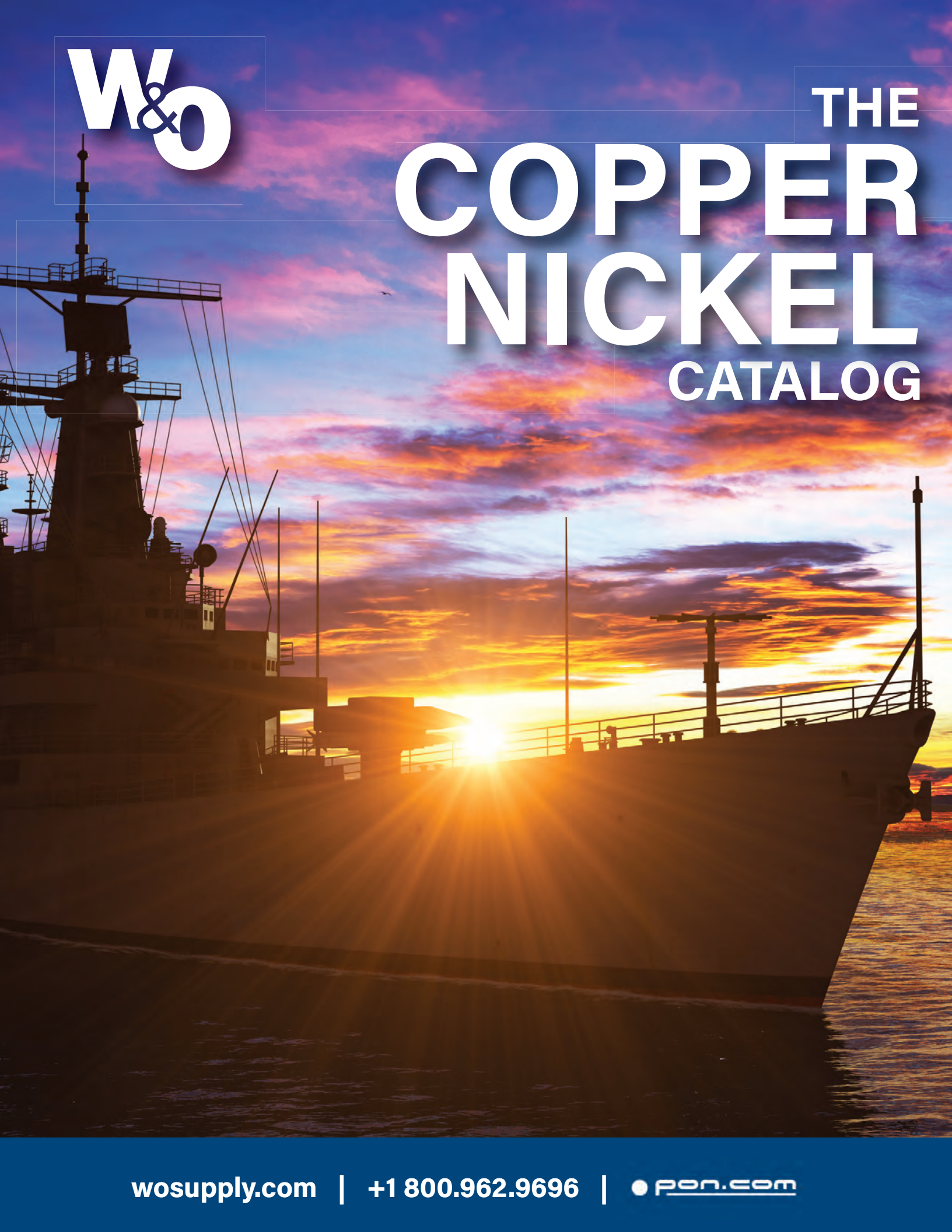


The logo consists of the letters 'W' and 'O' in a large, bold, white sans-serif font, with an ampersand '&' in a smaller font size positioned between them. The logo is set against a white rectangular background.

W&O

The background of the entire page is a photograph of a large cargo ship at sea during a vibrant sunset. The sun is low on the horizon, creating a bright orange and yellow glow that reflects on the water and illuminates the sky with streaks of orange and pink. The ship's silhouette is dark against the bright sky, with its masts and rigging visible. The overall mood is industrial and serene.

**THE
COPPER
NICKEL
CATALOG**

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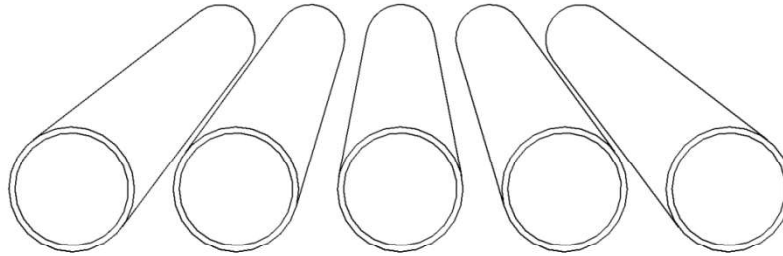
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Copper Nickel Pipe

- Copper-Nickel pipe conforms to the chemical and mechanical requirements of MIL-T-16420K or ASTM B466/467 as applicable.
- Type I (seamless) or Type II (welded) available as applicable.
- Grade I (supplied without heat identification) or Grade II (supplied with heat identification) available.



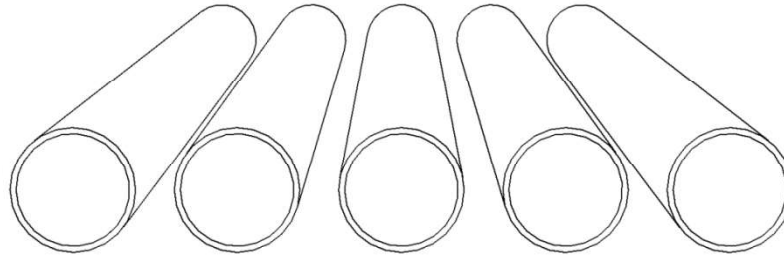
Copper Nickel Size Chart

IPS	OD	90/10		70/30			
		CL 50 Wall	CL 200 Wall	CL 700 Wall	CL 1650 Wall	CL 3300 Wall	CL 6000 Wall
1/4 OD	0.250		0.035			0.035	0.058
1/8	0.405		0.065			0.058	0.095
1/4	0.540		0.065	0.065	0.042	0.072	0.120
3/8	0.675		0.065	0.072	0.049	0.095	0.148
1/2	0.840		0.065	0.072	0.058	0.120	0.203
3/4	1.050		0.065	0.083	0.083	0.148	0.238
1	1.315		0.065	0.095	0.095	0.180	0.300
1-1/4	1.660		0.072	0.095	0.120	0.220	0.380
1-1/2	1.900		0.072	0.109	0.134	0.250	0.425
2	2.375		0.083	0.120	0.165	0.340	0.520
2-1/2	2.875		0.083	0.134	0.203	0.380	
3	3.500		0.095	0.165	0.250	0.457	
3-1/2	4.000		0.095	0.180	0.284		
4	4.500		0.109	0.203	0.340		
4-1/2	5.000		0.109				
5	5.563		0.125	0.220	0.425		
6	6.625		0.134	0.259			
7	7.625		0.140	0.284			
8	8.625		0.151	0.340			
9	9.625		0.187	0.340			
10	10.750	0.134	0.187	0.380			
12	12.750	0.156	0.250	0.454			
14	14.000	0.165	0.250				
16	16.000	0.165	0.250				
18	18.000	0.180	0.250				
20	20.000	0.180	0.250				

90/10 Alloy C70600
 Alloy 706 Annealed
 MIL-T-16420K



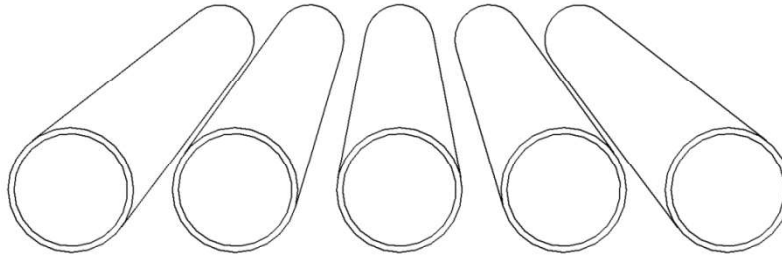
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90/10 Copper Nickel

IPS	Premier Part #	W&O Part #	Premier Part #	W&O Part #
	Class 200	Class 200	Class 50	Class 50
1/8	P1200020	710200.020		
1/4	P1200040	710200.040		
3/8	P1200060	710200.060		
1/2	P1200100	710200.100		
3/4	P1200150	710200.150		
1	P1200200	710200.200		
1-1/4	P1200250	710200.250		
1-1/2	P1200300	710200.300		
2	P1200400	710200.400		
2-1/2	P1200450	710200.450		
3	P1200500	710200.500		
3-1/2	P1200550	710200.550		
4	P1200600	710200.600		
5	P1200650	710200.650		
6	P1200700	710200.700		
8	P1200750	710200.750		
10	P1200800	710200.800	P1050800	710050.800
12	P1200820	710200.820	P1050820	710050.820
14	P1200840	710200.880	P1050840	710050.880
16	P1200860	710200.890	P1050860	710050.890
18	P1200880	710200.900	P1050880	710050.900
20	P1200900	710200.920	P1050900	710050.920
24	P1200920	710200.924		710050.924
30		710200.930	P1050940	

Table of Dimensions
70/30 Alloy C71500
Alloy 715 Annealed
MIL-T-16420



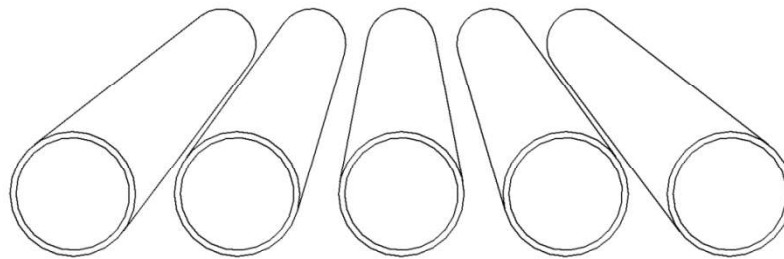
70/30 Copper Nickel

IPS	Premier	W&O	Premier	W&O	Premier	W&O	Premier	W&O	Premier	W&O
	Part #	Part #	Part #	Part #	Part #	Part #	Part #	Part #	Part #	Part #
	Class 200	Class 200	Class 700	Class 700	Class 1650	Class 1650	Class 3300	Class 3300	Class 6000	Class 6000
1/8		720200.020		720700.020		721650.020		723300.020		726000.020
1/4	P2200040	720200.040	P2700040	720700.040	P2165040	721650.040	P2330040	723300.040	P2600040	726000.040
3/8	P2200060	720200.060	P2700060	720700.060	P2165060	721650.060	P2330060	723300.060	P2600060	726000.060
1/2	P2200100	720200.100	P2700100	720700.100	P2165100	721650.100	P2330100	723300.100	P2600100	726000.100
3/4	P2200150	720200.150	P2700150	720700.150	P2165150	721650.150	P2330150	723300.150	P2600150	726000.150
1	P2200200	720200.200	P2700200	720700.200	P2165200	721650.200	P2330200	723300.200	P2600200	726000.200
1 1/4	P2200250	720200.250	P2700250	720700.250	P2165250	721650.250	P2330250	723300.250	P2600250	726000.250
1 1/2	P2200300	720200.300	P2700300	720700.300	P2165300	721650.300	P2330300	723300.300	P2600300	726000.300
2	P2200400	720200.400	P2700400	720700.400	P2165400	721650.400	P2330400	723300.400	P2600400	726000.400
2 1/2	P2200450	720200.450	P2700450	720700.450	P2165450	721650.450	P2330450	723300.450	P2600450	
3	P2200500	720200.500	P2700500	720700.500	P2165500	721650.500	P2330500	723300.500	P2600500	
3 1/2	P2200550	720200.550	P2700550	720700.550	P2165550	721650.550				
4	P2200600	720200.600	P2700600	720700.600	P2165600	721650.600				
5	P2200650	720200.650	P2700650	720700.650	P2165650	721650.650				
6	P2200700	720200.700	P2700700	720700.700	P2165700					
8	P2200750	720200.750	P2700750	720700.750	P2165750					
10	P2200800	720200.800	P2700800	720700.800	P2165800					
12	P2200820	720200.820	P2700820	720700.820	P2165820					
14	P2200840	720200.840	P2700840							
16	P2200860	720200.880	P2700860							
18	P2200880	720200.890								
20	P2200900	720200.900								
24	P2200920	720200.920								

Table of Dimensions
90/10 Alloy C70600
ASTM B-466/467



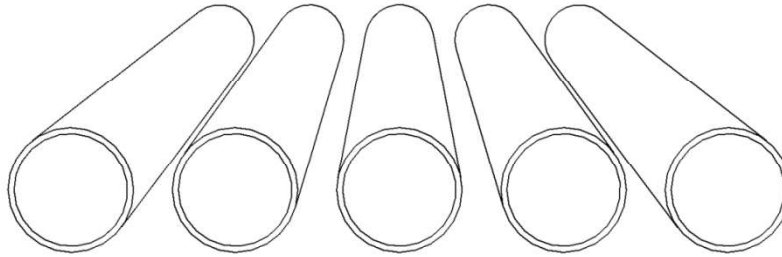
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90/10 Copper Nickel

IPS	Premier	W&O	Premier	W&O
	Part #	Part #	Part #	Part #
	STD. SCH 40	STD. SCH 40	XH. SCH 80	XH. SCH 80
1/8	P1S40020	710040.020	P1S80020	710080.020
1/4	P1S40040	710040.040	P1S80040	710080.040
3/8	P1S40060	710040.060	P1S80060	710080.060
1/2	P1S40100	710040.100	P1S80100	710080.100
3/4	P1S40150	710040.150	P1S80150	710080.150
1	P1S40200	710040.200	P1S80200	710080.200
1-1/4	P1S40250	710040.250	P1S80250	710080.250
1-1/2	P1S40300	710040.300	P1S80300	710080.300
2	P1S40400	710040.400	P1S80400	710080.400
2-1/2	P1S40450	710040.450	P1S80450	710080.450
3	P1S40500	710040.500	P1S80500	710080.500
3-1/2	P1S40550	710040.550	P1S80550	710080.550
4	P1S40600	710040.600	P1S80600	710080.600
5	P1S40650	710040.650	P1S80650	710080.650
6	P1S40700	710040.700	P1S80700	710080.700
8	P1S40750	710040.750	P1S80750	710080.750
10	P1S40800	710040.800	P1S80800	710080.800
12	P1S40820	710040.820	P1S80820	710080.820

Table of Dimensions
70/30 Alloy C71500
MIL-T-16420K
ASTM B-466



1

70/30 Copper Nickel

IPS	Premier	W&O	Premier	W&O
	Part #	Part #	Part #	Part #
	STD. SCH 40	STD. SCH 40	XH. SCH 80	XH. SCH 80
1/8	P2840020	720040.020	P2880020	720080.020
1/4	P2S40040	720040.040	P2S80040	720080.040
3/8	P2S40060	720040.060	P2S80060	720080.060
1/2	P2S40100	720040.100	P2S80100	720080.100
3/4	P2S40150	720040.150	P2S80150	720080.150
1	P2S40200	720040.200	P2S80200	720080.200
1-1/4	P2S40250	720040.250	P2S80250	720080.250
1-1/2	P2S40300	720040.300	P2S80300	720080.300
2	P2S40400	720040.400	P2S80400	720080.400
2-1/2	P2S40450	720040.450	P2S80450	720080.450
3	P2S40500	720040.500	P2S80500	720080.500
3-1/2	P2S40550	720040.550	P2S80550	720080.550
4	P2S40600	720040.600	P2S80600	720080.600
5	P2S40650	720040.650	P2S80650	720080.650
6	P2S40700	720040.700	P2S80700	720080.700
8	P2S40750	720040.750	P2S80750	720080.750
10	P2S40800	720040.800	P2S80800	720080.800
12	P2S40820	720040.820	P2S80820	720080.820



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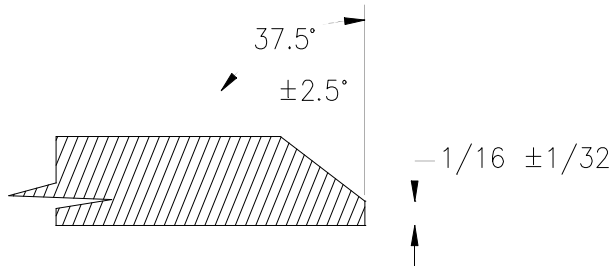
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90° Long Radius Elbows	4
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90° Long Radius Elbows, Reducing	6
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Long-Turn Double Sweep Tees	10
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180° Return Bends.....	12
Caps.....	13
Concentric Reducers.....	14
Eccentric Reducers	16
Sleeves	18

CL-200 Butt Weld Copper Nickel Fittings

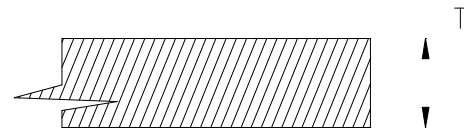


- All CI-200 BW Fittings manufactured iaw general requirements of BUSHIPS Dwg. 810-1385880 Revision D.
- Intended use with Copper-Nickel Pipe iaw MIL-T-16420K, CI-200.
- Rated at 200 PSI @ 150°F for Air, Oil, and Water Service.
- Fittings may also be special ordered:
 - ANSI Dimensions (B16.9, B16.28) with or without tangents.
 - Custom wall thickness.
 - Large O.D.

Weld End Preparation Detail



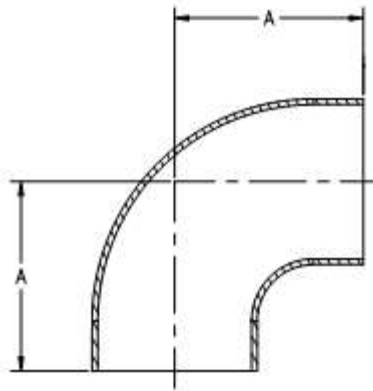
Weld End Preparation if Wall "T" is greater than 0.095.



Weld End Preparation if Wall "T" is less than 0.095.

Nominal Pipe Size	Maximum Outside Diameter	Wall Thickness	Minimum Tangent
1/4	0.540	0.065	0.281
3/8	0.675	0.065	0.375
1/2	0.840	0.065	0.438
3/4	1.050	0.065	0.469
1	1.315	0.065	0.500
1-1/4	1.660	0.072	0.563
1-1/2	1.900	0.072	0.688
2	2.375	0.083	0.719
2-1/2	2.875	0.083	0.875
3	3.500	0.095	0.906
3-1/2	4.000	0.095	0.938
4	4.500	0.109	0.969
5	5.563	0.125	1.094
6	6.625	0.134	1.172
7	7.625	0.134	1.281
8	8.625	0.148	1.375
9	9.625	0.187	1.563
10	10.750	0.187	1.563
12	12.750	0.250	1.688
14	14.000	0.250	n/a
16	16.000	0.250	n/a
18	18.000	0.250	n/a
20	20.000	0.250	n/a
24	24.000	0.250	n/a

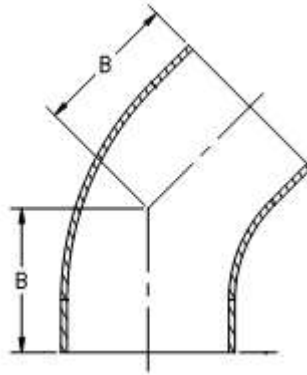
CL-200 Butt Weld Fittings
90° SR Elbows
DWG 810-1385880



90° Short Radius Elbows

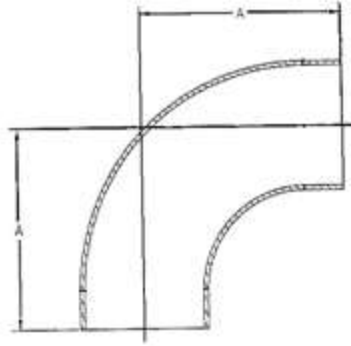
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1	88101200	601101.200	87101200	602101.200	1.500	0.15
1-1/4	88101250	601101.250	87101250	602101.250	1.813	0.24
1-1/2	88101300	601101.300	87101300	602101.300	2.188	0.36
2	88101400	601101.400	87101400	602101.400	2.719	0.62
2-1/2	88101450	601101.450	87101450	602101.450	3.375	1.07
3	88101500	601101.500	87101500	602101.500	3.906	1.70
3-1/2	88101550	601101.550	87101550	602101.550	4.438	2.70
4	88101600	601101.600	87101600	602101.600	4.969	3.90
5	88101650	601101.650	87101650	602101.650	6.094	7.20
6	88101700	601101.700	87101700	602101.700	7.172	11.80
7	88101725	601101.725	87101725	602101.725	8.281	18.20
8	88101750	601101.750	87101750	602101.750	9.375	26.50
9	88101775	601101.775	87101775	602101.775	10.563	38.80
10	88101800	601101.800	87101800	602101.800	11.563	49.20
12	88101820	601101.820	87101820	602101.820	13.688	70.50
14	88101880	601101.880	87101880	602101.880	14.500	85.00
16	88101890	601101.890	87101890	602101.890	16.500	108.00
18	88101900	601101.900	87101900	602101.900	18.500	140.00
20	88101920	601101.920	87101920	602101.920	20.500	175.00
24	88101924	601101.924	97101924	602101.924	24.500	240.00

**CL-200 Butt Weld Fittings
45° Elbows
DWG 810-1385880**



45° Elbows

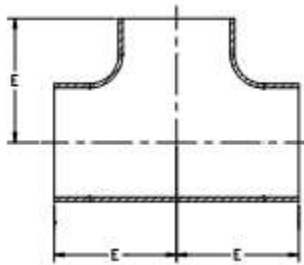
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	88104040	601104.040	87104040	602104.040	0.703	0.03
3/8	88104060	601104.060	87104060	602104.060	0.891	0.04
1/2	88104100	601104.100	87104100	602104.100	1.063	0.05
3/4	88104150	601104.150	87104150	602104.150	0.938	0.06
1	88104200	601104.200	87104200	602104.200	1.125	0.11
1-1/4	88104250	601104.250	87104250	602104.250	1.344	0.18
1-1/2	88104300	601104.300	87104300	602104.300	1.625	0.27
2	88104400	601104.400	87104400	602104.400	1.969	0.48
2-1/2	88104450	601104.450	87104450	602104.450	2.438	0.83
3	88104500	601104.500	87104500	602104.500	2.766	1.20
3-1/2	88104550	601104.550	87104550	602104.550	3.172	2.00
4	88104600	601104.600	87104600	602104.600	3.453	2.90
5	88104650	601104.650	87104650	602104.650	4.203	5.30
6	88104700	601104.700	87104700	602104.700	4.906	8.60
7	88104725	601104.725	87104725	602104.725	5.625	13.30
8	88104750	601104.750	87104750	602104.750	6.344	19.30
10	88104775	601104.775	87104775	602104.775	7.156	28.10
12	88104800	601104.800	87104800	602104.800	7.781	37.50
14	88104820	601104.820	87104820	602104.820	9.141	45.00



90° Long Radius Elbows

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	88111040	601111.040	87111040	602111.040	1.281	0.05
3/8	88111060	601111.060	87111060	602111.060	1.625	0.06
1/2	88111100	601111.100	87111100	602111.100	1.938	0.08
3/4	88111150	601111.150	87111150	602111.150	1.594	0.10
1	88111200	601111.200	87111200	602111.200	2.000	0.18
1-1/4	88111250	601111.250	87111250	602111.250	2.438	0.30
1-1/2	88111300	601111.300	87111300	602111.300	2.938	0.45
2	88111400	601111.400	87111400	602111.400	3.719	0.76
2-1/2	88111450	601111.450	87111450	602111.450	4.625	1.30
3	88111500	601111.500	87111500	602111.500	5.406	2.20
3-1/2	88111550	601111.550	87111550	602111.550	6.250	3.30
4	88111600	601111.600	87111600	602111.600	6.969	4.80
5	88111650	601111.650	87111650	602111.650	8.594	9.00
6	88111700	601111.700	87111700	602111.700	10.172	15.00
7	88111725	601111.725	87111725	602111.725	11.781	23.10
8	88111750	601111.750	87111750	602111.750	13.375	33.60
9	88111775	601111.775	87111775	602111.775	15.063	49.40
10	88111800	601111.800	87111800	602111.800	16.563	60.80
12	88111820	601111.820	87111820	602111.820	19.688	96.00
14	88111880	601111.880	87111880	602111.880	21.500	120.00
16	88111890	601111.890	87111890	602111.890	24.500	160.00
18	88111900	601111.900	87111900	602111.900	27.500	200.00
20	88111920	601111.920	87111920	602111.920	30.500	250.00
24	88111924	601111.924	87111924	602111.924	36.500	545.00

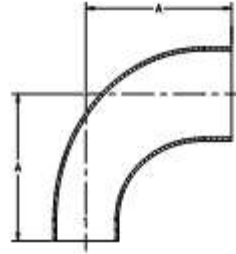
CL-200 Butt Weld Fittings
Tees
DWG 810-1385880



Tees

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	E	Estimated Weight (LBS)
	90/10	90/10	70/30	70/30		
1/4	88121040	601121.040	87121040	602121.040	0.688	0.03
3/8	88121060	601121.060	87121060	602121.060	0.906	0.04
1/2	88121100	601121.100	87121100	602121.100	1.094	0.09
3/4	88121150	601121.150	87121150	602121.150	1.250	0.18
1	88121200	601121.200	87121200	602121.200	1.500	0.28
1-1/4	88121250	601121.250	87121250	602121.250	1.875	0.45
1-1/2	88121300	601121.300	87121300	602121.300	2.250	0.62
2	88121400	601121.400	87121400	602121.400	2.500	0.86
2-1/2	88121450	601121.450	87121450	602121.450	3.000	1.40
3	88121500	601121.500	87121500	602121.500	3.375	2.10
3-1/2	88121550	601121.550	87121550	602121.550	3.750	3.10
4	88121600	601121.600	87121600	602121.600	4.125	4.40
5	88121650	601121.650	87121650	602121.650	4.875	7.90
6	88121700	601121.700	87121700	602121.700	5.625	12.70
7	88121725	601121.707	87121725	602121.707	6.313	18.90
8	88121750	601121.750	87121750	602121.750	7.000	26.70
9	88121775	601121.790	87121775	602121.790	7.750	38.60
10	88121800	601121.800	87121800	602121.800	8.500	51.60
12	88121820	601121.820	87121820	602121.820	10.000	90.00

CL-200 Butt Weld Fittings
90° Long Radius Elbows, Reducing
DWG 810-1385880

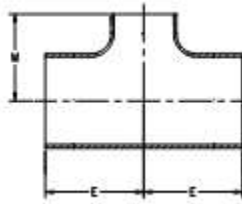


90° Long Radius Elbows: Reducing

2

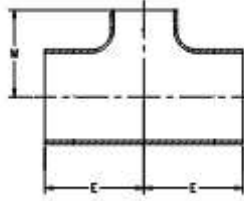
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
2 x 3/4	88111396	601111R.396	87111396	602111R.396	3.719	0.66
2 x 1	88111397	601111R.397	87111397	602111R.397	3.719	0.70
2 x 1-1/4	88111398	601111R.398	87111398	602111R.398	3.719	0.73
2 x 1-1/2	88111399	601111R.399	87111399	602111R.399	3.719	0.75
2-1/2 x 1-1/4	88111447	601111R.447	87111447	602111R.447	4.625	1.10
2-1/2 x 1-1/2	88111448	601111R.448	87111448	602111R.448	4.625	1.20
2-1/2 x 2	88111449	601111R.449	87111449	602111R.449	4.625	1.20
3 x 1-1/2	88111497	601111R.497	87111497	602111R.497	5.406	2.10
3 x 2	88111498	601111R.498	87111498	602111R.498	5.406	2.10
3 x 2-1/2	88111499	601111R.499	87111499	602111R.499	5.406	2.20
3-1/2 x 1-1/2	88111546	601111R.546	87111546	602111R.546	6.188	3.10
3-1/2 x 2	88111547	601111R.547	87111547	602111R.547	6.188	3.10
3-1/2 x 2-1/2	88111548	601111R.548	87111548	602111R.548	6.188	3.20
3-1/2 x 3	88111549	601111R.549	87111549	602111R.549	6.188	3.20
4 x 1-1/2	88111595	601111R.595	87111595	602111R.595	6.969	4.50
4 x 2	88111596	601111R.596	87111596	602111R.596	6.969	4.70
4 x 2-1/2	88111597	601111R.597	87111597	602111R.597	6.969	4.70
4 x 3	88111598	601111R.598	87111598	602111R.598	6.969	4.70
4 x 3-1/2	88111599	601111R.599	87111599	602111R.599	6.969	4.80
5 x 2-1/2	88111646	601111R.646	87111646	602111R.646	8.594	8.60
5 x 3	88111647	601111R.647	87111647	602111R.647	8.594	8.70
5 x 3-1/2	88111648	601111R.648	87111648	602111R.648	8.594	8.80
5 x 4	88111649	601111R.649	87111649	602111R.649	8.594	8.90
6 x 3	88111696	601111R.696	87111696	602111R.696	10.172	14.00
6 x 3-1/2	88111697	601111R.697	87111697	602111R.697	10.172	14.60
6 x 4	88111698	601111R.698	87111698	602111R.698	10.172	14.80
6 x 5	88111699	601111R.699	87111699	602111R.699	10.172	14.90
8 x 4	88111747	601111R.747	87111747	602111R.747	13.375	28.90
8 x 5	88111748	601111R.748	87111748	602111R.748	13.375	29.40
8 x 6	88111749	601111R.749	87111749	602111R.749	13.375	31.20
10 x 6	88111798	601111R.798	87111798	602111R.798	16.563	58.50
10 x 8	88111799	601111R.799	87111799	602111R.799	16.563	63.70
12 x 6	88111817	601111R.817	87111817	602111R.817	19.688	85.20
12 x 8	88111818	601111R.818	87111818	602111R.818	19.688	91.50
12 x 10	88111819	601111R.819	87111819	602111R.819	19.688	94.30

**CL-200 Butt Weld Fittings
Tees, Reducing
(Page 1 of 2)**



Tees, Reducing

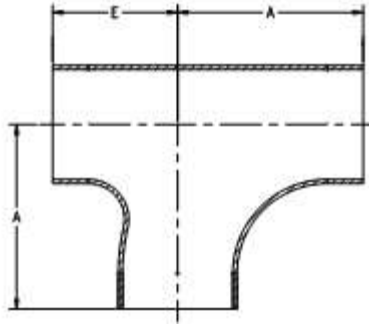
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	E	M	Estimated Weight (LBS)
	90/10	90/10	70/30	70/30			
3/8 x 1/4	88121059	601121R.059	87121059	602121R.059	0.906	0.869	0.04
1/2 x 1/4	88121098	601121R.098	87121098	602121R.098	1.094	0.951	0.08
1/2 x 3/8	88121099	601121R.099	87121099	602121R.099	1.094	1.045	0.08
3/4 X 1/4	88121147	601121R.147	87121147	602121R.147	1.250	1.056	0.15
3/4 X 3/8	88121148	601121R.148	87121148	602121R.148	1.250	1.150	0.16
3/4 X 1/2	88121149	601121R.149	87121149	602121R.149	1.250	1.275	0.16
1 X 1/4	88121196	601121R.196	87121196	602121R.196	1.500	1.189	0.25
1 X 3/8	88121197	601121R.197	87121197	602121R.197	1.500	1.283	0.26
1 X 1/2	88121198	601121R.198	87121198	602121R.198	1.500	1.408	0.26
1 X 3/4	88121199	601121R.199	87121199	602121R.199	1.500	1.470	0.27
1-1/4 X 1/2	88121247	601121R.247	87121247	602121R.247	1.875	1.580	0.64
1-1/4 X 3/4	88121248	601121R.248	87121248	602121R.248	1.875	1.643	0.65
1-1/4 X 1	88121249	601121R.249	87121249	602121R.249	1.875	1.705	0.66
1-1/2 X 1/2	88121296	601121R.296	87121296	602121R.296	2.250	1.700	0.85
1-1/2 X 3/4	88121297	601121R.297	87121297	602121R.297	2.250	1.763	0.87
1-1/2 X 1	88121298	601121R.298	87121298	602121R.298	2.250	1.825	0.90
1-1/2 X 1-1/4	88121299	61121R.299	87121299	61121R.299	2.250	1.950	0.92
2 X 1/2	88121395	601121R.395	87121395	602121R.395	2.500	1.938	1.30
2 X 3/4	88121396	601121R.396	87121396	602121R.396	2.500	2.000	1.40
2 X 1	88121397	601121R.397	87121397	602121R.397	2.500	2.063	1.40
2 X 1-1/4	88121398	601121R.398	87121398	602121R.398	2.500	2.188	1.50
2 X 1-1/2	88121399	601121R.399	87121399	602121R.399	2.500	2.438	1.50
2-1/2 X 1	88121446	601121R.446	87121446	602121R.446	3.000	2.313	1.20
2-1/2 X 1-1/4	88121447	601121R.447	87121447	602121R.447	3.000	2.438	1.30
2-1/2 X 1-1/2	88121448	601121R.448	87121448	602121R.448	3.000	2.688	1.30
2-1/2 X 2	88121449	601121R.449	87121449	602121R.449	3.000	2.750	1.30
3 X 1	88121495	601121R.495	87121495	602121R.495	3.375	2.625	1.90
3 X 1-1/4	88121496	601121R.496	87121496	602121R.496	3.375	2.750	1.90
3 X 1-1/2	88121497	601121R.497	87121497	602121R.497	3.375	3.000	2.00
3 X 2	88121498	601121R.498	87121498	602121R.498	3.375	3.063	2.00
3 X 2-1/2	88121499	601121R.499	87121499	602121R.499	3.375	3.313	2.00
3-1/2 X 1-1/4	88121545	601121R.545	87121545	602121R.545	3.750	3.000	2.90
3-1/2 X 1-1/2	88121546	601121R.546	87121546	602121R.546	3.750	3.250	3.00
3-1/2 X 2-1/2	88121547	601121R.547	87121547	602121R.547	3.750	3.313	3.00
3-1/2 X 2-1/2	88121548	601121R.548	87121548	602121R.548	3.750	3.563	3.00
3-1/2 X 3	88121549	601121R.549	87121549	602121R.549	3.750	3.656	3.00



Tees, Reducing

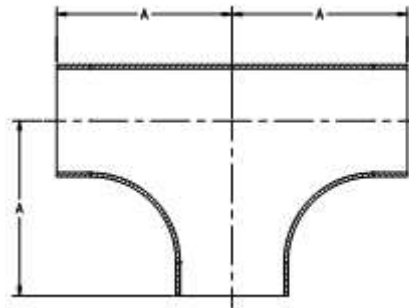
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	E	M	Estimate d Weight (LBS)
	90/10	90/10	70/30	70/30			
4 X 1-1/2	88121595	601121R.595	87121595	602121R.595	4.125	3.500	4.10
4 X 2	88121596	601121R.596	87121596	602121R.596	4.125	3.563	4.20
4 X 2-1/2	88121597	601121R.597	87121597	602121R.597	4.125	3.813	4.30
4 X 3	88121598	601121R.598	87121598	602121R.598	4.125	3.906	4.30
4 X 3-1/2	88121599	601121R.599	87121599	301121.599	4.125	4.000	4.30
5 X 2	88121645	601121R.645	87121645	602121R.645	4.875	4.094	7.40
5 X 2-1/2	88121646	601121R.646	87121646	602121R.646	4.875	4.344	7.50
5 X 3	88121647	601121R.647	87121647	602121R.647	4.875	4.438	7.70
5 X 3-1/2	88121648	601121R.648	87121648	602121R.648	4.875	4.532	7.70
5 X 4	88121649	601121R.649	87121649	602121R.649	4.875	4.594	7.80
6 X 2	88121694	601121R.694	87121694	602121R.694	5.625	4.625	12.00
6 X 2-1/2	88121695	601121R.695	87121695	602121R.695	5.625	4.875	12.10
6 X 3	88121696	601121R.696	87121696	602121R.696	5.625	4.969	12.30
6 X 3-1/2	88121697	601121R.697	87121697	602121R.697	5.625	5.063	12.40
6 X 4	88121698	601121R.698	87121698	602121R.698	5.625	5.125	12.50
6 X 5	88121699	601121R.699	87121699	602121R.699	5.625	5.375	12.50
8 X 4	88121747	601121R.747	87121747	602121R.747	7.000	6.125	25.70
8 X 5	88121748	601121R.748	87121748	602121R.748	7.000	6.375	25.80
8 X 6	88121749	601121R.749	87121749	602121R.749	7.000	6.531	25.80
10 X 6	88121798	601121R.798	87121798	602121R.798	8.500	7.594	48.70
10 X 8	88121799	601121R.799	87121799	602121R.799	8.500	8.000	48.80
12 X 6	88121817	601121R.817	87121817	602121R.817	10.000	8.594	83.20
12 X 8	88121818	601121R.818	87121818	602121R.818	10.000	9.000	85.10
12 X 10	88121819	601121R.819	87121819	602121R.819	10.000	9.375	87.30

CL-200 Butt Weld Fittings
LTSS Tees
DWG 810-1385880



Long Turn Single Sweep Tees

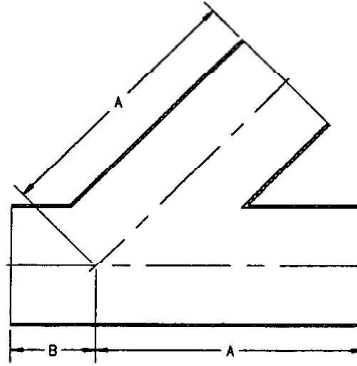
Nominal Pipe Size	Premier	W&O	Premier	W&O	A	E	Estimated Weight (LBS)
	Part #	Part #	Part #	Part #			
	90/10	90/10	70/30	70/30			
2	88130400	601130.400	87130400	602130.400	3.719	2.500	3.10
2-1/2	88130450	601130.450	87130450	602130.450	4.625	3.000	3.60
3	88130500	601130.500	87130500	602130.500	5.406	3.375	4.20
3-1/2	88130550	601130.550	87130550	602130.550	6.250	3.750	5.70
4	88130600	601130.600	87130600	602130.600	6.969	4.125	8.10
5	88130650	601130.650	87130650	602130.650	8.594	4.875	11.70
6	88130700	601130.700	87130700	602130.700	10.172	5.625	20.00
7	88130725	601130.725	87130725	602130.725	11.781	6.313	28.60
8	88130750	601130.750	87130750	602130.750	13.375	7.000	35.70



Long Turn Double Sweep Tees

Nominal Pipe Size	Premier	W&O	Premier	W&O	A	Estimated Weight (LBS)
	Part #	Part #	Part #	Part #		
	90/10	90/10	70/30	70/30		
2	88133400	601133.400	87133400	602133.400	3.719	3.30
2-1/2	88133450	601133.450	87133450	602133.450	4.625	3.80
3	88133500	601133.500	87133500	602133.500	5.406	4.50
3-1/2	88133550	601133.550	87133550	602133.550	6.250	6.10
4	88133600	601133.600	87133600	602133.600	6.969	8.60
5	88133650	601133.650	87133650	602133.650	8.594	12.30
6	88133700	601133.700	87133700	602133.700	10.172	22.50
7	88133725	601133.725	87133725	602133.725	11.781	30.10
8	88133750	601133.750	87133750	602133.750	13.375	39.80
10	88133800	601133.800	87133800	602133.800	16.562	60

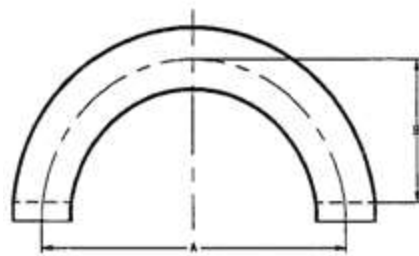
**CL-200 Butt Weld Fittings
45° Y-Laterals
DWG 810-1385880**



45° Y-LATERALS

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	Estimated Weight (LBS)
	90/10	90/10	70/30	70/30			
1	88140200	601140.200	87140200	602140.200	5.750	1.750	0.90
1-1/4	88140250	601140.250	87140250	602140.250	6.250	1.750	1.20
1-1/2	88140300	601140.300	87140300	602140.300	7.000	2.000	2.40
2	88140400	601140.400	87140400	602140.400	8.000	2.500	3.80
2-1/2	88140450	601140.450	87140450	602140.450	9.500	2.500	5.40
3	88140500	601140.500	87140500	602140.500	10.000	3.000	6.80
3-1/2	88140550	601140.550	87140550	602140.550	11.500	3.000	9.20
4	88140600	601140.600	87140600	602140.600	12.000	3.000	11.60
5	88140650	601140.650	87140650	602140.650	13.500	3.500	19.10
6	88140700	601140.700	87140700	602140.700	14.500	3.500	26.00
8	88140750	601140.750	87140750	602140.750	17.500	4.500	40.60
10	88140800	601140.800	87140800	602140.800	20.500	5.000	65.50
12	88140820	601140.820	87140820	602140.820	24.500	5.500	95.50

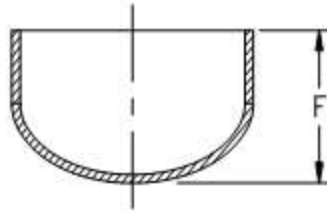
**CL-200 Butt Weld Fittings
180° Return Bends
DWG 810-1385880**



180° RETURN BENDS

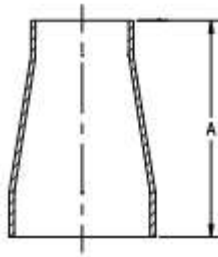
Nominal Pipe Size	Premier	W&O	Premier	W&O	A	B	Estimated Weight (LBS)
	Part #	Part #	Part #	Part #			
	90/10	90/10	70/30	70/30			
1	88156200	601156.200	87156200	602156.200	3.000	1.500	0.55
1-1/4	88156250	601156.250	87156250	602156.250	3.750	1.875	0.68
1-1/2	88156300	601156.300	87156300	602156.300	4.500	2.250	0.95
2	88156400	601156.400	87156400	602156.400	6.000	3.000	1.60
2-1/2	88156450	601156.450	87156450	602156.450	7.500	3.750	2.80
3	88156500	601156.500	87156500	602156.500	9.000	4.500	4.60
3-1/2	88156550	601156.550	87156550	602156.550	10.500	5.250	7.00
4	88156600	601156.600	87156600	602156.600	12.000	6.000	10.30
5	88156650	601156.650	87156650	602156.650	15.000	7.500	19.00
6	88156700	601156.700	87156700	602156.700	18.000	9.000	31.30
8	88156750	601156.750	87156750	602156.750	24.000	12.000	70.20
10	88156800	601156.800	87156800	602156.800	30.000	15.000	138.00
12	88156820	601156.820	87156820	602156.820	36.000	18.000	175.00

