

Fig. 211, Fig. C-211 Fig. 640, Fig. C-640: Field Welded Strut

Sway Strut Assembly

Finish: Painted (Fig. 211 & Fig. 640)
or Galvanized (Fig. C-211 & C-640)

Service: Used to restrain movement of piping while allowing for movement in the other two directions.

How to size:

- (1) Select size consistent with max. load to be restrained.
- (2) C to C is obtained by subtracting E and A from the distance from structural steel to center of pipe. Verify that the calculated C to C is within the min/max limits.
- (3) Determine W dimension by: $W=(C \text{ to } C)-2F$.

Installation: Shipped assembled. Securely fasten bracket to structure, make necessary adjustment in overall length, and fasten clamp to pipe.

Features:

- Effective under either tensile or compressive force.
- Provides 3 1/2" (Fig. 211) or 2" (Fig. 640) of field adjustment in either direction.
- Self-aligning bushings permits ±5° misalignment or angular motion. Bushings are coated with a dry lubricant.

Ordering: Specify figure number, assembly size, name, option number, normal pipe size or special O.D., and "W" dimension. Please specify temperature for pipe clamp. For restraint parallel to the pipe axis using two sway strut assemblies, a riser clamp is available. If a riser clamp is required, consult the nearest Anvil representative for information about this clamp.

Note: The rear bracket assembly can be ordered separately.



Note: Second lock nut available by special request only.

E-TAKE OUT																				
OD**	E-Take Out: Dimensions (in) at 650°F										E Dimension at 1005°F and 1075°F*									
	Sizes										Sizes									
	A	B & C	1 & 2	3	4	5	6	7	8	A	B	C	1	2	3	4	5	6	7	8
3/4	2 7/16	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	
1	2 9/16	-	-	-	-	-	-	-	-	8 1/8	-	-	-	-	-	-	-	-	-	
1 1/4	2 1 1/16	-	-	-	-	-	-	-	-	8 1/4	-	-	-	-	-	-	-	-	-	
1 1/2	4 1/8	-	-	-	-	-	-	-	-	8 3/8	-	-	-	-	-	-	-	-	-	
2	5 1/8	6 3/8	6 3/8	-	-	-	-	-	-	8 5/8	8 5/8	8 5/8	8 5/8	8 5/8						
2 1/2	5 3/8									8 7/8	8 7/8	8 7/8	8 7/8	8 7/8						
3	5 15/16	7	7	8 3/8						9 1/8	9 1/8	9 1/8	9 1/8	9 1/8						
3 1/2	6 3/16									9 3/8	9 3/8	9 3/8	9 3/8	9 3/8	9 3/8					
4	6 1/2	7 1/4	7 1/4	8 3/8						9 5/8	9 5/8	9 5/8	9 5/8	9 5/8						
5	7 3/4	7 3/4	7 3/4	9 3/8	9 3/8					10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4					
6	8 3/8	8 3/8	8 3/8	10	10					10 3/4	10 3/4	10 3/4	10 3/4	10 3/4	10 3/4	10 3/4	11 1/8	12	11 7/8	12 1/4
8	9 3/8	9 3/8	9 3/8	11 1/4	11 1/4	11 1/4	12 5/8	-	-	11 3/4	11 3/4	11 3/4	11 3/4	11 3/4	11 3/4	11 3/4	12 3/8	13 3/8	13 3/8	13 7/8
10	10 1/2	10 1/2	10 1/2	12 3/4	12 3/4	12 3/4	14 1/4	14 1/4	16 1/4	12 3/4	12 3/4	12 3/4	12 3/4	12 3/4	12 3/4	12 3/4	13 5/8	14 3/4	14 3/4	15 1/2
12	-	11 7/8	11 7/8	13 3/8	13 3/8	13 3/8	15 3/8	15 3/8	17 1/4	-	13 3/4	13 3/4	13 3/4	13 3/4	13 3/4	14	14 3/4	15 7/8	16	16 3/4
14	-	12 5/8	12 5/8	14 1/2	14 1/2	14 1/2	16	16 1/4	18	-	14 3/8	14 3/8	14 3/8	14 3/8	14 3/8	14 3/8	15 3/8	17 1/4	17 1/4	17 1/2
16	-	13 5/8	13 5/8	15 1/4	15 1/4	15 1/4	17 1/8	17 1/2	19	-	15 3/8	15 3/8	15 3/8	15 3/8	15 3/8	15 3/4	16 7/8	18 3/8	18 1/2	18 3/4
18	-	14 5/8	14 5/8	16 3/8	16 3/8	16 3/8	18 1/4	18 1/2	20 1/4	-	16 3/8	16 3/8	16 3/8	16 3/8	16 1/2	16 7/8	18	19 1/2	19 5/8	20
20	-	15 3/4	15 3/4	17 3/4	17 3/4	17 3/4	19 1/4	19 3/4	21 1/2	-	17 3/8	17 3/8	17 3/8	17 3/8	17 1/2	17 7/8	19 3/8	20 3/8	20 7/8	21 1/8
24	-	18 3/8	18 3/8	19 7/8	19 7/8	19 7/8	21 3/4	21 3/4	24	-	19 3/8	19 3/8	19 3/8	19 3/8	20 3/8	20 3/8	21 1/2	22 1/2	23	23 3/8
30	-	21 1/4	21 1/4	23	23	23	25	25	28	-	22 3/8	22 3/8	22 3/8	22 3/8	23 1/2	23 1/2	24 1/2	26 3/8	26 1/4	26 5/8
36	-	24	24	26 1/2	26 1/2	26 1/2	28 1/2	28 1/2	31 1/4	-	25 3/8	25 3/8	25 3/8	25 3/8	26 3/8	26 3/8	27 1/2	29 3/8	-	-

* Please specify whether a 1005°F clamp or 1075°F clamp is required when ordering.

