	29
20	20	20 1/4	1 7/16	27
24	24	24 1/4	1 5/8	42.66
30	30	30 1/4	1 7/8	88



PIPE SUPPORTS and HARDWARE

FIG. 809
CLEVIS ROLLER HANGER

APPLICATION: A Fig. 809 Clevis Roller Hanger is used to support piping where 1.) significant movement along the axis of the piping at the support location occurs due to thermal expansion or contraction of the piping, 2.) support is to be provided by one rod attached to the structural member above the piping, 3.) a limited amount of vertical adjustment of the pipe roll is necessary or desirable and 4.) the support loads are relatively small. A Roller Hanger allows significant axial movement of the piping along the axis of the piping with virtually a negligible amount of frictional resistance to the movement. In addition, the support remains virtually vertical resulting in very little angular rotation of the support rod. Vertical adjustment is achieved by changing the elevation of the adjustment nuts above and below the top of the yoke and is limited to the distance between the pipe's outside surface and the bottom end of the hanger rod.

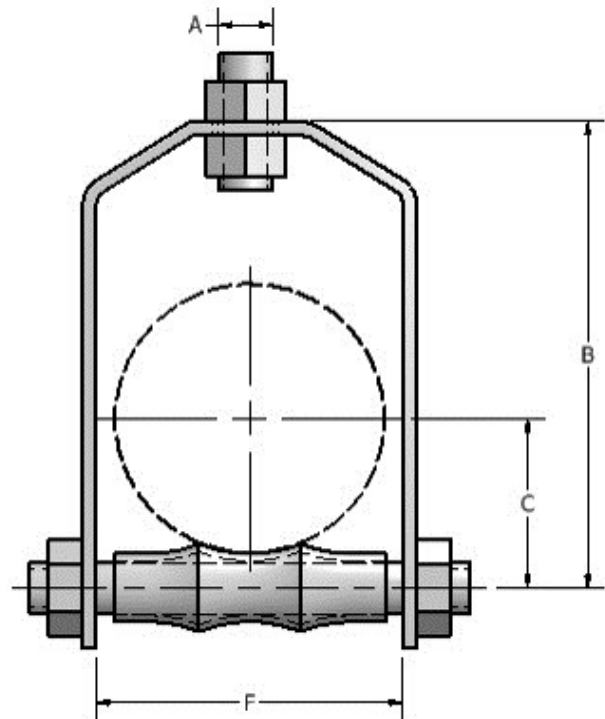
CONSTRUCTION: A Fig. 809 Clevis Roller Hanger consists of a Fig. 806 Cast Iron Pipe Roll, a carbon steel yoke, a threaded carbon steel roll rod and hex nuts on each end of the roll rod.

NOTE: See size selection chart for assistance in determining the appropriate Clevis Roller Hanger for your application.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, roll size, name and finish, if other than black.

NOTE: Hanger rod and nuts are to be ordered separately.



ROLL SIZE	MAX. REC. LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	STEEL SIZE	ROLL ROD DIA. (IN)	WT EA
2	150	1/2	4 15/16	1 9/16	2 7/8	8ga x 1 1/4	3/8	1.14
2 1/2	225	1/2	5 13/16	1 7/8	3 1/4	8ga x 1 1/4	3/8	1.47
3	310	1/2	6 7/16	2 1/8	3 13/16	8ga x 1 1/4	1/2	1.62
3 1/2	390	1/2	7 1/8	2 1/2	4 5/16	3ga x 1 1/2	1/2	2.76
4	475	5/8	7 5/8	2 13/16	4 7/8	3ga x 1 1/2	1/2	3.16
5	685	5/8	9 1/8	3 3/8	5 7/8	3ga x 2	5/8	4.62
6	780	3/4	10 5/16	3 15/16	7	3ga x 2	3/4	6.08
7	780	3/4	10 13/16	4 1/2	8	3ga x 2	3/4	7.59
8	780	7/8	12 11/16	5 1/8	9	3/8 x 2	7/8	11.83
10	965	7/8	15	6 1/4	11 1/8	3/8 x 2 1/2	7/8	17.29
12	965	1	17	7 3/8	13	1/2 x 2	7/8	22.5
14	1200	1 1/8	19 5/8	8 3/8	14 1/4	1/2 x 2 1/2	7/8	33
16	1200	1 1/4	21 5/8	9 3/8	16 1/4	1/2 x 3	7/8	46
18	1400	1 1/4	23 3/4	10 1/2	18 1/4	1/2 x 3	7/8	50.5
20	1600	1 3/8	25 7/8	11 5/8	20 1/4	1/2 x 3	7/8	65



PIPE SUPPORTS and HARDWARE

FIG. 812
TWO ROD ROLL TYPE HANGER

APPLICATION: A Fig. 812 Two Rod Roll Type Hanger is used to support piping where 1.) significant movement along the axis of the piping at the support location occurs due to thermal expansion or contraction of the piping, 2.) support is to be provided by two rods attached to a structural member above the pipe and 3.) substantial vertical adjustment of the pipe roll is necessary or desirable. A Roll Type Hanger allows axial movement of the piping with virtually a negligible amount of frictional resistance to the movement. In addition, the support remains virtually vertical resulting in very little angular rotation of the support rod. Vertical adjustment is achieved by changing the elevation of the adjustment nuts and is only limited by the amount of threading on the hanger rods.

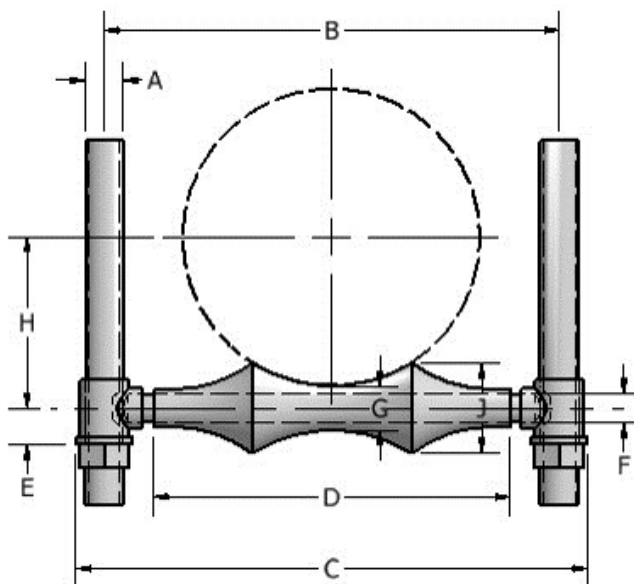
CONSTRUCTION: A Fig. 812 Two Rod Roll Type Hanger consists of a Fig. 806 Cast Iron Pipe Roll, two cast iron sockets, one on each end as shown in the picture, and a carbon steel roll rod.

NOTE: See size selection chart for assistance in determining the appropriate Two Rod Roll Type Hanger for your application.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, roll size, name and finish, if other than black.

NOTE: Hanger rods and nuts are to be ordered separately.



ROLL SIZE	MAX. REC. LOAD	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	H (IN)	J (IN)	WT EA
2	600	3/8	4 3/8	5 5/8	2 7/8	5/8	3/8	1 9/16	3/4	0.76
2 1/2	660	1/2	5 1/8	6 1/2	3 1/8	7/8	1/2	1 7/8	7/8	1.185
3	700	1/2	5 5/8	7	3 3/4	7/8	1/2	2 1/8	7/8	1.385
3 1/2	750	1/2	5 7/8	7 1/4	3 7/8	7/8	1/2	2 1/2	7/8	1.5
4	750	5/8	7	8 9/16	4 3/4	7/8	1/2	2 13/16	1	2.11
5	750	5/8	8 1/8	9 3/4	5 3/4	7/8	5/8	3 3/8	1 1/8	2.57
6	1070	3/4	9 3/4	11 5/8	6 7/8	1	3/4	3 15/16	1 3/8	4.395
7	1070	3/4	10 1/2	12 1/2	8	1	3/4	4 1/2	1 5/8	5.16
8	1350	7/8	12 1/8	14 1/4	8 7/8	1 1/8	7/8	5 1/8	1 1/2	7.425
10	1730	7/8	14	16 1/4	11	1 1/8	7/8	6 1/4	1 3/4	9.17
12	2400	7/8	15 3/4	18	13	1 1/8	7/8	7 5/16	2	13.15
14	3130	1	17 3/4	20 1/2	14 1/4	1 3/8	1	8 3/8	2 5/8	18.745
16	3970	1	20 9/16	23 3/8	16 7/8	1 3/8	1	9 1/2	2 5/8	24.54
18	4200	1	22	14 7/8	18 5/16	1 3/8	1	10 7/16	2 3/4	27.2
20	4550	1 1/4	24	27	20 1/4	1 1/2	1 1/4	11 1/2	3	32
24	6160	1 1/2	28 3/4	32	24 1/4	1 3/4	1 1/4	13 13/16	3 5/8	54
30	7290	1 3/4	35 5/8	39 3/4	30 1/4	2 1/8	1 1/4	17 1/4	4 1/2	82