**CL-200 Butt Weld Fittings
Caps
DWG 810-1385880**



Caps

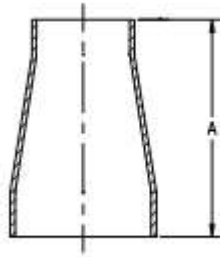
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	F	Estimated Weight (LBS)
	90/10	90/10	70/30	70/30		
1/4	88154040	601154.040	87154040	602154.040	0.750	0.05
3/8	88154060	601154.060	87154060	602154.060	1.000	0.07
1/2	88154100	601154.100	87154100	602154.100	1.250	0.10
3/4	88154150	601154.150	87154150	602154.150	1.250	0.13
1	88154200	601154.200	87154200	602154.200	1.500	0.18
1-1/4	88154250	601154.250	87154250	602154.250	1.500	0.25
1-1/2	88154300	601154.300	87154300	602154.300	1.500	0.27
2	88154400	601154.400	87154400	602154.400	1.500	0.39
2-1/2	88154450	601154.450	87154450	602154.450	1.500	0.44
3	88154500	601154.500	87154500	602154.500	2.000	0.75
3-1/2	88154550	601154.550	87154550	602154.550	2.500	1.00
4	88154600	601154.600	87154600	602154.600	2.500	1.30
5	88154650	601154.650	87154650	602154.650	3.000	2.10
6	88154700	601154.700	87154700	602154.700	3.500	3.00
7	88154725	601154.725	87154725	602154.725	3.500	3.30
8	88154750	601154.750	87154750	602154.750	4.000	4.60
9	88154775	601154.775	87154775	602154.775	4.500	7.00
10	88154800	601154.800	87154800	602154.800	5.000	8.70
12	88154820	601154.820	87154820	602154.820	6.000	16.20



Concentric Reducers

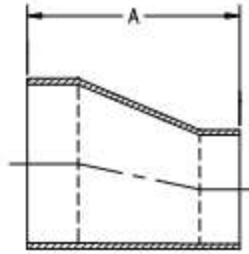
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (LBS)
	90/10	90/10	70/30	70/30		
3/4 x 1/2	88150149	601150.149	87150149	602150.149	1.500	0.09
1 x 1/2	88150198	601150.198	87150198	602150.198	2.000	0.15
1 x 3/4	88150199	601150.199	87150199	602150.199	2.000	0.19
1-1/4 x 1/2	88150247	601150.247	87150247	602150.247	2.000	0.19
1-1/4 x 3/4	88150248	601150.248	87150248	602150.248	2.000	0.19
1-1/4 x 1	88150249	601150.249	87150249	602150.249	2.000	0.19
1-1/2 X 1/2	88150296	601150.296	87150296	602150.296	2.500	0.29
1-1/2 X 3/4	88150297	601150.297	87150297	602150.297	2.500	0.29
1-1/2 X 1	88150298	601150.298	87150298	602150.298	2.500	0.29
1-1/2 X 1-1/4	88150299	601150.299	87150299	602150.299	2.500	0.29
2 X 1/2	88150395	601150.395	87150395	602150.395	3.000	0.41
2 X 3/4	88150396	601150.396	87150396	602150.396	3.000	0.41
2 X 1	88150397	601150.397	87150397	602150.397	3.000	0.41
2 X 1-1/4	88150398	601150.398	87150398	602150.398	3.000	0.41
2 X 1-1/2	88150399	601150.399	87150399	602150.399	3.000	0.41
2-1/2 X 3/4	88150445	601150.445	87150445	602150.445	3.500	0.63
2-1/2 X 1	88150446	601150.446	87150446	602150.446	3.500	0.63
2-1/2 X 1-1/4	88150447	601150.447	87150447	602150.447	3.500	0.63
2-1/2 X 1-1/2	88150448	601150.448	87150448	602150.448	3.500	0.63
2-1/2 X 2	88150449	601150.449	87150449	602150.449	3.500	0.63
3 X 1	88150495	601150.495	87150495	602150.495	3.500	0.87
3 X 1-1/4	88150496	601150.496	87150496	602150.496	3.500	0.87
3 X 1-1/2	88150497	601150.497	87150497	602150.497	3.500	0.87
3 X 2	88150498	601150.498	87150498	602150.498	3.500	0.87
3 X 2-1/2	88150499	601150.499	87150499	602150.499	3.500	0.87
3-1/2 x 1-1/4	88150545	601150.545	87150545	602150.545	4.000	1.40
3-1/2 x 1-1/2	88150546	601150.546	87150546	602150.546	4.000	1.40
3-1/2 x 2	88150547	601150.547	87150547	602150.547	4.000	1.40
3-1/2 x 2-1/2	88150548	601150.548	87150548	602150.548	4.000	1.40
3-1/2 x 3	88150549	601150.549	87150549	602150.549	4.000	1.40

**CL-200 Butt Weld Fittings
Concentric Reducers
DWG 810-1385880
(Page 2 of 2)**



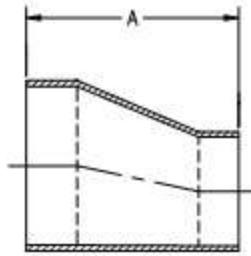
Concentric Reducers

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (LBS)
	90/10	90/10	70/30	70/30		
4 X 1-1/2	88150595	601150.595	87150595	602150.595	4.000	1.70
4 X 2	88150596	601150.596	87150596	602150.596	4.000	1.70
4 X 2-1/2	88150597	601150.597	87150597	602150.597	4.000	1.70
4 X 3	88150598	601150.598	87150598	602150.598	4.000	1.70
4 X 3-1/2	88150599	601150.599	87150599	602150.599	4.000	1.70
5 X 2-1/2	88150646	601150.646	87150646	602150.646	5.000	3.10
5 X 3	88150647	601150.647	87150647	602150.647	5.000	3.10
5 X 3-1/2	88150648	601150.648	87150648	602150.648	5.000	3.10
5 X 4	88150649	601150.649	87150649	602150.649	5.000	3.10
6 X 2	88150694	601150.694	87150694	602150.694	5.500	4.10
6 X 2-1/2	88150695	601150.695	87150695	602150.695	5.500	4.30
6 X 3	88150696	601150.696	87150696	602150.696	5.500	4.30
6 X 3-1/2	88150697	601150.697	87150697	602150.697	5.500	4.50
6 X 4	88150698	601150.698	87150698	602150.698	5.500	5.00
6 X 5	88150699	601150.699	87150699	602150.699	5.500	5.00
8 X 4	88150747	601150.747	87150747	602150.747	6.000	9.40
8 X 5	88150748	601150.748	87150748	602150.748	6.000	9.40
8 X 6	88150749	601150.749	87150749	602150.749	6.000	9.40
10 X 6	88150798	601150.798	87150798	602150.798	7.000	18.00
10 X 8	88150499	601150.799	87150799	602150.799	7.000	18.00
12 X 6	88150817	601150.817	87150817	602150.817	8.000	22.50
12 X 8	88150818	601150.818	87150818	602150.818	8.000	24.00
12 X 10	88150819	601150.819	87150819	602150.819	8.000	27.60
14 X 6	88150876	601150.876	87150876	602150.876	13.000	38.30
14 X 10	88150878	601150.878	87150878	602150.878	13.000	43.20
14 X 12	88150879	601150.879	87150879	602150.879	13.000	50.00
16 X 10	88150887	601150.887	87150887	602150.887	14.000	47.30
16 X 12	88150888	601150.888	87150888	602150.888	14.000	51.00
16 X 14	88150889	601150.889	87150889	602150.889	14.000	53.40



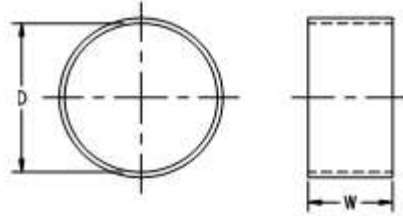
Eccentric Reducers

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (LBS)
	90/10	90/10	70/30	70/30		
1-1/2 X 1/2	88152296	601149.296	87152296	602149.296	2.500	0.31
1-1/2 X 1	88152298	601149.298	87152298	602149.298	2.500	0.31
1-1/2 X 1-1/4	88152299	601149.299	87152299	602149.299	2.500	0.31
2 X 1/2	88152395	601149.395	87152395	602149.395	3.000	0.42
2 X 3/4	88152396	601149.396	87152396	602149.396	3.000	0.42
2 X 1	88152397	601149.397	87152397	602149.397	3.000	0.42
2 X 1-1/4	88152398	601149.398	87152398	602149.398	3.000	0.42
2 X 1-1/2	88152399	601149.399	87152399	602149.399	3.000	0.42
2-1/2 X 3/4	88152445	601149.445	87152445	602149.445	3.500	0.63
2-1/2 X 1	88152446	601149.446	87152446	602149.446	3.500	0.63
2-1/2 X 1-1/4	88152447	601149.447	87152447	602149.447	3.500	0.63
2-1/2 X 1-1/2	88152448	601149.448	87152448	602149.448	3.500	0.63
2-1/2 X 2	88152449	601149.449	87152449	602149.449	3.500	0.63
3 X 1	88152495	601149.495	87152495	602149.495	3.500	0.88
3 X 1-1/4	88152496	601149.496	87152496	602149.496	3.500	0.88
3 X 1-1/2	88152497	601149.497	87152497	602149.497	3.500	0.88
3 X 2	88152498	601149.498	87152498	602149.498	3.500	0.88
3 X 2-1/2	88152499	601149.499	87152499	602149.499	3.500	0.88
3-1/2 X 1-1/4	88152545	601149.545	87152545	602149.545	4.000	1.4
3-1/2 X 1-1/2	88152546	601149.546	87152546	602149.546	4.000	1.4
3-1/2 X 2	88152547	601149.547	87152547	602149.547	4.000	1.4
3-1/2 X 2-1/2	88152548	601149.548	87152548	602149.548	4.000	1.4
3-1/2 X 3	88152549	601149.549	87152549	602149.549	4.000	1.4



Eccentric Reducers

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (LBS)
	90/10	90/10	70/30	70/30		
5 X 2-1/2	88152595	601149.595	87152595	602149.595	5.000	3.1
5 X 3	88152596	601149.596	87152596	602149.596	5.000	3.1
5 X 3-1/2	88152597	601149.597	87152597	602149.597	5.000	3.1
5 X 4	88152598	601149.598	87152598	602149.598	5.000	3.1
4 X 1-1/2	88152599	601149.599	87152599	602149.599	4.000	1.7
4 X 2	88152646	601149.646	87152646	602149.646	4.000	1.7
4 X 2-1/2	88152647	601149.647	87152647	602149.647	4.000	1.7
4 X 3	88152648	601149.648	87152648	602149.648	4.000	1.7
4 X 3-1/2	88152649	601149.649	87152649	602149.649	4.000	1.7
6 X 2	88152694	601149.694	87152694	602149.694	5.500	4.1
6 X 2-1/2	88152695	601149.695	87152695	602149.695	5.500	4.3
6 X 3	88152696	601149.696	87152696	602149.696	5.500	4.3
6 X 3-1/2	88152697	601149.697	87152697	602149.697	5.500	4.5
6 X 4	88152698	601149.698	87152698	602149.698	5.500	5.0
6 X 5	88152699	601149.699	87152699	602149.699	5.500	5.0
8 X 4	88152747	601149.747	87152747	602149.747	6.000	9.4
8 X 5	88152748	601149.748	87152748	602149.748	6.000	9.4
8 X 6	88152749	601149.749	87152749	602149.749	6.000	9.4
10 X 6	88152798	601149.798	87152798	602149.798	7.000	18.0
10 X 8	88152799	601149.799	87152799	602149.799	7.000	18.0
12 X 6	88152817	601149.817	87152817	602149.817	8.000	22.5
12 X 8	88152818	601149.818	87152818	602149.818	8.000	24.0
12 X 10	88152819	601149.819	87152819	602149.819	8.000	27.6



Sleeves

Nominal Pipe Size	Premier	W&O	Premier	W&O	W	D	Estimated Weight (LBS)
	Part #	Part #	Part #	Part #			
	90/10	90/10	70/30	70/30			
1/4	88008040	601155.040	87008040	602155.040	0.531	0.540	0.02
3/8	88008060	601155.060	87008060	602155.060	0.625	0.675	0.03
1/2	88008100	601155.100	87008100	602155.100	0.750	0.840	0.05
3/4	88008150	601155.150	87008150	602155.150	0.813	1.050	0.07
1	88008200	601155.200	87008200	602155.200	0.875	1.315	0.09
1-1/4	88008250	601155.250	87008250	602155.250	1.000	1.660	0.15
1-1/2	88008300	601155.300	87008300	602155.300	1.250	1.900	0.21
2	88008400	601155.400	87008400	602155.400	1.313	2.375	0.31
2-1/2	88008450	601155.450	87008450	602155.450	1.563	2.875	0.45
3	88008500	601155.500	87008500	602155.500	1.656	3.500	0.66
3-1/2	88008550	601155.550	87008550	602155.550	1.750	4.000	0.80
4	88008600	601155.600	87008600	602155.600	1.813	4.500	1.10
5	88008650	601155.650	87008650	602155.650	2.063	5.563	1.60
6	88008700	601155.700	87008700	602155.700	2.219	6.625	2.30
8	88008750	601155.750	87008750	602155.750	2.625	8.625	4.40
10	88008800	601155.800	87008800	602155.800	3.000	10.750	8.40
12	88008820	601155.820	87008820	602155.820	3.250	12.750	10.70



Contents

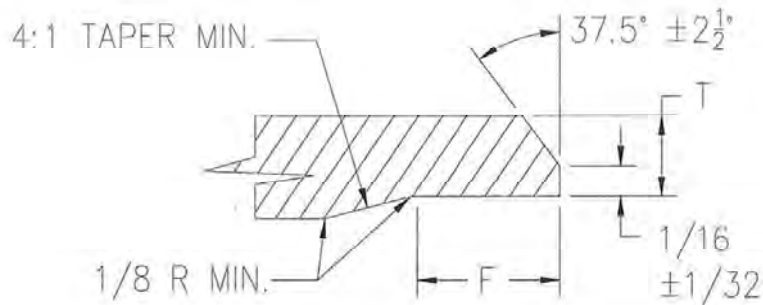
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45° Elbows.....	2
90° Short Radius Elbows.....	3
90° Long Radius Elbows	4
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CL-700 Butt Weld Copper Nickel Fittings

- All CL-700 BW fittings manufactured iaw general requirements of MIL-F-24202 AMENDMENT 1.
- Intended use with Copper-Nickel Pipe iaw MIL-T-16420K, CL-700.
- Rated at 700 PSI @ 200°F.
- Sizes shown reflect the full range of fittings described in MIL-F-24202 AMENDMENT 1. While most sizes are in current production and readily available, there are exceptions. Always call for availability.

CL-700 Butt Weld Fittings
Weld End Preparation Detail

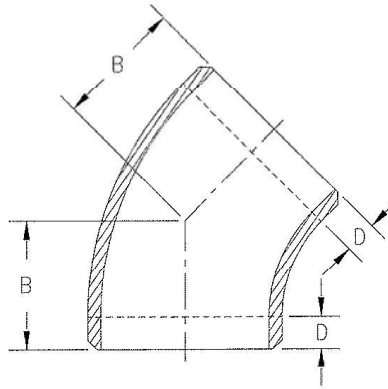


3

Weld End Prep Detail

Nominal Pipe Size	Maximum Outside Diameter	Minimum Wall Thickness T	Minimum Counterbore F
1/2	0.840	0.072	0.313
3/4	1.050	0.083	0.313
1	1.315	0.095	0.313
1-1/4	1.660	0.095	0.313
1-1/2	1.900	0.109	0.313
2	2.375	0.120	0.313
2-1/2	2.875	0.134	0.313
3	3.500	0.165	0.313
3-1/2	4.000	0.180	0.500
4	4.500	0.203	0.500
5	5.563	0.220	0.500
6	6.625	0.259	0.500
8	8.625	0.340	0.500
10	10.750	0.380	0.500
12	12.750	0.454	0.500
14	14.000	0.473	0.500
16	16.000	0.534	0.500

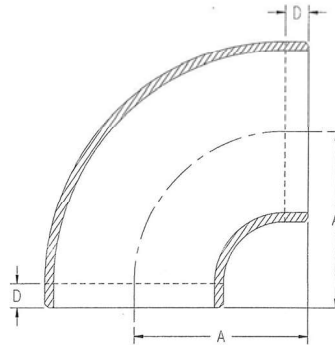
CL-700 Butt Weld Fittings
45° Elbows



3

45° Elbows

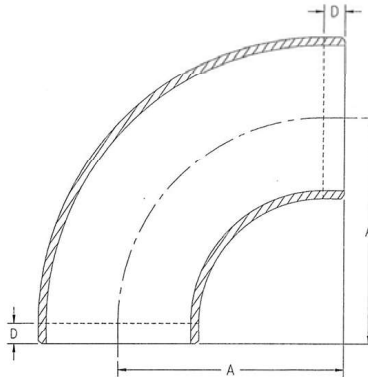
Nominal Pipe Size	Premier Part #	W&O Part #	B	Tangent D	Estimated Weight (Lbs.)
	70/30	70/30			
1/2	89104100	6027104.100	0.938	0.313	0.06
3/4	89104150	6027104.150	0.750	0.313	0.08
1	89104200	6027104.200	1.188	0.313	0.16
1-1/4	89104250	6027104.250	1.313	0.313	0.24
1-1/2	89104300	6027104.300	1.438	0.313	0.41
2	89104400	6027104.400	1.688	0.313	0.69
2-1/2	89104450	6027104.450	2.063	0.313	1.34
3	89104500	6027104.500	2.313	0.313	2.08
3-1/2	89104550	6027104.550	2.750	0.500	3.79
4	89104600	6027104.600	3.000	0.500	5.40
5	89104650	6027104.650	3.625	0.500	9.33
6	89104700	6027104.700	4.250	0.500	16.60
8	89104750	6027104.750	5.500	0.500	44.30
10	89104800	6027104.800	6.750	0.500	76.20
12	89104820	6027104.820	8.000	0.500	90.00
14	89104840	6027104.880	9.250	0.500	113.00
16	89104860	6027104.890	10.500	0.500	169.00



90° Short Radius Elbows

Nominal Pipe Size	Premier Part #	W&O Part #	A	Tangent D	Estimated Weight (Lbs.)
	70/30	70/30			
1	89101200	6027101.200	1.313	0.313	0.22
1-1/4	89101250	6027101.250	1.563	0.313	0.32
1-1/2	89101300	6027101.300	1.813	0.313	0.56
2	89101400	6027101.400	2.313	0.313	0.90
2-1/2	89101450	6027101.450	2.813	0.313	1.73
3	89101500	6027101.500	3.313	0.313	2.95
3-1/2	89101550	6027101.550	4.000	0.500	5.11
4	89101600	6027101.600	4.500	0.500	7.26
5	89101650	6027101.650	5.500	0.500	12.70
6	89101700	6027101.700	6.500	0.500	22.80
8	89101750	6027101.750	8.500	0.500	60.90
10	89101800	6027101.800	10.500	0.500	99.90
12	89101820	6027101.820	12.500	0.500	128.00
14	89101840	6027101.880	14.500	0.500	151.30
16	89101860	6027101.890	16.500	0.500	224.30

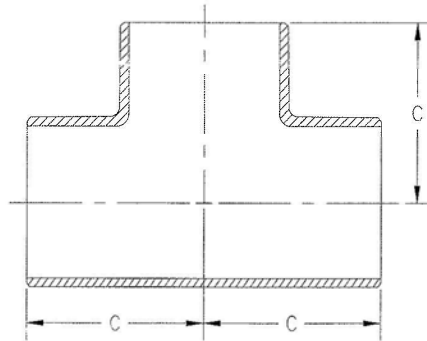
CL-700 Butt Weld Fittings
90° LR Elbows



90° Long Radius Elbows

Nominal Pipe Size	Premier Part #	W&O Part #	A	Tangent D	Estimated Weight (Lbs.)
	70/30	70/30			
1/2	89111100	6027111.100	1.813	0.313	0.09
3/4	89111150	6027111.150	1.438	0.313	0.13
1	89111200	6027111.200	1.813	0.313	0.26
1-1/4	89111250	6027111.250	2.188	0.313	0.40
1-1/2	89111300	6027111.300	2.563	0.313	0.68
2	89111400	6027111.400	3.313	0.313	1.09
2-1/2	89111450	6027111.450	4.063	0.313	2.09
3	89111500	6027111.500	4.813	0.313	3.82
3-1/2	89111550	6027111.550	5.750	0.500	6.25
4	89111600	6027111.600	6.500	0.500	8.94
5	89111650	6027111.650	8.000	0.500	15.80
6	89111700	6027111.700	9.500	0.500	28.90
8	89111750	6027111.750	12.500	0.500	77.20
10	89111800	6027111.800	15.500	0.500	123.50
12	89111820	6027111.820	18.500	0.500	174.30
14	89111840	6027111.880	21.500	0.500	227.10
16	89111860	6027111.890	24.500	0.500	335.30

CL-700 Butt Weld Fittings
Tees

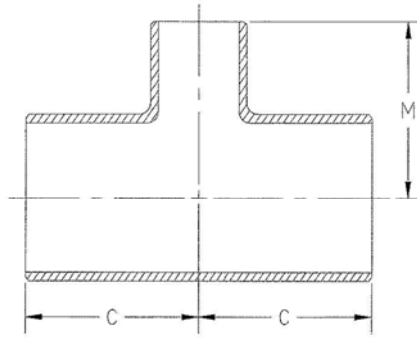


3

Tees

Nominal Pipe Size	Premier Part #	W&O Part #	C	Estimated Weight (Lbs.)
	70/30	70/30		
3/4	89121150	6027121.150	1.125	0.23
1	89121200	6027121.200	1.500	0.41
1-1/4	89121250	6027121.250	1.875	0.59
1-1/2	89121300	6027121.300	2.250	0.94
2	89121400	6027121.400	2.500	1.24
2-1/2	89121450	6027121.450	3.000	2.26
3	89121500	6027121.500	3.375	3.65
3-1/2	89121550	6027121.550	3.750	5.87
4	89121600	6027121.600	4.125	8.19
5	89121650	6027121.650	4.875	13.90
6	89121700	6027121.700	5.625	24.50
8	89121750	6027121.750	7.000	61.30
10	89121800	6027121.800	8.500	104.80
12	89121820	6027121.820	10.000	163.40
14	89121840	6027121.880	11.000	179.30
16	89121860	6027121.890	12.000	239.20

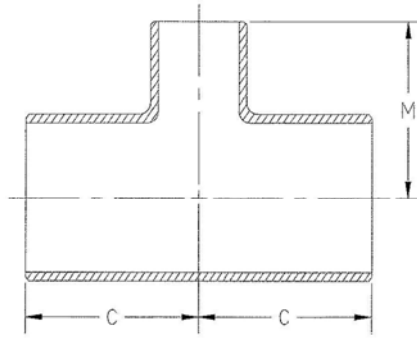
CL-700 Butt Weld Fittings
Reducing Tees
 (Page 1 of 2)



Reducing Tees

Nominal Pipe Size	Premier Part #	W&O Part #	C	M	Estimated Weight (Lbs.)
	70/30	70/30			
1 x 1/2	89121198	6027121R.198	1.500	1.500	0.38
1 x 3/4	89121199	6027121R.199	1.500	1.500	0.39
1-1/4 x 1/2	89121247	6027121R.247	1.875	1.875	0.84
1-1/4 x 3/4	89121248	6027121R.248	1.875	1.875	0.86
1-1/4 x 1	89121249	6027121R.249	1.875	1.875	0.87
1-1/2 x 1/2	89121296	6027121R.296	2.250	2.250	1.29
1-1/2 x 3/4	89121297	6027121R.297	2.250	2.250	1.32
1-1/2 x 1	89121298	6027121R.298	2.250	2.250	1.36
1-1/2 x 1-1/4	89121299	6027121R.299	2.250	2.250	1.39
2 x 3/4	89121396	6027121R.396	2.500	1.750	2.02
2 x 1	89121397	6027121R.397	2.500	2.000	2.02
2 x 1-1/4	89121398	6027121R.398	2.500	2.250	2.17
2 x 1-1/2	89121399	6027121R.399	2.500	2.375	2.17
2-1/2 x 1	89121446	6027121R.446	3.000	2.250	1.94
2-1/2 x 1-1/4	89121447	6027121R.447	3.000	2.500	2.09
2-1/2 x 1-1/2	89121448	6027121R.448	3.000	2.625	2.09
2-1/2 x 2	89121449	6027121R.449	3.000	2.750	2.09
3 x 1-1/4	89121496	6027121R.496	3.375	2.750	3.30
3 x 1-1/2	89121497	6027121R.497	3.375	2.875	3.47
3 x 2	89121498	6027121R.498	3.375	3.000	3.47
3 x 2-1/2	89121499	6027121R.499	3.375	3.250	3.47
3-1/2 x 1-1/2	89121546	6027121R.546	3.750	3.125	5.68
3-1/2 x 2	89121547	6027121R.547	3.750	3.250	5.68
3-1/2 x 2-1/2	89121548	6027121R.548	3.750	3.500	5.68
3-1/2 x 3	89121549	6027121R.549	3.750	3.625	5.68
4 x 1-1/2	89121595	6027121R.595	4.125	3.375	7.64
4 x 2	89121596	6027121R.596	4.125	3.500	7.82
4 x 2-1/2	89121597	6027121R.597	4.125	3.750	8.00
4 x 3	89121598	6027121R.598	4.125	3.875	8.00
4 x 3-1/2	89121599	6027121R.599	4.125	4.000	8.00
5 x 2	89121645	6027121R.645	4.875	4.125	13.00
5 x 2-1/2	89121646	6027121R.646	4.875	4.250	13.20
5 x 3	89121647	6027121R.647	4.875	4.375	13.50
5 x 3-1/2	89121648	6027121R.648	4.875	4.500	13.50
5 x 4	89121649	6027121R.649	4.875	4.625	13.70

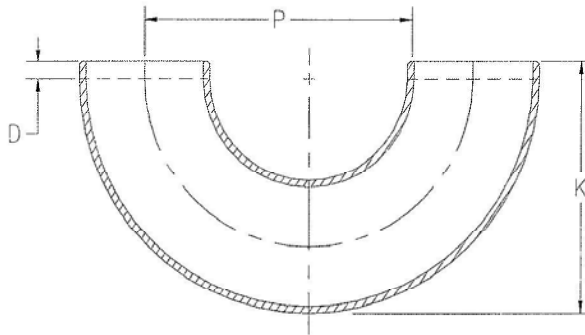
CL-700 Butt Weld Fittings
Reducing Tees
 (Page 2 of 2)



Reducing Tees

Nominal Pipe Size	Premier Part #	W&O Part #	C	M	Estimated Weight (Lbs.)
	70/30	70/30			
6 x 2-1/2	89121695	6027121R.695	5.625	4.750	23.30
6 x 3	89121696	6027121R.696	5.625	4.875	23.70
6 x 3-1/2	89121697	6027121R.697	5.625	5.000	23.90
6 x 4	89121698	6027121R.698	5.625	5.125	24.10
6 x 5	89121699	6027121R.699	5.625	5.375	24.10
8 x 3-1/2	89121746	6027121R.746	7.000	6.000	58.60
8 x 4	89121747	6027121R.747	7.000	6.125	59.00
8 x 5	89121748	6027121R.748	7.000	6.375	59.20
8 x 6	89121749	6027121R.749	7.000	6.625	59.20
10 x 4	89121796	6027121R.796	8.500	7.250	98.50
10 x 5	89121797	6027121R.797	8.500	7.500	98.70
10 x 6	89121798	6027121R.798	8.500	7.625	98.90
10 x 8	89121799	6027121R.799	8.500	8.000	101.10
12 x 5	89121816	6027121R.816	10.000	8.500	150.70
12 x 6	89121817	6027121R.817	10.000	8.625	151.10
12 x 8	89121818	6027121R.818	10.000	9.000	154.50
12 x 10	89121819	6027121R.819	10.000	9.500	158.50
14 x 6	89121836	6027121R.836	11.000	9.375	150.70
14 x 8	89121837	6027121R.837	11.000	9.750	154.50
14 x 10	89121838	6027121R.838	11.000	10.125	158.90
14 x 12	89121839	6027121R.839	11.000	10.625	163.20
16 x 6	89121855	6027121R.855	12.000	10.375	213.60
16 x 8	89121856	6027121R.856	12.000	10.750	217.80
16 x 10	89121857	6027121R.857	12.000	11.125	224.20
16 x 12	89121858	6027121R.858	12.000	11.625	228.50
16 x 14	89121859	6027121R.859	12.000	12.000	232.80

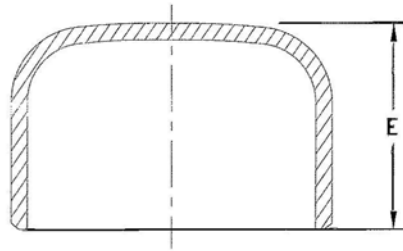
**CL-700 Butt Weld Fittings
180° Return Bends**



3

180° Return Bends

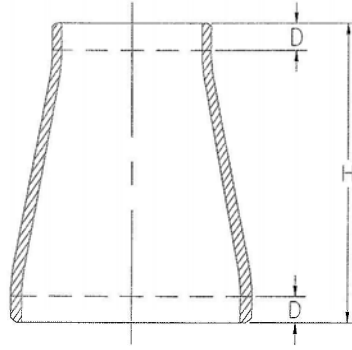
Nominal Pipe Size	Premier Part #	W&O Part #	P	K	Tangent D	Estimated Weight (Lbs.)
	70/30	70/30				
1	89156200	6027156.200	3.000	2.500	0.313	0.80
1-1/4	89156250	6027156.250	3.750	3.063	0.313	1.02
1-1/2	89156300	6027156.300	4.500	3.563	0.313	1.43
2	89156400	6027156.400	6.000	4.500	0.313	2.31
2-1/2	89156450	6027156.450	7.500	5.500	0.313	4.52
3	89156500	6027156.500	9.000	6.563	0.313	7.98
3-1/2	89156550	6027156.550	10.500	7.750	0.500	13.20
4	89156600	6027156.600	12.000	8.750	0.500	19.10
5	89156650	6027156.650	15.000	10.813	0.500	33.40
6	89156700	6027156.700	18.000	12.813	0.500	60.40
8	89156750	6027156.750	24.000	16.813	0.500	161.20
10	89156800	6027156.800	30.000	20.875	0.500	247.10
12	89156820	6027156.820	36.000	24.875	0.500	348.60
14	89156840	6027156.880	42.000	28.500	0.500	454.00
16	89156860	6027156.890	48.000	32.500	0.500	670.00



Caps

Nominal Pipe Size	Premier Part #	W&O Part #	E	Estimated Weight (Lbs.)
	70/30	70/30		
1	89154200	6027154.200	1.500	0.26
1-1/4	89154250	6027154.250	1.500	0.36
1-1/2	89154300	6027154.300	1.500	0.40
2	89154400	6027154.400	1.500	0.56
2-1/2	89154450	6027154.450	1.500	0.71
3	89154500	6027154.500	2.000	1.30
3-1/2	89154550	6027154.550	2.500	1.89
4	89154600	6027154.600	2.500	2.00
5	89154650	6027154.650	3.000	3.69
6	89154700	6027154.700	3.500	5.79
8	89154750	6027154.750	4.000	10.50
10	89154800	6027154.800	5.000	17.60
12	89154820	6027154.820	6.000	29.40
14	89154840	6027154.880	6.500	37.80
16	89154860	6027154.890	7.000	59.80

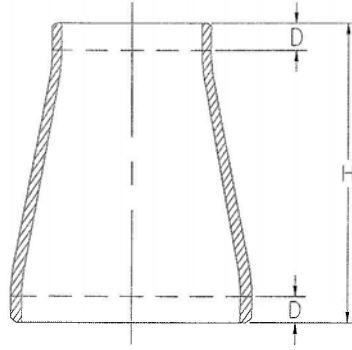
**CL-700 Butt Weld Fittings
Concentric Reducers
(Page 1 of 2)**



Concentric Reducers

Nominal Pipe Size	Premier Part #	W&O Part #	H	Estimated Weight (Lbs.)
	70/30	70/30		
1 x 1/2	89150198	6027150.198	2.000	0.38
1 x 3/4	89150199	6027150.199	2.000	0.38
1-1/4 x 1/2	89150247	6027150.247	2.000	0.41
1-1/4 x 3/4	89150248	6027150.248	2.000	0.41
1-1/4 x 1	89150249	6027150.249	2.000	0.41
1-1/2 x 1/2	89150296	6027150.296	2.500	0.47
1-1/2 x 3/4	89150297	6027150.297	2.500	0.47
1-1/2 x 1	89150298	6027150.298	2.500	0.47
1-1/2 x 1-1/4	89150299	6027150.299	2.500	0.47
2 x 3/4	89150396	6027150.396	3.000	0.60
2 x 1	89150397	6027150.397	3.000	0.60
2 x 1-1/4	89150398	6027150.398	3.000	0.60
2 x 1-1/2	89150399	6027150.399	3.000	0.60
2-1/2 x 1	89150446	6027150.446	3.500	1.01
2-1/2 x 1-1/4	89150447	6027150.447	3.500	1.01
2-1/2 x 1-1/2	89150448	6027150.448	3.500	1.01
2-1/2 x 2	89150449	6027150.449	3.500	1.01
3 x 1-1/4	89150496	6027150.496	3.500	1.52
3 x 1-1/2	89150497	6027150.497	3.500	1.52
3 x 2	89150498	6027150.498	3.500	1.52
3 x 2-1/2	89150499	6027150.499	3.500	1.52
3-1/2 x 1-1/4	89150545	6027150.545	4.000	2.65
3-1/2 x 1-1/2	89150546	6027150.546	4.000	2.65
3-1/2 x 2	89150547	6027150.547	4.000	2.65
3-1/2 x 2-1/2	89150548	6027150.548	4.000	2.65
3-1/2 x 3	89150549	6027150.549	4.000	2.65
4 x 1-1/2	89150595	6027150.595	4.000	3.16
4 x 2	89150596	6027150.596	4.000	3.16
4 x 2-1/2	89150597	6027150.597	4.000	3.16
4 x 3	89150598	6027150.598	4.000	3.16
4 x 3-1/2	89150599	6027150.599	4.000	3.16
5 x 2	89150645	6027150.645	5.000	5.45
5 x 2-1/2	89150646	6027150.646	5.000	5.45
5 x 3	89150647	6027150.647	5.000	5.45
5 x 3-1/2	89150648	6027150.648	5.000	5.45
5 x 4	89150649	6027150.649	5.000	5.45

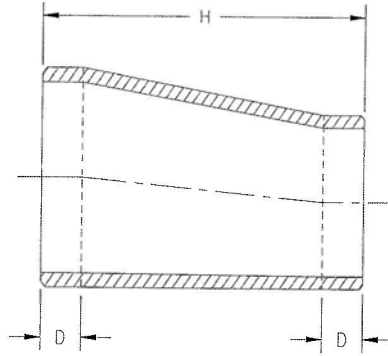
**CL-700 Butt Weld Fittings
Concentric Reducers
(Page 2 of 2)**



Concentric Reducers

Nominal Pipe Size	Premier Part #	W&O Part #	H	Estimated Weight (Lbs.)
	70/30	70/30		
6 x 2-1/2	89150695	6027150.695	5.500	8.31
6 x 3	89150696	6027150.696	5.500	8.31
6 x 3-1/2	89150697	6027150.697	5.500	8.69
6 x 4	89150698	6027150.698	5.500	9.66
6 x 5	89150699	6027150.699	5.500	9.66
8 x 3-1/2	89150746	6027150.746	6.000	21.50
8 x 4	89150747	6027150.747	6.000	21.50
8 x 5	89150748	6027150.748	6.000	21.50
8 x 6	89150749	6027150.749	6.000	21.50
10 x 4	89150796	6027150.796	7.000	36.50
10 x 5	89150797	6027150.797	7.000	36.50
10 x 6	89150798	6027150.798	7.000	36.50
10 x 8	89150799	6027150.799	7.000	36.50
12 x 5	89150816	6027150.816	8.000	39.95
12 x 6	89150817	6027150.817	8.000	40.80
12 x 8	89150818	6027150.818	8.000	43.50
12 x 10	89150819	6027150.819	8.000	50.10
14 x 6	89150836	6027150.836	13.000	69.50
14 x 8	89150837	6027150.837	13.000	74.20
14 x 10	89150838	6027150.838	13.000	78.40
14 x 12	89150839	6027150.839	13.000	94.60
16 x 8	89150856	6027150.856	14.000	93.90
16 x 10	89150857	6027150.857	14.000	101.00
16 x 12	89150858	6027150.858	14.000	108.90
16 x 14	89150859	6027150.859	14.000	114.00

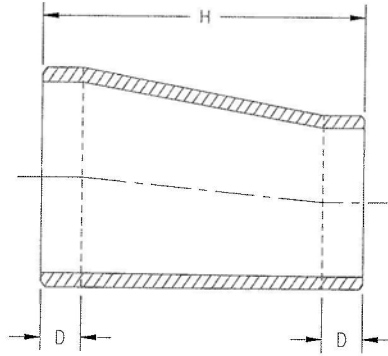
**CL-700 Butt Weld Fittings
Eccentric Reducers
(Page 1 of 2)**



Eccentric Reducers

Nominal Pipe Size	Premier Part #	W&O Part #	H	Estimated Weight (Lbs.)
	70/30	70/30		
1 x 1/2	89152198	6027149.198	2.000	0.38
1 x 3/4	89152199	6027149.199	2.000	0.38
1-1/4 x 1/2	89152247	6027149.247	2.000	0.41
1-1/4 x 3/4	89152248	6027149.248	2.000	0.41
1-1/4 x 1	89152249	6027149.249	2.000	0.41
1-1/2 x 1/2	89152296	6027149.296	2.500	0.47
1-1/2 x 3/4	89152297	6027149.297	2.500	0.47
1-1/2 x 1	89152298	6027149.298	2.500	0.47
1-1/2 x 1-1/4	89152299	6027149.299	2.500	0.47
2 x 3/4	89152396	6027149.396	3.000	0.60
2 x 1	89152397	6027149.397	3.000	0.60
2 x 1-1/4	89152398	6027149.398	3.000	0.60
2 x 1-1/2	89152399	6027149.399	3.000	0.60
2-1/2 x 1	89152446	6027149.446	3.500	1.01
2-1/2 x 1-1/4	89152447	6027149.447	3.500	1.01
2-1/2 x 1-1/2	89152448	6027149.448	3.500	1.01
2-1/2 x 2	89152449	6027149.449	3.500	1.01
3 x 1-1/4	89152496	6027149.496	3.500	1.52
3 x 1-1/2	89152497	6027149.497	3.500	1.52
3 x 2	89152498	6027149.498	3.500	1.52
3 x 2-1/2	89152499	6027149.499	3.500	1.52
3-1/2 x 1-1/4	89152545	6027149.545	4.000	2.65
3-1/2 x 1-1/2	89152546	6027149.546	4.000	2.65
3-1/2 x 2	89152547	6027149.547	4.000	2.65
3-1/2 x 2-1/2	89152548	6027149.548	4.000	2.65
3-1/2 x 3	89152549	6027149.549	4.000	2.65
4 x 1-1/2	89152595	6027149.595	4.000	3.16
4 x 2	89152596	6027149.596	4.000	3.16
4 x 2-1/2	89152597	6027149.597	4.000	3.16
4 x 3	89152598	6027149.598	4.000	3.16
4 x 3-1/2	89152599	6027149.599	4.000	3.16
5 x 2	89152645	6027149.645	5.000	5.45
5 x 2-1/2	89152646	6027149.646	5.000	5.45
5 x 3	89152647	6027149.647	5.000	5.45
5 x 3-1/2	89152648	6027149.648	5.000	5.45
5 x 4	89152649	6027149.649	5.000	5.45

**CL-700 Butt Weld Fittings
Eccentric Reducers
(Page 2 of 2)**



Eccentric Reducers

Nominal Pipe Size	Premier Part #	W&O Part #	H	Estimated Weight (Lbs.)
	70/30	70/30		
6 x 2-1/2	89152695	6027149.695	5.500	8.31
6 x 3	89152696	6027149.696	5.500	8.31
6 x 3-1/2	89152697	6027149.697	5.500	8.69
6 x 4	89152698	6027149.698	5.500	9.66
6 x 5	89152699	6027149.699	5.500	9.66
8 x 3-1/2	89152746	6027149.746	6.000	21.50
8 x 4	89152747	6027149.747	6.000	21.50
8 x 5	89152748	6027149.748	6.000	21.50
8 x 6	89152749	6027149.749	6.000	21.50
10 x 4	89152796	6027149.796	7.000	36.50
10 x 5	89152797	6027149.797	7.000	36.50
10 x 6	89152798	6027149.798	7.000	36.50
10 x 8	89152799	6027149.799	7.000	36.50
12 x 5	89152816	6027149.816	8.000	39.95
12 x 6	89152817	6027149.817	8.000	40.80
12 x 8	89152818	6027149.818	8.000	43.50
12 x 10	89152819	6027149.819	8.000	50.10
14 x 6	89152836	6027149.836	13.000	69.50
14 x 8	89152837	6027149.837	13.000	74.20
14 x 10	89152838	6027149.838	13.000	78.40
14 x 12	89152839	6027149.839	13.000	94.60
16 x 8	89152856	6027149.856	14.000	93.90
16 x 10	89152857	6027149.857	14.000	101.00
16 x 12	89152858	6027149.858	14.000	108.90
16 x 14	89152859	6027149.859	14.000	114.00



