

Pipe Covering Protection Saddle For Nominal Thickness of Covering Shown

Fig. 160 1"

Fig. 163 2½"

Fig. 165A 4"Alloy

Fig. 166 5½"

Special Order

Fig. 161 1½"

Fig. 164 3"

Fig. 165E 4½" *

Fig. 166A 5½"Alloy

Fig. 162 2"

Fig. 165 4"

Fig. 166 5" *

Note: Currently not included in sizing table below. Please contact your ASC Sales Associate for more information.

Size Range: ¾" through 36"

Materials:

- Figs. 160, 161, 162, 163, 164, 165, 165E and 166 are curved carbon steel plate.
- Figs. 165A and 166A are alloy steel manufactured from ASTM A 387 Grade 22 Chrome Molybdenum steel plate.
- Figs. 165A and 166A have a welded-in center plate in all sizes.
- All other saddles have a welded-in center plate for pipe sizes 12" and larger.
- All saddles are 12" long with side edges turned up.
- Special lengths available upon request.

Finish: Plain, HDG, Stainless

Service:

Designed for use on insulated high temperature systems where heat losses are to be kept to a minimum and to protect insulation against damage.

Maximum Temperature: 650° F Carbon Steel, 950° F Alloy Steel, Stainless Steel 650° F.

Approvals:

Complies with Federal Specification A-A-1192A (Type 39A & 39B), WW-H-171-E (Type 40A & 40B), ANSI/MSS SP-69 and MSS SP-58 (Type 39A & 39B).

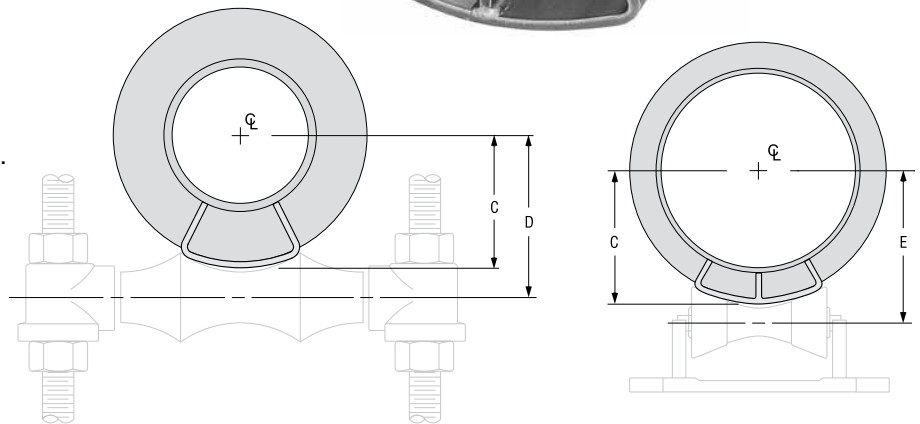
Features: Permits finished, weather tight covering at all points of pipe support.

Ordering:

Specify pipe size, finish, figure number and name. Data for 42" size available on request.

Installation:

It is recommended that saddle be welded to the pipe.



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

Fig. 160 to Fig. 166A Pipe Covering Protection Saddle

Fig. 160, 161, 162, 163, 164, 165, 165A, 166A: Dimensions (in) • Loads (lbs) • Weight (lbs)

