Transition Fittings Product

Special Reinforced (SR) & Metal Threaded Transition Fittings & Adapters



TRANSITION FITTINGS OVERVIEW

Spears® Transition fittings are designed primarily for adapting plastic-to-metal systems. These fittings, especially the Special Reinforced (SR) Female Plastic Thread style, can also be used for superior strength in make-up of plastic threaded joints. Spears® offers a variety of transition adapter fittings specified below. All have standard ASTM socket sizes for IPS pipe and NPT threads, except for the Gasket Sealed style that uses a straight thread with elastomer seal. All other threads should be assembled with a quality grade thread sealant that is compatible with plastics.

Warning: Some pipe joint compounds or PTFE pastes may contain substances that could cause stress cracking in thermoplastic materials. Spears[®] recommends the use of Spears[®] BLUE 75™ thread sealant that has been tested for compatibility with Spears[®] products. Choice of any other appropriate thread sealant is at the discretion of the installer.

Special Reinforced (SR) Thread Fittings: This patented fitting features all-plastic female thread construction that reduces problems associated with over-tightening of female plastic pipe threads. The external reinforcing collar is not just an added reinforcement ring, this unique precompression design compensates for expansion forces generated from tapered pipe thread joint make-up. Radial stress is reduced in normal installations and contained in severe over-tightening situations. The all-plastic internal construction provides for the maximum in chemical and corrosion benefits. Its solid construction and reliability make the SR our best transition design for all applications.

Brass Thread Fitting: This patented fitting features a molded-in-place brass thread with external reinforcing collar as an integral part of each fitting for superior strength. An internal form-compressed O-ring seal compensates for expansion and contraction variations between materials. Excellent as a metal-to-plastic transition adapter fitting.

Male Brass Thread Fitting: Developed for Copper Tube Size (CTS) hot-and-cold water distribution systems, this male brass thread alternative is the only metal thread design of its type that has the metal component lined with plastic for improved fitting construction and minimal exposure. Excellent for transition to female metal threads in a CTS system.

Gasket Sealed Thread Fittings: Also developed for Copper Tube Size (CTS) hot-and-cold water distribution systems, this female threaded fitting features all plastic internal construction for maximum corrosion resistance. The fitting incorporates straight-threads for mechanical connection, while sealing is accomplished through an internal elastomer gasket or O-ring against the pipe face. No sealants are used.

APPROVALS

Except where otherwise specified, Spears® Transition Fittings/Materials are approved for use in potable water systems by NSF® International under ANSI/NSF® Standard 61, Drinking Water System Components - Health Effects.

CPVC Orange Fittings in this SPS-1 (4200 series part numbers) are approved by Underwriters Laboratories, FM Global, or LPCB for use in CPVC Fire Sprinkler Systems. When installed in these systems, installation must be made in accordance with Spears® publication FG-3, FlameGuard® CPVC Fire Sprinkler Products Installation Manual, and local codes. However, these fittings can also be used in many other types of installations. CPVC fittings may also be used on PVC pipe when installed using a quality CPVC solvent cement meeting the requirements of ASTM F 493, Standard Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings.

TECHNICAL INFORMATION

See Engineering Sourcebook SES-1 for specific product (i.e., Schedule 80 PVC Technical Information, Copper Tube Size (CTS) Technical Information, FlameGuard® CPVC Fire Sprinkler Products Technical Information, etc.).



