

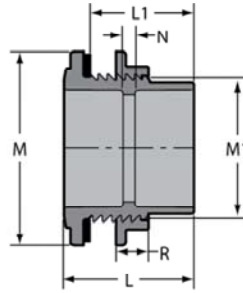
Schedule 80 CPVC Technical
Schedule 80 CPVC Tank Adapters



**Tank Adapters, CPVC New
 Style Standard with Neoprene
 Gaskets**

Socket x Socket
 150 psi Maximum Internal Pressure Rating @ 73°
 F (23°C)

Dimensions Also Applicable to
 8170E-XXXX & 8170V-XXXX

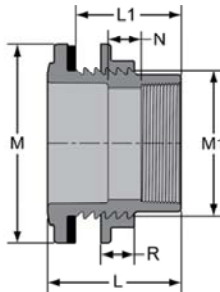


Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8170-002C	1/4	2-15/32	1-13/16	1-17/32	1-1/32	1-3/16	1/2	1-1/16	.11
8170-003C	3/8	2- 1/2	1-27/32	1-21/32	1-5/32	1	1/2	1-3/16	.12
8170-005C	1/2	2-29/32	2-3/16	2-1/16	1-7/16	1-1/8	5/8	1-1/2	.22
8170-007C	3/4	2-15/16	2-3/16	2-1/4	1-5/8	29/32	5/8	1-3/4	.24
8170-010C	1	3-9/32	2-9/16	2-21/32	1-31/32	1	5/8	2	.37
8170-012C	1-1/4	3-13/32	2-5/8	3-1/8	2-5/16	29/32	5/8	2-3/8	.48
8170-015C	1-1/2	3-5/8	2-13/16	3-5/8	2-11/16	7/8	5/8	2-3/4	.66
8170-020C	2	4-1/8	3-1/4	4-7/8	3-1/4	1-1/16	3/4	3-3/8	1.29
8170-025C	2-1/2	4-27/32	3-29/32	5-1/4	3-13/16	1-5/16	1	3-7/8	2.26
8170-030C	3	5-1/2	4-1/2	6	4-17/32	1-23/32	1	4-5/8	2.61
8170-040C	4	4-31/32	3-15/16	7-7/16	5-7/16	7/16	1-1/4	5-1/2	3.21
8170-060C	6	5	4	10-3/32	8	1/8	1-1/4	8	5.76
8170-080C	8	8-19/32	6-7/8	12-15/16	10-7/32	1/2	1-1/2	10-3/8	17.30

**Tank Adapters, CPVC New
 Style Standard with Neoprene
 Gaskets**

Socket x Fipt
 150 psi Maximum Internal Pressure Rating @ 73°
 F (23°C)

Dimensions Also Applicable to
 8171E-XXXX & 8171V-XXXX

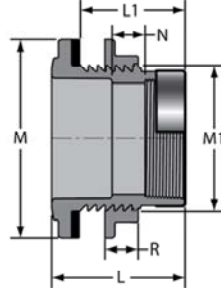


Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8171-002C	1/4	2-15/32	1-13/16	1-17/32	1-1/32	1- 1/4	1/2	1-1/16	.12
8171-003C	3/8	2- 1/2	1-27/32	1-21/32	1-5/32	1- 3/16	1/2	1-3/16	.12
8171-005C	1/2	2-29/32	2- 3/16	2- 1/16	1-7/16	1-5/16	5/8	1-1/2	.23
8171-007C	3/4	2-15/16	2-3/16	2- 1/4	1- 5/8	1- 3/16	5/8	1-3/4	.26
8171-010C	1	3-9/32	2-9/16	2-21/32	1-31/32	1- 1/4	5/8	2	.39
8171-012C	1-1/4	3-13/32	2-5/8	3-1/8	2- 5/16	1-7/32	5/8	2-3/8	.51
8171-015C	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1-9/32	5/8	2-3/4	.71
8171-020C	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	1- 5/8	3/4	3-3/8	1.34
8171-025C	2-1/2	4-27/32	3-29/32	5- 1/4	3-13/16	1-3/4	1	3-7/8	2.39
8171-030C	3	5- 1/2	4- 1/2	6	4-17/32	2- 3/16	1	4-5/8	2.75
8171-040C	4	4-31/32	3-15/16	7-7/16	5-7/16	1-7/32	1- 1/4	5-1/2	3.35
8171-060C	6	5	4	10-3/32	8	1/32	1- 1/4	8	5.91