Contents

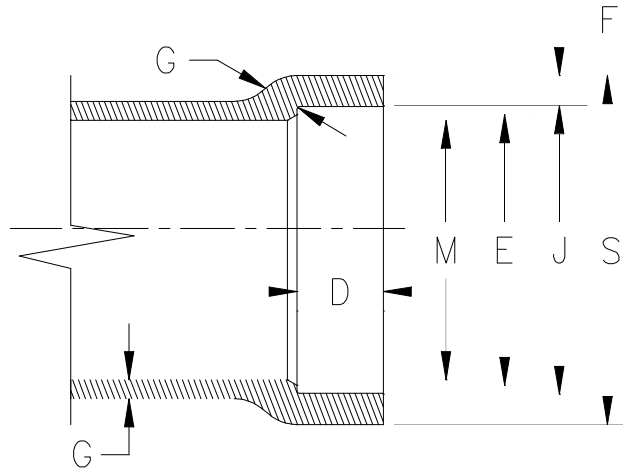
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400 PSI Socket Weld Copper Nickel Fittings



- Design is iaw NAVSEA Dwg. 803-6397430.
- Nearly half the weight of similar 3000 PSI ANSI B16.11 fittings.
- Significantly reduced cost when compared to ANSI B16.11 fittings.
- Intended use with Copper-Nickel Pipe iaw MIL-T-16420K CL200.
- Rated at 400 PSI @ 150°F for Air, Oil, and Water Service.
Rated at 200 PSI @ 425°F for Steam Service
- Principal Dimensions from:
 - MIL-F-1183:
 - Takeout Distances
 - Socket Depth
 - Waterway Bore
 - ANSI B16.11:
 - Socket Diameter

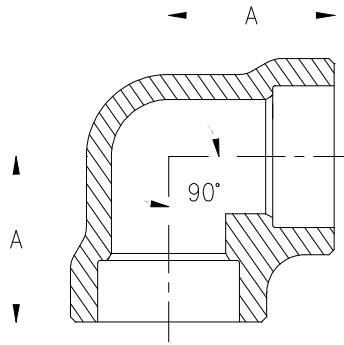
400 PSI Socket Weld Fittings
Socket Detail



Socket Detail

Nominal Pipe Size	D Min.	E Optional Max.	F		G		J		M		S Avg. Max.
			Min.	Avg. Max.	Min.	Avg. Max.	Size	Tol.	Size	Tol. ±	
1/4	17/64	0.443	0.130	0.200	0.070	0.128	0.545	+0.030 -0.000	0.398	0.015	0.945
3/8	5/16	0.577	0.130	0.208	0.080	0.140	0.680	+0.030 -0.000	0.532	0.015	1.096
1/2	3/8	0.747	0.130	0.215	0.080	0.140	0.845	+0.030 -0.000	0.697	0.020	1.275
3/4	13/32	0.962	0.130	0.224	0.090	0.153	1.055	+0.030 -0.000	0.907	0.025	1.503
1	7/16	1.226	0.130	0.230	0.100	0.175	1.320	+0.030 -0.000	1.171	0.025	1.780
1-1/4	1/2	1.562	0.144	0.232	0.110	0.188	1.665	+0.030 -0.000	1.502	0.030	2.129
1-1/2	5/8	1.802	0.144	0.241	0.120	0.200	1.905	+0.030 -0.000	1.742	0.030	2.387
2	21/32	2.246	0.166	0.264	0.140	0.254	2.380	+0.046 -0.000	2.186	0.030	2.908
2-1/2	25/32	2.746	0.166	0.264	0.150	0.267	2.880	+0.051 -0.000	2.686	0.030	3.408
3	53/64	3.351	0.190	0.268	0.170	0.300	3.505	+0.055 -0.000	3.286	0.035	4.041
3-1/2	7/8	3.851	0.190	0.268	0.180	0.313	4.005	+0.055 -0.000	3.786	0.035	4.541
4	29/32	4.322	0.218	0.296	0.200	0.338	4.505	+0.060 -0.000	4.252	0.040	5.097
5	1	5.348	0.280	0.350	0.280	0.438	5.568	+0.060 -0.000	5.278	0.040	6.268
6	1-7/64	6.391	0.320	0.390	0.320	0.488	6.630	+0.060 -0.000	6.321	0.040	7.410

400 PSI Socket Weld Fittings
90° SR Elbows
DWG 803-6397430

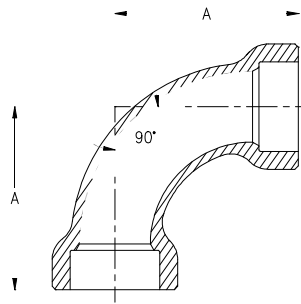


90° Short Radius Elbows

4

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	99101040	640101.040	77101040	645101.040	0.710	0.12
3/8	99101060	640101.060	77101060	645101.060	0.820	0.13
1/2	99101100	640101.100	77101100	645101.100	1.010	0.29
3/4	99101150	640101.150	77101150	645101.150	1.180	0.45
1	99101200	640101.200	77101200	645101.200	1.430	0.67
1-1/4	99101250	640101.250	77101250	645101.250	1.690	1.12
1-1/2	99101300	640101.300	77101300	645101.300	1.840	1.57
2	99101400	640101.400	77101400	645101.400	2.120	2.21
2-1/2	99101450	640101.450	77101450	645101.450	2.700	4.14
3	99101500	640101.500	77101500	645101.500	3.080	6.21
3-1/2	99101550	640101.550	77101550	645101.550	3.420	8.12
4	99101600	640101.600	77101600	645101.600	3.790	11.10
5	99101650	640101.650	77101650	645101.650	4.500	21.60
6	99101700	640101.700	77101700	645101.700	5.130	31.70

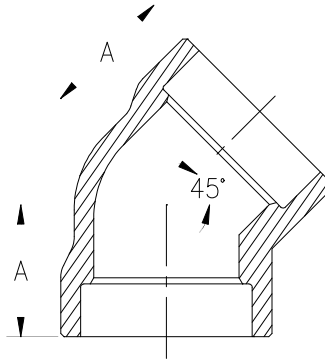
**400 PSI Socket Weld Fittings
90° LR Elbows
DWG 803-6397430**



90° Long Radius Elbows

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	99111040	640111.040	77111040	645111.040	1.250	0.33
3/8	99111060	640111.060	77111060	645111.060	1.500	0.37
1/2	99111100	640111.100	77111100	645111.100	1.750	0.46
3/4	99111150	640111.150	77111150	645111.150	2.000	0.64
1	99111200	640111.200	77111200	645111.200	2.310	0.97
1-1/4	99111250	640111.250	77111250	645111.250	2.750	1.57
1-1/2	99111300	640111.300	77111300	645111.300	3.130	2.10
2	99111400	640111.400	77111400	645111.400	3.750	3.43
2-1/2	99111450	640111.450	77111450	645111.450	4.500	5.23
3	99111500	640111.500	77111500	645111.500	5.440	8.05
3-1/2	99111550	640111.550	77111550	645111.550	6.190	10.80
4	99111600	640111.600	77111600	645111.600	6.940	13.90
5	99111650	640111.650	77111650	645111.650	8.130	21.90
6	99111700	640111.700	77111700	645111.700	9.000	31.70

400 PSI Socket Weld Fittings
45° Elbows
DWG 803-6397430

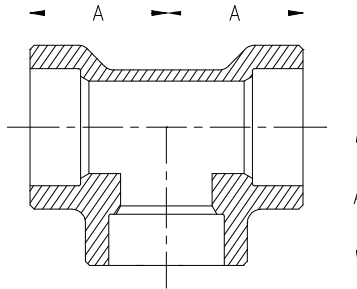


45° Elbows

4

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	99104040	640104.040	77104040	645104.040	0.560	0.28
3/8	99104060	640104.060	77104060	645104.060	0.630	0.30
1/2	99104100	640104.100	77104100	645104.100	0.780	0.35
3/4	99104150	640104.150	77104150	645104.150	0.890	0.44
1	99104200	640104.200	77104200	645104.200	1.060	0.61
1-1/4	99104250	640104.250	77104250	645104.250	1.220	0.93
1-1/2	99104300	640104.300	77104300	645104.300	1.300	1.22
2	99104400	640104.400	77104400	645104.400	1.450	1.94
2-1/2	99104450	640104.450	77104450	645104.450	1.950	2.91
3	99104500	640104.500	77104500	645104.500	2.170	4.44
3-1/2	99104550	640104.550	77104550	645104.550	2.390	5.91
4	99104600	640104.600	77104600	645104.600	2.610	7.61
5	99104650	640104.650	77104650	645104.650	3.050	12.00
6	99104700	640104.700	77104700	645104.700	3.460	17.30

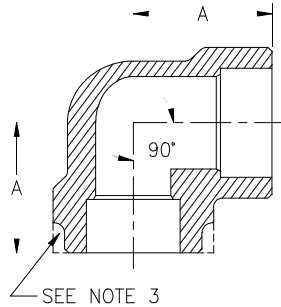
400 PSI Socket Weld Fittings
Tees
DWG 803-6397430



Tees

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	99121040	640121.040	77121040	645121.040	0.710	0.51
3/8	99121060	640121.060	77121060	645121.060	0.820	0.52
1/2	99121100	640121.100	77121100	645121.100	1.010	0.57
3/4	99121150	640121.150	77121150	645121.150	1.180	0.69
1	99121200	640121.200	77121200	645121.200	1.430	0.96
1-1/4	99121250	640121.250	77121250	645121.250	1.690	1.48
1-1/2	99121300	640121.300	77121300	645121.300	1.840	1.96
2	99121400	640121.400	77121400	645121.400	2.120	3.20
2-1/2	99121450	640121.450	77121450	645121.450	2.700	4.91
3	99121500	640121.500	77121500	645121.500	3.080	7.64
3-1/2	99121550	640121.550	77121550	645121.550	3.420	10.30
4	99121600	640121.600	77121600	645121.600	3.790	13.40
5	99121650	640121.650	77121650	645121.650	4.500	21.30
6	99121700	640121.700	77121700	645121.700	5.130	31.20

**400 PSI Socket Weld Fittings
Reducing 90° SR Elbows
DWG 803-6397430**

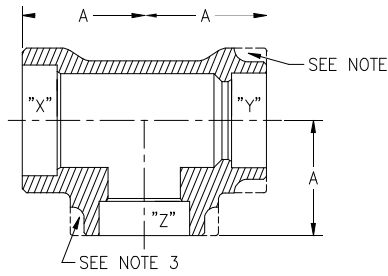


Reducing 90° Short Radius Elbows

Nominal Pipe Size (X) x (Y) x (Z)	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
3/8 x 1/4	99101059	640101R.059	77101059	645101R.059	0.820	0.31
1/2 x 1/4	99101098	640101R.098	77101098	645101R.098	1.010	0.75
1/2 x 3/8	99101099	640101R.099	77101099	645101R.099	1.010	0.79
3/4 x 3/8	99101148	640101R.148	77101148	645101R.148	1.180	1.04
3/4 x 1/2	99101149	640101R.149	77101149	645101R.149	1.180	1.07
1 x 3/8	99101197	640101R.197	77101197	645101R.197	1.430	1.30
1 x 1/2	99101198	640101R.198	77101198	645101R.198	1.430	1.33
1 x 3/4	99101199	640101R.199	77101199	645101R.199	1.430	1.37
1-1/4 x 1/2	99101247	640101R.247	77101247	645101R.247	1.690	2.04
1-1/4 x 3/4	99101248	640101R.248	77101248	645101R.248	1.690	2.11
1-1/4 x 1	99101249	640101R.249	77101249	645101R.249	1.690	2.17
1-1/2 x 1/2	99101296	640101R.296	77101296	645101R.296	1.840	3.02
1-1/2 x 3/4	99101297	640101R.297	77101297	645101R.297	1.840	3.10
1-1/2 x 1	99101298	640101R.298	77101298	645101R.298	1.840	3.20
1-1/2 x 1-1/4	99101299	640101R.299	77101299	645101R.299	1.840	3.30
2 x 1/2	99101395	640101R.395	77101395	645101R.395	2.120	4.97
2 x 3/4	99101396	640101R.396	77101396	645101R.396	2.120	5.11
2 x 1	99101397	640101R.397	77101397	645101R.397	2.120	5.27
2 x 1-1/4	99101398	640101R.398	77101398	645101R.398	2.120	5.45
2 x 1-1/2	99101399	640101R.399	77101399	645101R.399	2.120	5.50
2-1/2 x 1-1/2	99101448	640101R.448	77101448	645101R.448	2.700	9.73
2-1/2 x 2	99101449	640101R.449	77101449	645101R.449	2.700	9.97
3 x 1-1/4	99101496	640101R.496	77101496	645101R.496	3.080	6.00
3 x 1-1/2	99101497	640101R.497	77101497	645101R.497	3.080	6.00
3 x 2	99101498	640101R.498	77101498	645101R.498	3.080	5.95
3 x 2-1/2	99101499	640101R.499	77101499	645101R.499	3.080	5.89
4 x 1-1/2	99101595	640101R.595	77101595	645101R.595	3.790	11.00
4 x 2	99101596	640101R.596	77101596	645101R.596	3.790	11.00
4 x 2-1/2	99101597	640101R.597	77101597	645101R.597	3.790	10.80
4 x 3	99101598	640101R.598	77101598	645101R.598	3.790	10.70
4 x 3-1/2	99101599	640101R.599	77101599	645101R.599	3.790	10.70
5 x 4	99101649	640101R.649	77101649	645101R.649	4.500	19.30

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**400 PSI Socket Weld Fittings
Reducing Tees
DWG 803-6397430
(Page 1 of 4)**

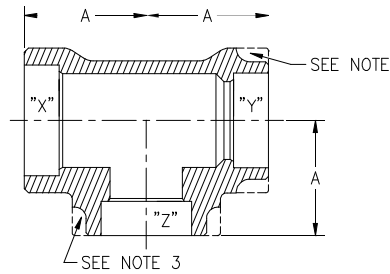


Reducing Tees

Nominal Pipe Size (X) x (Y) x (Z)	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4 x 1/4 x 3/8	99121041	640121R.041	77121041	645121R.041	0.820	0.42
1/4 x 1/4 x 1/2	99121042	640121R.042	77121042	645121R.042	1.010	0.57
3/8 x 1/4 x 1/4	99121054	640121R.054	77121054	645121R.054	0.820	0.42
3/8 x 1/4 x 3/8	99121055	640121R.055	77121055	645121R.055	0.820	0.45
3/8 x 3/8 x 1/4	99121059	640121R.059	77121059	645121R.059	0.820	0.46
3/8 x 3/8 x 1/2	99121061	640121R.061	77121061	645121R.061	1.010	0.65
3/8 x 3/8 x 3/4	99121062	640121R.062	77121062	645121R.062	1.180	0.45
1/2 x 1/4 x 1/4	99121078	640121R.078	77121078	645121R.078	1.010	0.61
1/2 x 1/4 x 1/2	99121080	640121R.080	77121080	645121R.080	1.010	0.63
1/2 x 3/8 x 3/8	99121089	640121R.089	77121089	645121R.089	1.010	0.66
1/2 x 3/8 x 1/2	99121090	640121R.090	77121090	645121R.090	1.010	0.67
1/2 x 1/2 x 1/4	99121098	640121R.098	77121098	645121R.098	1.010	0.66
1/2 x 1/2 x 3/8	99121099	640121R.099	77121099	645121R.099	1.010	0.69
1/2 x 1/2 x 3/4	99121101	640121R.101	77121101	645121R.101	1.180	0.51
1/2 x 1/2 x 1	99121102	640121R.102	77121102	645121R.102	1.430	1.48
3/4 x 1/4 x 3/4	99121120	640121R.120	77121120	645121R.120	1.180	0.47
3/4 x 3/8 x 3/8	99121128	640121R.128	77121128	645121R.128	1.180	0.5
3/4 x 3/8 x 1/2	99121129	640121R.129	77121129	645121R.129	1.180	0.51
3/4 x 3/8 x 3/4	99121130	640121R.130	77121130	645121R.130	1.180	0.52
3/4 x 3/8 x 1	99121138	640121R.138	77121138	645121R.138	1.180	0.53
3/4 x 1/2 x 3/8	99121139	640121R.139	77121139	645121R.139	1.180	0.54
3/4 x 1/2 x 1/2	99121140	640121R.140	77121140	645121R.140	1.180	0.55
3/4 x 1/2 x 3/4	99121141	640121R.141	77121141	645121R.141	1.430	1.69
3/4 x 1/2 x 1	99121147	640121R.147	77121147	645121R.147	1.180	0.54
3/4 x 3/4 x 1/4	99121148	640121R.148	77121148	645121R.148	1.180	0.58
3/4 x 3/4 x 3/8	99121149	640121R.149	77121149	645121R.149	1.180	0.59
3/4 x 3/4 x 1/2	99121151	640121R.151	77121151	645121R.151	1.430	1.6
3/4 x 3/4 x 1	99121165	640121R.160	77121165	645121R.160	1.430	1.51
3/4 x 3/4 x 1-1/4	99121170	640121R.170	77121170	645121R.170	1.430	1.58
1 x 1/4 x 1	99121177	640121R.177	77121177	645121R.177	1.430	1.59
1 x 3/8 x 3/4	99121178	640121R.178	77121178	645121R.178	1.430	1.61
1 x 3/8 x 1	99121179	640121R.179	77121179	645121R.179	1.430	1.62

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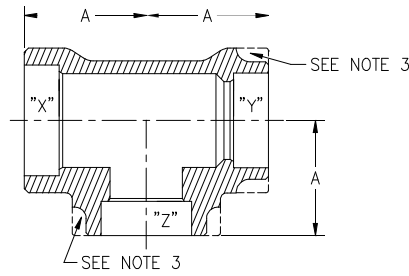
**400 PSI Socket Weld Fittings
Reducing Tees
DWG 803-6397430
(Page 2 of 4)**



Reducing Tees

Nominal Pipe Size (X) x (Y) x (Z)	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1 x 1/2 x 1	99121180	640121R.180	77121180	645121R.180	1.430	1.62
1 x 3/4 x 3/8	99121187	640121R.187	77121187	645121R.187	1.430	1.65
1 x 3/4 x 1/2	99121188	640121R.188	77121188	645121R.188	1.430	1.66
1 x 3/4 x 3/4	99121189	640121R.189	77121189	645121R.189	1.430	1.67
1 x 3/4 x 1	99121190	640121R.190	77121190	645121R.190	1.430	11.68
1 x 1 x 1/4	99121196	640121R.196	77121196	645121R.196	1.430	1.69
1 x 1 x 3/8	99121197	640121R.197	77121197	645121R.197	1.430	1.73
1 x 1 x 1/2	99121198	640121R.198	77121198	645121R.198	1.430	1.74
1 x 1 x 3/4	99121199	640121R.199	77121199	645121R.199	1.430	1.75
1 x 1 x 1-1/4	99121201	640121R.201	77121201	645121R.201	1.690	3.17
1 x 1 x 1-1/2	99121202	640121R.202	77121202	645121R.202	1.840	4.07
1-1/4 x 1/4 x 1	99121209	640121R.209	77121209	645121R.209	1.690	2.97
1-1/4 x 1/4 x 1-1/4	99121210	640121R.210	77121210	645121R.210	1.690	2.96
1-1/4 x 3/8 x 1-1/4	99121215	640121R.215	77121215	645121R.215	1.690	3.04
1-1/4 x 1/2 x 1	99121218	640121R.218	77121218	645121R.218	1.690	3.11
1-1/4 x 1/2 x 1-1/4	99121219	640121R.219	77121219	645121R.219	1.690	3.10
1-1/4 x 3/4 x 1/2	99121222	640121R.222	77121222	645121R.222	1.690	3.18
1-1/4 x 3/4 x 3/4	99121223	640121R.223	77121223	645121R.223	1.690	3.19
1-1/4 x 3/4 x 1-1/4	99121225	640121R.230	77121225	645121R.230	1.690	3.19
1-1/4 x 1 x 1/2	99121232	640121R.232	77121232	645121R.232	1.690	3.27
1-1/4 x 1 x 3/4	99121233	640121R.233	77121233	645121R.233	1.690	3.28
1-1/4 x 1 x 1	99121234	640121R.234	77121234	645121R.234	1.690	3.29
1-1/4 x 1 x 1-1/4	99121235	640121R.235	77121235	645121R.235	1.690	3.28
1-1/4 x 1-1/4 x 1/4	99121245	640121R.245	77121245	645121R.245	1.690	3.33
1-1/4 x 1-1/4 x 3/8	99121246	640121R.246	77121246	645121R.246	1.690	3.38
1-1/4 x 1-1/4 x 1/2	99121247	640121R.247	77121247	645121R.247	1.690	3.39
1-1/4 x 1-1/4 x 1	99121249	640121R.249	77121249	645121R.249	1.690	3.39
1-1/4 x 1-1/4 x 1-1/2	99121251	640121R.251	77121251	645121R.251	1.840	4.33
1-1/4 x 1-1/4 x 2	99121252	640121R.252	77121252	645121R.252	2.120	7.24
1-1/2 x 3/8 x 1-1/2	99121259	640121R.260	77121259	645121R.260	1.840	3.85
1-1/2 x 1/2 x 3/4	99121262	640121R.262	77121262	640121R.262	1.840	3.97
1-1/2 x 1/2 x 1-1/2	99121265	640121R.265	77121265	645121R.265	1.840	3.92
1-1/2 x 3/4 x 3/4	99121267	640121R.267	77121267	645121R.267	1.840	4.07
1-1/2 x 3/4 x 1	99121268	640121R.268	77121268	645121R.268	1.840	4.08
1-1/2 x 3/4 x 1-1/4	99121269	640121R.269	77121269	645121R.269	1.840	4.08
1-1/2 x 3/4 x 1-1/2	99121270	640121R.270	77121270	645121R.270	1.840	4.02
1-1/2 x 1 x 3/4	99121277	640121R.277	77121277	645121R.277	1.840	4.19
1-1/2 x 1 x 1	99121278	640121R.278	77121278	645121R.278	1.840	4.20
1-1/2 x 1 x 1-1/4	99121279	640121R.279	77121279	645121R.279	1.840	4.19

400 PSI Socket Weld Fittings
Reducing Tees
DWG 803-6397430
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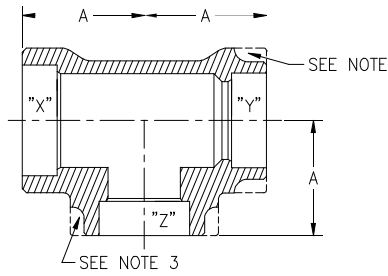


Reducing Tees

Nominal Pipe Size (X) x (Y) x (Z)	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1-1/2 x 1-1/4 x 1/2	99121286	640121R.286	77121286	645121R.286	1.840	4.28
1-1/2 x 1-1/4 x 3/4	99121287	640121R.287	77121287	645121R.287	1.840	4.30
1-1/2 x 1-1/4 x 1	99121288	640121R.288	77121288	645121R.288	1.840	4.31
1-1/2 x 1-1/4 x 1-1/4	99121289	640121R.289	77121289	645121R.289	1.840	4.30
1-1/2 x 1-1/4 x 1-1/2	99121290	640121R.290	77121290	645121R.290	1.840	4.25
1-1/2 x 1-1/2 x 3/8	99121295	640121R.295	77121295	645121R.295	1.840	4.27
1-1/2 x 1-1/2 x 1/2	99121296	640121R.296	77121296	645121R.296	1.840	4.28
1-1/2 x 1-1/2 x 3/4	99121297	640121R.297	77121297	645121R.297	1.840	4.29
1-1/2 x 1-1/2 x 1	99121298	640121R.298	77121298	645121R.298	1.840	4.30
1-1/2 x 1-1/2 x 1-1/4	99121299	640121R.299	77121299	645121R.299	1.840	4.29
1-1/2 x 1-1/2 x 2	99121302	640121R.302	77121302	645121R.302	2.120	7.15
2 x 1/2 x 2	99121350	640121R.350	77121350	645121R.350	2.120	6.97
2 x 3/4 x 2	99121360	640121R.360	77121360	645121R.360	2.120	7.12
2 x 1 x 1	99121367	640121R.367	77121367	645121R.367	2.120	7.40
2 x 1 x 2	99121370	640121R.370	77121370	645121R.370	2.120	7.31
2 x 1-1/4 x 1-1/4	99121378	640121R.378	77121378	645121R.378	2.120	7.58
2 x 1-1/4 x 1-1/2	99121379	640121R.379	77121379	645121R.379	2.120	7.50
2 x 1-1/4 x 2	99121380	640121R.380	77121380	645121R.380	2.120	7.49
2 x 1-1/2 x 1	99121387	640121R.387	77121387	645121R.387	2.120	7.56
2 x 1-1/2 x 1-1/4	99121388	640121R.388	77121388	645121R.388	2.120	7.56
2 x 1-1/2 x 1-1/2	99121389	640121R.389	77121389	645121R.389	2.120	7.47
2 x 1-1/2 x 2	99121390	640121R.390	77121390	645121R.390	2.120	7.47
2 x 2 x 1/2	99121395	640121R.395	77121395	645121R.395	2.120	7.74
2 x 2 x 3/4	99121396	640121R.396	77121396	645121R.396	2.120	7.76
2 x 2 x 1	99121397	640121R.397	77121397	645121R.397	2.120	7.78
2 x 2 x 1-1/4	99121398	640121R.398	77121398	645121R.398	2.120	7.78
2 x 2 x 1-1/2	99121399	640121R.399	77121399	645121R.399	2.120	7.70
2 x 2 x 2-1/2	99121401	640121R.401	77121401	645121R.401	2.700	14.00
2-1/2 x 1/2 x 2-1/2	99121410	640121R.410	77121410	645121R.410	2.700	12.90
2-1/2 x 1-1/2 x 1-1/2	99121428	640121R.428	77121428	645121R.428	2.700	14.10
2-1/2 x 1-1/2 x 2	99121429	640121R.429	77121429	645121R.429	2.700	14.00
2-1/2 x 1-1/2 x 2-1/2	99121430	640121R.430	77121430	645121R.430	2.700	14.70
2-1/2 x 2 x 3/4	99121435	640121R.435	77121435	645121R.435	2.700	14.40
2-1/2 x 2 x 1-1/2	99121438	640121R.438	77121438	645121R.438	2.700	14.30
2-1/2 x 2 x 2	99121439	640121R.439	77121439	645121R.439	2.700	14.00
2-1/2 x 2 x 2-1/2	99121440	640121R.440	77121440	645121R.440	2.700	14.70
2-1/2 x 2-1/2 x 3/4	99121445	640121R.445	77121445	645121R.445	2.700	14.70
2-1/2 x 2-1/2 x 1	99121446	640121R.446	77121446	645121R.446	2.700	14.60
2-1/2 x 2-1/2 x 1-1/4	99121447	640121R.447	77121447	645121R.447	2.700	14.40
2-1/2 x 2-1/2 x 1-1/2	99121448	640121R.448	77121448	645121R.448	2.700	14.30
2-1/2 x 2-1/2 x 2	99121449	640121R.449	77121449	645121R.449	2.700	10.80
2-1/2 x 2-1/2 x 3	99121451	640121R.451	77121451	645121R.451	3.080	9.50

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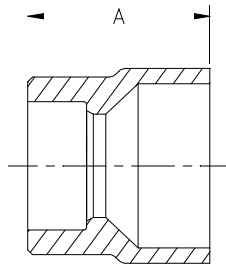
**400 PSI Socket Weld Fittings
Reducing Tees
DWG 803-6397430
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Reducing Tees

Nominal Pipe Size (X) x (Y) x (Z)	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
3 x 1 x 3	99121460	640121R.460	77121460	645121R.460	3.080	9.50
3 x 1-1/2 x 3	99121470	640121R.470	77121470	645121R.470	3.080	9.50
3 x 2 x 2	99121478	640121R.478	77121478	645121R.478	3.080	10.90
3 x 2 x 3	99121480	640121R.480	77121480	645121R.480	3.080	9.44
3 x 2-1/2 x 2	99121488	640121R.488	77121488	645121R.488	3.080	10.90
3 x 2-1/2 x 2-1/2	99121489	640121R.489	77121489	645121R.489	3.080	10.80
3 x 2-1/2 x 3	99121490	640121R.490	77121490	645121R.490	3.080	9.39
3 x 3 x 3/4	99121494	640121R.494	77121494	645121R.494	3.080	9.52
3 x 3 x 1	99121495	640121R.495	77121495	645121R.495	3.080	9.50
3 x 3 x 1-1/4	99121496	640121R.496	77121496	645121R.496	3.080	9.50
3 x 3 x 1-1/2	99121497	640121R.497	77121497	645121R.497	3.080	9.50
3 x 3 x 2	99121498	640121R.498	77121498	645121R.498	3.080	9.45
3 x 3 x 2-1/2	99121499	640121R.499	77121499	645121R.499	3.080	9.39
3-1/2 x 2-1/2 x 2-1/2	99121533	640121R.533	77121533	645121R.533	3.420	10.50
3-1/2 x 3 x 2-1/2	99121538	640121R.538	77121538	645121R.538	3.420	10.60
3-1/2 x 3-1/2 x 2-1/2	99121548	640121R.548	77121548	645121R.548	3.420	8.60
3-1/2 x 3-1/2 x 3	99121549	640121R.549	77121549	645121R.549	3.420	8.71
4 x 3 x 3	99121589	640121R.589	77121589	645121R.589	3.790	16.10
4 x 3 x 4	99121590	640121R.590	77121590	645121R.590	3.790	13.70
4 x 4 x 1-1/2	99121595	640121R.595	77121595	645121R.595	3.790	14.00
4 x 4 x 2	99121596	640121R.596	77121596	645121R.596	3.790	13.90
4 x 4 x 2-1/2	99121597	640121R.597	77121597	645121R.597	3.790	13.80
4 x 4 x 3	99121598	640121R.598	77121598	645121R.598	3.790	13.70
4 x 4 x 3-1/2	99121599	640121R.599	77121599	645121R.599	3.790	13.70
5 x 3 x 4	99121629	640121R.629	77121629	645121R.629	4.500	28.20
5 x 5 x 4	99121649	640121R.649	77121649	645121R.649	4.500	23.30
6 x 6 x 2	99121694	640121R.694	77121694	645121R.694	5.130	35.90
6 x 6 x 3	99121696	640121R.696	77121696	645121R.696	5.130	35.20
6 x 6 x 4	99121698	640121R.698	77121698	645121R.698	5.130	34.40
6 x 6 x 5	99121699	640121R.699	77121699	645121R.699	5.130	33.40

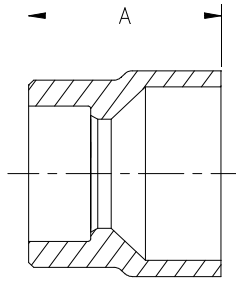
**400 PSI Socket Weld Fittings
Bushings
(Page 1 of 2)**



Bushings

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
3/8 x 1/4	99157059	640157.059	77157059	645157.059	0.938	0.08
1/2 x 1/4	99157098	640157.098	77157098	645157.098	1.063	0.10
1/2 x 3/8	99157099	640157.099	77157099	645157.099	1.063	0.12
3/4 x 1/4	99157147	640157.147	77157147	645157.147	1.063	0.11
3/4 x 3/8	99157148	640157.148	77157148	645157.148	1.188	0.14
3/4 x 1/2	99157149	640157.149	77157149	645157.149	1.188	0.18
1 x 1/4	99157196	640157.196	77157196	645157.196	1.225	0.17
1 x 3/8	99157197	640157.197	77157197	645157.197	1.177	0.18
1 x 1/2	99157198	640157.198	77157198	645157.198	1.162	0.19
1 x 3/4	99157199	640157.199	77157199	645157.199	1.250	0.25
1-1/4 x 1/4	99157245	640157.245	77157245	645157.245	1.460	0.27
1-1/4 x 3/8	99157246	640157.246	77157246	645157.246	1.412	0.28
1-1/4 x 1/2	99157247	640157.247	77157247	645157.247	1.398	0.30
1-1/4 x 3/4	99157248	640157.248	77157248	645157.248	1.332	0.30
1-1/4 x 1	99157249	640157.249	77157249	645157.249	1.438	0.37
1-1/2 x 1/4	99157294	640157.294	77157294	645157.294	1.705	0.38
1-1/2 x 3/8	99157295	640157.295	77157295	645157.295	1.657	0.40
1-1/2 x 1/2	99157296	640157.296	77157296	645157.296	1.643	0.40
1-1/2 x 3/4	99157297	640157.297	77157297	645157.297	1.577	0.41
1-1/2 x 1	99157298	640157.298	77157298	645157.298	1.474	0.41
1-1/2 x 1-1/4	99157299	640157.299	77157299	645157.299	1.625	0.54
2 x 1/4	99157393	640157.393	77157393	645157.393	1.973	0.63
2 x 3/8	99157394	640157.394	77157394	645157.394	1.925	0.64
2 x 1/2	99157395	640157.395	77157395	645157.395	1.911	0.65
2 x 3/4	99157396	640157.396	77157396	645157.396	1.846	0.65
2 x 1	99157397	640157.397	77157397	645157.397	1.743	0.64
2 x 1-1/4	99157398	640157.398	77157398	645157.398	1.628	0.64
2 x 1-1/2	99157399	640157.399	77157399	645157.399	1.635	0.66
2-1/2 x 1/4	99157442	640157.442	77157442	645157.442	2.286	0.98
2-1/2 x 3/8	99157443	640157.443	77157443	645157.443	2.286	0.98
2-1/2 x 1/2	99157444	640157.444	77157444	645157.444	2.286	0.98
2-1/2 x 3/4	99157445	640157.445	77157445	645157.445	2.221	0.98

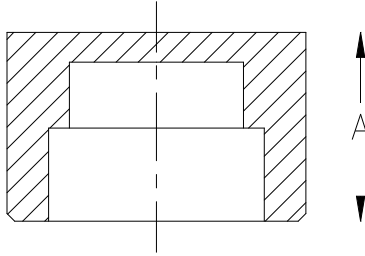
**400 PSI Socket Weld Fittings
Bushings
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Bushings

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
2-1/2 x 1	99157446	640157.446	77157446	645157.446	2.118	0.98
2-1/2 x 1-1/4	99157447	640157.447	77157447	645157.447	2.003	0.96
2-1/2 x 1-1/2	99157448	640157.448	77157448	645157.448	2.010	0.98
2-1/2 x 2	99157449	640157.449	77157449	645157.449	1.773	0.94
3 x 3/4	99157494	640157.494	77157494	645157.494	2.580	1.54
3 x 1	99157495	640157.495	77157495	645157.495	2.477	1.52
3 x 1-1/4	99157496	640157.496	77157496	645157.496	2.363	1.52
3 x 1-1/2	99157497	640157.497	77157497	645157.497	2.369	1.52
3 x 2	99157498	640157.498	77157498	645157.498	2.132	1.47
3 x 2-1/2	99157499	640157.499	77157499	645157.499	2.005	1.41
3-1/2 x 1	99157544	640157.544	77157544	645157.544	2.774	2.05
3-1/2 x 1-1/4	99157545	640157.545	77157545	645157.545	2.660	2.03
3-1/2 x 1-1/2	99157546	640157.546	77157546	645157.546	2.666	2.02
3-1/2 x 2	99157547	640157.547	77157547	645157.547	2.429	1.97
3-1/2 x 2-1/2	99157548	640157.548	77157548	645157.548	2.302	1.90
3-1/2 x 3	99157549	640157.549	77157549	645157.549	2.188	2.01
4 x 1/2	99157591	640157.591	77157591	645157.591	3.158	2.81
4 x 3/4	99157592	640157.592	77157592	645157.592	3.158	2.81
4 x 1	99157593	640157.593	77157593	645157.593	3.055	2.80
4 x 1-1/4	99157594	640157.594	77157594	645157.594	2.941	2.76
4 x 1-1/2	99157595	640157.595	77157595	645157.595	2.947	2.76
4 x 2	99157596	640157.596	77157596	645157.596	2.710	2.68
4 x 2-1/2	99157597	640157.597	77157597	645157.597	2.583	2.56
4 x 3	99157598	640157.598	77157598	645157.598	2.300	2.43
4 x 3-1/2	99157599	640157.599	77157599	645157.599	2.250	2.43
5 x 2	99157645	640157.645	77157645	645157.645	3.336	5.32
5 x 2-1/2	99157646	640157.646	77157646	645157.646	3.208	5.13
5 x 3	99157647	640157.647	77157647	645157.647	2.926	4.81
5 x 3-1/2	99157648	640157.648	77157648	645157.648	2.720	4.40
5 x 4	99157649	640157.649	77157649	645157.649	2.479	4.13
6 x 2	99157694	640157.694	77157694	645157.694	3.976	8.53
6 x 2-1/2	99157695	640157.695	77157695	645157.695	3.848	8.33
6 x 3	99157696	640157.696	77157696	645157.696	3.566	7.92
6 x 3-1/2	99157697	640157.697	77157697	645157.697	3.360	7.49
6 x 4	99157698	640157.698	77157698	645157.698	3.119	7.08
6 x 5	99157699	640157.699	77157699	645157.699	2.638	6.06

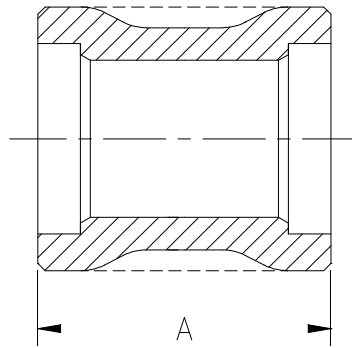
**400 PSI Socket Weld Fittings
Caps
DWG 803-6397430**



Caps

Nominal Pipe Size	Premier	W&O	Premier	W&O	A	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #		
	90/10	90/10	70/30	70/30		
1/4	99154040	640154.040	77154040	645154.040	0.590	0.09
3/8	99154060	640154.060	77154060	645154.060	0.640	0.12
1/2	99154100	640154.100	77154100	645154.100	0.760	0.16
3/4	99154150	640154.150	77154150	645154.150	0.840	0.24
1	99154200	640154.200	77154200	645154.200	0.990	0.37
1-1/4	99154250	640154.250	77154250	645154.250	1.100	0.60
1-1/2	99154300	640154.300	77154300	645154.300	1.150	0.79
2	99154400	640154.400	77154400	645154.400	1.320	1.27
2-1/2	99154450	640154.450	77154450	645154.450	1.700	1.91
3	99154500	640154.500	77154500	645154.500	1.800	2.90
3-1/2	99154550	640154.550	77154550	645154.550	1.900	3.84
4	99154600	640154.600	77154600	645154.600	2.080	4.91
5	99154650	640154.650	77154650	645154.650	2.320	7.65
6	99154700	640154.700	77154700	645154.700	2.500	11.00

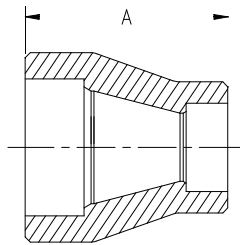
**400 PSI Socket Weld Fittings
Couplings
DWG 803-6397430**



Couplings

4

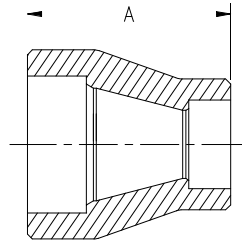
Nominal Pipe Size	Premier	W&O	Premier	W&O	A	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #		
	90/10	90/10	70/30	70/30		
1/4	99150040	640150.040	77150040	645150.040	0.970	0.14
3/8	99150060	640150.060	77150060	645150.060	1.050	0.18
1/2	99150100	640150.100	77150100	645150.100	1.290	0.24
3/4	99150150	640150.150	77150150	645150.150	1.430	0.35
1	99150200	640150.200	77150200	645150.200	1.680	0.52
1-1/4	99150250	640150.250	77150250	645150.250	1.860	0.80
1-1/2	99150300	640150.300	77150300	645150.300	1.920	1.04
2	99150400	640150.400	77150400	645150.400	2.200	1.63
2-1/2	99150450	640150.450	77150450	645150.450	2.880	2.39
3	99150500	640150.500	77150500	645150.500	3.180	3.55
3-1/2	99150550	640150.550	77150550	645150.550	3.430	4.65
4	99150600	640150.600	77150600	645150.600	3.690	5.91
5	99150650	640150.650	77150650	645150.650	4.220	9.08
6	99150700	640150.700	77150700	645150.700	4.750	12.90



Reducing Couplings

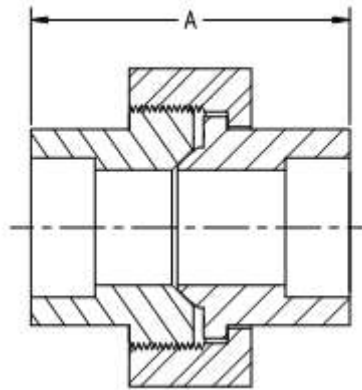
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
3/8 x 1/4	99150059	640150R.059	77150059	645150R.059	1.050	0.16
1/2 x 1/4	99150098	640150R.098	77150098	645150R.098	1.290	0.23
1/2 x 3/8	99150099	640150R.099	77150099	645150R.099	1.290	0.26
3/4 x 1/4	99150147	640150R.147	77150147	645150R.147	1.430	0.30
3/4 x 3/8	99150148	640150R.148	77150148	645150R.148	1.430	0.32
3/4 x 1/2	99150149	640150R.149	77150149	645150R.149	1.430	0.35
1 x 1/4	99150196	640150R.196	77150196	645150R.196	1.680	0.42
1 x 3/8	99150197	640150R.197	77150197	645150R.197	1.680	0.45
1 x 1/2	99150198	640150R.198	77150198	645150R.198	1.680	0.47
1 x 3/4	99150199	640150R.199	77150199	645150R.199	1.680	0.51
1-1/4 x 1/4	99150245	640150R.245	77150245	645150R.245	1.860	0.57
1-1/4 x 3/8	99150246	640150R.246	77150246	645150R.246	1.860	0.61
1-1/4 x 1/2	99150247	640150R.247	77150247	645150R.247	1.860	0.64
1-1/4 x 3/4	99150248	640150R.248	77150248	645150R.248	1.860	0.67
1-1/4 x 1	99150249	640150R.249	77150249	645150R.249	1.860	0.73
1-1/2 x 1/4	99150294	640150R.294	77150294	645150R.294	1.920	0.65
1-1/2 x 3/8	99150295	640150R.295	77150295	645150R.295	1.920	0.68
1-1/2 x 1/2	99150296	640150R.296	77150296	645150R.296	1.920	0.71
1-1/2 x 3/4	99150297	640150R.297	77150297	645150R.297	1.920	0.75
1-1/2 x 1	99150298	640150R.298	77150298	645150R.298	1.920	0.80
1-1/2 x 1-1/4	99150299	640150R.299	77150299	645150R.299	1.920	0.89
2 x 1/4	99150393	640150R.393	77150393	645150R.393	2.200	0.97
2 x 3/8	99150394	640150R.394	77150394	645150R.394	2.200	1.03
2 x 1/2	99150395	640150R.395	77150395	645150R.395	2.200	1.08

