



Schedule 40 Saddles Dimensions & Information



ENGINEERING GUIDE

Contact Spears® for any Information not found.



SADDLES & SNAP-ON SADDLES

When Assembling Spears® Saddles to PVC pipe, Spears® Manufacturing Company recommends Spears® PVC-19 Solvent Cement and Spears® Primer-68/Primer-70 or equivalent. Although good connections may be accomplished without saddle straps, Spears® Manufacturing Company recommends the use of clamp or strap device during the assembly step to ensure good compression between the pipe and fitting surfaces as the solvent cures. Solvent cemented saddles are non pressure rated. For additional information, contact Spears® Technical Service.

LARGE DIAMETER NPR SADDLE INSTALLATION

Spears® Large Diameter Non-Pressure Rated (NPR) Saddles are designed for use with PVC pipe in open ended, drainage applications. A supplemental clamping strap must be used to eliminate gaps and ensure good compression and proper fit between the pipe and the saddle surfaces as the solvent cement cures. Clamping straps/kits are commercially available and are not included with saddle. Proper installation requires adequate application of solvent cement and immediate clamping in position with the clamping straps.

Additional Items Needed

Marking Pen	60-Grit Sandpaper	Large Roller Applicator
1/2" Wrench	Primer (Spears® Primer-68/Primer-70)	Clamping Straps
Hole Saw	Solvent Cement (Spears® PVC-19)	
Power Drill	Primer & Cement Use Containers	

Step 1: Dry-fit Saddle, Mark Location of Saddle and Hole, Prepare Clamping Straps

Check for adequate clearance of saddle and that clamping straps can be installed. Position saddle on pipe aligning branch and desired hole centers. Mark outline of saddle, branch hole and center. Prepare two (2) clamping straps of appropriate length (one strap will be used on each side of branch).

Step 2: Cut Hole in Pipe

Remove saddle; verify system is drained. Drill hole at marked center location using appropriate size hole saw.

Step 3: Sand Pipe and Saddle Contact Areas with 60-Grit Sandpaper

Thoroughly rough up the marked outline area on the pipe and on the underside of the saddle using 60-grit sandpaper. Sand in direction of pipe (parallel), then crosswise of pipe (perpendicular) until rough and all gloss is removed. Give attention to area around the branch on both pipe and saddle.

Step 4: Apply Primer to Pipe and Saddle

Work several coats into the roughened pipe area and underside of saddle, giving attention to the area around the branch on both. Primer until the surfaces are softened using a large roller applicator.

Step 5: Apply a Liberal Quantity of Cement to Pipe and Saddle

Apply several coats (minimum 3) one after the other to build up cement on pipe and saddle contact areas. Avoid removing previous coat with each application. **DO NOT** allow cement to dry out between coats. Again, give attention to area around the branch on both pipe and saddle. For threaded saddles, avoid runs or drips in the branch fitting threads.

Step 6: Immediately Install Saddle and Tighten Clamping Straps

Position saddle and locate clamping straps midway between branch and end on each side of branch. This should be done immediately while cement is still wet. Avoid excessive movement that might dislocate proper positioning (assistance is recommended). Tighten straps tight to firmly press saddle onto pipe. A thick glue-bead should be forced out around the saddle edges and inside the branch joint. If no bead, quickly remove saddle and apply more cement.

Step 7: Allow Cement Joint to Cure

Cure for same time and conditions as required for standard solvent cement pipe joints of the same size in the system.

Snap-On Saddle Installation Instructions

- The surface to be joined must be wiped clean.
- Using an appropriate applicator, apply a coat of primer to the fitting and pipe.
- While the primer is still wet, apply a generous coat of medium bodied cement first to the pipe, then to the fitting and then to the pipe again, covering an area of the pipe slightly larger than the saddle.
- Without delay, push the saddle onto the pipe and rotate the fitting approximately 15° in each direction to evenly distribute the cement.
- Allow cement to cure.
- Drill fitting and pipe with the recommended size hole saw.
- Remove debris from the line.
- Follow all safe handling precautions.

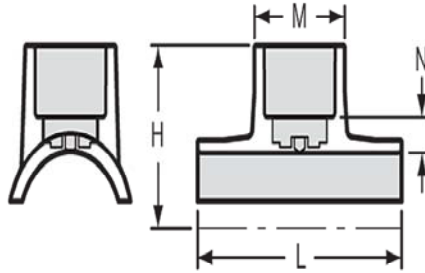
Solvent cemented saddles are non pressure rated. For additional information, contact Spears® Technical Service.



Schedule 40 Fittings Technical
Schedule 40 Saddles Dimensions & Information

Saddle

IPS O.D. x Socket
 NSF-61



Part Number	Size	H	L	M	N	Approx. Wt. (Lbs.)
463-288	2-1/2X3/4	2- 9/16	5- 5/16	1-11/32	1/16	.23
463-333 ¹	3X1/2	3-9/16	6-11/32	2- 3/8	1-1/16	.62
463-335 ¹	3X1	3-21/32	6-11/32	2- 3/8	25/32	.62
463-336 ¹	3X1-1/4	3-21/32	6-11/32	2- 3/8	21/32	.57
463-337	3X1-1/2	3- 5/16	6-11/32	2- 3/8	5/16	.51
463-338 ²	3X2	5	6-11/32	2- 3/4	1- 7/8	.72
463-415 ¹	4X1/2	4	6- 5/16	2- 3/8	1	.67
463-417 ¹	4X1	4-3/32	6- 5/16	2- 3/8	23/32	.68
463-418 ¹	4X1-1/4	4-1/16	6-5/16	2- 3/8	9/16	.62
463-419	4X1-1/2	3-13/16	6-5/16	2-3/8	9/32	.56
463-420 ²	4X2	5- 1/2	6-5/16	2- 3/4	1-7/8	.77
463-485 ¹	5X1-1/2	5-3/16	7- 1/8	2-25/32	1-1/16	1.07
463-486	5X2	5	7- 1/8	2-25/32	1/4	.94
463-523 ¹	6X1/2	5-7/32	6-3/8	2-3/8	1-5/32	.79
463-525 ¹	6X1	5-1/4	6- 3/8	2-3/8	13/16	.80
463-526 ¹	6X1-1/4	5-1/4	6-3/8	2- 3/8	11/16	.74
463-527	6X1-1/2	4-21/32	6-3/8	2-3/8	3/8	.68
463-528 ²	6X2	6- 9/16	6-3/8	2- 3/4	1- 7/8	.89
463-530 ¹	6X3	5-15/16	11-15/16	5- 1/16	11/16	2.73
463-532	6X4	5-17/32	11-15/16	5	7/32	1.94
463-573 ¹	8X1/2	6- 9/16	6-11/32	2- 3/8	1- 1/2	.93
463-575 ¹	8X1	6-1/2	6-11/32	2- 3/8	1-1/16	.94
463-576 ¹	8X1-1/4	6-1/2	6-11/32	2- 3/8	1	.88
463-577	8X1-1/2	6-1/4	6-11/32	2- 3/8	21/32	.83
463-578 ²	8X2	7-3/4	6-11/32	2- 3/4	2-1/16	1.03
463-580 ¹	8X3	6-7/8	11-15/16	5-1/16	11/16	2.91
463-582	8X4	6-17/32	11-15/16	5- 1/32	7/32	2.12
463-624	10X4	7-19/32	11-15/16	5-1/32	7/32	2.19

