



CREATIVE PIPING SOLUTIONS

Innovating The Piping Industry | www.creativepiping.com

Threaded and Socket Weld Forged Fittings Dimension Specifications



Creative Piping Solutions envision ourselves to be one of the most Trusted and Admired ASME B16.11 Forged Fittings Manufacturing companies in India by providing quality products to our valued customers in the least time. We believe in adopting and Innovating Environment-friendly methods and materials. We offer a commendable range of threaded and socketed weld Forged Fittings for distinguished clients at competitive prices, and we believe in Quality. We supply these Forged Fittings to various Industries publicly & Private Sector, Government & Semi-Government Department everywhere in India.

PRODUCT CATALOG

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PRODUCT CATALOG

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Forged Threaded Fittings

ASME B16.11, ASME B1.20.1

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90° Threaded Elbows

1/8" to 4" Class 2000
1/8" to 4" Class 3000
1/8" to 4" Class 6000

45° Threaded Elbows

1/4" to 4" Class 2000
1/8" to 4" Class 3000
1/8" to 4" Class 6000

Threaded TEEs

1/8" to 4" Class 2000
1/8" to 4" Class 3000
1/8" to 4" Class 6000

Threaded Crosses

1/8" to 4" Class 2000
1/8" to 4" Class 3000
1/8" to 3" Class 6000

Threaded Street Elbows

1/8" to 2" Class 3000
1/4" to 1 1/2" Class 6000

Threaded Laterals

1/2 to 2" Class 3000
3/4" to 1 1/2" Class 6000



Threaded Couplings

1/8" to 4" Class 3000
1/8" to 4" Class 6000

Threaded Half Couplings

1/8" to 4" Class 3000
1/8" to 4" Class 6000

Threaded Pipe Caps

1/8" to 4" Class 3000
1/8" to 4" Class 6000

Threaded Couplets

1/4" to 4" Class 3000
1/4" to 4" Class 6000

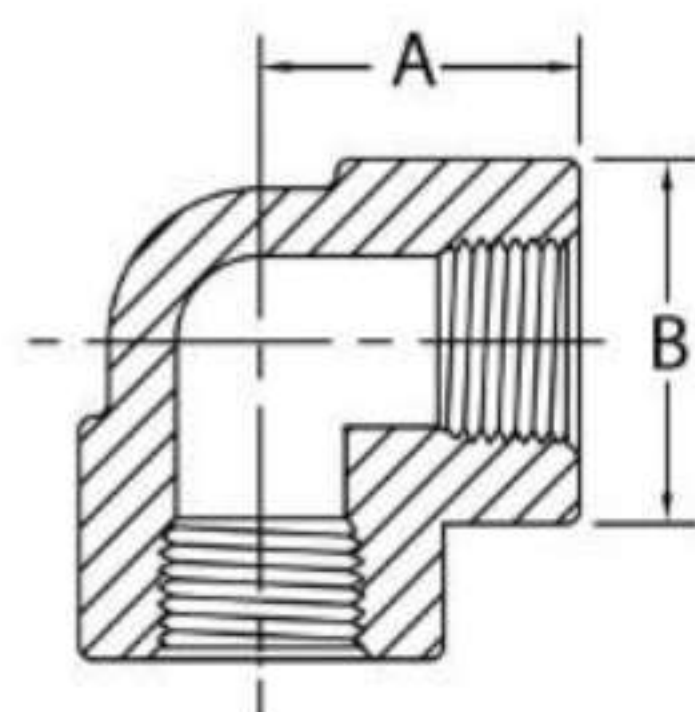
Threaded Reducing Couplings

1/4" to 4" Class 3000
1/4" to 4" Class 6000

Class 2000 Forged Threaded Fittings

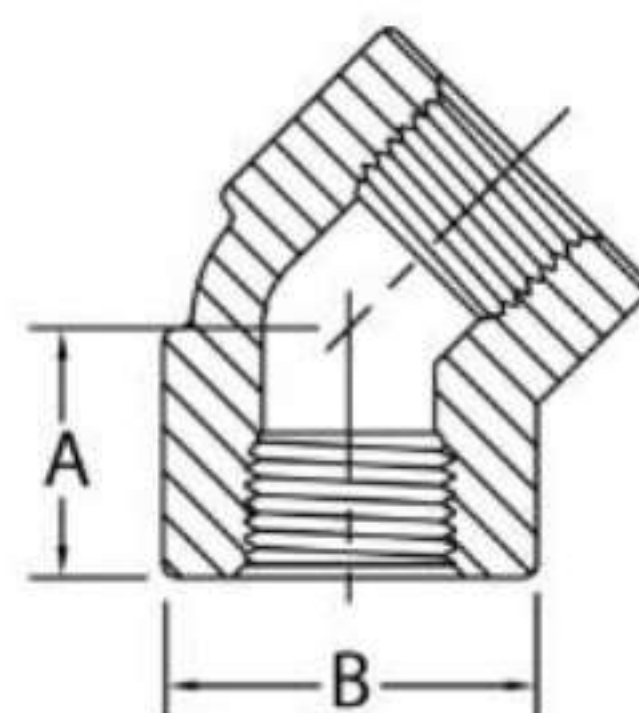
ASME B16.11, ASME B1.20.1

Creative Piping Solutions



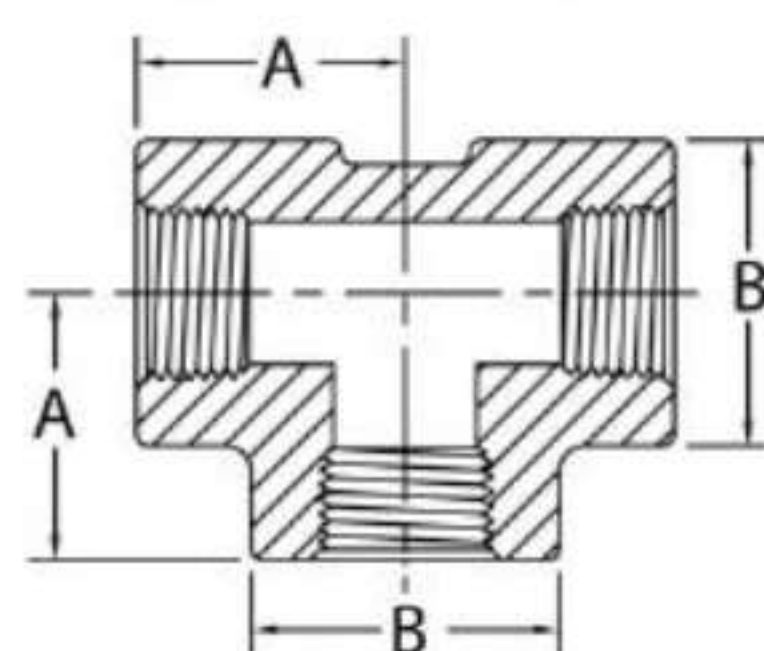
90 Degree Elbows

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.810	0.810	0.970	1.120	1.310	1.500	1.750	2.000	2.380	3.000	3.380	4.190
B	0.880	0.880	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.690	4.310	5.750
Wt. Ea.	0.38	0.34	0.28	0.49	0.70	1.03	1.63	2.04	3.38	6.56	10.00	22.50



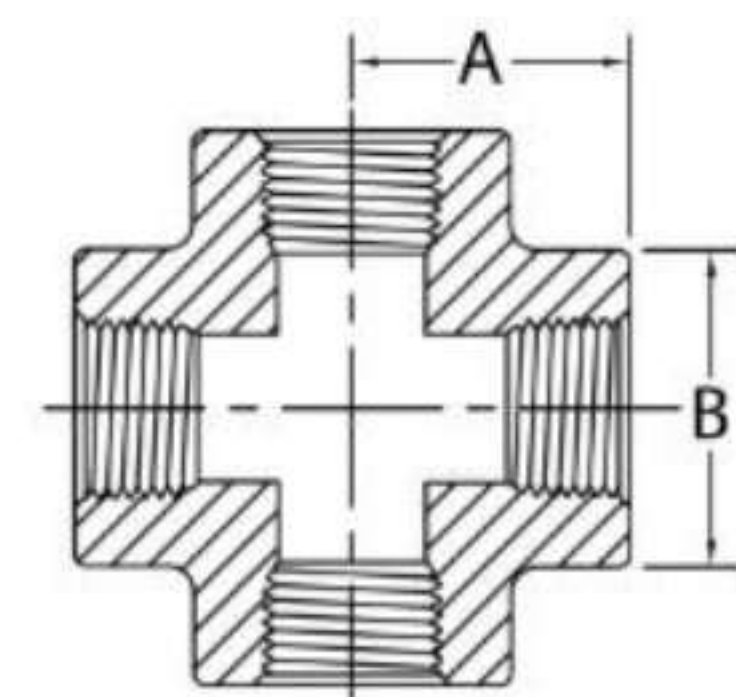
45 Degree Elbows

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A		0.690	0.750	0.880	1.000	1.120	1.310	1.380	1.690	2.060	2.500	3.120
B		0.880	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.690	4.310	6.000
Wt. Ea.		0.14	0.23	0.45	0.59	0.90	1.40	1.65	2.63	7.63	12.00	19.75



Tees

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.810	0.810	0.970	1.120	1.310	1.500	1.750	2.000	2.380	3.000	3.380	4.190
B	0.880	0.880	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.620	4.310	5.750
Wt. Ea.	0.28	0.26	0.34	0.69	0.95	1.35	2.10	2.75	4.25	9.06	13.50	32.50



Crosses

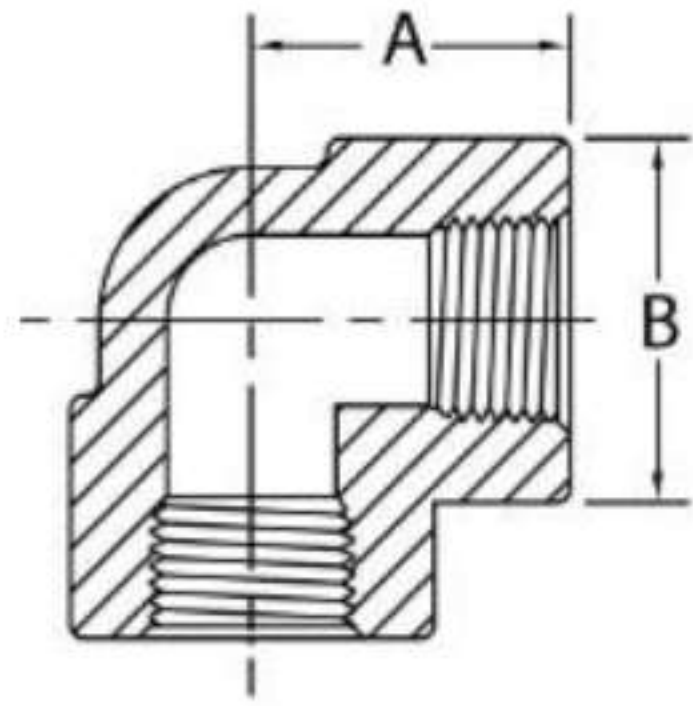
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	*4
A	0.970	0.970	0.970	1.120	1.310	1.500	1.750	2.000	2.380	3.250	3.750	4.500
B	1.000	1.000	1.000	1.310	1.500	1.810	2.190	2.440	2.970	4.000	4.750	6.000
Wt. Ea.	0.52	0.51	0.50	0.80	1.05	1.65	2.35	3.28	5.00	17.20	22.10	34.13

* 2-1/2, 3 and 4 are not to ASME B16.11

Class 3000 Forged Threaded Fittings

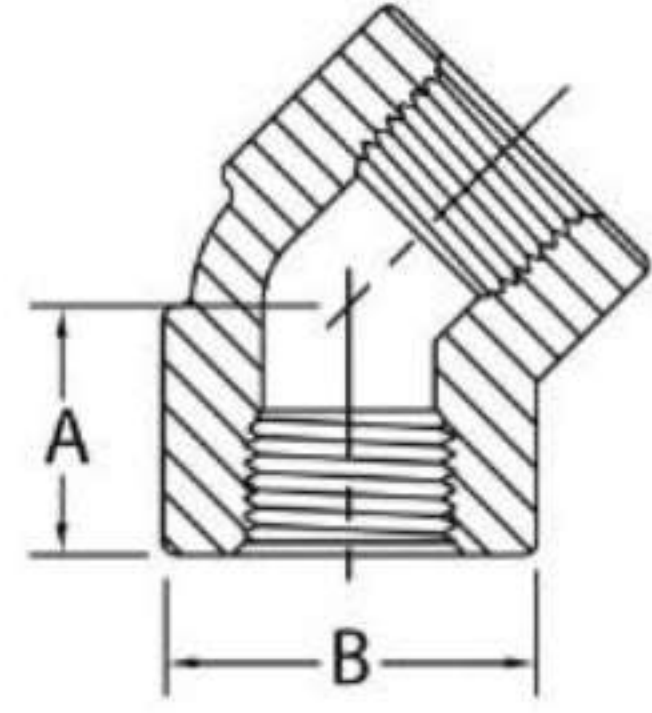
ASME B16.11, ASME B1.20.1

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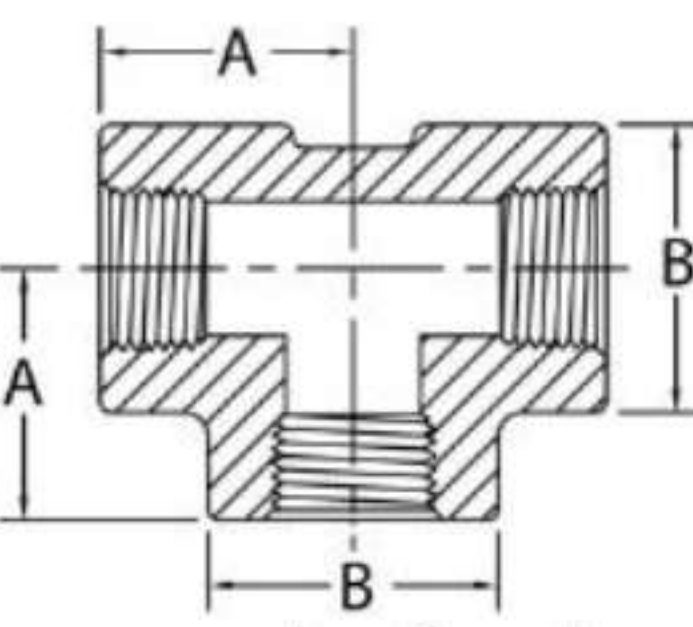
90 Degree Elbows

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.810	0.970	1.120	1.310	1.500	1.750	2.000	2.380	2.500	3.250	3.750	4.500
B	0.880	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.310	4.000	4.750	6.000
Wt. Ea.	0.21	0.31	0.60	0.91	1.43	2.28	2.88	4.88	5.44	10.00	17.13	29.25



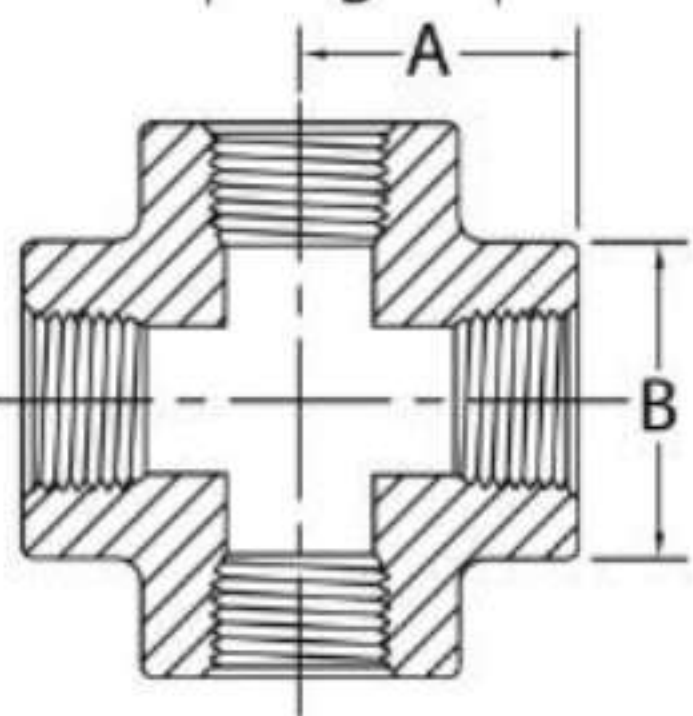
45 Degree Elbows

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.690	0.750	0.880	1.000	1.120	1.310	1.380	1.690	1.720	2.060	2.500	3.120
B	0.880	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.310	4.000	4.750	6.000
Wt. Ea.	0.18	0.26	0.54	0.75	1.18	2.03	2.13	4.05	4.25	7.63	12.00	19.75



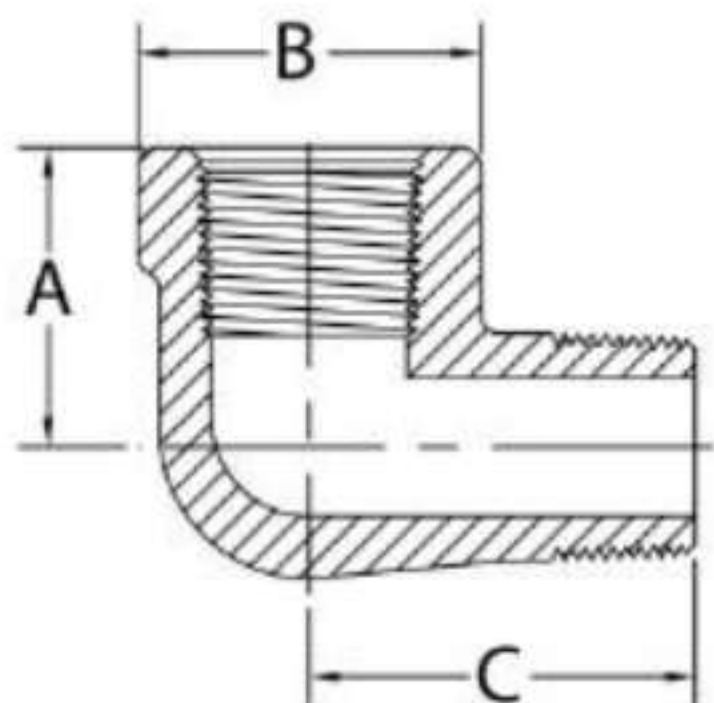
Tees

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.810	0.970	1.120	1.310	1.500	1.750	2.000	2.380	2.500	3.250	3.750	4.500
B	0.880	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.310	4.000	4.750	6.000
Wt. Ea.	0.28	0.43	0.84	1.23	1.85	3.00	3.63	6.83	7.00	13.75	21.00	38.00



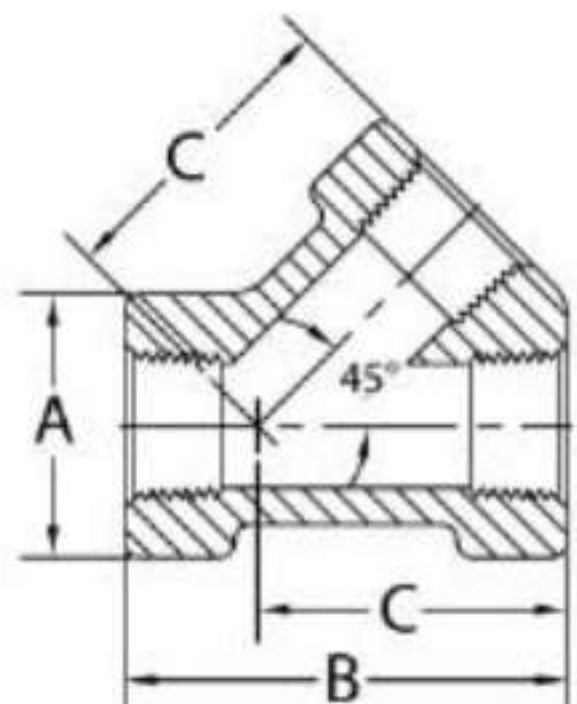
Crosses

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.970	0.970	1.120	1.310	1.500	1.750	2.000	2.380	2.500	3.250	3.750	4.500
B	1.000	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.310	4.000	4.750	6.000
Wt. Ea.	0.51	0.50	0.96	1.43	2.30	3.73	4.40	8.13	8.31	16.94	20.75	34.13



Street Elbows

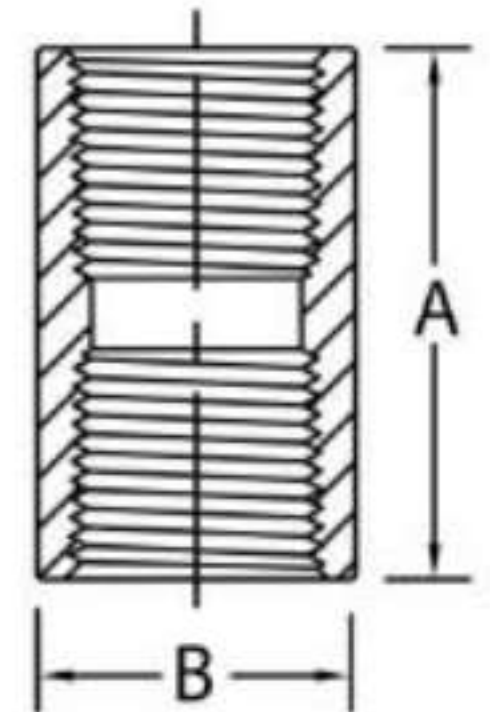
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.880	0.880	1.000	1.120	1.380	1.750	2.000	2.120	2.500			
B	0.875	1.000	1.250	1.500	1.750	2.000	2.440	2.750	3.310			
C	1.250	1.250	1.500	1.620	1.880	2.250	2.620	2.810	3.310			
Wt. Ea.	0.20	0.25	0.36	0.53	0.85	1.38	2.25	2.81	5.09			



Laterals

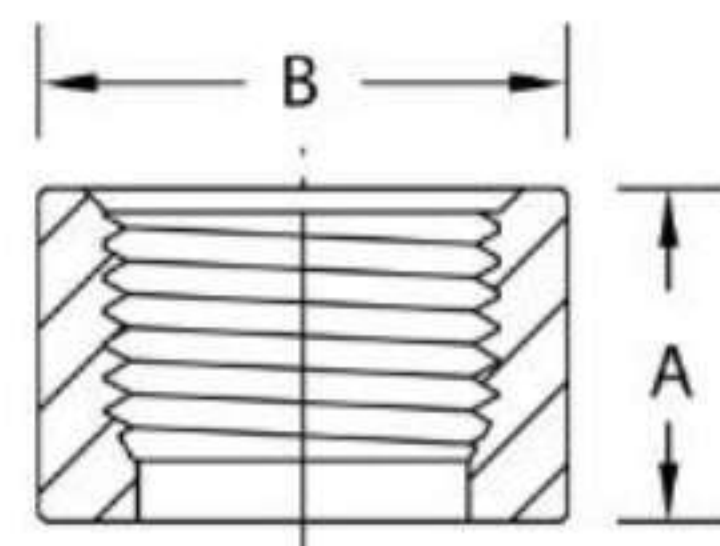
Laterals not covered by ASME B16.11

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A				1.500	1.750	2.219	2.500	3.030	3.344			
B				2.500	3.000	4.813	5.375	6.438	6.625			
C				1.750	2.125	3.500	3.938	4.750	5.000			
Wt. Ea.				1.12	1.50	2.62	3.10	11.00	11.00			



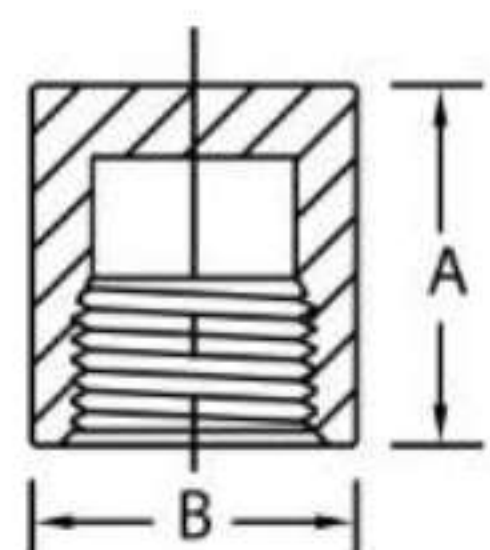
Couplings

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	1.250	1.375	1.500	1.875	2.000	2.375	2.625	3.125	3.375	3.625	4.250	4.750
B	0.625	0.750	0.875	1.125	1.375	1.750	2.250	2.500	3.000	3.625	4.250	5.500
Wt. Ea.	0.11	0.10	0.13	0.28	0.42	0.85	1.50	2.19	3.02	4.56	6.79	12.00



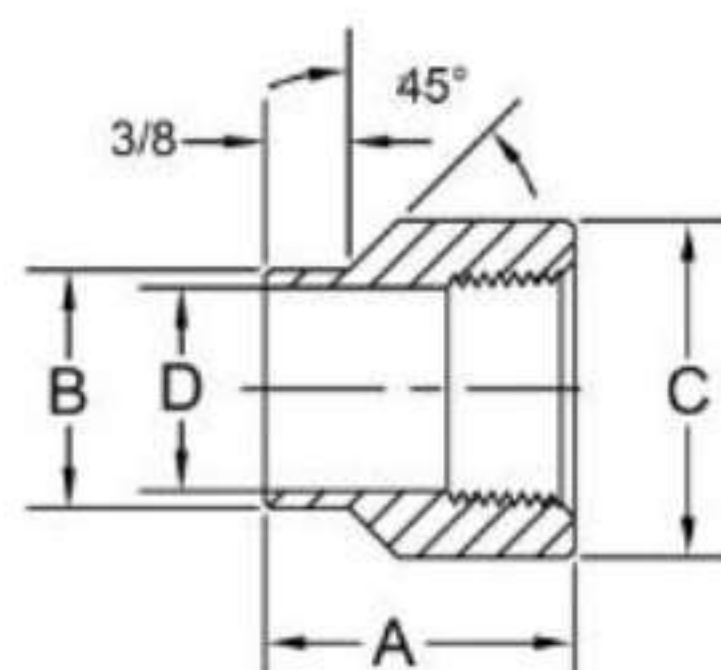
Half Couplings

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.625	0.688	0.750	0.938	1.000	1.188	1.312	1.562	1.688	1.812	2.125	2.375
B	0.625	0.750	0.875	1.125	1.375	1.750	2.250	2.500	3.000	3.625	4.250	5.500
Wt. Ea.	0.06	0.05	0.06	0.14	0.21	0.43	0.75	1.09	1.57	2.28	3.40	6.00



Pipe Caps

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.812	1.062	1.062	1.312	1.500	1.687	1.781	1.937	2.250	2.375	2.562	2.687
B	0.750	0.750	0.875	1.125	1.375	1.750	2.250	2.500	3.000	3.625	4.250	5.500
Wt. Ea.	0.08	0.09	0.11	0.24	0.39	0.72	1.32	1.54	2.34	4.05	5.84	10.08

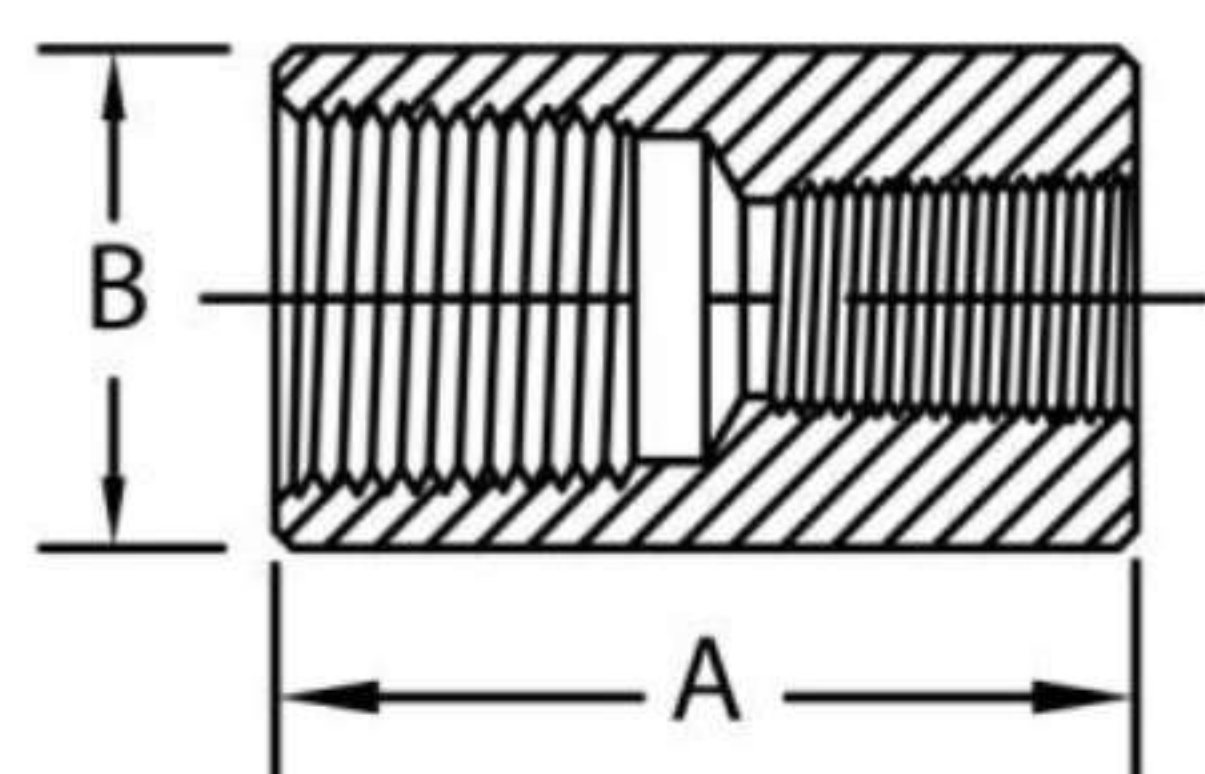


Couplets

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A		1.188	1.188	1.313	1.375	1.688	1.875	2.000	2.250	2.500	2.750	3.000
B		0.688	0.813	0.938	1.063	1.313	1.688	1.938	2.438	2.875	3.500	4.500
C		0.938	1.063	1.313	1.500	1.813	2.188	2.500	3.125	3.625	4.375	5.563
D		0.433	0.566	0.700	0.906	1.137	1.480	1.720	2.193	2.614	3.234	4.227
Wt. Ea.		0.12	0.14	0.26	0.26	0.52	0.82	1.06	1.54	2.40	6.70	7.30

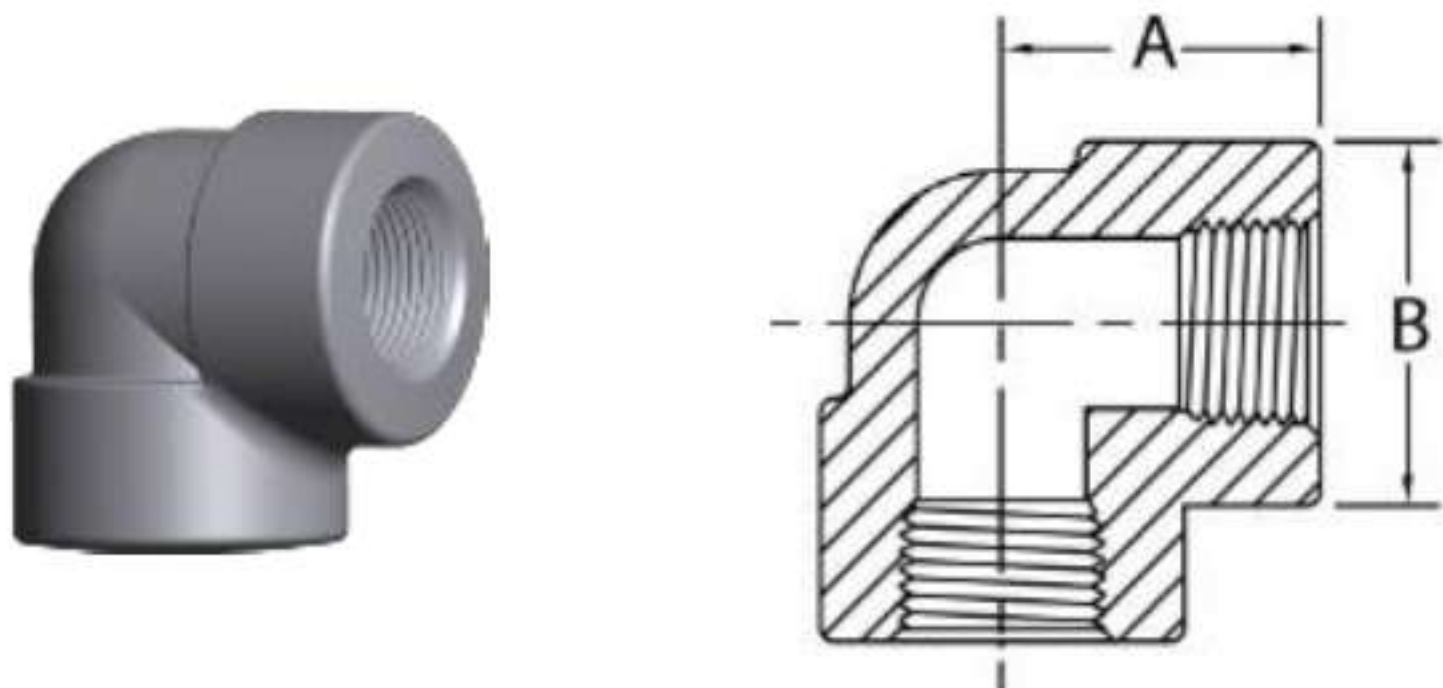
Class 3000 Forged Threaded Reducing Couplings **Creative** Piping Solutions

ASME B16.11, ASME B1.20.1



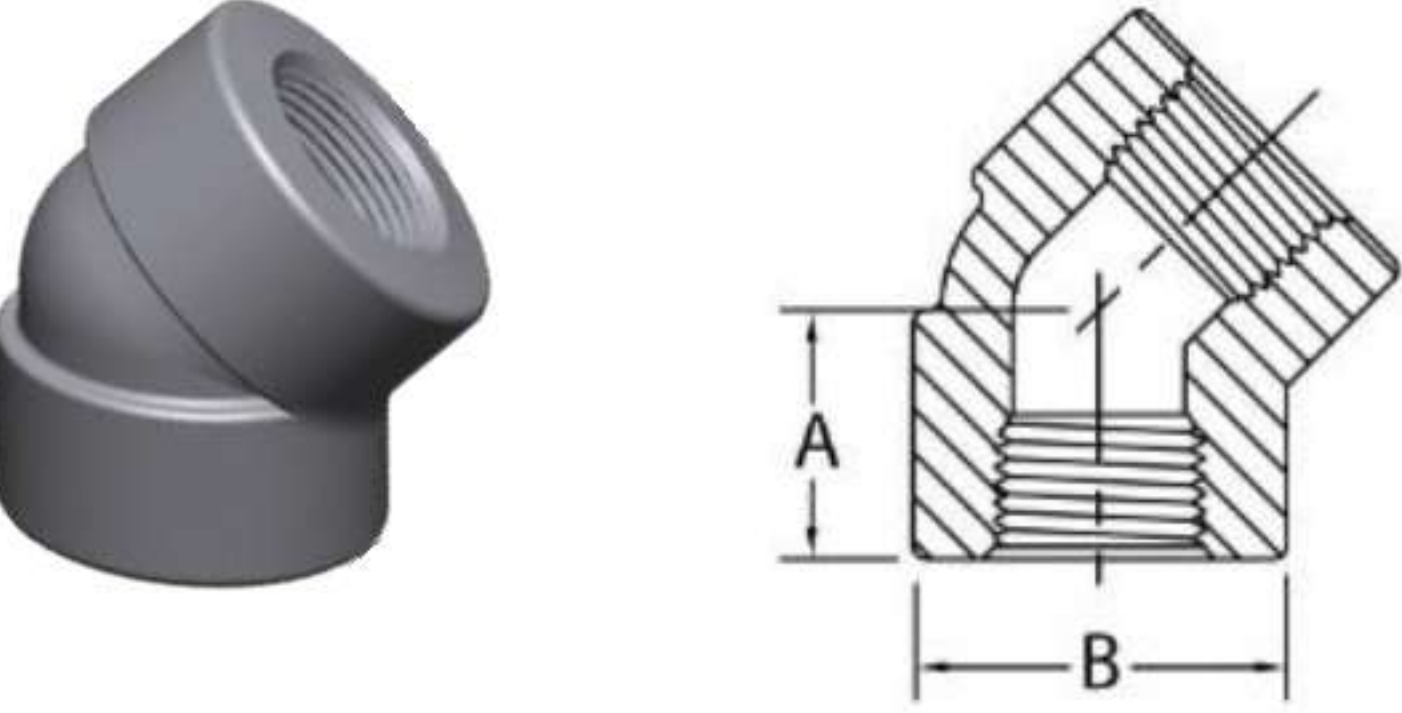
Pipe Size	A	B	Approx. Weight
1/4 X 1/8	1.375	0.750	0.1
3/8 X 1/8			
3/8 X 1/4	1.500	0.875	0.13
1/2 X 1/8			
1/2 X 1/4	1.875	1.125	0.28
1/2 X 3/8	1.875	1.250	0.28
3/4 X 1/8			
3/4 X 1/4			
3/4 X 3/8	2.000	1.375	0.42
3/4 X 1/2			
1 X 1/8			
1 X 1/4			
1 X 3/8	2.375	1.750	0.85
1 X 1/2			
1 X 3/4			
1-1/4 X 1/8			
1-1/4 X 1/4			
1-1/4 X 3/8			
1-1/4 X 1/2	2.625	2.250	1.50
1-1/4 X 3/4			
1/1/4 X 1			
1-1/2 X 1/8			
1-1/2 X 1/4			
1-1/2 X 3/8			
1-1/2 X 1/2	3.125	2.500	2.19
1-1/2 X 3/4			
1-1/2 X 1			
1-1/2 X 1-1/4			
2 X 1/8			
2 X 1/4			
2 X 3/8			
2 X 1/2			
2 X 3/4	3.375	3.000	3.02
2 X 1			
2 X 1-1/4			
2 X 1-1/2			
2-1/2 X 1/8			
2-1/2 X 1/4			
2-1/2 X 3/8			
2-1/2 X 1/2			
2-1/2 X 3/4	3.625	3.625	4.56
2-1/2 X 1			
2-1/2 X 1-1/4			
2-1/2 X 1-1/2			
2-1/2 X 2			
3 X 1/8			
3 X 1/4			
3 X 3/8			
3 X 1/2			
3 X 3/4			
3 X 1	4.250	4.250	6.79
3 X 1-1/4			
3 X 1-1/2			
3 X 2			
3 X 2-1/2			
4 X 1/8			
4 X 1/4			
4 X 3/8			
4 X 1/2			
4 X 1			
4 X 1-1/4	4.750	5.500	12.00
4 X 1-1/2			
4 X 2			
4 X 2-1/2			
4 X 3			
4 X 3-1/2			