PIPE SUPPORTS and HARDWARE

FIG. 815
ADJUSTABLE SUPPORT ROLLER

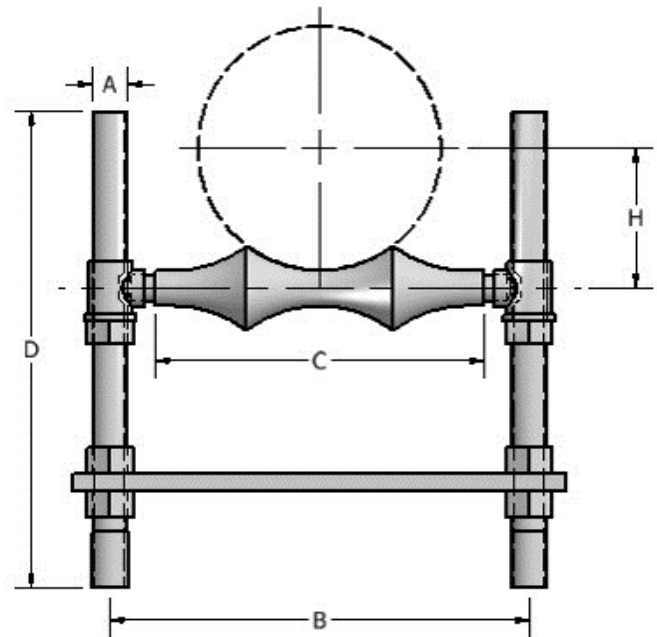
APPLICATION: A Fig. 815 Adjustable Support Roller is used to support piping where 1.) significant movement along the axis of the piping at the support location occurs due to thermal expansion or contraction of the piping, 2.) support is to be provided from a beam or other structural member located below the piping and 3.) significant vertical adjustment of the pipe roll is necessary or desirable. An Adjustable Support Roller allows axial movement of the piping with virtually a negligible amount of frictional resistance to the movement. Vertical adjustment is achieved by changing the elevation of the adjustable nuts above and below the structural member to which the support rods are attached.

CONSTRUCTION: A Fig. 815 Adjustable Support Roller consists of a Fig. 806 Cast Iron Pipe Roll, two cast iron sockets, one on each end as shown in the picture, a carbon steel roll rod, two pieces of all thread rod (length = to "D" dimension) and eight nuts.

NOTE: See size selection chart for assistance in determining the appropriate Adjustable Support Roller for your application.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, pipe roll size, name and finish, of other than black.



ROLL SIZE	MAX. REC. LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	H (IN)	WT EA
2	600	3/8	4 3/8	2 7/8	12	1 9/16	1.45
2 1/2	600	1/2	5 1/8	3 1/8	12	1 7/8	2.535
3	700	1/2	5 5/8	3 3/4	12	2 1/8	2.735
3 1/2	750	1/2	5 7/8	3 7/8	12	2 1/2	2.85
4	750	1/2	7	4 3/4	12	2 13/16	4.32
5	750	5/8	8 1/8	5 3/4	12	3 3/8	4.78
6	1070	3/4	9 3/4	6 7/8	12	3 15/16	7.705
7	1070	3/4	10 1/2	8	12	4 1/2	8.41
8	1350	7/8	12 1/8	8 7/8	12	5 1/8	12.205
10	1730	7/8	14	11	12	3 1/4	13.95
12	2400	7/8	15 3/4	13	12	7 5/16	17.93
14	3130	1 1/8	17 3/4	14 1/4	18	8 3/8	27.545
16	3970	1 1/4	20 9/16	16 7/8	18	9 1/2	33.34
18	4200	1 1/4	22	18 5/16	18	10 7/16	36
20	4550	1 1/4	24	20 1/4	18	11 1/2	46.6
24	6160	1 1/2	28 3/4	24 1/4	24	13 13/16	81.22
30	7290	1 3/4	35 5/8	30 1/4	24	17 1/4	109.22



PIPE SUPPORTS and HARDWARE

FIG. 818

ALTERNATE ADJUSTABLE PIPE ROLLER

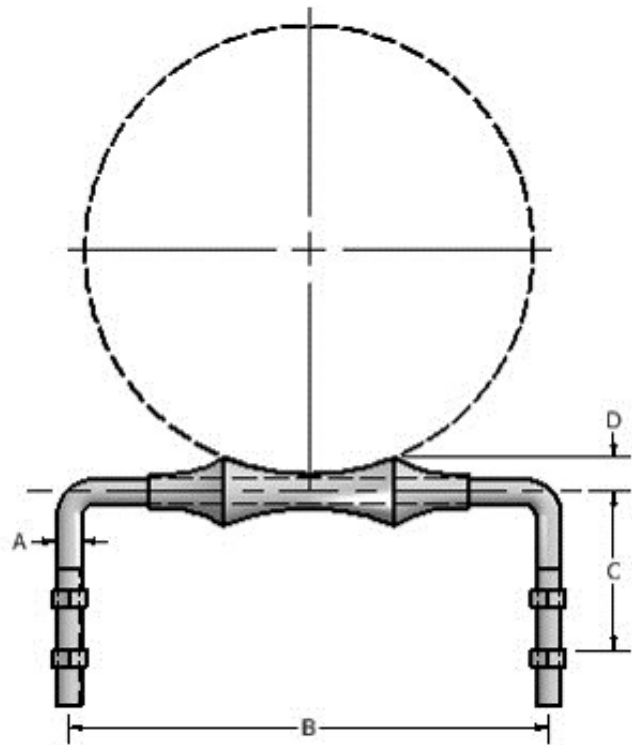
APPLICATION: A Fig. 818 Alternate Adjustable Support Roller is used to support piping where 1.) significant movement along the axis of the piping at the support location occurs due to thermal expansion or contraction of the piping, 2.) support is to be provided from a beam or other structural member located immediately below the piping and 3.) limited vertical adjustment of the pipe roll is necessary or desirable. An Alternate Adjustable Support Roller allows axial movement of the piping with virtually a negligible amount of frictional resistance to the movement. Vertical adjustment is achieved by changing the elevation of the adjustment nuts above and below the structural member to which the support rods are attached. Vertical adjustment is limited to the threads on the support rods.

CONSTRUCTION: A Fig. 818 Alternate Adjustable Support Roller consists of a Fig. 806 Cast Iron Pipe Roll, a carbon steel roll rod bent on both ends to provide vertical legs for support and four nuts.

NOTE: See size selection chart for assistance in determining the appropriate Alternate Adjustable Support Roller for your application.
FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, pipe roll size, name and finish, of other than black.

EXAMPLE: Fig. 818, Size 4, Alternate Adjustable Support Roller,



ROLL SIZE	MAX. REC. LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	M (IN)	WT EA
2	300	4 1/2	3/8	4 1/2	2 5/8	1 5/8	0.6
2 1/2	600	5	1/2	4 1/2	3 1/8	1 15/16	0.95
3	600	6 1/8	1/2	4 1/2	6 3/4	2 1/4	1.2
3 1/2	600	6 1/2	1/2	4 1/2	4 1/4	2 9/16	1.3
4	700	7 3/8	1/2	4 1/2	4 3/4	2 13/16	1.5
5	700	8 1/2	5/8	4 1/2	5 13/16	3 7/16	2.8
6	1000	10	3/4	4 1/2	6 7/8	4 1/16	4.235
8	1300	12	7/8	5 1/4	8 7/8	5 1/8	6.3
10	1700	14	7/8	5 1/2	11	6 3/8	10
12	2300	16	7/8	6	13	7 5/16	12.7
14	3075	17 1/2	1 1/8	7	14 1/4	8 5/16	22
16	3075	19	1 1/4	8	16 1/4	9 1/2	28

PIPE SUPPORTS and HARDWARE

FIG. 821

PIPE ROLLER CHAIR

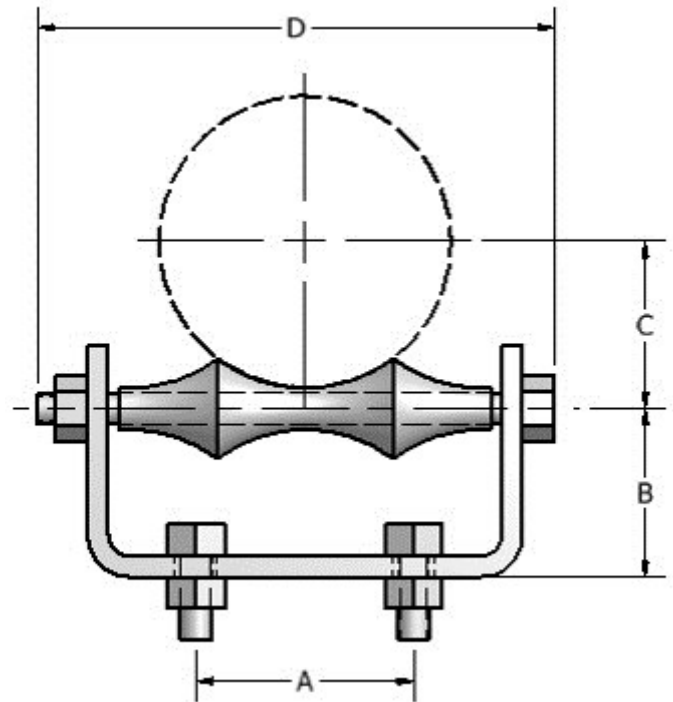
APPLICATION: A Fig. 821 Pipe Roller Chair is used to support pipe where 1.) significant movement along the axis of the piping at the support location occurs due to thermal expansion or contraction of the piping, 2.) support is to be provided from a beam or other structural member located directly below the piping and 3.) vertical adjustment of the pipe roll is not necessary. A Pipe Roller Chair allows axial movement of the piping with virtually a negligible amount of frictional resistance to the movement. Vertical adjustment can only be achieved by shimming under the Pipe Roller Chair at the time of installation. A Fig. 821 Pipe Roller Chair may be bolted or welded to the supporting structural member.