**400 PSI Socket Weld Fittings
Reducing Couplings
DWG 803-6397430
(Page 2 of 2)**



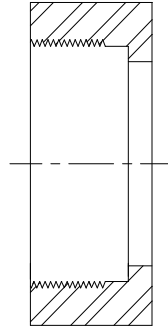
Reducing Couplings

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
2 x 3/4	99150396	640150R.396	77150396	645150R.396	2.200	1.12
2 x 1	99150397	640150R.397	77150397	645150R.397	2.200	1.18
2 x 1-1/4	99150398	640150R.398	77150398	645150R.398	2.200	1.28
2 x 1-1/2	99150399	640150R.399	77150399	645150R.399	2.200	1.30
2-1/2 x 1/4	99150442	640150R.442	77150442	645150R.442	2.880	1.75
2-1/2 x 3/8	99150443	640150R.443	77150443	645150R.443	2.880	1.81
2-1/2 x 1/2	99150444	640150R.444	77150444	645150R.444	2.880	1.84
2-1/2 x 3/4	99150445	640150R.445	77150445	645150R.445	2.880	1.87
2-1/2 x 1	99150446	640150R.446	77150446	645150R.446	2.880	1.90
2-1/2 x 1-1/4	99150447	640150R.447	77150447	645150R.447	2.880	1.95
2-1/2 x 1-1/2	99150448	640150R.448	77150448	645150R.448	2.880	1.99
2-1/2 x 2	99150449	640150R.449	77150449	645150R.449	2.880	2.30
3 x 1/4	99150491	640150R.491	77150491	645150R.491	3.180	2.51
3 x 3/8	99150492	640150R.492	77150492	645150R.492	3.180	2.54
3 x 1/2	99150493	640150R.493	77150493	645150R.493	3.180	2.59
3 x 3/4	99150494	640150R.494	77150494	645150R.494	3.180	2.63
3 x 1	99150495	640150R.495	77150495	645150R.495	3.180	2.68
3 x 1-1/4	99150496	640150R.496	77150496	645150R.496	3.180	2.71
3 x 1-1/2	99150497	640150R.497	77150497	645150R.497	3.180	2.73
3 x 2	99150498	640150R.498	77150498	645150R.498	3.180	3.08
3 x 2-1/2	99150499	640150R.499	77150499	645150R.499	3.180	3.25
4 x 1-1/2	99150595	640150R.595	77150595	645150R.595	3.690	4.22
4 x 2	99150596	640150R.596	77150596	645150R.596	3.690	4.65
4 x 2-1/2	99150597	640150R.597	77150597	645150R.597	3.690	4.83
4 x 3	99150598	640150R.598	77150598	645150R.598	3.690	5.40
4 x 3-1/2	99150599	640150R.599	77150599	645150R.599	3.690	5.67
5 x 4	99150649	640150R.649	77150649	645150R.649	4.220	8.94



Union Assembly

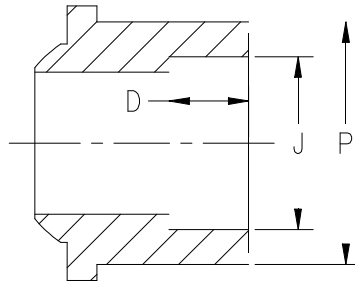
Nominal Pipe Size	Premier	W&O	Premier	W&O	A	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #		
	90/10	90/10	70/30	70/30		
1/4	99301040	640301.040	77301040	645301.040	1.630	0.36
3/8	99301060	640301.060	77301060	645301.060	1.810	0.54
1/2	99301100	640301.100	77301100	645301.100	1.940	0.80
3/4	99301150	640301.150	77301150	645301.150	2.250	1.19
1	99301200	640301.200	77301200	645301.200	2.440	1.77
1-1/4	99301250	640301.250	77301250	645301.250	2.810	2.70
1-1/2	99301300	640301.300	77301300	645301.300	3.000	3.45
2	99301400	640301.400	77301400	645301.400	3.380	5.20



Union Nuts

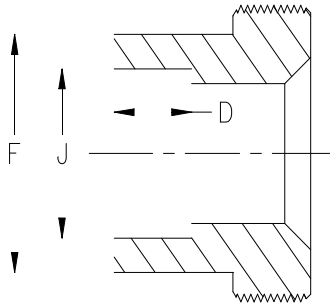
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Nominal Pipe Size	Premier	W&O	Premier	W&O	Premier	W&O	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #	Part #	Part #	
	90/10	90/10	70/30	70/30	Bronze	Bronze	
1/4	99103040	640297.040	77103040	645297.040	SB103040	605297.040	0.14
3/8	99103060	640297.060	77103060	645297.060	SB103060	605297.060	0.18
1/2	99103100	640297.100	77103100	645297.100	SB103100	605297.100	0.24
3/4	99103150	640297.150	77103150	645297.150	SB103150	605297.150	0.40
1	99103200	640297.200	77103200	645297.200	SB103200	605297.200	0.56
1-1/4	99103250	640297.250	77103250	645297.250	SB103250	605297.250	0.80
1-1/2	99103300	640297.300	77103300	645297.300	SB103300	605297.300	1.06
2	99103400	640297.400	77103400	645297.400	SB103400	605297.400	1.58



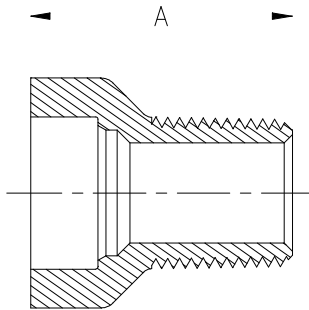
Union Tailpieces

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	P	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	99555040	640298.040	77555040	645298.040	0.828	0.10
3/8	99555060	640298.060	77555060	645298.060	0.984	0.12
1/2	99555100	640298.100	77555100	645298.100	1.188	0.18
3/4	99555150	640298.150	77555150	645298.150	1.468	0.30
1	99555200	640298.200	77555200	645298.200	1.750	0.44
1-1/4	99555250	640298.250	77555250	645298.250	2.125	0.68
1-1/2	99555300	640298.300	77555300	645298.300	2.375	0.90
2	99555400	640298.400	77555400	645298.400	2.906	1.48
2-1/4	99555450	640298.450	77555450	645298.450	3.490	3.70



Union Threadpieces

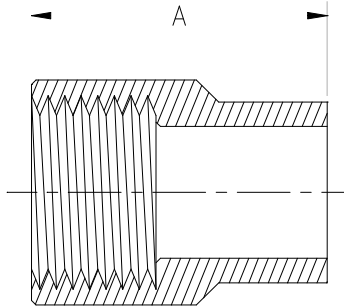
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	F	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	99444040	640299.040	77444040	645299.040	0.828	0.14
3/8	99444060	640299.060	77444060	645299.060	0.984	0.20
1/2	99444100	640299.100	77444100	645299.100	1.188	0.28
3/4	99444150	640299.150	77444150	645299.150	1.468	0.50
1	99444200	640299.200	77444200	645299.200	1.750	0.72
1-1/4	99444250	640299.250	77444250	645299.250	2.125	1.12
1-1/2	99444300	640299.300	77444300	645299.300	2.375	1.30
2	99444400	640299.400	77444400	645299.400	2.906	2.14
2-1/4	99444450	640299.450	77444450	645299.450	3.490	3.40



MPT Adapters

(Male Thread x Female Socket)

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/4	99160040	640160.040	77160040	645160.040	1.220	0.18
3/8	99160060	640160.060	77160060	645160.060	1.300	0.24
1/2	99160100	640160.100	77160100	645160.100	1.580	0.35
3/4	99160150	640160.150	77160150	645160.150	1.630	0.51
1	99160200	640160.200	77160200	645160.200	1.900	0.77
1-1/4	99160250	640160.250	77160250	645160.250	1.990	1.19
1-1/2	99160300	640160.300	77160300	645160.300	2.160	1.54
2	99160400	640160.400	77160400	645160.400	2.250	2.36
2-1/2	99160450	640160.450	77160450	645160.450	2.900	3.70
3	99160500	640160.500	77160500	645160.500	3.690	4.19
3-1/2	99160550	640160.550	77160550	645160.550	3.690	4.50
4	99160600	640160.600	77160600	645160.600	3.690	4.75

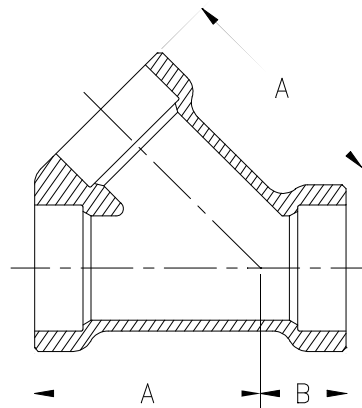


FPT Adapters

(Female Thread x Male Plain End)

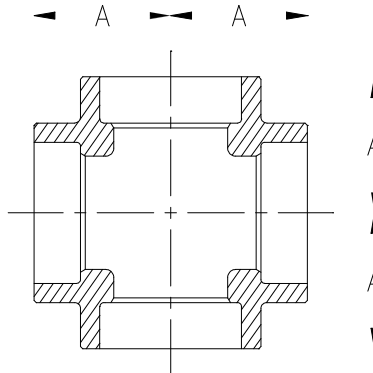
Nominal Pipe Size	Premier	W&O	Premier	W&O	A	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #		
	90/10	90/10	70/30	70/30		
1/4	99161040	640063.040	77161040	645063.040	1.000	0.06
3/8	99161060	640063.060	77161060	645063.060	1.375	0.09
1/2	99161100	640063.100	77161100	645063.100	1.531	0.13
3/4	99161150	640063.150	77161150	645063.150	1.406	0.20
1	99161200	640063.200	77161200	645063.200	1.563	0.30
1-1/4	99161250	640063.250	77161250	645063.250	2.125	0.46
1-1/2	99161300	640063.300	77161300	645063.300	2.188	0.59
2	99161400	640063.400	77161400	645063.400	2.375	0.90
2-1/2	99161450	640063.450	77161450	645063.450	2.531	1.88

**400 PSI Socket Weld Fittings
45° Y-Lateral
DWG 803-6397430**



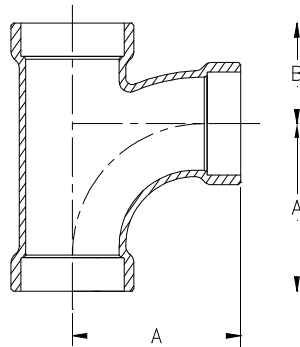
45° Y-Lateral

Nominal Pipe Size	Premier	W&O	Premier	W&O	A	B	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #			
	90/10	90/10	70/30	70/30			
1/2	99140100	640140.100	77140100	645140.100	1.580	0.610	0.57
3/4	99140150	640140.150	77140150	645140.150	1.900	0.720	0.79
1	99140200	640140.200	77140200	645140.200	2.330	0.850	1.19
1-1/4	99140250	640140.250	77140250	645140.250	2.830	1.020	1.91
1-1/2	99140300	640140.300	77140300	645140.300	3.140	1.100	2.53
2	99140400	640140.400	77140400	645140.400	3.760	1.240	4.08
2-1/2	99140450	640140.450	77140450	645140.450	4.730	1.520	6.16
3	99140500	640140.500	77140500	645140.500	5.550	1.710	9.41
3-1/2	99140550	640140.550	77140550	645140.550	6.250	1.850	12.50
4	99140600	640140.600	77140600	645140.600	6.970	2.010	16.10
5	99140650	640140.650	77140650	645140.650	8.430	2.340	25.20
6	99140700	640140.700	77140700	645140.700	9.810	2.660	36.40



Crosses

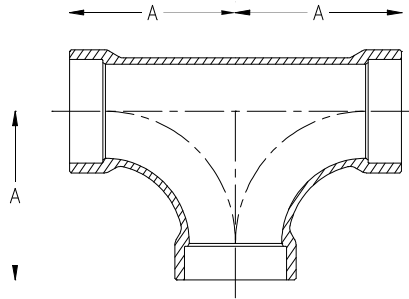
Nominal Pipe Size	Premier	W&O	Premier	W&O	A	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #		
	90/10	90/10	70/30	70/30		
1/2	99135100	640135.100	77135100	645135.100	1.010	0.66
3/4	99135150	640135.150	77135150	645135.150	1.180	0.79
1	99135200	640135.200	77135200	645135.200	1.430	1.07
1-1/4	99135250	640135.250	77135250	645135.250	1.690	1.67
1-1/2	99135300	640135.300	77135300	645135.300	1.840	2.24
2	99135400	640135.400	77135400	645135.400	2.120	3.71
2-1/2	99135450	640135.450	77135450	645135.450	2.700	5.78
3	99135500	640135.500	77135500	645135.500	3.080	9.10
3-1/2	99135550	640135.550	77135550	645135.550	3.420	12.40
4	99135600	640135.600	77135600	645135.600	3.790	16.10



Long Turn Single Sweep Tees

4

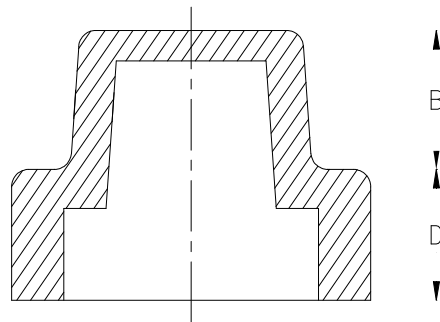
Nominal Pipe Size	Premier	W&O	Premier	W&O	A	B	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #			
	90/10	90/10	70/30	70/30			
1/2	99130100	640130.100	77130100	645130.100	1.750	1.000	0.75
3/4	99130150	640130.150	77130150	645130.150	2.000	1.190	0.88
1	99130200	640130.200	77130200	645130.200	2.310	1.310	1.25
1-1/4	99130250	640130.250	77130250	645130.250	2.750	1.680	2.06
1-1/2	99130300	640130.300	77130300	645130.300	3.130	1.880	2.84
2	99130400	640130.400	77130400	645130.400	3.750	2.130	4.90
2-1/2	99130450	640130.450	77130450	645130.450	4.500	2.560	7.83
3	99130500	640130.500	77130500	645130.500	5.440	2.880	12.60
3-1/2	99130550	640130.550	77130550	645130.550	6.190	3.250	17.30
4	99130600	640130.600	77130600	645130.600	6.940	3.560	22.70
5	99130650	640130.650	77130650	645130.650	8.130	4.310	36.90
6	99130700	640130.700	77130700	645130.700	9.000	5.000	54.60



4

Long Turn Double Sweep Tees

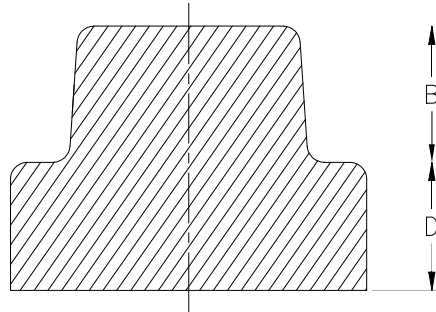
Nominal Pipe Size	Premier	W&O	Premier	W&O	A	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #		
	90/10	90/10	70/30	70/30		
1/2	99133100	640133.100	77133100	645133.100	1.750	0.79
3/4	99133150	640133.150	77133150	645133.150	2.000	0.98
1	99133200	640133.200	77133200	645133.200	2.310	1.43
1-1/4	99133250	640133.250	77133250	645133.250	2.750	2.38
1-1/2	99133300	640133.300	77133300	645133.300	3.130	3.28
2	99133400	640133.400	77133400	645133.400	3.750	5.66
2-1/2	99133450	640133.450	77133450	645133.450	4.500	9.01
3	99133500	640133.500	77133500	645133.500	5.440	14.40
3-1/2	99133550	640133.550	77133550	645133.550	6.190	19.70
4	99133600	640133.600	77133600	645133.600	6.940	25.90



Plugs – Cored

4

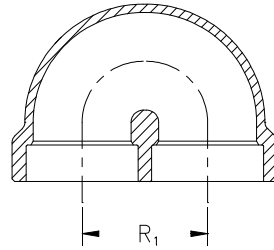
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	D		B	Estimated Weight (lbs.)
	90/10	90/10	70/30	70/30	MIN	MAX		
1/2	99164100	640064.100	77164100	645064.100	0.41	0.54	0.380	0.07
3/4	99164150	640064.150	77164150	645064.150	0.44	0.55	0.440	0.10
1	99164200	640064.200	77164200	645064.200	0.47	0.69	0.500	0.18
1-1/4	99164250	640064.250	77164250	645064.250	0.53	0.71	0.560	0.28
1-1/2	99164300	640064.300	77164300	645064.300	0.66	0.73	0.620	0.36
2	99164400	640064.400	77164400	645064.400	0.69	0.76	0.680	0.56
2-1/2	99164450	640064.450	77164450	645064.450	0.84	1.07	0.740	1.07
3	99164500	640064.500	77164500	645064.500	0.89	1.13	0.800	1.58
3-1/2	99164550	640064.550	77164550	645064.550	0.94	1.18	0.860	3.51
4	99164600	640064.600	77164600	645064.600	0.97	1.22	0.920	2.68
5	99164650	640064.650	77164650	645064.650	1.06	1.44	0.980	5.90
6	99164700	640064.700	77164700	645064.700	1.17	1.50	1.050	8.22



Plugs - Solid

Nominal Pipe Size	Premier	W&O	Premier	W&O	D		B	Estimated Weight (Lbs.)
	Part #	Part #	Part #	Part #	MIN	MAX		
	90/10	90/10	70/30	70/30				
1/2	99165100	640065.100	77165100	645065.100	0.41	0.54	0.380	0.15
3/4	99165150	640065.150	77165150	645065.150	0.44	0.55	0.440	0.22
1	99165200	640065.200	77165200	645065.200	0.47	0.69	0.500	0.43
1-1/4	99165250	640065.250	77165250	645065.250	0.53	0.71	0.560	0.69
1-1/2	99165300	640065.300	77165300	645065.300	0.66	0.73	0.620	0.97
2	99165400	640065.400	77165400	645065.400	0.69	0.76	0.680	1.53
2-1/2	99165450	640065.450	77165450	645065.450	0.84	1.07	0.740	2.89
3	99165500	640065.500	77165500	645065.500	0.89	1.13	0.800	4.40
3-1/2	99165550	640065.550	77165550	645065.550	0.94	1.18	0.860	5.97
4	99165600	640065.600	77165600	645065.600	0.97	1.22	0.920	8.06
5	99165650	640065.650	77165650	645065.650	1.06	1.44	0.980	14.20
6	99165700	640065.700	77165700	645065.700	1.17	1.50	1.050	21.20

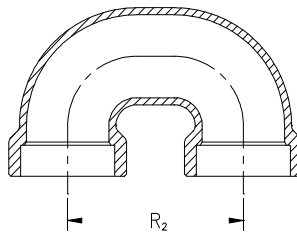
400 PSI Socket Weld Fittings
180° Return Bends – Closed
180° Return Bends - Open



180° Return Bends - Closed

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	R ₁	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/2	99155100	640155.100	77155100	645155.100	1.000	0.40
3/4	99155150	640155.150	77155150	645155.150	1.250	0.70
1	99155200	640155.200	77155200	645155.200	1.500	0.82
1-1/4	99155250	640155.250	77155250	645155.250	1.880	1.87
1-1/2	99155300	640155.300	77155300	645155.300	2.190	1.75
2	99155400	640155.400	77155400	645155.400	2.630	3.11

4



180° Return Bends - Open

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	R ₂	Estimated Weight (Lbs.)
	90/10	90/10	70/30	70/30		
1/2	99156100	640156.100	77156100	645156.100	1.500	0.38
3/4	99156150	640156.150	77156150	645156.150	2.000	0.71
1	99156200	640156.200	77156200	645156.200	2.500	1.23
1-1/4	99156250	640156.250	77156250	645156.250	3.000	1.66
1-1/2	99156300	640156.300	77156300	645156.300	3.500	3.18
2	99156400	640156.400	77156400	645156.400	4.000	4.94



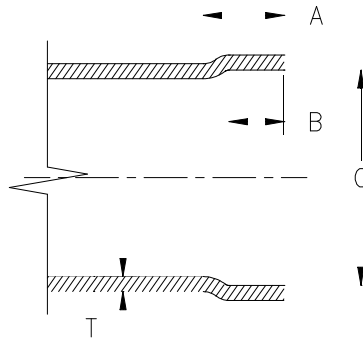
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Bell End Copper Nickel Fittings



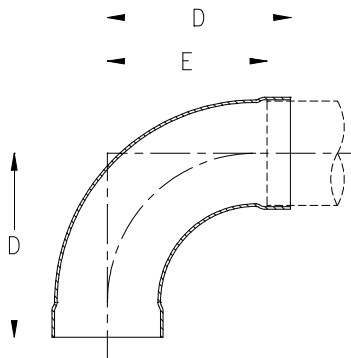
- Design is iaw MSS SP-119.
- Intended use with Copper-Nickel Pipe iaw MIL-T-16420K, C1-200.



**Bell End Fittings
Socket Detail**

Nominal Pipe Size	A	B	T	C
1/4	0.620	0.380	0.065	0.570
3/8	0.620	0.380	0.065	0.700
1/2	0.750	0.380	0.065	0.870
3/4	0.750	0.380	0.065	1.080
1	0.810	0.440	0.065	1.350
1-1/4	1.000	0.500	0.072	1.690
1-1/2	1.120	0.620	0.072	1.930
2	1.120	0.620	0.083	2.410
2-1/2	1.500	0.810	0.083	2.910
3	1.500	0.810	0.095	3.530
4	1.620	0.880	0.109	4.530
5	1.750	1.000	0.125	5.600
6	1.810	1.060	0.134	6.660
8	2.190	1.310	0.151	8.660
10	2.500	1.500	0.187	10.790
12	2.620	1.620	0.250	12.790

Bell End Fittings
90° LR Elbows
DWG 5959353
MSS SP-119

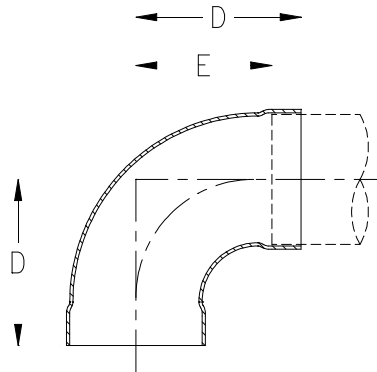


90° Long Radius Elbows F x F

5

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	D	E	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	9B111040	601B111.040	7B111040	602B111.040	1.88	1.56	0.05
3/8	9B111060	601B111.060	7B111060	602B111.060	1.94	1.62	0.06
1/2	9B111100	601B111.100	7B111100	602B111.100	2.25	1.94	0.08
3/4	9B111150	601B111.150	7B111150	602B111.150	1.91	1.59	0.11
1	9B111200	601B111.200	7B111200	602B111.200	2.38	2.00	0.19
1-1/4	9B111250	601B111.250	7B111250	602B111.250	2.88	2.44	0.33
1-1/2	9B111300	601B111.300	7B111300	602B111.300	3.50	2.94	0.49
2	9B111400	601B111.400	7B111400	602B111.400	4.28	3.72	0.83
2-1/2	9B111450	601B111.450	7B111450	602B111.450	5.38	4.62	1.43
3	9B111500	601B111.500	7B111500	602B111.500	6.17	5.41	2.42
4	9B111600	601B111.600	7B111600	602B111.600	7.78	6.97	5.28
5	9B111650	601B111.650	7B111650	602B111.650	9.53	8.59	9.90
6	9B111700	601B111.700	7B111700	602B111.700	11.17	10.17	16.50
8	9B111750	601B111.750	7B111750	602B111.750	14.62	13.38	36.96
10	9B111800	601B111.800	7B111800	602B111.800	18.00	16.56	66.88
12	9B111820	601B111.820	7B111820	602B111.820	21.25	19.69	105.60

Bell End Fittings
90° SR Elbows
MSS SP-119

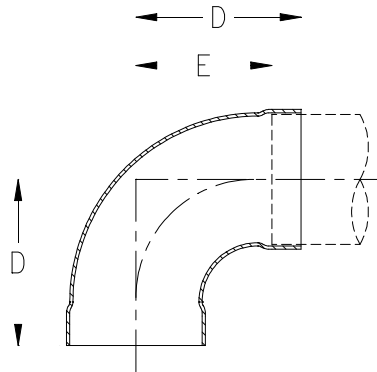


90° Short Radius Elbows F x F

5

Nominal Pipe Size	Premier	W&O	Premier	W&O	D	E	Est. Weight
	Part #	Part #	Part #	Part #			
	90/10	90/10	70/30	70/30			
1/4	9B101200	601B101.040.C	7B101200	602B101.040.C	1.75	1.37	0.11
1-1/4	9B101250	601B101.250.C	7B101250	602B101.250.C	2.00	1.56	0.26
1-1/2	9B101300	601B101.300.C	7B101300	602B101.300.C	2.620	2.06	1.00
2	9B101400	601B101.400.C	7B101400	602B101.400.C	3.12	2.56	1.75
2-1/2	9B101450	601B101.450.C	7B101450	602B101.450.C	4.00	3.25	3.00
3	9B101500	601B101.500.C	7B101500	602B101.500.C	4.50	3.70	5.00
4	9B101600	601B101.600.C	7B101600	602B101.600.C	5.62	4.80	8.00
5	9B101650	601B101.650.C	7B101650	602B101.650.C	6.750	5.81	10.06
6	9B101700	601B101.700.C	7B101700	602B101.700.C	7.810	6.81	19.00
8	9B101750	601B101.750.C	7B101750	602B101.750.C	10.19	8.94	29.15
10	9B101800	601B101.800.C	7B101800	602B101.800.C	12.50	11.06	54.12
12	9B101820	601B101.820.C	7B101820	602B101.820.C	14.62	13.06	77.55

Bell End Fittings
90° SR Elbows
DWG 5959353
MSS SP-119

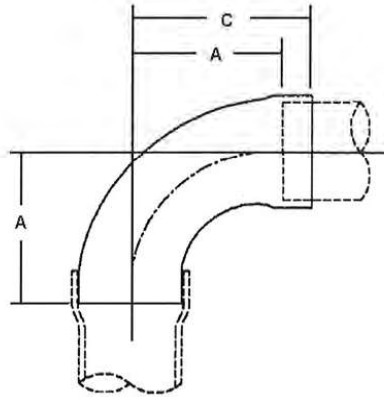


90° Short Radius Elbows F x F

5

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	D	E	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	9B101200	601B101.040.N	7B101200	602B101.040.N	1.75	1.37	0.11
1-1/4	9B101250	601B101.250.N	7B101250	602B101.250.N	2.00	1.56	0.26
1-1/2	9B101300	601B101.300.N	7B101300	602B101.300.N	2.620	2.06	1.00
2	9B101400	601B101.400.N	7B101400	602B101.400.N	3.12	2.56	1.75
2-1/2	9B101450	601B101.450.N	7B101450	602B101.450.N	4.00	3.25	3.00
3	9B101500	601B101.500.N	7B101500	602B101.500.N	4.50	3.70	5.00
4	9B101600	601B101.600.N	7B101600	602B101.600.N	5.62	4.80	8.00
5	9B101650	601B101.650.N	7B101650	602B101.650.N	6.750	5.81	10.06
6	9B101700	601B101.700.N	7B101700	602B101.700.N	7.810	6.81	19.00
8	9B101750	601B101.750.N	7B101750	602B101.750.N	10.19	8.94	29.15
10	9B101800	601B101.800.N	7B101800	602B101.800.N	12.50	11.06	54.12
12	9B101820	601B101.820.N	7B101820	602B101.820.N	14.62	13.06	77.55

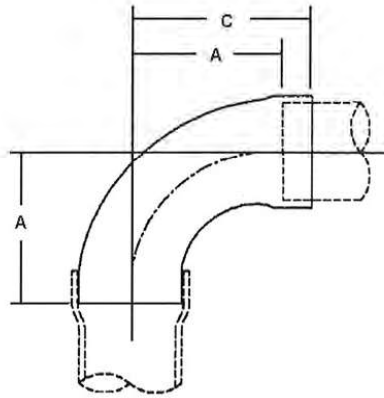
Bell End Fittings
90° LR Street Elbows
MSS SP-119



90° Long Radius Elbows M x F

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	C	A	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	9B107040	601B117.040.C	7B107040	602B117.040.C	1.59	1.28	0.13
3/8	9B107060	601B117.060.C	7B107060	602B117.060.C	1.94	1.62	0.17
1/2	9B107100	601B117.100.C	7B107100	602B117.100.C	2.25	1.94	0.25
3/4	9B107150	601B117.150.C	7B107150	602B117.150.C	1.91	1.59	0.34
1	9B107200	601B117.200.C	7B107200	602B117.200.C	2.38	2.00	0.53
1-1/4	9B107250	601B117.250.C	7B107250	602B117.250.C	2.88	2.44	0.76
1-1/2	9B107300	601B117.300.C	7B107300	602B117.300.C	3.50	2.94	0.96
2	9B107400	601B117.400.C	7B107400	602B117.400.C	4.28	3.72	1.81
2-1/2	9B107450	601B117.450.C	7B107450	602B117.450.C	5.38	4.62	2.65
3	9B107500	601B117.500.C	7B107500	602B117.500.C	6.17	5.41	4.54
4	9B107600	601B117.600.C	7B107600	602B117.600.C	7.78	6.67	8.55
5	9B107650	601B117.650.C	7B107650	602B117.650.C	9.53	8.59	13.32
6	9B107700	601B117.700.C	7B107700	602B117.700.C	11.17	10.17	19.90
8	9B107750	601B117.750.C	7B107750	602B117.750.C	14.62	13.38	38.50
10	9B107800	601B117.800.C	7B107800	602B117.800.C	18.00	16.56	66.88
12	9B107820	601B117.820.C	7B107820	602B117.820.C	21.25	19.69	105.60

Bell End Fittings
90° LR Street Elbows
DWG 802-5959353

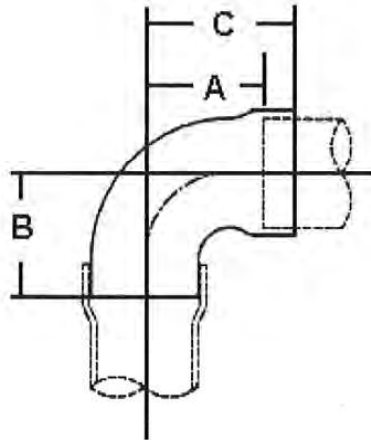


90° Long Radius Elbows M x F

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Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	C	A	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	9B107040	601B117.040.N	7B107040	602B117.040.N	1.59	1.28	0.13
3/8	9B107060	601B117.060.N	7B107060	602B117.060.N	1.94	1.62	0.17
1/2	9B107100	601B117.100.N	7B107100	602B117.100.N	2.25	1.94	0.25
3/4	9B107150	601B117.150.N	7B107150	602B117.150.N	1.91	1.59	0.34
1	9B107200	601B117.200.N	7B107200	602B117.200.N	2.38	2.00	0.53
1-1/4	9B107250	601B117.250.N	7B107250	602B117.250.N	2.88	2.44	0.76
1-1/2	9B107300	601B117.300.N	7B107300	602B117.300.N	3.50	2.94	0.96
2	9B107400	601B117.400.N	7B107400	602B117.400.N	4.28	3.72	1.81
2-1/2	9B107450	601B117.450.N	7B107450	602B117.450.N	5.38	4.62	2.65
3	9B107500	601B117.500.N	7B107500	602B117.500.N	6.17	5.41	4.54
4	9B107600	601B117.600.N	7B107600	602B117.600.N	7.78	6.67	8.55
5	9B107650	601B117.650.N	7B107650	602B117.650.N	9.53	8.59	13.32
6	9B107700	601B117.700.N	7B107700	602B117.700.N	11.17	10.17	19.90
8	9B107750	601B117.750.N	7B107750	602B117.750.N	14.62	13.38	38.50
10	9B107800	601B117.800.N	7B107800	602B117.800.N	18.00	16.56	66.88
12	9B107820	601B117.820.N	7B107820	602B117.820.N	21.25	19.69	105.60

Bell End Fittings
90° SR Street Elbows
DWG 802-5959353

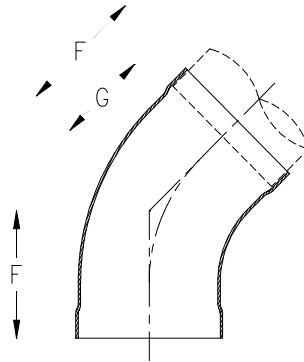


90° Short Radius M x F

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Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	C	A	B	Est. Weight
	90/10	90/10	70/30	70/30				
1	9B106200	601B107.200	7B106200	602B107.200	1.75	1.37	1.50	0.57
1-1/4	9B106250	601B107.250	7B106250	602B107.250	2.00	1.56	1.81	1.00
1-1/2	9B106300	601B107.300	7B106300	602B107.300	2.62	2.06	2.19	1.10
2	9B106400	601B107.400	7B106400	602B107.400	3.12	2.56	2.72	2.00
2-1/2	9B106450	601B107.450	7B106450	602B107.450	4.00	3.25	3.38	2.50
3	9B106500	601B107.500	7B106500	602B107.500	4.50	3.75	3.91	4.31
4	9B106600	601B107.600	7B106600	602B107.600	5.62	4.81	4.98	8.00
5	9B106650	601B107.650	7B106650	602B107.650	6.75	5.81	6.09	13.75
6	9B106700	601B107.700	7B106700	602B107.700	7.81	6.81	7.17	21.00
8	9B106750	601B107.750	7B106750	602B107.750	10.19	8.94	9.38	42.00
10	9B106800	601B107.800	7B106800	602B107.800	12.50	11.06	11.56	54.12
12	9B106820	601B107.820	7B106820	602B107.820	14.62	13.06	13.69	77.55

Bell End Fittings
45° Elbows
DWG 5959353
MSS SP-119

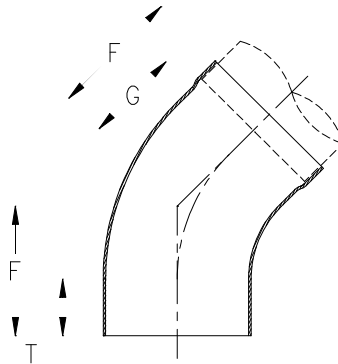


45° Elbows F x F

5

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	F	G	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	9B104040	601B104.040	7B104040	602B104.040	1.02	0.70	0.04
3/8	9B104060	601B104.060	7B104060	602B104.060	1.20	0.89	0.05
1/2	9B104100	601B104.100	7B104100	602B104.100	1.38	1.06	0.06
3/4	9B104150	601B104.150	7B104150	602B104.150	1.25	0.94	0.07
1	9B104200	601B104.200	7B104200	602B104.200	1.50	1.12	0.12
1-1/4	9B104250	601B104.250	7B104250	602B104.250	1.78	1.34	0.19
1-1/2	9B104300	601B104.300	7B104300	602B104.300	2.19	1.62	0.29
2	9B104400	601B104.400	7B104400	602B104.400	2.53	1.97	0.52
2-1/2	9B104450	601B104.450	7B104450	602B104.450	3.19	2.44	0.91
3	9B104500	601B104.500	7B104500	602B104.500	3.52	2.76	1.32
4	9B104600	601B104.600	7B104600	602B104.600	4.27	3.45	2.20
5	9B104650	601B104.650	7B104650	602B104.650	5.14	4.20	3.19
6	9B104700	601B104.700	7B104700	602B104.700	5.19	4.91	9.46
8	9B104750	601B104.750	7B104750	602B104.750	7.59	6.34	21.23
10	9B104800	601B104.800	7B104800	602B104.800	9.22	7.78	41.25
12	9B104820	601B104.820	7B104820	602B104.820	10.70	9.14	49.50

Bell End Fittings
45° LR Street Elbows
DWG 802-5959353

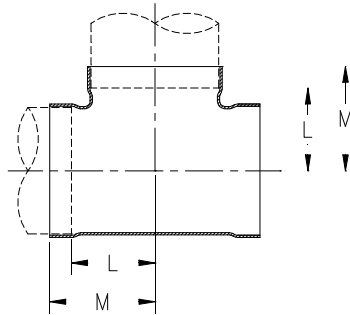


45° Street Elbows M x F

5

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	F	G	T	Est. Weight
	90/10	90/10	70/30	70/30				
1/4	9B105040	601B109.040.N	7B105040	602B109.040.N	1.24	0.92	0.62	0.09
3/8	9B105060	601B109.060.N	7B105060	602B109.060.N	1.24	0.92	0.62	0.11
1/2	9B105100	601B109.100.N	7B105100	602B109.100.N	1.38	1.06	0.75	0.17
3/4	9B105150	601B109.150.N	7B105150	602B109.150.N	1.38	1.06	0.75	0.24
1	9B105200	601B109.200.N	7B105200	602B109.200.N	1.50	1.12	0.88	0.35
1-1/4	9B105250	601B109.250.N	7B105250	602B109.250.N	1.78	1.34	1.00	0.51
1-1/2	9B105300	601B109.300.N	7B105300	602B109.300.N	2.19	1.62	1.25	0.67
2	9B105400	601B109.400.N	7B105400	602B109.400.N	2.53	1.97	1.28	1.43
2-1/2	9B105450	601B109.450.N	7B105450	602B109.450.N	3.19	2.44	1.63	2.00
3	9B105500	601B109.500.N	7B105500	602B109.500.N	3.52	2.76	1.67	4.88
4	9B105600	601B109.600.N	7B105600	602B109.600.N	4.27	3.45	1.78	7.00
5	9B105650	601B109.650.N	7B105650	602B109.650.N	5.14	4.20	2.03	10.18
6	9B105700	601B109.700.N	7B105700	602B109.700.N	5.91	4.91	2.17	8.70
8	9B105750	601B109.750.N	7B105750	602B109.750.N	7.59	6.34	2.62	28.08
10	9B105800	601B109.800.N	7B105800	602B109.800.N	9.22	7.78	3.00	41.25
12	9B105820	601B109.820.N	7B105820	602B109.820.N	10.70	9.14	3.25	49.50

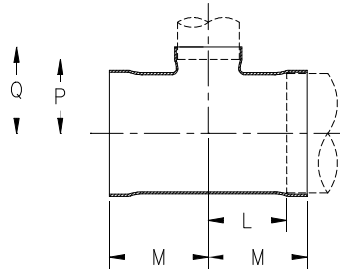
**Bell End Fittings
Straight Tees
DWG 5959353
MSS SP-119**



Straight Tees

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	M	L	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	9B121040	601B121.040	7B121040	602B121.040	0.69	0.38	0.05
3/8	9B121060	601B121.060	7B121060	602B121.060	0.91	0.59	0.07
1/2	9B121100	601B121.100	7B121100	602B121.100	1.09	0.78	0.19
3/4	9B121150	601B121.150	7B121150	602B121.150	1.25	0.94	0.19
1	9B121200	601B121.200	7B121200	602B121.200	1.50	1.12	0.30
1-1/4	9B121250	601B121.250	7B121250	602B121.250	1.88	1.44	0.49
1-1/2	9B121300	601B121.300	7B121300	602B121.300	2.25	1.69	1.38
2	9B121400	601B121.400	7B121400	602B121.400	2.50	1.94	1.50
2-1/2	9B121450	601B121.450	7B121450	602B121.450	3.00	2.25	2.50
3	9B121500	601B121.500	7B121500	602B121.500	3.38	2.62	3.88
4	9B121600	601B121.600	7B121600	602B121.600	4.12	3.31	6.00
5	9B121650	601B121.650	7B121650	602B121.650	4.88	3.94	8.69
6	9B121700	601B121.700	7B121700	602B121.700	5.62	4.62	16.00
8	9B121750	601B121.750	7B121750	602B121.750	7.00	5.75	24.16
10	9B121800	601B121.800	7B121800	602B121.800	8.50	7.06	56.76
12	9B121820	601B121.820	7B121820	602B121.820	10.00	8.43	99.00