90 Degree Elbows

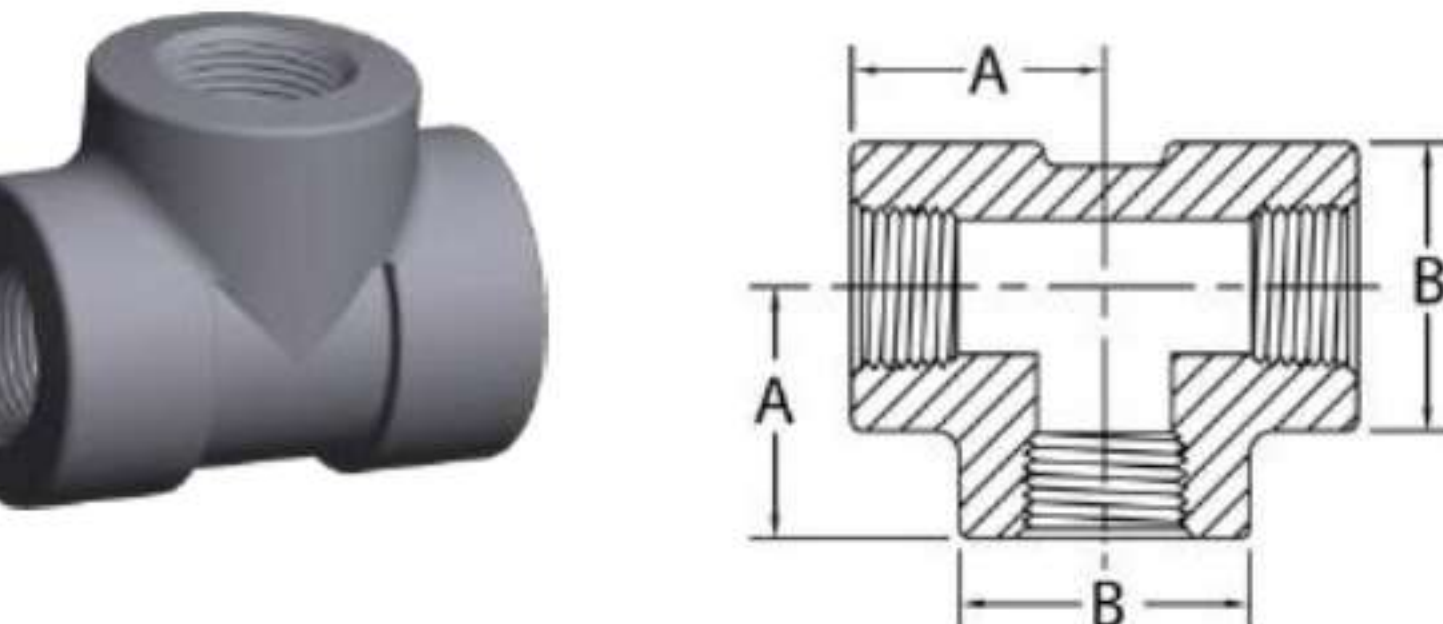
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.970	1.120	1.310	1.500	1.750	2.000	2.380	2.500	3.250	3.750	4.190	4.500
B	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.310	4.000	4.750	5.750	6.000
Wt. Ea.	0.38	0.66	1.45	1.59	2.54	3.56	5.88	7.06	13.00	21.78	36.22	36.22



45 Degree Elbows

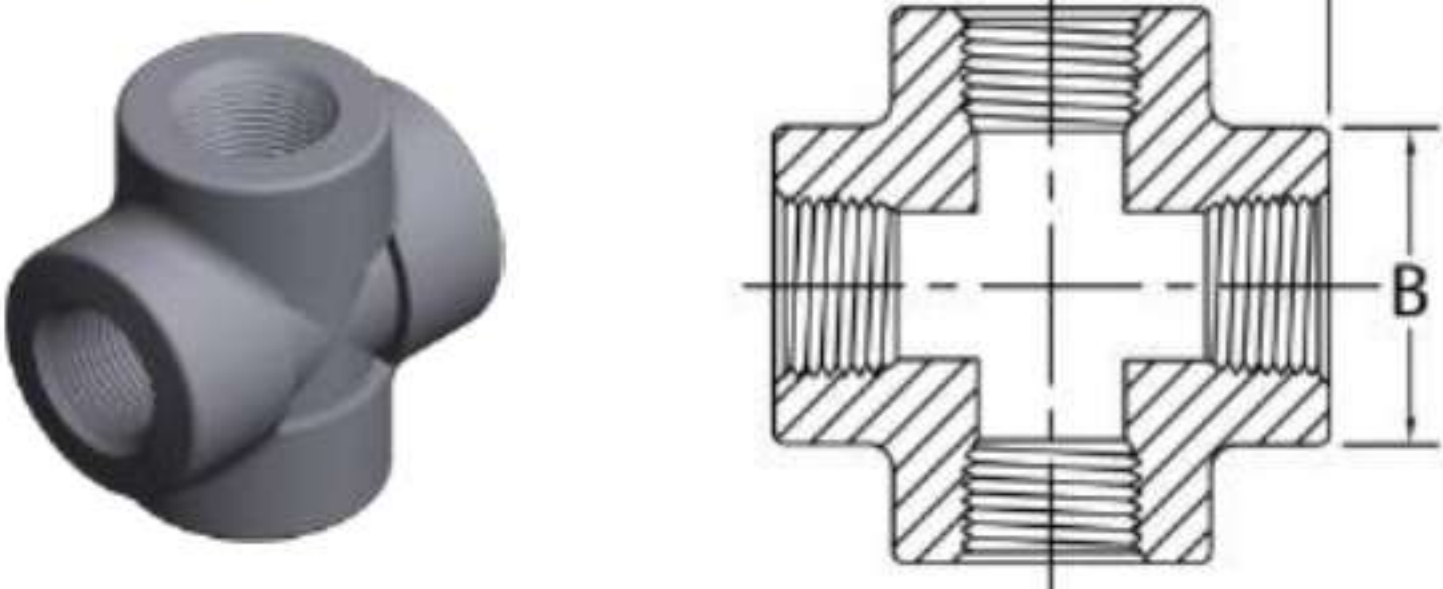
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	* 3	4
A	0.750	0.880	1.000	1.120	1.310	1.380	1.690	1.720	2.060	2.500	3.120	3.120
B	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.310	4.000	4.750	6.000	6.000
Wt. Ea.	0.25	0.59	0.85	1.34	2.25	2.59	4.56	5.75	9.63	11.00	35.00	22.00

* 3 is not to ASME B16.11



Tees

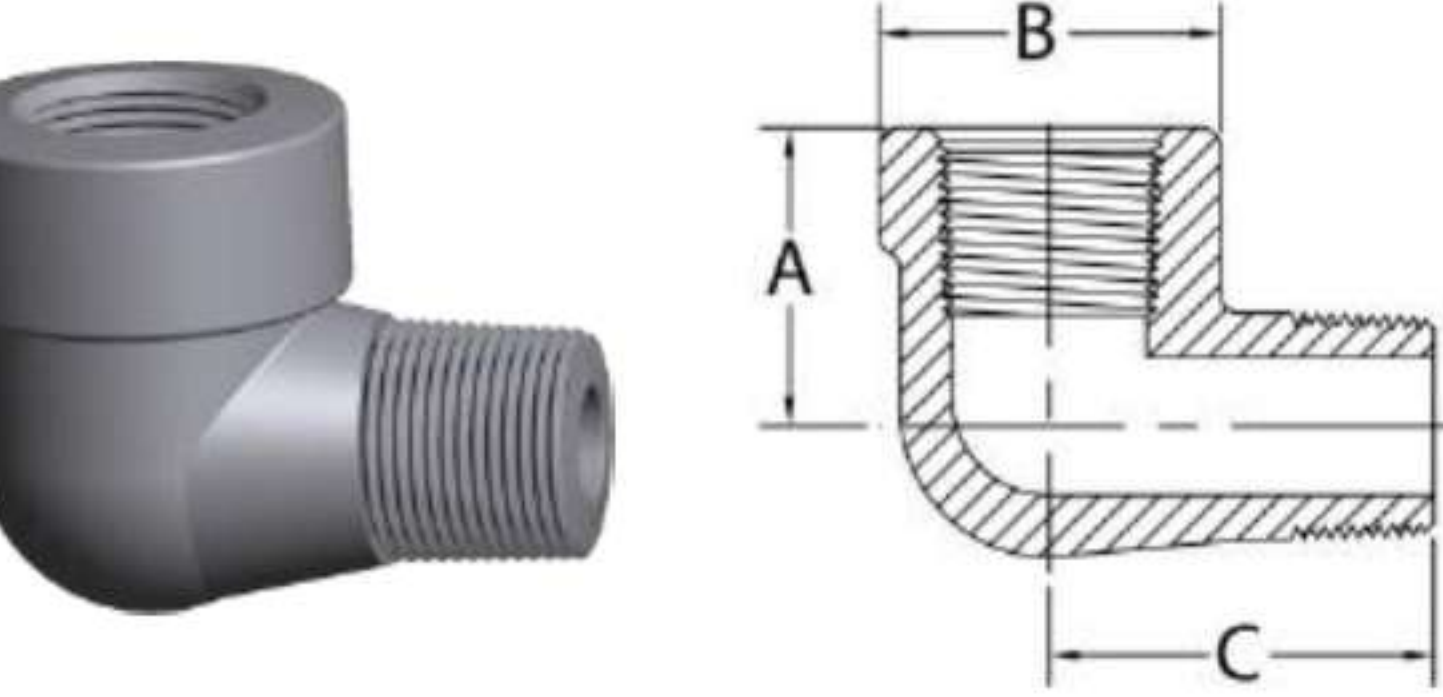
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.970	1.120	1.310	1.500	1.750	2.000	2.380	2.500	3.250	3.750	4.190	4.500
B	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.310	4.000	4.750	5.750	6.000
Wt. Ea.	0.44	0.92	1.38	2.16	3.63	4.83	7.75	9.75	17.38	28.90	49.60	49.60



Crosses

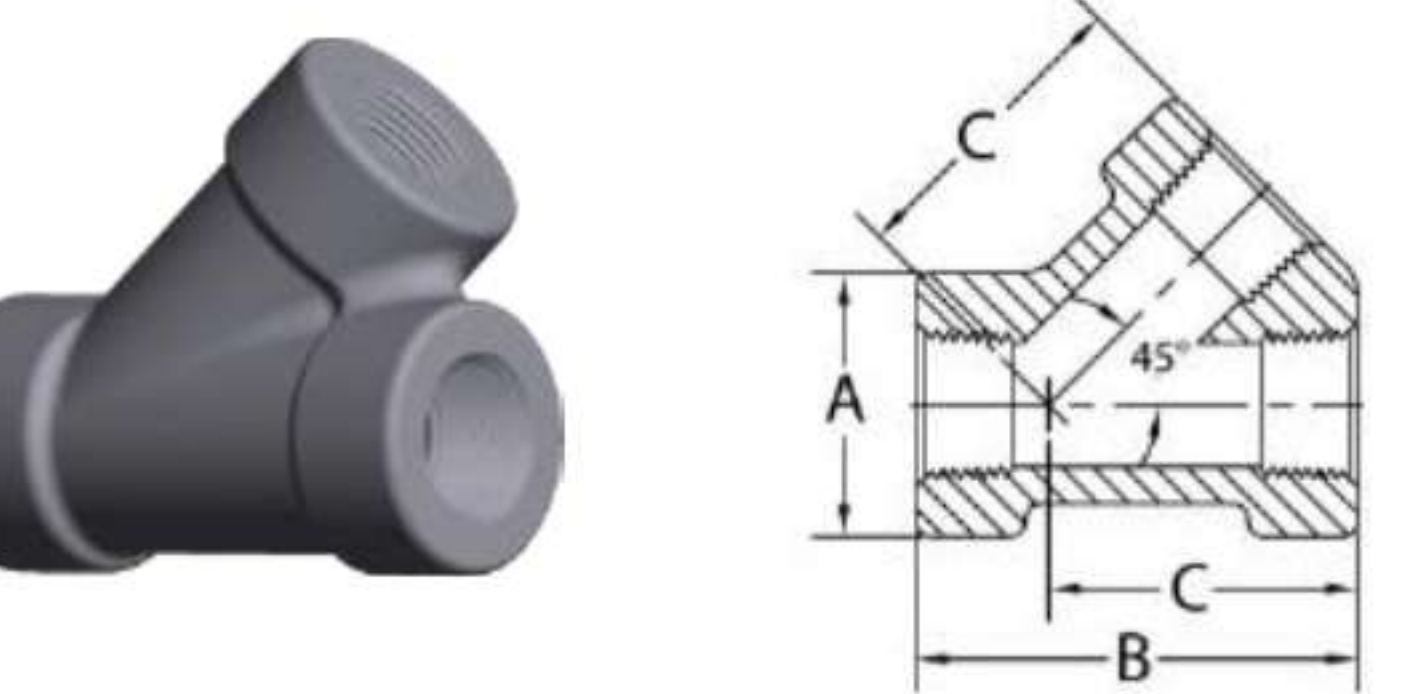
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	* 3	4
A	0.970	1.120	1.310	1.500	1.750	2.000	2.380	2.500	3.250	3.750	4.500	4.500
B	1.000	1.310	1.500	1.810	2.190	2.440	2.970	3.310	4.000	4.750	6.000	6.000
Wt. Ea.	0.50	1.12	1.55	2.59	4.21	5.64	9.58	11.39	21.37	25.45	32.10	34.13

* 3 is not to ASME B16.11



Street Elbows

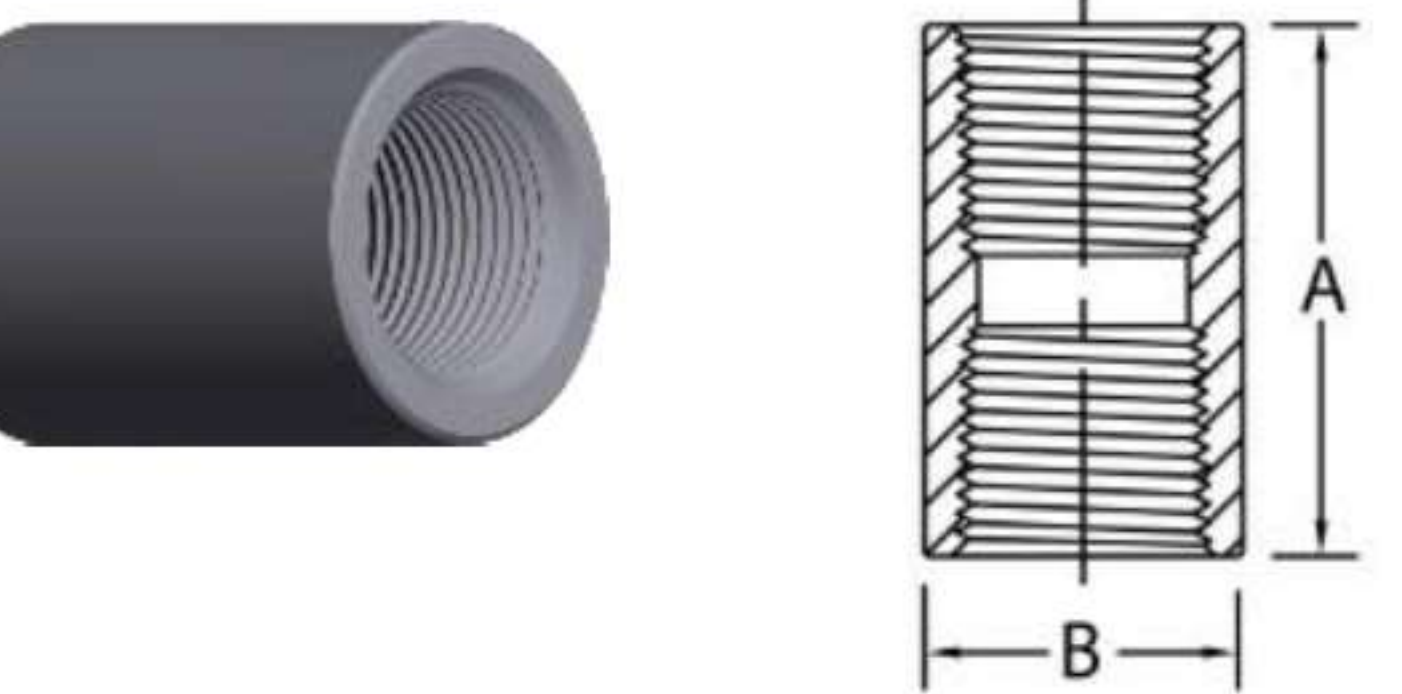
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A		1.000	1.120	1.380	1.750	2.000	2.120	2.500				
B		1.250	1.500	1.750	2.000	2.440	2.750	3.310				
C		1.500	1.620	1.880	2.250	2.620	2.810	3.310				
Wt. Ea.		0.50	0.99	1.02	1.84	2.45	3.60	6.55				



Laterals

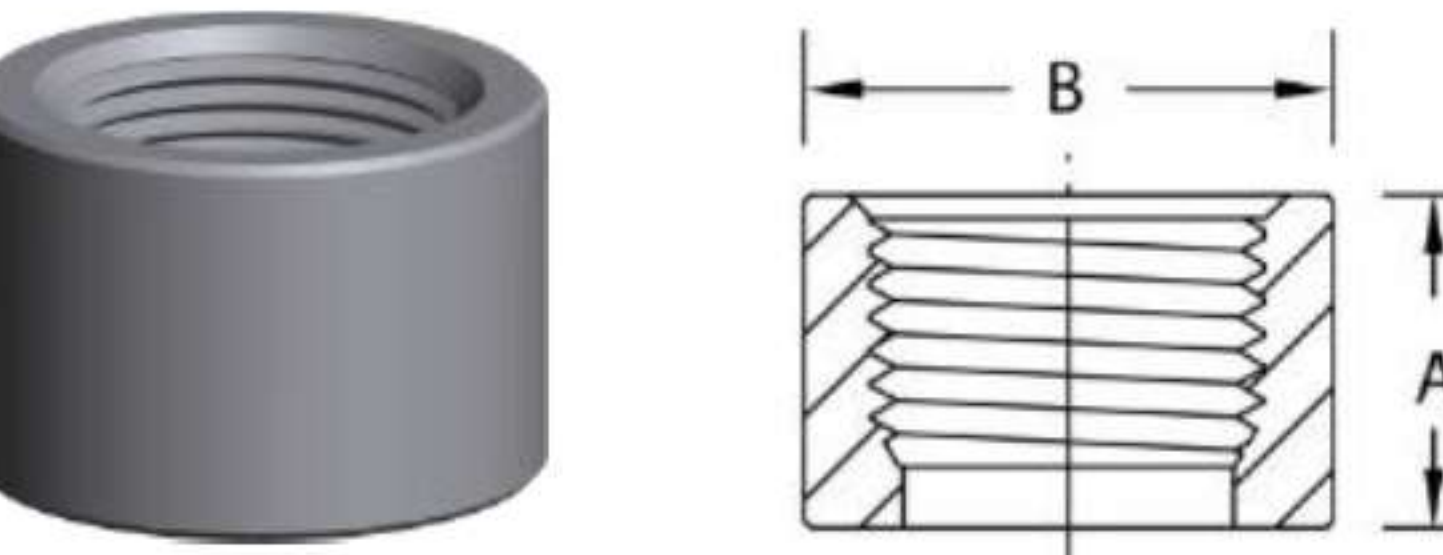
Laterals not covered by ASME B16.11

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A					2.219	2.500	3.030	3.344				
B					4.813	5.375	6.438	6.625				
C					3.500	3.938	4.750	5.000				
Wt. Ea.					1.84	1.90	5.60	7.50				



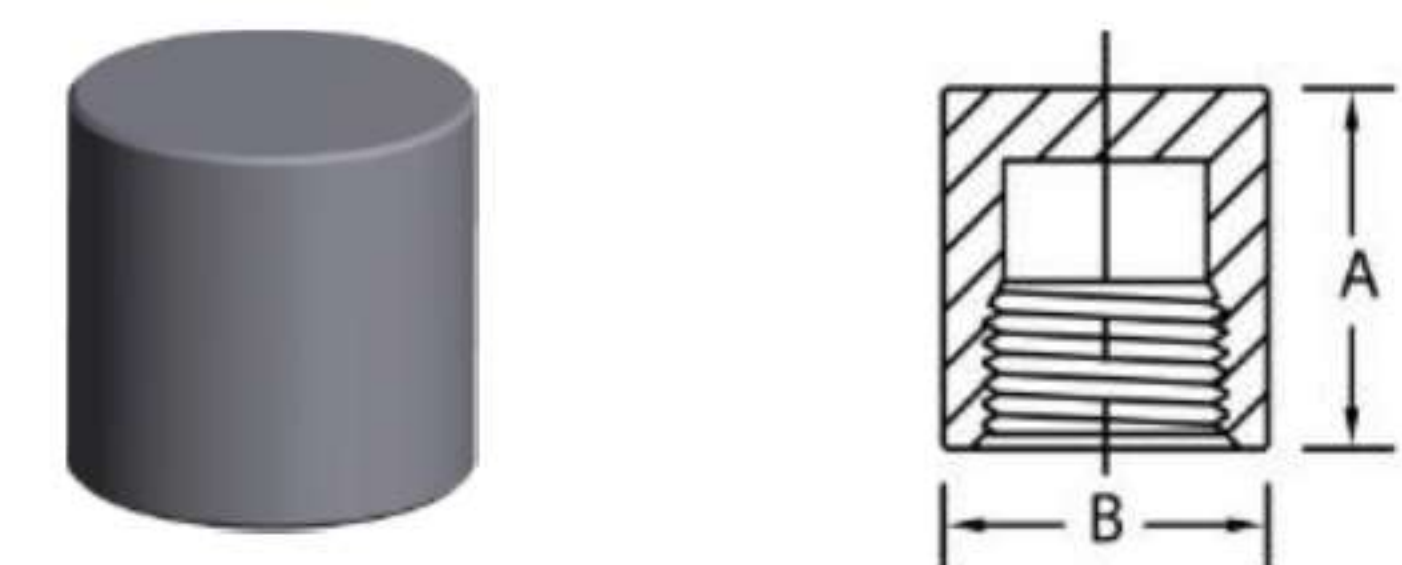
Couplings

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	1.250	1.375	1.500	1.875	2.000	2.375	2.625	3.125	3.375	3.625	4.250	4.750
B	0.875	1.000	1.250	1.500	1.750	2.250	2.500	3.000	3.625	4.250	5.000	6.250
Wt. Ea.	0.18	0.14	0.40	0.69	0.90	1.88	2.31	4.00	6.20	9.25	13.44	22.13



Half Couplings

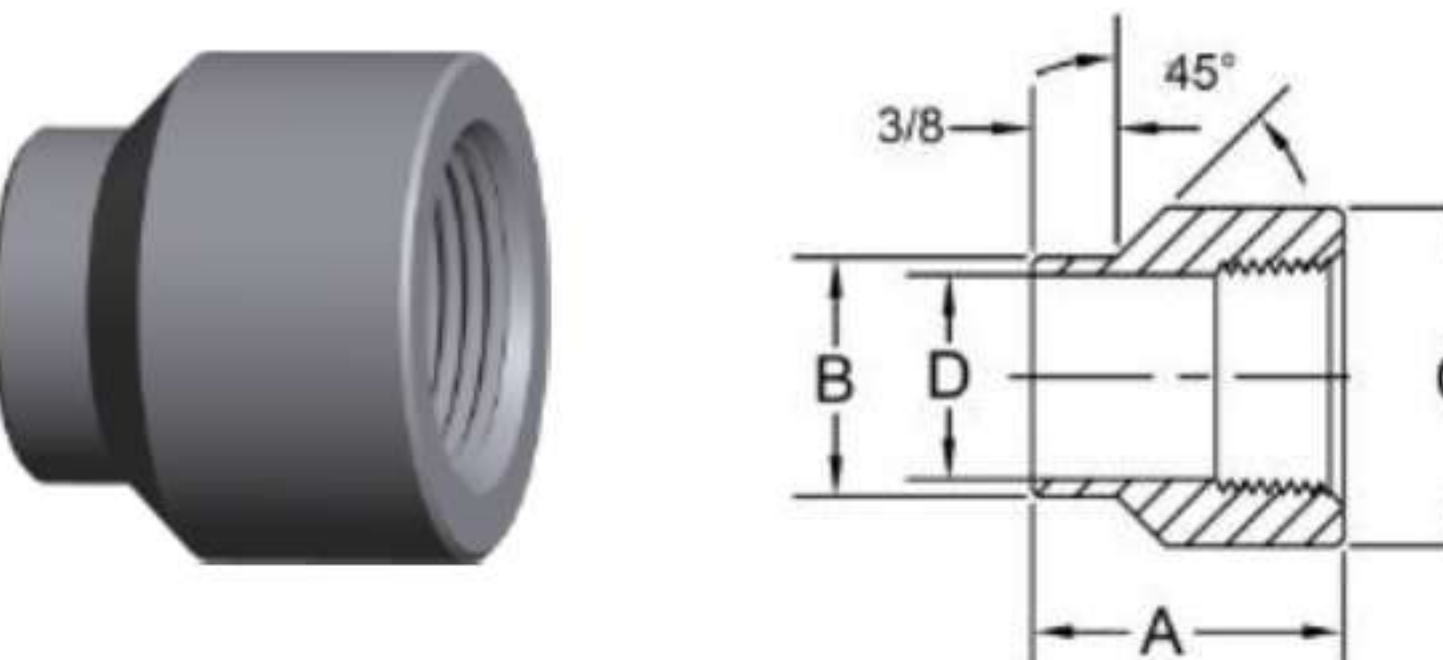
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.625	0.688	0.750	0.938	1.000	1.188	1.312	1.562	1.688	1.812	2.125	2.375
B	0.875	1.000	1.250	1.500	1.750	2.250	2.500	3.000	3.625	4.250	5.000	6.250
Wt. Ea.	0.09	0.07	0.20	0.35	0.45	0.94	1.15	2.00	3.75	4.62	6.72	11.06



Pipe Caps

Pipe Size	* 1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.875	1.125	1.125	1.375	1.562	1.750	1.844	1.968	2.219	2.531	2.750	3.062
B	0.875	1.062	1.250	1.500	1.750	2.250	2.500	3.000	3.625	4.250	5.000	6.250
Wt. Ea.	0.13	0.21	0.35	0.42	0.58	1.16	1.40	2.14	3.62	8.10	11.70	20.00

* 1/8 is not to ASME B16.11

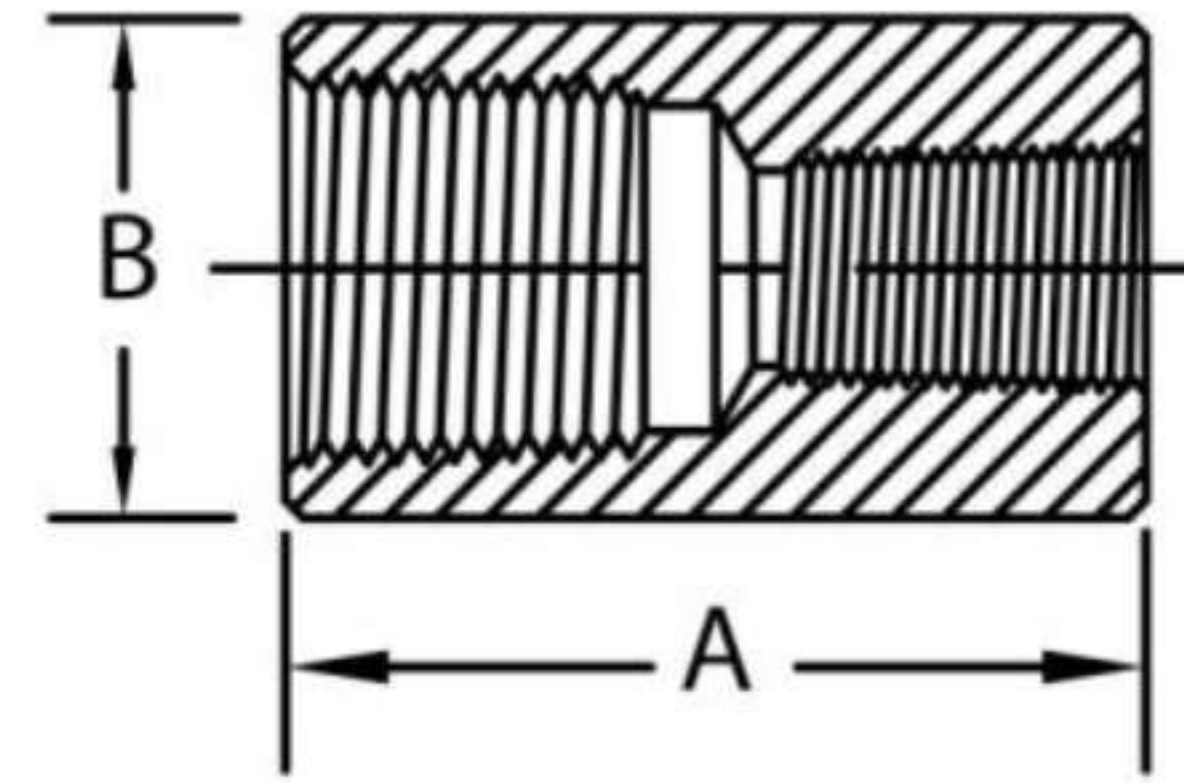


Couplets

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A		1.188	1.188	1.313	1.375	1.688	1.875	2.000	2.250	2.500	2.750	3.000
B		0.688	0.813	0.938	1.063	1.313	1.688	1.938	2.438	2.875	3.500	4.500
C		1.000	1.250	1.500	1.750	2.250	2.500	3.000	3.625	4.250	5.000	6.250
D		0.433	0.566	0.700	0.907	1.137	1.480	1.719	2.192	2.613	3.234	4.227
Wt. Ea.		0.35	0.42	0.50	0.60	0.85	1.20	1.40	1.90	2.20	3.60	

Class 6000 Forged Reducing Couplings Threaded Creative Piping Solutions

ASME B16.11, ASME B1.20.1



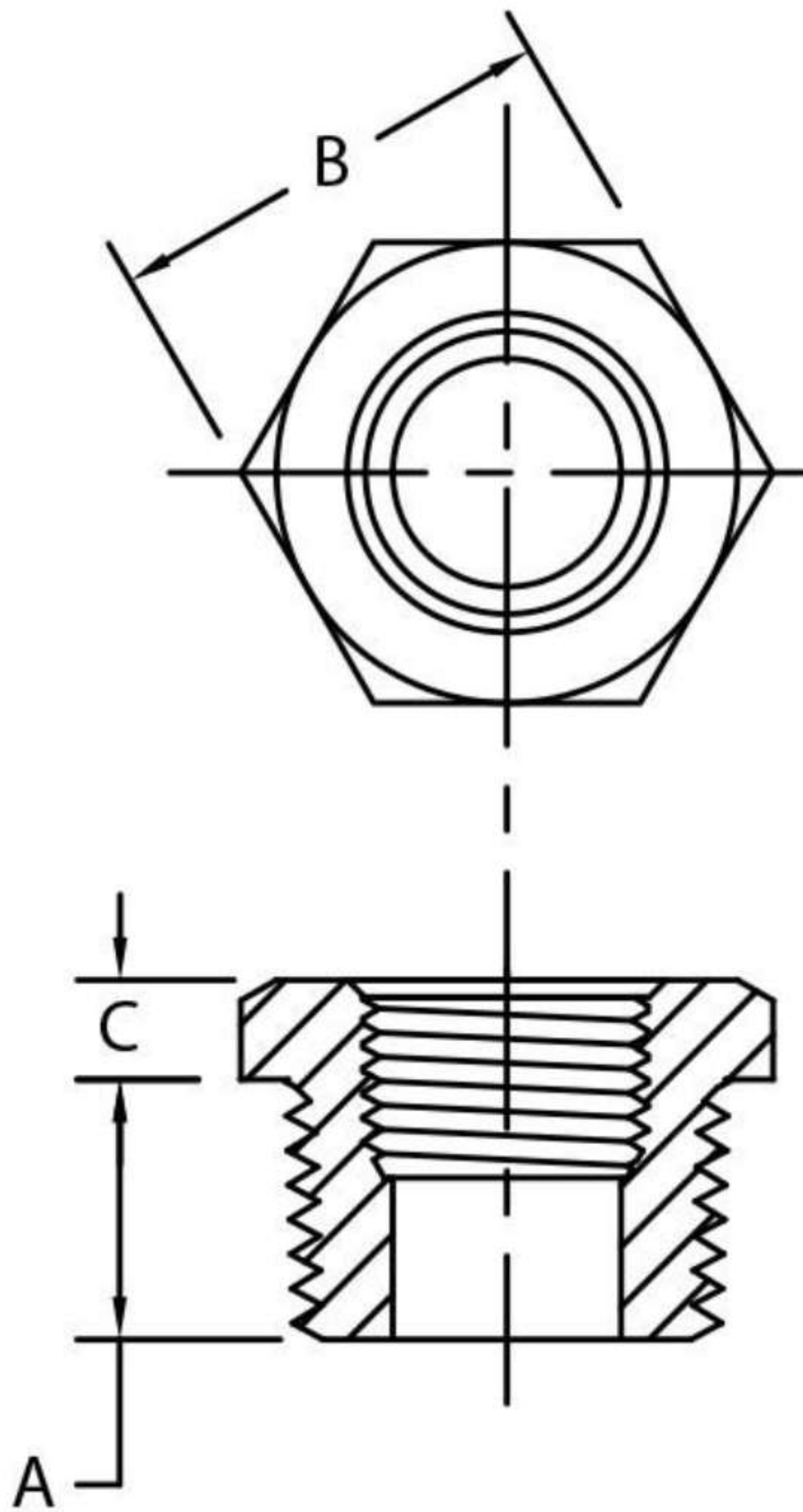
Pipe Size	A	B	Approx. Weight
1/4 X 1/8	1.375	1.062	0.14
3/8 X 1/8			
3/8 X 1/4	1.500	1.250	0.40
1/2 X 1/8			
1/2 X 1/4	1.875	1.500	0.69
1/2 X 3/8			
3/4 X 1/8			
3/4 X 1/4			
3/4 X 3/8	2.000	1.750	0.90
3/4 X 1/2			
1 X 1/8			
1 X 1/4			
1 X 3/8	2.375	2.250	1.88
1 X 1/2			
1 X 3/4			
1-1/4 X 1/8			
1-1/4 X 1/4			
1-1/4 X 3/8			
1-1/4 X 1/2	2.625	2.500	2.31
1-1/4 X 3/4			
1-1/2 X 1/8			
1-1/2 X 1/4			
1-1/2 X 3/8			
1-1/2 X 1/2	3.125	3.000	4.00
1-1/2 X 3/4			
1-1/2 X 1			
1-1/2 X 1-1/4			
2 X 1/8			
2 X 1/4			
2 X 3/8			
2 X 1/2			
2 X 3/4	3.375	3.625	7.50
2 X 1			
2 X 1-1/4			
2 X 1-1/2			