CONSTRUCTION: A Fig. 821 Pipe Roller Chair consists of a Fig. 806 Cast Iron Pipe Roll, a threaded carbon steel rod with a hex nut on each end, a heavy steel chair and two hold-down bolts in the chair.

NOTE: See size selection chart for assistance in determining the appropriate Roller Chair for your application.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, pipe roll size, name and finish, if other than black.



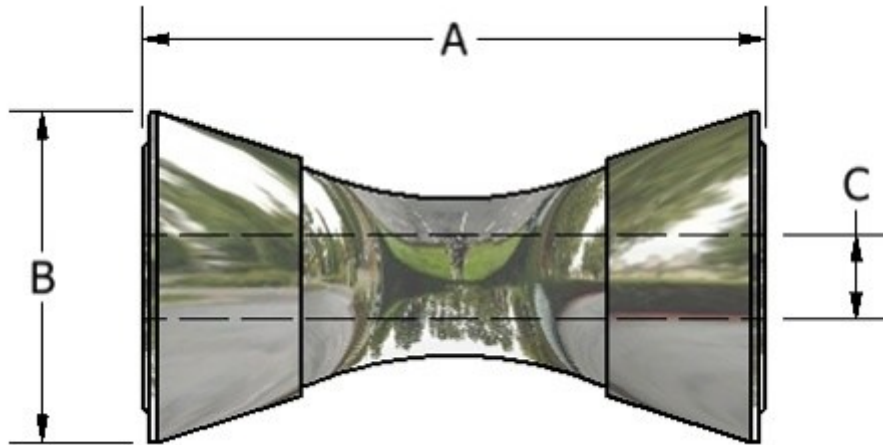
ROLL SIZE	MAX. REC. LOAD (LBS)	A (IN)	B (IN)	C (IN)	D (IN)	BOLT SIZE (IN)	WT EA
2	390	1 1/4	1 3/8	1 9/16	4 1/4	4ga x 1 1/4	0.94
2 1/2	390	1 1/4	1 5/8	1 7/8	4 7/8	4ga x 1 1/4	1.18
3	390	2	1 3/4	2 1/8	5 11/32	4ga x 1 1/4	1.32
3 1/2	390	2 1/2	2	2 1/2	6 11/32	3/8 x 1 1/2	2.58
4	950	2	2 5/16	2 13/16	7 11/32	3/8 x 1 1/2	2.94
5	950	3	2 1/2	3 3/8	8 1/4	3/8 x 1 1/2	3.64
6	950	3 1/8	2 3/4	3 15/16	9 1/2	3/8 x 2	5.72
7	1350	3 3/8	2 13/16	4 1/2	10	3/8 x 2	6.98
8	1350	3 3/8	3	5 1/8	12 1/4	3/8 x 2	8.16
10	1730	5	3 5/8	6 3/8	14 1/2	1/2 x 2	11.96
12	2400	6	4 1/8	7 1/2	16 1/4	1/2 x 2	15.86
14	3130	6 1/2	4 11/16	8 3/8	18	1/2 x 2 1/2	21.58
16	3970	8 1/4	5 3/8	9 3/8	21	1/2 x 3	34.5
18	4200	9 1/4	6	10 7/16	22 7/8	1/2 x 3	36.5
20	4550	10 1/4	6 1/2	11 5/8	25 1/4	1/2 x 3	45
24	6160	12 1/4	7 7/8	14	30	5/8 x 4	77.5



PIPE SUPPORTS and HARDWARE

FIG. 824

CAST IRON PIPE ROLL



APPLICATION: A Fig. 824 Cast Iron Pipe Roll is the roll unit in our Fig. 827 and 830 Pipe Roll supports. It can also be used to replace damaged roll units in existing installations as well as being incorporated in custom field fabricated pipe rolls.

CONSTRUCTION: The Fig. 824 Cast Iron Pipe Roll is constructed of cast iron. The Pipe Roll is designed so that the outside diameter of the cylinder to be supported, be it bare piping or insulated piping, contacts the two conical shapes on either end of the Pipe Roll. The contact points are to be on the flat surface of the conical sections.

NOTE: Use the size selection chart for assistance in determining the appropriate Pipe Roll for your application.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, roll number, name and finish, if other than black.

ROLL NO.	NOM. PIPE DIA. RANGE (IN)	A (IN)	B (IN)	ROD DIA. "C" (IN)	WT EA
1	2 - 3 1/2	3	2	5/8	1.5
2	4 - 6	3 3/8	2 3/16	5/8	1.5
3	7 - 10	5	3 1/2	3/4	3.85
4	11 - 14	7	4 1/4	7/8	8.25
5	15 - 20	8 1/8	4 3/4	1	10.2
6	21 - 24	9	4 7/8	1	14.5
7	25 - 30	11	5 3/4	1 1/4	18.25
8	31 - 36	12 1/2	6 1/2	1 1/4	21
9	37 - 42	14 1/4	7 3/4	1 1/2	23.75



PIPE SUPPORTS and HARDWARE

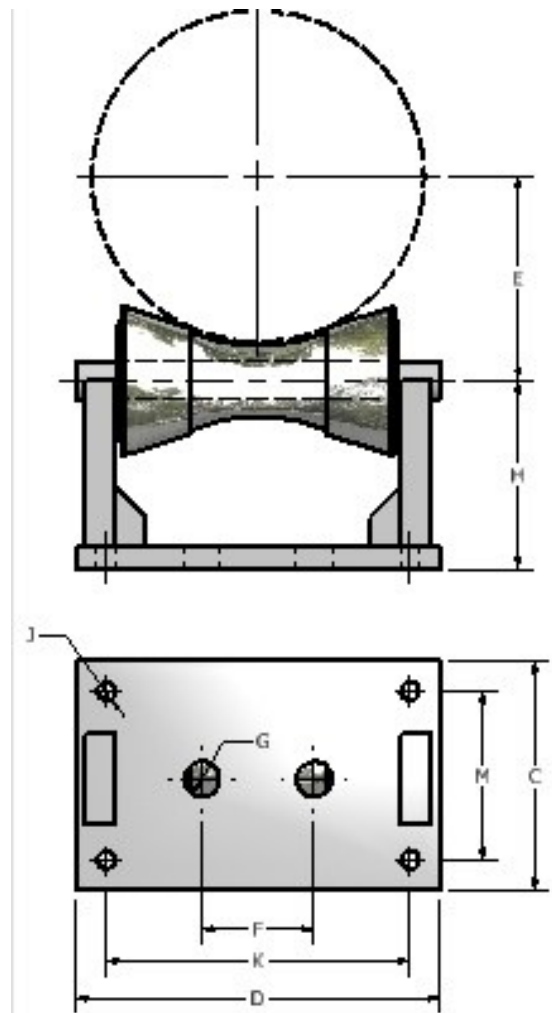
FIG. 827
PIPE ROLLER & STAND

APPLICATION: A Fig. 827 Pipe Roller and Stand is used to support piping where 1.) significant movement along the axis of the piping at the support location occurs due to thermal expansion or contraction of the piping, 2.) support is to be provided from a beam or other structural member located below the piping and 3.) vertical adjustment of the pipe roll is not necessary. This Pipe Roller and Stand allows axial movement of the piping with virtually a negligible amount of frictional resistance to the movement. Vertical adjustment can only be achieved by shimming under the stand at the time of installation. A Fig. 827 Pipe Roller and Stand is designed to be bolted or welded to the supporting structural member.

CONSTRUCTION: A Fig. 827 Pipe Roller and Stand consists of a Fig. 824 Cast Iron Pipe Roll, a base fabricated of carbon steel plate and a carbon steel roll rod. With the Cast Iron Pipe Roll properly positioned on the roll rod, the roll rod rests securely in the V notch in the steel support frame.

NOTE: See size selection chart for assistance in determining the appropriate Pipe Roller and Stand number for your application.
FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

ORDERING: Specify figure number, Pipe Roller and Stand number, name and finish, if other than black.



NOM. PIPE DIA. RANGE (IN)	F (IN)	G (IN)	H (IN)	J (IN)	K (IN)	M (IN)
2 - 3	6 1/2	1	2	7/16	3 1/2	4 1/8
4 - 6	8	1	2 3/8	9/16	4 3/4	4 1/4
8 - 10	4	1	3 3/4	5/8	7	5
12 - 14	5 3/4	1	3 3/4	9/16	9 1/4	6
16 - 20	6 3/4	1	4 5/8	3/4	10 1/4	6 1/2
22 - 24	7 1/2	1	4 3/4	13/16	11 1/2	6 3/4
26 - 30	10	1	5 5/8	1	14 3/8	8