**When calculating strut C-C for intermediate sizes, use the takeout "E" for the next largest pipe diameter.

Note: Carbon steel clamps will accommodate 4" of insulation. Alloy clamps will accommodate 6".

High temperature clamps will be made from alloy steel. Stainless steel available upon request. For other special design requirements, please contact your Anvil EPS sales representative.



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SWAY STRUT ASSEMBLY

Fig. 211, Fig. C-211

Sway Strut Assembly

Fig. 640, Fig. C-640: Field Welded Strut

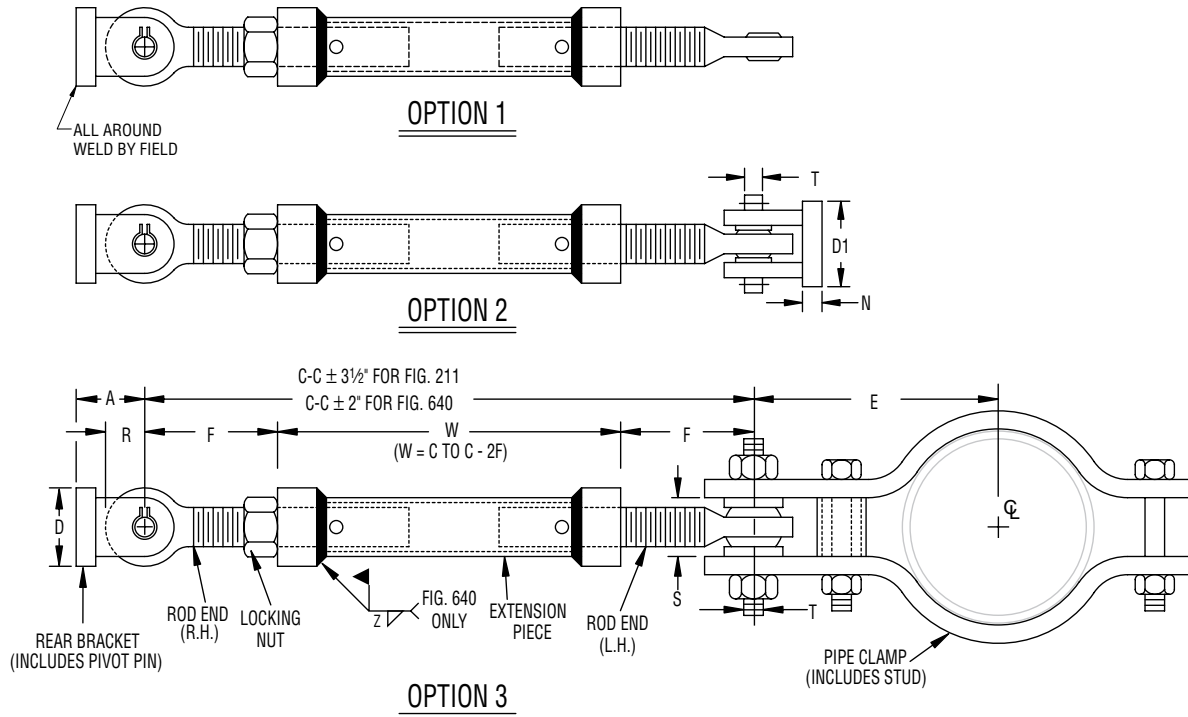


FIG. 211, C-211, FIG. 640 & FIG. C-640: LOAD (LBS) • DIMENSIONS (IN)

Size	Fig. 211 & Fig. 640											Fig. 211				Fig. 640			
	Load ■	Rod End	Ext. Piece	A	D	D1	N	R	S	T	C-C		W		F	Weld Z	C-C		F
											Max	Min	Max	Min			Max	Min	
A	650	3/4	1	1	2	1 1/4	1/4	5/8	5/8	0.374 0.372	60	16 1/2	53 3/8	9 5/8	3 3/16	3/16	60	12 3/8	2 1 1/16
B	1,500	1	1 1/2	2 3/8		5/8	1 3/8		0.749 0.747	108			19	99 3/8	10 3/8				
C	4,500	1	2	2 1/2	2	2 3/8	5/8	1 3/8	1 3/8	0.749 0.747	120	21	110 3/8	10 3/8	4 7/8	5/16	96	16 1/2	4 3/8
1	8,000	1 1/4								2 7/8									
2	11,630	1 1/2	2 1/2	3	3	3 3/16	3/4	2	1 1 1/16	1.249 1.247	120	22 7/8	108 1/2	5 3/4	5/16	96	18 3/8	5	
3	15,700	1 3/4								2 7/8									3/4
4	20,700	2	3	4	6 3/8	4 1/4	1 1/4	2 1/2	2	1.499 1.497	120	26 1/2	106 1/2	13	3/8	96	22	6	
5	27,200	2 1/4								2 7/8									3/4
6	33,500	2 1/2	4	5	7 7/8	5 3/8	1 3/4	3	2 3/8	1.999 1.997	120	32 1/2	102 1/2	15	5/8	96	28	8	
7	68,200	3								5 3/4									9 3/8
8	120,000	4	6	7 1/4	14	8 3/4	2 1/4	4 3/4	3 3/8	2.499 2.497	120	39 1/4	98	17 1/4	3/4	96	34 3/4	10 1/4	

■ Loads must not be applied outside a 10° included angle cone of action to the pipe clamp axis without special authorization.
Fig. 640 shipped at maximum length C-C, field cut to "W" to suit, unless otherwise specified.