Pipe Size	A	B	Approx. Weight
2-1/2 X 1/8			
2-1/2 X 1/4			
2-1/2 X 3/8			
2-1/2 X 1/2			
2-1/2 X 3/4	3.625	4.250	9.25
2-1/2 X 1			
2-1/2 X 1-1/4			
2-1/2 X 1-1/2			
2-1/2 X 2			
3 X 1/8			
3 X 1/4			
3 X 3/8			
3 X 1/2			
3 X 3/4			
3 X 1	4.250	5.000	13.44
3 X 1-1/4			
3 X 1-1/2			
3 X 2			
3 X 2-1/2			
4 X 1/8			
4 X 1/4			
4 X 3/8			
4 X 1/2			
4 X 3/4			
4 X 1			
4 X 1-1/4	4.750	6.250	22.13
4 X 1-1/2			
4 X 2			
4 X 2-1/2			
4 X 3			
4 X 3-1/2			

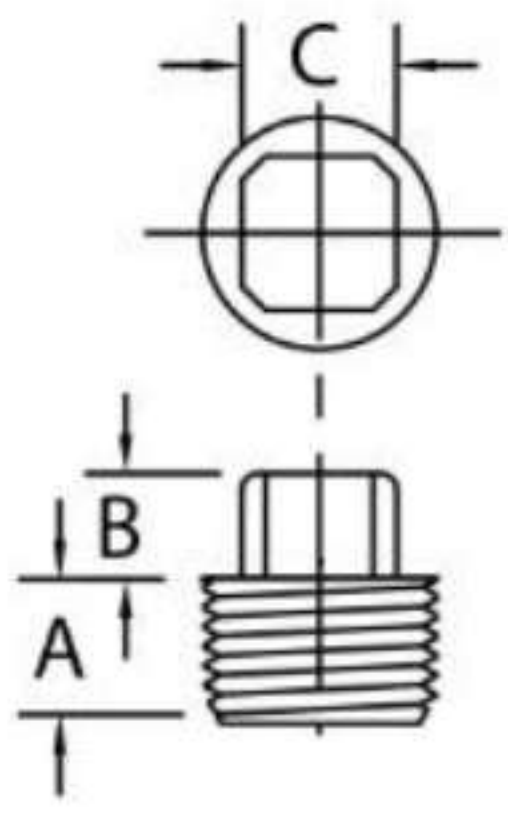
Forged Steel Hex Bushings Threaded

ASME B16.11, ASME B1.20.1

Creative Piping Solutions

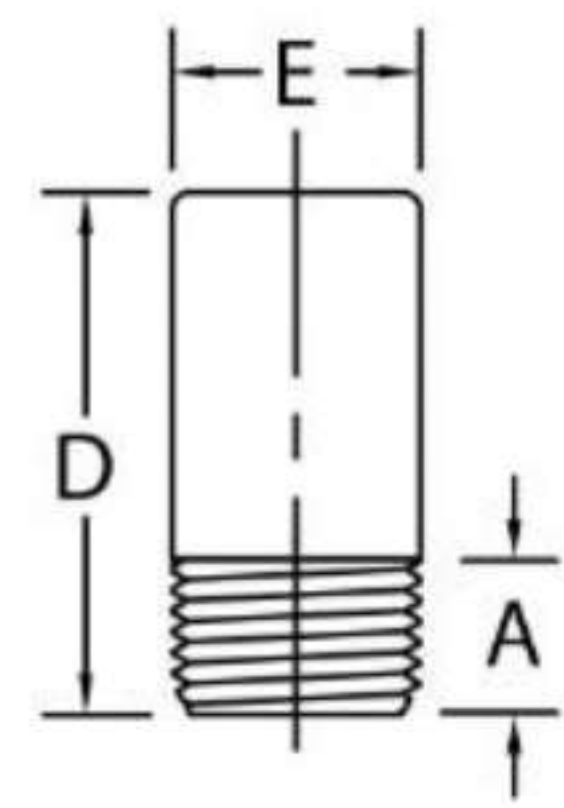


Pipe Size	A	B	C	Approx Weight
1/4 x 1/8	.44	.62	.12	0.02
3/8 x 1/8				0.05
3/8 x 1/4	.50	.69	.16	0.03
1/2 x 1/8				0.11
1/2 x 1/4	.56	.88	.19	0.09
1/2 x 3/8				0.06
3/4 x 1/8				0.21
3/4 x 1/4	.62	1.06	.22	0.18
3/4 x 3/8				0.15
3/4 x 1/2				0.10
1 x 1/8				0.36
1 x 1/4	.75	1.38	.25	0.33
1 x 3/8				0.30
1 x 1/2				0.27
1 x 3/4				0.19
1-1/4 x 1/8				0.79
1-1/4 x 1/4	.81	1.75	.28	0.76
1-1/4 x 3/8				0.73
1-1/4 x 1/2				0.68
1-1/4 x 3/4				0.64
1-1/4 x 1				0.60
1-1/2 x 1/8				1.08
1-1/2 x 1/4	.81	2.00	.31	1.01
1-1/2 x 3/8				0.83
1-1/2 x 1/2				0.93
1-1/2 x 3/4				0.84
1-1/2 x 1				0.80
1-1/2 x 1-1/4				0.75
2 x 1/8				1.88
2 x 1/4	.88	2.50	.34	1.84
2 x 3/8				1.80
2 x 1/2				1.74
2 x 3/4				1.63
2 x 1				1.55
2 x 1-1/4				1.50
2 x 1-1/2				1.45
2-1/2 x 1/8				-
2-1/2 x 1/4				3.75
2-1/2 x 3/8				3.50
2-1/2 x 1/2	1.125	3.00	0.5	3.25
2-1/2 x 3/4				3.00
2-1/2 x 1				2.75
2-1/2 x 1-1/4				2.25
2-1/2 x 1-1/2				2.00
2-1/2 x 2				1.13
3 x 1/8				-
3 x 1/4				5.50
3 x 3/8				-
3 x 1/2				5.00
3 x 3/4	1.312	3.62	0.56	4.75
3 x 1				4.50
3 x 1-1/4				4.13
3 x 1-1/2				3.63
3 x 2				2.75
3 x 2-1/2				2.13
4 x 1/8				-
4 x 1/4				9.00
4 x 3/8				9.00
4 x 1/2				9.00
4 x 3/4				9.00
4 x 1	1.5	4.62	0.69	9.00
4 x 1-1/4				9.00
4 x 1-1/2				8.12
4 x 2				7.00
4 x 2-1/2				6.75
4 x 3				4.50



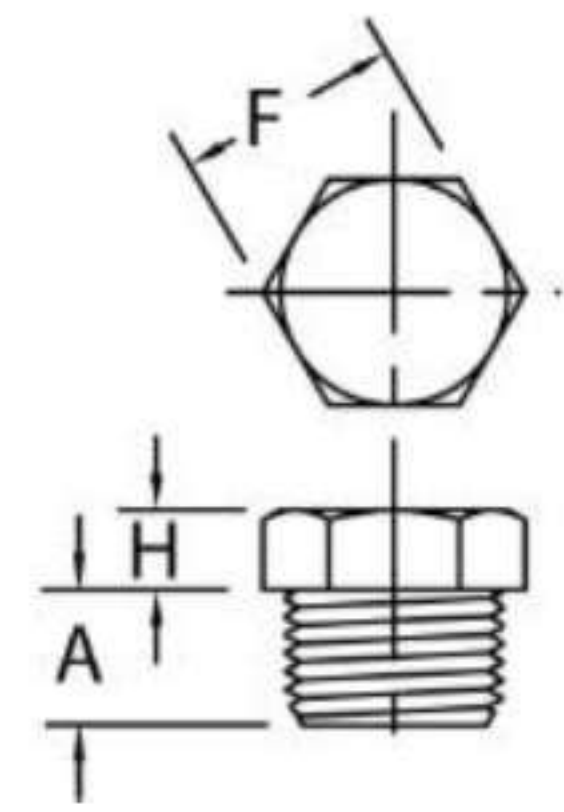
Square Head Plugs

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.395	0.455	0.515	0.580	0.640	0.770	0.830	0.830	0.910	1.062	1.188	1.250
B	0.250	0.250	0.310	0.380	0.440	0.500	0.560	0.620	0.690	0.750	0.875	1.000
C	0.295	0.405	0.465	0.575	0.645	0.835	0.965	1.145	1.335	1.500	1.875	2.500
Wt. Ea.	0.02	0.03	0.06	0.13	0.19	0.31	0.56	0.88	1.50	2.25	2.87	7.18



Round Head Plugs

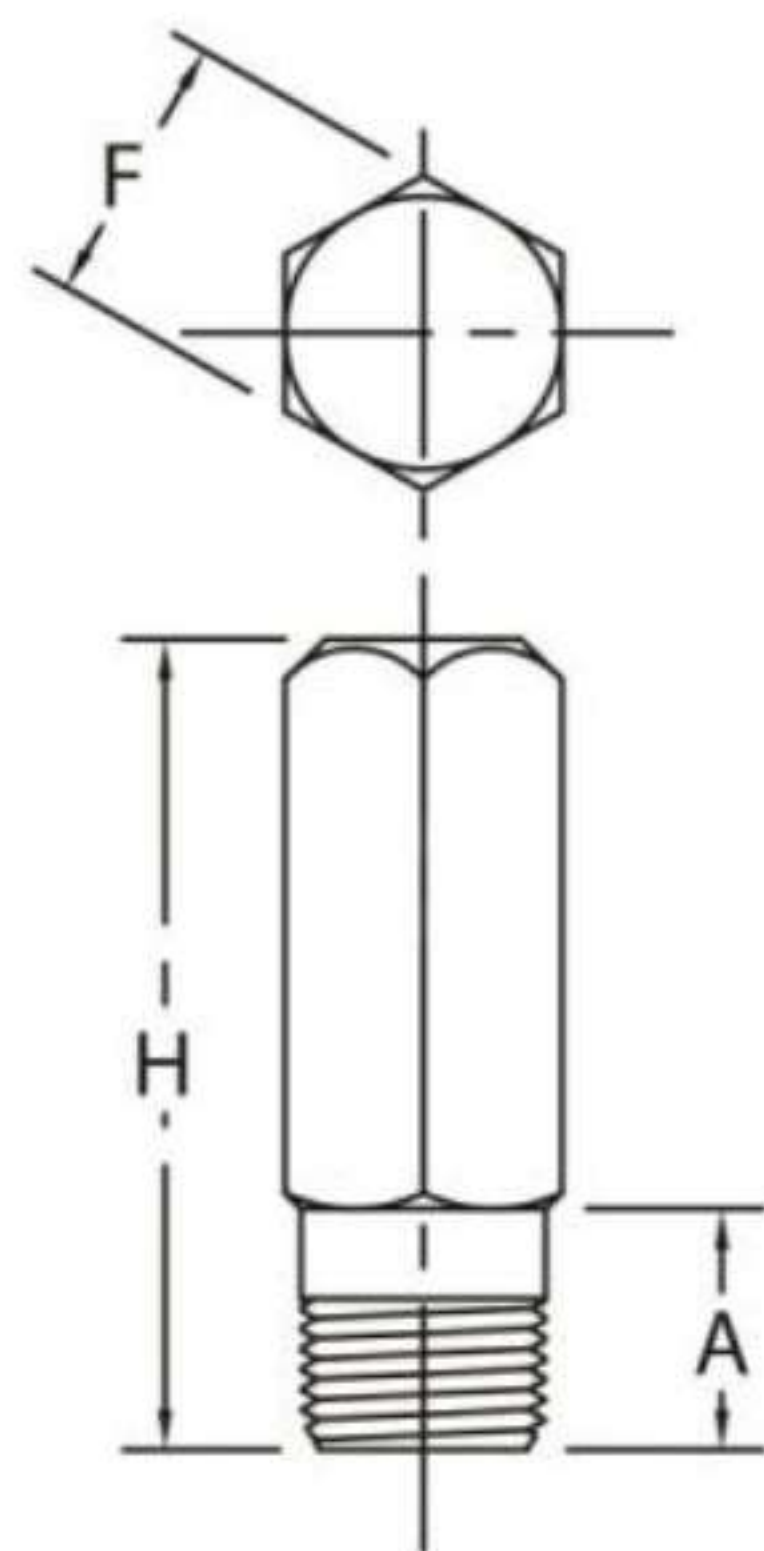
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.380	0.562	0.562	0.812	0.812	0.937	0.937	1.000	1.062	1.500	1.562	1.625
D	1.380	1.620	1.620	1.750	1.750	2.000	2.000	2.000	2.500	2.750	2.750	3.000
E	0.437	0.562	0.750	0.875	1.062	1.312	1.750	2.000	2.375	3.000	3.625	4.625
Wt. Ea.	0.06	0.11	0.20	0.30	0.44	0.77	1.27	1.78	3.48	5.50	8.04	14.28



Hex Head Plugs

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	*4
A	0.437	0.593	0.593	0.781	0.781	0.968	1.000	1.000	1.062	1.125	1.312	1.500
F	0.437	0.625	0.687	0.875	1.062	1.375	1.750	2.000	2.500	3.000	3.625	4.625
H	0.250	0.250	0.310	0.310	0.380	0.380	0.560	0.620	0.690	0.500	0.562	0.687
Wt. Ea.	0.06	0.06	0.07	0.19	0.30	0.59	1.10	1.54	2.54	2.34	6.24	11.00

* 2 1/2, 3 and 4 are not to ASME B16.11



Hex Head Refinery

Pipe Size	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
A	0.810	0.810	1.250	1.375	1.562	1.625	1.625	1.750
F	0.625	0.875	0.875	1.062	1.375	1.750	2.000	2.500
H	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000



90° Socket Weld Elbows

1/8" to 4" Class 3000
1/8" to 4" Class 6000
1/4" to 3" Class 9000



45° Socket Weld Elbows

1/8" to 4" Class 3000
1/8" to 3" Class 6000
1/4" to 2 1/2" Class 9000



Socket Weld TEEs

1/8" to 4" Class 3000
1/8" to 4" Class 6000
1/4" to 2" Class 9000



Socket Weld Crosses

1/8" to 4" Class 3000
1/2" to 2" Class 6000



Socket Weld Laterals

1/2" to 2" Class 3000
1/2" to 2" Class 6000
3/4" to 1 1/2" Class 9000



Socket Weld Couplings

1/8" to 4" Class 3000
1/8" to 4" Class 6000
1/4" to 2" Class 9000



Socket Weld Half Couplings

1/8" to 4" Class 3000
1/8" to 4" Class 6000
1/2" to 2" Class 9000



Socket Weld Pipe Caps

1/8" to 4" Class 3000
1/8" to 4" Class 6000
1/2" to 2" Class 9000



Socket Weld Couplets

1/8" to 4" Class 3000
1/8" to 3" Class 6000



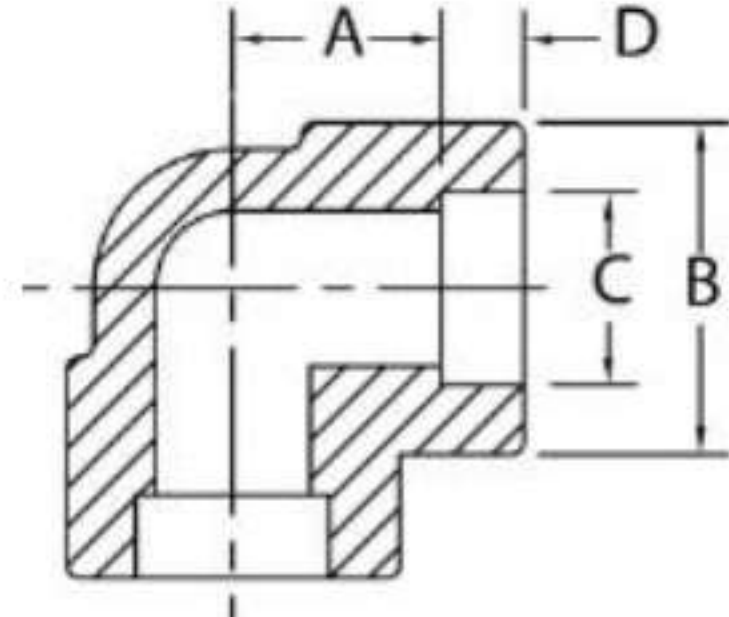
Socket Weld Reducing Couplings

1/4" to 4" Class 3000
1/4" to 4" Class 6000
1/4" to 2 1/2" Class 9000



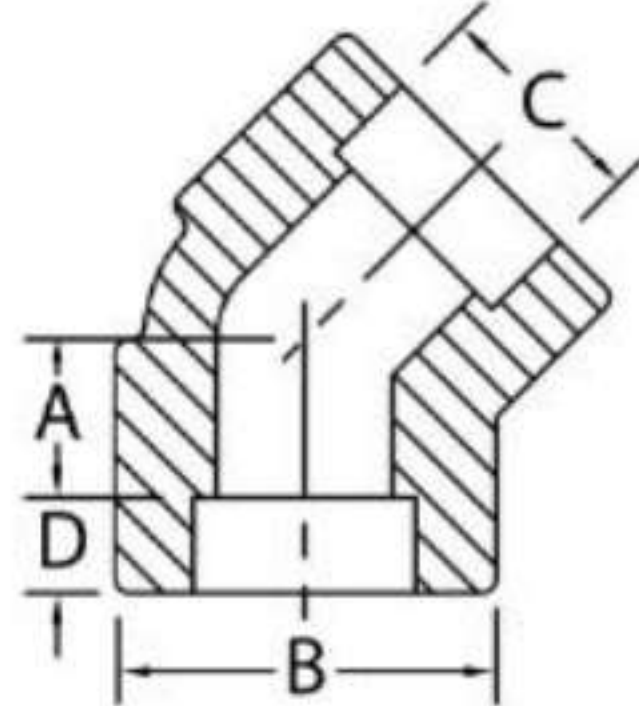
Common Dimensions

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
C	0.420/ 0.440	0.555/ 0.575	0.690/ 0.710	0.855/ 0.875	1.065/ 1.085	1.330/ 1.350	1.675/ 1.695	1.915/ 1.935	2.406/ 2.426	2.906/ 2.931	3.535/ 3.560	4.545/ 4.570
D	0.380	0.380	0.380	0.380	0.500	0.500	0.500	0.500	0.620	0.620	0.620	0.750



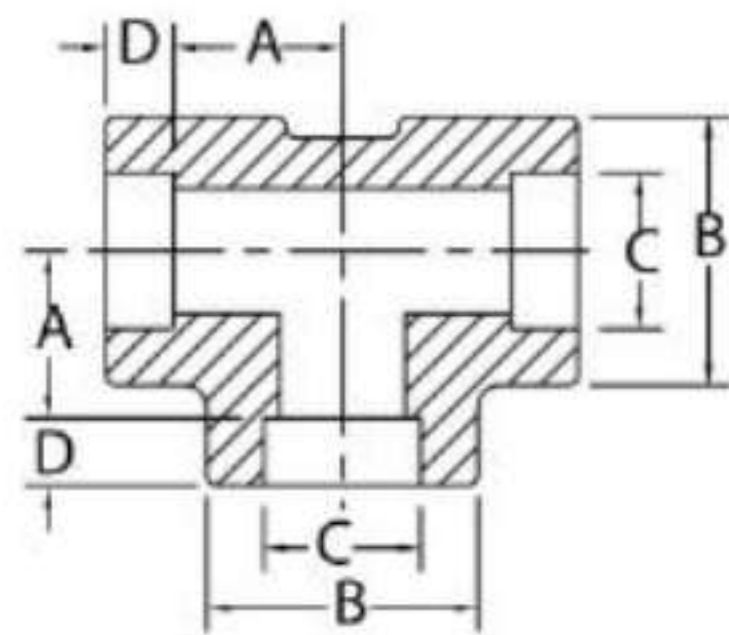
90 Degree Elbows

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.440	0.440	0.530	0.620	0.750	0.880	1.060	1.250	1.500	1.620	2.250	2.620
B	0.880	0.880	1.040	1.310	1.500	1.810	2.250	2.500	3.030	3.690	4.380	5.750
Wt. Ea.	0.20	0.16	0.25	0.48	0.68	1.06	1.59	2.13	3.78	6.74	10.94	24.13



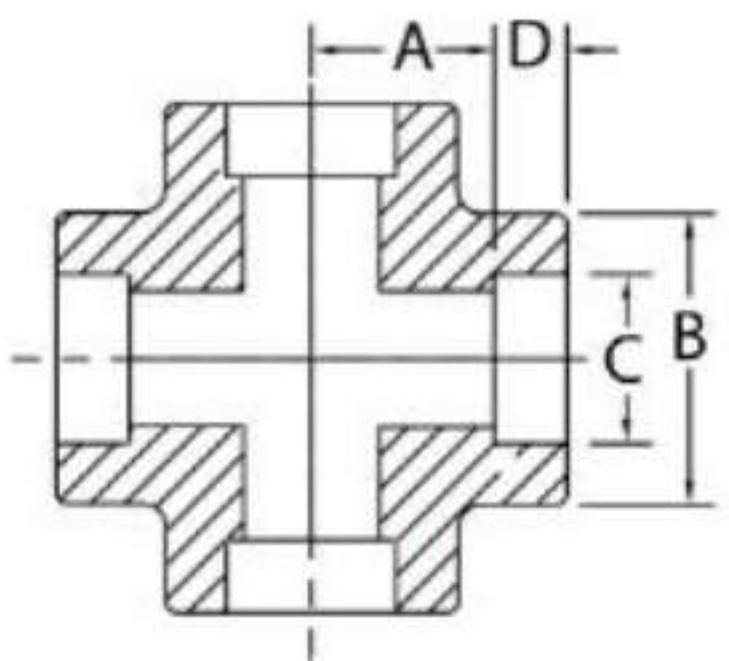
45 Degree Elbows

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.310	0.310	0.310	0.440	0.500	0.560	0.690	0.810	1.000	1.120	1.250	1.620
B	0.880	0.880	1.040	1.310	1.500	1.810	2.250	2.500	3.030	3.680	4.370	6.000
Wt. Ea.	0.15	0.13	0.20	0.43	0.58	0.89	1.40	1.70	2.69	7.88	11.25	20.75



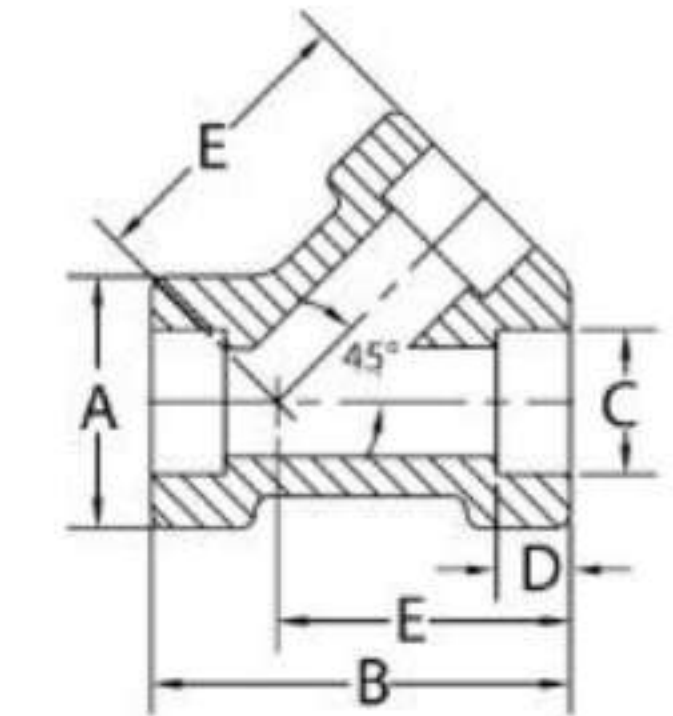
Tees

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.440	0.440	0.530	0.620	0.750	0.880	1.060	1.250	1.500	1.620	2.250	2.620
B	0.880	0.880	1.040	1.310	1.500	1.810	2.250	2.500	3.030	3.690	4.380	5.750
Wt. Ea.	0.23	0.19	0.33	0.71	0.87	1.44	2.19	2.98	4.57	8.60	13.00	31.30



Crosses

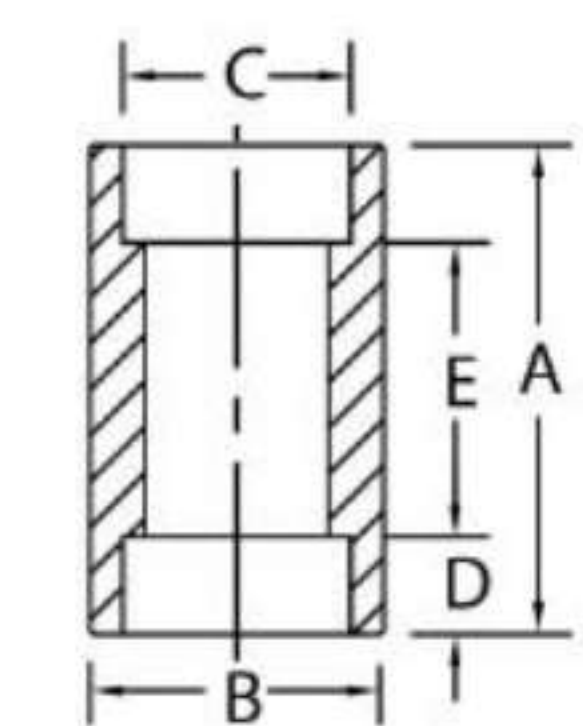
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.530	0.530	0.530	0.620	0.750	0.880	1.060	1.250	1.500	1.620	2.250	2.620
B	1.040	1.040	1.040	1.310	1.500	1.810	2.250	2.500	3.030	4.000	4.750	6.000
Wt. Ea.	0.57	0.51	0.39	0.83	1.03	1.68	2.56	3.46	5.60	13.70	21.10	35.00



Laterals

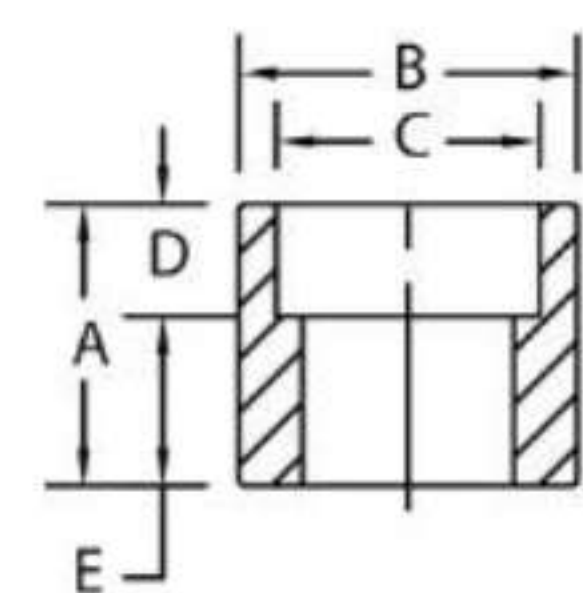
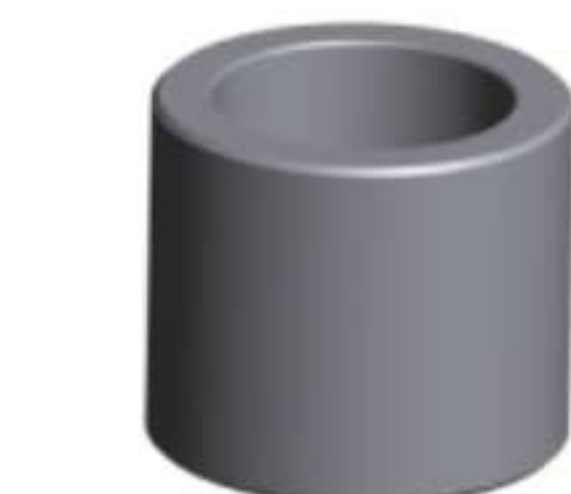
Laterals not covered by ASME B16.11

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A				1.500	1.750	2.219	2.219	2.500	3.030			
B				2.500	3.000	4.813	4.813	5.375	6.438			
E				1.750	2.125	3.500	3.500	3.938	4.750			
Wt. Ea.				0.90	1.40	2.55	2.80	4.13	6.29			



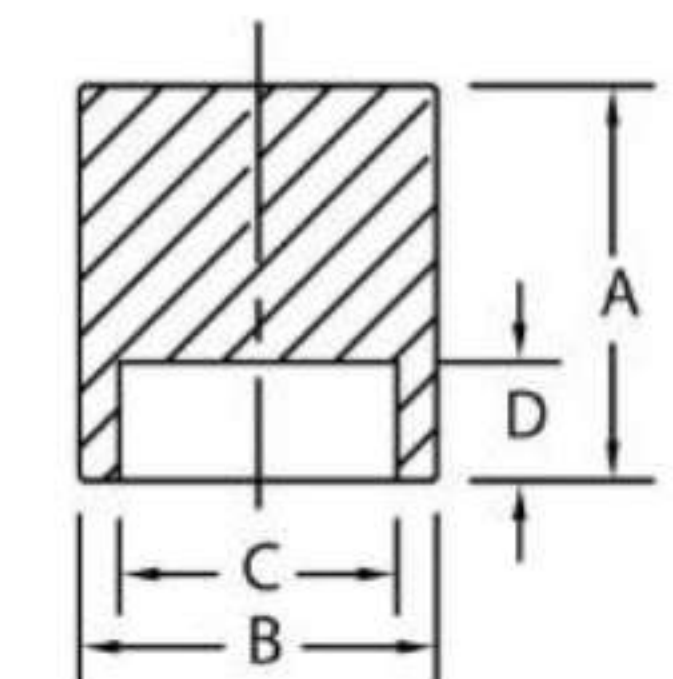
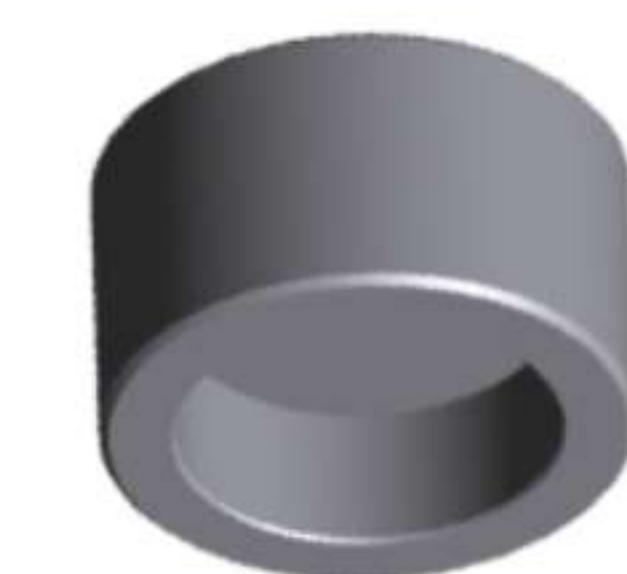
Couplings

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	1.025	1.025	1.085	1.245	1.335	1.415	1.415	1.415	1.905	1.865	1.865	2.125
B	0.750	0.875	1.063	1.250	1.500	1.875	2.250	2.500	3.000	3.625	4.312	5.500
E	0.250	0.250	0.250	0.380	0.380	0.500	0.500	0.500	0.750	0.750	0.750	0.750
Wt. Ea.	0.09	0.11	0.16	0.29	0.42	0.59	1.07	1.30	2.13	3.14	4.14	7.30



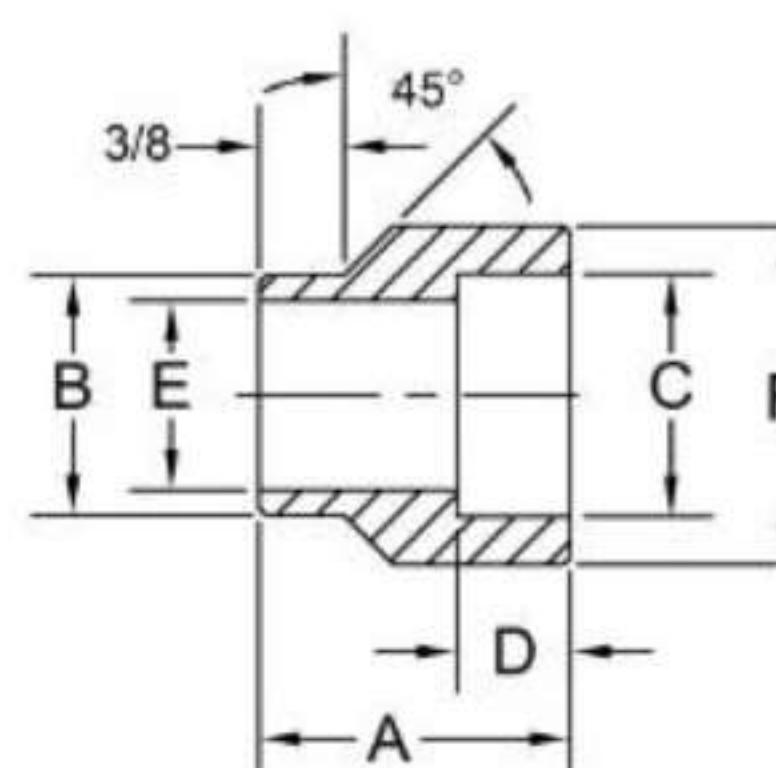
Half Couplings

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	1.025	1.025	1.085	1.245	1.425	1.585	1.655	1.715	2.205	2.255	2.315	2.575
B	0.750	0.875	1.063	1.250	1.500	1.875	2.250	2.500	3.000	3.625	4.312	5.500
E	0.620	0.620	0.690	0.880	0.940	1.120	1.190	1.250	1.620	1.690	1.750	1.880
Wt. Ea.	0.09	0.11	0.16	0.29	0.42	0.59	1.07	1.30	2.13	3.14	4.14	7.30



Pipe Caps

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	0.705	0.705	0.705	0.765	0.875	1.045	1.045	1.105	1.265	1.395	1.515	1.765
B	0.750	0.875	1.062	1.250	1.500	1.875	2.250	2.500	3.000	3.625	4.312	5.500
Wt. Ea.	0.07	0.09	0.12	0.22	0.36	0.48	0.91	1.30	1.88	2.74	4.27	7.40



Couplets

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A	1.188	1.190	1.190	1.310	1.380	1.690	1.880	2.000	2.250	2.500	2.750	3.000
B	0.562	0.688	0.813	0.938	1.063	1.313	1.688	1.938	2.438	2.875	3.500	4.500
E	0.269	0.364	0.493	0.622	0.824	1.049	1.380	1.610	2.067	2.469	3.068	4.026
F	0.875	0.940	1.060	1.310	1.500	1.810	2.190	2.500	3.130	3.630	4.380	5.560
Wt. Ea.	0.25	0.30	0.35	0.50	0.26	0.85	1.07	1.30	2.13	3.14	4.14	7.30

Common Dimensions

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
C	0.420/ 0.440	0.555/ 0.575	0.690/ 0.710	0.855/ 0.875	1.065/ 1.085	1.330/ 1.350	1.675/ 1.695	1.915/ 1.935	2.406/ 2.426	2.906/ 2.931	3.535/ 3.560	4.545/ 4.570
D	0.380	0.380	0.380	0.380	0.500	0.500	0.500	0.500	0.620	0.620	0.620	0.750

90 Degree Elbows

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	*4
A	0.440	0.530	0.620	0.750	0.880	1.060	1.250	1.500	1.620	2.250	2.500	2.875
B	1.040	1.040	1.310	1.500	1.810	2.250	2.500	3.030	3.310	4.000	4.750	6.000
Wt. Ea.	0.25	0.35	0.68	0.88	1.38	2.63	3.00	5.31	6.00	10.47	18.84	31.54

* 2-1/2, 3 and 4 not covered by ASME B16.11

45 Degree Elbows

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	4
A	0.310	0.310	0.440	0.500	0.560	0.690	0.810	1.000	1.120	1.125	1.250	
B	1.040	1.040	1.310	1.500	1.810	2.250	2.500	3.030	3.310	4.000	4.750	
Wt. Ea.	0.20	0.30	0.30	0.68	1.14	2.03	2.25	4.22	5.03	7.00	15.00	

* 2-1/2 and 3 not covered by ASME B16.11

Tees

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	*4
A	0.440	0.530	0.620	0.750	0.880	1.060	1.250	1.500	1.620	2.250	2.500	2.875
B	1.040	1.040	1.310	1.500	1.810	2.250	2.500	3.030	3.310	4.000	4.750	6.000
Wt. Ea.	0.35	0.35	0.42	1.16	1.94	3.17	3.95	7.13	7.72	15.30	23.10	34.90

* 2-1/2, 3 and 4 not covered by ASME B16.11

Crosses

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A				0.750	0.880	1.060	1.250	1.500	1.620			
B				1.500	1.810	2.250	2.500	3.030	3.310			
Wt. Ea.				1.44	2.31	3.46	4.65	8.70	13.00			

Laterals

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
A				1.500	1.750	2.219	2.500	3.030	3.344			
B				2.500	3.000	4.813	5.375	6.438	6.625			
E				1.750	2.125	3.500	3.938	4.750	5.000			
Wt. Ea.				1.44	2.31	3.46	4.65	8.70	13.00			

Laterals not covered by ASME B16.11

Couplings

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	*4
A	1.025	1.025	1.025	1.095	1.335	1.415	1.415	1.415	1.905	1.865	1.865	2.125
B	0.875	1.000	1.125	1.375	1.688	2.000	2.500	2.750	3.500	4.250	5.000	6.000
E	0.250	0.250	0.250	0.380	0.380	0.500	0.500	0.500	0.750	0.750	0.750	0.750
Wt. Ea.	0.09	0.16	0.28	0.51	0.70	1.40	1.59	2.58	4.58	6.14	7.10	13.70