NOM. PIPE DIA. (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G (IN)	H (IN)	J (IN)	K (IN)	M (IN)	WT EA	MAX REC LOAD (LBS)
2	6	8 3/8	3 11/16	6 3/8	1	1 3/4	9/16	3 3/8	4	5.08	390
2 1/2	6	8 3/8	3 15/16	6 3/8	1	1 3/4	9/16	3 3/8	4	5.08	390
3	6	8 3/8	4 1/4	6 3/8	1	1 3/4	9/16	3 3/8	4	5.08	390
3 1/2	6	8 3/8	4 1/2	6 3/8	1	1 3/4	9/16	3 3/8	4	5.08	390
4	6	9 7/8	5	7 7/8	1	2	9/16	4 3/4	4 1/4	6.31	650
5	6	9 7/8	5 9/16	7 7/8	1	2	9/16	4 3/4	4 1/4	6.31	950
6	6	9 7/8	6 1/16	7 7/8	1	2	9/16	4 3/4	4 1/4	6.31	950
8	8	8 5/8	8 13/16	4	1	3 3/8	11/16	7	5	13.65	2100
10	8	8 5/8	9 7/8	4	1	3 3/8	11/16	7	5	13.65	2100
12	8	11	11 7/16	5 3/4	1	3 7/8	13/16	9	6	21	3075
14	8	11	12 1/16	5 3/4	1	3 7/8	13/16	9	6	21	3075
16	10	12 3/8	13 5/8	6 3/4	1	4 1/4	13/16	10 3/8	6 1/2	34.23	4980
18	10	12 3/8	14 11/16	6 3/4	1	4 1/4	13/16	10 3/8	6 1/2	34.23	4980
20	10	12 3/8	15 11/16	6 3/4	1	4 1/4	13/16	10 3/8	6 1/2	34.23	4980
24	10	13 1/2	17 11/16	7 1/2	1	4 3/8	13/16	11 1/2	6 1/2	40	6100
30	10	17	21 3/4	10	1	5 1/8	1 1/16	14 1/4	7 3/4	71.32	7500
36	12	20	25 3/4	12	1	5 3/4	1 3/8	17	9	147	12000
42	12	20	28 7/8	12	1	5 3/4	1 3/8	17	9	147	12000



PIPE SUPPORTS and HARDWARE

FIG. 830

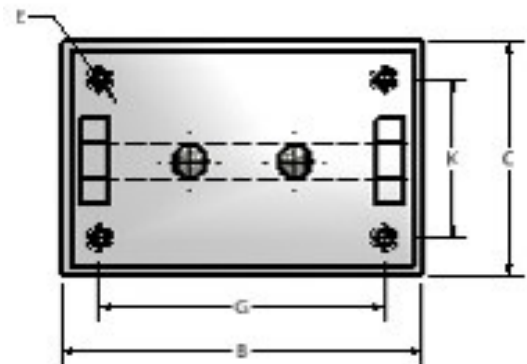
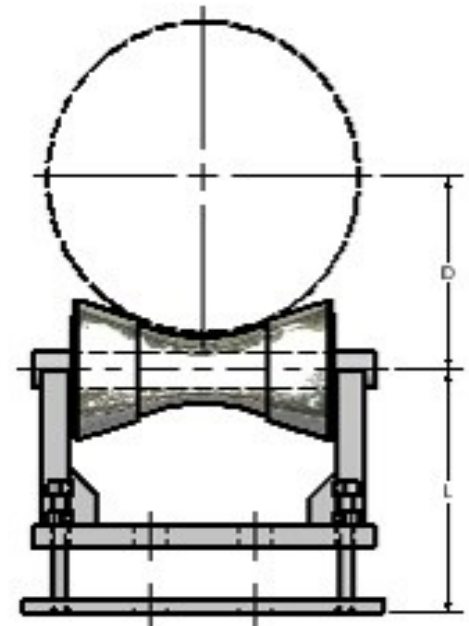
ADJUSTABLE PIPE ROLLER & STAND

APPLICATION: A Fig. 830 Adjustable Pipe Roller and Stand is used to support piping where 1.) significant movement along the axis of the piping at the support location occurs due to thermal expansion or contraction of the piping, 2.) support is to be provided from a beam or other structural member located below the piping and 3.) vertical adjustment of the pipe roll is necessary and relatively easy to accomplish. This Adjustable Pipe Roller and Stand allows axial movement of the piping with virtually a negligible amount of frictional resistance to the movement. Vertical adjustment is achieved by turning the adjustment bolts up or down on the base. A Fig. 830 Adjustable Pipe Roller and Stand is designed to be bolted or welded to the supporting structural members.

CONSTRUCTION: A Fig. 830 Adjustable Pipe Roller and Stand consists of a Fig. 824 Cast Iron Pipe Roll, four Adjusting Screws with lock nuts for securing in final position and a Base Plate with a slot to enable anchorage to the supporting structure.

NOTE: See size selection chart for assistance in determining the appropriate Pipe Roller and Stand number for your application.
FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted.

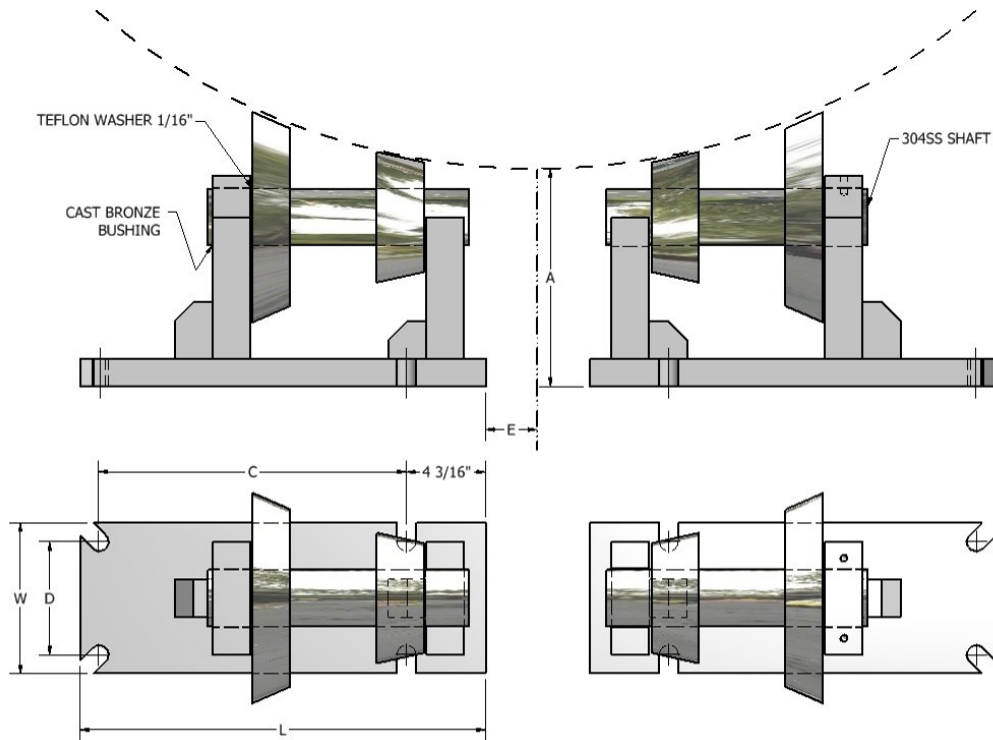
ORDERING: Specify figure number, Pipe Roller and Stand number, name and finish, if other than black.



NOM. PIPE DIA. (IN)	A (IN)	B (IN)	C MIN (IN)	C MAX (IN)	D (IN)	E	WT EA	MAX REC LOAD (LBS)
2	6 7/8	6	4 3/4	5 5/8	3 7/8	1	11	390
2 1/2	6 7/8	6	5	5 7/8	3 7/8	1	11	390
3	6 7/8	6	5 5/16	6 9/16	3 7/8	1	11	390
3 1/2	6 7/8	6	5 9/16	6 7/16	3 7/8	1	11	390
4	8 1/2	6	6 3/16	7 7/16	5 1/8	1	13.1	950
5	8 1/2	6	6 3/4	8	5 1/8	1	13.1	950
6	8 1/2	6	7 1/4	8 1/2	5 1/8	1	13.1	950
8	10 1/2	7 1/2	10 1/8	11 11/16	7 3/8	1	29	2100
10	10 1/2	7 1/2	11 3/16	12 3/4	7 3/8	1	29	2100
12	12 1/2	8 1/4	12 3/4	14 1/8	9 1/2	1	40	3075
14	12 1/2	8 1/4	13 3/8	14 3/8	9 1/2	1	40	3075
16	14 5/8	10	15 3/8	17 1/4	11 1/8	1	63.84	4980
18	14 5/8	10	16 3/8	18 1/4	11 1/8	1	63.84	4980
20	14 5/8	10	17 3/8	19 1/4	11 1/8	1	63.84	4980
24	15 3/4	10	19 1/4	21 1/4	12 1/4	1	71	6100
30	19 1/2	10 3/4	14 7/16	26 11/16	15 3/4	1	125.28	7500

PIPE SUPPORTS and HARDWARE

FIG. 833
ROLLER SUPPORT STAND



APPLICATION: Fig. 833 Roller Support Stand is used to support heavy piping where; significant movement along the axis of the heavy piping at the support location occurs due to thermal expansion or contraction of the piping; no vertical adjustment is required. A Roller Support Stand is designed to be bolted or welded to the supporting structural member.

CONSTRUCTION: A Fig. 833 Roller Support and stand consists of an inner and outer wheel with a stainless steel rod and carbon steel plate base. **FINISH:** The Roller Support can be provided with a black, painted or hot dip galvanized finish. **ORDERING:** Specify figure number (Fig. 833), pipe diameter, non-standard options, if other than desired finish.

EXAMPLE: Fig. 833, 48", Roller Support, HDG.