**Bell End Fittings
Reducing Tees
DWG 5959353
MSS SP-119**

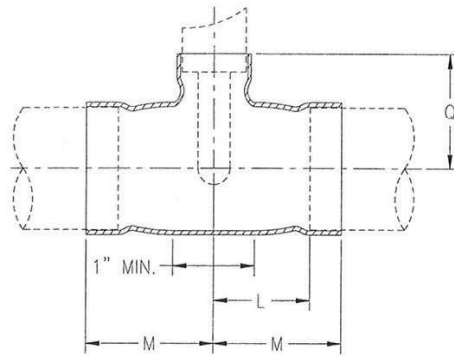


Reducing Tees

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	L	M	P	Q
	90/10	90/10	70/30	70/30				
2-1/2 x 2-1/2 x 1	9B121446	601B121R.446	7B121446	602B121R.446	2.25	3.00	1.87	2.25
2-1/2 x 2-1/2 x 1-1/4	9B121447	601B121R.447	7B121447	602B121R.447	2.25	3.00	2.06	2.50
2-1/2 x 2-1/2 x 1-1/2	9B121448	601B121R.448	7B121448	602B121R.448	2.25	3.00	2.06	2.62
2-1/2 x 2-1/2 x 2	9B121449	601B121R.449	7B121449	602B121R.449	2.25	3.00	2.19	2.75
3 x 3 x 1-1/4	9B121496	601B121R.496	7B121496	602B121R.496	2.62	3.38	2.31	2.75
3 x 3 x 1-1/2	9B121497	601B121R.497	7B121497	602B121R.497	2.62	3.38	2.32	2.88
3 x 3 x 2	9B121498	601B121R.498	7B121498	602B121R.498	2.62	3.38	2.44	3.00
3 x 3 x 2-1/2	9B121499	601B121R.499	7B121499	602B121R.499	2.62	3.38	2.50	3.25
4 x 4 x 1-1/2	9B121595	601B121R.595	7B121595	602B121R.595	3.31	4.12	2.82	3.38
4 x 4 x 2	9B121596	601B121R.596	7B121596	602B121R.596	3.31	4.12	2.94	3.50
4 x 4 x 2-1/2	9B121597	601B121R.597	7B121597	602B121R.597	3.31	4.12	3.00	3.75
4 x 4 x 3	9B121598	601B121R.598	7B121598	602B121R.598	3.31	4.12	3.13	3.88
5 x 5 x 2	9B121645	601B121R.645	7B121645	602B121R.645	3.94	4.88	3.56	4.12
5 x 5 x 2-1/2	9B121646	601B121R.646	7B121646	602B121R.646	3.94	4.88	3.50	4.25
5 x 5 x 3	9B121647	601B121R.647	7B121647	602B121R.647	3.94	4.88	3.63	4.38
5 x 5 x 4	9B121649	601B121R.649	7B121649	602B121R.649	3.94	4.88	3.80	4.62
6 x 6 x 2-1/2	9B121695	601B121R.695	7B121695	602B121R.695	4.62	5.62	4.00	4.75
6 x 6 x 3	9B121696	601B121R.696	7B121696	602B121R.696	4.62	5.62	4.13	4.88
6 x 6 x 4	9B121698	601B121R.698	7B121698	602B121R.698	4.62	5.62	4.30	5.12
6 x 6 x 5	9B121699	601B121R.699	7B121699	602B121R.699	4.62	5.62	4.44	5.38
8 x 8 x 4	9B121747	601B121R.747	7B121747	602B121R.747	5.75	7.00	5.30	6.12
8 x 8 x 5	9B121748	601B121R.748	7B121748	602B121R.748	5.75	7.00	5.44	6.38
8 x 8 x 6	9B121749	601B121R.749	7B121749	602B121R.749	5.75	7.00	5.62	6.62
10 x 10 x 4	9B121796	601B121R.796	7B121796	602B121R.796	7.06	8.50	6.43	7.25
10 x 10 x 5	9B121797	601B121R.797	7B121797	602B121R.797	7.06	8.50	6.50	7.50
10 x 10 x 6	9B121798	601B121R.798	7B121798	602B121R.798	7.06	8.50	6.62	7.62
10 x 10 x 8	9B121799	601B121R.799	7B121799	602B121R.799	7.06	8.50	6.75	8.00
12 x 12 x 5	9B121816	601B121R.816	7B121816	602B121R.816	8.43	10.00	7.56	8.50
12 x 12 x 6	9B121817	601B121R.817	7B121817	602B121R.817	8.43	10.00	7.62	8.62
12 x 12 x 8	9B121818	601B121R.818	7B121818	602B121R.818	8.43	10.00	7.75	9.00
12 x 12 x 10	9B121819	601B121R.819	7B121819	602B121R.819	8.43	10.00	8.06	9.50

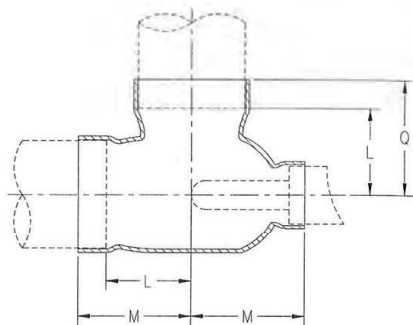
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Bell End Fittings
Thermowell Tees
Angle Thermowell Tees
DWG 5959353
MSS SP-119



Straight Thermowell Tees

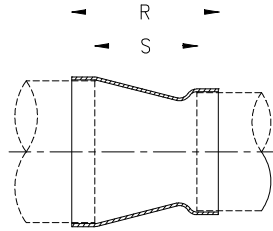
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	L	M	Q
	90/10	90/10	70/30	70/30			
1/2 x 1/2 x 3/4 1-1/2 Body NPS	9B123101	601B123.101	7B123101	602B123.101	2.18	2.50	2.19
3/4 x 3/4 x 3/4 1-1/2 Body NPS	9B123150	601B123.150	7B123150	602B123.150	2.18	2.50	2.19
1 x 1 x 3/4 1-1/2 Body NPS	9B123199	601B123.199	7B123199	602B123.199	2.12	2.50	2.19
1-1/4 x 1-1/4 x 3/4 2 Body NPS	9B123248	601B123.248	7B123248	602B123.248	2.56	3.00	2.38
1-1/2 x 1-1/2 x 3/4 2 Body NPS	9B123297	601B123.297	7B123297	602B123.297	2.44	3.00	2.38



Angle Thermowell Tees

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	L	M	Q
	90/10	90/10	70/30	70/30			
1/2 x 3/4 x 1/2 1-1/2 Body NPS	9B124110	601B124.110	7B124110	602B124.110	1.88	2.50	2.19
3/4 x 3/4 x 3/4 1-1/2 Body NPS	9B124150	601B124.150	7B124150	602B124.150	1.88	2.50	2.19
1 x 3/4 x 1 1-1/2 Body NPS	9B124190	601B124.190	7B124190	602B124.190	1.82	2.50	2.19
1-1/4 x 3/4 x 1-1/4 2 Body NPS	9B124255	601B124.255	7B124255	602B124.255	1.94	2.50	2.38

Bell End Fittings
Concentric Reducers F x F
DWG 802-5959353

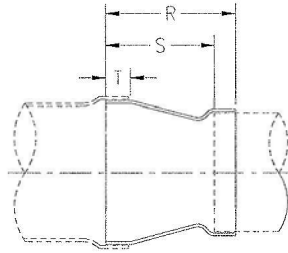


Concentric Reducers F x F

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	R	S	Est. Weight
	90/10	90/10	70/30	70/30			
3/8 x 1/4	9B150059	601B150.059	7B150059	602B150.059	1.84	1.22	0.09
1/2 x 1/4	9B150098	601B150.098	7B150098	602B150.098	1.90	1.27	0.12
1/2 x 3/8	9B150099	601B150.099	7B150099	602B150.099	1.90	1.27	0.12
3/4 x 1/4	9B150147	601B150.147	7B150147	602B150.147	1.90	1.27	0.15
3/4 x 3/8	9B150148	601B150.148	7B150148	602B150.148	1.90	1.27	0.15
3/4 x 1/2	9B150149	601B150.149	7B150149	602B150.149	1.90	1.27	0.19
1 x 1/4	9B150196	601B150.196	7B150196	602B150.196	2.60	1.91	0.26
1 x 3/8	9B150197	601B150.197	7B150197	602B150.197	2.60	1.91	0.26
1 x 1/2	9B150198	601B150.198	7B150198	602B150.198	2.60	1.91	0.30
1 x 3/4	9B150199	601B150.199	7B150199	602B150.199	2.60	1.91	0.30
1-1/4 x 1/4	9B150245	601B150.245	7B150245	602B150.245	2.75	2.00	0.36
1-1/4 x 3/8	9B150246	601B150.246	7B150246	602B150.246	2.75	2.00	0.36
1-1/4 x 1/2	9B150247	601B150.247	7B150247	602B150.247	2.75	2.00	0.36
1-1/4 x 3/4	9B150248	601B150.248	7B150248	602B150.248	2.75	2.00	0.36
1-1/4 x 1	9B150249	601B150.249	7B150249	602B150.249	2.75	1.94	0.40
1-1/2 x 1/4	9B150294	601B150.294	7B150294	602B150.294	3.37	2.50	0.50
1-1/2 x 3/8	9B150295	601B150.295	7B150295	602B150.295	3.37	2.50	0.50
1-1/2 x 1/2	9B150296	601B150.296	7B150296	602B150.296	3.37	2.50	0.50
1-1/2 x 3/4	9B150297	601B150.297	7B150297	602B150.297	3.37	2.50	0.50
1-1/2 x 1	9B150298	601B150.298	7B150298	602B150.298	3.37	2.44	0.50
1-1/2 x 1-1/4	9B150299	601B150.299	7B150299	602B150.299	3.37	2.37	0.51
2 x 1/2	9B150395	601B150.395	7B150395	602B150.395	3.84	2.97	0.81
2 x 3/4	9B150396	601B150.396	7B150396	602B150.396	3.84	2.97	0.88
2 x 1	9B150397	601B150.397	7B150397	602B150.397	3.84	2.90	1.00
2 x 1-1/4	9B150398	601B150.398	7B150398	602B150.398	3.84	2.84	1.00
2 x 1-1/2	9B150399	601B150.399	7B150399	602B150.399	3.84	2.72	1.00
2-1/2 x 1-1/4	9B150447	601B150.447	7B150447	602B150.447	4.53	3.34	1.25
2-1/2 x 1-1/2	9B150448	601B150.448	7B150448	602B150.448	4.53	3.22	1.19
2-1/2 x 2	9B150449	601B150.449	7B150449	602B150.449	4.53	3.22	1.28
3 x 1-1/2	9B150497	601B150.497	7B150497	602B150.497	4.72	3.40	1.69
3 x 2	9B150498	601B150.498	7B150498	602B150.498	4.72	3.40	2.00
3 x 2-1/2	9B150499	601B150.499	7B150499	602B150.499	4.72	3.22	1.88
4 x 2	9B150596	601B150.596	7B150596	602B150.596	5.25	3.87	3.50
4 x 2-1/2	9B150597	601B150.597	7B150597	602B150.597	5.25	3.69	2.93
4 x 3	9B150598	601B150.598	7B150598	602B150.598	5.25	3.69	3.00
5 x 2-1/2	9B150646	601B150.646	7B150646	602B150.646	6.32	4.63	5.00
5 x 3	9B150647	601B150.647	7B150647	602B150.647	6.32	4.63	5.00
5 x 4	9B150649	601B150.649	7B150649	602B150.649	6.32	4.57	6.00
6 x 3	9B150696	601B150.696	7B150696	602B150.696	6.80	5.05	8.00
6 x 4	9B150698	601B150.698	7B150698	602B150.698	6.80	4.99	8.00
6 x 5	9B150699	601B150.699	7B150699	602B150.699	6.80	4.86	6.00
8 x 4	9B150747	601B150.747	7B150747	602B150.747	7.45	5.39	13.00
8 x 5	9B150748	601B150.748	7B150748	602B150.748	7.45	5.26	13.00
8 x 6	9B150749	601B150.749	7B150749	602B150.749	7.45	5.20	13.00
10 x 5	9B150797	601B150.797	7B150797	602B150.797	8.75	6.38	22.12
10 x 6	9B150798	601B150.798	7B150798	602B150.798	8.75	6.32	22.12
10 x 8	9B150799	601B150.799	7B150799	602B150.799	8.75	6.06	25.00
12 x 6	9B150817	601B150.817	7B150817	602B150.817	9.87	7.31	28.95
12 x 8	9B150818	601B150.818	7B150818	602B150.818	9.87	7.06	26.00
12 x 10	9B150819	601B150.819	7B150819	602B150.819	9.87	6.87	32.10

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Bell End Fittings
Concentric Reducers M x F
DWG 802-5959353

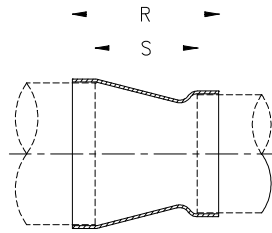


Concentric Reducers M x F

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	R	S	T
	90/10	90/10	70/30	70/30			
3/8 x 1/4	9B151059	601B157.059	7B151059	602B157.059	1.84	1.52	0.38
1/2 x 1/4	9B151098	601B157.098	7B151098	602B157.098	1.90	1.58	0.44
1/2 x 3/8	9B151099	601B157.099	7B151099	602B157.099	1.90	1.58	0.44
3/4 x 1/4	9B151147	601B157.147	7B151147	602B157.147	1.90	1.58	0.47
3/4 x 3/8	9B151148	601B157.148	7B151148	602B157.148	1.90	1.58	0.47
3/4 x 1/2	9B151149	601B157.149	7B151149	602B157.149	1.90	1.58	0.47
1 x 1/4	9B151196	601B157.196	7B151196	602B157.196	2.60	2.28	0.50
1 x 3/8	9B151197	601B157.197	7B151197	602B157.197	2.60	2.28	0.50
1 x 1/2	9B151198	601B157.198	7B151198	602B157.198	2.60	2.28	0.50
1 x 3/4	9B151199	601B157.199	7B151199	602B157.199	2.60	2.28	0.50
1-1/4 x 1/4	9B151245	601B157.245	7B151245	602B157.245	2.75	2.43	0.56
1-1/4 x 3/8	9B151246	601B157.246	7B151246	602B157.246	2.75	2.43	0.56
1-1/4 x 1/2	9B151247	601B157.247	7B151247	602B157.247	2.75	2.43	0.56
1-1/4 x 3/4	9B151248	601B157.248	7B151248	602B157.248	2.75	2.43	0.56
1-1/4 x 1	9B151249	601B157.249	7B151249	602B157.249	2.75	2.37	0.56
1-1/2 x 1/4	9B151294	601B157.294	7B151294	602B157.294	3.37	3.05	0.69
1-1/2 x 3/8	9B151295	601B157.295	7B151295	602B157.295	3.37	3.05	0.69
1-1/2 x 1/2	9B151296	601B157.296	7B151296	602B157.296	3.37	3.05	0.69
1-1/2 x 3/4	9B151297	601B157.297	7B151297	602B157.297	3.37	3.05	0.69
1-1/2 x 1	9B151298	601B157.298	7B151298	602B157.298	3.37	3.00	0.69
1-1/2 x 1-1/4	9B151299	601B157.299	7B151299	602B157.299	3.37	2.93	0.69
2 x 1/2	9B151395	601B157.395	7B151395	602B157.395	3.84	3.52	0.72
2 x 3/4	9B151396	601B157.396	7B151396	602B157.396	3.84	3.52	0.72
2 x 1	9B151397	601B157.397	7B151397	602B157.397	3.84	3.46	0.72
2 x 1-1/4	9B151398	601B157.398	7B151398	602B157.398	3.84	3.40	0.72
2 x 1-1/2	9B151399	601B157.399	7B151399	602B157.399	3.84	3.28	0.88
2-1/2 x 1-1/4	9B151447	601B157.447	7B151447	602B157.447	4.53	4.09	0.88
2-1/2 x 1-1/2	9B151448	601B157.448	7B151448	602B157.448	4.53	3.97	0.88
2-1/2 x 2	9B151449	601B157.449	7B151449	602B157.449	4.53	3.97	0.88
3 x 1-1/2	9B151497	601B157.497	7B151497	602B157.497	4.72	4.16	0.91
3 x 2	9B151498	601B157.498	7B151498	602B157.498	4.72	4.16	0.91
3 x 2-1/2	9B151499	601B157.499	7B151499	602B157.499	4.72	3.97	0.91
4 x 2	9B151596	601B157.596	7B151596	602B157.596	5.25	4.69	0.97
4 x 2-1/2	9B151597	601B157.597	7B151597	602B157.597	5.25	4.50	0.97
4 x 3	9B151598	601B157.598	7B151598	602B157.598	5.25	4.50	0.97
5 x 2-1/2	9B151646	601B157.646	7B151646	602B157.646	6.32	5.57	1.09
5 x 3	9B151647	601B157.647	7B151647	602B157.647	6.32	5.57	1.09
5 x 4	9B151649	601B157.649	7B151649	602B157.649	6.32	5.50	1.09
6 x 3	9B151696	601B157.696	7B151696	602B157.696	6.80	6.05	1.17
6 x 4	9B151698	601B157.698	7B151698	602B157.698	6.80	5.98	1.17
6 x 5	9B151699	601B157.699	7B151699	602B157.699	6.80	5.86	1.17
8 x 4	9B151747	601B157.747	7B151747	602B157.747	7.45	6.63	1.38
8 x 5	9B151748	601B157.748	7B151748	602B157.748	7.45	6.51	1.38
8 x 6	9B151749	601B157.749	7B151749	602B157.749	7.45	6.45	1.38
10 x 5	9B151797	601B157.797	7B151797	602B157.797	8.75	7.81	1.56
10 x 6	9B151798	601B157.798	7B151798	602B157.798	8.75	7.75	1.56
10 x 8	9B151799	601B157.799	7B151799	602B157.799	8.75	7.50	1.56
12 x 6	9B151817	601B157.817	7B151817	602B157.817	9.87	8.87	1.69
12 x 8	9B151818	601B157.818	7B151818	602B157.818	9.87	8.62	1.69
12 x 10	9B151819	601B157.819	7B151819	602B157.819	9.87	8.43	1.69

5

**Bell End Fitting
Eccentric Reducers F x F
DWG 802-5959353**

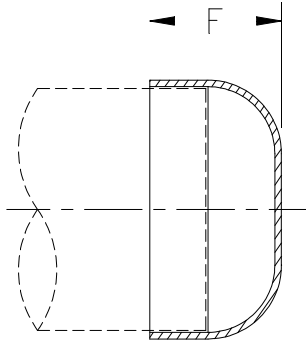


Eccentric Reducers F x F

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	R	S
	90/10	90/10	70/30	70/30		
3/8 x 1/4	9B152059	601B149.059	7B152059	602B149.059	1.84	1.22
1/2 x 1/4	9B152098	601B149.098	7B152098	602B149.098	1.90	1.27
1/2 x 3/8	9B152099	601B149.099	7B152099	602B149.099	1.90	1.27
3/4 x 1/4	9B152147	601B149.147	7B152147	602B149.147	1.90	1.27
3/4 x 3/8	9B152148	601B149.148	7B152148	602B149.148	1.90	1.27
3/4 x 1/2	9B152149	601B149.149	7B152149	602B149.149	1.90	1.27
1 x 1/4	9B152196	601B149.196	7B152196	602B149.196	2.60	1.91
1 x 3/8	9B152197	601B149.197	7B152197	602B149.197	2.60	1.91
1 x 1/2	9B152198	601B149.198	7B152198	602B149.198	2.60	1.91
1 x 3/4	9B152199	601B149.199	7B152199	602B149.199	2.60	1.91
1-1/4 x 1/4	9B152245	601B149.245	7B152245	602B149.245	2.75	2.00
1-1/4 x 3/8	9B152246	601B149.246	7B152246	602B149.246	2.75	2.00
1-1/4 x 1/2	9B152247	601B149.247	7B152247	602B149.247	2.75	2.00
1-1/4 x 3/4	9B152248	601B149.248	7B152248	602B149.248	2.75	2.00
1-1/4 x 1	9B152249	601B149.249	7B152249	602B149.249	2.75	1.94
1-1/2 x 1/4	9B152294	601B149.294	7B152294	602B149.294	3.37	2.50
1-1/2 x 3/8	9B152295	601B149.295	7B152295	602B149.295	3.37	2.50
1-1/2 x 1/2	9B152296	601B149.296	7B152296	602B149.296	3.37	2.50
1-1/2 x 3/4	9B152297	601B149.297	7B152297	602B149.297	3.37	2.50
1-1/2 x 1	9B152298	601B149.298	7B152298	602B149.298	3.37	2.44
1-1/2 x 1-1/4	9B152299	601B149.299	7B152299	602B149.299	3.37	2.37
2 x 1/2	9B152395	601B149.395	7B152395	602B149.395	3.84	2.97
2 x 3/4	9B152396	601B149.396	7B152396	602B149.396	3.84	2.97
2 x 1	9B152397	601B149.397	7B152397	602B149.397	3.84	2.90
2 x 1-1/4	9B152398	601B149.398	7B152398	602B149.398	3.84	2.84
2 x 1-1/2	9B152399	601B149.399	7B152399	602B149.399	3.84	2.72
2-1/2 x 1-1/4	9B152447	601B149.447	7B152447	602B149.447	4.53	3.34
2-1/2 x 1-1/2	9B152448	601B149.448	7B152448	602B149.448	4.53	3.22
2-1/2 x 2	9B152449	601B149.449	7B152449	602B149.449	4.53	3.22
3 x 1-1/2	9B152497	601B149.497	7B152497	602B149.497	4.72	3.40
3 x 2	9B152498	601B149.498	7B152498	602B149.498	4.72	3.40
3 x 2-1/2	9B152499	601B149.499	7B152499	602B149.499	4.72	3.22
4 x 2	9B152596	601B149.596	7B152596	602B149.596	5.25	3.87
4 x 2-1/2	9B152597	601B149.597	7B152597	602B149.597	5.25	3.69
4 x 3	9B152598	601B149.598	7B152598	602B149.598	5.25	3.69
5 x 2-1/2	9B152646	601B149.646	7B152646	602B149.646	6.32	4.63
5 x 3	9B152647	601B149.647	7B152647	602B149.647	6.32	4.63
5 x 4	9B152649	601B149.649	7B152649	602B149.649	6.32	4.57
6 x 3	9B152696	601B149.696	7B152696	602B149.696	6.80	5.05
6 x 4	9B152698	601B149.698	7B152698	602B149.698	6.80	4.99
6 x 5	9B152699	601B149.699	7B152699	602B149.699	6.80	4.86
8 x 4	9B152747	601B149.747	7B152747	602B149.747	7.45	5.39
8 x 5	9B152748	601B149.748	7B152748	602B149.748	7.45	5.26
8 x 6	9B152749	601B149.749	7B152749	602B149.749	7.45	5.20
10 x 5	9B152797	601B149.797	7B152797	602B149.797	8.75	6.38
10 x 6	9B152798	601B149.798	7B152798	602B149.798	8.75	6.32
10 x 8	9B152799	601B149.799	7B152799	602B149.799	8.75	6.06
12 x 6	9B152817	601B149.817	7B152817	602B149.817	9.87	7.31
12 x 8	9B152818	601B149.818	7B152818	602B149.818	9.87	7.06
12 x 10	9B152819	601B149.819	7B152819	602B149.819	9.87	6.87

5

Bell End Fittings
Pipe Caps
DWG 5959353
MSS SP-119

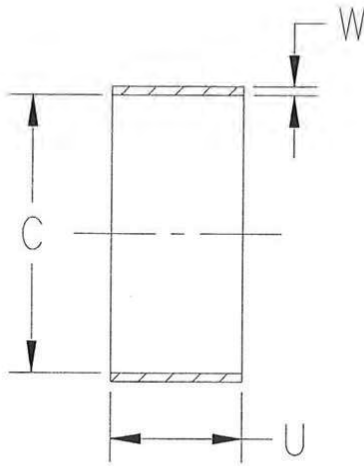


Pipe Cap

5

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	F	Est. Weight
	90/10	90/10	70/30	70/30		
1/4	9B154040	601B154.040	7B154040	602B154.040	0.85	0.06
3/8	9B154060	601B154.060	7B154060	602B154.060	1.00	0.08
1/2	9B154100	601B154.100	7B154100	602B154.100	1.19	0.14
3/4	9B154150	601B154.150	7B154150	602B154.150	1.19	0.14
1	9B154200	601B154.200	7B154200	602B154.200	1.44	0.28
1-1/4	9B154250	601B154.250	7B154250	602B154.250	1.44	0.28
1-1/2	9B154300	601B154.300	7B154300	602B154.300	1.44	0.58
2	9B154400	601B154.400	7B154400	602B154.400	1.44	0.25
2-1/2	9B154450	601B154.450	7B154450	602B154.450	1.44	0.56
3	9B154500	601B154.500	7B154500	602B154.500	1.19	0.84
4	9B154600	601B154.600	7B154600	602B154.600	2.41	1.74
5	9B154650	601B154.650	7B154650	602B154.650	2.91	2.31
6	9B154700	601B154.700	7B154700	602B154.700	3.39	6.75
8	9B154750	601B154.750	7B154750	602B154.750	3.39	5.06
10	9B154800	601B154.800	7B154800	602B154.800	4.94	9.57
12	9B154820	601B154.880	7B154820	602B154.880	5.93	17.82

**Bell End Fittings
Standard Couplings
DWG 5959353
MSS SP-119**

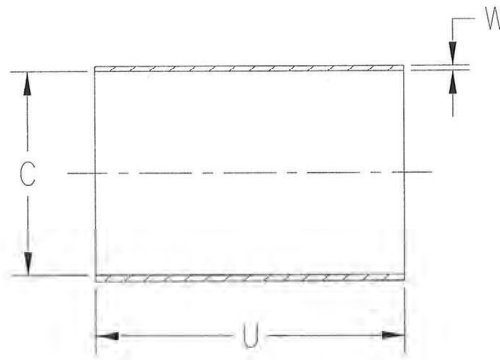


Standard Sleeve

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	C	U	W
	90/10	90/10	70/30	70/30			
1/4	9B000040	601B155.040	7B000040	602B155.040	0.57	0.88	0.07
3/8	9B000060	601B155.060	7B000060	602B155.060	0.70	0.88	0.07
1/2	9B000100	601B155.100	7B000100	602B155.100	0.87	0.88	0.07
3/4	9B000150	601B155.150	7B000150	602B155.150	1.08	0.88	0.07
1	9B000200	601B155.200	7B000200	602B155.200	1.35	1.00	0.07
1-1/4	9B000250	601B155.250	7B000250	602B155.250	1.69	1.12	0.08
1-1/2	9B000300	601B155.300	7B000300	602B155.300	1.93	1.36	0.08
2	9B000400	601B155.400	7B000400	602B155.400	2.41	1.36	0.09
2-1/2	9B000450	601B155.450	7B000450	602B155.450	2.91	1.74	0.09
3	9B000500	601B155.500	7B000500	602B155.500	3.53	1.74	0.10
3-1/2	9B000550	601B155.550	7B000550	602B155.550	4.00	1.75	0.11
4	9B000600	601B155.600	7B000600	602B155.600	4.53	1.88	0.12
5	9B000650	601B155.650	7B000650	602B155.650	5.60	2.12	0.14
6	9B000700	601B155.700	7B000700	602B155.700	6.66	2.24	0.15
8	9B000750	601B155.750	7B000750	602B155.750	8.66	2.74	0.16
10	9B000800	601B155.800	7B000800	602B155.800	10.79	3.12	0.20
12	9B000828	601B155.828	7B000828	602B155.828	12.79	3.36	0.27

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**Bell End Fittings
Closure Couplings
DWG 5959353
MSS SP-119**



Closure Couplings

5

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	C	U	W
	90/10	90/10	70/30	70/30			
1/4	9B001040	601B001.040	7B001040	602B001.040	0.57	5.00	0.07
3/8	9B001060	601B001.060	7B001060	602B001.060	0.70	5.00	0.07
1/2	9B001100	601B001.100	7B001100	602B001.100	0.87	5.00	0.07
3/4	9B001150	601B001.150	7B001150	602B001.150	1.08	5.50	0.07
1	9B001200	601B001.200	7B001200	602B001.200	1.35	5.50	0.07
1-1/4	9B001250	601B001.250	7B001250	602B001.250	1.69	5.50	0.08
1-1/2	9B001300	601B001.300	7B001300	602B001.300	1.93	5.50	0.08
2	9B001400	601B001.400	7B001400	602B001.400	2.41	5.50	0.09
2-1/2	9B001450	601B001.450	7B001450	602B001.450	2.91	5.50	0.09
3	9B001500	601B001.500	7B001500	602B001.500	3.53	5.50	0.10
3-1/2	9B001550	601B001.550	7B001550	602B001.550	4.00	6.00	0.11
4	9B001600	601B001.600	7B001600	602B001.600	4.53	6.00	0.12
5	9B001650	601B001.650	7B001650	602B001.650	5.60	6.00	0.14
6	9B001700	601B001.700	7B001700	602B001.700	6.66	6.00	0.15
8	9B001750	601B001.750	7B001750	602B001.750	8.66	6.00	0.16
10	9B001800	601B001.800	7B001800	602B001.800	10.79	6.00	0.20
12	9B001828	601B001.828	7B001828	602B001.828	12.79	6.00	0.27



Contents

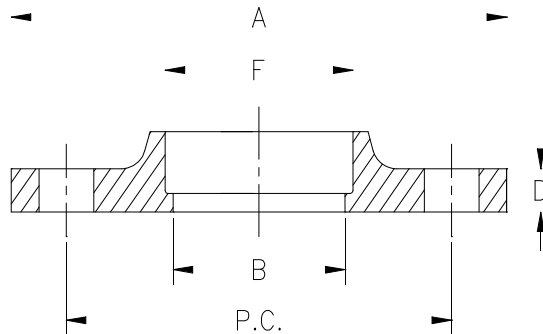
150 PSI Navy Socket Weld	1
150 PSI Navy Slip-On.....	2
250 PSI Navy Socket Weld	3
250 PSI Navy Slip-On.....	4
200 PSI Navy Socket Weld	5
400 PSI Navy Socket Weld	6
150 PSI Navy Weld Neck	7
250 PSI Navy Weld Neck	8
150 PSI Commercial Socket Weld.....	9
150 PSI Commercial Slip-On	10
300 PSI Commercial Socket Weld.....	11
300 PSI Commercial Slip-On	12
150 PSI Commercial Weld Neck.....	13
300 PSI Commercial Weld Neck.....	14

Navy & Commercial Copper Nickel Flanges



- Navy and Commercial Socket Weld, Slip-On and Weld Neck Flanges.
- Intended use with Copper-Nickel Pipe iaw MIL-T-16420K.
- Rated as shown (150, 200, 250, 300, 400 PSI).
- Principal Dimensions from:
 - Navy:
 - MIL-F-20042
 - NAVSEA 810-4715319
 - NAVSEA 810-1385992
 - NAVSHIPS 810-1385892
 - Commercial:
 - ANSI B16.5

Navy Flanges
150 PSI
Socket Weld
DWG 810-4715319
MIL-F-20042

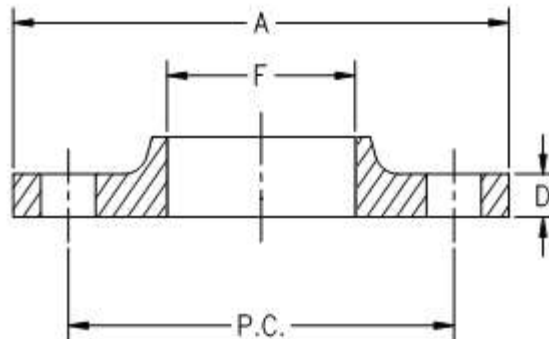


150 PSI Socket Weld

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30								
1/4	21122040	689040.040	22122040	687040.040	3.250	0.410	0.375	0.580	3	9/16	2.125	0.80
3/8	21122060	689040.060	22122060	687040.060	3.375	0.545	0.375	0.715	3	9/16	2.250	1.00
1/2	21122100	689040.100	22122100	687040.100	3.563	0.710	0.375	0.880	3	9/16	2.438	1.30
3/4	21122150	689040.150	22122150	687040.150	3.813	0.906	0.438	1.090	4	9/16	2.688	1.80
1	21122200	689040.200	22122200	687040.200	4.250	1.171	0.438	1.355	4	9/16	3.125	2.00
1-1/4	21122250	689040.250	22122250	687040.250	4.500	1.516	0.438	1.700	4	9/16	3.375	2.25
1-1/2	21122300	689040.300	22122300	687040.300	5.063	1.756	0.438	1.950	6	9/16	3.938	2.75
2	21122400	689040.400	22122400	687040.400	5.563	2.240	0.438	2.411	6	9/16	4.438	3.00
2-1/2	21122450	689040.450	22122450	687040.450	6.125	2.710	0.500	2.913	6	9/16	5.000	4.00
3	21122500	689040.500	22122500	687040.500	6.625	3.310	0.500	3.543	8	9/16	5.500	4.50
3-1/2	21122550	689040.550	22122550	687040.550	7.188	3.810	0.500	4.054	8	9/16	6.063	5.00
4	21122600	689040.600	22122600	687040.600	7.688	4.280	0.500	4.552	8	9/16	6.563	5.80
5	21122650	689040.650	22122650	687040.650	9.063	5.320	0.563	5.620	10	11/16	7.813	8.50
6	21122700	689040.700	22122700	687040.700	10.125	6.360	0.563	6.682	12	11/16	8.875	10.00
8	21122750	689040.750	22122750	687040.750	12.375	8.330	0.625	8.682	14	11/16	11.063	17.00
10	21122800	689040.800	22122800	687040.800	15.000	10.380	0.688	10.807	15	13/16	13.438	22.50
12	21122820	689040.820	22122820	687040.820	17.625	12.250	0.750	12.807	18	13/16	16.063	32.50

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Navy Flanges
 150 PSI
 Slip-On
 DWG 810-4715319
 MIL-F-20042

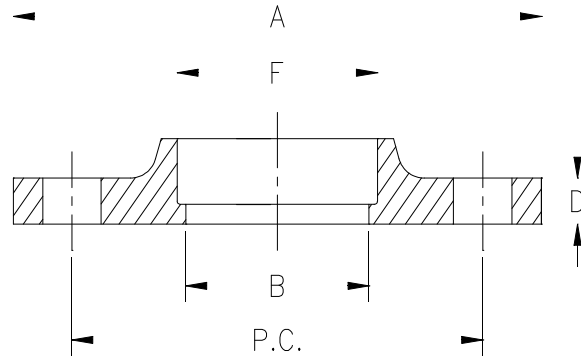


150 PSI Slip-On

6

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30							
1/4	21100040	689000.040	22100040	687000.040	3.250	0.375	0.580	3	9/16	2.125	0.80
3/8	21100060	689000.060	22100060	687000.060	3.375	0.375	0.715	3	9/16	2.250	0.90
1/2	21100100	689000.100	22100100	687000.100	3.563	0.375	0.880	3	9/16	2.438	1.00
3/4	21100150	689000.150	22100150	687000.150	3.813	0.438	1.090	4	9/16	2.688	1.30
1	21100200	689000.200	22100200	687000.200	4.250	0.438	1.355	4	9/16	3.125	1.60
1-1/4	21100250	689000.250	22100250	687000.250	4.500	0.438	1.700	4	9/16	3.375	1.80
1-1/2	21100300	689000.300	22100300	687000.300	5.063	0.438	1.950	6	9/16	3.938	2.20
2	21100400	689000.400	22100400	687000.400	5.563	0.438	2.411	6	9/16	4.438	2.60
2-1/2	21100450	689000.450	22100450	687000.450	6.125	0.500	2.913	6	9/16	5.000	3.40
3	21100500	689000.500	22100500	687000.500	6.625	0.500	3.543	8	9/16	5.500	3.70
3-1/2	21100550	689000.550	22100550	687000.550	7.188	0.500	4.054	8	9/16	6.063	4.10
4	21100600	689000.600	22100600	687000.600	7.688	0.500	4.552	8	9/16	6.563	4.50
5	21100650	689000.650	22100650	687000.650	9.063	0.563	5.620	10	11/16	7.813	6.50
6	21100700	689000.700	22100700	687000.700	10.125	0.563	6.682	12	11/16	8.875	7.50
8	21100750	689000.750	22100750	687000.750	12.375	0.625	8.682	14	11/16	11.063	11.30
10	21100800	689000.800	22100800	687000.800	15.000	0.688	10.807	15	13/16	13.438	17.20
12	21100820	689000.820	22100820	687000.820	17.625	0.750	12.807	18	13/16	16.063	25.60

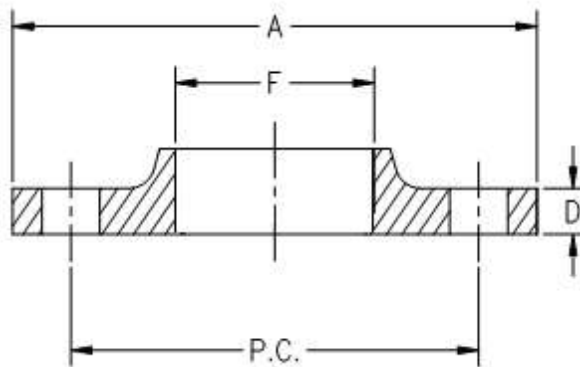
Navy Flanges
250 PSI
Socket Weld
DWG 810-4715319
MIL-F-20042



250 PSI Socket Weld

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30								
1/4	21144040	689240.040	22144040	687240.040	3.250	0.410	0.688	0.580	3	9/16	2.125	1.40
3/8	21144060	689240.060	22144060	687240.060	3.375	0.545	0.688	0.715	3	9/16	2.250	1.80
1/2	21144100	689240.100	22144100	687240.100	3.563	0.710	0.688	0.880	3	9/16	2.438	2.20
3/4	21144150	689240.150	22144150	687240.150	3.813	0.920	0.688	1.090	4	9/16	2.688	2.50
1	21144200	689240.200	22144200	687240.200	4.250	1.185	0.750	1.355	4	9/16	3.125	3.00
1-1/4	21144250	689240.250	22144250	687240.250	4.500	1.516	0.813	1.700	4	9/16	3.375	3.50
1-1/2	21144300	689240.300	22144300	687240.300	5.063	1.756	0.813	1.950	6	9/16	3.938	4.50
2	21144400	689240.400	22144400	687240.400	5.563	2.240	0.813	2.411	6	9/16	4.438	5.00
2-1/2	21144450	689240.450	22144450	687240.450	6.125	2.710	0.938	2.913	6	9/16	5.000	6.50
3	21144500	689240.500	22144500	687240.500	6.625	3.310	0.938	3.543	8	9/16	5.500	7.20
3-1/2	21144550	689240.550	22144550	687240.550	7.188	3.810	1.000	4.054	8	9/16	6.063	9.00
4	21144600	689240.600	22144600	687240.600	7.688	4.280	1.000	4.552	8	9/16	6.563	10.50
5	21144650	689240.650	22144650	687240.650	9.063	5.320	1.063	5.620	10	11/16	7.813	15.30
6	21144700	689240.700	22144700	687240.700	10.125	6.360	1.188	6.682	12	11/16	8.875	20.50
8	21144750	689240.750	22144750	687240.750	12.375	8.330	1.313	8.682	14	11/16	11.063	30.00
10	21144800	689240.800	22144800	687240.800	15.000	10.380	1.438	10.807	15	13/16	13.438	47.50
12	21144820	689240.820	22144820	687240.820	17.625	12.250	1.500	12.807	18	13/16	16.063	67.00

Navy Flanges
 250 PSI
 Slip-On
 DWG 801-4715319
 MIL-F-20042

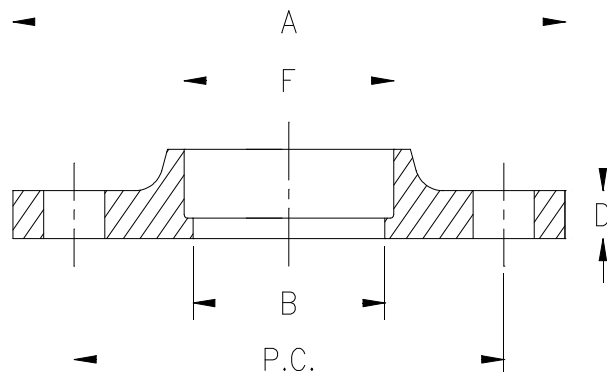


250 PSI Slip-On

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30							
1/4	21111040	689200.040	22111040	687200.040	3.250	0.688	0.545	3	9/16	2.125	1.60
3/8	21111060	689200.060	22111060	687200.060	3.375	0.688	0.680	3	9/16	2.250	1.70
1/2	21111100	689200.100	22111100	687200.100	3.563	0.688	0.845	3	9/16	2.438	1.90
3/4	21111150	689200.150	22111150	687200.150	3.813	0.688	1.055	4	9/16	2.688	2.10
1	21111200	689200.200	22111200	687200.200	4.250	0.750	1.320	4	9/16	3.125	2.80
1-1/4	21111250	689200.250	22111250	687200.250	4.500	0.813	1.665	4	9/16	3.375	3.30
1-1/2	21111300	689200.300	22111300	687200.300	5.063	0.813	1.905	6	9/16	3.938	4.10
2	21111400	689200.400	22111400	687200.400	5.563	0.813	2.380	6	11/16	4.438	4.60
2-1/2	21111450	689200.450	22111450	687200.450	6.125	0.938	2.880	6	11/16	5.000	6.20
3	21111500	689200.500	22111500	687200.500	6.625	0.938	3.505	8	11/16	5.500	6.60
3-1/2	21111550	689200.550	22111550	687200.550	7.188	1.000	4.005	8	11/16	6.063	7.90
4	21111600	689200.600	22111600	687200.600	7.688	1.000	4.505	8	11/16	6.563	8.80
5	21111650	689200.650	22111650	687200.650	9.063	1.063	5.568	10	11/16	7.813	12.40
6	21111700	689200.700	22111700	687200.700	10.125	1.188	6.630	12	11/16	8.875	15.70
8	21111750	689200.750	22111750	687200.750	12.375	1.313	8.630	14	11/16	11.063	23.70
10	21111800	689200.800	22111800	687200.800	15.000	1.438	10.755	15	13/16	13.438	35.90
12	21111820	689200.820	22111820	687200.820	17.625	1.500	12.755	18	13/16	16.063	51.30

6

Navy Flanges
 200 PSI Socket Weld
 Butterfly Flange
 DWG 810-4715319
 DWG 1385892
 MIL-F-20042

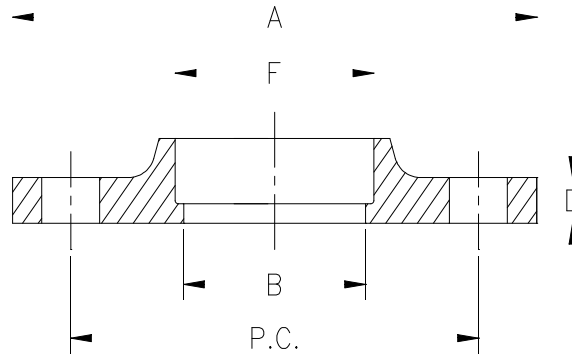


200 PSI Socket Weld – Butterfly Flange

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30								
1-1/2	21133300	689188.300	22133300	687188.300	5.000	1.696	0.438	1.905	4	5/8	3.875	2.50
2	21133400	689188.400	22133400	687188.400	6.000	2.067	0.500	2.380	4	3/4	4.750	4.00
2-1/2	21133450	689188.450	22133450	687188.450	7.000	2.469	0.563	2.880	4	3/4	5.500	6.00
3	21133500	689188.500	22133500	687188.500	7.500	3.068	0.625	3.505	4	3/4	6.000	8.00
3-1/2	21133550	689188.550	22133550	687188.550	8.500	3.548	0.688	4.005	8	3/4	7.000	10.00
4	21133600	689188.600	22133600	687188.600	9.000	4.026	0.688	4.505	8	3/4	7.500	11.50
5	21133650	689188.650	22133650	687188.650	10.000	5.047	0.750	5.568	8	7/8	8.500	14.50
6	21133700	689188.700	22133700	687188.700	11.000	6.065	0.813	6.630	8	7/8	9.500	17.50
8	21133750	689188.750	22133750	687188.750	13.500	7.981	0.938	8.630	8	7/8	11.750	30.50
10	21133800	689188.800	22133800	687188.800	16.000	10.020	1.000	10.755	12	1	14.250	42.00
12	21133820	689188.820	22133820	687188.820	19.000	11.938	1.063	12.755	12	1	17.000	68.50