¹ Outlet-sized with Bushing

² Outlet-sized with Coupling

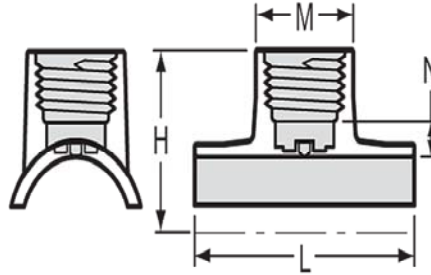


Schedule 40 Fittings Technical
Schedule 40 Saddles Dimensions & Information



Saddle

IPS O.D. x Fipt
 NSF-61

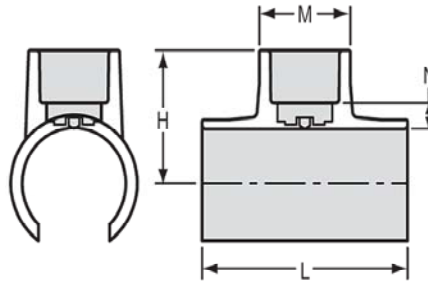


Part Number	Size	H	L	M	N	Approx. Wt. (Lbs.)
464-071	1/2X1/8	1	2- 1/8	19/32	1/8	.02
464-097	3/4X1/8	1- 1/8	2- 1/8	19/32	1/8	.03
464-288	2-1/2X3/4	2- 9/16	5-5/16	1-11/32	5/16	.23
464-337	3X1-1/2	3- 9/32	6-11/32	2- 3/8	13/32	.53
464-419	4X1-1/2	3-13/16	6-5/16	2- 3/8	1/2	.56
464-486	5X2	5	7-1/8	2- 3/4	1-1/8	.99
464-527	6X1-1/2	5	6-3/8	2-3/8	3/8	.69
464-532	6X4	5-1/4	11-15/16	5	9/32	1.92
464-577	8X1-1/2	6- 7/32	6-11/32	2- 3/8	19/32	.78
464-582	8X4	6-9/32	11-15/16	5-1/32	9/32	2.15
464-624	10X4	7- 5/16	11-15/16	5	1/4	2.03

Saddle Installation Instructions: When Assembling Spears® Saddles to PVC pipe, Spears® Manufacturing Company recommends Spears® PVC-19 Extra Heavy Body Solvent Cement and Spears® PRIMER-68 or PRIMER-70, or equivalent. Although good connections may be accomplished without saddle straps, Spears® Manufacturing Company recommends the use of clamp or strap device during the assembly step to ensure good compression between the pipe and fitting surfaces as the solvent cures. Solvent cemented saddles are non pressure rated. For additional information, contact Spears® Technical Service.

Snap-On Saddle

IPS O.D. x Socket
 NSF-61



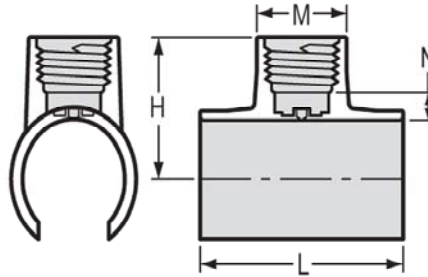
Part Number	Size	H	L	M	N	Approx. Wt. (Lbs.)
463-005	1/2	1-3/8	2- 1/2	1- 3/32	7/32	.05
463-007	3/4	1-23/32	3- 1/8	1- 5/16	3/16	.08
463-010	1	1-15/16	3- 5/8	1- 5/8	5/32	.13
463-012	1-1/4	2- 1/4	4- 1/4	2	5/32	.20
463-015	1-1/2	2-13/32	4- 7/16	2-13/32	5/32	.24
463-020	2	2-3/4	5- 1/4	2-3/4	5/32	.39
463-101	3/4X1/2	1-15/32	2- 3/4	1- 3/32	3/16	.06
463-130	1X1/2	1-19/32	3- 1/2	1- 3/32	3/16	.10



Schedule 40 Fittings Technical
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Snap-On Saddle

IPS O.D. x Fipt



Part Number	Size	H	L	M	N	Approx. Wt. (Lbs.)
464-005	1/2	1-11/32	2- 1/2	1-3/32	3/16	.05
464-007	3/4	1-23/32	3-1/8	1- 5/16	13/32	.08
464-010	1	1-15/16	3- 5/8	1- 5/8	5/16	.14
464-071	1/2X1/8	1	2- 1/8	19/32	1/8	.02
464-097	3/4X1/8	1- 1/8	2- 1/8	19/32	1/8	.03
464-101	3/4X1/2	1- 7/16	2- 3/8	1-3/32	3/16	.05
464-130	1X1/2	1-9/16	2-7/8	1-3/32	3/16	.07
464-131	1X3/4	1-9/16	3	1-5/16	3/16	.09
464-210	1-1/2X3/4	1-15/16	3-1/2	1- 5/16	3/16	.15





CLAMP-ON SADDLES

Simple Two-Piece Design Engineered for Reliability



Spears® PVC & CPVC Clamp-On Saddles allow quick, easy and reliable addition of branch lines to existing piping system lines. These versatile saddle units can be used in either temporary or permanent installations on all types of pipe with IPS (Iron Pipe size) outside diameter, such as PVC, CPVC, Polyethylene, Polypropylene and Steel.