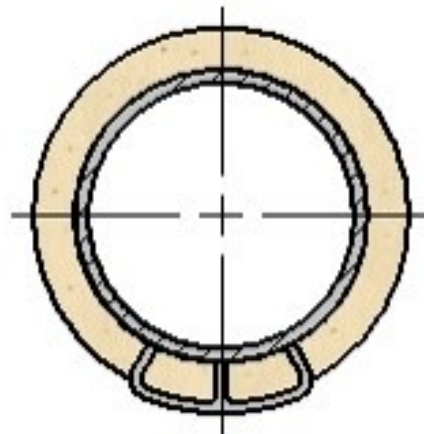
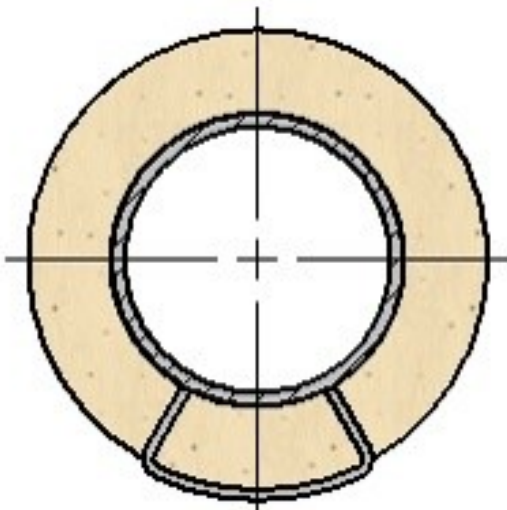
NOMINAL PIPE DIA. (IN)	"A" (IN)	"C" (IN)	"D" (IN)	"W" (IN)	"E" (IN)	"L" (IN)	BOLT DIA. (IN)	AP-PROX. UNIT WT EA (LBS)
36	8	7 13/16	3	5	1/2	13	3/4	175
42	8	7 13/16	3	5	1	13	3/4	175
44	8	7 13/16	3	5	1	13	3/4	175
46	8	7 13/16	3	5	1	13	3/4	175
48	8	10 13/16	4	6	1 1/2	16	3/4	250
54	8	10 13/16	4	6	1 1/2	16	3/4	250
56	8	11 13/16	4	6	2	17	3/4	325
60	8	11 13/16	5	7	2 3/8	17	7/8	325
64	8	12 13/16	5	7	2 7/8	18	7/8	400
72	8	14 13/16	6	8	3	20	7/8	550



PIPE SUPPORTS and HARDWARE

FIGS. 842, 845, 848, 851, 854 & 857

PIPE COVERING PROTECTION SADDLE



APPLICATION: Insulation Protection Saddles are used to: 1.) Prevent pipe insulation from being crushed at pipe support locations, and 2.) Minimize heat losses by providing for the application of a continuous outer weathertight covering over the insulation and the saddle.

CONSTRUCTION: The saddles are made from steel plate, shaped to fit to the shape of the outside of the insulation. The edges of the saddles are turned so that they are radial to the pipe centerline for maximum strength. The edges are notched out at the pipe to saddle contact points so as to provide for a minimum of bearing against the pipe and therefore a minimum of heat loss. All saddles are supplied in 12 inch lengths. For pipe diameters of 10 inches or smaller, Insulation Protection Saddles will be supplied with two edges and a welded-in center plate. For pipe diameters of 12 inches or larger, Insulation Protection Saddles will be supplied with two edges only.

INSTALLATION: It is advisable to spot weld each Insulation Protection Saddle to the piping system at the time of installation in order to insure that the saddle is held in place during piping system operation. Insulation Protection Saddles are not to be allowed to move with respect to the pipe and the combined pipe and saddle are to move in unison as the pipe expands or contracts due to temperature changes in the piping.

LOADS: When a Insulation Protection Saddle is used in conjunction with a pipe roll, the maximum load given for the pipe roll also applies to the saddle. In the event that a saddle is to be used on a flat bearing surface, contact AAA Technology for the appropriate load ratings.

SPECIALS: Saddles of special materials, lengths or construction can be furnished upon request.

NOTE: When ordering Insulation Protection Saddles and Pipe Rolls, remember that the size of the pipe roll must be larger than the nominal diameter of the pipe. The pipe roll must be purchased to fit the outside diameter of the Insulation Protection Saddle. See size/selection chart in the pipe roll section for sizing assistance.

FINISHES AVAILABLE: Black, Hot Dip Galvanized, Electro-Plated or Painted. Stainless Steel Insulation Protection Saddles are available by special order.

ORDERING: Specify figure number, name, Insulation O.D. and finish, if other than black.



PIPE SUPPORTS and HARDWARE

FIGS. 830, 842, 845, 848, 851, 854 & 857

PIPE COVERING PROTECTION SADDLE CONTINUED

PIPE SIZE (IN)	FIG. NO.	ACTUAL THICKNESS OF COVERING (IN)	HANGER ROLLER SIZE (FIG 812, 815, 821)	HANGER ROLLER SIZE (FIG 809)	HANGER ROLLER SIZE (FIG 827, 830)	CENTER-LINE OF PIPE TO OUTSIDE OF SADDLE (IN)	CENTER-LINE OF PIPE TO CENTER-LINE OF PIPE TO CENTER-LINE OF ROLL, (FIG. 809, 812, 815, 821)	CENTER-LINE OF PIPE TO CENTER-LINE OF ROLL, (FIG. 827, 830)	WT EA	MAX REC LOAD (LBS)
3/4	842	7/8	2	2 1/2	2-3 1/2	1 9/16	1 15/16	2 1/4	0.93	1200
3/4	845	1 25/64	3	3 1/2	2-3 1/2	2 1/8	5 5/8	2 7/8	1.74	1200
3/4	848	2 1/16	4	5	2-3 1/2	2 3/4	3 3/8	3 3/8	2.6	1200
1	842	1 1/16	2 1/2	3	2-3 1/2	1 13/16	2 1/4	2 7/16	0.93	1200
1	845	1 9/16	3	4	2-3 1/2	2 7/16	2 15/16	3	1.74	1200
1	848	2 1/8	4	5	2-3 1/2	2 7/8	6 1/2	3 1/2	2.6	1200
1 1/4	842	7/8	2 1/2	3	2-3 1/2	1 15/16	2 1/2	2 9/16	1.32	1200
1 1/4	845	1 5/8	3 1/2	5	2-3 1/2	2 9/16	3 1/8	3 3/16	1.82	1200
1 1/4	848	2 1/16	5	5	2-3 1/2	3 1/16	3 11/16	3 11/16	2.6	1200
1 1/2	842	1	3	3 1/2	2-3 1/2	2 1/8	2 5/8	2 11/16	1.32	1200
1 1/2	845	1 1/2	3 1/2	5	2-3 1/2	2 11/16	3 1/4	3 5/16	1.82	1200
1 1/2	848	2 5/16	5	6	4-6	6 7/16	4 1/8	3 7/8	2.75	1800
1 1/2	851	2 13/16	7	7	4-6	3 13/16	4 5/8	4 1/2	3.01	1800
2	842	1 1/16	3 1/2	4	2-3 1/2	2 7/16	3	3 1/16	1.34	1200
2	845	1 9/16	4	5	2-3 1/2	2 7/8	3 1/2	3 9/16	1.98	1200
2	848	2 1/8	5	6	4-6	3 11/16	4 3/8	4 3/16	2.8	1800
2	851	2 5/8	7	7	4-6	3 15/16	4 3/4	4 3/4	3.18	1800
2	854	3 1/8	8	8	4-6	4 11/16	5 1/2	5 1/4	3.97	1800
2 1/2	842	1 1/16	5	5	2-3 1/2	2 11/16	3 1/4	3 5/16	1.34	1200
2 1/2	845	1 7/8	6	6	4-6	3 3/4	4 1/8	3 15/16	1.98	1200
2 1/2	848	2 5/16	7	7	4-6	3 15/16	4 5/8	4 1/2	2.8	1800
2 1/2	851	2 7/8	7	7	4-6	4 7/16	4 1/4	5	3.2	1800
2 1/2	854	3 3/8	10	10	4-6	4 15/16	4 3/4	5 1/2	3.98	1800
3	842	1	5	5	2-3 1/2	2 15/16	3 1/2	3 9/16	1.48	1200
3	845	1 9/16	6	6	4-6	3 1/2	4 3/16	4 1/4	2.08	1800
3	848	2 1/16	7	7	4-6	4 1/8	4 7/8	4 11/16	2.9	1800
3	851	2 9/16	8	8	4-6	4 11/16	5 3/8	5 5/16	3.01	1800
3	854	3 1/16	10	10	8-10	5	5 15/16	6 1/16	4.49	1800
3 1/2	842	1 1/4	6	6	4-6	3 7/16	4	3 15/16	1.48	1200
3 1/2	845	1 13/16	7	7	4-6	4	4 11/16	4 1/2	2.08	1800
3 1/2	848	2 1/4	8	8	4-6	4 3/8	5 3/16	5	2.9	1800
3 1/2	851	2 3/4	10	10	8-10	4 13/16	5 3/4	5 11/16	3.43	1800
3 1/2	854	3 5/16	10	10	8-10	5 1/2	6 7/16	6 3/8	4.49	1800
4	842	1 1/16	6	6	4-6	3 9/16	4 3/16	4 3/16	1.58	1800
4	845	1 9/16	7	7	4-6	3 7/8	4 11/16	4 3/4	2.14	1800
4	848	2 1/16	8	8	4-6	4 11/16	5 1/2	5 1/4	2.95	1800
4	851	2 9/16	10	10	8-10	5 1/8	6 1/16	6	3.43	1800
4	854	3 1/16	10	10	8-10	5 9/16	6 1/2	6 5/8	4.49	1800
4	857	4 1/16	14	104	8-10	6 9/16	7 11/16	7 9/16	6.09	1800
5	842	1	7	7	4-6	4 1/8	4 13/16	4 3/4	2.62	1800
5	845	1 1/2	8	8	4-6	4 1/2	5 5/16	5 3/8	3.3	1800
5	848	2	10	10	8-10	4 15/16	5 7/8	6 1/8	3.45	1800
5	851	2 9/16	12	12	8-10	5 9/16	6 1/2	6 5/8	6.85	1800
5	854	3 1/16	12	12	8-10	6 1/8	7 1/16	7 1/4	4.49	1800
5	857	4 3/16	14	14	8-10	7 3/16	8 1/4	8 3/16	6.09	1800
6	842	1	8	8	4-6	4 9/16	5 3/8	5 1/4	3.82	1800
6	845	1 1/2	8	10	8-10	5 1/16	5 7/8	6	4.28	1800