Schedule 80 CPVC Technical
Schedule 80 CPVC Tank Adapters

Tank Adapters, CPVC New Style Special Reinforced (SR) Threaded with Neoprene Gaskets

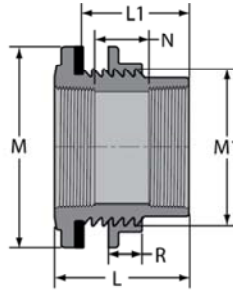


Socket x SR Fipt - Stainless Steel Collar
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

Dimensions Also Applicable to
8171E-XXXCSR & 8171V-XXXCSR

Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8171-002CSR	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 1/4	1/2	1-1/16	.12
8171-003CSR	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/16	1/2	1-3/16	.13
8171-005CSR	1/2	2-15/16	2- 1/4	2- 1/16	1-15/32	1- 9/32	5/8	1-1/2	.24
8171-007CSR	3/4	2-15/16	2- 3/16	2- 1/4	1- 5/8	1- 1/4	5/8	1-3/4	.27
8171-010CSR	1	3- 5/16	2-13/16	2- 5/8	1-31/32	1- 1/4	5/8	2	.40
8171-012CSR	1-1/4	3-13/32	2- 5/8	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.53
8171-015CSR	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1- 1/4	5/8	2-3/4	.74
8171-020CSR	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	1- 5/8	3/4	3-3/8	1.36
8171-025CSR	2-1/2	4- 7/8	3- 7/8	5- 1/4	3-13/16	1-11/16	1	3-7/8	2.45
8171-030CSR	3	5- 1/2	4- 1/2	6	4- 9/16	2- 3/16	1	4-5/8	2.82
8171-040CSR	4	5	4	7- 1/2	5- 1/2	1- 1/4	1- 1/4	5-1/2	3.47
8171-060CSR	6	4-31/32	4- 1/16	10-3/32	7-11/16	1/16	1- 1/4	8	9.11

Tank Adapters, CPVC New Style Standard with Neoprene Gaskets



Fipt x Fipt
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

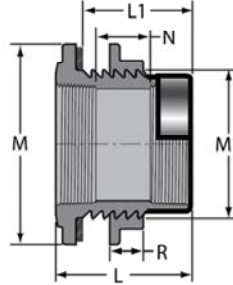
Dimensions Also Applicable to
8172E-XXXC & 8172V-XXXC

Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8172-002C	1/4	2-15/32	1-13/16	1-17/32	1-1/32	1- 5/16	1/2	1-1/16	.12
8172-003C	3/8	2- 1/2	1-27/32	1-21/32	1-5/32	1-11/32	1/2	1-3/16	.13
8172-005C	1/2	2-29/32	2- 3/16	2- 1/16	1-7/16	1-15/32	5/8	1-1/2	.24
8172-007C	3/4	2-15/16	2-3/16	2- 1/4	1- 5/8	1-15/32	5/8	1-3/4	.26
8172-010C	1	3-9/32	2-9/16	2-21/32	1-31/32	1-1/2	5/8	2	.40
8172-012C	1-1/4	3-13/32	2-5/8	3-1/8	2- 5/16	1-17/32	5/8	2-3/8	.53
8172-015C	1-1/2	3-5/8	2-13/16	3-5/8	2-11/16	1-23/32	5/8	2-3/4	.74
8172-020C	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	2-5/32	3/4	3-3/8	1.35
8172-025C	2-1/2	4-7/32	3-29/32	5- 1/4	3-13/16	2-7/32	1	3-7/8	2.52
8172-030C	3	5- 1/2	4- 1/2	6	4-17/32	2-11/16	1	4-5/8	2.95
8172-040C	4	4-31/32	3-15/16	7-7/16	5-7/16	2	1- 1/4	5-1/2	3.69
8172-060C	6	5	4	10-3/32	8	1-1/8	1- 1/4	8	6.21

Schedule 80 CPVC Technical
Schedule 80 CPVC Tank Adapters



Tank Adapters, CPVC New Style Special Reinforced (SR) Threaded with Neoprene Gaskets