Pipe Size	Fig. No.	Max Load ■	Weight	Size of Pipe Roll			Center Line of Pipe to Outside of Saddle C	Center Line of Pipe to Center Line of Roll		
				Figs. 171, 175, 177	Fig. 181	Figs. 271, 274, 277		D		E
								Figs. 171, 175, 177	Fig. 181	Figs. 271, 274, 277
3/4	160•	1,200	1.4	2	2 1/2	1 5/8	2 1/16	2 1/8	2 1/4	
	161•		2.1	3	3 1/2	2 3/16	2 3/4	2 3/4	2 7/8	
	162•		2.8	4	5	2 11/16	3 5/16	3 5/16	3 3/8	
1	160•	1,200	1.4	2 1/2	3	1 13/16	2 5/16	2 1/4	2 7/16	
	161•		2.1	3	4	2-3 1/2	2 7/8	2 7/8	3	
	162•		2.8	4	5	2 7/8	3 1/2	3 1/2	3 1/2	
1 1/4	160	1,200	1.4	2 1/2	3	1 15/16	2 1/2	2 7/16	2 9/16	
	161•		2.1	3 1/2	5	2-3 1/2	2 9/16	3 1/16	3 1/16	
	162•		2.8	4	5	3	3 5/8	3 5/8	3 11/16	
1 1/2	160	1,200	1.5	3	3 1/2	3 3/4	4 3/8	4 3/8	4 3/8	
	161•		2.1	3 1/2	5	2-3 1/2	2 1/8	2 5/8	2 11/16	
	162•		3.2	5	6	4-6	2 5/8	3 1/4	3 5/16	
2	160	1,200	1.7	3 1/2	4	3 7/8	4 1/2	4 5/8	4 1/2	
	161•		2.3	4	5	2-3 1/2	3 7/8	4 1/2	4 1/2	
	162•		3.2	5	6	3 9/16	4 1/4	4 1/4	4 3/16	
2 1/2	160	1,200	1.7	3 1/2	5	4 1/16	4 3/4	4 13/16	4 3/4	
	161		2.8	5	6	4 9/16	5 3/8	5 3/8	5 1/4	
	162		3.2	6	8	4 9/16	5 3/8	5 3/8	5 1/4	
3	160	1,200	1.9	4	5	4 7/8	5 5/8	5 3/4	5 1/2	
	161		2.8	5	6	2 15/16	3 1/2	3 1/2	3 9/16	
	162		3.6	6	8	3 5/8	4 5/16	4 5/16	4 1/4	
3 1/2	160	1,200	2.3	5	6	4 1/8	4 13/16	4 13/16	4 11/16	
	161		3.2	6	8	4 11/16	5 7/16	5 7/16	5 5/16	
	162		3.6	8	10	4 11/16	5 7/16	5 7/16	5 5/16	
4	160	1,200	2.3	5	6	5 1/16	6	6	6 1/16	
	161		3.2	6	8	3 5/16	4	4	3 15/16	
	162		3.6	8	10	4 5/16	4 9/16	4 9/16	4 1/2	
4 1/2	160	1,200	2.3	5	6	4 9/16	5 1/8	5 1/8	5	
	161		3.2	6	8	4 11/16	5 5/8	5 5/8	5 11/16	
	162		3.6	8	10	4 11/16	5 5/8	5 5/8	5 11/16	
5	160	1,200	2.3	5	6	5 3/8	6 5/16	6 5/16	6 3/8	
	161		3.2	6	8	3 9/16	4 1/4	4 1/4	4 3/16	
	162		3.6	8	10	4 1/16	4 7/8	4 7/8	4 3/4	
5 1/2	160	1,200	2.3	5	6	4 9/16	5 3/8	5 3/8	5 1/4	
	161		3.2	6	8	4 9/16	5 3/8	5 3/8	5 1/4	
	162		3.6	8	10	5	5 15/16	5 15/16	6	
6	160	1,200	2.3	5	6	5 5/8	6 9/16	6 9/16	6 5/8	
	161		3.2	6	8	5 5/8	6 9/16	6 9/16	6 5/8	
	162		3.6	8	10	6 1/2	7 5/8	7 5/8	7 9/16	
6 1/2	160	7,200	2.3	5	6	6 1/2	7 5/8	7 5/8	7 9/16	
	161		3.2	6	8	6 1/2	7 5/8	7 5/8	7 9/16	
	162		3.6	8	10	8 1/2	9 5/8	9 1/2	9 5/16	

■ Maximum recommended loads are applicable only when saddle is used on a flat bearing surface or roller hangers and tack welded to pipe.
 When saddle is used with a pipe roll, the maximum load for the assembly is the smaller of the two loads.
 • Saddles may require notching when used with a U-bolt.