Excellent Metal-to-Plastic System Transition

Easily installs on metal pipe as a transition to plastic system.

PVC & CPVC Tee or Cross Configurations

Available in PVC White, PVC Gray or CPVC in 2" - 12" IPS pipe saddle with socket outlets in sizes 1/2" - 6" and Special Reinforced (SR) threaded outlets in sizes 1/2" - 6", single Tee or double Cross configurations.

Patented SR Design Female Threads

Patented Special Reinforced (SR) design on female thread outlets for superior strength.

O-ring Options

Choice of high grade Buna-N or EPDM O-rings for Schedule 40 and EPDM or FKM O-rings for Schedule 80, for application specific selection for optimum chemical resistance.

Multi-Bolt Design, Choice of Hardware

Positive attachment eliminates splitting problems associated with plastic wedge fasteners and outperforms 2-Bolt clamp saddle designs. Choose zinc plated or stainless steel nut, bolt and washer hardware.

Excellent Pressure Capabilities

Maximum internal pressure rating of 235 psi through 4", 200 psi for 6", and 150 psi for 8" - 12" at 73°F.

Sample Engineering Specification

All thermoplastic saddles shall be clamp-on type with O-ring seal constructed from PVC Type I cell classification 12454 or CPVC Type IV cell classification 23447. All O-rings shall be Buna-N, EPDM or FKM. All saddles shall be piloted at O-ring area for positive positioning in pipe. All bolt clamping hardware shall be zinc plated steel or stainless steel. All threaded saddle outlets shall be Special Reinforced (SR) design. Saddles shall be pressure rated at 235 psi for use on pipe sizes through 4" nominal IPS diameters, 200 psi for use on 6" pipe, and 150 psi for use on 8" - 12" pipe, maximum internal pressure for water at 73° F, as manufactured by Spears® Manufacturing Company.

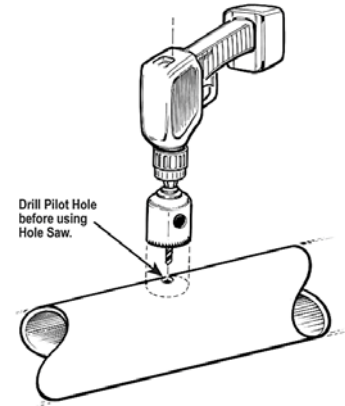


Schedule 40 Fittings Technical
Schedule 40 Clamp-On Saddles Dimensions & Information

Spears® Two-Piece Clamp-On Saddle Design Clamps onto Pipe for Quick and Easy Installation

Clamp-On Saddle Installation Instructions

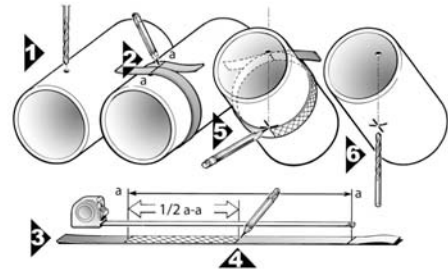
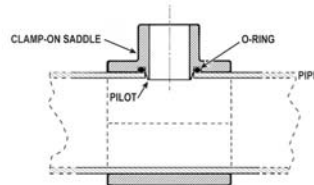
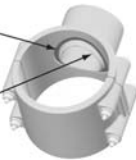
1. Using a standard industrial grade hole-saw, cut specified hole in desired position on pipe according to recommended hole saw size engraved on the saddle. **Note:** Care must be taken to deburr hole and remove all residue from hole area to assure tight fit and avoid leakage.
2. Fully seat O-ring in groove on underside of saddle outlet component. Position over hole and fully seat saddle onto pipe. Note: Certain saddle outlets are piloted. Be sure pilot lip fully engages with hole in pipe.
3. Place strap component opposite outlet and secure with bolts (4), nuts (4) and washers (8). Important: Washers **MUST** be placed under each bolt head (1) and under each nut (1) to avoid damage to saddle.
4. Tighten bolts to specified torque.



Saddle Size	2	3	4	6 & up
Recommended Bolt-Torque - ft/lb	8	8	8	10

O-ring seal provides positive, trouble-free sealing to pipe.

Special pilot engages with hole in pipe to prevent saddle dislocation.



Saddle x Outlet Size	Recommended Hole Size	Recommended Bolt Torque ft./lbs.
2 x 1/2	3/4	8
2 x 3/4	7/8	8
2 x 1	1-1/8	8
2 x 1-1/4	1-1/2	8
2 x 1-1/2	1-1/2	8
2-1/2 x 1-1/2	1-3/4	8
3 x 1/2 ¹	7/8	8
3 x 3/4	7/8	8
3 x 1	1-1/8	8
3 x 1-1/4 ¹	2-1/4	8
3 x 1-1/2 ¹	2-1/4	8
3 x 2	2-1/4	8
4 x 1/2 ¹	1-1/8	8
4 x 3/4 ¹	1-1/8	8
4 x 1	1-1/8	8
4 x 1-1/4 ¹	1-3/4	8
4 x 1-1/2	1-3/4	8
4 x 2	2-1/4	8
4 x 2-1/2 ¹	3	8
4 x 3	3	8
6 x 1/2 ¹	1-1/8	10
6 x 3/4 ¹	1-1/8	10

Saddle x Outlet Size	Recommended Hole Size	Recommended Bolt Torque ft./lb.s
6 x 1	1-1/8	10
6 x 1-1/4 ¹	2-1/4	10
6 x 1-1/2 ¹	2-1/4	10
6 x 2	2-1/4	10
6 x 2-1/2 ¹	3	10
6 x 3	3	10
6 x 4	4	10
8 x 1/2 ¹	4	10
8 x 3/4 ¹	4	10
8 x 1 ¹	4	10
8 x 1-1/4 ¹	4	10
8 x 1-1/2 ¹	4	10
8 x 2 ¹	4	10
8 x 2-1/2 ¹	4	10
8 x 3 ¹	4	10
8 x 4	4	10
8 x 6	6	10
10 x 4	4	10
10 x 6	6	10
12 x 4	4	10
12 x 6	6	10