* 2-1/2, 3 and 4 not covered by ASME B16.11

Half Couplings

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	*4
A	1.015	1.015	1.085	1.245	1.425	1.585	1.655	1.715	2.205	2.555	2.315	2.575
B	0.875	1.000	1.125	1.375	1.687	2.000	2.500	2.750	3.500	4.250	5.000	6.000
E	0.620	0.620	0.690	0.880	0.940	1.120	1.190	1.250	1.620	1.690	1.750	1.880
Wt. Ea.	0.13	0.19	0.38	0.42	0.35	0.70	0.80	1.29	2.29	6.14	7.10	12.38

* 2-1/2, 3 and 4 not covered by ASME B16.11

Pipe Caps

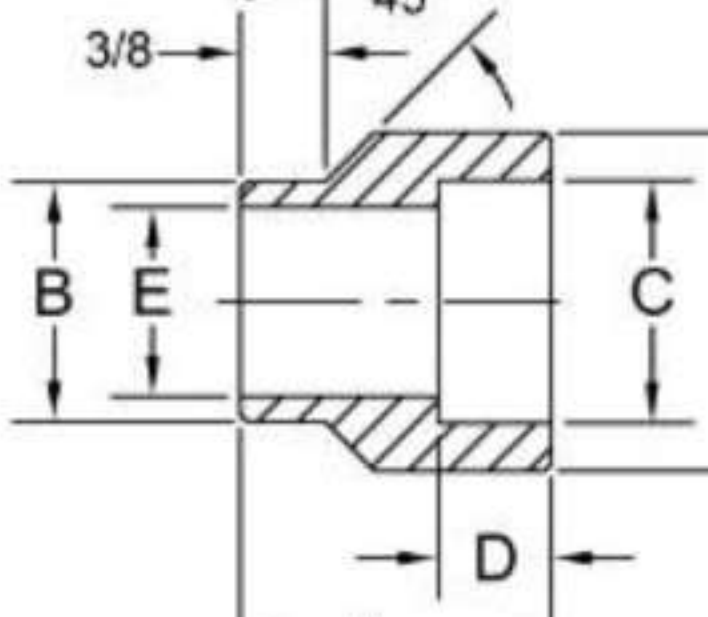
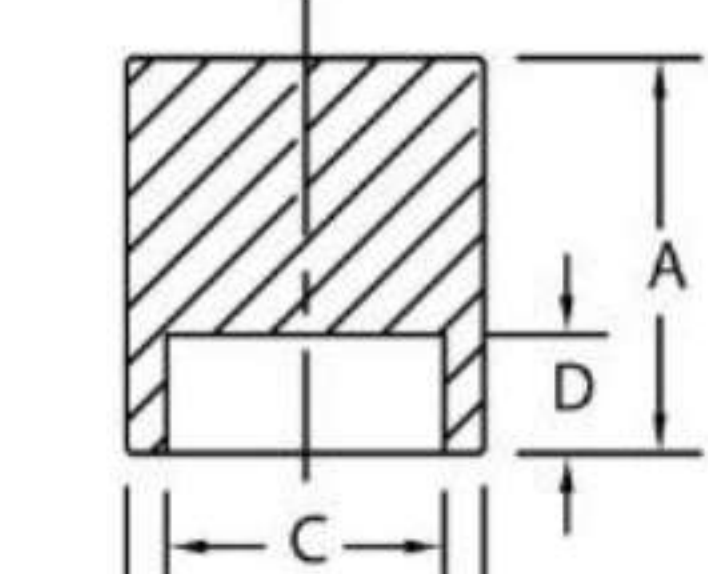
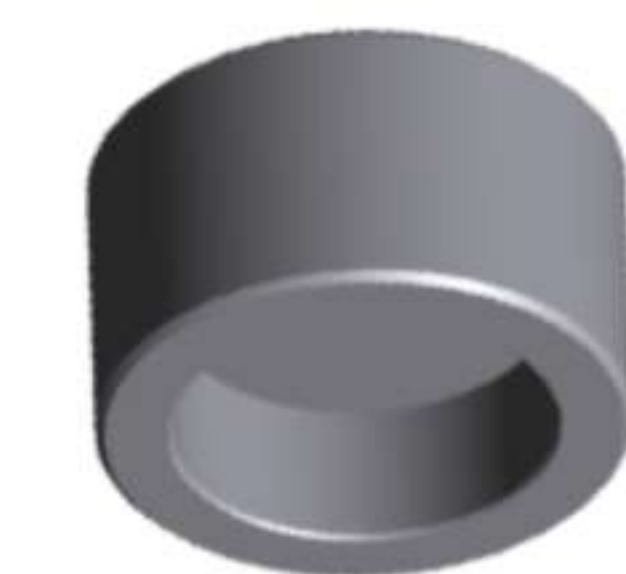
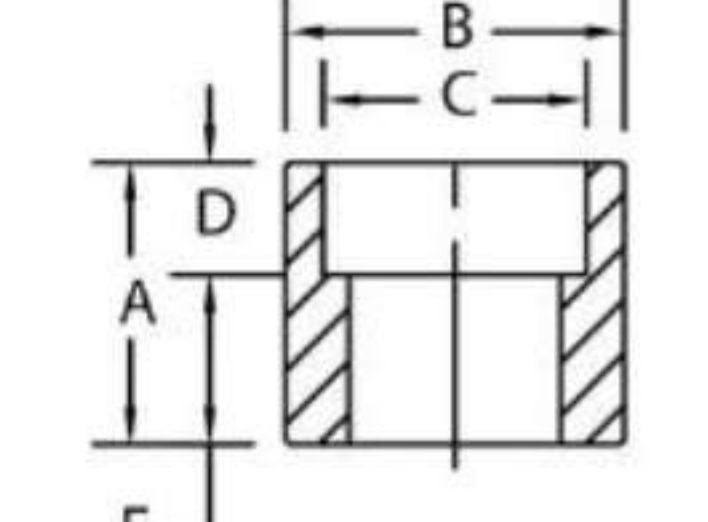
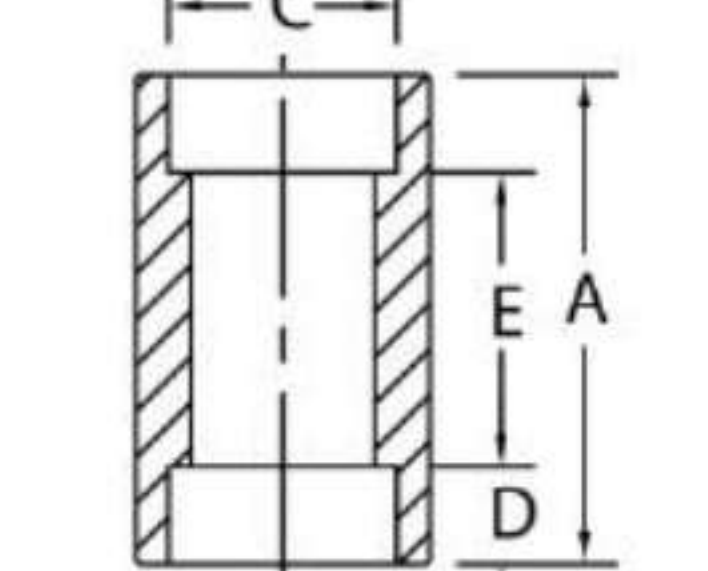
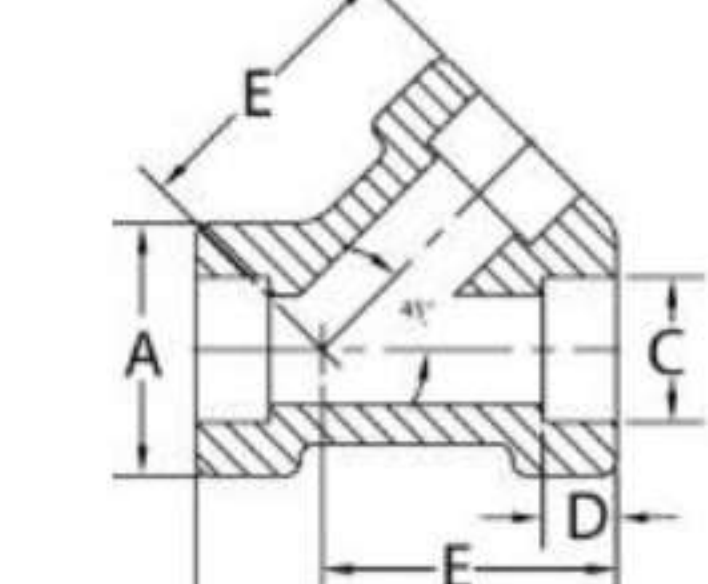
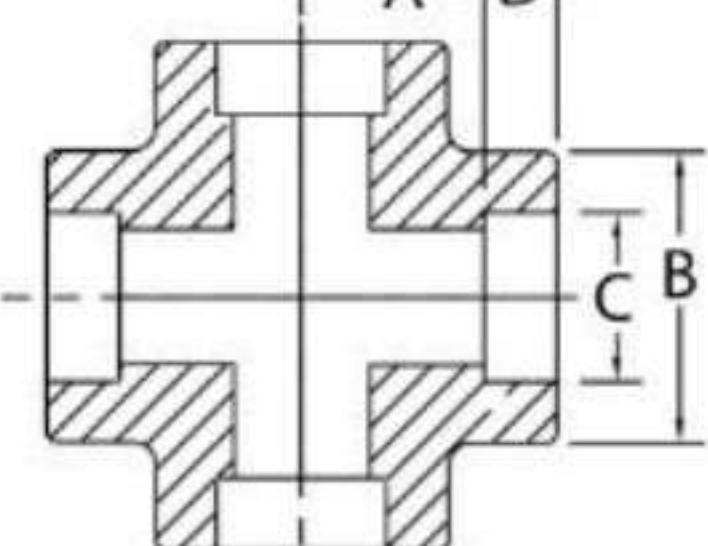
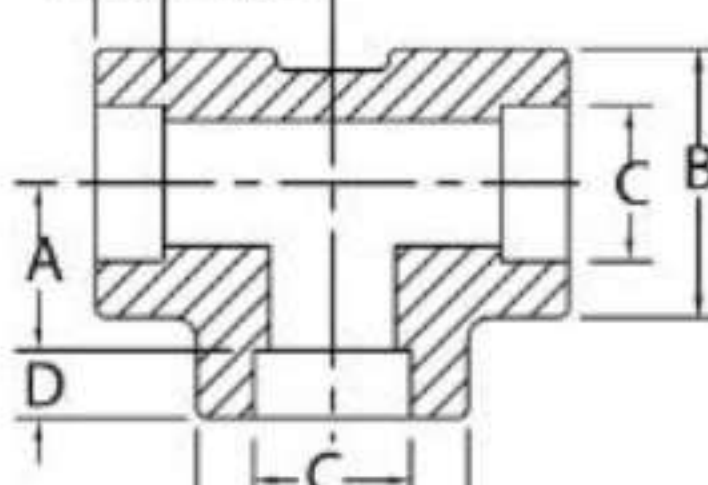
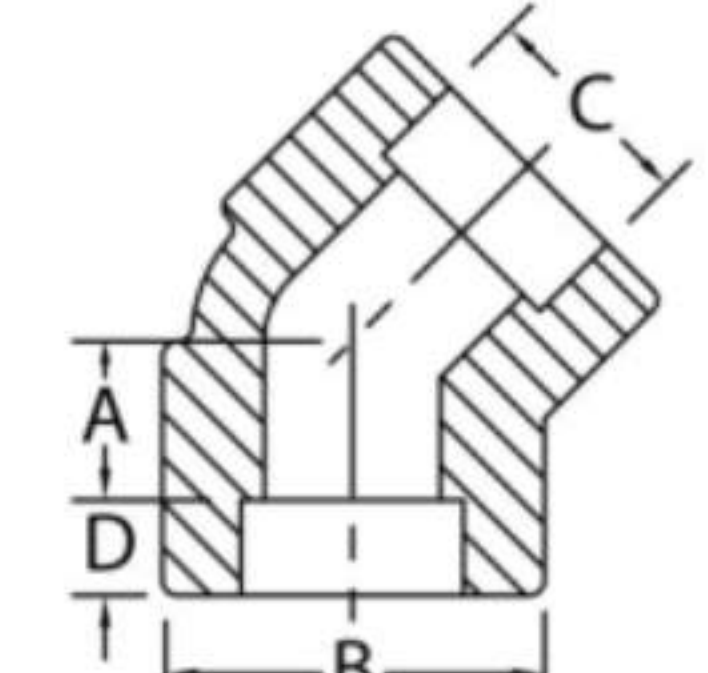
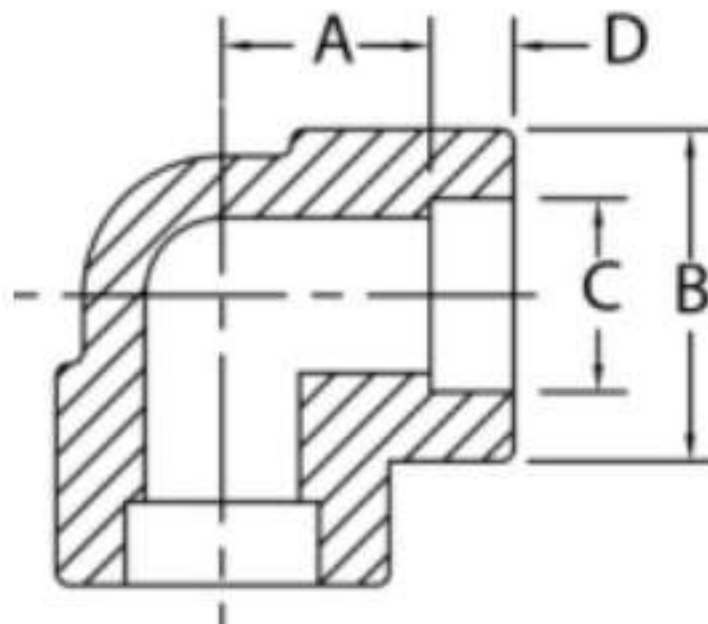
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	*4
A	0.765	0.765	0.765	0.825	0.955	1.075	1.075	1.135	1.395	1.515	1.635	2.015
B	0.875	1.000	1.125	1.375	1.688	2.000	2.500	2.750	3.500	4.250	5.000	6.000
Wt. Ea.	0.12	0.25	0.19	0.42	0.58	1.16	1.40	2.14	3.62	4.90	7.60	12.75

* 2-1/2, 3 and 4 not covered by ASME B16.11

Couplets

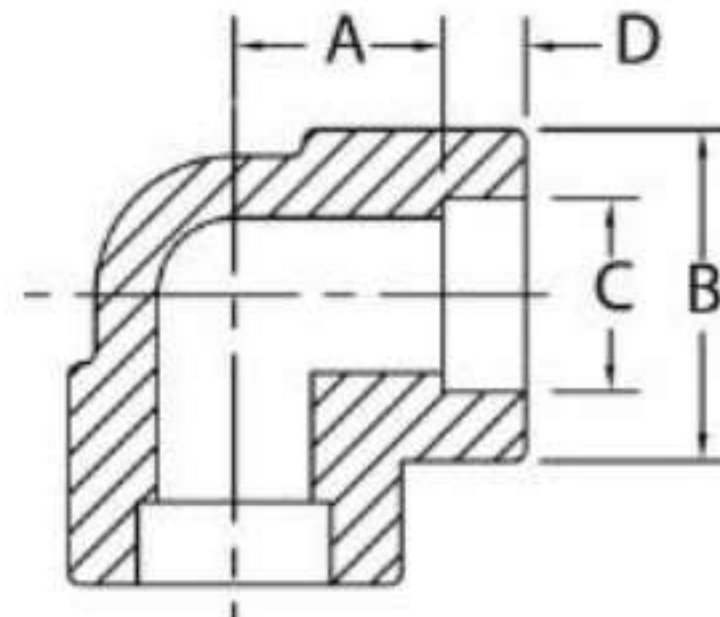
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3	*4
A	1.188	1.190	1.190	1.310	1.380	1.690	1.880	2.000	2.250	2.500	2.750	3.000
B	0.562	0.688	0.813	0.938	1.063	1.313	1.688	1.938	2.438	2.875	3.500	4.500
E	0.156	0.250	0.359	0.464	0.612	0.815	1.160	1.338	1.687	2.125	2.625	3.438
F	0.875	1.000	1.250	1.500	1.750	2.250	2.500	3.000	3.630	4.250	5.000	6.250
Wt. Ea.	0.14	0.17	0.25	0.39	0.50	1.06	1.44	2.23	3.65	5.38	8.12	13.21

* 2-1/2, 3 and 4 not covered by ASME B16.11



Common Dimensions

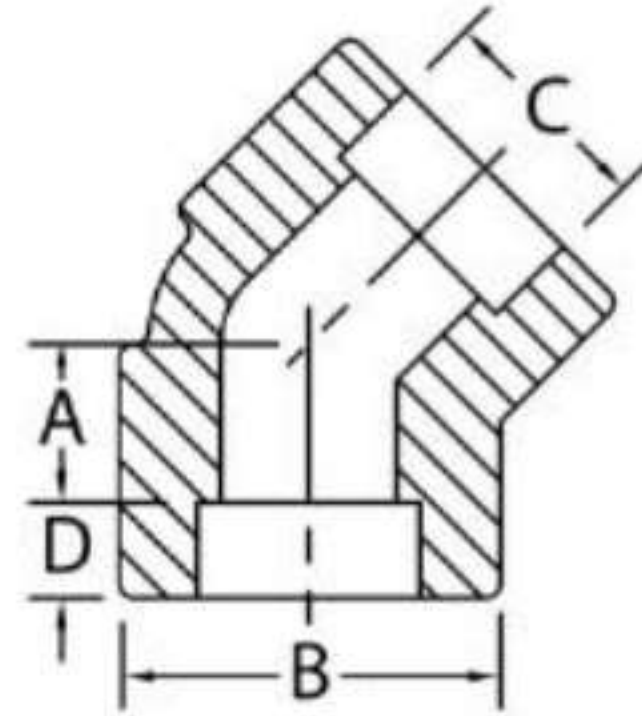
Pipe Size	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
C	0.555/ 0.575	0.690/ 0.710	0.855/ 0.875	1.065/ 1.085	1.330/ 1.350	1.675/ 1.695	1.915/ 1.935	2.406/ 2.426	2.906/ 2.931	3.535/ 3.560
D	0.380	0.380	0.380	0.500	0.500	0.500	0.500	0.620	0.620	0.620



90 Degree Elbows

Pipe Size	*1/4	*3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	*3
A	0.687	0.880	1.000	1.120	1.250	1.380	1.500	2.120	2.500	2.937
B	1.310	1.500	1.810	2.250	2.500	3.030	3.310	3.690	4.750	5.750
Wt. Ea.	0.59	1.10	1.44	2.25	4.09	5.81	6.69	12.00	13.00	N/A

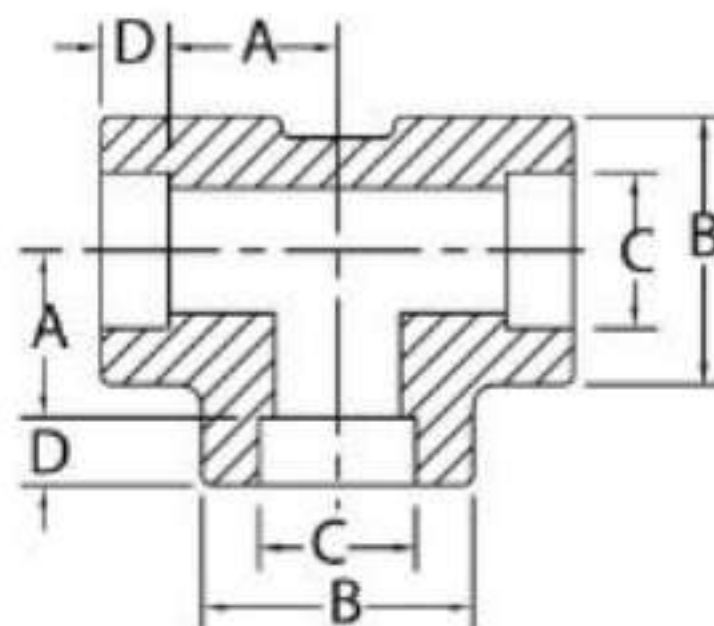
* 1/4, 3/8, 2-1/2 and 3 not covered by ASME B16.11



45 Degree Elbows

Pipe Size	*1/4	*3/8	1/2	3/4	1	1-1/4	1-1/2	2	*2-1/2	3
A	0.440	0.562	0.620	0.750	0.810	0.880	1.000	1.120	1.312	
B	1.312	1.500	1.812	2.250	2.500	3.030	3.312	3.680	4.750	
Wt. Ea.	N/A	0.90	1.42	2.06	2.50	5.00	6.51	10.44	N/A	

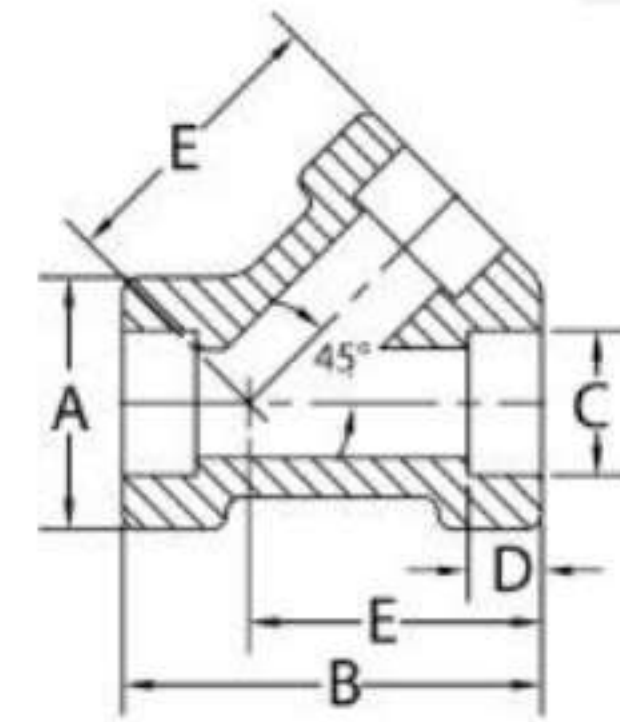
* 1/4, 3/8 and 2-1/2 not covered by ASME B16.11



Tees

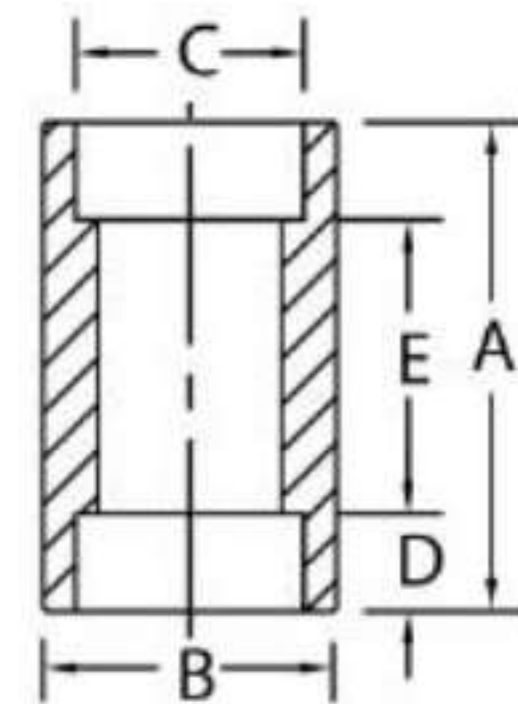
Pipe Size	*1/4	*3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A	0.687	0.880	1.000	1.120	1.250	1.380	1.500	2.120		
B	1.310	1.500	1.810	2.250	2.500	3.030	3.310	3.690		
Wt. Ea.	N/A	N/A	2.37	4.00	5.35	7.44	7.88	8.75		

* 1/4 and 3/8 not covered by ASME B16.11



Laterals

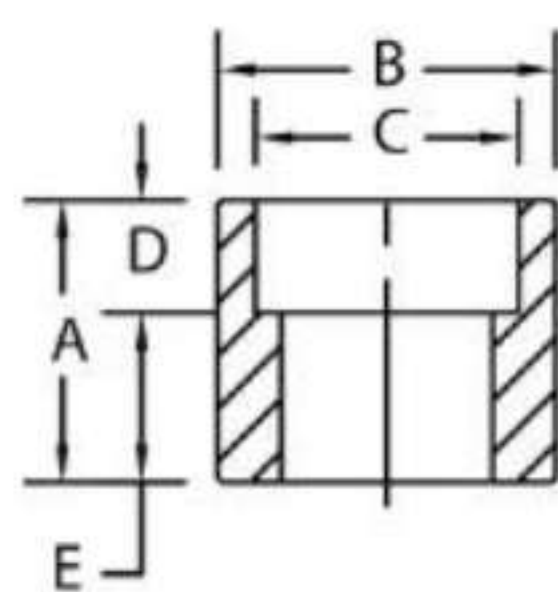
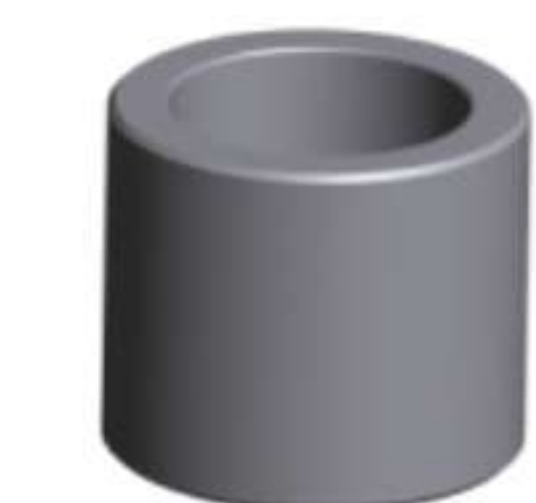
Pipe Size	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A				2.219	2.500	3.030	3.344			
B				4.813	5.375	6.438	6.625			
E				3.500	3.938	4.750	5.000			
Wt. Ea.										



Couplings

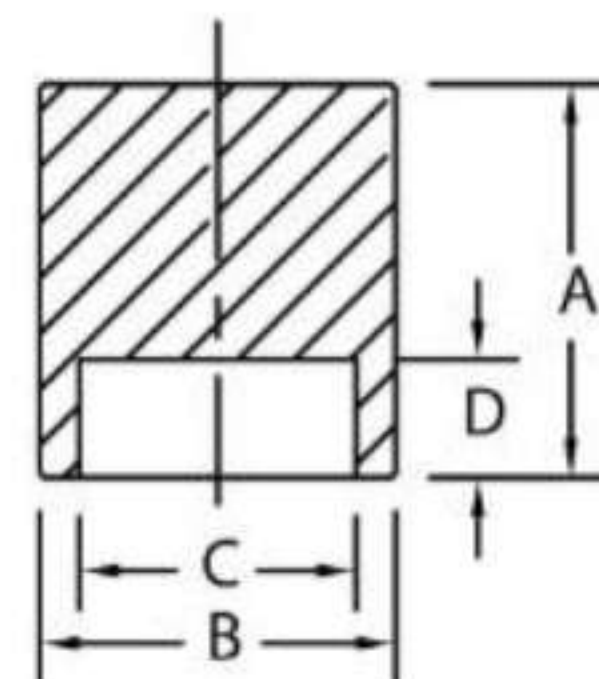
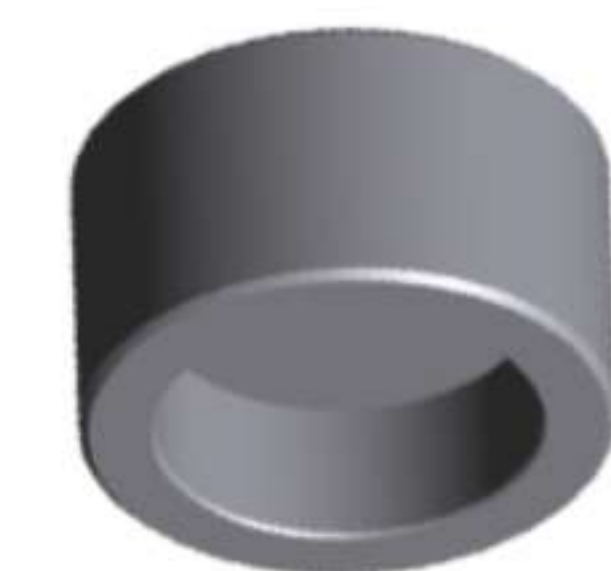
Pipe Size	*1/4	*3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A	1.030	1.030	1.090	1.330	1.410	1.410	1.410	1.900		
B	1.250	1.380	1.690	2.000	2.500	2.750	3.000	3.620		
E	0.250	0.250	0.380	0.380	0.500	0.500	0.500	0.750		
Wt. Ea.	0.50	0.53	0.85	0.91	1.65	1.85	2.00	3.51		

* 1/4 and 3/8 not covered by ASME B16.11



Half Couplings

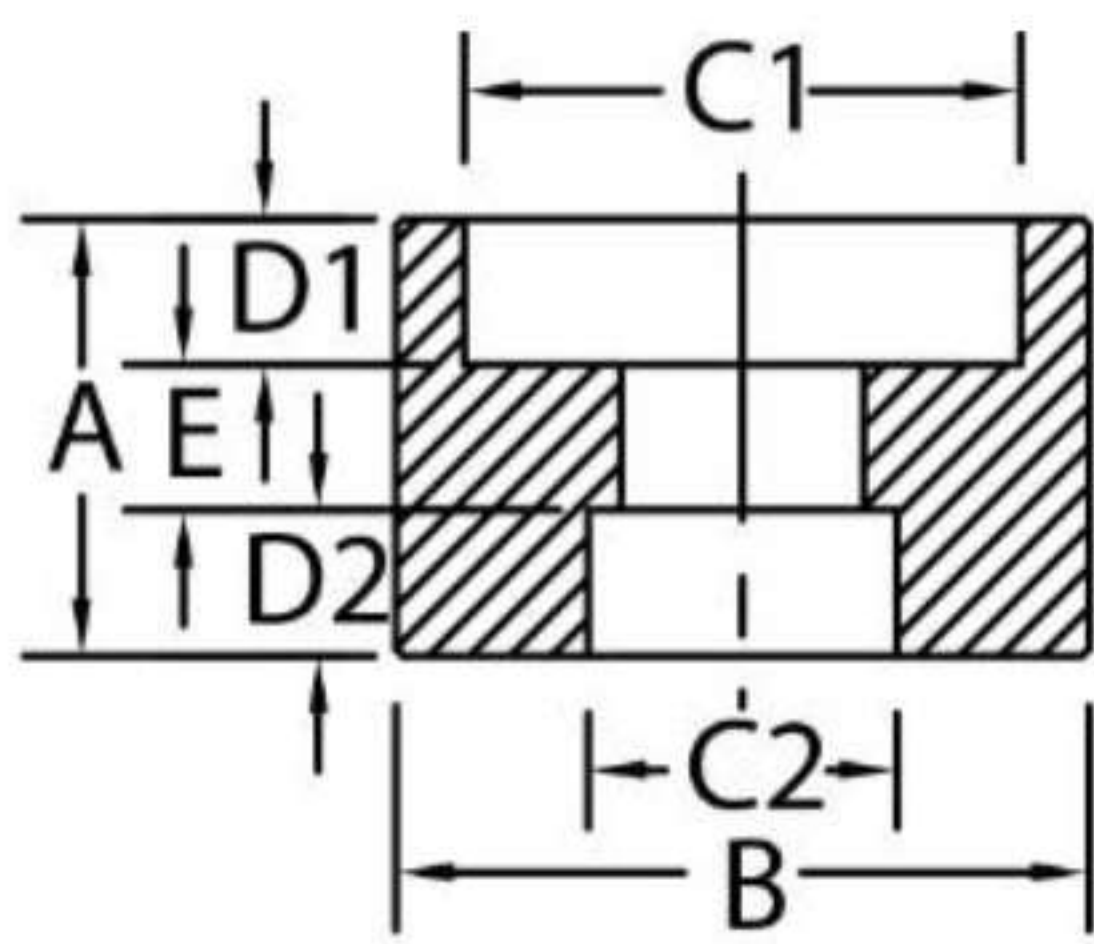
Pipe Size	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A			1.245	1.425	1.585	1.655	1.715	2.205		
B			1.687	2.000	2.500	2.750	3.000	3.625		
E			0.880	0.940	1.120	1.190	1.250	1.620		
Wt. Ea.			0.45	1.14	1.99	2.34	2.76	4.85		



Pipe Caps

Pipe Size	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A			0.955	1.135	1.205	1.205	1.265	1.515		
B			1.688	2.000	2.500	2.750	3.000	3.625		
Wt. Ea.			0.59	1.10	1.58	1.81	1.58	3.87		

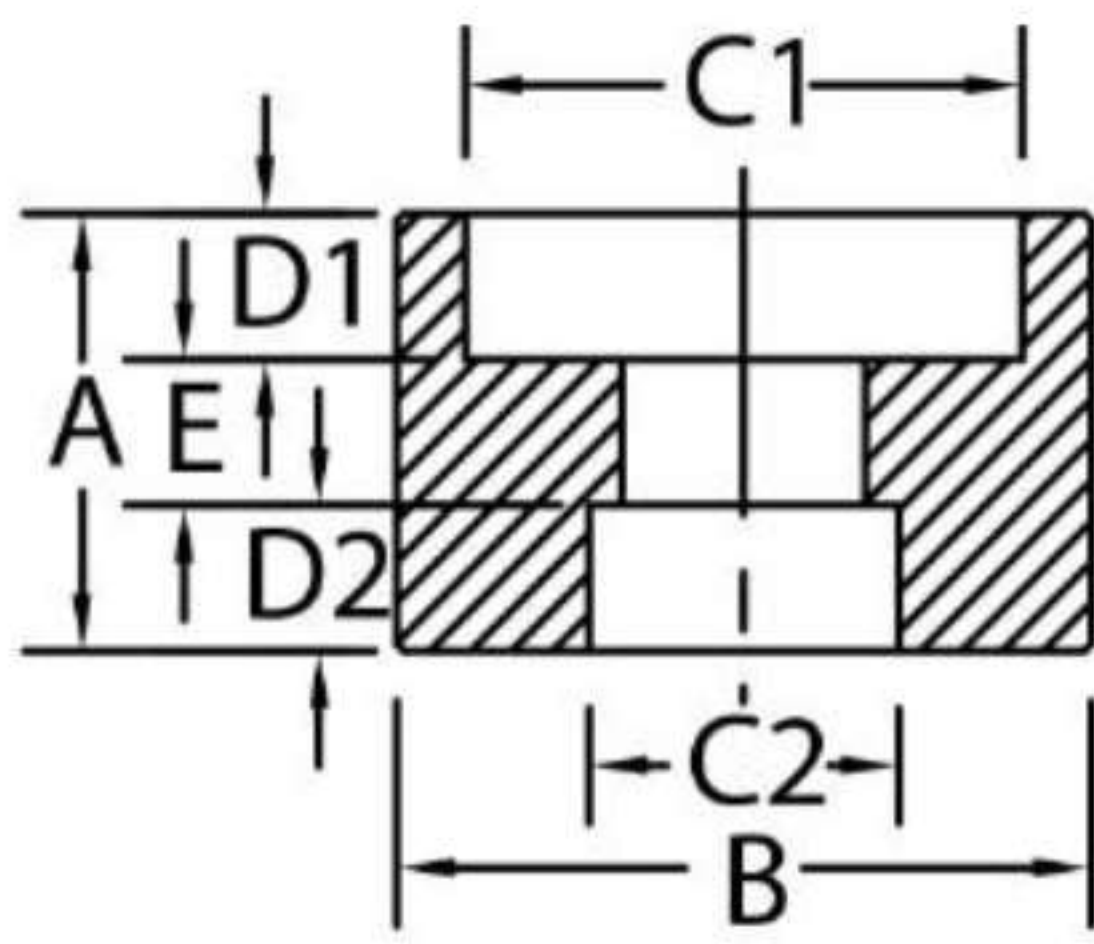
Class 3000 Forged Steel Socket Weld Reducing Couplings ASME B16.11