PIPE SUPPORTS and HARDWARE

FIGS. 830, 842, 845, 848, 851, 854 & 857

PIPE COVERING PROTECTION SADDLE CONTINUED

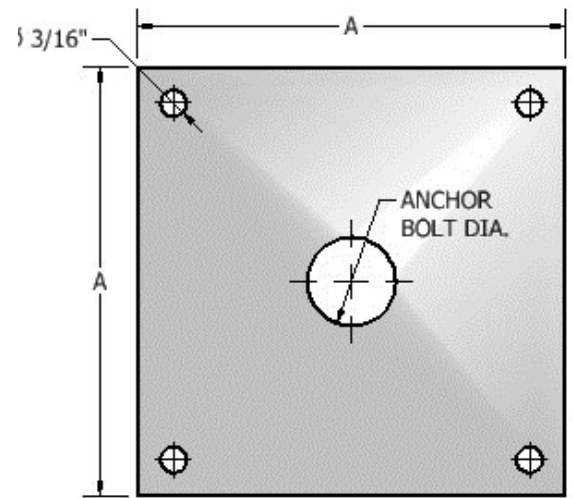
PIPE SIZE (IN)	FIG. NO.	ACTUAL THICKNESS OF COVERING (IN)	HANGER ROLLER SIZE (FIG 812, 815, 821)	HANGER ROLLER SIZE (FIG 809)	HANGER ROLLER SIZE (FIG 827, 830)	CENTER-LINE OF PIPE TO OUTSIDE OF SADDLE	CENTER-LINE OF PIPE TO CENTER-LINE OF ROLL, (FIG. 809, 812, 815, 821)	CENTER-LINE OF PIPE TO CENTER-LINE OF ROLL, (FIG. 827, 830)	WT EA	MAX REC LOAD (LBS)
6	848	2	10	12	8-10	5 1/2	6 1/2	6 1/2	5.4	1800
6	851	2 1/2	10	12	8-10	6 1/16	7 1/16	7 1/4	6.85	1800
6	854	3	12	12	8-10	6 9/16	7 5/8	7 5/8	7.69	1800
6	857	1 1/8	14	16	12-14	7 5/8	9 1/8	8 3/4	10.24	1800
8	845	1 1/2	10	12	8-10	6	7 1/8	7 1/16	5.82	1800
8	848	2	12	12	8-10	6 1/2	7 5/8	7 9/16	6.41	1800
8	851	2 11/16	12	14	8-10	7 1/4	8 5/16	8 5/16	7.21	1800
8	854	6 1/8	14	16	12-14	7 5/8	9 1/8	8 3/4	9.14	1800
8	857	4 1/8	16	18	12-14	8 11/16	10 1/8	9 7/8	10.24	1800
10	845	1 9/16	12	14	8-10	7 1/4	8 5/16	8 5/16	6.66	1800
10	848	2 1/16	14	16	12-14	7 5/8	9 1/16	8 13/16	8.57	1800
10	851	2 9/16	14	16	12-14	8 3/16	9 5/8	9 5/16	8.91	1800
10	854	3 1/16	16	18	16-20	8 7/8	10 1/4	10	11.1	1800
10	857	4 1/16	18	20	16-20	9 11/16	11 5/16	11 1/8	14.1	1800
12	845	1 1/2	14	16	12-14	8 1/16	9 5/8	9 1/4	7.61	5000
12	848	2 1/16	16	18	16-20	8 13/16	10 3/16	10	8.73	5000
12	851	2 5/8	16	18	16-20	9 1/8	10 11/16	10 1/2	9.69	5000
12	854	3 1/16	18	20	16-20	9 11/16	11 5/16	11	11.38	5000
12	857	4 1/8	20	---	16-20	10 13/16	12 3/8	12 3/16	14.2	5000
14	845	1 1/2	16	18	12-14	8 7/8	10 3/16	10 1/16	7.67	5000
14	848	2	16	18	16-20	9 1/4	10 3/4	10 11/16	9.43	5000
14	851	2 1/2	18	20	16-20	9 3/4	11 5/16	11 3/16	9.69	5000
14	854	3	18	20	16-20	10 1/4	11 7/8	11 5/8	11.82	5000
14	857	4	20	---	24	11 7/16	13 1/8	12 5/8	18.48	7200
16	845	1 1/2	18	20	16-20	9 7/8	11 3/8	11 1/8	8.35	5000
16	848	2	18	20	16-20	10 1/4	11 7/8	11 9/16	10	5000
16	851	2 1/2	20	---	16-20	10 7/8	12 7/16	12 3/16	14.62	7200
16	854	3	24	---	24	11 3/16	13 1/8	12 7/16	18.17	7200
16	857	4	24	---	24	12 5/16	14 3/16	12 3/16	21.8	7200
18	845	1 1/2	20	---	16-20	10 7/8	12 1/2	12 3/16	8.92	5000
18	848	2	20	---	24	11 1/2	13 1/16	12 11/16	13.19	7200
18	851	2 1/2	24	---	24	12	13 15/16	13 1/16	16.89	7200
18	854	3	24	---	24	12 5/16	14 1/4	13 5/8	18.2	7200
18	857	4	24	---	24	13 1/2	15 7/16	14 3/4	21.95	7200
20	845	1 1/2	24	---	24	11 3/4	13 11/16	13 1/16	13.76	7200
20	848	2	24	---	24	12 5/16	14 1/4	13 5/8	14.98	7200
20	851	2 1/2	24	---	24	12 7/8	14 13/16	14 3/16	16.79	7200
20	854	3	24	---	24	13 1/2	15 1/2	14 3/4	18.4	7200
20	857	4	30	---	30	14 3/16	16 5/8	18 7/8	22.83	7200
24	845	1 1/2	30	---	30	13 5/8	16 1/16	15 1/4	16.05	7200
24	848	2	30	---	30	14 3/16	16 5/8	15 3/4	17.62	7200
24	851	2 1/2	30	---	30	14 3/4	17 3/16	16 7/16	18.75	7200
24	854	3	30	---	30	15 3/8	17 13/16	17	19.72	7200
24	857	4	30	---	30	16 9/16	19	19 1/4	23.14	7200



PIPE SUPPORTS and HARDWARE

FIG. 900
CONCRETE INSERT PLATE FOR ANCHOR BOLT

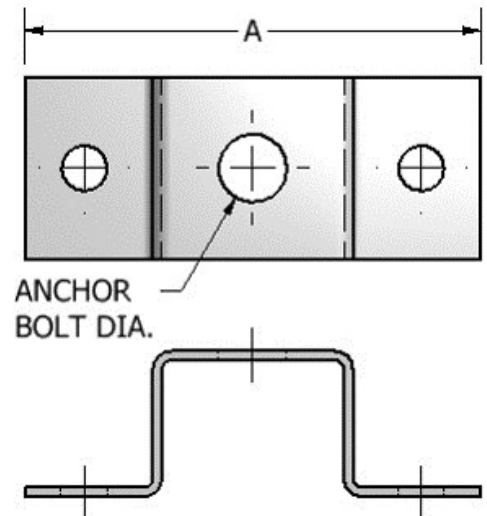
APPLICATION: Fig. 900 Concrete Insert Plate for Anchor Bolt is designed to be embedded in concrete and used as an attachment point for equipment, pipe supports or structural steel.
CONSTRUCTION: A Concrete Insert Plate for Anchor Bolt is furnished in diameters from 5/8 inch through 1 1/2 inches.
FINISHES AVAILABLE: Electro-Plated.
ORDERING: Specify figure number, rod diameter and name.
EXAMPLE: Fig. 900, 5/8" diameter, Concrete Insert Plate for Anchor



ROD DIA.	A (IN)	B (IN) MIN. EMBED.	MAX. REC. LOAD (LBS) (IN 3000 LB. HARD ROCK CONCRETE)
5/8	3	3 1/2	1810
3/4	3	3 1/2	2710
7/8	3	4	3770
1	3	4	4960

FIG. 903
CONCRETE INSERT FRAME FOR ANCHOR BOLT

APPLICATION: Fig. 903 Concrete Insert Frame for Anchor Bolt is designed to be embedded in concrete and used as an attachment point for equipment, pipe supports or structural steel.
CONSTRUCTION: A Concrete Insert Frame for Anchor Bolt is furnished in diameters from 3/8 through 7/8 inch.
FINISHES AVAILABLE: Electro-Plated.
ORDERING: Specify figure number, rod diameter and name.
EXAMPLE: Fig. 903, 5/8" diameter, Concrete Insert Frame for An-