6

Navy Flanges
 400 PSI
 Socket Weld
 DWG 810-4715319
 DWG 1385892
 MIL-F-20042

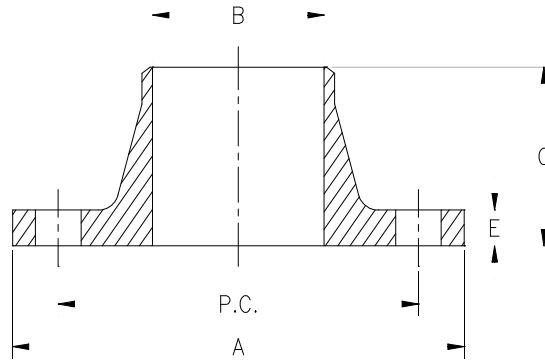


400 PSI – Socket Weld

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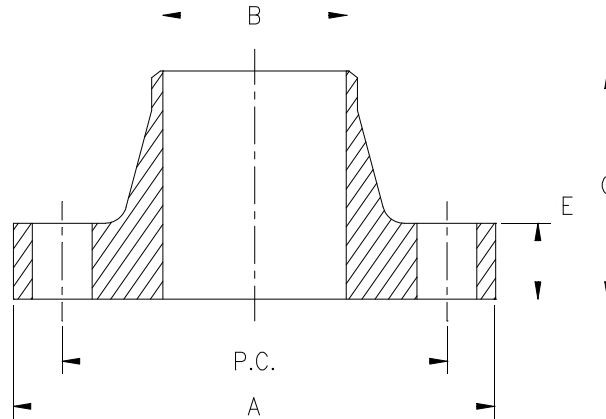
Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	D	F		No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30				Min.	Max.				
1/4	21177040	689400.040	22177040	687400.040	3.750	0.396	0.688	0.545	0.575	3	9/16	2.625	2.30
3/8	21177060	689400.060	22177060	687400.060	3.875	0.531	0.688	0.680	0.710	4	9/16	2.750	2.30
1/2	21177100	689400.100	22177100	687400.100	4.000	0.696	0.688	0.845	0.875	4	9/16	2.875	2.50
3/4	21177150	689400.150	22177150	687400.150	4.313	0.906	0.688	1.055	1.085	4	9/16	3.188	2.90
1	21177200	689400.200	22177200	687400.200	5.063	1.171	0.750	1.320	1.350	5	11/16	3.750	4.20
1-1/4	21177250	689400.250	22177250	687400.250	5.375	1.516	0.813	1.665	1.695	5	11/16	4.063	5.00
1-1/2	21177300	689400.300	22177300	687400.300	5.938	1.756	0.813	1.905	1.935	6	11/16	4.625	6.10
2	21177400	689400.400	22177400	687400.400	6.500	2.240	0.813	2.380	2.426	7	11/16	5.188	7.10
2-1/2	21177450	689400.450	22177450	687400.450	7.563	2.710	0.938	2.880	2.931	8	13/16	6.000	10.70
3	21177500	689400.500	22177500	687400.500	8.125	3.310	0.938	3.505	3.560	8	13/16	6.563	11.90
3-1/2	21177550	689400.550	22177550	687400.550	8.688	3.810	1.000	4.005	4.060	9	13/16	7.125	14.00
4	21177600	689400.600	22177600	687400.600	9.250	4.280	1.000	4.505	4.565	9	13/16	7.688	15.80
5	21177650	689400.650	22177650	687400.650	10.375	5.320	1.063	5.568	5.628	11	13/16	8.813	20.00
6	21177700	689400.700	22177700	687400.700	11.938	6.360	1.188	6.630	6.690	12	15/16	10.188	28.60
8	21177750	689400.750	22177750	687400.750	14.750	8.330	1.313	8.630	8.690	13	1-1/16	12.750	45.80
10	21177800	689400.800	22177800	687400.800	17.000	10.380	1.438	10.755	10.815	15	1-1/16	15.000	63.00

Navy Flanges
150 PSI
Weld Neck
MIL-F 20670 Type D



150 PSI Weld Neck

Nominal Pipe Size	Premier	W&O	Premier	W&O	A	B	C	E	No. Holes	Hole Dia.	P.C.	Est. Weight
	Part #	Part #	Part #	Part #								
	90/10	90/10	70/30	70/30								
2	21155400	689060.400	22155400	687060.400	5.563	2.115	2.188	0.562	6	9/16	4.438	4.20
2-1/2	21155450	689060.450	22155450	687060.450	6.125	2.615	2.375	0.625	6	9/16	5.000	5.60
3	21155500	689060.500	22155500	687060.500	6.625	3.220	2.313	0.625	8	9/16	5.500	6.40
3-1/2	21155550	689060.550	22155550	687060.550	7.188	3.720	2.375	0.625	8	9/16	6.063	7.30
4	21155600	689060.600	22155600	687060.600	7.688	4.220	2.563	0.687	8	9/16	6.563	8.40
5	21155650	689060.650	22155650	687060.650	9.063	5.283	3.125	0.750	10	11/16	7.813	12.80
6	21155700	689060.700	22155700	687060.700	10.125	6.251	3.250	0.812	12	11/16	8.875	16.40
8	21155750	689060.750	22155750	687060.750	12.375	8.251	3.688	0.875	14	11/16	11.063	25.60
10	21155800	689060.800	22155800	687060.800	15.000	10.376	3.875	1.000	15	13/16	13.438	37.30
12	21155820	689060.820	22155820	687060.820	17.625	12.250	4.375	0.875	18	13/16	16.063	63.50

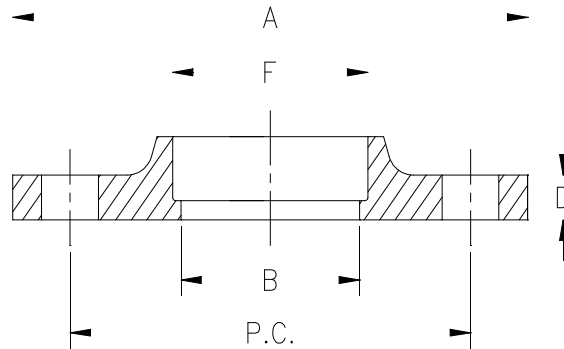


250 PSI Weld Neck

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Nominal Pipe Size	Premier	W&O	Premier	W&O	A	B	C	E	No. Holes	Hole Dia.	P.C.	Est. Weight
	Part #	Part #	Part #	Part #								
	90/10	90/10	70/30	70/30								
2	21166400	689260.400	22166400	687260.400	5.563	2.115	2.625	0.875	6	11/16	4.438	6.00
2-1/2	21166450	689260.450	22166450	687260.450	6.125	2.615	2.813	0.938	6	11/16	5.000	8.00
3	21166500	689260.500	22166500	687260.500	6.625	3.220	2.75	0.938	8	11/16	5.500	9.00
3-1/2	21166550	689260.500	22166550	687260.550	7.188	3.720	2.875	1.000	8	11/16	6.063	11.00
4	21166600	689260.600	22166600	687260.600	7.688	4.220	3.063	1.000	8	11/16	6.563	13.00
5	21166650	689260.650	22166650	687260.650	9.063	5.283	3.625	1.063	10	11/16	7.813	19.00
6	21166700	689260.700	22166700	687260.700	10.125	6.251	3.875	1.188	12	11/16	8.875	26.00
8	21166750	689260.750	22166750	687260.750	12.375	8.251	4.375	1.313	14	11/16	11.063	44.00
10	21166800	689260.800	22166800	687260.800	15.000	10.376	4.625	1.438	15	13/16	13.438	66.00
12	21166820	689260.820	22166820	687260.820	17.625	12.250	5.125	1.500	18	13/16	16.063	102.00

**Commercial Flanges
150 PSI
Socket Weld
ANSI B16.5**

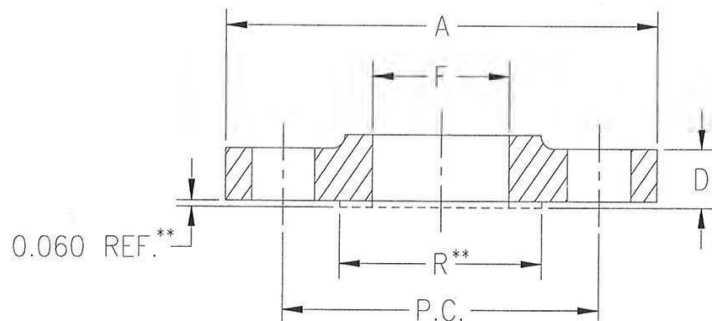


150 PSI Socket Weld

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30								
1/2	21222100	689140.100	22222100	687140.100	3.500	0.880	0.438	0.880	4	5/8	2.375	1.20
3/4	21222150	689140.150	22222150	687140.150	3.875	0.906	0.500	1.090	4	5/8	2.750	1.70
1	21222200	689140.200	22222200	687140.200	4.250	1.171	0.563	1.355	4	5/8	3.125	2.20
1-1/4	21222250	689140.250	22222250	687140.250	4.625	1.516	0.625	1.700	4	5/8	3.500	2.90
1-1/2	21222300	689140.300	22222300	687140.300	5.000	1.756	0.688	1.950	4	5/8	3.875	3.70
2	21222400	689140.400	22222400	687140.400	6.000	2.240	0.750	2.440	4	3/4	4.750	5.70
2-1/2	21222450	689140.450	22222450	687140.450	7.000	2.710	0.875	2.940	4	3/4	5.500	9.00
3	21222500	689140.500	22222500	687140.500	7.500	3.310	0.938	3.570	4	3/4	6.000	10.50
3-1/2	21222550	689140.550	22222550	687140.550	8.500	3.810	0.938	4.070	8	3/4	7.000	13.00
4	21222600	689140.600	22222600	687140.600	9.000	4.280	0.938	4.570	8	3/4	7.500	14.20
5	21222650	689140.650	22222650	687140.650	10.000	5.320	0.938	5.660	8	7/8	8.500	16.00
6	21222700	689140.700	22222700	687140.700	11.000	6.360	1.000	6.720	8	7/8	9.500	19.40
8	21222750	689140.750	22222750	687140.750	13.500	8.330	1.125	8.720	8	7/8	11.750	31.30
10	21222800	689140.800	22222800	687140.800	16.000	10.380	1.188	10.880	12	1	14.250	42.30
12	21222820	689140.820	22222820	687140.820	19.000	12.250	1.250	12.880	12	1	17.000	69.60

6

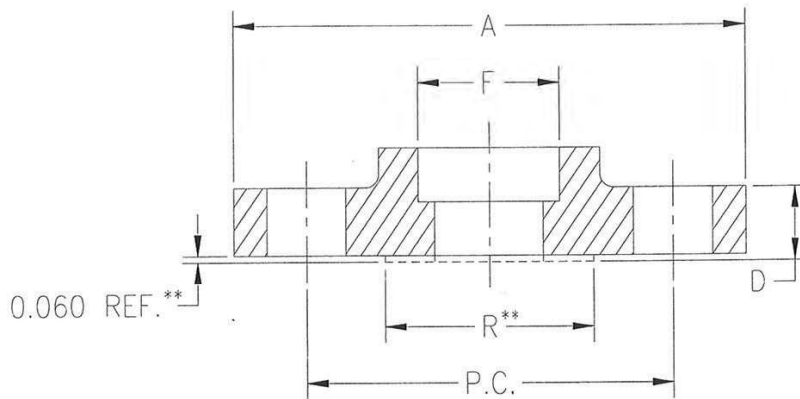
Commercial Flanges
150 PSI
Slip-On
ANSI B16.5



150 PSI Slip-On

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30							
1/2	21211100	689100.100	22211100	687100.100	3.500	0.438	0.880	4	5/8	2.375	1.20
3/4	21211150	689100.150	22211150	687100.150	3.875	0.500	1.090	4	5/8	2.750	1.70
1	21211200	689100.200	22211200	687100.200	4.250	0.563	1.355	4	5/8	3.125	2.20
1-1/4	21211250	689100.250	22211250	687100.250	4.625	0.625	1.700	4	5/8	3.500	2.90
1-1/2	22211300	689100.300	22211300	687100.300	5.000	0.688	1.950	4	5/8	3.875	3.70
2	21211400	689100.400	22211400	687100.400	6.000	0.750	2.440	4	3/4	4.750	5.70
2-1/2	21211450	689100.450	22211450	687100.450	7.000	0.875	2.940	4	3/4	5.500	9.00
3	21211500	689100.500	22211500	687100.500	7.500	0.938	3.570	4	3/4	6.000	10.50
3-1/2	21211550	689100.550	22211550	687100.550	8.500	0.938	4.070	8	3/4	7.000	13.00
4	21211600	689100.600	22211600	687100.600	9.000	0.938	4.570	8	3/4	7.500	14.20
5	21211650	689100.650	22211650	687100.650	10.000	0.938	5.660	8	7/8	8.500	16.00
6	21211700	689100.700	22211700	687100.700	11.000	1.000	6.720	8	7/8	9.500	19.40
8	21211750	689100.750	22211750	687100.750	13.500	1.125	8.720	8	7/8	11.750	31.30
10	21211800	689100.800	22211800	687100.800	16.000	1.188	10.880	12	1	14.250	42.30
12	21211820	689100.820	22211820	687100.820	19.000	1.250	12.880	12	1	17.000	65.70

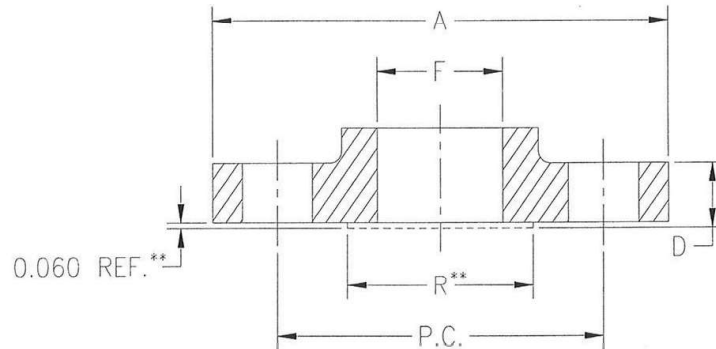
**Commercial Flanges
300 PSI
Socket Weld
ANSI B16.5**



300 PSI Socket Weld

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30							
1/2	21322100	689340.100	22322100	687340.100	3.750	0.563	0.880	4	5/8	2.625	1.90
3/4	21322150	689340.150	22322150	687340.150	4.625	0.625	1.090	4	3/4	3.250	3.20
1	21322200	689340.200	22322200	687340.200	4.875	0.688	1.355	4	3/4	3.500	3.90
1-1/4	21322250	689340.250	22322250	687340.250	5.250	0.750	1.700	4	3/4	3.875	4.80
1-1/2	21322300	689340.300	22322300	687340.300	6.125	0.813	1.950	4	7/8	4.500	7.00
2	21322400	689340.400	22322400	687340.400	6.500	0.875	2.440	8	3/4	5.000	8.10
2-1/2	21322450	689340.450	22322450	687340.450	7.500	1.000	2.940	8	7/8	5.875	12.00
3	21322500	689340.500	22322500	687340.500	8.250	1.125	3.570	8	7/8	6.625	16.00
3-1/2	21322550	689340.550	22322550	687340.550	9.000	1.188	4.070	8	7/8	7.250	19.90
4	21322600	689340.600	22322600	687340.600	10.000	1.250	4.570	8	7/8	7.875	26.00
5	21322650	689340.650	22322650	687340.650	11.000	1.375	5.660	8	7/8	9.250	32.80
6	21322700	689340.700	22322700	687340.700	12.500	1.438	6.720	12	7/8	10.625	42.30
8	21322750	689340.750	22322750	687340.750	15.000	1.625	8.720	12	1	13.000	64.70
10	21322800	689340.800	22322800	687340.800	17.500	1.875	10.880	16	1-1/8	15.250	92.40
12	21322820	689340.820	22322820	687340.820	20.500	2.000	12.880	16	1-1/4	17.750	136.00

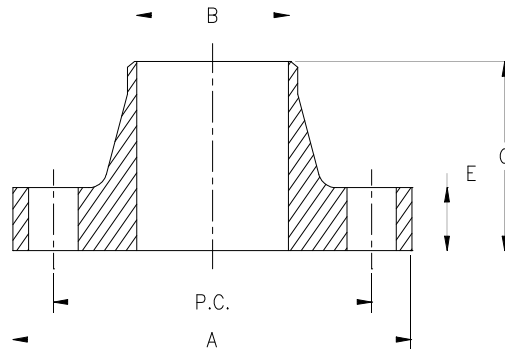
**Commercial Flanges
300 PSI
Slip-On
ANSI B16.5**



300 PSI Slip-On

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	D	F	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30							
1/2	21311100	689300.100	22311100	687300.100	3.750	0.563	0.880	4	5/8	2.625	1.90
3/4	21311150	689300.150	22311150	687300.150	4.625	0.625	1.090	4	3/4	3.250	3.20
1	21311200	689300.200	22311200	687300.200	4.875	0.688	1.355	4	3/4	3.500	3.80
1-1/4	21311250	689300.250	22311250	687300.250	5.250	0.750	1.700	4	3/4	3.875	4.70
1-1/2	21311300	689300.300	22311300	687300.300	6.125	0.813	1.950	4	7/8	4.500	6.90
2	21311400	689300.400	22311400	687300.400	6.500	0.875	2.440	8	3/4	5.000	7.90
2-1/2	21311450	689300.450	22311450	687300.450	7.500	1.000	2.940	8	7/8	5.875	11.70
3	21311500	689300.500	22311500	687300.500	8.250	1.125	3.570	8	7/8	6.625	15.60
3-1/2	21311550	689300.550	22311550	687300.550	9.000	1.188	4.070	8	7/8	7.250	19.30
4	21311600	689300.600	22311600	687300.600	10.000	1.250	4.570	8	7/8	7.875	25.30
5	21311650	689300.650	22311650	687300.650	11.000	1.375	5.660	8	7/8	9.250	31.70
6	21311700	689300.700	22311700	687300.700	12.500	1.438	6.720	12	7/8	10.625	40.90
8	21311750	689300.750	22311750	687300.750	15.000	1.625	8.720	12	1	13.000	62.20
10	21311800	689300.800	22311800	687300.800	17.500	1.875	10.880	16	1-1/8	15.250	88.70
12	21311820	689300.820	22311820	687300.820	20.500	2.000	12.880	16	1-1/4	17.750	129.50

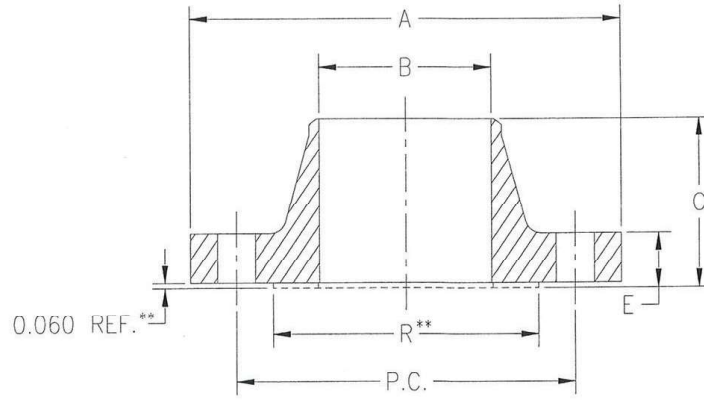
**Commercial Flanges
150 PSI
Weld Neck
ANSI B16.5**



150 PSI Weld Neck

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	C	E	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30								
1/2	21233100	689160.100	22233100	687160.100	3.500	0.620	1.875	0.437	4	5/8	2.375	2.00
3/4	21233150	689160.150	22233150	687160.150	3.875	0.820	2.062	0.500	4	5/8	2.750	2.00
1	21233200	689160.200	22233200	687160.200	4.250	1.050	2.187	0.562	4	5/8	3.125	3.00
1-1/4	21233250	689160.250	22233250	687160.250	4.625	1.380	2.250	0.625	4	5/8	3.500	3.00
1-1/2	21233300	689160.300	22233300	687160.300	5.000	1.610	2.437	0.687	4	5/8	3.875	4.00
2	21233400	689160.400	22233400	687160.400	6.000	2.070	2.500	0.750	4	3/4	4.750	6.00
2-1/2	21233450	689160.450	22233450	687160.450	7.000	2.470	2.750	0.875	4	3/4	5.500	8.00
3	21233500	689160.500	22233500	687160.500	7.500	3.070	2.750	0.938	4	3/4	6.000	10.00
3-1/2	21233550	689160.550	22233550	687160.550	8.500	3.550	2.810	0.938	8	3/4	7.000	12.00
4	21233600	689160.600	22233600	687160.600	9.000	4.030	3.000	0.938	8	3/4	7.500	15.00
5	21233650	689160.650	22233650	687160.650	10.000	5.050	3.500	0.938	8	7/8	8.500	19.00
6	21233700	689160.700	22233700	687160.700	11.000	6.070	3.500	1.000	8	7/8	9.500	24.00
8	21233750	689160.750	22233750	687160.750	13.500	7.980	4.000	1.125	8	7/8	11.750	39.00
10	21233800	689160.800	22233800	687160.800	16.000	10.020	4.000	1.188	12	1	14.250	52.00
12	21233820	689160.820	22233820	687160.820	19.000	12.000	4.500	1.250	12	1	17.000	80.00

**Commercial Flanges
300 PSI
Weld Neck
ANSI B16.5**



300 PSI Weld Neck

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	C	E	No. Holes	Hole Dia.	P.C.	Est. Weight
	90/10	90/10	70/30	70/30								
2	21333400	689360.400	22333400	687360.400	6.500	2.115	2.750	0.875	8	3/4	5.000	9.80
2-1/2	21333450	689360.450	22333450	687360.450	7.500	2.615	3.000	1.000	8	7/8	5.875	14.50
3	21333500	689360.500	22333500	687360.500	8.250	3.220	3.125	1.125	8	7/8	6.625	19.10
3-1/2	21333550	689360.550	22333550	687360.550	9.000	3.720	3.188	1.188	8	7/8	7.250	22.70
4	21333600	689360.600	22333600	687360.600	10.000	4.220	3.380	1.250	8	7/8	7.875	29.40
5	21333650	689360.650	22333650	687360.650	11.000	5.283	3.875	1.375	8	7/8	9.250	37.30
6	21333700	689360.700	22333700	687360.700	12.500	6.251	3.875	1.438	12	7/8	10.625	49.60
8	21333750	689360.750	22333750	687360.750	15.000	8.251	4.375	1.625	12	1	13.000	76.40
10	21333800	689360.800	22333800	687360.800	17.500	10.376	4.625	1.875	16	1-1/8	15.250	108.70
12	21333820	689360.820	22333820	687360.820	20.500	12.250	5.125	2.000	16	1-1/4	17.750	166.60



Contents

Bellmouths

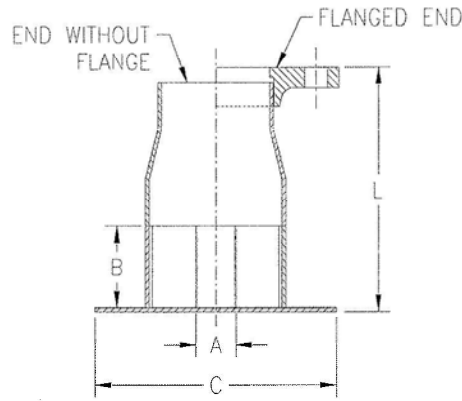
Type 1	1
Type 2	3
Type 3	5



Copper-Nickel Bellmouths

- Bellmouths are intended for use as the terminal fitting in transfer, fill, and stripping systems.
- Bellmouths may be ordered standard or custom:
 - Standard bellmouths have principal dimensions iaw BUSHIPS Dwg. 810-1385792.
 - Custom bellmouths are made to individual customer requirements. See ordering information.
- Available end connections include:
 - Flanged
 - Plain (for Butt Welding)
 - Custom
- Standard CL-150 flange connections include:
 - Navy Copper Nickel Flange iaw BUSHIPS Dwg. 810-4715319 Dimensions
 - Navy Bronze Flange iaw MIL-F-20042 Dimensions
 - Commercial Copper-Nickel Flange iaw ANSI B16.5 Dimensions
 - Commercial Bronze Flange iaw ANSI B16.24 Dimensions
- Bellmouths are available in both 90/10 and 70/30 Copper-Nickel.
- As weights will vary with selections, approximate weights are available upon request.

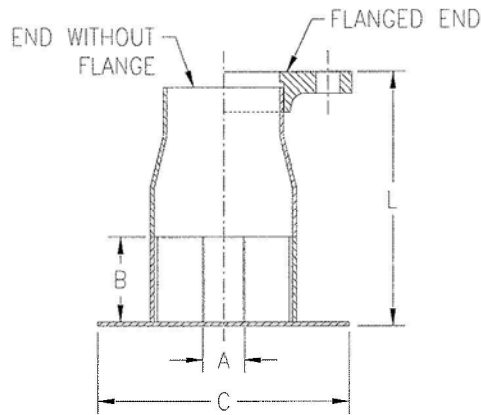
Bellmouths
Type 1
Dwg. 810-1385792
(Page 1 of 2)



Type 1

Nominal Pipe Size	Flange Option	Premier Part #	Premier Part #	A	B	C	L
		90/10	70/30				
1-1/4	Navy CuNi	591FN250	571FN250	3/8	3/4	4	4-1/4
	Navy Brz	591NB250	571NB250				
	Com'l CuNi	591FC250	571FC250				
	Com'l Brz	591CB250	571CB250				
	Plain	591PE250	571PE250				
1-1/2	Navy CuNi	591FN300	571FN300	1/2	1	4-1/2	5
	Navy Brz	591NB300	571NB300				
	Com'l CuNi	591FC300	571FC300				
	Com'l Brz	591CB300	571CB300				
	Plain	591PE300	571PE300				
2	Navy CuNi	591FN400	571FN400	5/8	1-1/2	5	5-15/16
	Navy Brz	591NB400	571NB400				
	Com'l CuNi	591FC400	571FC400				
	Com'l Brz	591CB400	571CB400				
	Plain	591PE400	571PE400				
2-1/2	Navy CuNi	591FN450	571FN450	1	2	6	6-1/2
	Navy Brz	591NB450	571NB450				
	Com'l CuNi	591FC450	571FC450				
	Com'l Brz	591CB450	571CB450				
	Plain	591PE450	571PE450				
3	Navy CuNi	591FN500	571FN500	1-1/2	3	7	8
	Navy Brz	591NB500	571NB500				
	Com'l CuNi	591FC500	571FC500				
	Com'l Brz	591CB500	571CB500				
	Plain	591PE500	571PE500				
3-1/2	Navy CuNi	591FN550	571FN550	1-3/4	3-1/2	8-1/4	9-1/2
	Navy Brz	591NB550	571NB550				
	Com'l CuNi	591FC550	571FC550				
	Com'l Brz	591CB550	571CB550				
	Plain	591PE550	571PE550				

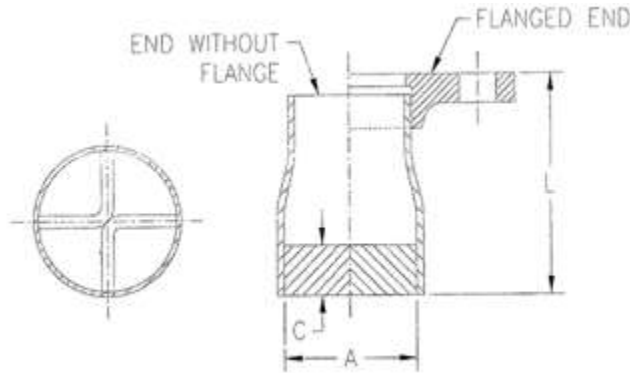
7



Type 1

Nominal Pipe Size	Flange Option	Premier Part #	Premier Part #	A	B	C	L
		90/10	70/30				
4	Navy CuNi	591FN600	571FN600	1-3/4	3-1/2	8-1/4	9-1/2
	Navy Brz	591NB600	571NB600				
	Com'l CuNi	591FC600	571FC600				
	Com'l Brz	591CB600	571CB600				
	Plain	591PE600	571PE600				
5	Navy CuNi	591FN650	571FN650	2	4	9-1/2	10-11/16
	Navy Brz	591NB650	571NB650				
	Com'l CuNi	591FC650	571FC650				
	Com'l Brz	591CB650	571CB650				
	Plain	591PE650	571PE650				
6	Navy CuNi	591FN700	571FN700	2-1/2	5	12	12-1/4
	Navy Brz	591NB700	571NB700				
	Com'l CuNi	591FC700	571FC700				
	Com'l Brz	591CB700	571CB700				
	Plain	591PE700	571PE700				
8	Navy CuNi	591FN750	571FN750	3	6-1/4	16	14-5/8
	Navy Brz	591NB750	571NB750				
	Com'l CuNi	591FC750	571FC750				
	Com'l Brz	591CB750	571CB750				
	Plain	591PE750	571PE750				
10	Navy CuNi	591FN800	571FN800	3-1/2	7-1/4	20	16-13/16
	Navy Brz	591NB800	571NB800				
	Com'l CuNi	591FC800	571FC800				
	Com'l Brz	591CB800	571CB800				
	Plain	591PE800	571PE800				

Bellmouths
Type 2
Dwg. 810-1385792
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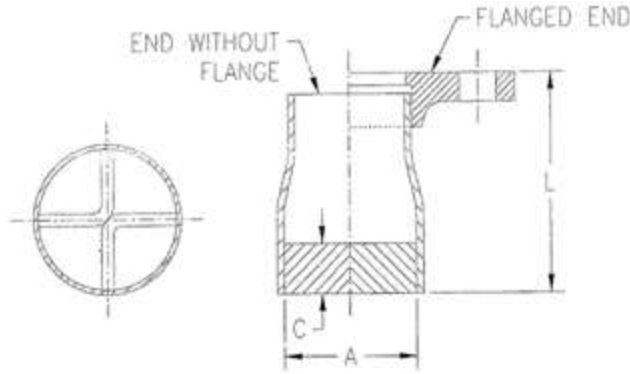


Type 2

Nominal Pipe Size	Flange Option	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	C	L
		90/10	90/10	70/30	70/30			
1-1/4	Navy CuNi	592FN250	526021.250.90/10	572FN250	526021.250.70/30	2-1/4	3/16	4-1/2
	Navy Brz	592NB250		572NB250				
	Com'l CuNi	592FC250		572FC250				
	Com'l Brz	592CB250		572CB250				
	Plain	592PE250		572PE250				
1-1/2	Navy CuNi	592FN300	526021.300.90/10	572FN300	526021.300.70/30	2-1/8	3/16	3-7/8
	Navy Brz	592NB300		572NB300				
	Com'l CuNi	592FC300		572FC300				
	Com'l Brz	592CB300		572CB300				
	Plain	592PE300		572PE300				
2	Navy CuNi	592FN400	526021.400.90/10	572FN400	526021.400.70/30	3-5/8	3/16	5-3/4
	Navy Brz	592NB400		572NB400				
	Com'l CuNi	592FC400		572FC400				
	Com'l Brz	592CB400		572CB400				
	Plain	592PE400		572PE400				
2-1/2	Navy CuNi	592FN450	526021.450.90/10	572FN450	526021.450.70/30	4-1/8	1/4	6
	Navy Brz	592NB450		572NB450				
	Com'l CuNi	592FC450		572FC450				
	Com'l Brz	592CB450		572CB450				
	Plain	592PE450		572PE450				
3	Navy CuNi	592FN500	526021.500.90/10	572FN500	526021.500.70/30	6-1/4	1/4	8-7/8
	Navy Brz	592NB500		572NB500				
	Com'l CuNi	592FC500		572FC500				
	Com'l Brz	592CB500		572CB500				
	Plain	592PE500		572PE500				

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Bellmouths
Type 2
Dwg. 810-1385792
(Page 2 of 2)

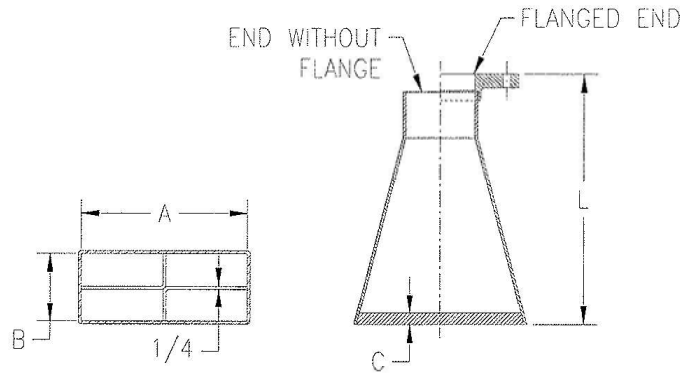


Type 2

Nominal Pipe Size	Flange Option	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	C	L
		90/10	90/10	70/30	70/30			
3-1/2	Navy CuNi	592FN550	526021.550.90/10	572FN550	526021.550.70/30	6-1/4	1/4	8
	Navy Brz	592NB550		572NB550				
	Com'l CuNi	592FC550		572FC550				
	Com'l Brz	592CB550		572CB550				
	Plain	592PE550		572PE550				
4	Navy CuNi	592FN600	526021.600.90/10	572FN600	526021.600.70/30	8-1/8	3/16	10-1/2
	Navy Brz	592NB600		572NB600				
	Com'l CuNi	592FC600		572FC600				
	Com'l Brz	592CB600		572CB600				
	Plain	592PE600		572PE600				
5	Navy CuNi	592FN650	526021.650.90/10	572FN650	526021.650.70/30	12-5/8	1/4	17-1/8
	Navy Brz	592NB650		572NB650				
	Com'l CuNi	592FC650		572FC650				
	Com'l Brz	592CB650		572CB650				
	Plain	592PE650		572PE650				
6	Navy CuNi	592FN700	526021.700.90/10	572FN700	526021.700.70/30	13-7/8	1/4	17-11/16
	Navy Brz	592NB700		572NB700				
	Com'l CuNi	592FC700		572FC700				
	Com'l Brz	592CB700		572CB700				
	Plain	592PE700		572PE700				
8	Navy CuNi	592FN750	526021.750.90/10	572FN750	526021.750.70/30	20-1/4	1/4	26-1/16
	Navy Brz	592NB750		572NB750				
	Com'l CuNi	592FC750		572FC750				
	Com'l Brz	592CB750		572CB750				
	Plain	592PE750		572PE750				

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Bellmouths
Type 3
Dwg. 810-1385792



Type 3

Nominal Pipe Size	Flange Option	Premier Part #	Premier Part #	A	B	C	L
		90/10	70/30				
3	Navy CuNi	593FN500	573FN500	6-5/8	3-1/8	3/4	9-1/2
	Navy Brz	593NB500	573NB500				
	Com'l CuNi	593FC500	573FC500				
	Com'l Brz	593CB500	573CB500				
	Plain	593PE500	573PE500				
3-1/2	Navy CuNi	593FN550	573FN550	6-1/2	3-1/2	3/4	8-3/8
	Navy Brz	593NB550	573NB550				
	Com'l CuNi	593FC550	573FC550				
	Com'l Brz	593CB550	573CB550				
	Plain	593PE550	573PE550				
4	Navy CuNi	593FN600	573FN600	8-3/4	4	3/4	11-5/8
	Navy Brz	593NB600	573NB600				
	Com'l CuNi	593FC600	573FC600				
	Com'l Brz	593CB600	573CB600				
	Plain	593PE600	573PE600				
5	Navy CuNi	593FN650	573FN650	15	5	3/4	21-1/2
	Navy Brz	593NB650	573NB650				
	Com'l CuNi	593FC650	573FC650				
	Com'l Brz	593CB650	573CB650				
	Plain	593PE650	573PE650				
6	Navy CuNi	593FN700	573FN700	15-5/8	6-1/8	1	20-7/16
	Navy Brz	593NB700	573NB700				
	Com'l CuNi	593FC700	573FC700				
	Com'l Brz	593CB700	573CB700				
	Plain	593PE700	573PE700				
8	Navy CuNi	593FN750	573FN750	23-7/8	8	1	32-13/16
	Navy Brz	593NB750	573NB750				
	Com'l CuNi	593FC750	573FC750				
	Com'l Brz	593CB750	573CB750				
	Plain	593PE750	573PE750				

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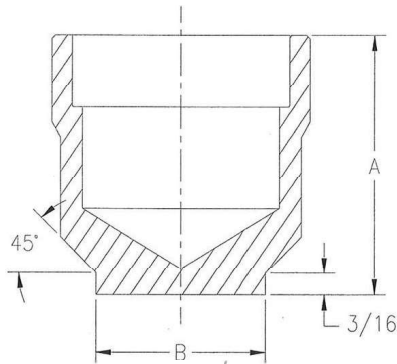
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400 PSI Non-Pilot Silver Braze	2
400 PSI Non-Pilot Threaded	3
400 PSI Pilot Socket Weld	4
400 PSI Pilot Silver Braze	5
400 PSI Pilot Threaded	6



Copper-Nickel Bosses

- Intended use with Copper-Nickel Pipe IAW MIL-T-16420 CL-200.
- Rated at 400 PSI.
- Principal Dimensions from Premier Dwg. 800-3606408.
- Piloted Branch Connection, fillet reinforced, single bevel, weld joint design iaw MIL-STD 22D P-72.

