

Fig. 137: Standard U-bolt

Fig. 137S*: Special U-bolt (non-standard)

Size Range: 1/2" through 36"

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

Finish: Plain or Galvanized

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".

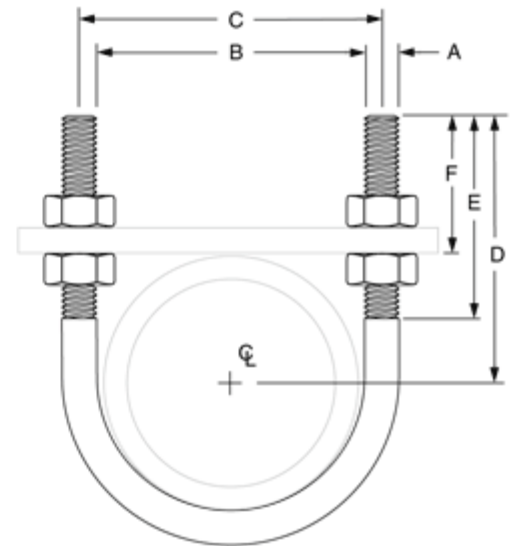
Note: The acceptability of galvanized coatings at temperatures above 450°F is at the discretion of the end user.



FIG. 137: LOADS (LBS) • WEIGHTS (LBS) • DIMENSIONS (IN) ■

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	1/4	580	454	145	0.11	1 5/16	1 3/16	2 3/4	2 1/8	2 5/16
3/4					0.12	1 1/8	1 3/8			2 7/32
1					0.12	1 3/8	1 5/8			2 3/32
1 1/4	3/8	1,460	1,144	365	0.28	1 11/16	2 1/16	2 7/8	2 1/2	2 1/32
1 1/2					0.30	2	2 3/8	3		2 1/16
2					0.33	2 7/16	2 13/16	3 1/4		2 1/16
2 1/2	1/2	2,700	2,114	675	0.73	2 15/16	3 7/16	3 3/4	3	2 5/16
3					0.78	3 9/16	4 1/16	4		2 1/4
3 1/2					0.84	4 1/16	4 9/16	4 1/4		2 7/32
4					0.90	4 9/16	5 1/16	4 1/2		
5					1.0	5 5/8	6 1/8	5		
6	5/8	4,320	3,382	1,080	2.0	6 3/4	7 3/8	6 1/8	3 3/4	2 13/16
8					2.3	8 3/4	9 3/8	7 1/8		
10	3/4	6,460	5,060	1,615	4.9	10 7/8	11 5/8	8 3/8	4	3
12	7/8	9,960	7,016	2,490	7.7	12 7/8	13 3/4	9 5/8	4 1/4	3 3/4
14					8.3	14 1/8	15	10 1/4		
16					9.2	16 1/8	17	11 1/4		
18	1	11,800	9,240	-	13.5	18 1/8	19 1/8	12 3/8	4 3/4	3 5/8
20					14.6	20 1/8	21 1/8	13 3/8		
24					16.9	24 1/8	25 1/8	15 3/8		
30					19.1	30 1/8	31 1/8	18 3/8		
36					23.2	36 1/8	37 1/8	21 3/8		

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



*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.