ROD DIA.	DESIGN LOAD - VERTICAL		DESIGN LOAD		DESIGN LOAD 450		"E" EMBED. DEPTH (IN)	DE MIN. (IN)
	HARD ROCK (LBS)	LT. WT. (LBS)	HARD ROCK (LBS)	LT. WT. (LBS)	HARD ROCK (LBS)	LT. WT. (LBS)		
3/8	1255	753	978	733	777	525	3 1/2	2
1/2	2321	1392	978	733	980	679	3 1/2	2
5/8	780	468	1278	958	688	445	4	2
3/4	1346	806	1278	958	927	619	4	2 1/2
7/8	2321	1392	1278	958	1166	803	4	6



PIPE SUPPORTS and HARDWARE

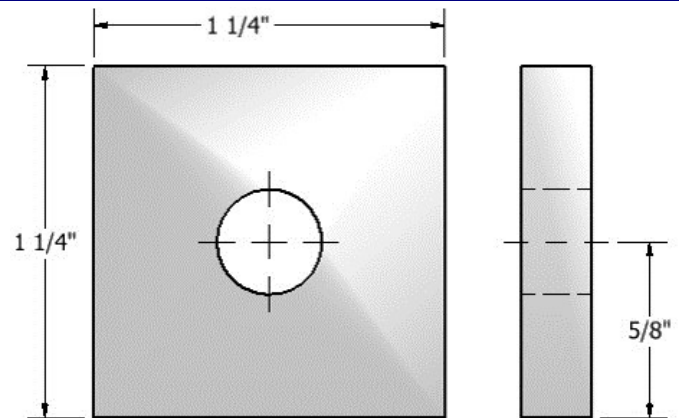
FIG. 909
STEEL SPOT INSERT NUT

APPLICATION: Fig. 909 Steel Spot Insert Nuts are to be used with Fig. 906 Steel Spot Concrete Inserts in order to attach threaded rods or bolts.

CONSTRUCTION: A Steel Spot Insert Nut is constructed of carbon steel and is furnished in diameters from 1/4 through 7/8 inch.

FINISHES AVAILABLE: Electro-Plated.

ORDERING: Specify figure number, rod diameter and name.



ROD DIA. (IN)	MAX. REC. LOAD (LBS)*	WT EA
1/4	240	0.08
3/8	600	0.13
1/2	600	0.12
5/8	600	0.11
3/4	600	0.1
7/8	600	0.09

FIG. 912
CB-UNIVERSAL CONCRETE INSERT

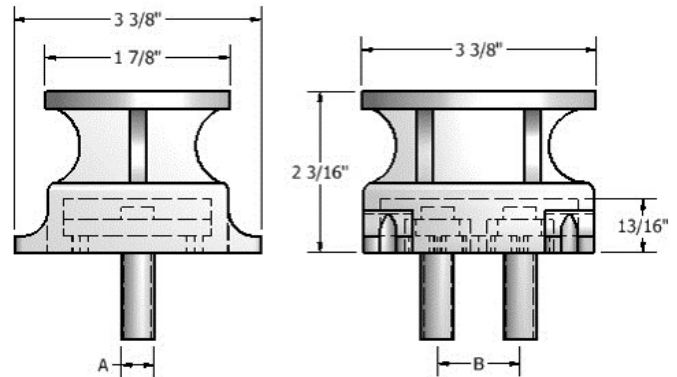
APPLICATION: Fig. 912 CB-Universal Concrete Insert is designed to be embedded in concrete ceilings and used as an attachment point for equipment, pipe supports or structural steel.

INSTALLATION: To install this unit properly, place the insert face down on the concrete form and nail it in place. Reinforcing rods may be placed through the open area at the top of the insert. Insert Fig. 915 Concrete Insert Nuts in the open area at the base of the insert and turn them 90 degrees to seat them properly. Then thread the hanger rods into the Fig. 915 Concrete Insert Nuts until they are tightly in place. Fig. 915 Concrete Insert Nuts must be ordered separately.

CONSTRUCTION: A Fig. 912 CB-Universal Concrete Insert is constructed of malleable iron and is furnished in diameters from 3/8 through 7/8 inch.

FINISHES AVAILABLE: Black or Electro-Plated.

ORDERING: Specify figure number, rod diameter and name.



ROD DIA. (IN)	MAX. REC. LOAD (LBS)*	WT EA
3/8	610	1.3
1/2	1130	1.3
5/8	1140	1.3
3/4	1140	1.3
7/8	1140	1.3



PIPE SUPPORTS and HARDWARE

FIGS. 915

CB-UNIVERSAL CONCRETE INSERT NUT

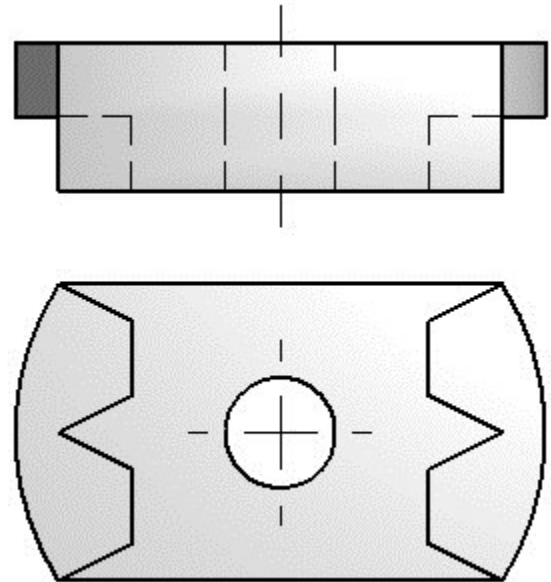
APPLICATION: Fig. 915 CB-Universal Concrete Insert Nuts are to be used with Fig. 912 CB-Universal Concrete Inserts in order to attach threaded rods or bolts.

CONSTRUCTION: A CB-Universal Concrete Insert Nut is constructed of carbon steel and is furnished in diameters from 3/8 through 7/8 inch.

FINISHES AVAILABLE: Black or Electro-Plated.

ORDERING: Specify figure number, rod diameter and name.

EXAMPLE: Fig. 915, 1/2" diameter, CB-Universal Concrete Insert



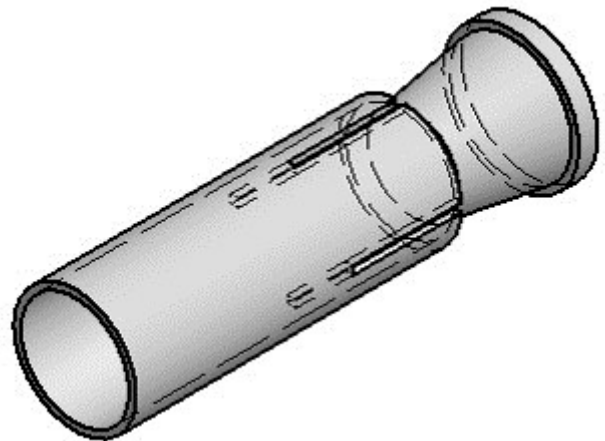
ROD DIA. (IN)	MAX. REC. LOAD (LBS)*	WT EA
3/8	610	1.3
1/2	1130	1.3
5/8	1140	1.3
3/4	1140	1.3
7/8	1140	1.3

FIGS. 927

EXTERNAL PLUG DROP-IN

APPLICATION: Fig. 927 Self-Drilling Flush Shells are widely used on new construction by plumbing, heating, ventilating and electrical contractors to fasten fixtures and equipment to walls, ceilings and floors.

ORDERING: Specify figure number, rod diameter and name.



SIZE (IN)	DRILL DIAMETER	MIN DEPTH (IN)	THREAD DEPTH (IN)	WT EA
1/4	3/8	1 1/4	7/16	0.02
3/8	1/2	1 7/8	5/8	0.06
1/2	5/8	2 3/8	8/21	0.12
5/8	7/8	33	1 3/16	0.32
3/4	1	3 1/2	1 3/8	0.48

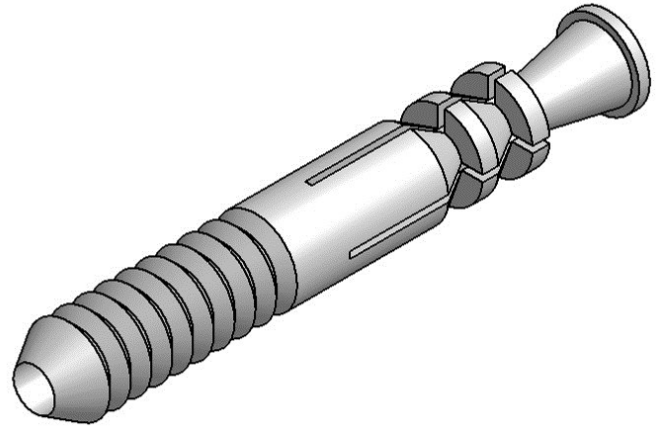


PIPE SUPPORTS and HARDWARE

FIGS. 930 SET BOLT

APPLICATION: The Fig. 930 Special Flush Shell is preferred where large quantities of shells are to be installed with power hammers. It has a tapered chucking end for mounting on a hammer chuck. After the shell is installed, the chucking end is broken off flush with the surface by hitting the chuck laterally or by striking the shell with a hammer after the chuck is removed. Cuttings pass through the shell and chuck. The chuck does not need to be removed for cleaning, thus drilling time is greatly reduced.

ORDERING: Specify figure number, rod diameter and name.