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Pipe Covering Protection Saddle Fig. 160 to Fig. 166A

Fig. 160, 161, 162, 163, 164, 165, 165A, 166A: Dimensions (in) • Loads (lbs) • Weight (lbs)

Pipe Size	Fig. No.	Max Load ■	Weight	Size of Pipe Roll			Center Line of Pipe to Outside of Saddle C	Center Line of Pipe to Center Line of Roll		
				Figs. 171, 175, 177	Fig. 181	Figs. 271, 274, 277		D		E
								Figs. 171, 175, 177	Fig. 181	Figs. 271, 274, 277
5	160	1,200	2.3	6	8	4-6	4 ¹ / ₈	4 ¹³ / ₁₆	4 ³ / ₄	
	161		3.2	8			4 ¹¹ / ₁₆	5 ¹ / ₂	5 ³ / ₈	
	162		3.6				5 ³ / ₁₆	6	6 ¹ / ₁₆	
	163		4.5	10	10	8-10	5 ⁵ / ₈	6 ⁹ / ₁₆	6 ⁹ / ₁₆	
	164	4.9				6 ³ / ₁₆	7 ¹ / ₈	7 ¹ / ₄		
	165	6.1					8 ³ / ₁₆	8 ³ / ₈	8 ³ / ₁₆	
	165A	11.6	12	14	12-14	7 ¹ / ₈	8 ¹ / ₈			
	166A	15.7	16	18		8 ¹¹ / ₁₆	10 ¹ / ₁₆	10 ¹ / ₁₆	9 ⁷ / ₈	
6	160	1,800	3.8	8	8	4-6	4 ¹ / ₂	5 ³ / ₈	5 ³ / ₈	
	161		4.4	8	8-10	5 ¹ / ₁₆	5 ⁷ / ₈	5 ¹¹ / ₁₆	6	
	162		5.7	10	10	8-10	5 ¹ / ₂	6 ⁷ / ₁₆	6 ⁷ / ₁₆	6 ¹ / ₂
	163		6.5	10	12	8-10	6 ³ / ₁₆	7 ¹ / ₈	7 ³ / ₁₆	7 ¹ / ₄
	164	7.7	12	12		6 ⁹ / ₁₆	7 ⁵ / ₈	7 ⁵ / ₈	7 ⁵ / ₈	
	165	10.2	14	16	12-14	7 ⁹ / ₁₆	9	9	8 ³ / ₄	
	165A	12.9	16	18	16-20	7 ⁵ / ₈	9 ¹ / ₈		8 ¹³ / ₁₆	
	166A	16.3	16	18		9 ¹ / ₈	10 ⁵ / ₈	10 ⁹ / ₁₆	10 ⁷ / ₁₆	
8	161	1,800	5.8	10	12	8-10	6	7 ¹ / ₁₆	7 ¹ / ₁₆	
	162		6.3	12	14	8-10	6 ¹ / ₂	7 ⁹ / ₁₆	7 ⁹ / ₁₆	
	163		7.2	12	14	12-14	7 ¹ / ₄	8 ⁵ / ₁₆	8 ¹ / ₂	8 ⁵ / ₁₆