Sizes marked with * are not covered by ASME B16.11

Pipe Size	A	B	C1	C2	D1	D2	E	Wt. Ea.
1/4 X 1/8	1.030	0.875	.555/.575	.420/.430	0.395	0.395	0.250	0.18
3/8 X 1/8	1.030	1.063	.690/.710	.420/.430	0.395	0.395	0.250	0.18
3/8 X 1/4				.555/.575				
1/2 X 1/8	1.095	1.250	.855/.875	.420/.430	0.395	0.395	0.380	0.26
1/2 X 1/4				.555/.575				
1/2 X 3/8				.690/.710				
3/4 X 1/8	1.335	1.500	1.065/1.085	.420/.430	0.515	0.515	0.380	0.41
3/4 X 1/4				.555/.575				
3/4 X 3/8				.690/.710				
3/4 X 1/2				.855/.875				
1 X 1/8	1.415	1.875	1.330/1.350	.420/.430	0.515	0.515	0.500	0.65
1 X 1/4				.555/.575				
1 X 3/8				.690/.710				
1 X 1/2				.855/.875				
1 X 3/4				1.065/1.085				
1-1/4 X 1/8	1.415	2.250	1.675/1.695	.420/.430	0.515	0.515	0.500	0.82
1-1/4 X 1/4				.555/.575				
1-1/4 X 3/8				.690/.710				
1-1/4 X 1/2				.855/.875				
1-1/4 X 3/4				1.065/1.085				
1-1/4 X 1				1.330/1.350				
1-1/2 X 1/8	1.415	2.500	1.915/1.935	.420/.430	0.515	0.515	0.500	0.92
1-1/2 X 1/4				.555/.575				
1-1/2 X 3/8				.690/.710				
1-1/2 X 1/2				.855/.875				
1-1/2 X 3/4				1.065/1.085				
1-1/2 X 1				1.330/1.350				
1-1/2 X 1-1/4				1.675/1.695				
2 X 1/8	1.905	3.000	2.406/2.426	.420/.430	0.635	0.635	0.750	1.62
2 X 1/4				.555/.575				
2 X 3/8				.690/.710				
2 X 1/2				.855/.875				
2 X 3/4				1.065/1.085				
2 X 1				1.330/1.350				
2 X 1-1/4				1.675/1.695				
2 X 1-1/2				1.915/1.935				

Class 3000 Forged Steel Socket Weld Reducing Couplings ASME B16.11



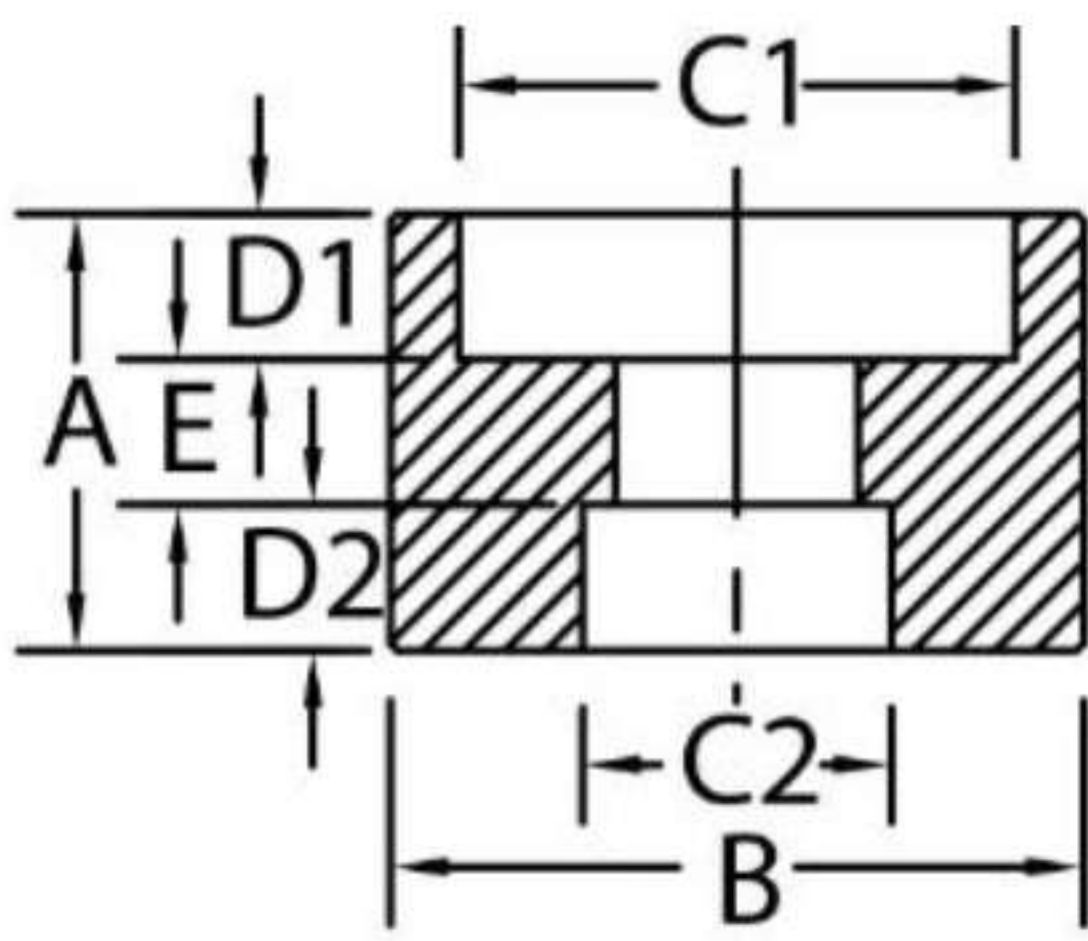
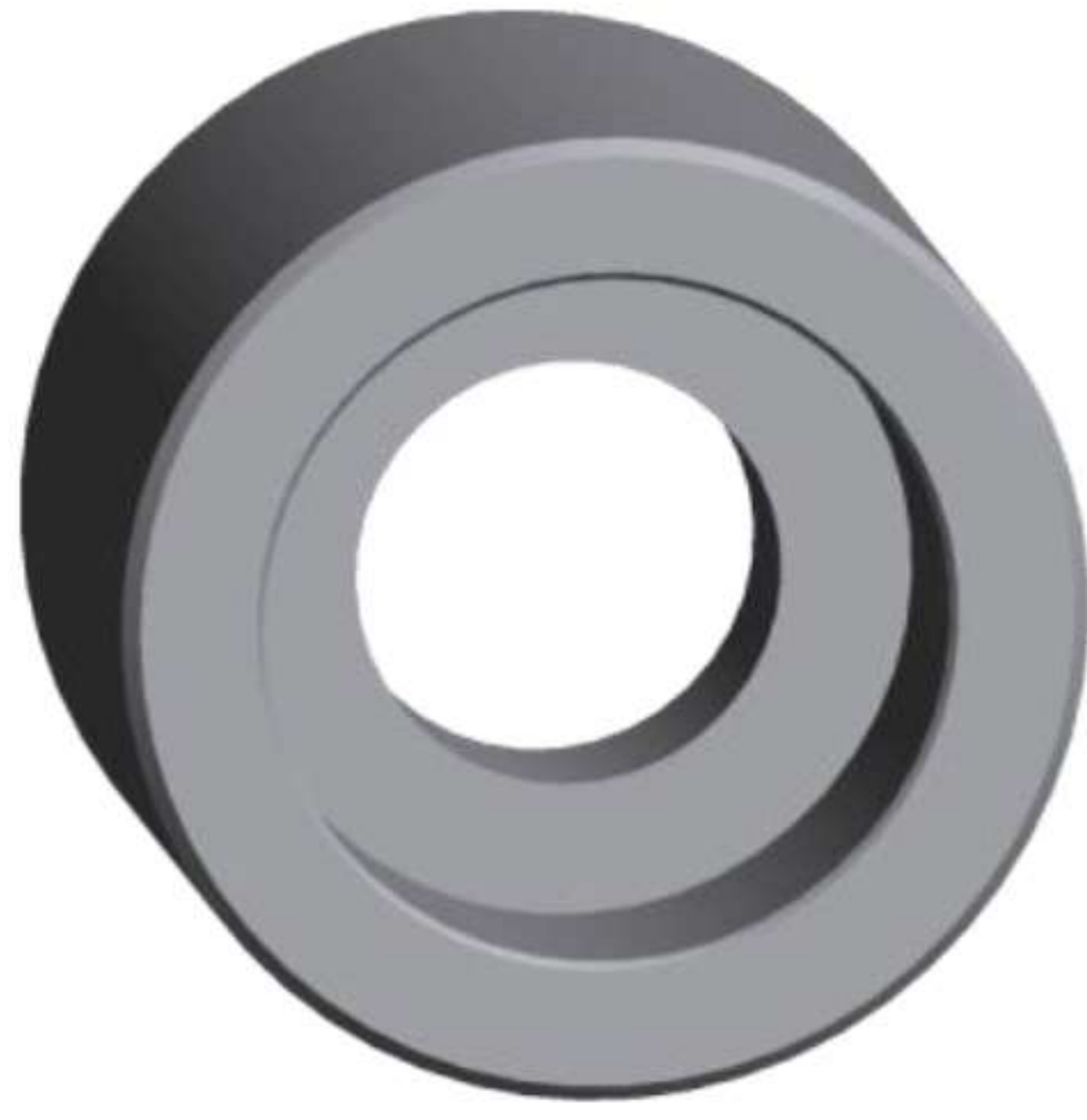
Sizes marked with * are not covered by ASME B16.11

Pipe Size	A	B	C1	C2	D1	D2	E	Wt. Ea.
2-1/2 X 1/8	1.865	3.625	2.906/2.931	.420/.430	0.635	0.635	0.750	2.61
2-1/2 X 1/4				.555/.575				
2-1/2 X 3/8				.690/.710				
2-1/2 X 1/2				.855/.875				
2-1/2 X 3/4				1.065/1.085				
2-1/2 X 1				1.330/1.350				
2-1/2 X 1-1/4				1.675/1.695				
2-1/2 X 1-1/2				1.915/1.935				
2-1/2 X 2				2.406/2.426				
3 X 1/8	1.865	4.312	3.535/3.550	.420/.430	0.635	0.635	0.750	3.13
3 X 1/4				.555/.575				
3 X 3/8				.690/.710				
3 X 1/2				.855/.875				
3 X 3/4				1.065/1.085				
3 X 1				1.330/1.350				
3 X 1-1/4				1.675/1.695				
3 X 1-1/2				1.915/1.935				
3 X 2				2.406/2.426				
3 X 2-1/2	2.906/2.931							
3-1/2 X 1/8 *	2.125	5.000	4.040/4.055	.420/.430	0.765	0.765	0.750	4.15
3-1/2 X 1/4 *				.555/.575				
3-1/2 X 3/8 *				.690/.710				
3-1/2 X 1/2 *				.855/.875				
3-1/2 X 3/4 *				1.065/1.085				
3-1/2 X 1 *				1.330/1.350				
3-1/2 X 1-1/4 *				1.675/1.695				
3-1/2 X 1-1/2 *				1.915/1.935				
3-1/2 X 2 *				2.406/2.426				
3-1/2 X 2-1/2 *	2.906/2.931							
3-1/2 X 3 *	3.535/3.550							
4 X 1/8	2.125	5.500	4.545/4.570	.420/.430	0.765	0.765	0.750	5.17
4 X 1/4				.555/.575				
4 X 3/8				.690/.710				
4 X 1/2				.855/.875				
4 X 3/4				1.065/1.085				
4 X 1				1.330/1.350				
4 X 1-1/4				1.675/1.695				
4 X 1-1/2				1.915/1.935				
4 X 2				2.406/2.426				
4 X 2-1/2				2.906/2.931				
4 X 3				3.535/3.550				

Class 6000 Forged Steel Socket Weld Reducing Couplings

ASME B16.11

Creative Piping Solutions



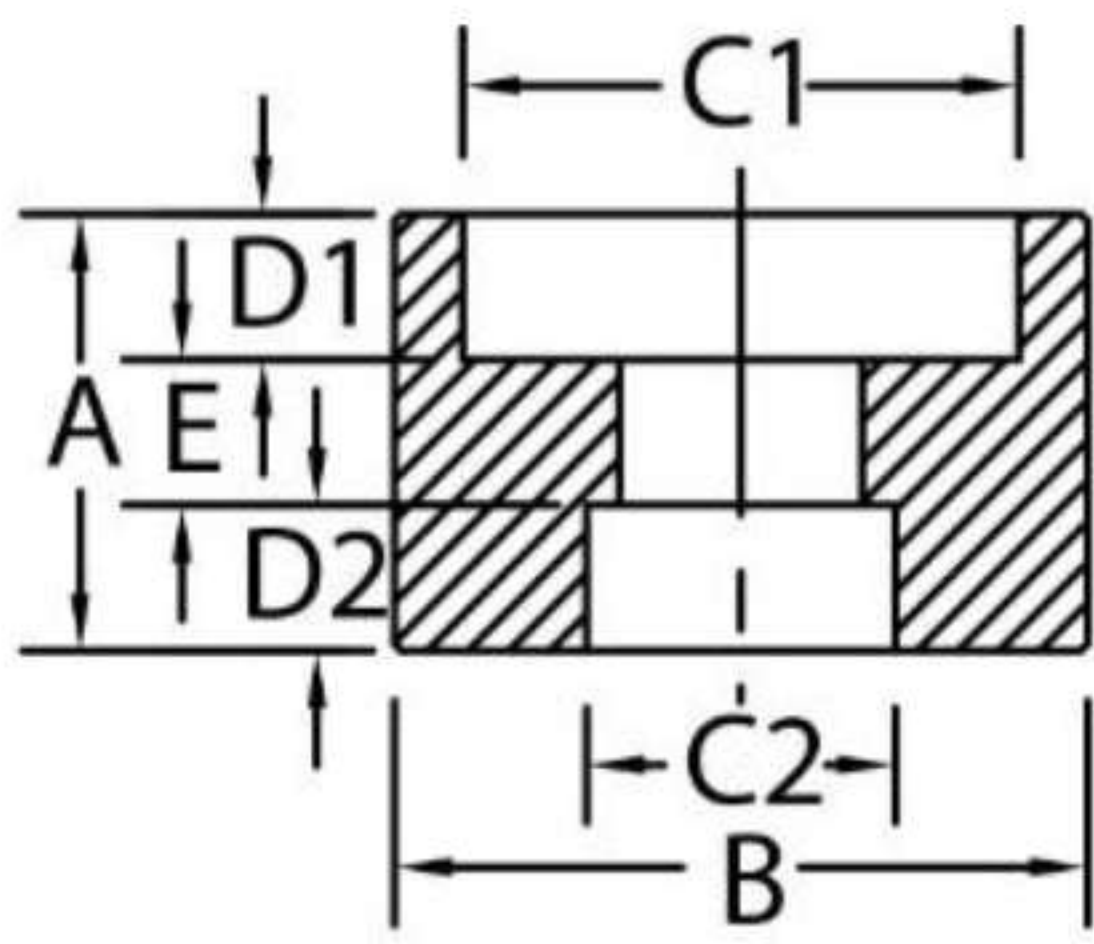
Sizes marked with * are not covered by ASME B16.11

Pipe Size	A	B	C1	C2	D1	D2	E	Wt. Ea.
1/4 X 1/8	1.025	1.000	.555/.575	.420/.430	0.395	0.395	0.250	0.09
3/8 X 1/8	1.025	1.125	.690/.710	.420/.430	0.395	0.395	0.250	0.22
3/8 X 1/4				.555/.575				
1/2 X 1/8	1.095	1.375	.855/.875	.420/.430	0.395	0.395	0.380	0.37
1/2 X 1/4				.555/.575				
1/2 X 3/8				.690/.710				
3/4 X 1/8	1.335	1.750	1.065/1.085	.420/.430	0.515	0.515	0.380	0.62
3/4 X 1/4				.555/.575				
3/4 X 3/8				.690/.710				
3/4 X 1/2				.855/.875				
1 X 1/8	1.415	2.000	1.330/1.350	.420/.430	0.515	0.515	0.500	0.86
1 X 1/4				.555/.575				
1 X 3/8				.690/.710				
1 X 1/2				.855/.875				
1 X 3/4				1.065/1.085				
1-1/4 X 1/8	1.415	2.500	1.675/1.695	.420/.430	0.515	0.515	0.500	1.29
1-1/4 X 1/4				.555/.575				
1-1/4 X 3/8				.690/.710				
1-1/4 X 1/2				.855/.875				
1-1/4 X 3/4				1.065/1.085				
1-1/4 X 1				1.330/1.350				
1-1/2 X 1/8	1.415	2.750	1.915/1.935	.420/.430	0.515	0.515	0.500	1.47
1-1/2 X 1/4				.555/.575				
1-1/2 X 3/8				.690/.710				
1-1/2 X 1/2				.855/.875				
1-1/2 X 3/4				1.065/1.085				
1-1/2 X 1				1.330/1.350				
1-1/2 X 1-1/4				1.675/1.695				
2 X 1/8	1.905	3.500	2.406/2.426	.420/.430	0.635	0.635	0.750	3.66
2 X 1/4				.555/.575				
2 X 3/8				.690/.710				
2 X 1/2				.855/.875				
2 X 3/4				1.065/1.085				
2 X 1				1.330/1.350				
2 X 1-1/4				1.675/1.695				
2 X 1-1/2	1.915/1.935							
2-1/2 X 1/8 *	1.865	4.250	2.906/2.931	.420/.430	0.635	0.635	0.750	4.90
2-1/2 X 1/4 *				.555/.575				
2-1/2 X 3/8 *				.690/.710				
2-1/2 X 1/2 *				.855/.875				
2-1/2 X 3/4 *				1.065/1.085				
2-1/2 X 1 *				1.330/1.350				
2-1/2 X 1-1/4 *				1.675/1.695				
2-1/2 X 1-1/2 *				1.915/1.935				
2-1/2 X 2 *	2.406/2.426							
3 X 1/8 *	1.865	5.000	3.535/3.550	.420/.430	0.635	0.635	0.750	6.34
3 X 1/4 *				.555/.575				
3 X 3/8 *				.690/.710				
3 X 1/2 *				.855/.875				
3 X 3/4 *				1.065/1.085				
3 X 1 *				1.330/1.350				
3 X 1-1/4 *				1.675/1.695				
3 X 1-1/2 *				1.915/1.935				
3 X 2 *				2.406/2.426				
3 X 2-1/2 *				2.906/2.931				
4 X 1/8 *	2.125	6.000	4.545/4.570	.420/.430	0.765	0.765	0.750	8.83
4 X 1/4 *				.555/.575				
4 X 3/8 *				.690/.710				
4 X 1/2 *				.855/.875				
4 X 3/4 *				1.065/1.085				
4 X 1 *				1.330/1.350				
4 X 1-1/4 *				1.675/1.695				
4 X 1-1/2 *				1.915/1.935				
4 X 2 *				2.406/2.426				
4 X 2-1/2 *				2.906/2.931				
4 X 3 *				3.535/3.550				
4 X 3-1/2 *				4.040/4.055				

Class 9000 Forged Steel Socket Weld Reducing Couplings

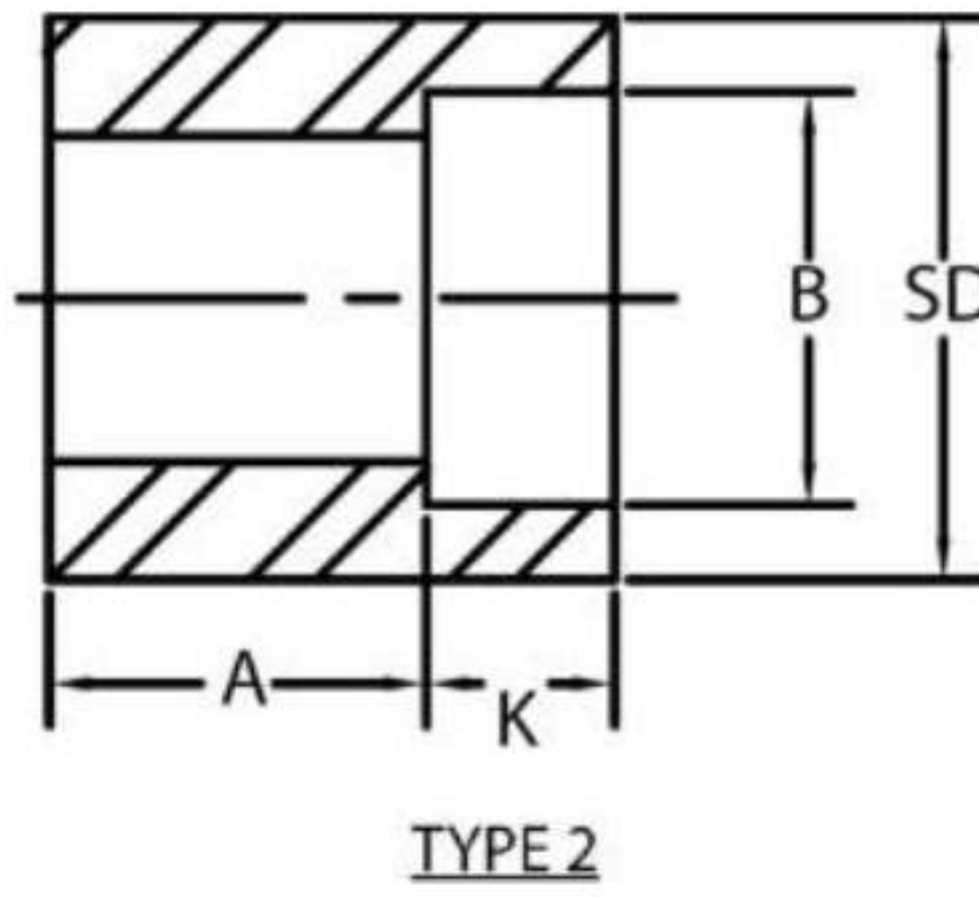
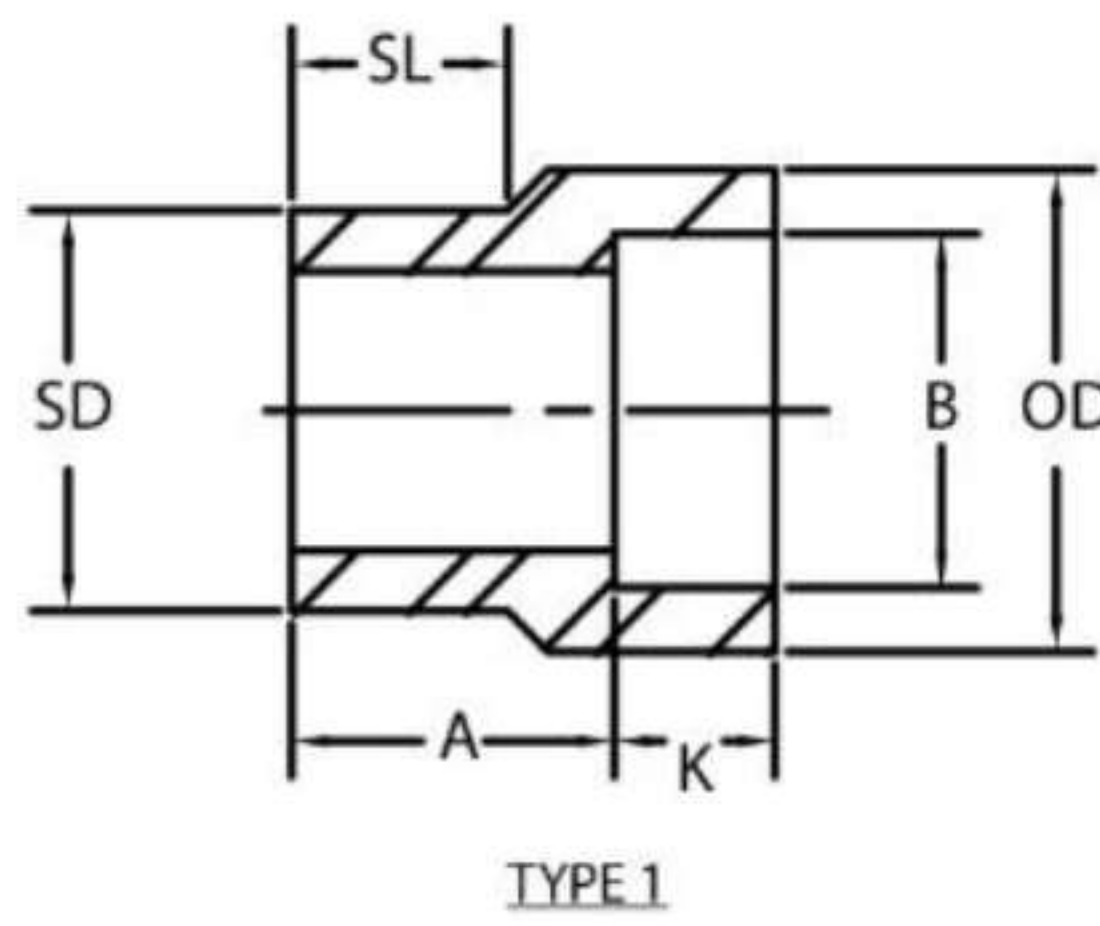
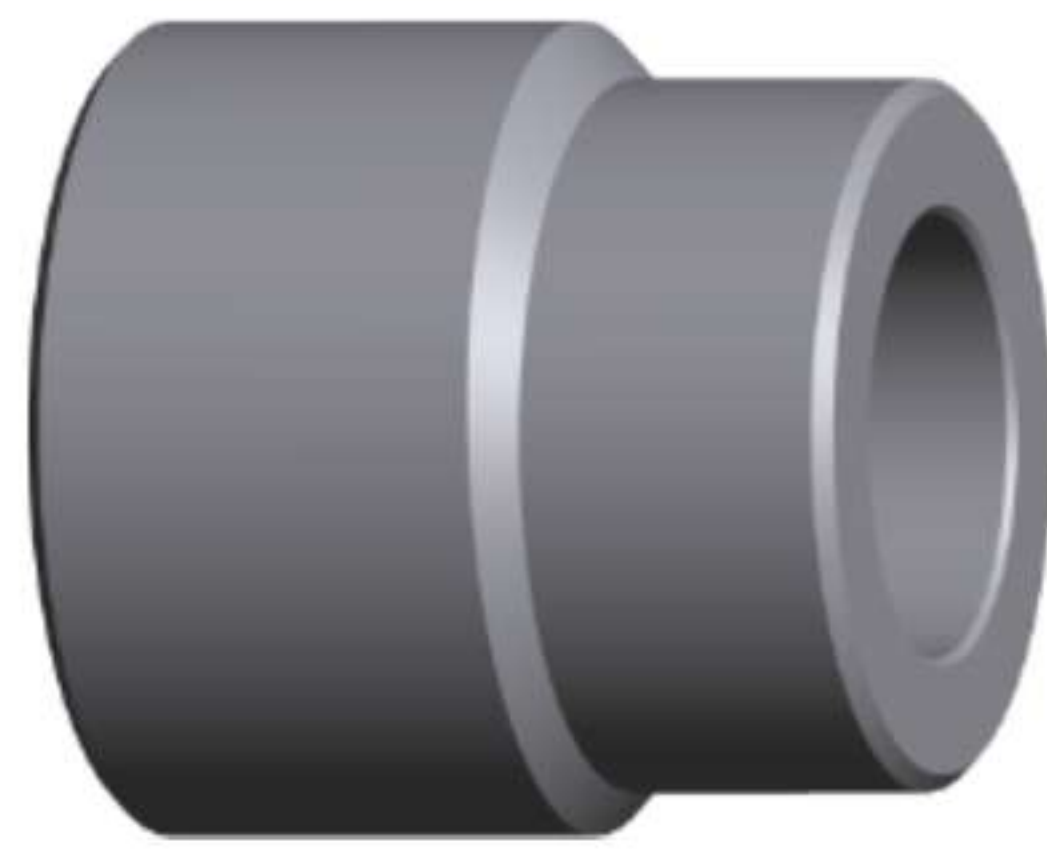
ASME B16.11

Creative Piping Solutions



Sizes marked with * are not covered by ASME B16.11

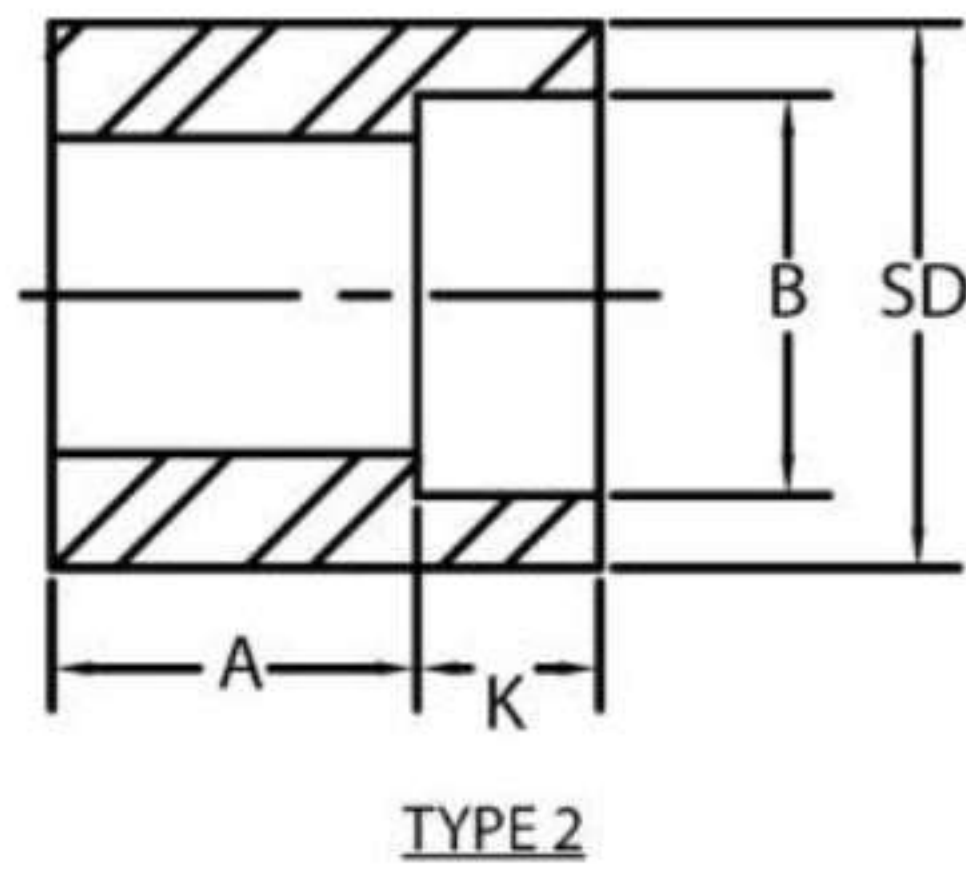
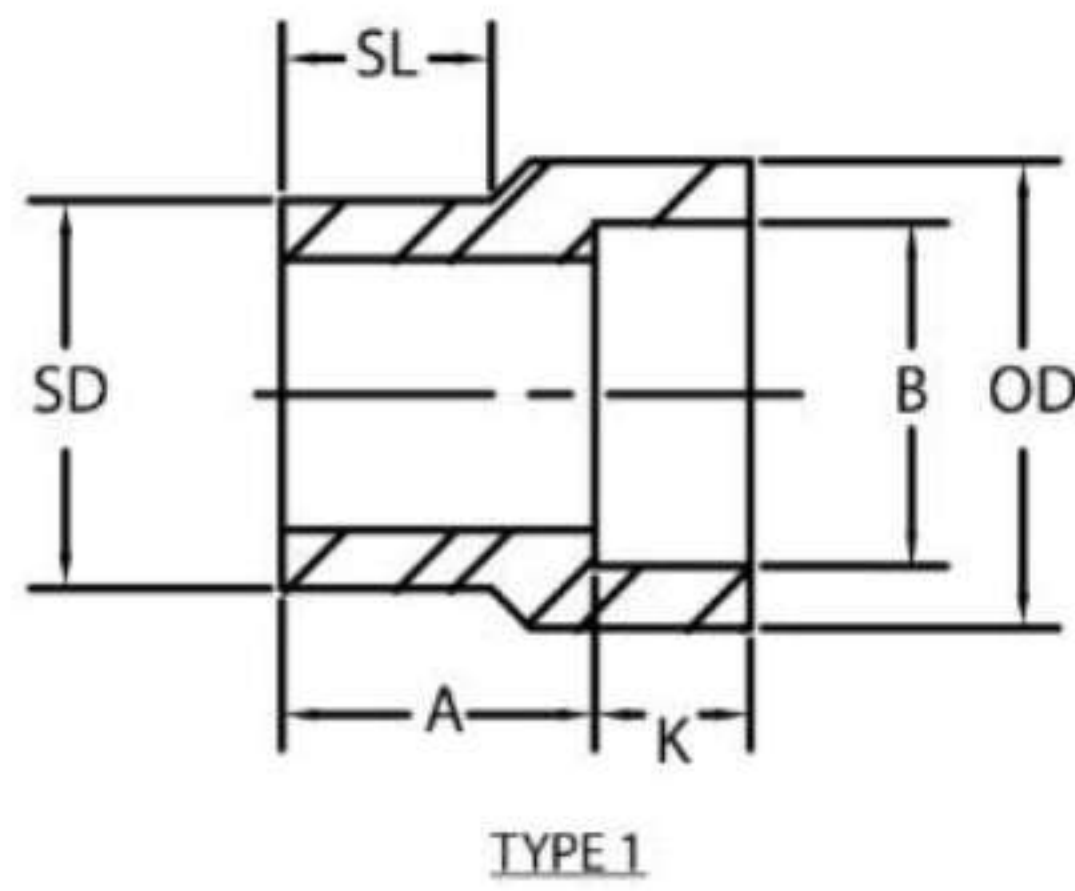
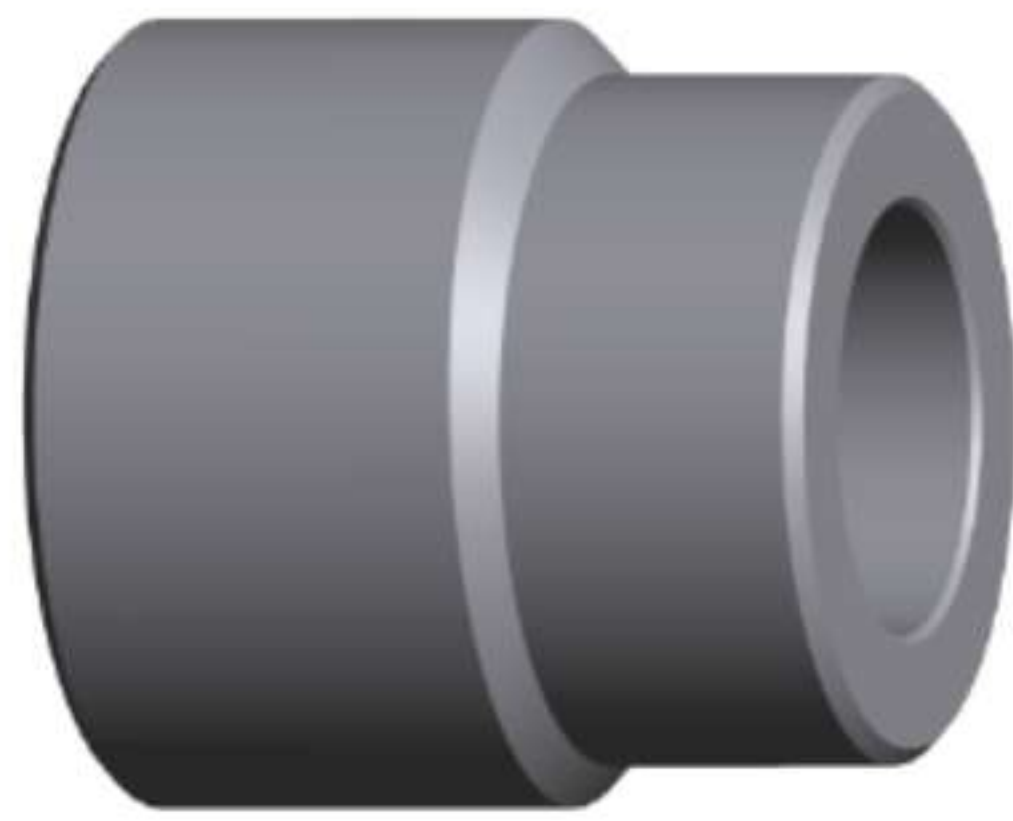
Pipe Size	A	B	C1	C2	D1	D2	E	Wt. Ea.
1/4 X 1/8 *	1.025	1.250	.555/.575	.420/.430	0.395	0.395	0.250	0.45
3/8 X 1/8 *	1.025	1.375	.690/.710	.420/.430	0.395	0.395	0.250	0.55
3/8 X 1/4 *				.555/.575				
1/2 X 1/8	1.025	1.688	.855/.875	.420/.430	0.395	0.395	0.380	0.64
1/2 X 1/4				.555/.575				
1/2 X 3/8				.690/.710				
3/4 X 1/8	1.335	2.000	1.065/1.085	.420/.430	0.515	0.515	0.380	1.30
3/4 X 1/4				.555/.575				
3/4 X 3/8				.690/.710				
3/4 X 1/2				.855/.875				
1 X 1/8	1.415	2.500	1.330/1.350	.420/.430	0.515	0.515	0.500	1.95
1 X 1/4				.555/.575				
1 X 3/8				.690/.710				
1 X 1/2				.855/.875				
1 X 3/4				1.065/1.085				
1-1/4 X 1/8	1.415	2.750	1.675/1.695	.420/.430	0.515	0.515	0.500	1.81
1-1/4 X 1/4				.555/.575				
1-1/4 X 3/8				.690/.710				
1-1/4 X 1/2				.855/.875				
1-1/4 X 3/4				1.065/1.085				
1-1/4 X 1				1.330/1.350				
1-1/2 X 1/8	1.415	3.000	1.915/1.935	.420/.430	0.515	0.515	0.500	2.30
1-1/2 X 1/4				.555/.575				
1-1/2 X 3/8				.690/.710				
1-1/2 X 1/2				.855/.875				
1-1/2 X 3/4				1.065/1.085				
1-1/2 X 1				1.330/1.350				
1-1/2 X 1-1/4				1.675/1.695				
2 X 1/8	1.905	3.625	2.406/2.426	.420/.430	0.635	0.635	0.750	3.81
2 X 1/4				.555/.575				
2 X 3/8				.690/.710				
2 X 1/2				.855/.875				
2 X 3/4				1.065/1.085				
2 X 1				1.330/1.350				
2 X 1-1/4				1.675/1.695				
2 X 1-1/2				1.915/1.935				
2-1/2 X 1/8 *	1.865	4.312	2.906/2.931	.420/.430	0.635	0.635	0.750	4.10
2-1/2 X 1/4 *				.555/.575				
2-1/2 X 3/8 *				.690/.710				
2-1/2 X 1/2 *				.855/.875				
2-1/2 X 3/4 *				1.065/1.085				
2-1/2 X 1 *				1.330/1.350				
2-1/2 X 1-1/4 *				1.675/1.695				
2-1/2 X 1-1/2 *				1.915/1.935				
2-1/2 X 2 *				2.406/2.426				