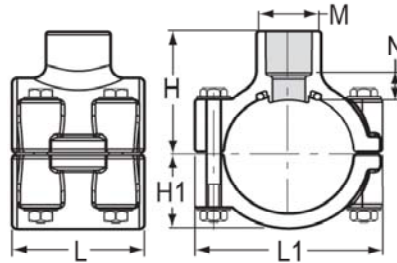
1: Outlet-Sized with Bushing

Schedule 40 Fittings Technical
Schedule 40 Clamp-On Saddles Dimensions & Information



Clamp-On Saddle x Soc Single Outlet, PVC White

with Buna-N O-ring Seal & Zinc-Plated Hardware
 2"- 4" 235, 6" 200, 8"-12" 150 psi @ 73°F (23°C)
 Dimensions Also Applicable to
 466S-XXX 466E-XXX 466SE-XXX



Part Number	Size	H	H1	L	L1	M	N	Bolt Torque FT./LBS.	Hole Size	No of Bolts	Approx. Wt. (Lbs.)
466-247	2X1/2	2- 3/8	1- 1/2	2- 7/16	3- 7/16	1- 3/16	5/16	8	3/4	4	.64
466-248	2X3/4	2-9/16	1- 1/2	2- 7/16	3- 7/16	1- 3/8	5/16	8	7/8	4	.66
466-249	2X1	2-11/16	1- 1/2	2- 7/16	3- 7/16	1-11/16	5/16	8	1-1/8	4	.67
466-250	2X1-1/4	2-13/16	1- 1/2	2- 7/16	3- 7/16	2- 1/16	5/16	8	1-1/2	4	.69
466-251	2X1-1/2	2-15/16	1- 1/2	2- 7/16	3- 7/16	2-13/32	11/32	8	1-1/2	4	.75
466-291	2-1/2X1-1/2	3- 3/16	1-3/4	4-1/8	4-1/8	2-13/32	11/32	8	1-3/4	4	1.07
466-333 ¹	3X1/2	3-3/16	2	3	4-3/4	1- 3/8	11/16	8	7/8	4	.90
466-334	3X3/4	3- 1/16	2- 1/16	3	4-3/4	1- 3/8	9/32	8	7/8	4	.88
466-335	3X1	3- 3/16	2	3	4-3/4	1-11/16	9/32	8	1-1/8	4	.90
466-336 ¹	3X1-1/4	3-7/8	2	4-1/8	4-3/4	3	7/8	8	2-1/4	4	1.46
466-337 ¹	3X1-1/2	3-7/8	2	4-1/8	4-3/4	3	3/4	8	2-1/4	4	1.41
466-338	3X2	3-11/16	2	4-1/8	4-3/4	3	3/8	8	2-1/4	4	1.28
466-415 ¹	4X1/2	4-1/32	2- 5/8	3	5-13/16	1-11/16	1	8	1-1/8	4	1.32
466-416 ¹	4X3/4	4-1/32	2- 5/8	3	5-13/16	1-11/16	13/16	8	1-1/8	4	1.30
466-417	4X1	3-27/32	2- 5/8	3	5-13/16	1-11/16	13/32	8	1-1/8	4	1.27
466-418 ¹	4X1-1/4	4-11/32	2- 5/8	4-1/8	5-13/16	2-7/16	13/16	8	1-3/4	4	1.71
466-419	4X1-1/2	4-1/16	2- 5/8	4-1/8	5-13/16	2-7/16	13/32	8	1-3/4	4	1.65
466-420	4X2	4-1/4	2- 5/8	4- 1/8	5-13/16	3	7/16	8	2-1/4	4	1.73
466-421 ¹	4X2-1/2	5	2- 5/8	5-1/2	5-13/16	4- 9/32	31/32	8	3	4	2.85
466-422	4X3	4-11/16	2-5/8	5-1/2	5-13/16	4-9/32	17/32	8	3	4	2.47
466-523 ¹	6X1/2	5-5/16	3-13/16	3	8-3/16	1-11/16	1- 7/32	8	1-1/8	4	2.48
466-524 ¹	6X3/4	5-5/16	3-13/16	3	8-3/16	1-11/16	1- 1/8	10	1-1/8	1-1/16	2.46
466-525	6X1	5- 1/8	3-13/16	3	8-3/16	1-11/16	5/8	10	1-1/8	4	2.43
466-526 ¹	6X1-1/4	5-11/16	3-13/16	4- 1/8	8-3/16	3	1-1/8	10	2-1/4	4	3.42
466-527 ¹	6X1-1/2	5-11/16	3-13/16	4-1/8	8-3/16	3	1-1/16	10	2-1/4	4	3.38
466-528	6X2	5- 1/2	3-3/16	4- 1/8	8-3/16	3	11/16	10	2-1/4	4	3.25
466-529 ¹	6X2-1/2	6-7/32	3-13/16	6	8-3/16	4-9/32	1- 1/8	10	3	4	4.88
466-530	6X3	5-7/8	3-13/16	6	8-3/16	4-9/32	11/16	10	3	4	4.51
466-532	6X4	6	3-13/16	6-1/16	9-13/16	5-1/4	7/16	10	4	6	5.43
466-573 ¹	8X1/2	6-11/16	4- 7/8	8- 1/2	10-1/16	3	1-5/8	10	2-1/8	6	8.50
466-574 ¹	8X3/4	6-11/16	4- 7/8	8- 1/2	10-1/16	3	1-3/8	10	2-1/8	6	8.49
466-575 ¹	8X1	6-11/16	4- 7/8	8- 1/2	10-1/16	3	1-5/16	10	2-1/8	6	8.50
466-576 ¹	8X1-1/4	6-11/16	4- 7/8	8- 1/2	10-1/16	3	1-1/8	10	2-1/8	6	8.51
466-577 ¹	8X1-1/2	6-11/16	4- 7/8	8- 1/2	10-1/16	3	1-1/16	10	2-1/8	6	8.46
466-578	8 X 2	6-1/2	4- 7/8	8- 1/2	10-1/16	3	11/16	10	2-1/8	6	8.33
466-579 ¹	8X2-1/2	7-5/8	4- 7/8	8- 1/2	10-1/16	5- 1/4	1-9/16	10	4	6	9.45
466-580 ¹	8X3	7-5/8	4- 7/8	8- 1/2	10-1/16	5- 1/4	1- 7/16	10	4	6	9.49
466-582	8X4	7- 5/16	4- 7/8	8- 1/2	10-1/16	5- 1/4	11/16	10	4	6	8.70
466-585	8X6	8- 3/32	4- 7/8	8- 1/2	10-1/16	7-11/16	11/16	10	6	6	9.97
466-620 ¹	10X1-1/2	8-13/16	6	8-1/2	12-1/4	5-1/4	3-1/4	10	4	6	13.78
466-624	10X4	8-7/16	6	8- 1/2	12-1/4	5- 1/4	13/16	10	4	6	12.48
466-626	10X6	9-3/16	6	8-1/2	12-1/4	7- 5/8	13/16	10	6	6	13.42