	164		7.7	14	16	12-14	7 ¹¹ / ₁₆	9	9	8 ³ / ₄
	165	10.2	16	18	16-20	8 ¹¹ / ₁₆	10 ¹ / ₈	10 ¹ / ₈	9 ⁷ / ₈	
	165A	16.9	18	20		10 ¹ / ₄	11 ⁷ / ₈	11 ¹³ / ₁₆	11 ⁵ / ₈	
	166A	22.6	18	20	16-20	10 ¹ / ₄	11 ⁷ / ₈		11 ⁵ / ₈	
	161	5.8	12	14	8-10	7 ¹ / ₄	8 ⁵ / ₁₆	8 ¹ / ₂	8 ⁵ / ₁₆	
10	162	1,800	7.7	14	16	12-14	7 ⁵ / ₈	9 ¹ / ₁₆	9	
	163		8.2	14	16	12-14	8 ¹ / ₈	9 ⁹ / ₁₆	9 ⁹ / ₁₆	9 ⁵ / ₁₆
	164		8.8	16	18		8 ¹¹ / ₁₆	10 ¹ / ₈	10 ¹ / ₁₆	10
	165		10.8	18	20	16-20	9 ³ / ₄	11 ¹ / ₄	11 ¹ / ₄	11 ¹ / ₈
	165A	18.9	20	24	22-24	11 ¹ / ₈	12 ¹⁵ / ₁₆	-	12 ¹ / ₂	
	166A	24.3	20	24	22-24	11 ¹ / ₈	12 ¹⁵ / ₁₆	-	12 ¹ / ₂	
	161	7.8	14	16	12-14	8 ¹ / ₁₆	9 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₄	
	162	9.9	16	18		8 ⁵ / ₈	10 ³ / ₁₆	10 ¹ / ₁₆	10	
12	163	5,000	10.5	16	18	16-20	9 ¹ / ₈	10 ¹¹ / ₁₆	10 ⁹ / ₁₆	10 ¹ / ₂
	164		11.4	18	20	16-20	9 ⁵ / ₈	11 ¹ / ₈	11 ¹ / ₈	11
	165		14.0	20	-		10 ¹³ / ₁₆	12 ³ / ₈	-	12 ³ / ₁₆
	165A		28.0	20	-		11	12 ¹ / ₂	-	12 ³ / ₈
	166A	35.5	24	-	22-24	12 ⁵ / ₁₆	14 ¹ / ₄	-	13 ¹¹ / ₁₆	
	161	7.8	16	18	12-14	8 ³ / ₄	10 ³ / ₁₆	10 ¹ / ₈	10 ¹ / ₁₆	
	162	9.9	16	18		9 ⁵ / ₁₆	10 ⁷ / ₈	10 ¹³ / ₁₆	10 ¹¹ / ₁₆	
	163	10.5	18	20	16-20	9 ⁷ / ₈	11 ⁵ / ₁₆	11 ³ / ₈	11 ³ / ₁₆	
14	164	5,000	11.4	18	20		10 ⁵ / ₁₆	11 ³ / ₄	11 ³ / ₄	11 ⁵ / ₈
	165		14.0	20	-		11 ⁵ / ₁₆	12 ⁷ / ₈	-	12 ⁵ / ₈
	165A		27.6	20	-	22-24	11 ⁹ / ₁₆	13 ¹ / ₁₆	-	12 ⁷ / ₈
	166A		35.5	24	-		12 ⁷ / ₈	14 ³ / ₄	-	14 ¹ / ₄