Transition Fittings Product PVC White Special Reinforced (SR) Fittings

PVC White Special Reinforced (SR) Fittings

Part Number	Size	 	Prod Code	

Part Number Size Std Mstr Prod Pk Ctn Code MSRP

Female Adapter - Special Reinforced

Socket x SR Fipt - Stainless Steel Collar



435-002SR	1/4	25	450	046	6.86
435-003SR	3/8	25	300	046	6.86
435-005SR	1/2	25	150	046	3.81
435-007SR	3/4	25	300	046	5.55
435-010SR	1	25	200	046	8.24
435-012SR	1-1/4	10	60	046	13.33
435-015SR	1-1/2	10	80	046	16.41
435-020SR	2	10	0	046	28.63
435-025SR	2-1/2	5	0	046	45.18
435-030SR	3	15	0	046	50.89
435-040SR	4	5	0	046	87.46

Tee - Special Reinforced

Socket x SR Fipt - Stainless Steel Collar

402-005SR	1/2	25	200	046	9.89
402-012SR	1-1/4	25	0	046	19.45

Tee - Special Reinforced Reducing

Socket x SR Fipt - Stainless Steel Collar



Tee - Special Reinforced Reducing

Socket x SR Fipt-Stainless Steel Collar x Socket

403-095SR	3/4X1/2X3/4	50	0	046	3.35

90° EII - Special Reinforced & Reducing 90° EII

Socket x SR Fipt - Stainless Steel Collar

407-005SR	1/2	50	400	046	8.79
407-007SR	3/4	75	0	046	11.27
407-010SR	1	50	0	046	11.39
407-012SR	1-1/4	25	0	046	13.77
407-131SR	1X3/4	50	0	046	10.89
407-168SR ¹	1-1/4X1	25	0	046	19.09
407-249SR	2X1	10	0	046	21.71
407-251SR	2X1-1/2	10	0	046	22.89
¹ Sized with SR Adapte	r				

Coupling - Special Reinforced

SR Fipt x SR Fipt - Stainless Steel Collar

430-005SR	1/2	25	300	046	4.52
430-007SR	3/4	25	150	046	6.45
430-010SR	1	25	200	046	6.89
430-012SR	1-1/4	10	120	046	8.59
430-015SR	1-1/2	10	60	046	18.99
430-020SR	2	10	0	046	19.92

Coupling - Special Reinforced Reducer

SR Fipt x SR Fipt - Stainless Steel Collar

430-101SR	3/4X1/2	50	200	046	9.77

Female Spigot Adapter - Special Reinforced

Spigot x SR Fipt - Stainless Steel Collar

478-005SR	1/2	50	600	046	5.01
478-007SR	3/4	25	300	046	5.91
478-010SR	1	50	0	046	9.09
478-012SR	1-1/4	25	0	046	14.48
478-015SR	1-1/2	25	0	046	17.36
478-020SR	2	15	0	046	28.91
478-030SR	3	5	0	046	53.14
478-040SR	4	5	0	046	82.07





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Transition Fittings Product

PVC White Special Reinforced (SR) Fittings & PVC White Brass Thread Fittings

13.94

20.29

20.92



Code

MSRP

8.26

Std Mstr

Pk Ctn

PVC White Special Reinforced (SR) Fittings

Part Number				Prod Code	
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1/2X1/4

3/4X1/4

1X1/4

Spears® SR Series reinforced spigot adapters can be user-installed in a

variety of socket type tees, elbows and reducer bushings for superior thread

25 450

50 300

50 400 046

046

046

Cap - Special Reinforced

Part Number

SR Fipt - Stainless Steel Collar 448-012SR 1-1/4 25 100 046

Union - Special Reinforced Fipt/Buna

Socket x SR Fipt with Buna O-ring Seal - Stainless Steel Collar

235 nci @ 73°F (23°C)

235 psi @ 73°F (23°	(C)				
459-002SR	1/4	25	150	046	18.81
459-003SR	3/8	25	100	046	18.81
459-005SR	1/2	10	60	046	10.22
459-007SR	3/4	10	60	046	14.05
459-010SR	1	10	40	046	18.71
459-012SR	1-1/4	5	20	046	35.72
459-015SR	1-1/2	5	0	046	44.22
459-020SR	2	5	0	046	68.08
459-030SR	3	5	0	046	160.77
459-040SR	4	4	0	046	184.59
459-060SR	6	1	0	046	410.19

Female Adapter - Special Reinforced Reducing

Socket x SR Fipt - Stainless Steel Collar

reinforcement demanding applications.