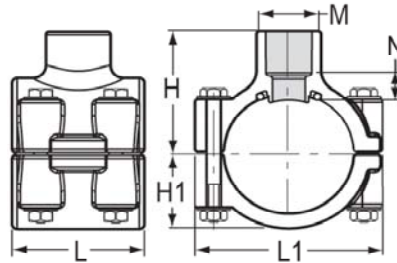


Schedule 40 Fittings Technical
Schedule 40 Clamp-On Saddles Dimensions & Information

Clamp-On Saddle x Soc Single Outlet, PVC White

(Continued)

with Buna-N O-ring Seal & Zinc-Plated Hardware
 2"- 4" 235, 6" 200, 8"-12" 150 psi @ 73°F (23°C)
 Dimensions Also Applicable to
 466S-XXX 466E-XXX 466SE-XXX

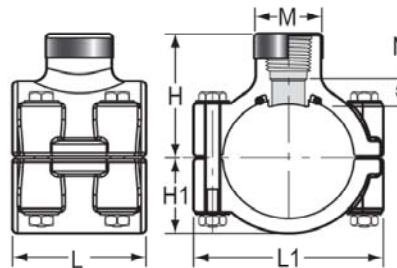


Part Number	Size	H	H1	L	L1	M	N	Bolt Torque FT./LBS.	Hole Size	No of Bolts	Approx. Wt. (Lbs.)
466-664	12X4	9-1/2	7-1/8	8- 1/2	14-14-1/4	5- 1/4	7/8	10	4	6	16.01
466-666	12X6	10-5/16	7-1/8	8- 1/2	14-1/4	7-11/16	7/8	10	6	6	16.87

¹ Outlet-sized with Bushing

Clamp-On Saddle x SR Thread Single Outlet, PVC White

with Buna-N O-ring Seal & Zinc-Plated Hardware
 2"- 4" 235, 6" 200, 8"-12" 150 psi @ 73°F (23°C)
 Dimensions Also Applicable to
 467S-XXXSR 467E-XXXSR 467SE-XXXSR



Part Number	Size	H	H1	L	L1	M	N	Bolt Torque FT./LBS.	Min Hole Size	No of Bolts	Approx. Wt. (Lbs.)
467-247SR	2X1/2	2-13/32	1- 1/2	2- 7/16	3- 7/16	1-7/32	1/2	8	3/4	4	.66
467-248SR	2X3/4	2-9/16	1- 1/2	2- 7/16	3- 7/16	1- 3/8	5/8	8	7/8	4	.67
467-249SR	2X1	2-11/16	1- 1/2	2- 7/16	3- 7/16	1-23/32	9/16	8	1-1/8	4	.69
467-250SR	2X1-1/4	2-13/16	1- 1/2	2- 7/16	3- 7/16	2- 1/16	11/16	8	1-1/2	4	.72
467-251SR	2X1-1/2	2-15/16	1-1/2	2-7/16	3-7/16	2-7/16	13/16	8	1-1/2	4	.79
467-291SR	2-1/2X1-1/2	3- 3/16	1-3/4	4-1/8	4-1/8	2-7/16	13/16	8	1-3/4	4	1.13
467-333SR ¹	3X1/2	3- 5/16	2	3	4-3/4	1- 3/8	13/16	8	7/8	4	.92
467-334SR	3X3/4	3- 1/16	2	3	4-3/4	1- 3/8	19/32	8	7/8	4	.91
467-335SR	3X1	3- 3/16	2	3	4-3/4	1-23/32	17/32	8	1-1/8	4	.94
467-336SR ¹	3X1-1/4	3-7/8	2	4-1/8	4-3/4	3-1/32	1-3/16	8	2-1/4	4	1.51
467-337SR ¹	3X1-1/2	3-7/8	2	4-1/8	4-3/4	3-1/32	1-3/16	8	2-1/4	4	1.47
467-338SR	3X2	3-11/16	2	4-1/8	4-3/4	3-1/32	15/16	8	2-1/4	4	1.38
467-415SR ¹	4X1/2	4-1/32	2- 5/8	3	5-13/16	1-23/32	1-1/16	8	1-1/8	4	1.34
467-416SR ¹	4X3/4	4-1/32	2- 5/8	3	5-13/16	1-23/32	1-1/32	8	1-1/8	4	1.32
467-417SR	4X1	3-7/8	2- 5/8	3	5-13/16	1-23/32	11/16	8	1-1/8	4	1.30
467-418SR ¹	4X1-1/4	4-7/32	2- 5/8	4-1/8	5-13/16	2-7/16	1-1/32	8	1-3/4	4	1.75
467-419SR	4X1-1/2	4-1/16	2- 5/8	4-1/8	5-13/16	2-7/16	7/8	8	1-3/4	4	1.72
467-420SR	4X2	4-1/4	2- 5/8	4- 1/8	5-13/16	3-1/32	1	8	2-1/4	4	1.82
467-421SR ¹	4X2-1/2	5-5/32	2- 5/8	5-1/2	5-13/16	4-5/16	1-5/16	8	3	4	3.00
467-422SR	4X3	4-3/4	2-5/8	5-1/2	5-13/16	4-5/16	1	8	3	4	2.66
467-523SR ¹	6X1/2	5-11/32	3-13/16	3	8-3/16	1-23/32	1-5/16	8	1-1/8	4	2.50
467-524SR ¹	6X3/4	5-11/32	3-13/16	3	8-3/16	1-23/32	1-1/4	10	1-1/8	4	2.48
467-525SR	6X1	5- 1/8	3-13/16	3	8-3/16	1-23/32	7/8	10	1-1/8	4	2.46
467-526SR ¹	6X1-1/4	5-3/4	3-13/16	4- 1/8	8-3/16	3-1/32	1-7/16	10	2-1/4	4	3.47
467-527SR ¹	6X1-1/2	5-3/4	3-13/16	4- 1/8	8-3/16	3-1/32	1-7/16	10	2-1/4	4	3.43
467-528SR	6X2	5- 1/2	3-13/16	4- 1/8	8-3/16	3-1/32	1-3/16	10	2-1/4	4	3.30
467-529SR ¹	6X2-1/2	6-9/32	3-13/16	6	8-3/16	4-5/16	1-13/32	10	3	4	5.03