■ Maximum recommended loads are applicable only when saddle is used on a flat bearing surface or roller hangers and tack welded to pipe.

When saddle is used with a pipe roll, the maximum load for the assembly is the smaller of the two loads.

• Saddles may require notching when used with a U-bolt.

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Pipe Covering Protection Saddle (cont.) Fig. 160 to Fig. 166A

Fig. 160, 161, 162, 163, 164, 165, 165A, 166A: Dimensions (in) • Loads (lbs) • Weight (lbs)

Pipe Size	Fig. No.	Max Load ■	Weight	Size of Pipe Roll			Center Line of Pipe to Outside of Saddle C	Center Line of Pipe to Center Line of Roll				
				Figs. 171, 175, 177	Fig. 181	Figs. 271, 274, 277		D		E		
								Figs. 171, 175, 177	Fig. 181	Figs. 271, 274, 277		
16	161	5,000	8.4	18	20	16-20	9 ¹³ / ₁₆	11 ¹ / ₄	11 ¹ / ₄	11 ¹ / ₈		
	162		10.4						10 ³ / ₁₆	11 ³ / ₁₆	11 ³ / ₄	11 ⁹ / ₁₆
	163		11.1	20	-		10 ¹³ / ₁₆	12 ⁵ / ₁₆	-	12 ³ / ₁₆		
	164	7,200	13.3	24	-	22-24	11 ¹ / ₁₆	12 ⁷ / ₈	-	12 ⁷ / ₁₆		
	165		15.3						12 ³ / ₁₆	14 ¹ / ₈	-	13 ⁵ / ₈
	165A		30.1						12 ⁷ / ₁₆	14 ⁵ / ₁₆	-	13 ⁷ / ₈
	166A	11,140	40.0	30	-	26-30	13 ¹³ / ₁₆	16 ⁵ / ₈	-	15 ⁵ / ₈		
18	161	5,000	9.1	20	-	16-20	10 ¹³ / ₁₆	12 ⁵ / ₁₆	-	12 ³ / ₁₆		
	162		10.4						11 ⁵ / ₁₆	12 ⁷ / ₈	-	12 ¹¹ / ₁₆
	163		12.4	24	-	22-24	11 ⁵ / ₈	13 ⁹ / ₁₆	-	13 ¹ / ₁₆		
	164	13.3						12 ¹ / ₄	14 ³ / ₁₆	-	13 ⁵ / ₈	
	165	15.3						13 ⁵ / ₁₆	15 ¹ / ₄	-	14 ³ / ₄	
	165A	13,370	40.3	-	-	-	13 ³ / ₄	15 ¹¹ / ₁₆	-	15 ¹ / ₈		
	166A		52.1	30	-	26-30	14 ⁷ / ₈	17 ⁵ / ₈	-	16 ⁵ / ₈		
20	161	7,200	10.4	24	-	22-24	11 ⁵ / ₈	13 ⁹ / ₁₆	-	13 ¹ / ₁₆		
	162		11.6						12 ¹ / ₄	14 ¹ / ₈	-	13 ⁵ / ₈
	163		12.4	30	-	26-30	12 ³ / ₄	14 ¹¹ / ₁₆	-	14 ³ / ₁₆		
	164	13.4						13 ⁵ / ₁₆	15 ¹ / ₄	-	14 ³ / ₄	
	165	22.8						14 ¹ / ₈	17	-	15 ⁷ / ₈	
	165A	13,370	44.8	-	-	-	14 ³ / ₈	17 ³ / ₁₆	-	16 ¹ / ₈		
	166A		52.1	-	-	-	16 ¹ / ₈	18 ¹⁵ / ₁₆	-	17 ⁷ / ₈		
24	161	7,200	12.3	30	-	26-30	13 ¹ / ₂	16 ⁵ / ₁₆	-	15 ¹ / ₄		
	162		13.4						14	16 ⁷ / ₈	-	15 ³ / ₄
	163		14.3	-	-	36-42	14 ⁵ / ₈	17 ¹ / ₂	-	16 ⁷ / ₁₆		
	164	20.3						15 ¹ / ₄	18 ¹ / ₁₆	-	17	
	165	23.1						16 ⁷ / ₁₆	19 ¹ / ₄	-	18 ³ / ₁₆	
	165A	13,370	45.4	-	-	-	16 ¹¹ / ₁₆	19 ¹ / ₂	-	18 ⁷ / ₁₆		
	166A		52.1	-	-	-	18	-	-	19 ³ / ₄		
30	161	7,200	13.3	-	-	36-42	16 ¹⁵ / ₁₆	-	-	18 ⁷ / ₈		
	162		14.0						17 ¹ / ₂	-	-	19 ³ / ₈
	163		20.0	-	-	36-42	18 ¹ / ₁₆	-	-	19 ¹⁵ / ₁₆		
	164	21.4						18 ⁵ / ₈	-	-	20 ¹ / ₂	
	165	24.0						19 ¹¹ / ₁₆	-	-	21 ¹ / ₂	
	165A	13,370	47.9	-	-	-	19 ¹⁵ / ₁₆	-	-	21 ³ / ₄		
	166A		55.6	-	-	-	21 ¹ / ₂	-	-	23 ³ / ₈		
36	161	7,200	18.0	-	-	36-42	20 ¹ / ₄	-	-	22 ¹ / ₈		
	162		18.9						20 ¹⁵ / ₁₆	-	-	22 ⁵ / ₈
	163		20.2	-	-	36-42	21 ⁵ / ₁₆	-	-	23 ³ / ₁₆		
	164	21.6						21 ⁷ / ₈	-	-	23 ¹¹ / ₁₆	
	165	24.1						22 ⁷ / ₈	-	-	24 ¹¹ / ₁₆	
	165A	13,370	48.3	-	-	-	23 ¹ / ₈	-	-	25		
	166A		55.8	-	-	-	24 ⁵ / ₈	-	-	26 ¹ / ₂		

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