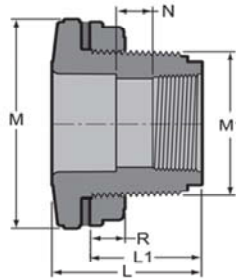


Fipt x SR Fipt - Stainless Steel Collar
 150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

Dimensions Also Applicable to
 8172E-XXXCSR & 8172V-XXXCSR

Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8172-002CSR	1/4	2- 1/2	1-13/16	1-17/32	1-1/32	1- 5/16	1/2	1-1/16	.12
8172-003CSR	3/8	2-17/32	1-27/32	1-21/32	1-5/32	1- 3/8	1/2	1-3/16	.13
8172-005CSR	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1-1/2	5/8	1-1/2	.25
8172-007CSR	3/4	2-15/16	2-7/32	2- 1/4	1- 5/8	1-1/2	5/8	1-3/4	.27
8172-010CSR	1	3-5/16	2-9/16	2-21/32	1-31/32	1-17/32	5/8	2	.42
8172-012CSR	1-1/4	3-9/16	2-21/32	3-1/8	2- 5/16	1-9/16	5/8	2-3/8	.54
8172-015CSR	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1-23/32	5/8	2-3/4	.77
8172-020CSR	2	4- 1/8	3- 1/4	4-7/8	3-1/4	2-5/32	3/4	3-3/8	1.41
8172-025CSR	2-1/2	4- 7/8	3-29/32	5- 1/4	3-13/16	2- 1/4	1	3-7/8	2.58
8172-030CSR	3	5-1/2	4-1/2	5-31/32	4-1/2	2-11/16	1	4-5/8	3.00
8172-040CSR	4	5	4	7-7/16	5-7/16	2-1/32	1- 1/4	5-1/2	3.79
8172-060CSR	6	5	4-3/32	9-15/16	8	1-1/8	1-1/4	8	9.41

Tank Adapter, CPVC Old Style with Neoprene Gasket



Socket x Fipt
 150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

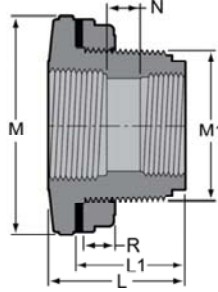
Part Number	Size	L	L1	M	M1	N	R	Approx. Wt. (Lbs.)
871-005C	1/2	2-27/32	2-3/16	2-3/8	1- 9/32	1-11/32	5/8	.25
871-007C	3/4	2-23/32	2-1/16	2-5/8	1- 5/8	29/32	5/8	.31
871-010C	1	2-25/32	2- 1/8	2-13/16	1- 7/8	25/32	21/32	.34
871-012C	1-1/4	3- 1/8	2- 7/16	3-29/32	2-11/32	27/32	5/8	.62
871-015C	1-1/2	3- 5/32	2-21/32	3-29/32	2-11/32	3/4	5/8	.57
871-020C	2	3- 3/16	2-17/32	4-31/32	3-15/32	13/16	3/4	1.42
871-030C	3	4-19/32	3-13/16	6- 7/16	4-15/32	31/32	1- 3/16	2.62
871-040C	4	4- 7/16	3-23/32	7- 7/16	5- 1/2	1/2	1- 1/4	3.37



Schedule 80 CPVC Technical
Schedule 80 CPVC Tank Adapters

Tank Adapter, CPVC Old Style with Neoprene Gasket

Fipt x Fipt
 150 psi Maximum Internal Pressure Rating @ 73°F (23°C)



Part Number	Size	L	L1	M	M1	N	R	Approx. Wt. (Lbs.)
872-005C	1/2	2-27/32	2-3/16	2-3/8	1-9/32	1-15/32	5/8	.25
872-007C	3/4	2-23/32	2-1/16	2-5/8	1- 5/8	1-1/4	5/8	.32
872-010C	1	2-25/32	2-1/8	2-7/8	1- 7/8	1-5/16	5/8	.36
872-012C	1-1/4	3- 1/8	2-7/16	3-15/16	2-11/32	1- 1/8	5/8	.64
872-015C	1-1/2	3- 1/8	2-7/16	3-15/16	2-11/32	1- 1/16	5/8	.60
872-020C	2	3-3/16	2- 3/8	5-3/32	3-15/32	1-1/8	3/4	1.44
872-030C	3	4-19/32	3-11/16	6-19/32	4-7/16	1-1/8	1- 3/16	2.61
872-040C	4	4-15/32	3-17/32	7-11/16	5- 1/2	17/32	1- 1/4	3.46