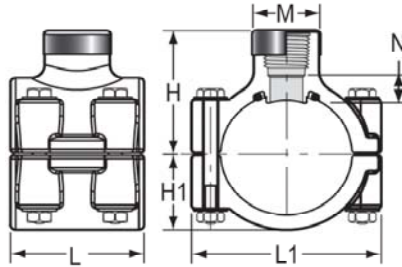
Schedule 40 Fittings Technical
Schedule 40 Clamp-On Saddles Dimensions & Information



**Clamp-On Saddle x SR Thread
 Single Outlet, PVC White**

(Continued)

with Buna-N O-ring Seal & Zinc-Plated Hardware
 2"- 4" 235, 6" 200, 8"-12" 150 psi @ 73°F (23°C)
 Dimensions Also Applicable to
 467S-XXXSR 467E-XXXSR 467SE-XXXSR

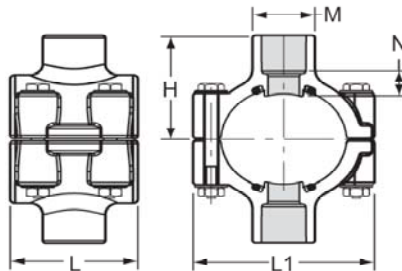


Part Number	Size	H	H1	L	L1	M	N	Bolt Torque FT./LBS.	Min Hole Size	No of Bolts	Approx. Wt. (Lbs.)
467-530SR	6X3	5-7/8	3-13/16	6	8-3/16	4-5/16	1-5/32	10	3	4	4.78
467-532SR	6X4	6	3-13/16	6-1/16	9-13/16	5-1/4	1-3/16	10	4	4	5.66
467-573SR ¹	8X1/2	6-15/16	4-7/8	8-1/2	10-1/16	3	1-7/8	10	2-1/8	6	8.58
467-574SR ¹	8X3/4	6-15/16	4-7/8	8-1/2	10-1/16	3	1-13/16	10	2-1/8	6	8.62
467-575SR ¹	8X1	6-15/16	4-7/8	8-1/2	10-1/16	3	1-11/16	10	2-1/8	6	8.62
467-576SR ¹	8X1-1/4	6-3/4	4-7/8	8-1/2	10-1/16	3-1/32	1-7/16	10	2-1/8	6	8.56
467-577SR ¹	8X1-1/2	6-3/4	4-7/8	8-1/2	10-1/16	3-1/32	1-7/16	10	2-1/8	6	8.52
467-578SR ¹	8X2	6-1/2	4-7/8	8-1/2	10-1/16	3-1/32	1-7/32	10	2-1/8	6	8.34
467-579SR ¹	8X2-1/2	7-11/16	4-7/8	8-1/2	10-1/16	5-1/4	1-3/4	10	4	6	9.81
467-580SR ¹	8X3	7-11/16	4-7/8	8-1/2	10-1/16	5-1/4	1-15/16	10	4	6	9.56
467-582SR	8X4	7-5/16	4-7/8	8-1/2	10-1/16	5-1/4	1-1/2	10	4	6	8.86
467-585SR	8X6	8-1/16	4-7/8	8-1/2	10-1/16	7-21/32	2-1/4	10	6	6	10.55
467-624SR	10X4	8-7/16	6	8-1/2	12-1/4	5-1/4	1-17/32	10	4	6	12.65
467-626SR	10X6	9-7/32	6	8-1/2	12-1/4	7-21/32	2-5/16	10	6	6	14.24
467-664SR	12X4	9-1/2	7-1/8	8-1/2	14-1/4	5-1/4	1-5/8	10	4	6	16.15
467-666SR	12X6	10-9/32	7-1/8	8-1/2	14-1/4	7-21/32	2-3/8	10	6	6	17.59

¹ Outlet-sized with Bushing

**Clamp-On Saddle x Soc Double
 Outlet, PVC White**

with Buna-N O-ring Seal & Zinc-Plated Hardware
 2"- 4" 235, 6" 200, 8"-12" 150 psi @ 73°F (23°C)
 Dimensions Also Applicable to
 468S-XXX 468E-XXX 468SE-XXX



Part Number	Size	H	L	L1	M	N	Bolt Torque FT./LBS.	Min Hole Size	No of Bolts	Approx. Wt. (Lbs.)
468-247	2X1/2	2-3/8	2-7/16	3-7/16	1-3/16	5/16	8	3/4	4	.68
468-248	2X3/4	2-9/16	2-7/16	3-7/16	1-3/8	5/16	8	7/8	4	.70
468-249	2X1	2-11/16	2-7/16	3-7/16	1-11/16	5/16	8	1-1/8	4	.73
468-250	2X1-1/4	2-13/16	2-7/16	3-7/16	2-1/16	5/16	8	1-1/2	4	.76
468-251	2X1-1/2	2-15/16	2-7/16	3-7/16	2-13/32	11/32	8	1-1/2	4	.89
468-291	2-1/2X1-1/2	3-3/16	4-1/8	4-1/8	2-13/32	11/32	8	1-3/4	4	1.22
468-333 ¹	3X1/2	3-3/16	3	4-3/4	1-3/8	11/16	8	7/8	4	.95
468-334	3X3/4	3-1/16	3	4-3/4	1-3/8	9/32	8	7/8	4	.91
468-335	3X1	3-3/16	3	4-3/4	1-11/16	9/32	8	1-1/8	4	.94
468-336 ¹	3X1-1/4	3-7/8	4-1/8	4-3/4	3	7/8	8	2-1/4	4	1.88
468-337 ¹	3X1-1/2	3-7/8	4-1/8	4-3/4	3	3/4	8	2-1/4	4	1.79
468-338	3X2	3-11/16	4-1/8	4-3/4	3	3/8	8	2-1/4	4	1.52
468-415 ¹	4X1/2	4-1/32	3	5-13/16	1-11/16	1	8	1-1/8	4	1.42