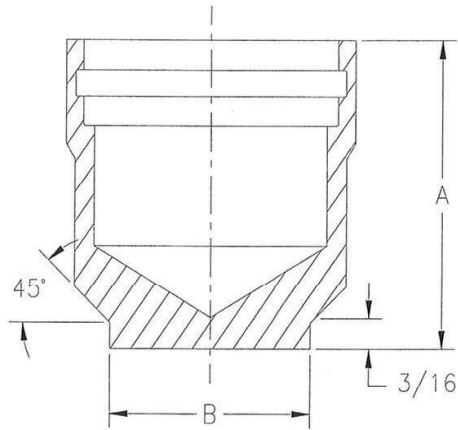
Non-Pilot Bosses
 400 PSI
 Socket Weld
 Dwg. 800-3606408



400 PSI Socket Weld

Nominal Pipe Size	Premier Part #	Premier Part #	A	B
	90/10	70/30		
1/4	B9SNP040	B7SNP040	1.000	0.219
3/8	B9SNP060	B7SNP060	1.250	0.344
1/2	B9SNP100	B7SNP100	1.375	0.531
3/4	B9SNP150	B7SNP150	1.500	0.734
1	B9SNP200	B7SNP200	1.750	1.000
1-1/4	B9SNP250	B7SNP250	2.000	1.281
1-1/2	B9SNP300	B7SNP300	2.250	1.500
2	B9SNP400	B7SNP400	2.500	1.969
2-1/2	B9SNP450	B7SNP450	3.000	2.469
3	B9SNP500	B7SNP500	3.250	3.063

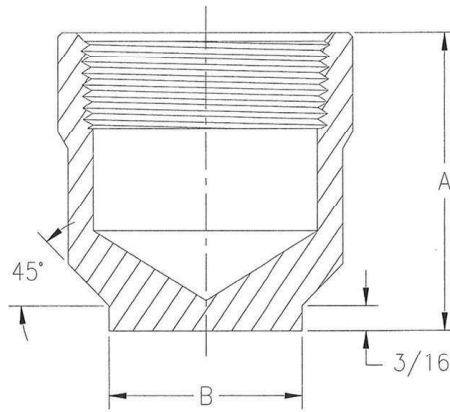
Non-Pilot Bosses
 400 PSI
 Silver Braze
 Dwg. 800-3606408



400 PSI Silver Braze

Nominal Pipe Size	Premier Part #	Premier Part #	A	B
	90/10	70/30		
1/4	B9BNP040	B7BNP040	1.000	0.219
3/8	B9BNP060	B7BNP060	1.250	0.344
1/2	B9BNP100	B7BNP100	1.375	0.531
3/4	B9BNP150	B7BNP150	1.500	0.734
1	B9BNP200	B7BNP200	1.750	1.000
1-1/4	B9BNP250	B7BNP250	2.000	1.281
1-1/2	B9BNP300	B7BNP300	2.250	1.500
2	B9BNP400	B7BNP400	2.500	1.969
2-1/2	B9BNP450	B7BNP450	3.000	2.469
3	B9BNP500	B7BNP500	3.250	3.063

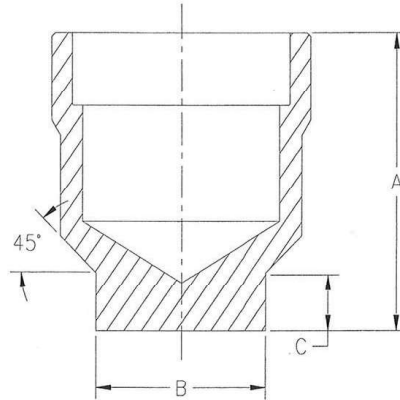
Non-Pilot Bosses
400 PSI
Threaded
Dwg. 800-3606408



400 PSI Threaded

Nominal Pipe Size	Premier Part #	Premier Part #	A	B
	90/10	70/30		
1/4	B9TNP040	B7TNP040	1.000	0.156
3/8	B9TNP060	B7TNP060	1.250	0.188
1/2	B9TNP100	B7TNP100	1.375	0.219
3/4	B9TNP150	B7TNP150	1.500	0.375
1	B9TNP200	B7TNP200	1.750	0.594
1-1/4	B9TNP250	B7TNP250	2.000	0.875
1-1/2	B9TNP300	B7TNP300	2.250	1.031
2	B9TNP400	B7TNP400	2.500	1.406
2-1/2	B9TNP450	B7TNP450	3.000	1.781
3	B9TNP500	B7TNP500	3.250	2.156

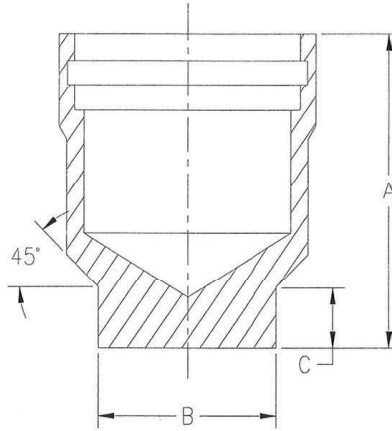
Pilot Bosses
 400 PSI
 Socket Weld
 Dwg. 800-3606408



400 PSI Socket Weld

Nominal Pipe Size	Premier Part #	Premier Part #	A	B	C
	90/10	70/30			
1/4	B9SPB040	B7SPB040	1.188	0.219	0.375
3/8	B9SPB060	B7SPB060	1.438	0.344	0.375
1/2	B9SPB100	B7SPB100	1.563	0.531	0.375
3/4	B9SPB150	B7SPB150	1.688	0.734	0.375
1	B9SPB200	B7SPB200	2.063	1.000	0.375
1-1/4	B9SPB250	B7SPB250	2.313	1.281	0.500
1-1/2	B9SPB300	B7SPB300	2.563	1.500	0.500
2	B9SPB400	B7SPB400	2.813	1.969	0.500
2-1/2	B9SPB450	B7SPB450	3.438	2.469	0.625
3	B9SPB500	B7SPB500	3.688	3.063	0.625

Pilot Bosses
400 PSI
Silver-Braze
Dwg. 800-3606408

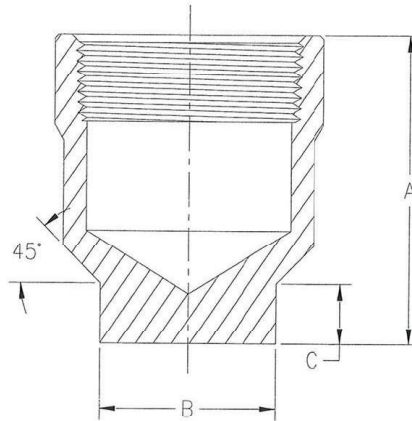


400 PSI Silver-Braze

Nominal Pipe Size	Premier Part #	Premier Part #	A	B	C
	90/10	70/30			
1/4	B9BPB040	B7BPB040	1.188	0.219	0.375
3/8	B9BPB060	B7BPB060	1.438	0.344	0.375
1/2	B9BPB100	B7BPB100	1.563	0.531	0.375
3/4	B9BPB150	B7BPB150	1.688	0.734	0.375
1	B9BPB200	B7BPB200	2.063	1.000	0.375
1-1/4	B9BPB250	B7BPB250	2.313	1.281	0.500
1-1/2	B9BPB300	B7BPB300	2.563	1.500	0.500
2	B9BPB400	B7BPB400	2.813	1.969	0.500
2-1/2	B9BPB450	B7BPB450	3.438	2.469	0.625
3	B9BPB500	B7BPB500	3.688	3.063	0.625

8

Pilot Bosses
400 PSI
Threaded
Dwg. 800-3606408



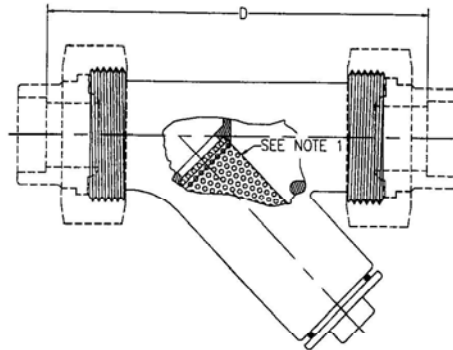
400 PSI Threaded

Nominal Pipe Size	Premier Part #	Premier Part #	A	B	C
	90/10	70/30			
1/4	B9TPB040	B7TPB040	1.188	0.219	0.375
3/8	B9TPB060	B7TPB060	1.438	0.344	0.375
1/2	B9TPB100	B7TPB100	1.563	0.531	0.375
3/4	B9TPB150	B7TPB150	1.688	0.734	0.375
1	B9TPB200	B7TPB200	2.063	1.000	0.375
1-1/4	B9TPB250	B7TPB250	2.313	1.281	0.500
1-1/2	B9TPB300	B7TPB300	2.563	1.500	0.500
2	B9TPB400	B7TPB400	2.813	1.969	0.500
2-1/2	B9TPB450	B7TPB450	3.438	2.469	0.625
3	B9TPB500	B7TPB500	3.688	3.063	0.625



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Union End Y-Strainer.....	1
Union End Y-Strainer w/ Blow Down Assembly	2
Replacement Perforated Screens	3



Union End Y-Strainer

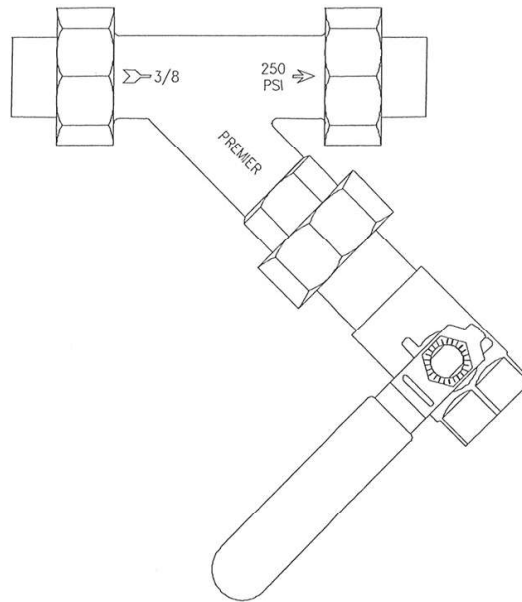
Nominal Pipe Size	Complete Strainer Assembly						D Ref	Est. Weight
	Tailpiece Material							
	Socket Weld				SB Bronze			
	Premier Part #	W&O** Part #	Premier Part #	W&O** Part #	Premier Part #	W&O Part #		
	90/10 CuNi	90/10 CuNi	70/30 CuNi	70/30 CuNi	Bronze	Bronze		
3/8	S9843060	690100.060	S7843060	690200.060	SB843060	690000.060	4.438	1.80
1/2	S9843100	690100.100	S7843100	690200.100	SB843100	690000.100	5.000	2.20
3/4	S9843150	690100.150	S7843150	690200.150	SB843150	690000.150	5.750	3.80
1	S9843200	690100.200	S7843200	690200.200	SB843200	690000.200	6.313	6.00
1-1/4	S9843250	690100.250	S7843250	690200.250	SB843250	690000.250	7.313	8.80
1-1/2	S9843300	690100.300	S7843300	690200.300	SB843300	690000.300	7.688	11.50
2	S9843400	690100.400	S7843400	690200.400	SB843400	690000.400	8.938	14.30
2-1/2	S9843450	690100.450	S7843450	690200.450	SB843450	690000.450	11.344	17.80

*Optional .020 Screen available for Premier Sizes (substitute size code for ***):

90/10: S9842***
 70/30: S7842***
 Bronze: SB842***

**W&O socket weld 90/10 and 70/30 tailpieces are not to Premier 804-8533843. Premier 804-8533843 uses tails to 803-7063850 and W&O are to no particular drawing and use tailpieces with socket dimensions to 803.6397430.

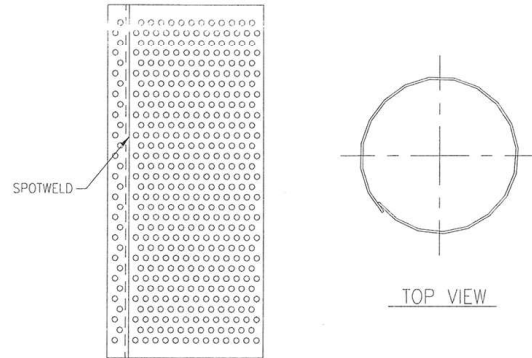
Union End Y-Strainer w/
Blow Down Assembly
250 PSI Fitting
Dwg. 804-8533843



Union End Y-Strainer w/ Blow Down Assembly

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Nominal Pipe Size	Complete Strainer Assembly w/Blow Down Assembly						Est. Weight
	Tailpiece Material				Silver Braze Tailpieces		
	Premier Part #	Premier Part #	Premier Part #	Premier Part #	Premier Part #	Premier Part #	
	90/10 CuNi		70/30 CuNi		Bronze		
	Standard Screen	Optional .020 Screen	Standard Screen	Optional .020 Screen	Standard Screen	Optional .020 Screen	
3/8	S9843060BV	S9842060BV	S7843060BV	S7842060BV	SB843060BV	SB842060BV	3.10
1/2	S9843100BV	S9842100BV	S7843100BV	S7842100BV	SB843100BV	SB842100BV	3.80
3/4	S9843150BV	S9842150BV	S7843150BV	S7842150BV	SB843150BV	SB842150BV	6.50
1	S9843200BV	S9842200BV	S7843200BV	S7842200BV	SB843200BV	SB842200BV	10.30
1-1/4	S9843250BV	S9842250BV	S7843250BV	S7842250BV	SB843250BV	SB842250BV	15.10
1-1/2	S9843300BV	S9842300BV	S7843300BV	S7842300BV	SB843300BV	SB842300BV	19.80
2	S9843400BV	S9842400BV	S7843400BV	S7842400BV	SB843400BV	SB842400BV	24.60
2-1/2	S9843450BV	S9842450BV	S7843450BV	S7842450BV	SB843450BV	SB842450BV	30.60



Replacement Perforated Screens

Nominal Pipe Size	NiCu Alloy (Grade 400)			
	Standard		Optional .020 Perforation	
	Premier Part Number	Perforation Size	Premier Part Number	Perforation Size
3/8	S1843060	0.062	S2843060	0.020
1/2	S1843100	0.062	S2843100	0.020
3/4	S1843150	0.062	S2843150	0.020
1	S1843200	0.062	S2843200	0.020
1-1/4	S1843250	0.062	S2843250	0.020
1-1/2	S1843300	0.062	S2843300	0.020
2	S1843400	0.062	S2843400	0.020
2-1/2	S1843450	0.093	S2843450	0.020



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General Information

- Principal dimensions from:
 - Union End Valves (Gate)
 - 803-1385714
 - Union End Valves (Globe and Angle Globe)
 - 803-4384536
 - Union End Valves (Swing Check)
 - 803-1385721
 - Flanged Valves (Globe and Angle Globe)
 - 803-1385541
 - Flanged Valves (Swing Check)
 - 803-1385637
 - Flanged Valves (Y-Pattern Globe)
 - 803-1385623
 - Flanged Valves (Hose Globe & Angle Hose Globe)
 - 803-1385711 & 803-1385712
 - Diverter Valves (Ball and Plug)
 - MIL-F-24509A

- Replacement parts available. Call for ordering information.

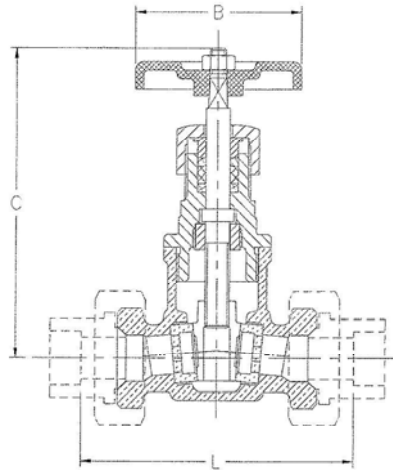


Union End Valves

Overview

- See individual valve descriptions for dimensions and drawing compliance information.
- “Soft” discs or seats are optional on globe stop and globe stop check valves ONLY. All other UE valves will ship with “hard” seats.
- Tailpieces available in 90/10 CuNi, 70/30 CuNi or bronze. Specialty alloys including 304/L stainless, 316/L stainless, and titanium can be ordered. Valves also available without tailpiece. Please call for availability, delivery options and part numbers.
- Unless specified at time of order, valve will ship with Buna-N O-ring. If EPDM, class I fluorocarbon or class II fluorocarbon is preferred call for part number.
- Estimated weights are given for valves only. Weight of assembly will vary depending on which tailpiece material is selected.
- Lock shield and indicator models available. Please specify when ordering.

Union End Valves
400 PSI
(in-line) Gate
iaw 803-1385714

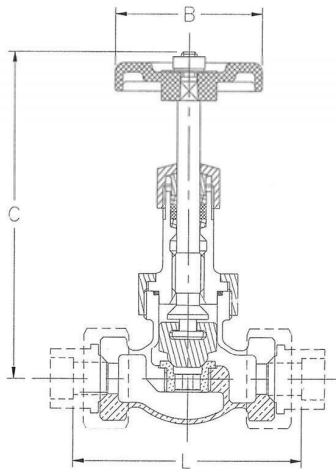


Gate Valve

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
	90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	VA719040B	414101.040.90/10	VA717040B	414101.040.70/30	VA71B040B	414101.040
3/8	VA719060B	414101.060.90/10	VA717060B	414101.060.70/30	VA71B060B	414101.060
1/2	VA719100B	414101.100.90/10	VA717100B	414101.100.70/30	VA71B100B	414101.100
3/4	VA719150B	414101.150.90/10	VA717150B	414101.150.70/30	VA71B150B	414101.150
1	VA719200B	414101.200.90/10	VA717200B	414101.200.70/30	VA71B200B	414101.200
1-1/4	VA719250B	414101.250.90/10	VA717250B	414101.250.70/30	VA71B250B	414101.250
1-1/2	VA719300B	414101.300.90/10	VA717300B	414101.300.70/30	VA71B300B	414101.300
2	VA719400B	414101.400.90/10	VA717400B	414101.400.70/30	VA71B400B	414101.400

Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	2.885	2-1/8	3-21/32	1.40
3/8	3.483	2-1/8	3-21/32	1.80
1/2	4.060	2-1/2	4-5/8	2.30
3/4	4.450	2-3/4	6	3.20
1	5.060	3	6-3/4	3.90
1-1/4	5.940	3-1/2	7-1/4	5.50
1-1/2	6.570	4	7-11/16	8.20
2	7.360	4-3/4	8-1/2	15.20

Union End Valves
400 PSI @ 150° F Max
(in-line) Globe Stop
With HARD Disc
aw 803-4384536



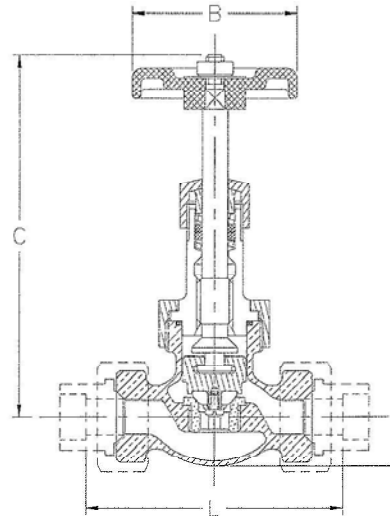
Globe Stop Valve, w/ HARD Disc

Nominal Pipe Size	Disc Type	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	HARD	VB1A9040B	414301.040.90/10	VB1A7040B	414301.040.70/30	VB1AB040B	414301.040
3/8	HARD	VB1A9060B	414301.060.90/10	VB1A7060B	414301.060.70/30	VB1AB060B	414301.060
1/2	HARD	VB1A9100B	414301.100.90/10	VB1A7100B	414301.100.70/30	VB1AB100B	414301.100
3/4	HARD	VB1A9150B	414301.150.90/10	VB1A7150B	414301.150.70/30	VB1AB150B	414301.150
1	HARD	VB1A9200B	414301.200.90/10	VB1A7200B	414301.200.70/30	VB1AB200B	414301.200
1-1/4	HARD	VB1A9250B	414301.250.90/10	VB1A7250B	414301.250.70/30	VB1AB250B	414301.250
1-1/2	HARD	VB1A9300B	414301.300.90/10	VB1A7300B	414301.300.70/30	VB1AB300B	414301.300
2	HARD	VB1A9400B	414301.400.90/10	VB1A7400B	414301.400.70/30	VB1AB400B	414301.400

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Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	3.135	2	4-3/8	1.50
3/8	3.545	2-1/2	4-11/32	1.90
1/2	4.185	2-3/4	5-3/16	2.90
3/4	4.593	3	6-1/16	4.70
1	5.198	3-1/2	6-7/8	7.00
1-1/4	6.183	4	7-11/16	9.60
1-1/2	7.089	4-3/4	8-3/8	13.60
2	8.103	5-1/4	10-7/16	22.50

Union End Valves
400 PSI @ 150° F Max
(in-line) Globe Stop
With SOFT Disc
jaw 803-4384536



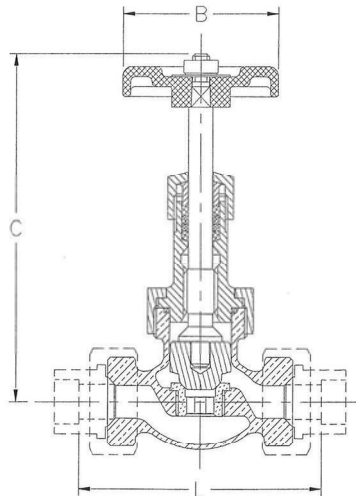
Globe Stop Valve, w/ SOFT Disc

Nominal Pipe Size	Disc Type	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	SOFT	VB1B9040B	414303.040.90/10	VB1B7040B	414303.040.70/30	VB1BB040B	414303.040
3/8	SOFT	VB1B9060B	414303.060.90/10	VB1B7060B	414303.060.70/30	VB1BB060B	414303.060
1/2	SOFT	VB1B9100B	414303.100.90/10	VB1B7100B	414303.100.70/30	VB1BB100B	414303.100
3/4	SOFT	VB1B9150B	414303.150.90/10	VB1B7150B	414303.150.70/30	VB1BB150B	414303.150
1	SOFT	VB1B9200B	414303.200.90/10	VB1B7200B	414303.200.70/30	VB1BB200B	414303.200
1-1/4	SOFT	VB1B9250B	414303.250.90/10	VB1B7250B	414303.250.70/30	VB1BB250B	414303.250
1-1/2	SOFT	VB1B9300B	414303.300.90/10	VB1B7300B	414303.300.70/30	VB1BB300B	414303.300
2	SOFT	VB1B9400B	414303.400.90/10	VB1B7400B	414303.400.70/30	VB1BB400B	414303.400

10

Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	3.135	2	4-3/8	1.50
3/8	3.545	2-1/2	4-11/32	1.90
1/2	4.185	2-3/4	5-3/16	2.90
3/4	4.593	3	6-1/16	4.70
1	5.198	3-1/2	6-7/8	7.00
1-1/4	6.183	4	7-11/16	9.60
1-1/2	7.089	4-3/4	8-3/8	13.60
2	8.103	5-1/4	10-7/16	22.50

Union End Valves
400 PSI @ 150° F Max
(in-line) Globe Stop Check
With HARD Disc
aw 803-4384536

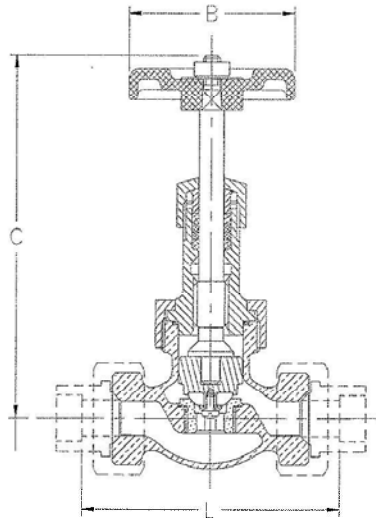


Globe Stop Check Valve, w/ HARD Disc

Nominal Pipe Size	Disc Type	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	HARD	VB2A9040B	414302.040.90/10	VB2A7040B	414302.040.70/30	VB2AB040B	414302.040
3/8	HARD	VB2A9060B	414302.060.90/10	VB2A7060B	414302.060.70/30	VB2AB060B	414302.060
1/2	HARD	VB2A9100B	414302.100.90/10	VB2A7100B	414302.100.70/30	VB2AB100B	414302.100
3/4	HARD	VB2A9150B	414302.150.90/10	VB2A7150B	414302.150.70/30	VB2AB150B	414302.150
1	HARD	VB2A9200B	414302.200.90/10	VB2A7200B	414302.200.70/30	VB2AB200B	414302.200
1-1/4	HARD	VB2A9250B	414302.250.90/10	VB2A7250B	414302.250.70/30	VB2AB250B	414302.250
1-1/2	HARD	VB2A9300B	414302.300.90/10	VB2A7300B	414302.300.70/30	VB2AB300B	414302.300
2	HARD	VB2A9400B	414302.400.90/10	VB2A7400B	414302.400.70/30	VB2AB400B	414302.400

Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	3.135	2	4-3/8	1.50
3/8	3.545	2-1/2	4-11/32	1.90
1/2	4.185	2-3/4	5-3/16	2.90
3/4	4.593	3	6-1/16	4.70
1	5.198	3-1/2	6-7/8	7.00
1-1/4	6.183	4	7-11/16	9.60
1-1/2	7.089	4-3/4	8-3/8	13.60
2	8.103	5-1/4	10-7/16	22.50

Union End Valves
400 PSI @ 150° F Max
(in-line) Globe Stop Check
With SOFT Disc
iw 803-4384536



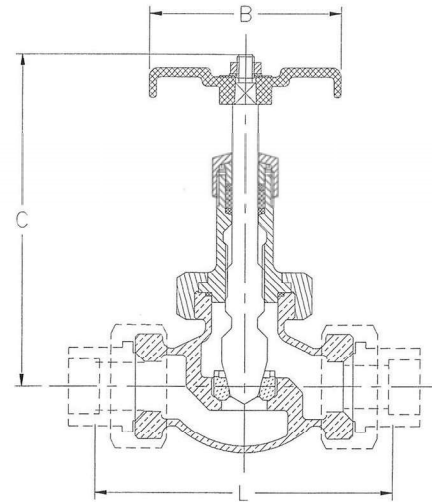
Globe Stop Check Valve, w/ SOFT Disc

Nominal Pipe Size	Disc Type	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	SOFT	VB2B9040B	414304.040.90/10	VB2B7040B	414304.040.70/30	VB2BB040B	414304.040
3/8	SOFT	VB2B9060B	414304.060.90/10	VB2B7060B	414304.060.70/30	VB2BB060B	414304.060
1/2	SOFT	VB2B9100B	414304.100.90/10	VB2B7100B	414304.100.70/30	VB2BB100B	414304.100
3/4	SOFT	VB2B9150B	414304.150.90/10	VB2B7150B	414304.150.70/30	VB2BB150B	414304.150
1	SOFT	VB2B9200B	414304.200.90/10	VB2B7200B	414304.200.70/30	VB2BB200B	414304.200
1-1/4	SOFT	VB2B9250B	414304.250.90/10	VB2B7250B	414304.250.70/30	VB2BB250B	414304.250
1-1/2	SOFT	VB2B9300B	414304.300.90/10	VB2B7300B	414304.300.70/30	VB2BB300B	414304.300
2	SOFT	VB2B9400B	414304.400.90/10	VB2B7400B	414304.400.70/30	VB2BB400B	414304.400

10

Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	3.135	2	4-3/8	1.50
3/8	3.545	2-1/2	4-11/32	1.90
1/2	4.185	2-3/4	5-3/16	2.90
3/4	4.593	3	6-1/16	4.70
1	5.198	3-1/2	6-7/8	7.00
1-1/4	6.183	4	7-11/16	9.60
1-1/2	7.089	4-3/4	8-3/8	13.60
2	8.103	5-1/4	10-7/16	22.50

Union End Valves
400 PSI @ 150° F Max
(in-line) Globe Needle
jaw 803-4384536

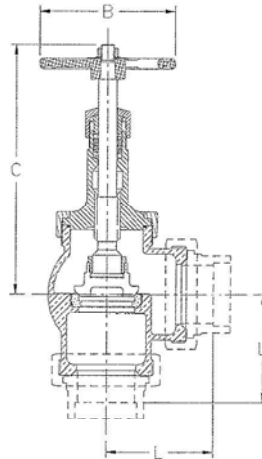


Globe Needle Valve

Nominal Pipe Size	Disc Type	Premier	W&O	Premier	W&O	Premier	W&O
		Part #	Part #	Part #	Part #	Part #	Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	HARD	VB5A9040B	414305.040.90/10	VB5A7040B	414305.040.70/30	VB5AB040B	414305.040
3/8	HARD	VB5A9060B	414305.060.90/10	VB5A7060B	414305.060.70/30	VB5AB060B	414305.060
1/2	HARD	VB5A9100B	414305.100.90/10	VB5A7100B	414305.100.70/30	VB5AB100B	414305.100
3/4	HARD	VB5A9150B	414305.150.90/10	VB5A7150B	414305.150.70/30	VB5AB150B	414305.150
1	HARD	VB5A9200B	414305.200.90/10	VB5A7200B	414305.200.70/30	VB5AB200B	414305.200
1-1/4	HARD	VB5A9250B	414305.250.90/10	VB5A7250B	414305.250.70/30	VB5AB250B	414305.250
1-1/2	HARD	VB5A9300B	414305.300.90/10	VB5A7300B	414305.300.70/30	VB5AB300B	414305.300
2	HARD	VB5A9400B	414305.400.90/10	VB5A7400B	414305.400.70/30	VB5AB400B	414305.400

Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	3.135	2	4-3/8	1.50
3/8	3.545	2-1/2	4-11/32	1.90
1/2	4.185	2-3/4	5-3/16	2.90
3/4	4.593	3	6-1/16	4.70
1	5.198	3-1/2	6-7/8	7.00
1-1/4	6.183	4	7-11/16	9.60
1-1/2	7.089	4-3/4	8-3/8	13.60
2	8.103	5-1/4	10-7/16	22.50

Union End Valves
400 PSI @ 150° F Max
Angle Globe Stop
With HARD Disc
1aw 803-4384536

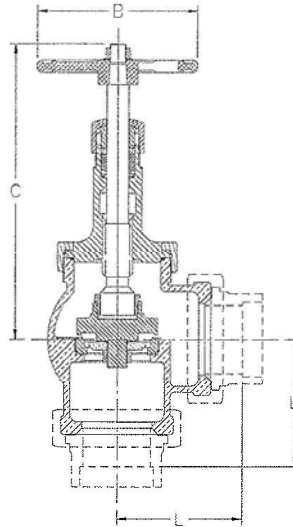


Angle Globe Stop Valve, w/ HARD Disc

Nominal Pipe Size	Disc Type	Premier	W&O	Premier	W&O	Premier	W&O
		Part #	Part #	Part #	Part #	Part #	Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	HARD	VB3A9040B	414401.040.90/10	VB3A7040B	414401.040.70/30	VB3AB040B	414401.040
3/8	HARD	VB3A9060B	414401.060.90/10	VB3A7060B	414401.060.70/30	VB3AB060B	414401.060
1/2	HARD	VB3A9100B	414401.100.90/10	VB3A7100B	414401.100.70/30	VB3AB100B	414401.100
3/4	HARD	VB3A9150B	414401.150.90/10	VB3A7150B	414401.150.70/30	VB3AB150B	414401.150
1	HARD	VB3A9200B	414401.200.90/10	VB3A7200B	414401.200.70/30	VB3AB200B	414401.200
1-1/4	HARD	VB3A9250B	414401.250.90/10	VB3A7250B	414401.250.70/30	VB3AB250B	414401.250
1-1/2	HARD	VB3A9300B	414401.300.90/10	VB3A7300B	414401.300.70/30	VB3AB300B	414401.300
2	HARD	VB3A9400B	414401.400.90/10	VB3A7400B	414401.400.70/30	VB3AB400B	414401.400

Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	1.583	2	4-3/8	1.50
3/8	1.835	2-1/2	4-11/32	1.90
1/2	1.999	2-3/4	5-3/16	2.90
3/4	2.296	3	6-1/16	4.70
1	2.630	3-1/2	6-7/8	7.00
1-1/4	3.185	4	7-11/16	9.60
1-1/2	3.498	4-3/4	8-3/8	13.60
2	3.958	5-1/4	10-7/16	22.50

**Union End Valves
400 PSI @ 150° F Max
Angle Globe Stop
With SOFT Disc
iaw 803-4384536**

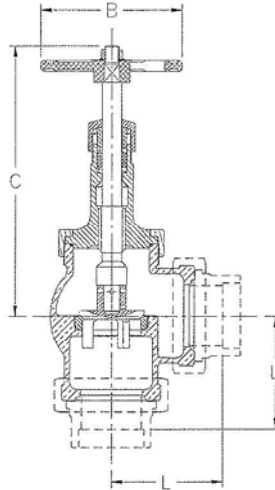


Angle Globe Stop Valve, w/ SOFT Disc

Nominal Pipe Size	Disc Type	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	SOFT	VB3B9040B	414403.040.90/10	VB3B7040B	414403.040.70/30	VB3BB040B	414403.040
3/8	SOFT	VB3B9060B	414403.060.90/10	VB3B7060B	414403.060.70/30	VB3BB060B	414403.060
1/2	SOFT	VB3B9100B	414403.100.90/10	VB3B7100B	414403.100.70/30	VB3BB100B	414403.100
3/4	SOFT	VB3B9150B	414403.150.90/10	VB3B7150B	414403.150.70/30	VB3BB150B	414403.150
1	SOFT	VB3B9200B	414403.200.90/10	VB3B7200B	414403.200.70/30	VB3BB200B	414403.200
1-1/4	SOFT	VB3B9250B	414403.250.90/10	VB3B7250B	414403.250.70/30	VB3BB250B	414403.250
1-1/2	SOFT	VB3B9300B	414403.300.90/10	VB3B7300B	414403.300.70/30	VB3BB300B	414403.300
2	SOFT	VB3B9400B	414403.400.90/10	VB3B7400B	414403.400.70/30	VB3BB400B	414403.400

Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	1.583	2	4-3/8	1.50
3/8	1.835	2-1/2	4-11/32	1.90
1/2	1.999	2-3/4	5-3/16	2.90
3/4	2.296	3	6-1/16	4.70
1	2.630	3-1/2	6-7/8	7.00
1-1/4	3.185	4	7-11/16	9.60
1-1/2	3.498	4-3/4	8-3/8	13.60
2	3.958	5-1/4	10-7/16	22.50

Union End Valves
400 PSI @ 150° F Max
Angle Globe Stop Check
With HARD Disc
aw 803-4384536



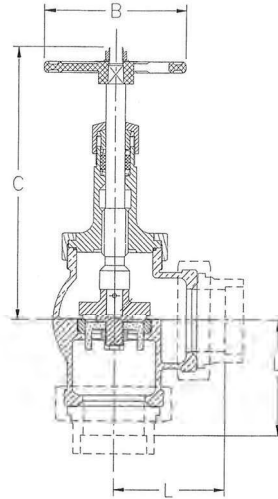
Angle Globe Stop Check Valve, w/ HARD Disc

Nominal Pipe Size	Disc Type	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	HARD	VB4A9040B	414402.040.90/10	VB4A7040B	414402.040.70/30	VB4AB040B	414402.040
3/8	HARD	VB4A9060B	414402.060.90/10	VB4A7060B	414402.060.70/30	VB4AB060B	414402.060
1/2	HARD	VB4A9100B	414402.100.90/10	VB4A7100B	414402.100.70/30	VB4AB100B	414402.100
3/4	HARD	VB4A9150B	414402.150.90/10	VB4A7150B	414402.150.70/30	VB4AB150B	414402.150
1	HARD	VB4A9200B	414402.200.90/10	VB4A7200B	414402.200.70/30	VB4AB200B	414402.200
1-1/4	HARD	VB4A9250B	414402.250.90/10	VB4A7250B	414402.250.70/30	VB4AB250B	414402.250
1-1/2	HARD	VB4A9300B	414402.300.90/10	VB4A7300B	414402.300.70/30	VB4AB300B	414402.300
2	HARD	VB4A9400B	414402.400.90/10	VB4A7400B	414402.400.70/30	VB4AB400B	414402.400

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Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	1.583	2	4-3/8	1.50
3/8	1.835	2-1/2	4-11/32	1.90
1/2	1.999	2-3/4	5-3/16	2.90
3/4	2.296	3	6-1/16	4.70
1	2.630	3-1/2	6-7/8	7.00
1-1/4	3.185	4	7-11/16	9.60
1-1/2	3.498	4-3/4	8-3/8	13.60
2	3.958	5-1/4	10-7/16	22.50

Union End Valves
400 PSI @ 150° F Max
Angle Globe Stop Check
With SOFT Disc
jaw 803-4384536



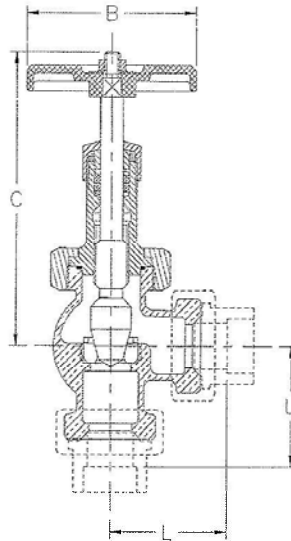
Angle Globe Stop Check Valve, w/ SOFT Disc

Nominal Pipe Size	Disc Type	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
		90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	SOFT	VB4B9040B	414404.040.90/10	VB4B7040B	414404.040.70/30	VB4BB040B	414404.040
3/8	SOFT	VB4B9060B	414404.060.90/10	VB4B7060B	414404.060.70/30	VB4BB060B	414404.060
1/2	SOFT	VB4B9100B	414404.100.90/10	VB4B7100B	414404.100.70/30	VB4BB100B	414404.100
3/4	SOFT	VB4B9150B	414404.150.90/10	VB4B7150B	414404.150.70/30	VB4BB150B	414404.150
1	SOFT	VB4B9200B	414404.200.90/10	VB4B7200B	414404.200.70/30	VB4BB200B	414404.200
1-1/4	SOFT	VB4B9250B	414404.250.90/10	VB4B7250B	414404.250.70/30	VB4BB250B	414404.250
1-1/2	SOFT	VB4B9300B	414404.300.90/10	VB4B7300B	414404.300.70/30	VB4BB300B	414404.300
2	SOFT	VB4B9400B	414404.400.90/10	VB4B7400B	414404.400.70/30	VB4BB400B	414404.400

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Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	1.583	2	4-3/8	1.50
3/8	1.835	2-1/2	4-11/32	1.90
1/2	1.999	2-3/4	5-3/16	2.90
3/4	2.296	3	6-1/16	4.70
1	2.630	3-1/2	6-7/8	7.00
1-1/4	3.185	4	7-11/16	9.60
1-1/2	3.498	4-3/4	8-3/8	13.60
2	3.958	5-1/4	10-7/16	22.50

Union End Valves
400 PSI @ 150° F Max
Angle Globe Needle
aw 803-4384536

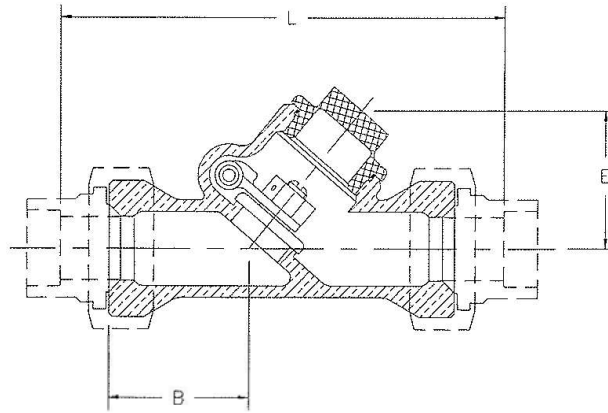


Angle Globe Needle Valve

Nominal Pipe Size	Disc Type	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
		90/10 Tailpiece	90/1 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	HARD	VB8A9040B	414405.040.90/10	VB8A7040B	414405.040.70/30	VB8AB040B	414405.040
3/8	HARD	VB8A9060B	414405.060.90/10	VB8A7060B	414405.060.70/30	VB8AB060B	414405.060
1/2	HARD	VB8A9100B	414405.100.90/10	VB8A7100B	414405.100.70/30	VB8AB100B	414405.100
3/4	HARD	VB8A9150B	414405.150.90/10	VB8A7150B	414405.150.70/30	VB8AB150B	414405.150
1	HARD	VB8A9200B	414405.200.90/10	VB8A7200B	414405.200.70/30	VB8AB200B	414405.200
1-1/4	HARD	VB8A9250B	414405.250.90/10	VB8A7250B	414405.250.70/30	VB8AB250B	414405.250
1-1/2	HARD	VB8A9300B	414405.300.90/10	VB8A7300B	414405.300.70/30	VB8AB300B	414405.300
2	HARD	VB8A9400B	414405.400.90/10	VB8A7400B	414405.400.70/30	VB8AB400B	414405.400

Nominal Pipe Size	L Ref.	B	C	Est. Wt. (Lbs.)
1/4	1.583	2	4-3/8	1.50
3/8	1.835	2-1/2	4-11/32	1.90
1/2	1.999	2-3/4	5-3/16	2.90
3/4	2.296	3	6-1/16	4.70
1	2.630	3-1/2	6-7/8	7.00
1-1/4	3.185	4	7-11/16	9.60
1-1/2	3.498	4-3/4	8-3/8	13.60
2	3.958	5-1/4	10-7/16	22.50

**Union End Valves
400 PSI
Swing Check Valves
iaw 803-1385721**



Swing Check Valve

Nominal Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Part #	W&O Part #
	90/10 Tailpiece	90/10 Tailpiece	70/30 Tailpiece	70/30 Tailpiece	Bronze Tailpiece	Bronze Tailpiece
1/4	VD729040B	414501.040.90/10	VD727040B	414501.040.70/30	VD72B040B	414501.040
3/8	VD729060B	414501.060.90/10	VD727060B	414501.060.70/30	VD72B060B	414501.060
1/2	VD729100B	414501.100.90/10	VD727100B	414501.100.70/30	VD72B100B	414501.100
3/4	VD729150B	414501.150.90/10	VD727150B	414501.150.70/30	VD72B150B	414501.150
1	VD729200B	414501.200.90/10	VD727200B	414501.200.70/30	VD72B200B	414501.200
1-1/4	VD729250B	414501.250.90/10	VD727250B	414501.250.70/30	VD72B250B	414501.250
1-1/2	VD729300B	414501.300.90/10	VD727300B	414501.300.70/30	VD72B300B	414501.300
2	VD729400B	414501.400.90/10	VD727400B	414501.400.70/30	VD72B400B	414501.400

Nominal Pipe Size	E	L Ref.	B	Est. Wt. (Lbs.)
1/4	2	3.573	1-5/8	1.30
3/8	2	4.295	1-5/16	1.60
1/2	2-1/4	4.935	1-9/16	2.00
3/4	2-1/2	5.468	1-13/16	2.80
1	3	6.135	2	3.20
1-1/4	3	7.183	2-5/16	4.60
1-1/2	3-1/4	7.995	2-9/16	7.00
2	3-1/2	8.978	2-7/8	13.10



Flange Valves

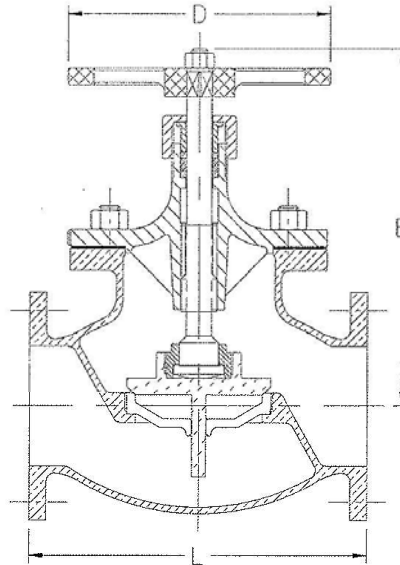
Overview

- Flanged globe and angle globe valves iaw 803-1385541. The following type codes apply:
 - 1 = in-line stop
 - 2 = angle stop
 - 3 = in-line stop check
 - 4 = angle stop check

- Flanged swing check valves iaw 803-1385637. These will ship drilled unless specified at time of order.

- Flanged y-globe valves iaw 803-1385623. Type 4 and type 6 available.