Sizes marked with * not covered by MSS SP-79

Pipe Size	Type	K	A	SD	B	OD	SL	Wt. Ea.		
1/4 x 1/8 *	1	0.380	0.750	0.540	0.430	0.750	0.560	0.40		
3/8 x 1/4	1	0.380	0.750	0.675	0.565	0.875	0.560	0.07		
3/8 x 1/8 *	1		0.750		0.430	0.875	0.560	0.07		
1/2 x 3/8	1	0.380	0.810	0.840	0.700	1.062	0.620	0.20		
1/2 x 1/4	1		0.810		0.565	0.875	0.620	0.13		
1/2 x 1/8 *	2	0.380	0.810	1.050	0.430	---	---	0.15		
3/4 x 1/2	1		0.880		0.865	1.250	0.690	0.25		
3/4 x 3/8	2		0.620		0.700	---	---	0.18		
3/4 x 1/4	2		0.690		0.565	---	---	0.20		
3/4 x 1/8 *	2	0.500	0.690	1.315	0.430	---	---	0.22		
1 x 3/4	1		0.940		1.075	1.500	0.750	0.35		
1 x 1/2	2		0.620		0.865	---	---	0.36		
1 x 3/8	2		0.690		0.700	---	---	0.40		
1 x 1/4	2		0.750		0.565	---	---	0.44		
1 x 1/8 *	2		0.750		0.430	---	---	0.48		
1-1/4 x 1	1	0.500	1.000	1.660	1.340	1.875	0.810	0.65		
1-1/4 x 3/4	2		0.690		1.075	---	---	0.62		
1-1/4 x 1/2	2	0.380	0.750	1.900	0.865	---	---	0.65		
1-1/4 x 3/8	2		0.810		0.700	---	---	0.68		
1-1/4 x 1/4	2		0.880		0.565	---	---	0.72		
1-1/4 x 1/8 *	2		0.880		0.430	---	---	---		
1-1/2 x 1-1/4	1	0.500	1.120	2.375	1.685	2.188	0.880	0.75		
1-1/2 x 1	2		0.690		1.340	---	---	0.75		
1-1/2 x 3/4	2	0.380	0.750	2.875	1.075	---	---	0.83		
1-1/2 x 1/2	2		0.810		0.865	---	---	0.90		
1-1/2 x 3/8	2		0.880		0.700	---	---	0.95		
1-1/2 x 1/4 *	2		0.880		0.565	---	---	0.95		
1-1/2 x 1/8 *	2		0.880		0.430	---	---	0.95		
2 x 1-1/2	1		0.500		1.250	3.500	1.925	2.500	1.000	0.93
2 x 1-1/4	2	0.810		1.685	---		---	1.30		
2 x 1	2	0.380	0.880	4.500	1.340	---	---	1.40		
2 x 3/4	2		0.940		1.075	---	---	1.52		
2 x 1/2	2		1.000		0.865	---	---	1.59		
2 x 3/8 *	2		1.000		0.700	---	---	1.69		
2 x 1/4 *	2		1.000		0.565	---	---	1.80		
2 x 1/8 *	2		1.000		0.430	---	---	1.90		
2-1/2 x 2	1	0.620	1.810	2.875	2.416	3.000	1.500	1.60		
2-1/2 x 1-1/2	2	0.500	1.380		3.500	1.925	---	---	1.70	
2-1/2 x 1-1/4	2		1.440			1.685	---	---	1.80	
2-1/2 x 1	2		1.500			1.340	---	---	1.90	
2-1/2 x 3/4	2		1.560			1.075	---	---	2.00	
2-1/2 x 1/2 *	2		1.560			0.865	---	---	2.10	
2-1/2 x 3/8 *	2		1.560			0.700	---	---	2.10	
2-1/2 x 1/4 *	2		1.560			0.565	---	---	---	
2-1/2 x 1/8 *	2		1.560			0.430	---	---	---	
3 x 2-1/2	1		0.620			1.500	4.500	2.916	3.625	1.250
3 x 2	2			1.000		2.416		---	---	3.40
3 x 1-1/2	2	0.500	1.120	5.500	1.925	---	---	3.00		
3 x 1-1/4	2		1.190		1.685	---	---	2.60		
3 x 1	2		1.250		1.340	---	---	2.30		
3 x 3/4 *	2		1.250		1.075	---	---	2.20		
3 x 1/2 *	2		1.250		0.865	---	---	2.40		
3 x 3/8 *	2		1.250		0.700	---	---	---		
3 x 1/4 *	2		1.250		0.565	---	---	---		
3 x 1/8 *	2		1.250		0.430	---	---	---		
4 x 3	2		0.620		1.310	6.500	3.545	---	---	6.25
4 x 2-1/2	2				1.500		2.916	---	---	6.50
4 x 2	2	0.500	1.500	7.500	2.416	---	---	6.80		
4 x 1-1/2	2		1.620		1.925	---	---	7.00		
4 x 1-1/4	2		1.690		1.685	---	---	7.20		
4 x 1 *	2		1.690		1.340	---	---	7.40		
4 x 3/4 *	2		1.690		1.075	---	---	---		
4 x 1/2 *	2		1.690		0.865	---	---	---		
4 x 3/8 *	2		1.690		0.700	---	---	---		
4 x 1/4 *	2		1.690		0.565	---	---	---		
4 x 1/8 *	2		1.690		0.430	---	---	---		

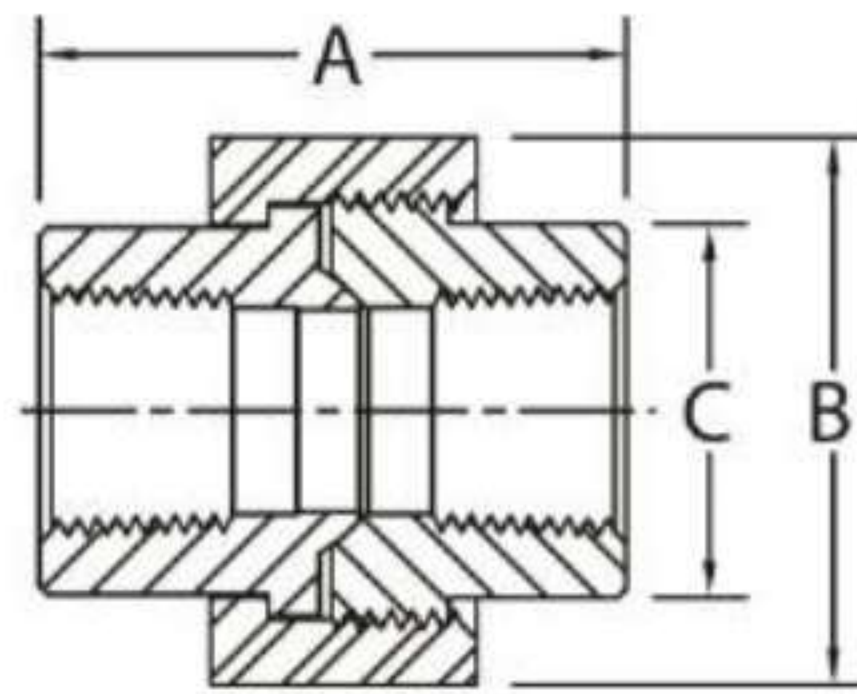
For Use With Schedule 40 or 80 Pipe



Sizes marked with * not covered by MSS SP-79

Pipe Size	Type	K	A	SD	B	OD	SL	Wt. Ea.
1/2 x 3/8	1	0.380	0.910	0.840	0.700	1.125	0.620	0.18
1/2 x 1/4	1		0.810		0.565	1.000	0.620	---
3/4 x 1/2	1	0.380	1.000	1.050	0.865	1.375	0.750	0.20
3/4 x 3/8	1		0.880		0.700	1.125	0.750	0.23
3/4 x 1/4	2		0.880		0.565	---	---	0.25
1 x 3/4	1	0.500	0.120	1.315	1.075	1.750	0.810	0.42
1 x 1/2	1	0.380	1.120		0.865	1.375	0.810	0.45
1 x 3/8	2		0.880		0.700	---	---	0.50
1 x 1/4	2		0.940		0.565	---	---	0.50
1-1/4 x 1	1	0.500	1.190	1.660	1.340	2.000	0.880	0.95
1-1/4 x 3/4	2		0.810		1.075	---	---	0.95
1-1/4 x 1/2	2	0.380	0.880		0.865	---	---	0.95
1-1/4 x 3/8	2		0.940		0.700	---	---	---
1-1/4 x 1/4	2		1.000	0.565	---	---	---	
1-1/2 x 1-1/4	1	0.500	1.380	1.900	1.685	2.500	1.000	0.95
1-1/2 x 1	2		1.150		1.340	---	---	1.12
1-1/2 x 3/4	2	0.380	1.000		1.075	---	---	1.05
1-1/2 x 1/2	2		1.060		0.865	---	---	1.12
1-1/2 x 3/8	2		1.120	0.700	---	---	---	
1-1/2 x 1/4 *	2		1.120	0.565	---	---	1.12	
2 x 1-1/2	1	0.500	1.530	2.375	1.900	2.750	1.130	1.70
2 x 1-1/4	2		0.940		1.685	---	---	1.80
2 x 1	2		1.000		1.340	---	---	1.90
2 x 3/4	2		1.060		1.075	---	---	2.00
2 x 1/2	2	0.380	1.120	0.865	---	---	2.10	
2 x 3/8 *	1		1.560	0.700	2.500	1.562	---	
2 x 1/4 *	1		1.810	0.565	2.500	1.562	---	

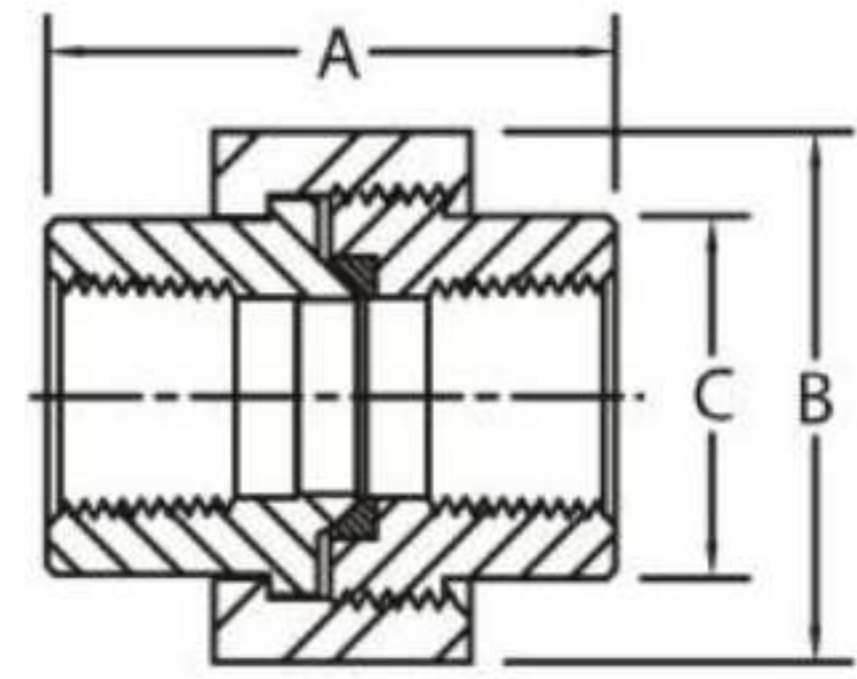
For Use With Schedule 160 Pipe



Threaded, X-Series

AAR M-404-42, MSS SP-83, ASME B1.20.1

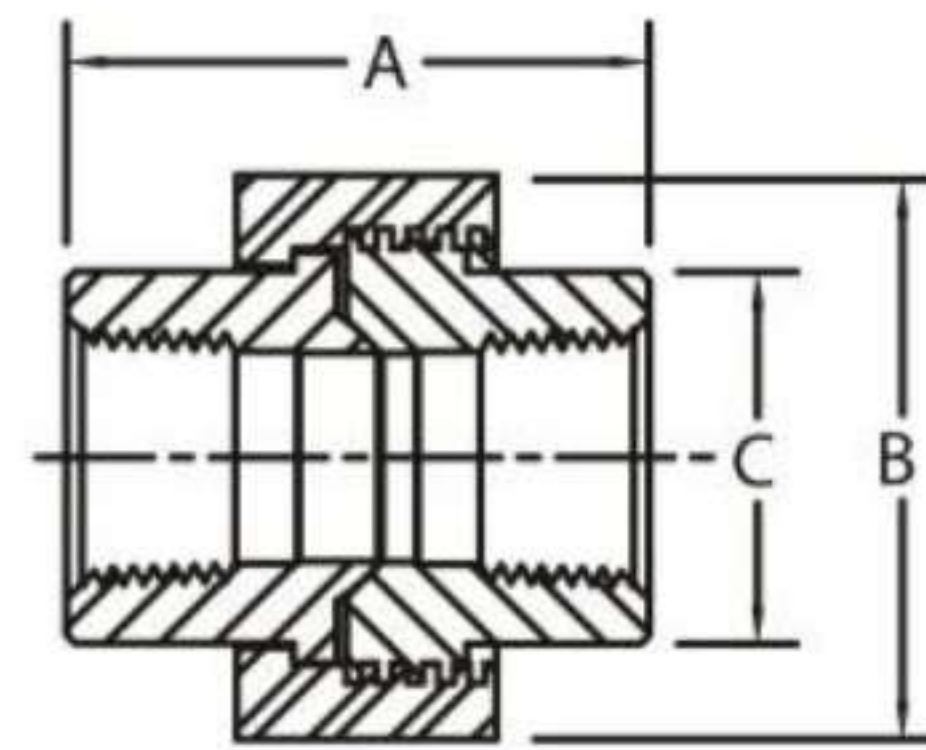
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A	1.630	1.630	1.810	1.930	2.240	2.440	2.800	3.010	3.390	4.030	4.290
B	1.375	1.375	1.594	1.812	2.187	2.546	3.046	3.406	4.062	4.828	5.687
C	0.859	0.859	1.015	1.234	1.468	1.797	2.172	2.468	3.032	3.640	4.390
Wt. Ea.	0.34	0.34	0.49	0.68	1.19	1.68	2.54	3.33	5.30	8.60	12.70



Brass Seat, X-Series

ASTM A-105, AAR M-404-42 (where applicable), MSS SP-83 (where applicable), ASME B1.20.1

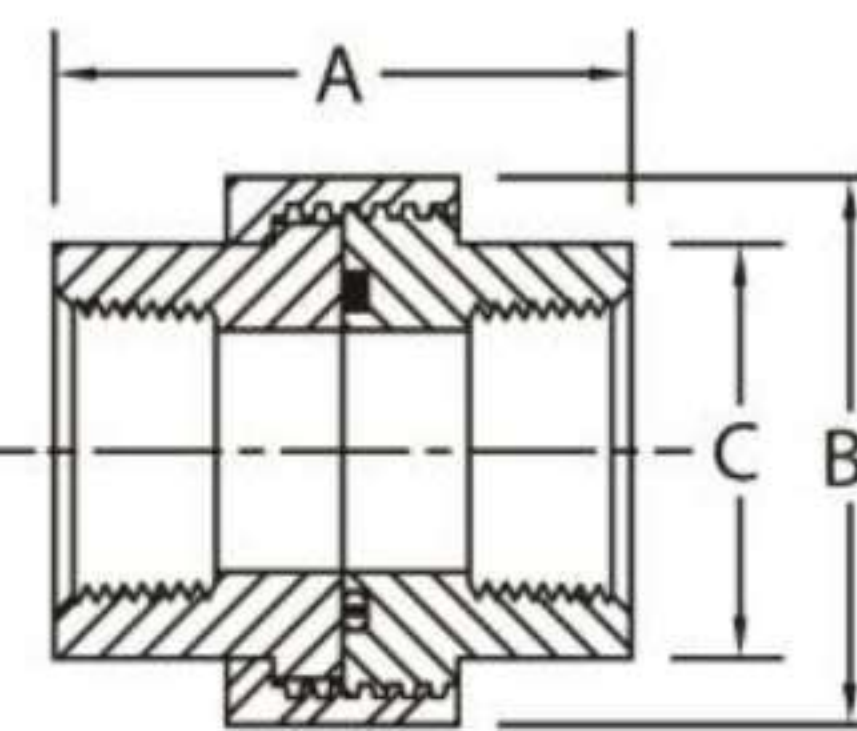
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A		1.690	1.850	1.960	2.280	2.490	2.820	3.050	3.450		
B		1.375	1.594	1.812	2.187	2.546	3.046	3.406	4.062		
C		0.859	1.015	1.234	1.468	1.797	2.172	2.468	3.032		
Wt. Ea.		0.34	0.49	0.68	1.19	1.68	2.54	3.33	5.30		



High Speed, Acme Threads, Threaded, X-Series

ASTM A-105, AAR M-404-42 (where applicable), MSS SP-83 (where applicable), ASME B1.20.1

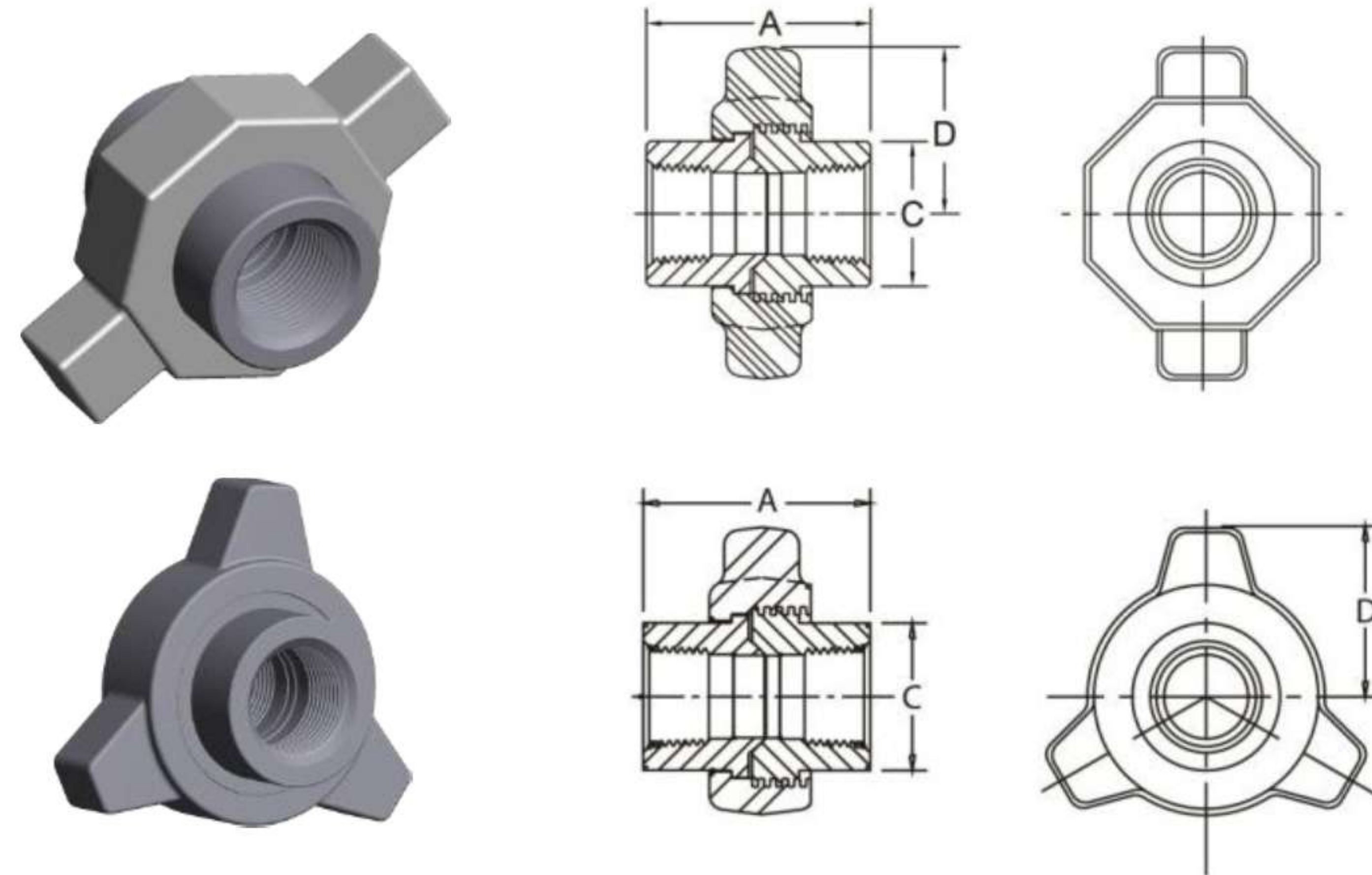
Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A				1.995	2.312	2.504	2.828	3.073	3.520	4.122	4.313
B				1.812	2.187	2.546	3.046	3.406	4.062	4.828	5.640
C				1.234	1.468	1.797	2.172	2.468	3.032	3.656	4.390
Wt. Ea.				0.68	1.45	1.68	2.54	3.33	5.30	8.60	12.70



High Speed, Acme Threads, O-Ring, Threaded, X-Series

ASTM A-105, AAR M-404-42 (where applicable), MSS SP-83 (where applicable), ASME B1.20.1

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A				1.995	2.312	2.504	2.828	3.073	3.520	4.122	4.313
B				1.812	2.187	2.546	3.046	3.406	4.062	4.828	5.640
C				1.234	1.468	1.797	2.172	2.468	3.032	3.656	4.390
Wt. Ea.				0.68	1.45	1.68	2.54	3.33	5.30	8.60	12.70

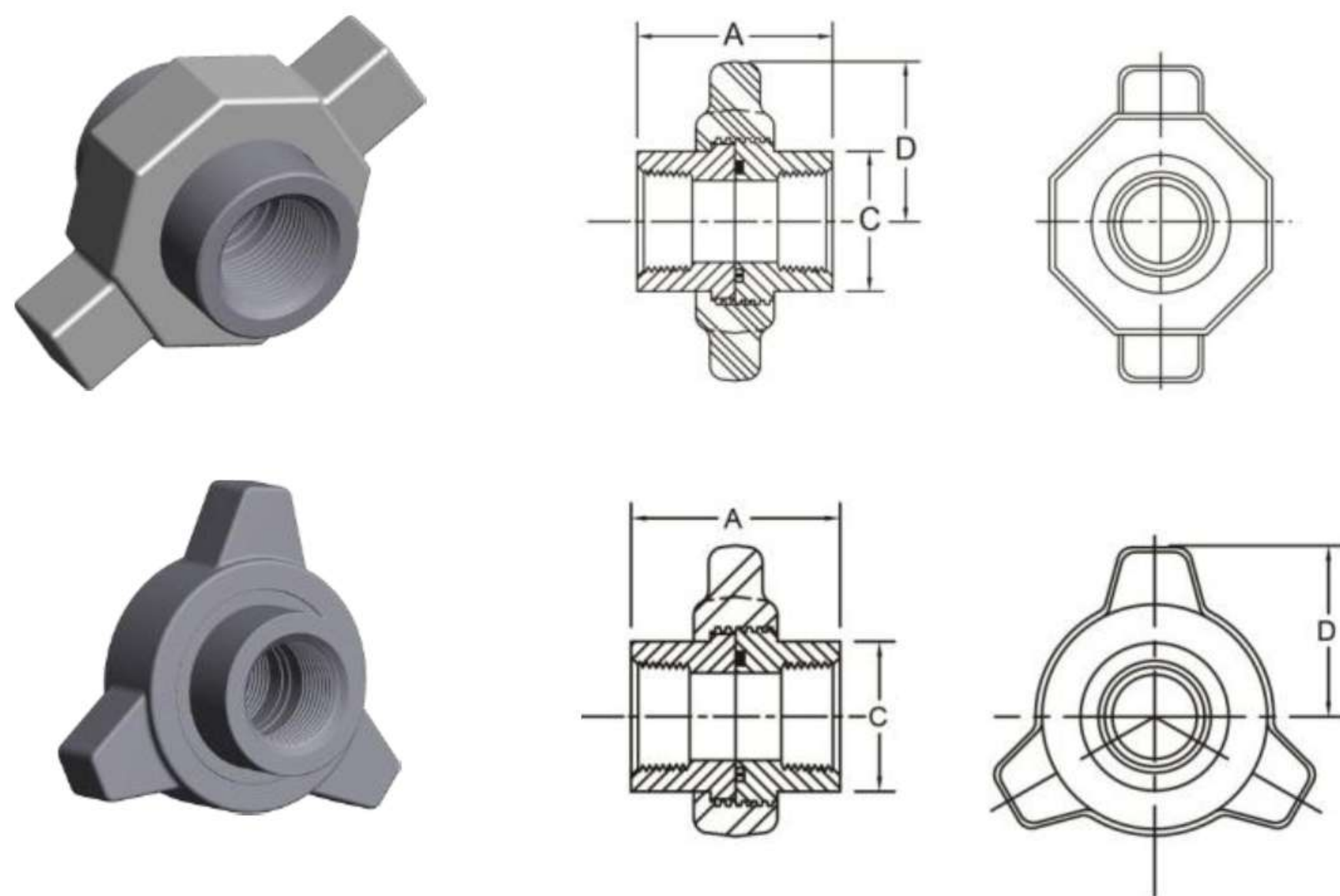


Lug, Threaded, X-Series

MSS SP-83 (where applicable), ASME B1.20.1

Pipe Size	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A	1.995	1.995	1.995	2.312	2.504	2.828	3.073	3.463	4.122	4.313
C	1.234	1.234	1.234	1.468	1.797	2.172	2.468	3.032	3.656	4.390
D 2 Lug	N/A	N/A	1.545	1.862	2.172	2.468	2.937	3.422	3.906	4.500
D 3 Lug	1.410	1.410	1.410	1.681	2.188	2.273	2.522	2.959	3.396	4.072
Wt. Ea.	0.83	0.83	0.83	1.41	1.97	3.25	3.90	6.50	10.63	14.60

Available in 2 Lug and 3 Lug Unions

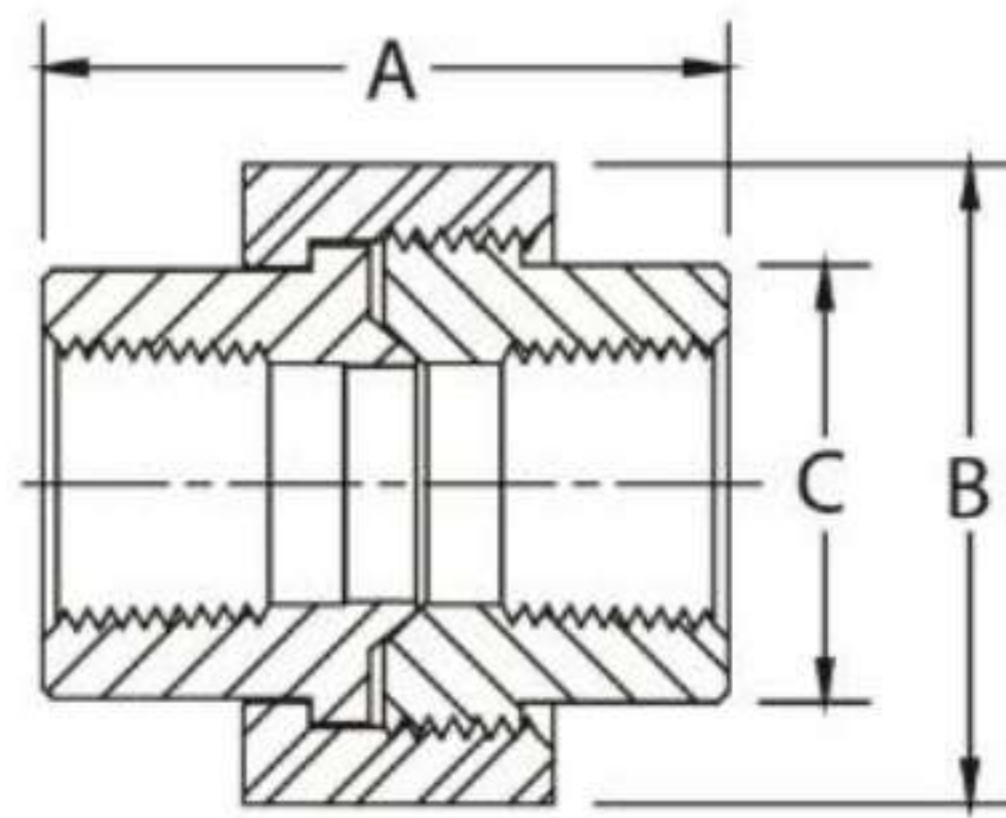


Lug, O-Ring, Threaded, X-Series

MSS SP-83 (where applicable), ASME B1.20.1

Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A	1.995	2.312	2.504	2.828	3.073	3.463	4.122	4.313
C	1.234	1.468	1.797	2.172	2.468	3.032	3.656	4.390
D 2 Lug	1.545	1.862	2.172	2.468	2.937	3.422	3.906	4.500
D 3 Lug	1.410	1.681	2.188	2.273	2.522	2.959	3.396	4.072
Wt. Ea.	0.83	1.41	1.97	3.25	3.90	6.50	10.63	14.60

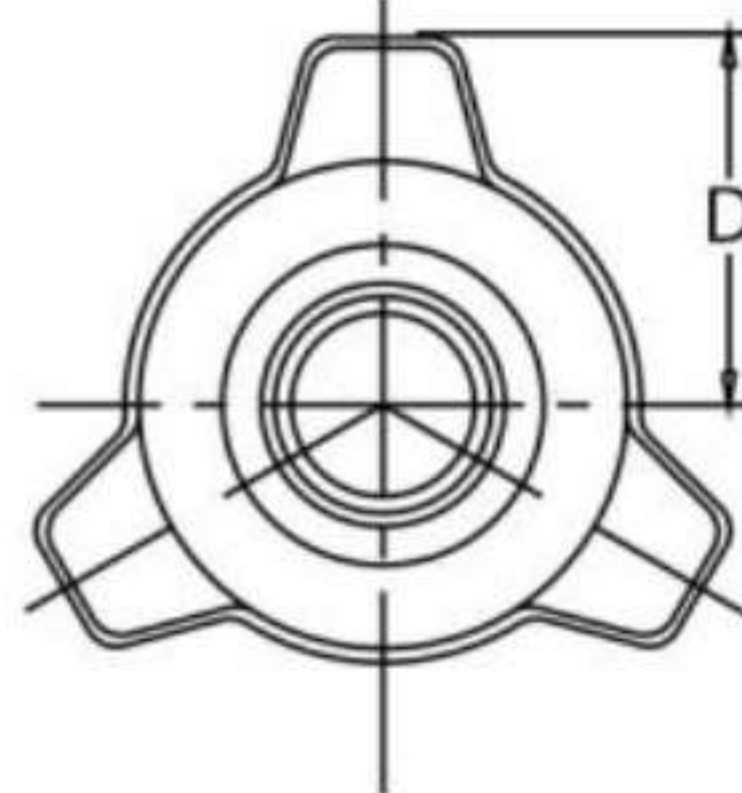
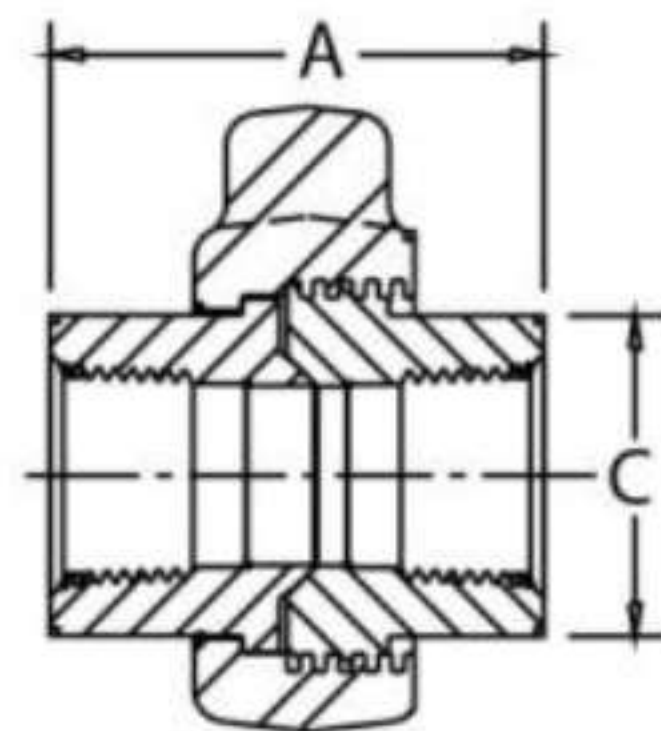
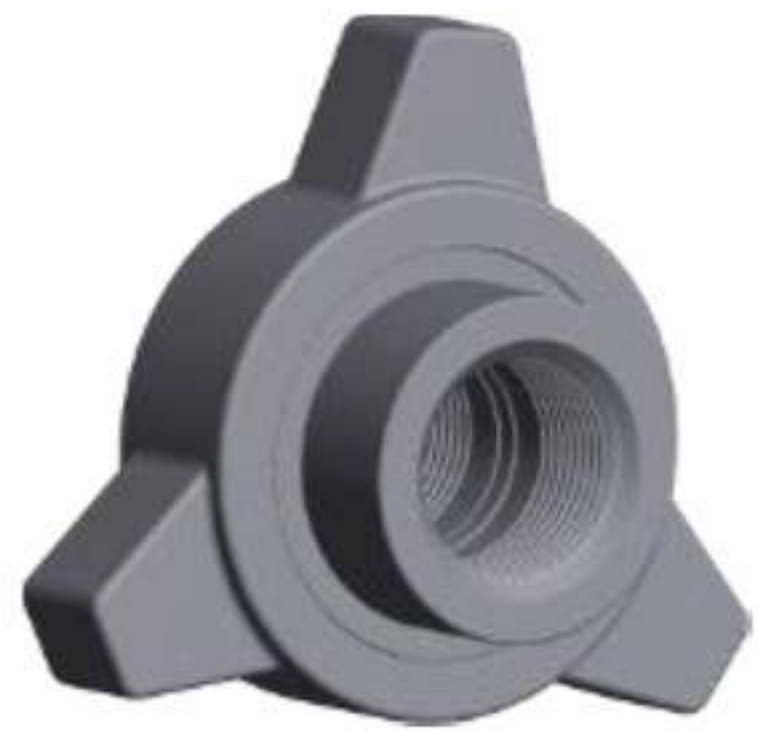
Available in 2 Lug and 3 Lug Unions



Threaded, X-Series

MSS SP-83, ASME B1.20.1

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
A	1.692	1.875	2.000	2.312	2.500	2.875	3.031	3.500	4.090
B	1.375	1.582	1.812	2.186	2.546	3.043	3.393	4.053	4.821
C	0.865	1.024	1.253	1.475	1.800	2.175	2.470	3.032	3.655
Wt. Ea.	0.36	0.55	0.75	1.36	2.00	3.10	5.85	6.55	10.50