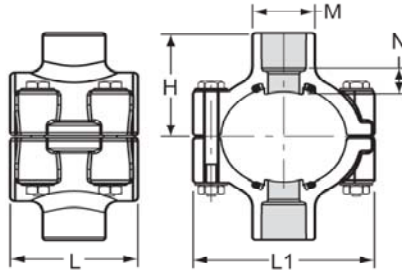


Schedule 40 Fittings Technical
Schedule 40 Clamp-On Saddles Dimensions & Information

Clamp-On Saddle x Soc Double Outlet, PVC White

(Continued)

with Buna-N O-ring Seal & Zinc-Plated Hardware
 2"- 4" 235, 6" 200, 8"-12" 150 psi @ 73°F (23°C)
 Dimensions Also Applicable to
 468S-XXX 468E-XXX 468SE-XXX



Part Number	Size	H	L	L1	M	N	Bolt Torque FT./LBS.	Min Hole Size	No of Bolts	Approx. Wt. (Lbs.)
468-416 ¹	4X3/4	4-1/32	3	5-13/16	1-11/16	13/16	8	1-1/8	4	1.39
468-417	4X1	3-27/32	3	5-13/16	1-11/16	13/32	8	1-1/8	4	1.33
468-418 ¹	4X1-1/4	4-11/32	4-1/8	5-13/16	2-7/16	13/16	8	1-3/4	4	1.90
468-419	4X1-1/2	4-1/16	4-1/8	5-13/16	2-7/16	13/32	8	1-3/4	4	1.78
468-420	4X2	4-1/4	4-1/8	5-13/16	3	7/16	8	2-1/4	4	1.93
468-421 ¹	4X2-1/2	5	5-1/2	5-13/16	4-9/32	31/32	8	3	4	3.79
468-422	4X3	4-11/16	5-1/2	5-13/16	4-9/32	17/32	8	3	4	3.05
468-523 ¹	6X1/2	5-5/16	3	8-3/16	1-11/16	1-7/32	8	1-1/8	4	2.56
468-524 ¹	6X3/4	5-5/16	3	8-3/16	1-11/16	1-1/16	10	1-1/8	4	2.53
468-525	6X1	5-1/8	3	8-3/16	1-11/16	5/8	10	1-1/8	4	2.46
468-526 ¹	6X1-1/4	5-15/16	4-1/8	8-3/16	3	1-1/8	10	2-1/4	4	3.82
468-527 ¹	6X1-1/2	5-11/16	4-1/8	8-3/16	3	1-1/16	10	2-1/4	4	3.72
468-528	6X2	5-1/2	4-1/8	8-3/16	3	11/16	10	2-1/4	4	3.46
468-529 ¹	6X2-1/2	6-7/32	6	8-3/16	4-9/32	1-1/8	10	3	4	5.76
468-530	6X3	5-7/8	6	8-3/16	4-5/16	11/16	10	3	4	5.01
468-532	6X4	6	6-1/16	9-13/16	5-1/4	7/16	10	4	4	6.01
468-573 ¹	8X1/2	6-11/16	8-1/2	10-1/16	3	1-5/8	10	2-1/8	6	8.89
468-574 ¹	8X3/4	6-11/16	8-1/2	10-1/16	3	1-3/8	10	2-1/8	6	8.87
468-575 ¹	8X1	6-11/16	8-1/2	10-1/16	3	1-5/16	10	2-1/8	6	8.88
468-576 ¹	8X1-1/4	6-11/16	8-1/2	10-1/16	3	1-1/8	10	2-1/8	6	8.90
468-577 ¹	8X1-1/2	6-11/16	8-1/2	10-1/16	3	1-1/16	10	2-1/8	6	8.81
468-578 ¹	8X2	6-1/2	8-1/2	10-1/16	3	11/16	10	2-1/8	6	8.54
468-579 ¹	8X2-1/2	7-5/8	8-1/2	10-1/16	5-1/4	1-9/16	10	4	6	10.79
468-580 ¹	8X3	7-5/8	8-1/2	10-1/16	5-1/4	1-7/16	10	4	6	10.85
468-582	8X4	7-5/16	8-1/2	10-1/16	5-1/4	11/16	10	4	6	9.28
468-585	8X6	8-3/32	8-1/2	10-1/16	7-11/16	11/16	10	6	6	11.83
468-624	10X4	8-7/16	8-1/2	12-1/4	5-1/4	13/16	10	4	6	12.94
468-626	10X6	9-3/16	8-1/2	12-1/4	7-11/16	13/16	10	6	6	14.82
468-664	12X4	9-1/2	8-1/2	14-1/4	5-1/4	7/8	10	4	6	16.52
468-666	12X6	10-5/16	8-1/2	14-1/4	7-11/16	7/8	10	6	6	18.23

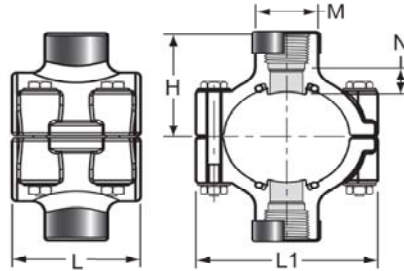
¹ Outlet-sized with Bushing

Schedule 40 Fittings Technical
Schedule 40 Clamp-On Saddles Dimensions & Information