SIZE	MIN DEPTH (IN)	THREAD	STD. BOX	STD. CTN.	WT EA
1/4 x 3/4	1 3/8	5/8	100	1000	0.02
1/4 x 2 1/4	1 3/8	7/8	100	500	0.02
1/4 x 3 3/4	1 3/8	1	100	500	0.04
3/8 x 2 1/4	1 5/8	5/8	50	250	0.06
3/8 x 3	1 5/8	1 3/8	50	250	0.08
3/8 x 3 3/4	1 5/8	1 3/8	50	250	0.11
3/8 x 6	1 5/8	2 1/2	50	50	0.16
1/2 x 2 3/4	1 7/8	7/8	50	250	0.14
1/2 x 4 1/4	1 7/8	1 7/8	25	125	0.24
1/2 x 5 1/4	1 7/8	2	25	50	0.28

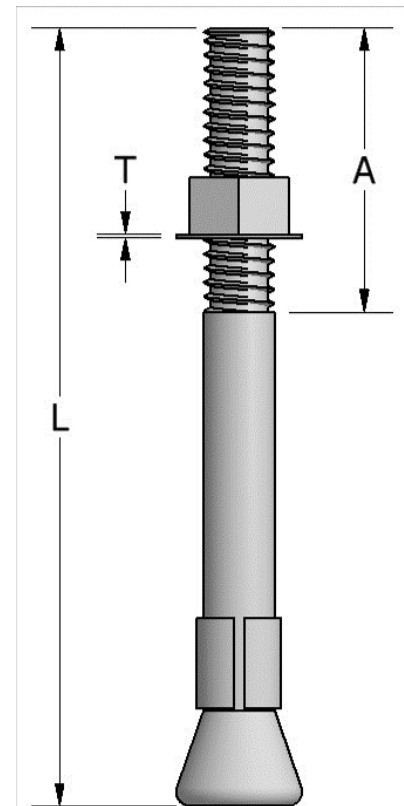
FIGS. 936 WEDGE ANCHOR

APPLICATION: Wedge Anchors are designed to be embedded in concrete and used as an attachment point for equipment, pipe supports or structural steel.

CONSTRUCTION: A Wedge Anchor is furnished in diameters from 1/4 inch through 1 inch and in lengths from 1 3/4 to 9 inches. Wedge anchors are constructed of carbon steel and are zinc plated for corrosion resistance. FINISHES AVAILABLE: Zinc Plated.

ORDERING: Specify figure number, item number, name and finish.

BOLT DIA. & LENGTH	THREAD LENGTH (IN)	MIN DEPTH (IN)	WT EA
1/4 x 1 3/4	3/4	1 1/8	0.032
1/4 x 2 1/4	7/8	1 1/8	0.037
1/4 x 3	7/8	1 1/8	0.052
3/8 x 2 1/4	1 1/8	1 3/4	0.087
3/8 x 2 3/4	1 1/8	1 3/4	0.105
3/8 x 3	1 1/8	1 3/4	0.11
3/8 x 3 1/2	1 1/8	1 3/4	0.125
3/8 x 3 3/4	1 1/8	1 3/4	0.13
3/8 x 5	1 1/8	1 3/4	0.172
1/2 x 2 3/4	1 1/4	2 1/4	0.18
1/2 x 3 3/4	1 1/4	2 1/4	0.24
1/2 x 4 1/2	1 1/4	2 1/4	0.3
1/2 x 5 1/2	1 1/4	2 1/4	0.34
1/2 x 7	1 1/4	2 1/4	0.44
5/8 x 3 1/2	1 5/8	2 7/8	0.4
5/8 x 4 1/2	1 5/8	2 7/8	0.54
5/8 x 5	1 5/8	2 7/8	0.57
5/8 x 6	1 5/8	2 7/8	0.64

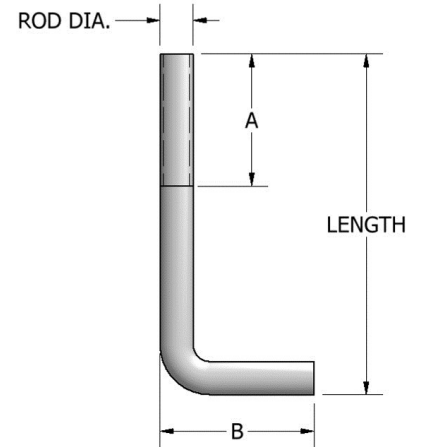




PIPE SUPPORTS and HARDWARE

FIG. 945
ANCHOR BOLT—L—THREADED ONE END

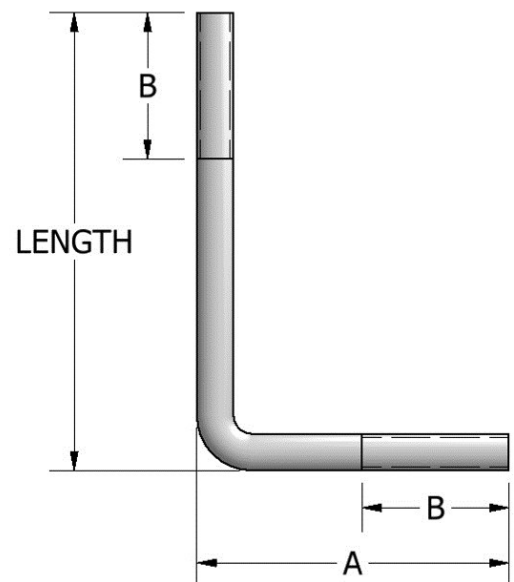
APPLICATION: Anchor Bolt – L – Threaded One End is designed to be embedded in concrete and used as an attachment point for equipment, pipe supports or structural steel.
CONSTRUCTION: An Anchor Bolt – L – Threaded One End is furnished in diameters from 3/8 inch through 1 1/2 inches. The standard thread lengths for each rod diameter are listed in the table.
FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.
ORDERING: Specify figure number, rod diameter, length, name and finish, if other than black.
EXAMPLE: Fig. 945, 5/8" diameter, 28" long, Anchor Bolt – L –



ROD DIA.	A (IN)	B (IN)
3/8	2	2 1/2
1/2	2	2 1/2
5/8	2 1/2	2 1/2
3/4	2 3/4	2 1/2
7/8	3	2 1/2
1	3 1/2	3
1 1/8	4	3 1/2
1 1/4	4 1/2	4
1 1/2	5 1/4	4

FIG. 948
ANCHOR BOLT—L—THREADED BOTH ENDS

APPLICATION: Anchor Bolt – L – Threaded Both Ends is designed for the short end to be bolted through a structural member and the long end to be used as a hanger rod.
CONSTRUCTION: An Anchor Bolt – L – Threaded Both Ends is furnished in diameters from 3/8 inch through 7/8 inch. The standard thread lengths for each rod diameter are listed in the table.
FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.
ORDERING: Specify figure number, rod diameter, short leg length, long leg length, name and finish, if other than black.
EXAMPLE: Fig. 948, 1/2" diameter, short = 8" long, Long = 18" long,



ROD DIA.	LENGTH	THREAD LENGTH SHORT END (IN)	THREAD LENGTH LONG END (IN)
3/8 - 7/8	4" - 8"	1 1/2	1 1/2
3/8 - 7/8	8" & up	1 1/2	2 1/2



PIPE SUPPORTS and HARDWARE

FIG. 951

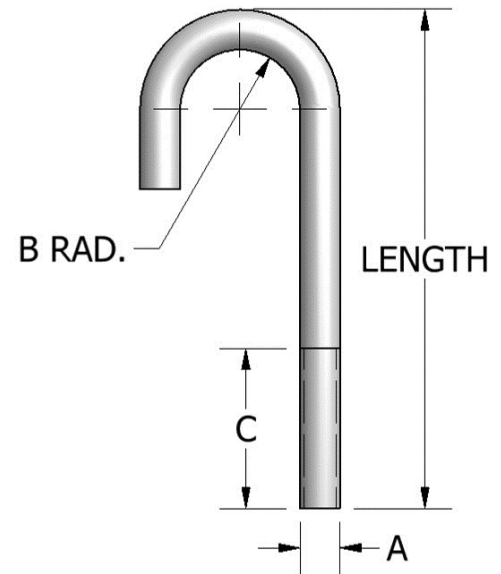
ANCHOR BOLT—L—THREADED ONE END

APPLICATION: Anchor Bolt – J – Threaded One End is designed to be hooked or hung from the flange of a beam or purlin. The J hook can also be hooked through an angle or tee member for support and the other end of the J Hook can be used as a hanger rod.

CONSTRUCTION: An Anchor Bolt – J – Threaded One End is furnished in diameters from 3/8 inch through 3/4 inch. The standard thread lengths for each rod diameter are listed in the table.

FINISHES AVAILABLE: Black, Hot Dip Galvanized or Electro-Plated.
ORDERING: Specify figure number, rod diameter, length, name and finish, if other than black.

EXAMPLE: Fig. 951, 5/8" diameter, 28" long, Anchor Bolt – J – Threaded One End, HDG.



ROD DIA. "A" (IN)	RAD. "B" (IN)	C (IN)	MAX. REC. LOAD (LBS)
3/8	1/2	2 1/2	240
1/2	5/8	2 1/2	440
5/8	3/4	2 1/2	705
3/4	7/8	2 1/2	1050



AAA TECHNOLOGY & SPECIALTIES CO., INC.

6219 Brittmoore Road, Houston, Texas 77041-5114, U.S.A.

Telephone: 713-849-3366; FAX: 713-849-3654

E-mail: info@aaatech.com; Website: <http://www.aaatech.com>

