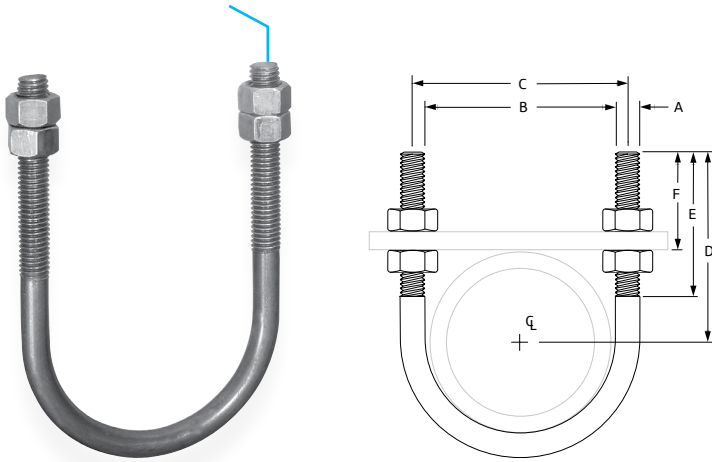


## U-Bolts

**Fig. 137** Standard U-bolt

**Fig. 137S\*** Special U-bolt (Non-Standard)



**Fig. 137: Dimensions (in) • Loads (lbs) • Weight (lbs) ■**

Pipe Size	Rod Size A	Max Normal Load		650° F Max Side Load	Wt.	B	C	D	E	F
		650° F	750° F							
1/2					0.11	15/16	13/16			25/16
3/4	1/4	580	454	145	0.12	17/8	13/8	23/4	21/8	27/32
1					0.12	13/8	15/8			23/32
1 1/4					0.28	111/16	21/16	27/8		21/32
1 1/2	3/8	1,460	1,144	365	0.30	2	23/8	3	2 1/2	2 1/16
2					0.33	27/16	213/16	3 1/4		
2 1/2					0.73	215/16	37/16	3 3/4		25/16
3					0.78	39/16	41/16	4		
3 1/2	1/2	2,700	2,114	675	0.84	41/16	49/16	4 1/4	3	2 1/4
4					0.90	49/16	51/16	4 1/2		
5					1.0	55/8	61/8	5		27/32
6	5/8	4,320	3,382	1,080	2.0	63/4	73/8	61/8	3 1/2	213/16
8					2.3	83/4	93/8	71/8		
10	3/4	6,460	5,060	1,615	4.9	107/8	115/8	83/8	4	3
12					7.7	127/8	133/4	95/8		
14	7/8	8,960	7,016	2,240	8.3	141/8	15	10 1/4	4 1/4	3 1/4
16					9.2	161/8	17	11 1/4		
18					13.5	181/8	191/8	125/8		
20					14.6	201/8	211/8	135/8		
24	1	11,800	9,240	-	16.9	241/8	251/8	155/8	4 3/4	3 5/8
30					19.1	301/8	311/8	185/8		
36					23.2	361/8	371/8	215/8		

■ Loads, weights and dimensions shown do not apply for Fig. 137S. Max load rating for carbon steel is based on 2 x load rating for rod. Max load rating for stainless steel is 0.85 times the maximum stated load ratings listed above.

**Size Range:** 1/2" through 36"

**Material:** Carbon steel U-bolt and four finished hex nuts

**Finish:** Plain or Fig. 137: Zinc Electro-Galvanized or Fig. 137S: Hot-Dip Galvanized (HDC not available for rod size 1/4". Stainless steel is offered as an alternative.)

**Service:** Recommended for support, or guide of heavy loads; often employed in power, process plant and marine service.

**Approvals:** Complies with Federal Specification A-A-1192A (Type 24), WW-H-171-E (Type 24), ANSI/MSS SP-69 and MSS SP-58 (Type 24).

**Ordering Fig. 137:** Specify pipe size x rod size (e.g., 6 x 5/8), figure number, name. U-bolt will be furnished with longer tangents D or with longer threads E if so required and ordered. If hex nuts are not required, specify "without hex nuts".

**Ordering Fig. 137S:** Specify figure number, name, material specification, dimensions A, B, C, D, and E, and "with hex nuts" or "without hex nuts".

**Note:** The acceptability of galvanized coatings at temperatures above 450°F is at the discretion of the end user.

**Note:** \*When the combination of a normal load and a side load occurs, a straight line interaction formula may be used to determine if the Fig. 137 is still within the allowable stress range:

$$P_n/P_{na} + P_s/P_{sa} \leq 1$$

Where:

$P_n$  = actual applied normal load;  
 $P_{na}$  = allowable normal load for the Fig. 137;  
 $P_s$  = actual applied side load;  
 $P_{sa}$  = allowable side load for the Fig. 137

Nuts must be snug tight in installation to achieve side loads shown.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	