Clamp-On Saddle x SR Thread
Double Outlet, PVC White

with Buna-N O-ring Seal & Zinc-Plated Hardware
 2"- 4" 235, 6" 200, 8"-12" 150 psi @ 73°F (23°C)
 Dimensions Also Applicable to
 469S-XXXSR 469E-XXXSR 469SE-XXXSR



¹Outlet-sized with Bushing

Part Number	Size	H	L	L1	M	N	Bolt Torque FT./LBS.	Min Hole Size	No of Bolts	Approx. Wt. (Lbs.)
469-247SR	2X1/2	2-13/32	2- 7/16	3- 7/16	1-7/32	1/2	8	3/4	4	.70
469-248SR	2X3/4	2-9/16	2- 7/16	3- 7/16	1- 3/8	5/8	8	7/8	4	.73
469-249SR	2X1	2-11/16	2- 7/16	3- 7/16	1-23/32	9/16	8	1-1/8	4	.77
469-250SR	2X1-1/4	2-13/16	2- 7/16	3- 7/16	2- 1/16	11/16	8	1-1/2	4	.83
469-251SR	2X1-1/2	2-15/16	2- 7/16	3- 7/16	2-7/16	13/16	8	1-1/2	4	.98
469-291SR	2-1/2X1-1/2	3- 3/16	4-1/8	4-1/8	2-7/16	13/16	8	1-3/4	4	1.34
469-333SR ¹	3X1/2	3- 5/16	3	4-3/4	1- 3/8	13/16	8	7/8	4	.98
469-334SR	3X3/4	3- 1/16	3	4-3/4	1- 3/8	19/32	8	7/8	4	.96
469-335SR	3X1	3- 3/16	3	4-3/4	1-23/32	17/32	8	1-1/8	4	1.01
469-336SR ¹	3X1-1/4	3-7/8	4-1/8	4-3/4	3-1/32	1-3/16	8	2-1/4	4	1.97
469-337SR ¹	3X1-1/2	3-7/8	4-1/8	4-3/4	3-1/32	1-3/16	8	2-1/4	4	1.88
469-338SR	3X2	3-11/16	4-1/8	4-3/4	3-1/32	15/16	8	2-1/4	4	1.72
469-415SR ¹	4X1/2	4-1/32	3	5-13/16	1-23/32	1-1/16	8	1-1/8	4	1.46
469-416SR ¹	4X3/4	4-1/32	3	5-13/16	1-23/32	1-1/32	8	1-1/8	4	1.43
469-417SR	4X1	3-7/8	3	5-13/16	1-23/32	11/16	8	1-1/8	4	1.40
469-418SR ¹	4X1-1/4	4-7/32	4-1/8	5-13/16	2-7/16	1-1/32	8	1-3/4	4	1.99
469-419SR	4X1-1/2	4-1/16	4-1/8	5-13/16	2-7/16	7/8	8	1-3/4	4	1.92
469-420SR	4X2	4-1/4	4- 1/8	5-13/16	3-1/32	1	8	2-1/4	4	2.12
469-421SR ¹	4X2-1/2	5-5/32	5-1/2	5-13/16	4-5/16	15/16	8	3	4	4.11
469-422SR	4X3	4-3/4	5-1/2	5-13/16	4-5/16	1	8	3	4	3.44
469-523SR ¹	6X1/2	5-11/32	3	8-3/16	1-23/32	1-5/16	8	1-1/8	4	3.01
469-524SR ¹	6X3/4	5-11/32	3	8-3/16	1-23/32	1-1/4	10	1-1/8	4	2.57
469-525SR	6X1	5- 1/8	3	8-3/16	1-23/32	7/8	10	1-1/8	4	2.53
469-526SR ¹	6X1-1/4	5-3/4	4- 1/8	8-3/16	3-1/32	1-7/16	10	2-1/4	4	3.91
469-527SR ¹	6X1-1/2	5-3/4	4- 1/8	8-3/16	3-1/32	1-7/16	10	2-1/4	4	3.83
469-528SR	6X2	5- 1/2	4- 1/8	8-3/16	3-1/32	1-3/16	10	2-1/4	4	3.57
469-529SR ¹	6X2-1/2	6-9/32	6	8-3/16	4-5/16	1-13/32	10	3	4	6.07
469-530SR	6X3	5-7/8	6	8-3/16	4-5/16	1-5/32	10	3	4	5.57
469-532SR	6X4	6	6-1/16	9-13/16	5-1/4	1-3/16	10	4	4	6.46
469-573SR ¹	8X1/2	6-15/16	8- 1/2	10-1/16	3	1-7/8	10	2-1/8	6	9.04
469-574SR ¹	8X3/4	6-15/16	8- 1/2	10-1/16	3	1-13/16	10	2-1/8	6	9.11
469-575SR ¹	8X1	6-15/16	8- 1/2	10-1/16	3	1-11/16	10	2-1/8	6	9.12
469-576SR ¹	8X1-1/4	6-3/4	8- 1/2	10-1/16	3-1/32	1-7/16	10	2-1/8	6	8.99
469-577SR ¹	8X1-1/2	6-3/4	8- 1/2	10-1/16	3-1/32	1-7/16	10	2-1/8	6	8.91
469-578SR ¹	8X2	6-1/2	8- 1/2	10-1/16	3-1/32	1-7/32	10	2-1/8	6	8.56
469-579SR ¹	8X2-1/2	7-11/16	8- 1/2	10-1/16	5- 1/4	1-3/4	10	4	6	11.49
469-580SR ¹	8X3	7-11/16	8- 1/2	10-1/16	5- 1/4	1-15/16	10	4	6	11.00
469-582SR	8X4	7- 5/16	8- 1/2	10-1/16	5- 1/4	1-1/2	10	4	6	9.59
469-585SR	8X6	8-1/16	8- 1/2	7-21/32	7-21/32	2-1/4	10	6	6	12.98
469-624SR	10X4	8-7/16	8- 1/2	12-1/4	5- 1/4	1-17/32	10	4	6	13.28
469-626SR	10X6	9-7/32	8- 1/2	12-1/4	7-21/32	2-5/16	10	6	6	16.47
469-666SR	12X6	10-9/32	8- 1/2	14-1/4	7-21/32	2-3/8	10	6	6	19.68