Female Spigot Adapter - Special Reinforced

Spigot x SR Fipt - Stainless Steel Collar

Reducing

478-072SR

478-098SR

478-128SR

435-072SR	1/2X1/4	50	600	046	4.98
435-074SR	1/2X3/4	50	400	046	5.55
435-101SR	3/4X1/2	50	400	046	5.55
435-102SR	3/4X1	50	0	046	8.24
435-130SR	1X1/2	50	0	046	8.24
435-131SR	1X3/4	25	200	046	8.24

Union - Special Reinforced Fipt/EPDM

Socket x SR Fipt with EPDM O-ring Seal -**Stainless Steel Collar**

00F ==: @ 700F (000C)

235 psi @ 73°F (23°	C)				
499-002SR	1/4	25	150	046	20.65
499-003SR	3/8	25	100	046	20.65
499-005SR	1/2	10	60	046	11.22
499-007SR	3/4	10	40	046	15.45
499-010SR	1	10	40	046	20.55
499-012SR	1-1/4	5	20	046	39.24
499-015SR	1-1/2	5	0	046	48.59
499-020SR	2	5	0	046	74.83
499-030SR	3	5	0	046	176.67
499-040SR	4	4	0	046	202.83
499-060SR	6	1	0	046	450.77

Reducer Bushing - Special Reinforced Flush Style

Spigot x SR Fipt - Stainless Steel Collar

				1000
1X1/4	25	150	046	4.05
1-1/4X1/2	25	100	046	7.41
1-1/2X1/4	25	100	046	10.35
1-1/2X1/2	25	100	046	10.35
1-1/2X3/4	25	100	046	10.35
2X1/2	10	80	046	12.66
2X3/4	10	80	046	12.66
2X1	10	120	046	12.66
3X3/4	10	0	046	49.59
3X1	10	0	046	49.59
3X1-1/4	10	0	046	49.59
3X1-1/2	10	0	046	49.59
4X2	6	0	046	76.21
4X2-1/2	6	0	046	85.77
6X2	5	0	046	87.76
6X3	5	0	046	79.01
6X4	5	0	046	87.76
	1-1/4X1/2 1-1/2X1/4 1-1/2X1/2 1-1/2X3/4 2X1/2 2X3/4 2X1 3X3/4 3X1 3X1-1/4 3X1-1/2 4X2 4X2-1/2 6X2 6X3	1-1/4X1/2 25 1-1/2X1/4 25 1-1/2X1/2 25 1-1/2X3/4 25 2X1/2 10 2X3/4 10 2X3/4 10 3X3/4 10 3X1-1/4 10 3X1-1/2 10 4X2 6 4X2-1/2 6 6X2 5 6X3 5	1-1/4X1/2 25 100 1-1/2X1/4 25 100 1-1/2X1/2 25 100 1-1/2X3/4 25 100 2X1/2 10 80 2X3/4 10 80 2X1 10 120 3X3/4 10 0 3X1 10 0 3X1-1/4 10 0 3X1-1/2 10 0 4X2 6 0 4X2-1/2 6 0 6X2 5 0 6X3 5 0	1-1/4X1/2

PVC White Brass Thread Fittings

Union - Brass Fipt/Buna

Socket x Fipt with Brass Thread Insert & Buna-N O-ring Seal

225 poi @ 72°E (22°C)

235 psi @ 73°F (23°	C)				
459-010BR	1	10	0	046	79.49
459-012BR	1-1/4	5	20	046	133.53
459-015BR	1-1/2	5	0	046	176.65
459-020BR	2	5	0	046	235.64

Not intended to convey or dispense water for human consumption through drinking or cooking

Reducer Bushing - Special Reinforced Flush Style

439-209SR	1-1/2X1/2	25	300	046	10.73
439-248SR	2X3/4	10	60	046	9.72
439-249SR	2X1	10	120	046	15.76