TANK ADAPTER GASKET SECTION	SIZE	O.D.*	I.D.*	T
	1/2	2.25	1.33	3/16
	3/4	2.49	1.69	3/16
	1	2.79	1.94	3/16
	1-1/4	3.81	2.39	3/16
	1-1/2	3.81	2.39	3/16
	2	4.89	3.51	3/16
	3	6.30	4.49	3/16
	4	7.33	5.50	3/16

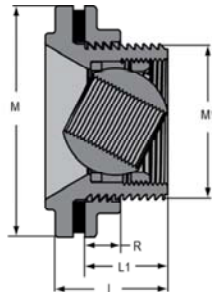
Old Style Tank Adapter Gasket & Hole Size Requirements			
Tank Adapter Size	Recommended Minimum Hole Size	Minimum Inside Curvature Radius (inches)	Maximum Tank Wall Thickness (inches)
1/2	1-3/8	3.88	1.06
3/4	1-3/4	5.00	1.06
1	2	6.12	1.06
1-1/4	2-7/16	10.75	1.34
1-1/2	2-7/16	10.75	1.34
2	3-9/16	18.50	1.16
3	4-9/16	31.00	1.75
4	5-9/16	42.75	1.81

* Both outside and inside dimensions are +/- .03 shore hardness 65-70

Tank Adapter, CPVC Self Aligning with Neoprene Gasket

Fipt
 75 psi Maximum Internal Pressure Rating @ 73°F (23°C)

Dimensions Also Applicable to
 8172ESA-XXXC & 8172VSA-XXXC



Part Number	Size	L	L1	M	M1	R	Approx. Wt. (Lbs.)
8172SA-010C	1	2- 9/16	1- 3/4	4- 7/8	3- 1/4	3/4	2.60
8172SA-020C	2	2-11/16	1- 3/4	6	4-7/16	1	5.11
8172SA-030C	3	3-3/16	2-9/32	7-7/16	5-7/16	1- 1/4	3.14

Schedule 80 CPVC Technical
Schedule 80 CPVC Tank Adapters



Self-Aligning Tank Adapters

Swivel Ball design permits straight-pipe connections with up to a 27° angle off vertical pipe centerline in any direction. Aids installation in domed top tanks and provides easy adjustment to compensate for tank curvature in making system connections. Pressure rated to 75 psi @ 73°F (23°C).

Easy Installation

1. Locate and cut designated hole size in tank
2. Remove Nut and insert Self-Aligning Tank Adapter through hole from inside. **Note: Body and Gasket must be installed on the inside of tank.**
3. Tighten Nut (clockwise) while holding body from inside tank.
4. Install threaded pipe into ball.
5. Position angular offset as desired and tighten lock ring (clockwise) against ball.

Self Aligning Tank Adapter Installation Requirements			
Tank Adapter Size	Minimum Hole Size	Minimum Tank Inside Curvature-Radius (in.)	Maximum Tank Wall Thickness
1	3-3/8	18.5	1-5/16
2	4-5/8	32.5	1-5/16
3	5-1/2	43.5	1-11/16

Nut Wrenches

While not required for installation, Self-Aligning Tank Adapters can use certain nut wrenches produced for use on Spears® regular Tank Adapters (New Style). While designated wrench sizes do not directly correspond, the following chart shows specific regular Tank Adapter Nut Wrench to use with each Self-Aligning size. Body wrenches are not currently available.

Self-Aligning Tank Adapter Size	Regular Tank Adapter Nut Wrench to Use	
	Part Number	Comment
1"	TAW2-020	Regular 2" wrench fits Self-Aligning 1" nut
2"	TAW2-030	Regular 3" wrench fits Self-Aligning 2" nut
3"	TAW2-040	Regular 4" wrench Self-Aligning 3" nut