Lug, Threaded, X-Series

MSS SP-83 (where applicable), ASME B1.20.1

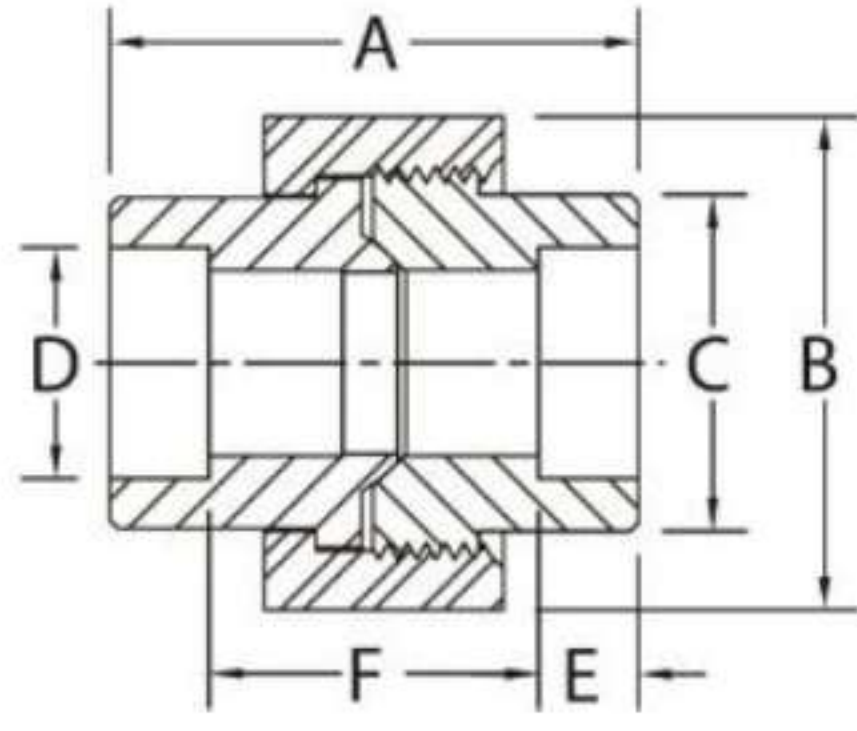
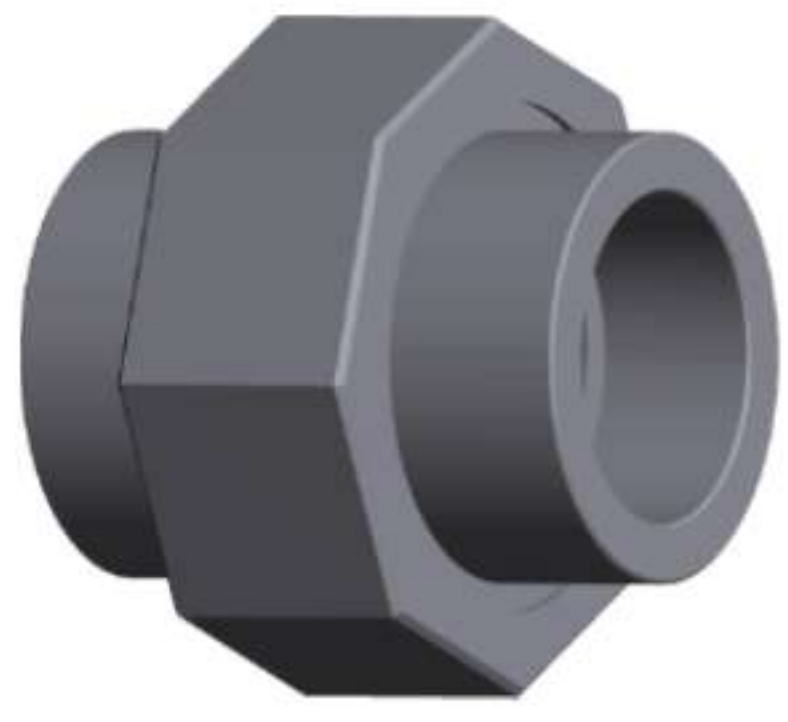
Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2
A	2.317	2.507	2.873	3.030	3.529	4.089
C	1.485	1.810	2.195	2.485	3.032	3.660
D	1.681	2.188	2.273	2.522	2.959	3.396
Wt. Ea.	1.66	2.44	3.78	4.00	7.99	12.81



Class 3000 Forged Steel Socket Weld Unions X-Series Creative Piping Solutions

Socket Welding, X-Series

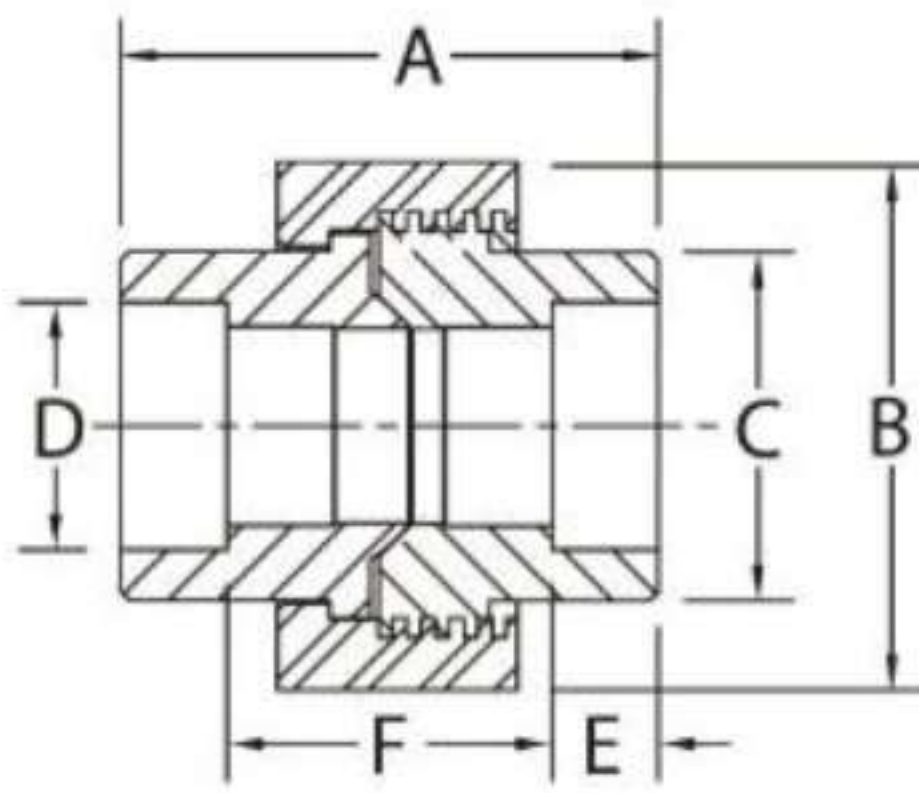
AAR M-404-42, MSS SP-83



Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A	1.630	1.630	1.810	1.930	2.240	2.440	2.800	3.010	3.390	4.030	4.290
B	1.375	1.375	1.582	1.812	2.186	2.546	3.100	3.393	4.090	4.821	5.671
C	0.863	0.863	1.021	1.230	1.465	1.790	2.160	2.455	3.025	3.650	4.390
D	.420/ .440	.555/ .575	.690/ .710	.855/ .875	1.065/ 1.085	1.330/ 1.350	1.675/ 1.695	1.915/ 1.935	2.406/ 2.426	2.906/ 2.931	3.535/ 3.560
E	0.380	0.380	0.380	0.380	0.500	0.500	0.500	0.500	0.620	0.620	0.620
F	.75/ .88	.75/ .88	.81/ 1.06	.81/ 1.06	1.00/ 1.25	1.03/ 1.35	1.28/ 1.60	1.34/ 1.66	1.47/ 1.79	2.05/ 1.43	2.11/ 2.51
Wt. Ea.	0.34	0.34	0.49	0.68	1.19	1.68	2.54	2.33	5.30	8.60	12.70

High Speed Acme Threads, Socket Welding, X-Series

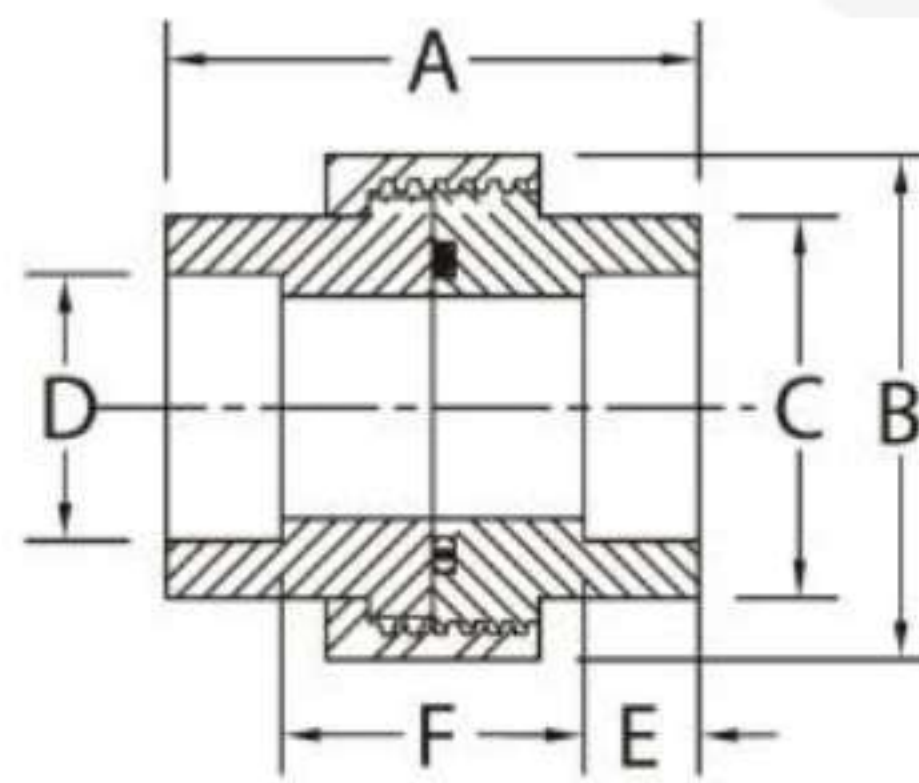
AAR M-404-42 (where applicable), MSS SP-83 (where applicable)



Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A				1.995	2.312	2.504	2.828	3.073	3.520	4.122	4.313
B				1.812	2.187	2.546	3.046	3.406	4.062	4.828	5.640
C				1.234	1.468	1.797	2.172	2.468	3.032	3.656	4.390
D				.855/ .875	1.065/ 1.085	1.330/ 1.350	1.675/ 1.695	1.915/ 1.935	2.406/ 2.426	2.906/ 2.931	3.535/ 3.560
E				0.380	0.500	0.500	0.500	0.500	0.620	0.620	0.620
F				.81/ 1.06	1.00/ 1.25	1.03/ 1.35	1.28/ 1.60	1.34/ 1.66	1.47/ 1.79	2.05/ 1.43	2.11/ 2.51
Wt. Ea.				0.68	1.19	1.68	2.54	3.33	5.30	8.60	12.70

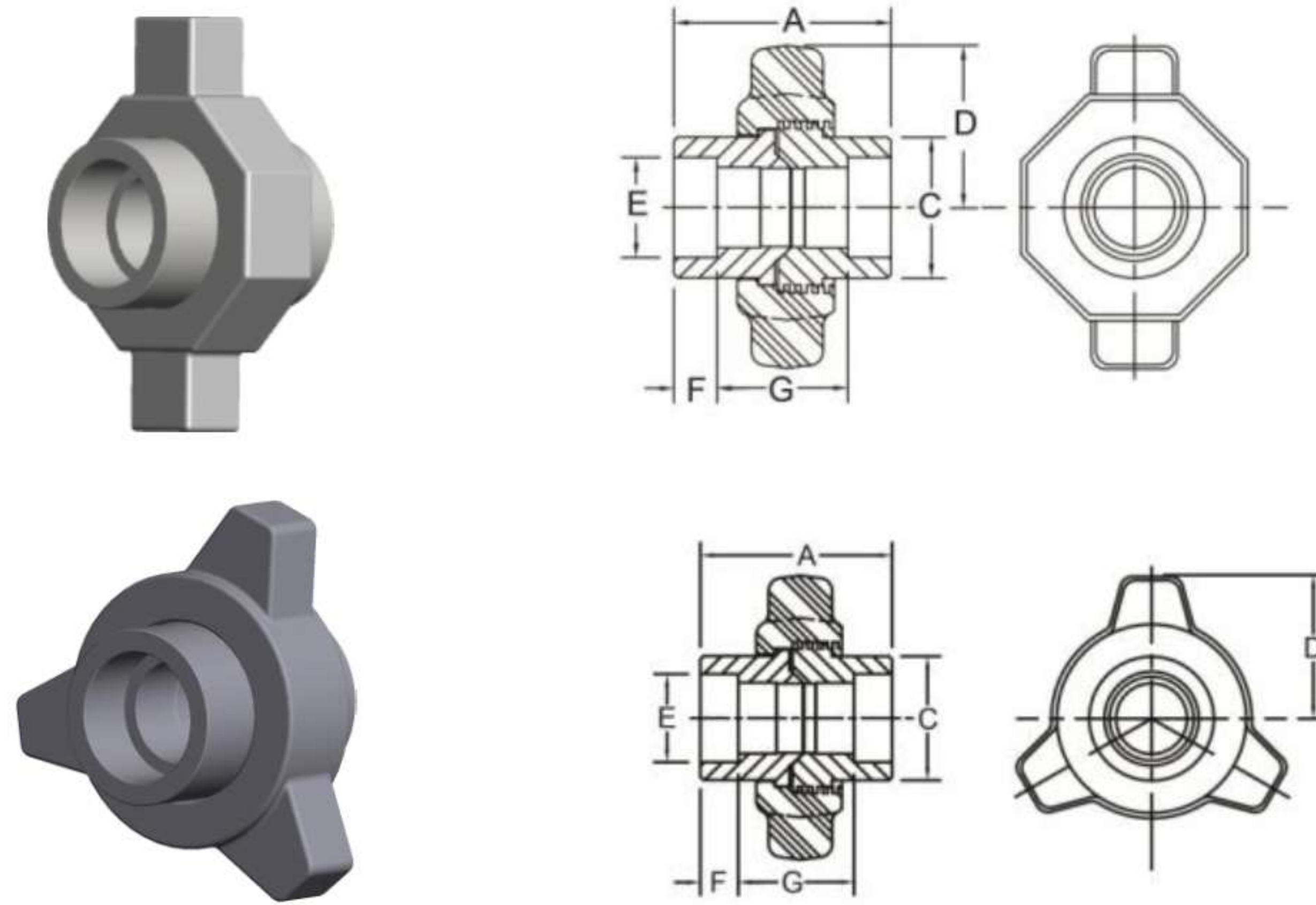
High Speed Acme Threads, O-Ring, Socket Welding, X-Series

AAR M-404-42 (where applicable), MSS SP-83 (where applicable)



Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A				1.995	2.312	2.504	2.828	3.073	3.520	4.122	4.313
B				1.812	2.187	2.546	3.046	3.406	4.062	4.828	5.640
C				1.234	1.468	1.797	2.172	2.468	3.032	3.656	4.390
D				.855/ .875	1.065/ 1.085	1.330/ 1.350	1.675/ 1.695	1.915/ 1.935	2.406/ 2.426	2.906/ 2.931	3.535/ 3.560
E				0.380	0.500	0.500	0.500	0.500	0.620	0.620	0.620
F				.887/ .981	1.074/ 1.168	1.145/ 1.244	1.369/ 1.468	1.483/ 1.585	1.616/ 1.715	2.232/ 2.346	2.272/ 2.388
Wt. Ea.				0.68	1.19	1.68	2.54	3.33	5.30	8.60	12.70

Class 3000 Forged Steel Socket Weld Unions X-Series Creative Piping Solutions

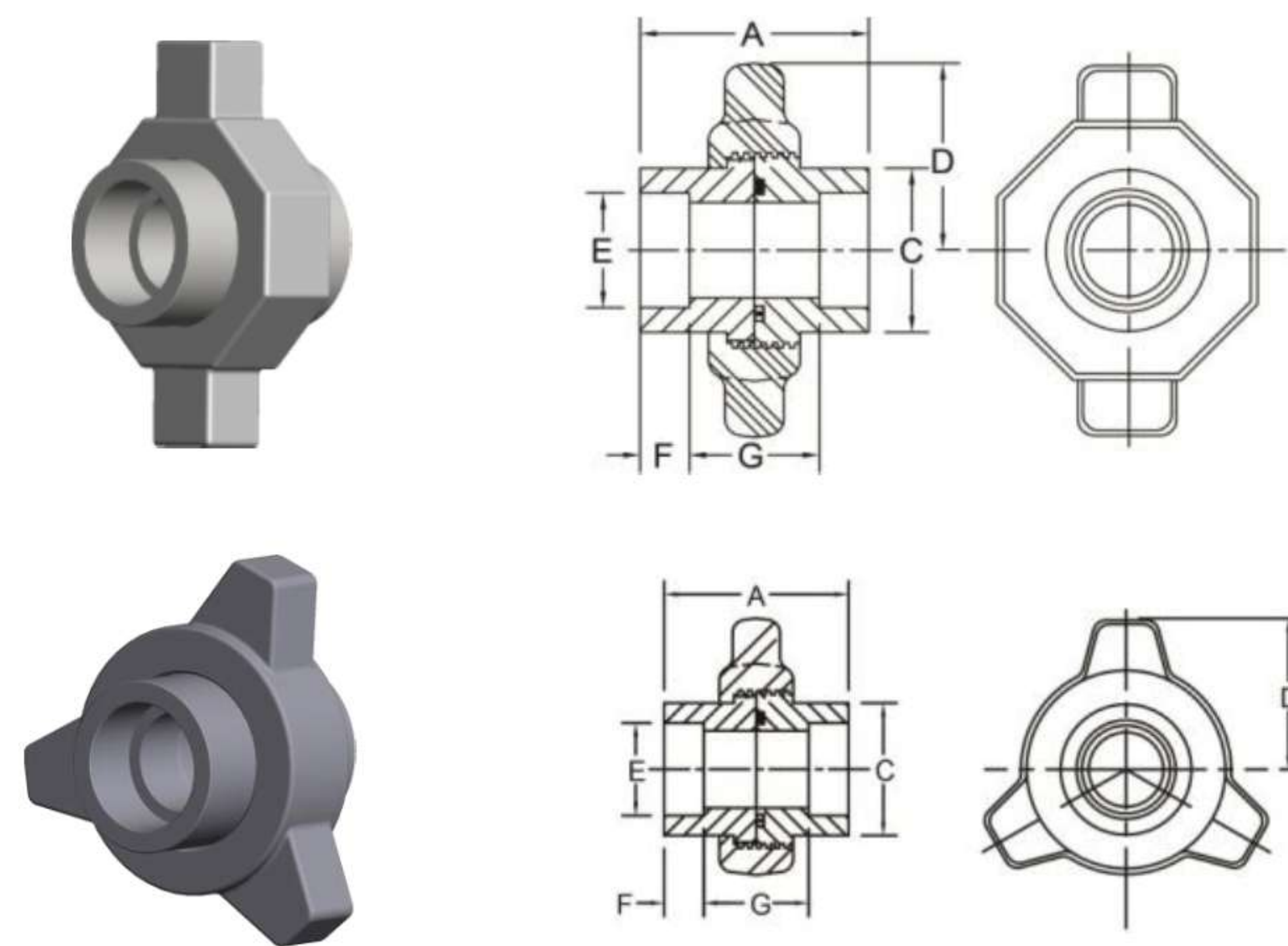


Lug, Socket Welding, X-Series

MSS SP-83 (where applicable)

Available in 2 Lug and 3 Lug styles

Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A	1.995	2.312	2.504	2.828	3.073	3.463	4.122	4.313
C	1.234	1.468	1.797	2.172	2.468	3.032	3.656	4.390
D 2 Lug	1.545	1.862	2.172	2.468	2.937	3.422	3.906	4.500
D 3 Lug	1.410	1.681	2.188	2.273	2.522	2.959	3.396	4.072
E	.855/.875	1.065/1.085	1.330/1.350	1.675/1.695	1.915/1.935	2.406/2.426	2.906/2.931	3.535/3.560
F	0.380	0.500	0.500	0.500	0.500	0.620	0.620	0.620
G	1.06/.81	1.25/1.00	1.35/1.03	1.60/1.28	1.66/1.34	1.79/1.47	2.43/2.05	2.51/2.11
Wt. Ea.	0.83	1.41	1.97	3.25	3.90	6.50	10.63	14.60



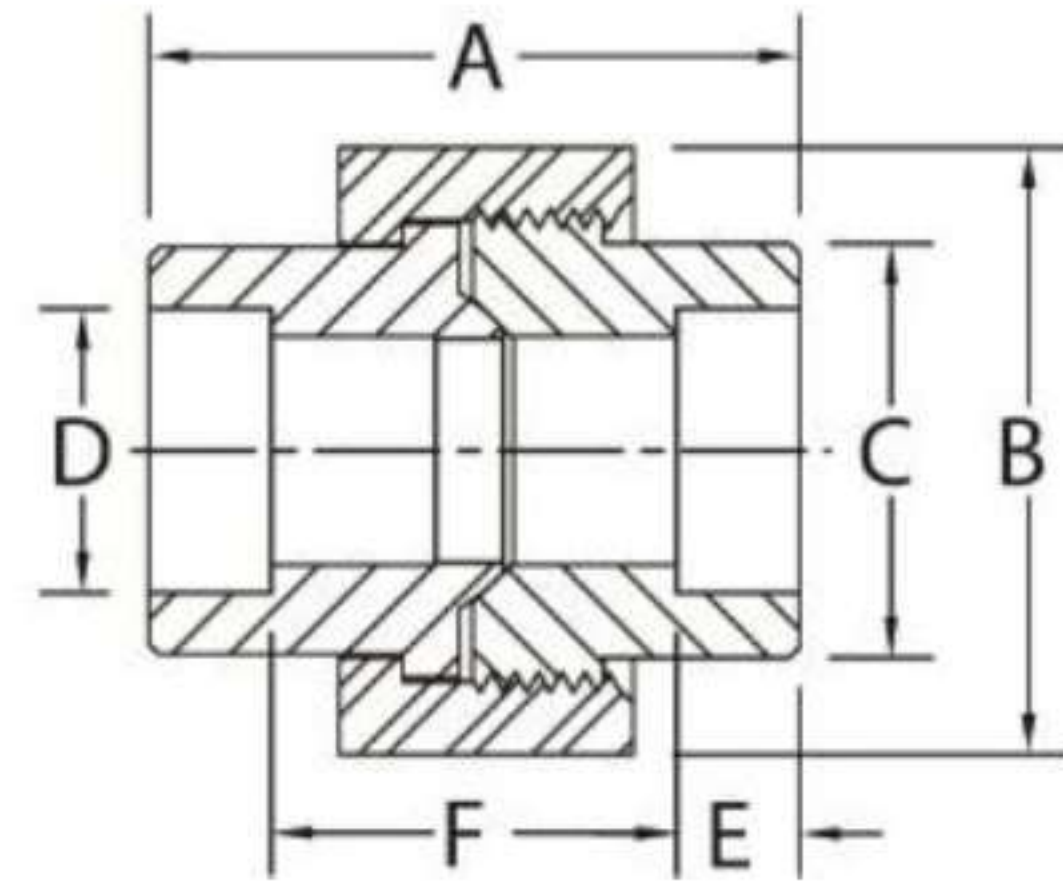
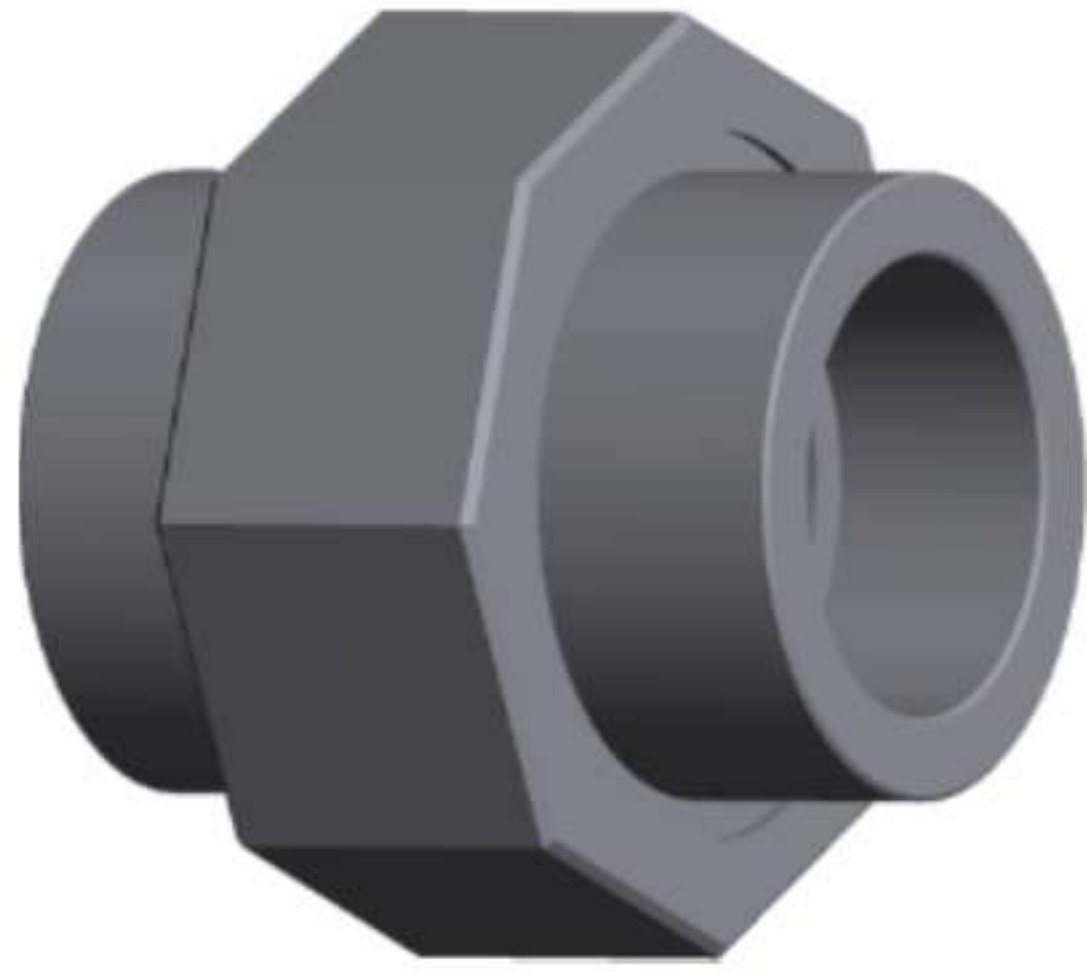
Lug, O-Ring, Socket Welding, X-Series

MSS SP-83 (where applicable)

Available in 2 Lug and 3 Lug styles

Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
A	1.995	2.312	2.504	2.828	3.073	3.463	4.122	4.313
C	1.234	1.468	1.797	2.172	2.468	3.032	3.656	4.390
D 2 Lug	1.545	1.862	2.172	2.468	2.937	3.422	3.906	4.500
D 3 Lug	1.410	1.681	2.188	2.273	2.522	2.959	3.396	4.072
E	.855/.875	1.065/1.085	1.330/1.350	1.675/1.695	1.915/1.935	2.406/2.426	2.906/2.931	3.535/3.560
F	0.380	0.500	0.500	0.500	0.500	0.620	0.620	0.620
G	.981/.887	1.168/1.074	1.244/1.145	1.468/1.369	1.585/1.483	1.715/1.616	2.346/2.232	2.388/2.272
Wt. Ea.	0.83	1.41	1.97	3.25	3.90	6.50	10.63	14.60

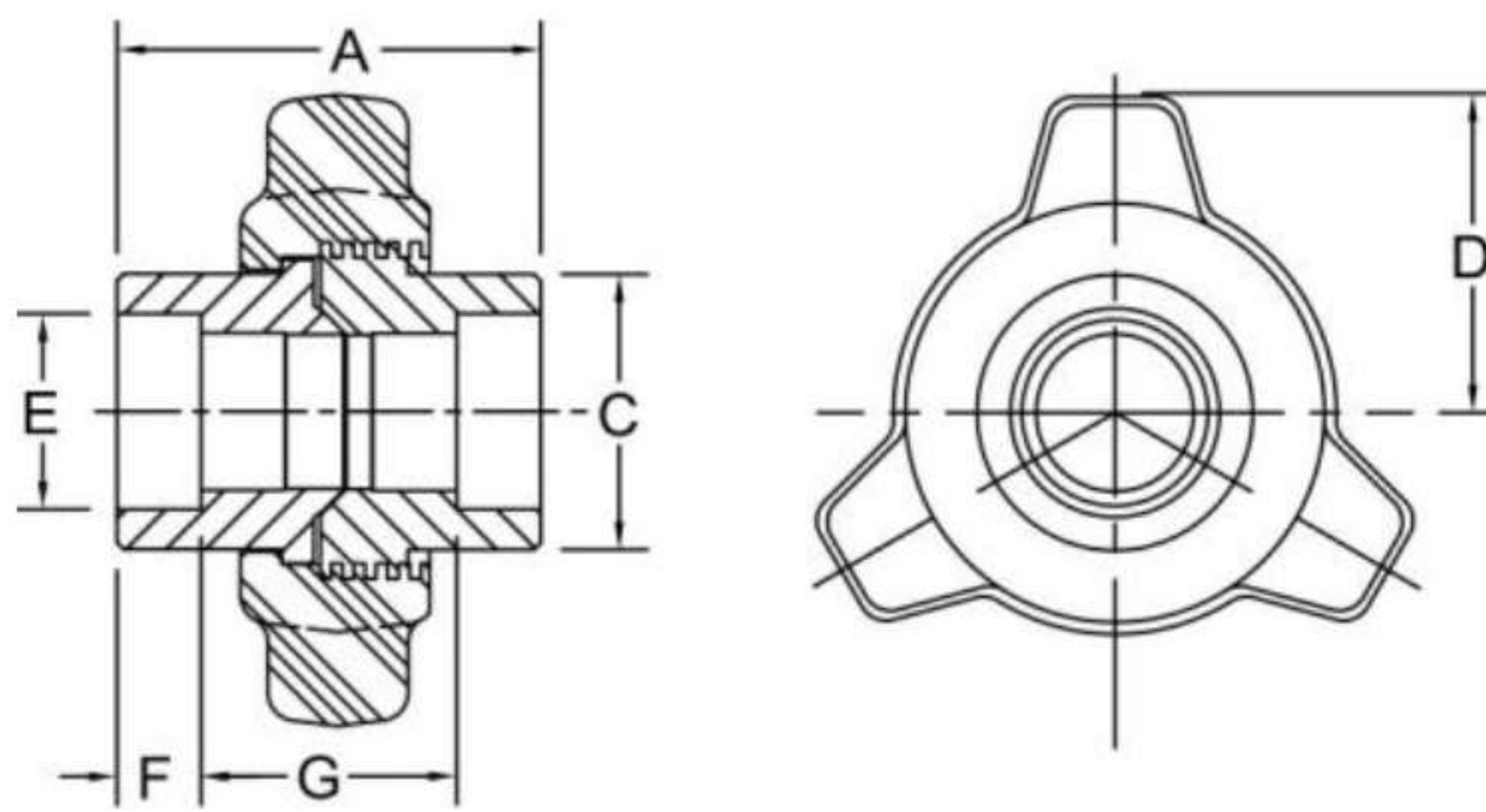
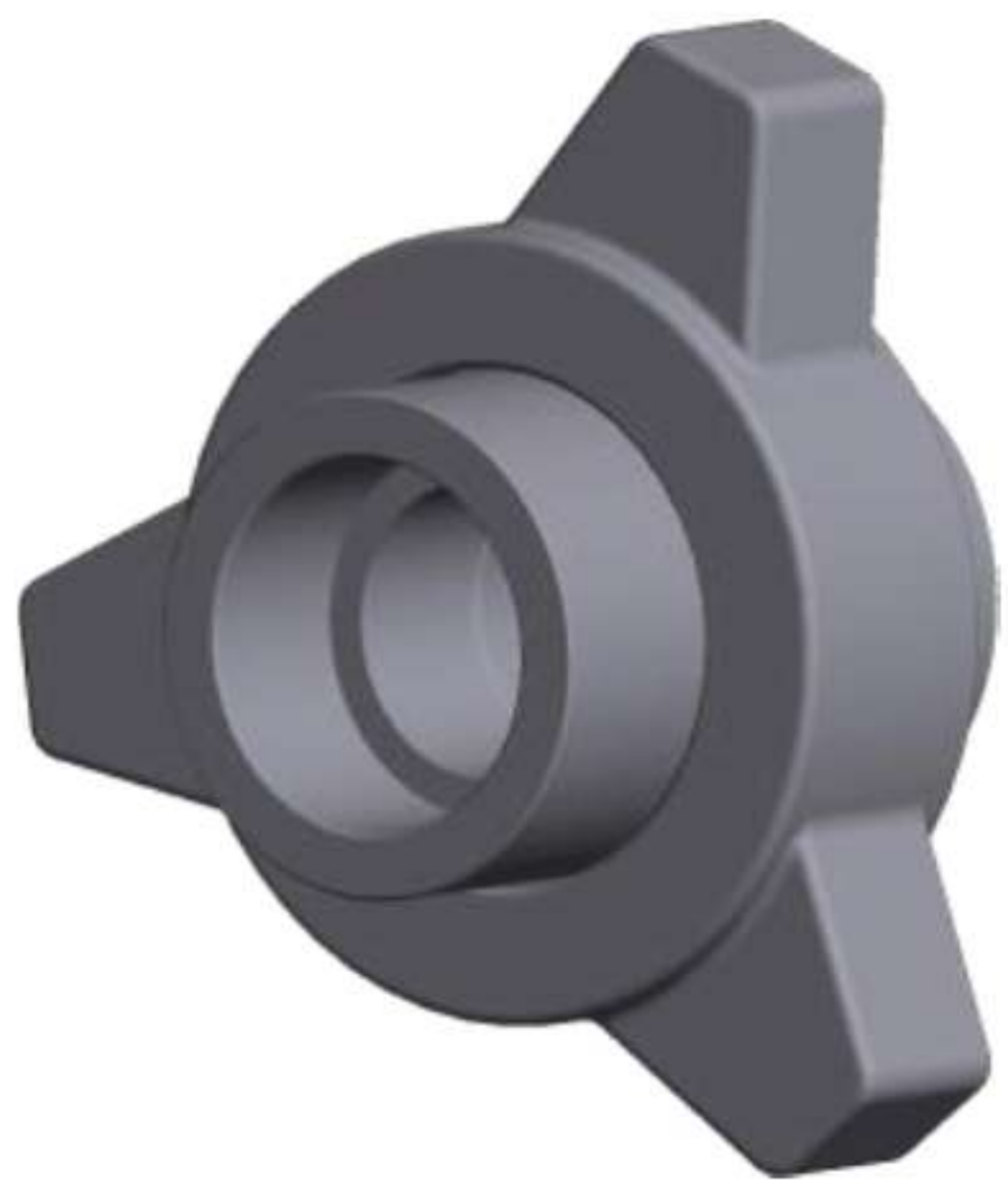
Class 6000 Forged Steel Socket Weld Unions X-Series **Creative** Piping Solutions



Socket Welding, X-Series

MSS SP-83

Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2
A	2.312	2.500	2.875	3.031	3.500	4.090
B	2.186	2.546	3.043	3.393	4.053	4.821
C	1.475	1.800	2.175	2.470	3.032	3.655
D	.855/ .875	1.065/ 1.085	1.330/ 1.350	1.675/ 1.695	1.915/ 1.935	2.406/ 2.426
E REF	0.562	0.625	0.750	0.812	0.875	1.000
F	1.195	1.259	1.379	1.413	1.734	2.077
Wt. Ea.	1.36	2.00	3.10	5.85	6.55	10.50

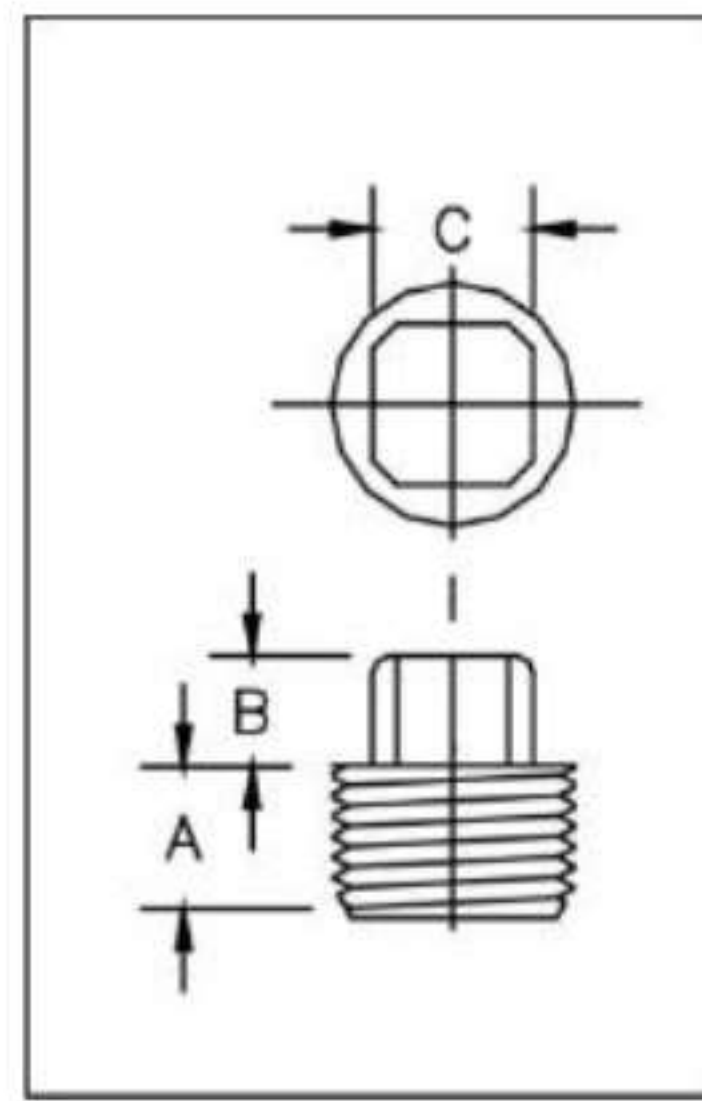


Lug, Socket Welding, X-Series

MSS SP-83 (where applicable)

Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2
A	2.317	2.507	2.873	3.030	3.529	4.089	4.314
C	1.485	1.810	2.195	2.485	3.032	3.660	4.395
D	1.681	2.188	2.273	2.522	2.959	3.396	4.072
E	.855/ .875	1.065/ 1.085	1.330/ 1.350	1.675/ 1.695	1.915/ 1.935	2.406/ 2.426	2.906/ 2.931
F REF	0.562	0.625	0.750	0.960	0.875	1.000	0.918
G	1.195	1.259	1.379	1.413	1.783	2.077	2.446
Wt. Ea.	1.66	2.44	7.87	7.14	7.99	7.99	11.00

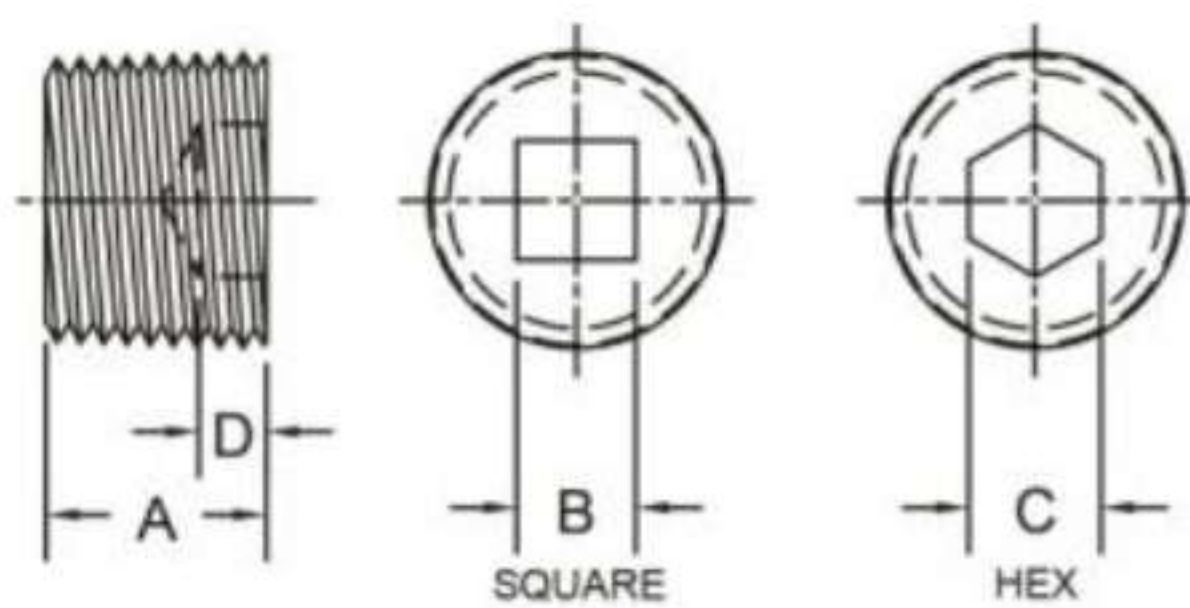




Pipe Plugs, Standard Pressure, Square Head

Pipe Size	1/8	1/4	3/8	1/2	3/4
A	0.375	0.500	0.500	0.688	0.688
B	0.250	0.281	0.312	0.375	0.437
C	0.281	0.375	0.437	0.562	0.625
Wt. Ea.	0.02	0.04	0.06	0.12	0.19

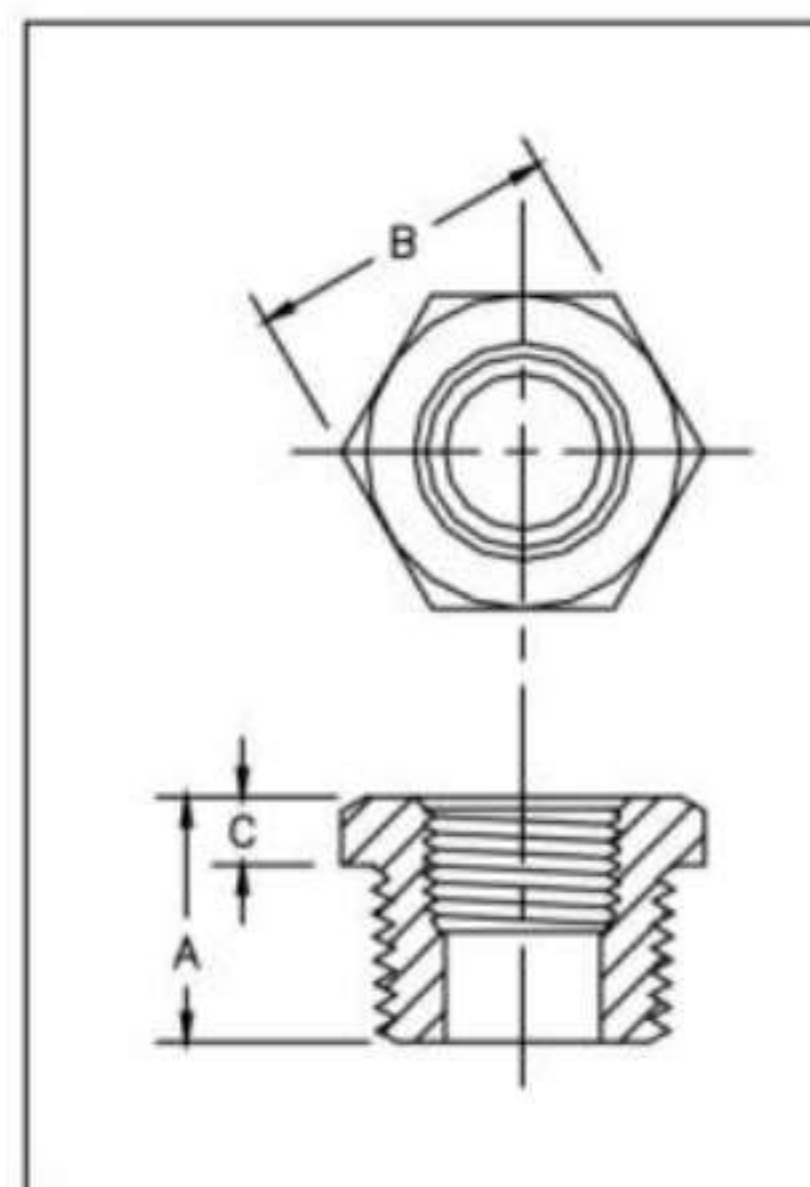
Available in black phosphate coatings or electro-zinc plated
SAE J531, ASME B1.20.3, AISI C1008-C1010



Pipe Plugs, Standard Pressure, Square & Hex Counter Sunk

Pipe Size	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
A	0.312	0.469	0.469	0.625	0.812	0.781	0.812	0.844	0.891
B	0.188	0.250	0.328	0.359	0.500	0.500	0.750	0.750	0.875
C	0.188	0.250	0.312	0.375	0.562	0.625	0.750	1.000	1.000
D	0.125	0.188	0.188	0.250	0.312	0.375	0.422	0.406	0.406
Wt. Ea.	0.01	0.02	0.03	0.06	0.10	0.20	0.33	0.46	0.88

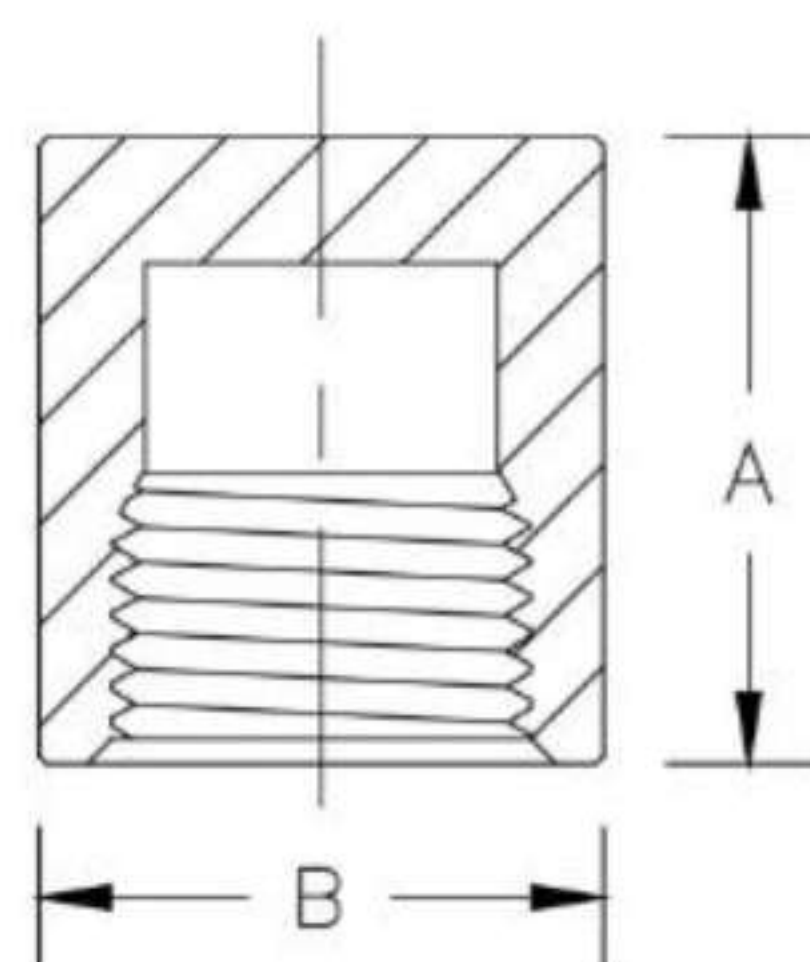
Available in black phosphate coatings or electro-zinc plated
Dimensions 1/8" through 1" conforms to SAE J531
Dimensions 1-1/4" through 2" conforms to ASME B16.14
Material: 1/8" - 1 1/4" AISI C1008-C1010
1 1/2" - 2" AISI C12L14
NPTF threads specified in ASME B1.20.3



Hex Bushings, Standard Pressure

Pipe Size	1/4	3/8	1/2	3/4	1
A	0.640	0.700	0.880	0.970	1.190
B	0.620	0.690	0.880	1.060	1.380
C	0.140	0.190	0.190	0.220	0.310
Wt. Ea.	0.02	0.05	0.11	0.21	0.36

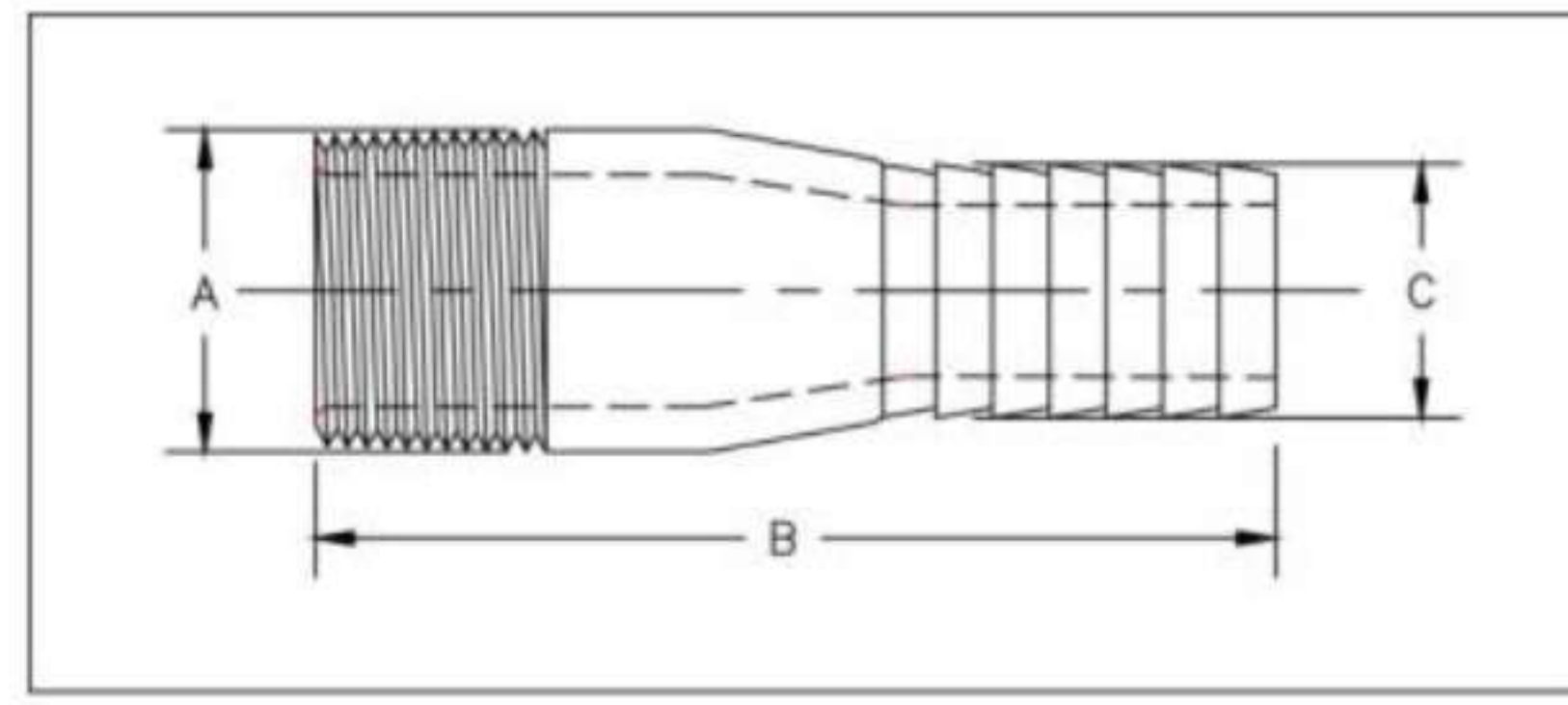
ASME B16.14, ASME B1.20.1, AISI C1010



Pipe Caps, Standard Pressure, Threaded

Pipe Size	1/8	1/4	3/8	1/2	3/4	1
A	0.500	0.750	0.750	0.938	1.062	1.188
B	0.625	0.719	0.875	1.032	1.312	1.562
Wt. Ea.	0.02	0.04	0.06	0.12	0.20	0.31

AISI C-12L14, ASME B1.20.3



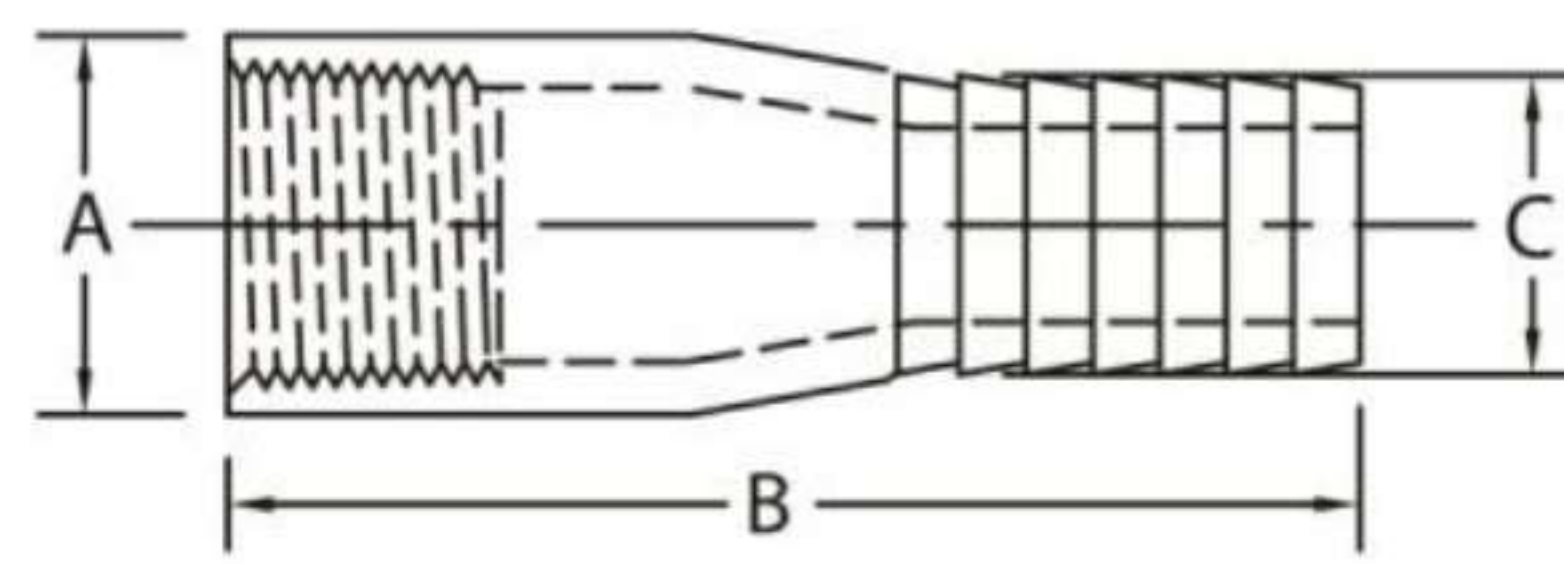
Serrated Male Adapters for Plastic Pipe

ASTM A53 Galvanized Pipe or ASTM B43 Red Brass

Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
Part No. (Galvanized Pipe)	M-10	M-20	M-30	M-40	M-50	M-60	M-70	M-80	M-90
Part No. (Red Brass)	BM-10	BM-20	BM-30	BM-40	BM-50	BM-60	BM-70	BM-80	BM-90
A	0.840	1.050	1.315	1.660	1.900	2.375	2.875	3.500	4.500
B	3.125	3.375	3.500	3.500	4.250	4.250	5.375	5.875	7.000
C	0.645	0.845	1.075	1.405	1.640	2.095	2.505	3.100	4.060
Wt. Ea.	0.14	0.23	0.34	0.50	0.64	0.90	2.00	2.50	4.50

Serrated dimensions per ASTM D.2609
NPT Threads per ASME B1.20.1

Use with Schedule 40 Plastic Pipe
Plastic Pipe must be secured to Adapter with One or Two Worm Type Hose Clamps
Pressure Rating equals that of Plastic Pipe



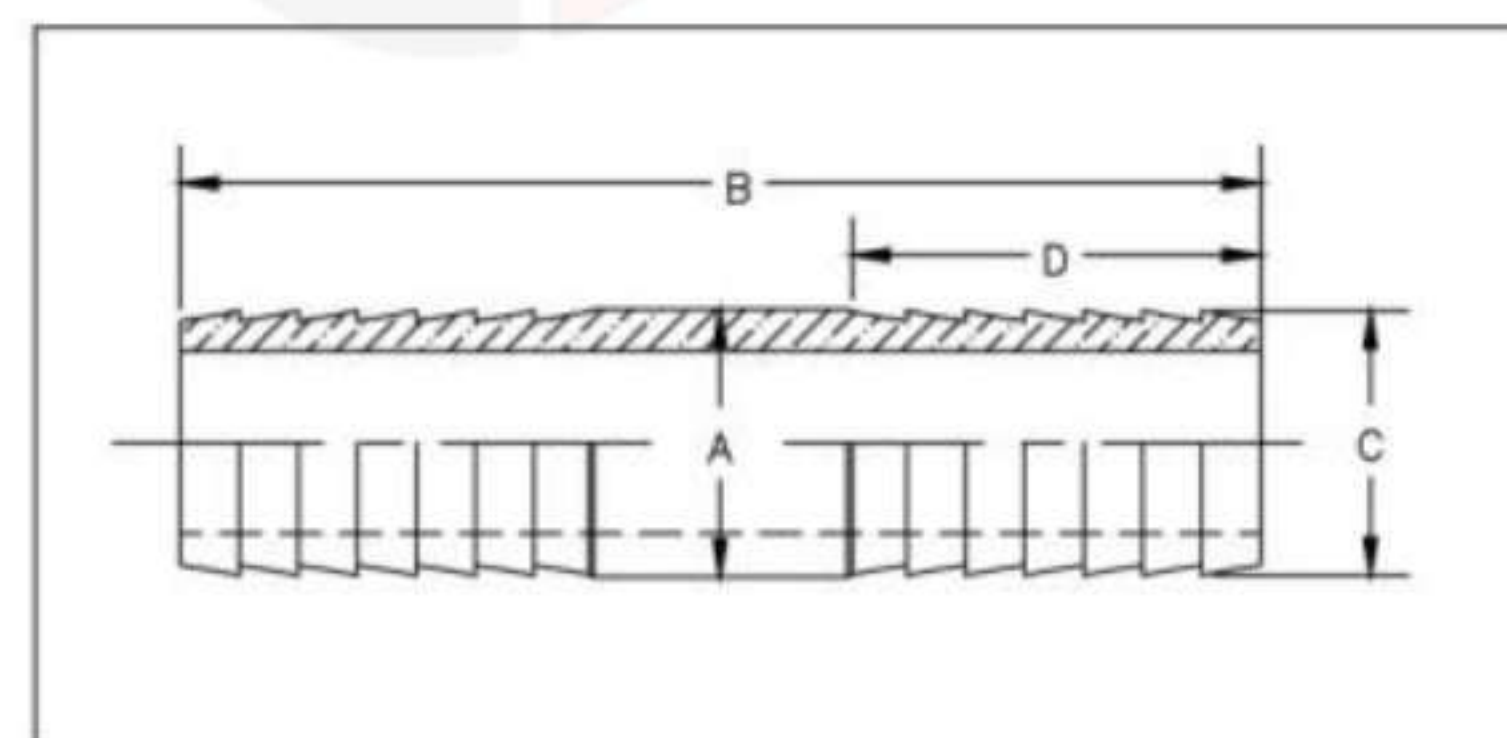
Serrated Female Adapters for Plastic Pipe

ASTM A53 Galvanized Pipe or ASTM B43 Red Brass

Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2
Part No. (Galvanized Pipe)	F-10	F-20	F-30	F-40	F-50	F-60
Part No. (Red Brass)	BF-10	BF-20	BF-30	BF-40	BF-50	BF-60
A	0.921	1.132	1.380	1.753	2.000	2.485
B	3.406	3.625	3.781	3.906	4.437	4.531
C	0.645	0.845	1.075	1.405	1.640	2.095
Wt. Ea.	0.20	0.25	0.33	0.50	0.65	0.93

Serrated dimensions per ASTM D.2609
NPT Threads per ASME B1.20.1

Use with Schedule 40 Plastic Pipe
Plastic Pipe must be secured to Adapter with One or Two Worm Type Hose Clamps
Pressure Rating equals that of Plastic Pipe

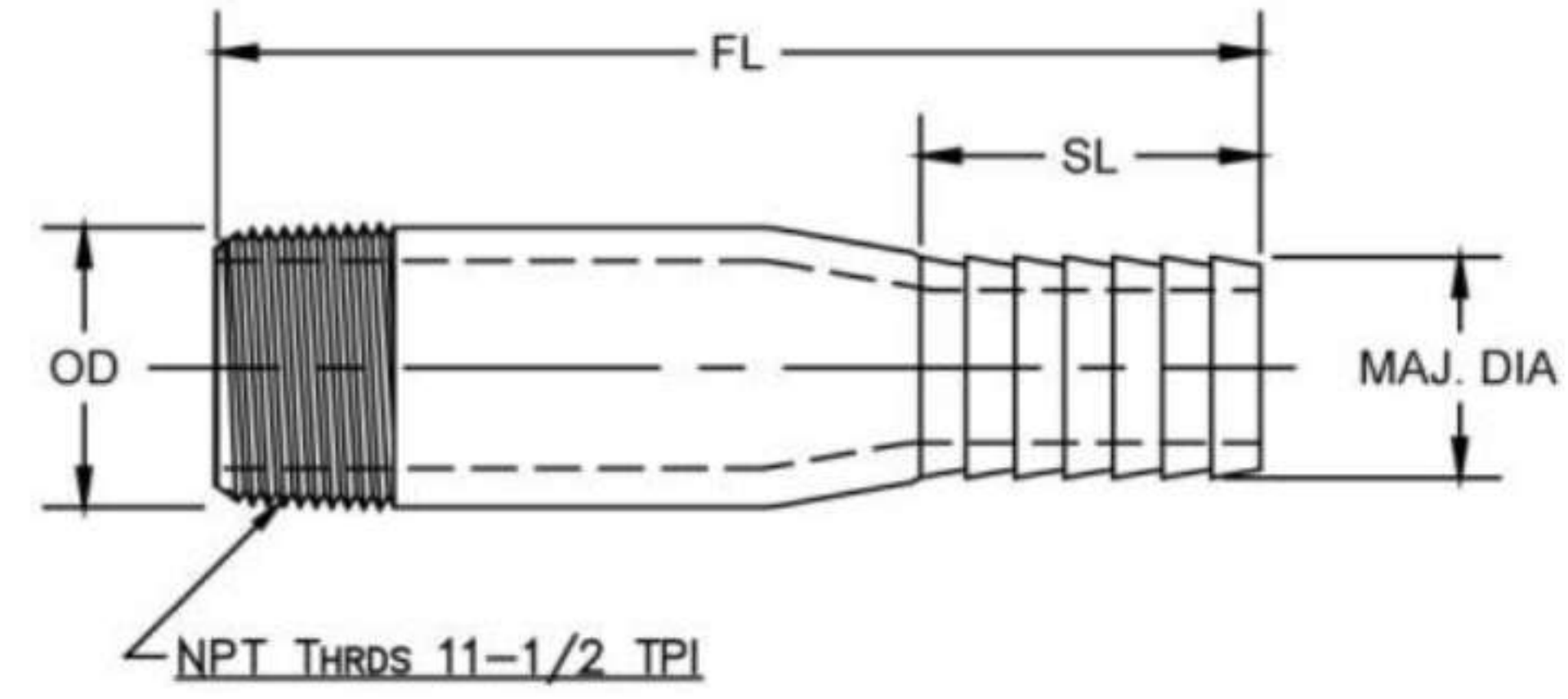


Serrated Insert Couplings for Plastic Pipe

ASTM A53 Galvanized Pipe or ASTM B43 Red Brass

Pipe Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3
Part No. (Galvanized Pipe)	C-10	C-20	C-30	C-40	C-50	C-60	C-70	C-80
Part No. (Red Brass)	BC-10	BC-20	BC-30	BC-40	BC-50	BC-60	BC-70	BC-80
A	0.675	0.840	1.075	1.525	1.660	2.162	2.505	3.100
B	3.375	3.375	3.625	3.625	3.750	3.750	5.500	6.000
C	0.645	0.845	1.075	1.405	1.640	2.095	2.505	3.100
D	1.281	1.281	1.281	1.281	1.281	1.281	2.250	2.750
Approx Weight Steel	0.10	0.18	0.38	0.36	0.60	1.21	1.50	2.50
Approx Weight Brass	0.09	0.19	0.30	0.46	0.62	1.07	-	2.50

Serrated dimensions per ASTM D.2609



ASTM A53 Galvanized Pipe or ASTM B43 Red Brass

Serrated Dimensions per ASTM D.2609

NPT Pipe Threads per ASME B1.20.1

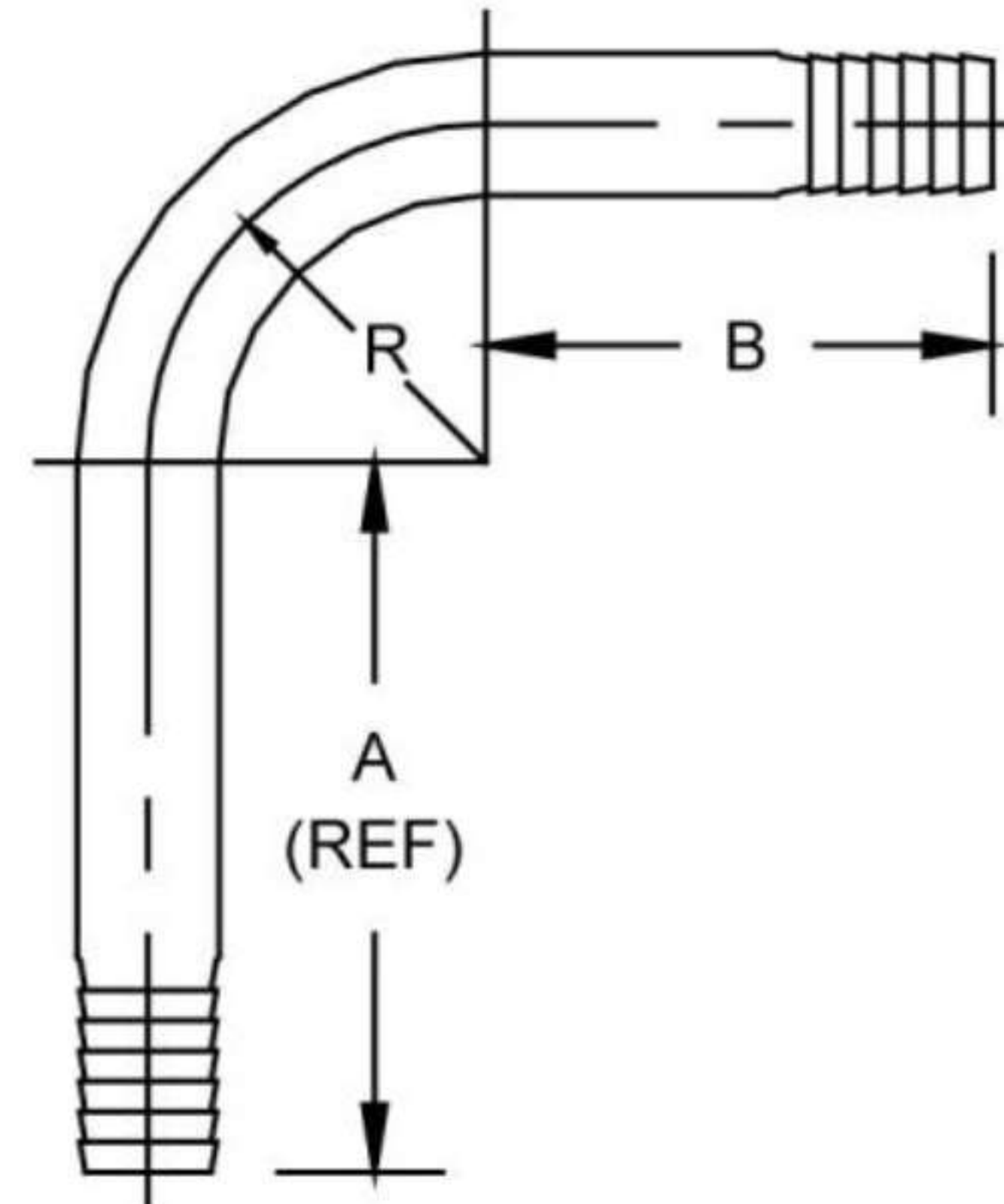
Serrated Adapters Male Venturi

Pipe Size	Part No. (Galv Steel)	Part No. (Red Brass)	OD	FL	SL	Maj. Dia.
1 x 6	MV-36	BMV-36	1.315	6	1-9/32	1.075
1 x 8	MV-38	BMV-38		8		
1 x 10	MV-310	BMV-310		10		
1 x 12	MV-312	BMV-312		12		
1-1/4 x 6	MV-46	BMV-46	1.660	6	1-9/32	1.405
1-1/4 x 8	MV-48	BMV-48		8		
1-1/4 x 10	MV-410	BMV-410		10		
1-1/4 x 12	MV-412	BMV-412		12		
1-1/2 x 6	MV-56	BMV-56	1.900	6	1-11/16	1.640
1-1/2 x 8	MV-58	BMV-58		8		
1-1/2 x 10	MV-510	BMV-510		10		
1-1/2 x 12	MV-512	BMV-512		12		

Use with Schedule 40 Plastic Pipe

Plastic Pipe must be secured to Adapter with One or Two Worm Type Hose Clamps

Pressure Rating equals that of Plastic Pipe



ASTM A53 Galvanized Pipe, ASTM B43 Red Brass
Serrated Dimensions per ASTM D.2609

Serrated Adapters, Well Seal Elbows (Both Ends Serrated)

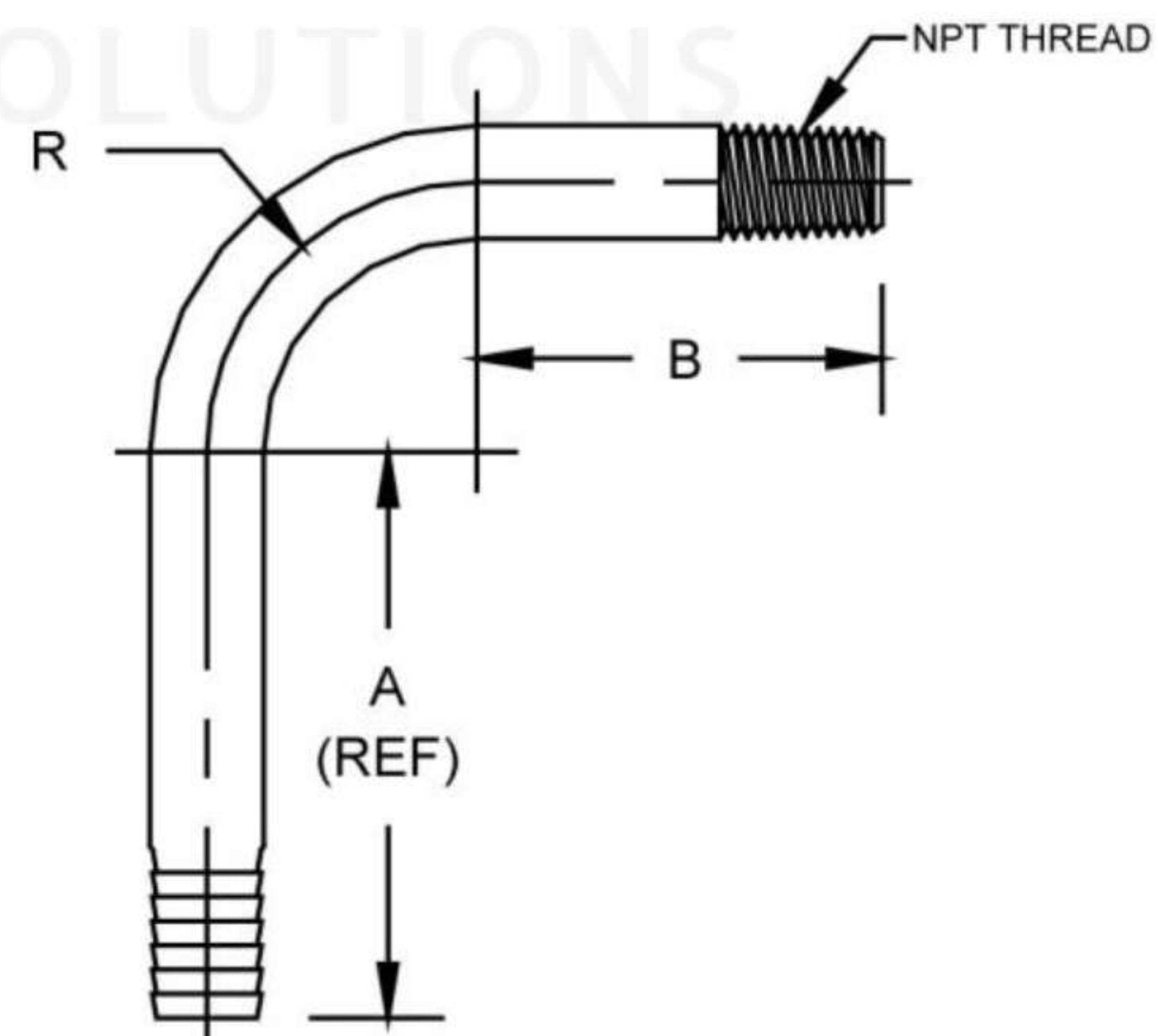
Pipe Size	Part No. (Galv. Steel)	Dim A Ref	Dim B	R
3/4	W-20	5-1/4	3-3/4	2-1/2
1	W-30			3
1-1/4	W-40			4-7/8
1-1/2	W-50			4-7/8

Pipe Size	Part No. (Red Brass)	Dim A Ref	Dim B	R
1	BW-30	5-1/4	3-3/4	2-1/4
1-1/4	BW-40			3-7/8
1-1/2	BW-50			3-7/8

Use with Schedule 40 Plastic Pipe

Plastic Pipe must be secured to Adapter with One or Two Worm Type Hose Clamps

Pressure Rating equals that of Plastic Pipe



ASTM A53 Galvanized Pipe, ASTM B43 Red Brass
Serrated Dimensions per ASTM D.2609
NPT Pipe Threads per ASME B1.20.1

Serrated Adapters, Well Seal Elbows (Serrated x NPT)

Pipe Size	Part No. (Galv. Steel)	Dim A Ref	Dim B	R
3/4	-	5-1/4	3-3/4	2-1/2
1	-			3
1-1/4	-			4-7/8
1-1/2	-			4-7/8

Pipe Size	Part No. (Red Brass)	Dim A Ref	Dim B	R
1	-	5-1/4	3-3/4	2-1/4
1-1/4	-			3-7/8
1-1/2	-			3-7/8

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Maharashtra Factory Unit-I

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Gujarat Unit-II

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Gujarat Uni-III

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