Flange Valves
 100 PSI
 (in-line) Globe Stop
 iaw 803-1385541

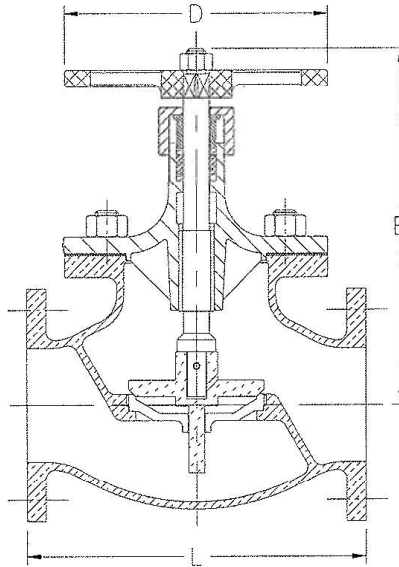


Flanged Globe Stop Valve – Type 1

Nominal Pipe Size	Premier Part #	W&O Part #	D	E (Ref.)	L	Est. Wt. (Lbs.)
2-1/2	VB541450	411301.450	7	10-1/8	9	37
3	VB541500	411301.500	8	11-1/4	10	45
4	VB541600	411301.600	9	13-15/16	12-1/2	64
5	VB541650	411301.650	11	16-7/16	14-3/4	105
6	VB541700	411301.700	12	17-7/8	17	142
8	VB541750	411301.750	16	22-7/16	21-1/2	270
10	VB541800	411301.800	18	25	26	432
12	VB541820	411301.820	21	28-1/8	29-1/4	595

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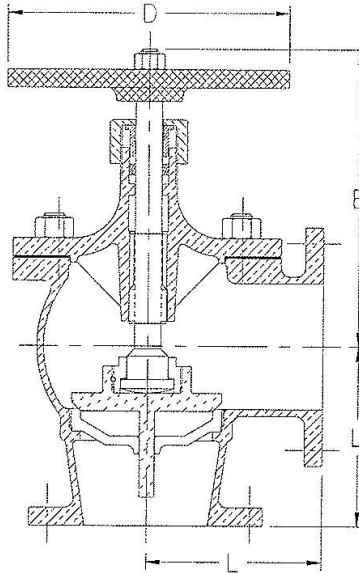
Flange Valves
 100 PSI
 (in-line) Globe Stop Check
 iaw 803-1385541



Flanged Globe Stop Check Valve – Type 3

Nominal Pipe Size	Premier Part #	W&O Part #	D	E (Ref.)	L	Est. Wt. (Lbs.)
2-1/2	VB543450	411311.450	7	10-1/8	9	37
3	VB543500	411311.500	8	11-1/4	10	45
4	VB543600	411311.600	9	13-15/16	12-1/2	64
5	VB543650	411311.650	11	16-7/16	14-3/4	105
6	VB543700	411311.700	12	17-7/8	17	142
8	VB543750	411311.750	16	22-7/16	21-1/2	270
10	VB543800	411311.800	18	25	26	432
12	VB543820	411311.820	21	28-1/8	29-1/4	595

Flange Valves
 100 PSI
 Angle Globe Stop
 iaw 803-1385541

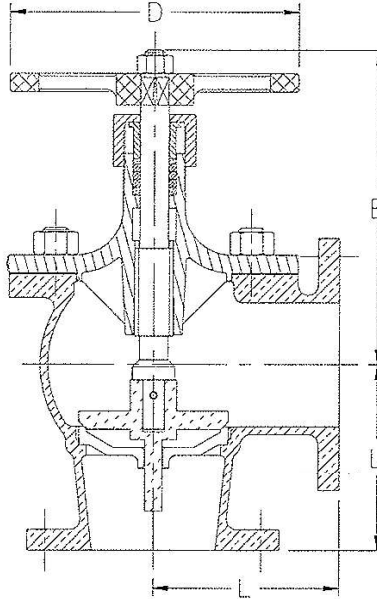


Flanged Angle Globe Stop Valve – Type 2

Nominal Pipe Size	Premier Part #	W&O Part #	D	E (Ref.)	L	Est. Wt. (Lbs.)
2-1/2	VB542450	411401.450	7	8-3/8	4-1/2	31
3	VB542500	411401.500	8	9-1/8	5	39
4	VB542600	411401.600	9	11-5/16	6	52
5	VB542650	411401.650	11	13-3/4	7-1/8	88
6	VB542700	411401.700	12	15-1/4	8	119
8	VB542750	411401.750	16	18-13/16	9-3/4	217
10	VB542800	411401.800	18	21-3/8	11-3/4	344
12	VB542820	411401.820	21	23-3/4	13-3/8	470

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Flange Valves
 100 PSI
 Angle Globe Stop Check
 iaw 803-1385541

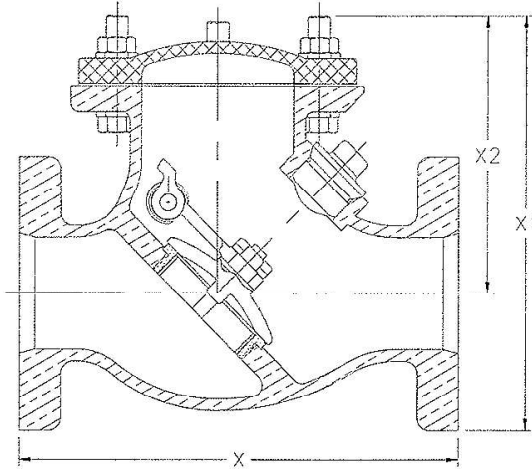


Flanged Angle Globe Stop Check Valve – Type 4

Nominal Pipe Size	Premier Part #	W&O Part #	D	E (Ref.)	L	Est. Wt. (Lbs.)
2-1/2	VB544450	411411.450	7	8-3/8	4-1/2	31
3	VB544500	411411.500	8	9-1/8	5	39
4	VB544600	411411.600	9	11-5/16	6	52
5	VB544650	411411.650	11	13-3/4	7-1/8	88
6	VB544700	411411.700	12	15-1/4	8	119
8	VB544750	411411.750	16	18-13/16	9-3/4	217
10	VB544800	411411.800	18	21-3/8	11-3/4	344
12	VB544820	411411.820	21	23-3/4	13-3/8	470

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Flange Valves
 150/250 PSI WOG
 Swing Check
 iaw 803-1385637

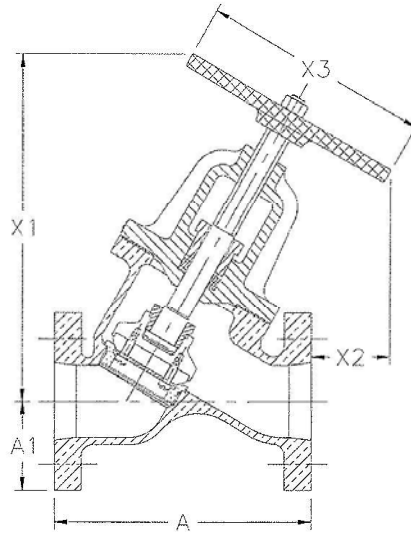


Flanged Swing Check Valve

Nominal Pipe Size	Premier Part #	W&O Part #	X Ref.	X1 Ref.	X2 Ref.	Est. Wt. (Lbs.)
2-1/2	VD637450	412501.450	10	8-11/16	5-5/8	48
3	VD637500	412501.500	10-3/4	9-19/32	6-9/32	58
4	VD637600	412501.600	12-1/4	11	7-5/32	78
5	VD637650	412501.650	13-3/4	13-3/16	8-21/32	110
6	VD637700	412501.700	15-1/4	14-1/2	9-7/16	150
8	VD637750	412501.750	18-1/2	17-7/8	11-11/16	275
10	VD637800	412501.800	21-3/4	21-3/32	13-19/32	330
12	VD637820	412501.820	25-1/4	24-19/32	15-25/32	500

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Flange Valves
 250 PSI WOG
 Globe Y Pattern – Type 4
 iaw 803-1385623

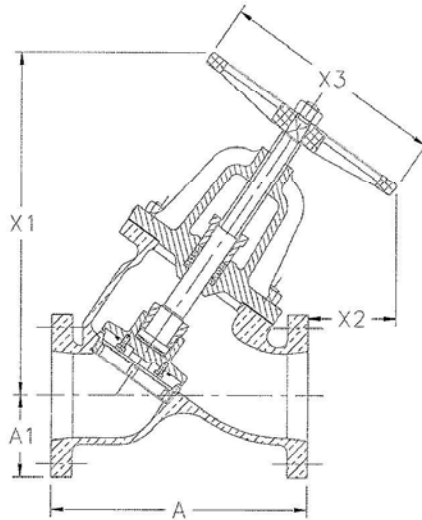


Flanged Globe Y Pattern Valve – Type 4

Nominal Pipe Size	Premier Part #	W&O Part #	A	A1	X1	X2	X3	Est. Wt. (Lbs.)
2-1/2	VB624450	412801.450	9	3-1/16	12-5/8	3	8	48
3	VB624500	412801.500	10	3-5/16	14	3-1/2	9	75
4	VB624600	412801.600	12-1/2	3-27/32	17-1/4	5-1/4	11	110
5	VB624650	412801.650	14-3/4	4-17/32	20-3/4	6	12	155
6	VB624700	412801.700	17	5-1/16	23-3/4	7-1/8	14	200
8	VB624750	412801.750	21-1/2	6-3/16	28-1/4	9-3/4	18	370
10	VB624800	412801.800	26	7-1/2	34-1/2	12-1/2	24	580

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Flange Valves
 250 PSI WOG
 Globe Y Pattern – Type 6
 iaw 803-1385623

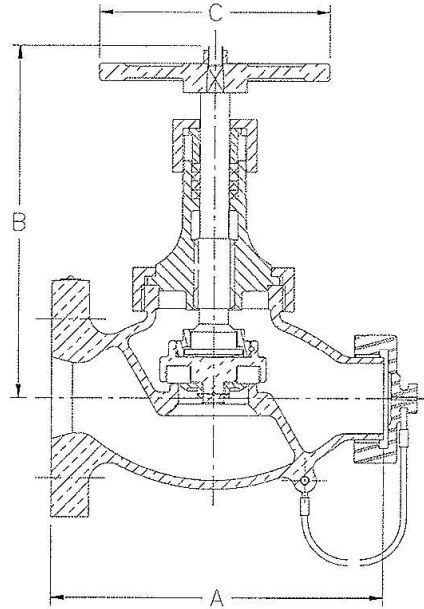


Flanged Globe Y Pattern Valve – Type 6

Nominal Pipe Size	Premier Part #	W&O Part #	A	A1	X1	X2	X3	Est. Wt. (Lbs.)
2-1/2	VB626450	412501.450	9	3-1/16	12-5/8	3	8	48
3	VB626500	412501.500	10	3-5/16	14	3-1/2	9	75
4	VB626600	412501.600	12-1/2	3-27/32	17-1/4	5-1/4	11	110
5	VB626650	412501.650	14-3/4	4-17/32	20-3/4	6	12	155
6	VB626700	412501.700	17	5-1/16	23-3/4	7-1/8	14	200
8	VB626750	412501.750	21-1/2	6-3/16	28-1/4	9-3/4	18	370
10	VB626800	412501.800	26	7-1/2	34-1/2	12-1/2	24	580

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Flange Valves
250 PSI
(in-line) Hose Globe (Type B)
Size 1-1/2
iaw 803-1385711

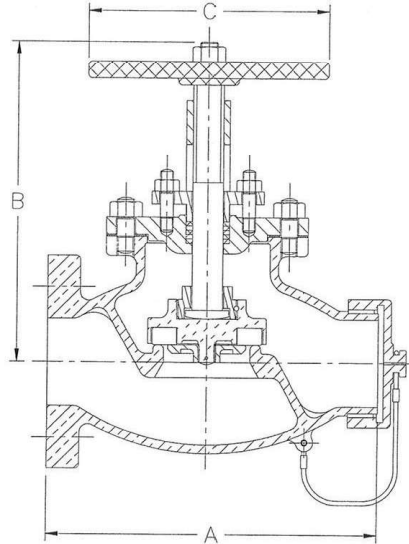


Size 1-1/2 Hose Globe Valve (Type B)

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Nominal Pipe Size	Service	Premier Part #	W&O Part #	A	B	C	Est. Wt. (Lbs.)
1-1/2	Water/Stream	VH711300BE	412371.300	7-3/16	5	7-9/16	19
1-1/2	Petroleum	VH711300BB	412371.300	7-3/16	5	7-9/16	19

Flange Valves
250 PSI
(in-line) Hose Globe (Type B)
Size 2-1/2
iaw 803-1385711

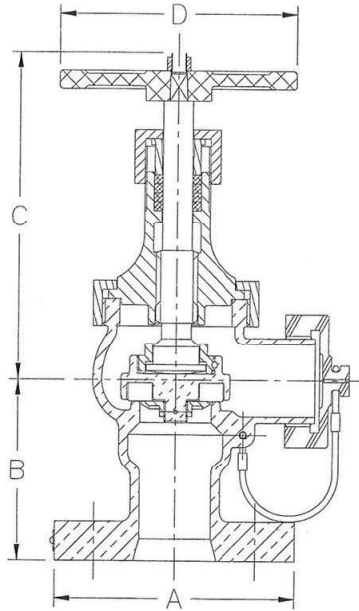


Size 2-1/2 Hose Globe Valve (Type B)

Nominal Pipe Size	Service	Premier Part #	W&O Part #	A	B	C	Est. Wt. (Lbs.)
2-1/2	Water/Stream	VH712450BE	412371.450	9-5/8	7	9-1/4	36.5
2-1/2	Petroleum	VH712450BB	412371.450	9-5/8	7	9-1/4	36.5

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Flange Valves
250 PSI
Angle Hose Globe (Type A)
Size 1-1/2
iaw 803-1385712

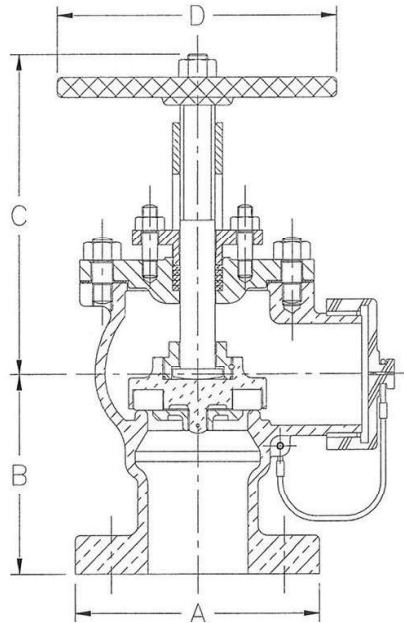


Size 1-1/2 Angle Hose Globe Valve (Type A)

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Nominal Pipe Size	Service	Premier Part #	W&O Part #	A	B	C	D	Est. Wt. (Lbs.)
1-1/2	Water/Stream	VH711300AE	412471.300	5-1/16	3-3/4	7-1/4	5	16.5
1-1/2	Petroleum	VH711300AB	412471.300	5-1/16	3-3/4	7-1/4	5	16.5

Flange Valves
250 PSI
Angle Hose Globe (Type A)
Size 2-1/2
iaw 803-1385712



Size 2-1/2 Angle Hose Globe Valve (Type A)

Nominal Pipe Size	Service	Premier Part #	W&O Part #	A	B	C	D	Est. Wt. (Lbs.)
2-1/2	Water/Stream	VH712450AE	412471.450	6-1/8	4-7/8	8-7/8	7	32
2-1/2	Petroleum	VH712450AB	412471.450	6-1/8	4-7/8	8-7/8	7	32

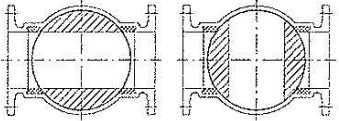
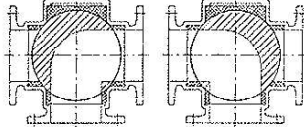
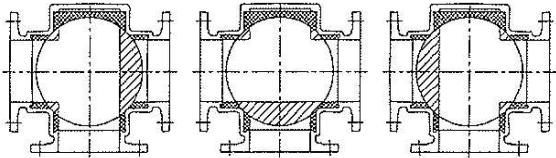
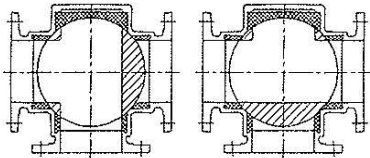
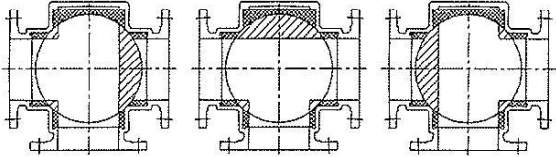
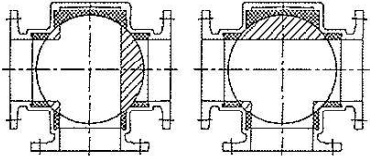
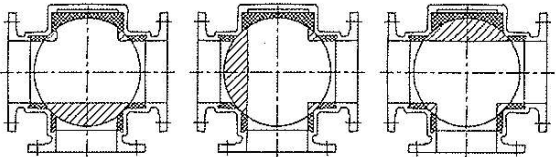
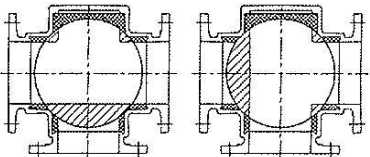
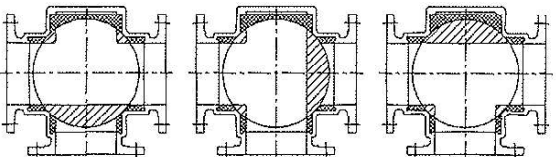
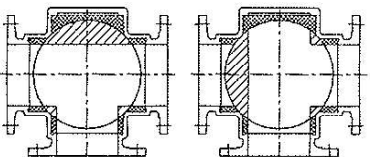
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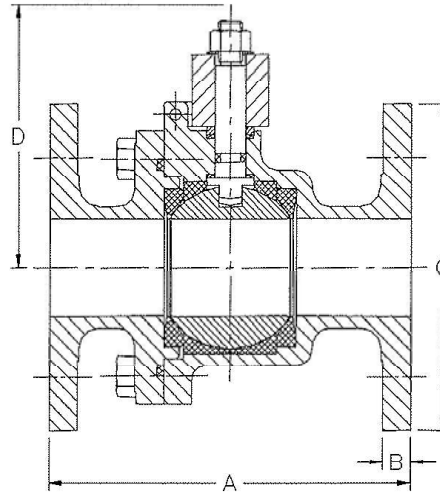
Diverter Valves

Overview

- All ball valves iaw MIL-V-24509A.
- For Flow Plan Diagrams, see chart next page.
- Plug Valves also available but not illustrated.

Type I Ball Valve Flow Plan	Type II Ball Valve Flow Plan
<p>FIG. 0, 2-WAY, 2-PORT, 90° TURN CW</p> 	<p>FIG. 9, 3-WAY, 2-PORT, 90° TURN CW</p> 
Type III Ball Valve Flow Plans	
<p>FIG. 1, 3-WAY, 3-PORT, 180° TURN CW</p> 	<p>FIG. 5, 3-WAY, 3-PORT, 90° TURN CW</p> 
<p>FIG. 2, 3-WAY, 3-PORT, 180° TURN CCW</p> 	<p>FIG. 6, 3-WAY, 3-PORT, 90° TURN CCW</p> 
<p>FIG. 3, 3-WAY, 3-PORT, 180° TURN CW</p> 	<p>FIG. 7, 3-WAY, 3-PORT, 90° TURN CW</p> 
<p>FIG. 4, 3-WAY, 3-PORT, 180° TURN CCW</p> 	<p>FIG. 8, 3-WAY, 3-PORT, 90° TURN CCW</p> 

Diverter Valves
150 PSI Ball Valve
Type I (2-way, 2-port)
Figure #/Flow Plan # 0
iaw MIL-V-24509A
iaw 803-1385620

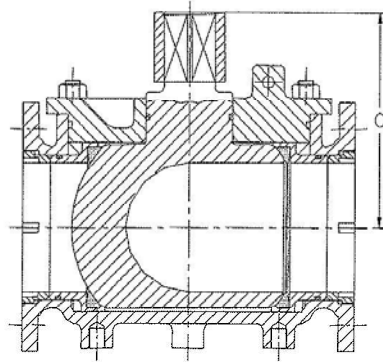


FRONT VIEW

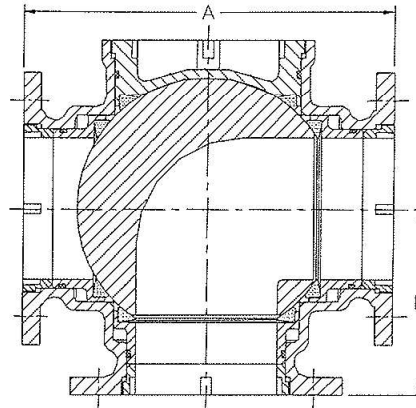
Type I Ball Valve (2-way, 2-port)

Nominal Pipe Size	Premier Part #	W&O Part #	A	B	C	D	Est. Wt. (Lbs.)
1-1/2	VE509300-10	395202.300	5-3/4	7/16	5-1/16	3-5/8	17
2	VE509400-10	395202.400	6-1/2	7/16	5-9/16	4-3/4	28
2-1/2	VE509450-10	395202.450	7-3/4	1/2	6-1/8	5	42
3	VE509500-10	395202.500	9	1/2	6-5/8	6-1/4	46
4	VE509600-10	395202.600	10-1/2	1/2	7-11/16	6-3/4	77
5	VE509650-10	395202.650	13	9/16	9-1/16	7-3/4	144
6	VE509700-10	395202.700	15	9/16	10-1/8	9	226
8	VE509750-10	395202.750	19	5/8	12-3/8	10-1/2	385

Diverter Valves
150 PSI Ball Valve
Type II (3-way, 2-port)
Figure #/Flow Plan # 9
iaw MIL-V-24509A
iaw 803-1385620



FRONT VIEW



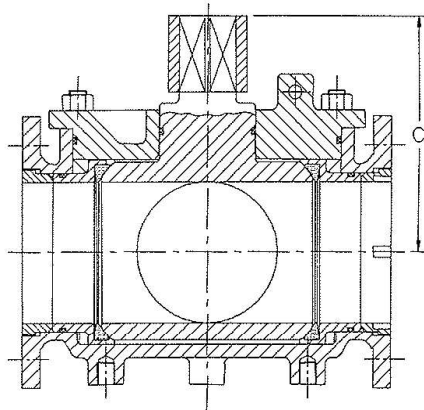
TOP VIEW

Type II Ball Valve (3-way, 2-port)

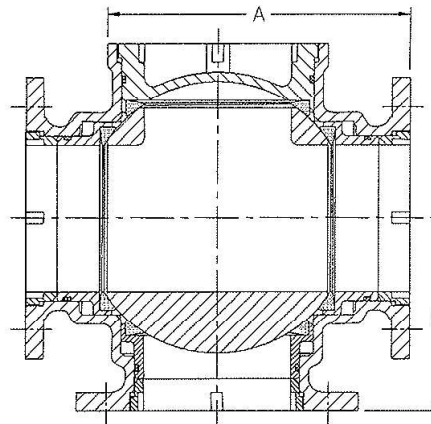
Nominal Pipe Size	Premier Part #	W&O Part #	A	B	C	Est. Wt. (Lbs.)
1-1/2	VE509300-29	395302.300	6-1/4	3-1/8	3-5/8	28
2	VE509400-29	395302.400	7	3-1/2	4-3/4	35
2-1/2	VE509450-29	395302.450	8	4	5	51
3	VE509500-29	395302.500	9	4-1/2	6-1/4	82
4	VE509600-29	395302.600	10-1/2	5-1/4	6-3/4	117
5	VE509650-29	395302.650	13	6-1/2	7-3/4	215
6	VE509700-29	395302.700	15	7-1/2	9	293
8	VE509750-29	395302.750	19	9-1/2	10-1/2	418

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Diverter Valves
150 PSI Ball Valve
Type III (3-way, 3-port)
Figure #/Flow Plan # 1-8
iaw MIL-V-24509A
iaw 803-1385620



FRONT VIEW



TOP VIEW

Type III Ball Valve (3-way, 3-port)

Nominal Pipe Size	Premier Part #	W&O Part #	A	B	C	Est. Wt. (Lbs.)
1-1/2	VE509300-3	395373.300	6-1/4	3-1/8	3-5/8	28
2	VE509400-3	395373.400	7	3-1/2	4-3/4	35
2-1/2	VE509450-3	395373.450	8	4	5	51
3	VE509500-3	395373.500	9	4-1/2	6-1/4	82
4	VE509600-3	395373.600	10-1/2	5-1/4	6-3/4	117
5	VE509650-3	395373.650	13	6-1/2	7-3/4	215
6	VE509700-3	395373.700	15	7-1/2	9	293
8	VE509750-3	395373.750	19	9-1/2	10-1/2	418



Contents

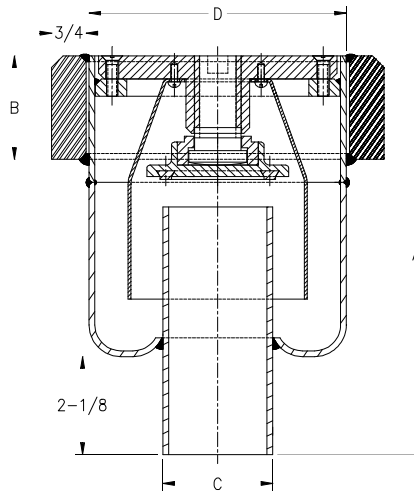
Type A 2" or 4" Seal	1
Type A 6" Seal.....	2
Type B.....	3
Type C.....	4
Type D 2" or 4" Seal	5
Type D 6" Seal	6
Type F	7
Type G 2" or 4" Seal	8
Type H 2" or 4" Seal	9
Type T.....	10
Type S.....	11



Wrought Copper-Nickel Deck Drains

- Deck Drains are similar to the dimensional requirements of Navships Dwg. 803-1385789 Rev. G, Navsea Dwgs. 6884068, 7262734, or BIW Dwg. 8100-2400-0084 Rev. G, as applicable.
- Wrought (cold-formed) Copper-Nickel drains conform to Mil-C-15726, Mil-T-16420K, ASTM B122, B466, and/or B467 as applicable.
- Internal component dimensions and material iaw Dwg. 803-1385789 Rev. G, 6884068, 7262734, or 7262688 where applicable.
- Kits for internal component replacement are available separately.
- Body sub-assemblies are also available. Call for part number and ordering information.

**Wrought Deck Drains
Type A 2" or 4" Seal
DWG 1385789**



Type A 2" or 4" Seal

Size	Premier Part #	Premier Part #	Premier Part #	Premier Part #	A 2" Seal	A 4" Seal	B	C	D
	70/30 Body	90/10 Body	Internals Kit Only 2" Seal	Internals Kit Only 4" Seal					
1-1/2	DD7(*)A300	DD9(*)A300	DDK2A300	DDK4A300	8.313	10.313	2.250	1.900	5.000
2	DD7(*)A400	DD9(*)A400	DDK2A400	DDK4A400	8.656	10.656	2.250	2.375	5.563
2-1/2	DD7(*)A450	DD9(*)A450	DDK2A450	DDK4A450	8.938	10.938	2.500	2.875	6.625
3	DD7(*)A500	DD9(*)A500	DDK2A500	DDK4A500	9.375	11.375	2.500	3.500	7.625

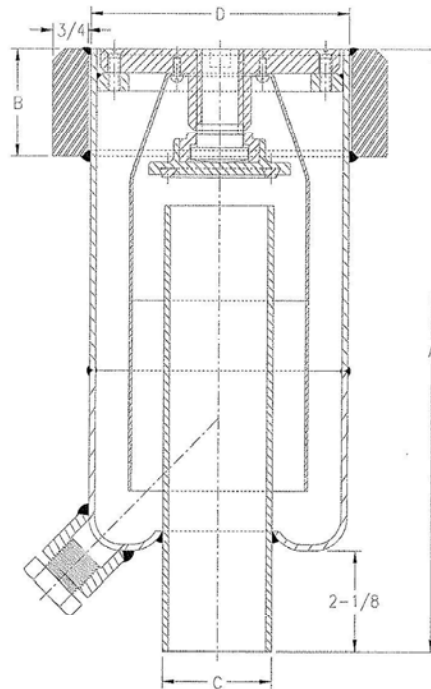
(*) Denotes seal size. Substitute 2 for 2" seal or 4 for 4"

Also Available in W&O 70/30, Aluminum Body and Bronze Body:

Size	W&O Part #	W&O Part #	W&O Part #	A 2" Seal	A 4" Seal	B	C	D	E	Est. Weight
	70/30 Body	Aluminum Body	Bronze Body							
1-1/2	510201.300	510101.300	511101.300	8.313	10.313	1.625	1.900	5.000	4.609	6.02
2	510201.400	510101.400	511101.400	8.656	10.656	1.625	2.375	5.563	5.172	16.12
2-1/2	510201.450	510101.450	511101.450	8.938	10.938	1.625	2.875	6.625	6.172	19.94
3	510201.500	510101.500	511101.500	9.375	11.375	1.625	3.500	7.625	7.109	31.84

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.

Wrought Deck Drains
Type A 6" Seal
DWG 1385789

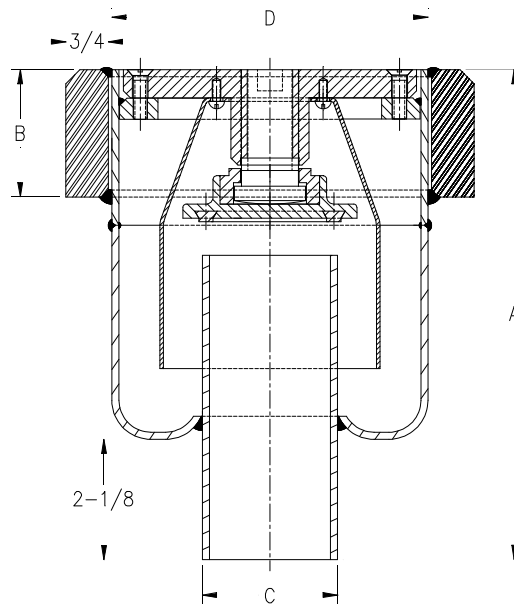


Type A 6" Seal

Size	Premier Part #	Premier Part #	Premier Part #	A	B	C	D
	70/30 Body	90/10 Body	Internals Kit Only				
1-1/2	DD76A300	DD96A300	DDK6A300	12.313	2.250	1.900	5.000
2	DD76A400	DD96A400	DDK6A400	12.656	2.250	2.375	5.563
2-1/2	DD76A450	DD96A450	DDK6A450	12.938	2.500	2.875	6.625
3	DD76A500	DD96A500	DDK6A500	13.375	2.500	3.500	7.625

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.

**Wrought Deck Drains
Type B
DWG 1385789**



Type B

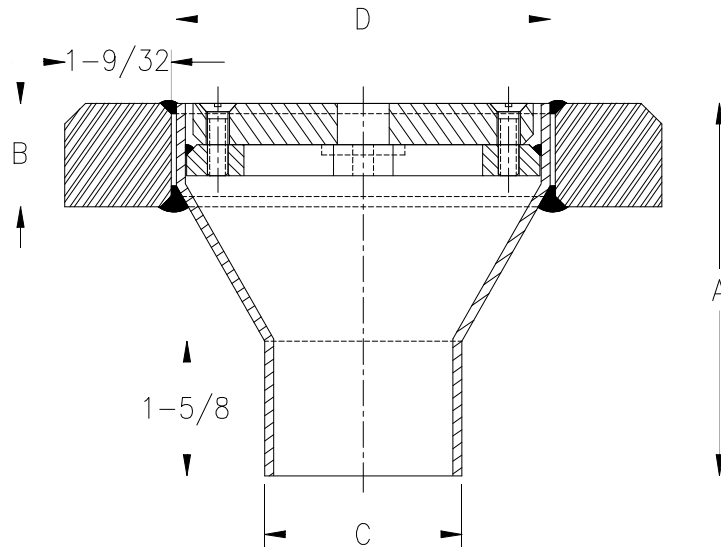
Size	Premier Part #	Premier Part #	Premier Part #	A	B	C	D
	70/30 Body	90/10 Body	Internals Kit Only				
1-1/2	DD70B300	DD90B300	DDK0B300	5.563	2.250	1.900	5.000
2	DD70B400	DD90B400	DDK0B400	5.906	2.250	2.375	5.563
2-1/2	DD70B450	DD90B450	DDK0B450	6.188	2.500	2.875	6.625
3	DD70B500	DD90B500	DDK0B500	6.625	2.500	3.500	7.625

Also Available in W&O 70/30, Aluminum Body, and Bronze Body:

Size	W&O Part #	W&O Part #	W&O Part #	A	B	C	D	E	Est. Weight
	70/30 Body	Aluminum Body	Bronze Body						
1-1/2	510202.300	510102.300	511102.300	5.563	1.625	1.900	5.000	4.609	6.02
2	510202.400	510102.400	511102.400	5.906	1.625	2.375	5.563	5.172	16.12
2-1/2	510202.450	510102.450	511102.450	6.188	1.625	2.875	6.625	6.172	19.94
3	510202.500	510102.500	511102.500	6.625	1.625	3.500	7.625	7.109	31.84

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.

**Wrought Deck Drains
Type C
DWG 1385789**



Type C

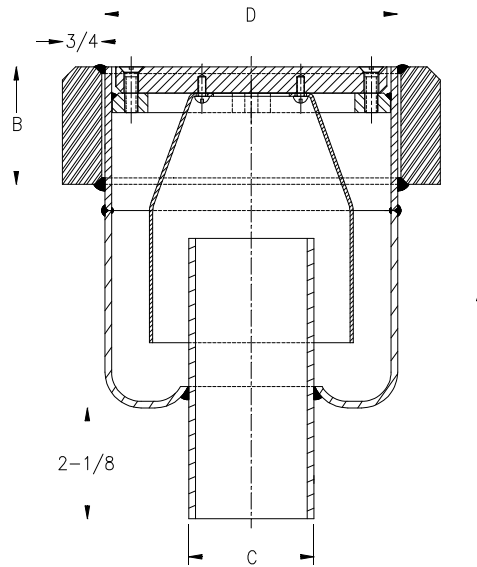
Size	Premier Part #	Premier Part #	Premier Part #	A	B	C	D	E	Est. Weight
	70/30 Body	90/10 Body	Internals Kit Only						
1-1/2	DD70C300	DD90C300	DDK0C300	4.500	1.625	1.900	4.000	3.609	6.02
2	DD70C400	DD90C400	DDK0C400	4.500	1.625	2.375	4.500	4.109	16.12
2-1/2	DD70C450	DD90C450	DDK0C450	4.750	1.625	2.875	5.563	5.109	19.94
3	DD70C500	DD90C500	DDK0C500	4.750	1.625	3.500	6.625	6.109	31.84

Also Available in W&O Aluminum Body and Bronze Body:

Size	W&O Part #	W&O Part #	A	B	C	D	E	Est. Weight
	Aluminum Body	Bronze Body						
1-1/2	510103.300	511103.300	4.500	1.625	1.900	4.000	3.609	6.02
2	510103.400	511103.400	4.500	1.625	2.375	4.500	4.109	16.12
2-1/2	510103.450	511103.450	4.750	1.625	2.875	5.563	5.109	19.94
3	510103.500	511103.500	4.750	1.625	3.500	6.625	6.109	31.84

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.

**Wrought Deck Drains
Type D 2" or 4" Seal
DWG 1385789**



Type D 2" or 4" Seal

Size	Premier Part #	Premier Part #	Premier Part #	Premier Part #	A 2" Seal	A 4" Seal	B	C	D
	70/30 Body	90/10 Body	Internals Kit Only 2" Seal	Internals Kit Only 4" Seal					
1-1/2	DD7(*)D300	DD9(*)D300	DDK2D300	DDK4D300	8.313	10.313	2.250	1.900	5.000
2	DD7(*)D400	DD9(*)D400	DDK2D400	DDK4D400	8.656	10.656	2.250	2.375	5.563
2-1/2	DD7(*)D450	DD9(*)D450	DDK2D450	DDK4D450	8.938	10.938	2.500	2.875	6.625
3	DD7(*)D500	DD9(*)D500	DDK2D500	DDK4D500	9.375	11.375	2.500	3.500	7.625

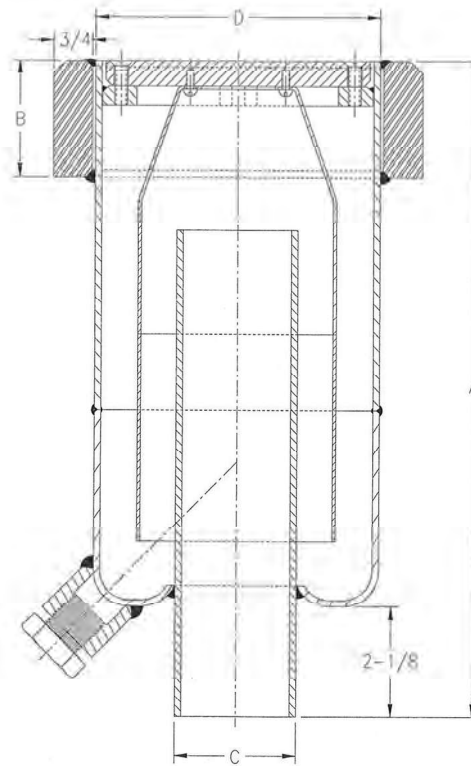
(*) Denotes seal size. Substitute 2 for 2" seal or 4 for 4"

Also Available in W&O 70/30, Aluminum Body, and Bronze Body:

Size	W&O Part #	W&O Part #	W&O Part #	A 2" Seal	A 4" Seal	B	C	D	E	Est. Weight
	70/30 Body	Aluminum Body	Bronze Body							
1-1/2	510204.300	510104.300	511104.300	8.313	10.313	1.625	1.900	5.000	4.609	6.02
2	510204.400	510104.400	511104.400	8.656	10.656	1.625	2.375	5.563	5.172	16.12
2-1/2	510204.450	510104.450	511104.450	8.938	10.938	1.625	2.875	6.625	6.172	19.94
3	510204.500	510104.500	511104.500	9.375	11.375	1.625	3.500	7.625	7.109	31.84

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.

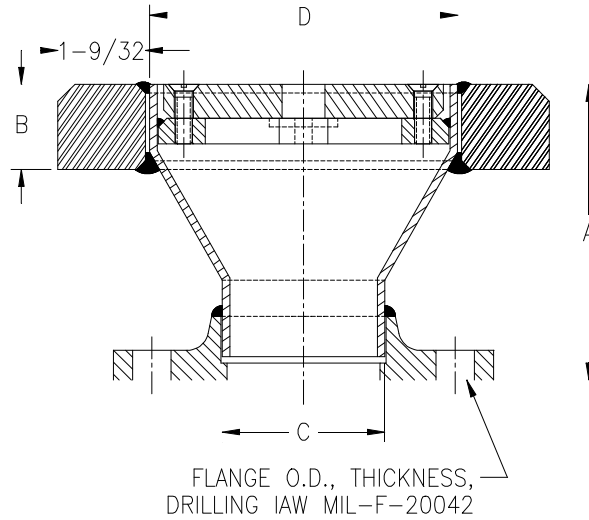
**Wrought Deck Drains
Type D 6" Seal
DWG 1385789**



Type D 6" Seal

Size	Premier Part #	W&O Part #	Premier Part #	Premier Part #	A	B	C	D
	70/30 Body Full Assembly	70/30 Body Full Assembly	90/10 Body Full Assembly	Internals Kit Only				
1-1/2	DD76D300	510204.300.6	DD96D300	DDK6D300	12.313	2.250	1.900	5.000
2	DD76D400	510204.400.6	DD96D400	DDK6D400	12.656	2.250	2.375	5.563
2-1/2	DD76D450	510204.450.6	DD96D450	DDK6D450	12.938	2.500	2.875	6.625
3	DD76D500	510204.500.6	DD96D500	DDK6D500	13.375	2.500	3.500	7.625

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.



Type F

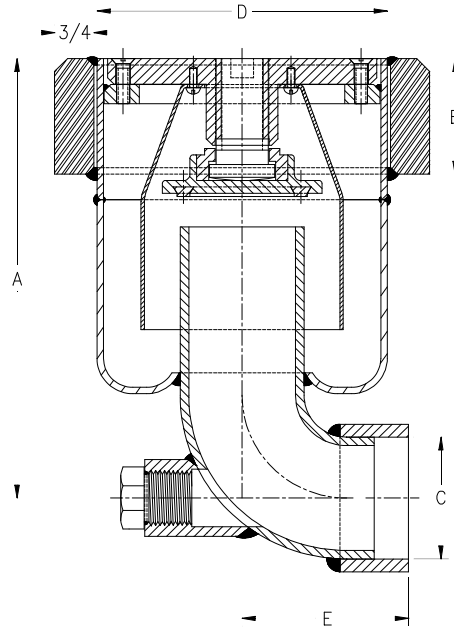
Size	Premier Part #	Premier Part #	Premier Part #	A	B	C	D
	70/30 Body	90/10 Body	Internals Kit Only				
1-1/2	DD70F300	DD90F300	DDK0F300	4.281	1.250	1.900	4.000
2	DD70F400	DD90F400	DDK0F400	4.344	1.250	2.375	4.500
2-1/2	DD70F450	DD90F450	DDK0F450	4.625	1.250	2.875	5.563
3	DD70F500	DD90F500	DDK0F500	5.313	1.250	3.500	6.625

Also Available in W&O Aluminum Body:

Size	W&O Part #	A	B	C	D	E	B.C.	F	No. Hole	Size Hole	Est. Weight
	Aluminum Body										
1-1/2	511106.300	4.281	0.438	1.770	4.063	3.625	3.938	5.063	6	9/16	2.00
2	511106.400	4.344	0.438	2.240	4.563	4.125	4.438	5.563	6	9/16	2.50
2-1/2	511106.450	4.625	0.500	2.750	5.625	5.125	5.000	6.125	6	9/16	3.00
3	511106.500	5.313	0.500	3.370	6.688	6.125	5.500	6.625	6	9/16	3.50

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.

**Wrought Deck Drains
Type G 2" or 4" Seal
DWG 1385789**



Type G

Size	Premier Part #	Premier Part #	Premier Part #	Premier Part #	A 2" Seal	B 4" Seal	B	C	D	E
	70/30 Body	90/10 Body	Internals Kit Only 2" Seal	Internals Kit Only 4" Seal						
1-1/2	DD7(*)G300	DD9(*)G300	DDK2G300	DDK4G300	8.000	10.000	2.250	1.900	5.000	3.188
2	DD7(*)G400	DD9(*)G400	DDK2G400	DDK4G400	8.563	10.563	2.250	2.375	5.563	3.188
2-1/2	DD7(*)G450	DD9(*)G450	DDK2G450	DDK4G450	9.063	11.063	2.250	2.875	6.625	4.125
3	DD7(*)G500	DD9(*)G500	DDK2G500	DDK4G500	9.781	11.781	2.250	3.500	7.625	4.813

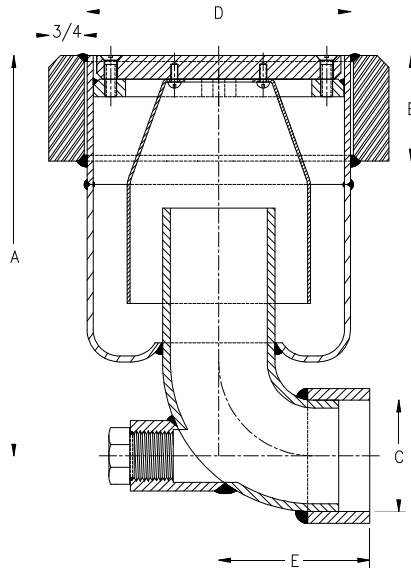
Also Available in W&O 70/30, Aluminum Body, and Bronze Body:

Size	W&O Part #	W&O Part #	W&O Part #	A 2" Seal	A 4" Seal	B	C	D	Est. Weight
	70/30 Body	Aluminum Body	Bronze Body						
1-1/2	510207.300	510107.300	511107.300	7.000	9.000	3.188	4.609	5.000	6.02
2	510207.400	510107.400	511107.400	7.563	9.563	3.188	5.172	5.563	16.12
2-1/2	510207.450	510107.450	511107.450	8.063	10.063	4.125	6.172	6.625	19.94
3	510207.500	510107.500	511107.500	8.781	10.781	4.813	7.109	7.625	31.84

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**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.

**Wrought Deck Drains
Type H 2" or 4" Seal
DWG 1385789**



Type H

Size	Premier Part #	Premier Part #	Premier Part #	Premier Part #	A 2" Seal	B 4" Seal	B	C	D	E
	70/30 Body	90/10 Body	Internals Kit Only 2" Seal	Internals Kit Only 4" Seal						
1-1/2	DD7(*)H300	DD9(*)H300	DDK2H300	DDK4H300	8.000	10.000	2.250	1.900	5.000	3.188
2	DD7(*)H400	DD9(*)H400	DDK2H400	DDK4H400	8.563	10.563	2.250	2.375	5.563	3.188
2-1/2	DD7(*)H450	DD9(*)H450	DDK2H450	DDK4H450	9.063	11.063	2.500	2.875	6.625	4.125
3	DD7(*)H500	DD9(*)H500	DDK2H500	DDK4H500	9.781	11.781	2.500	3.500	7.625	4.813

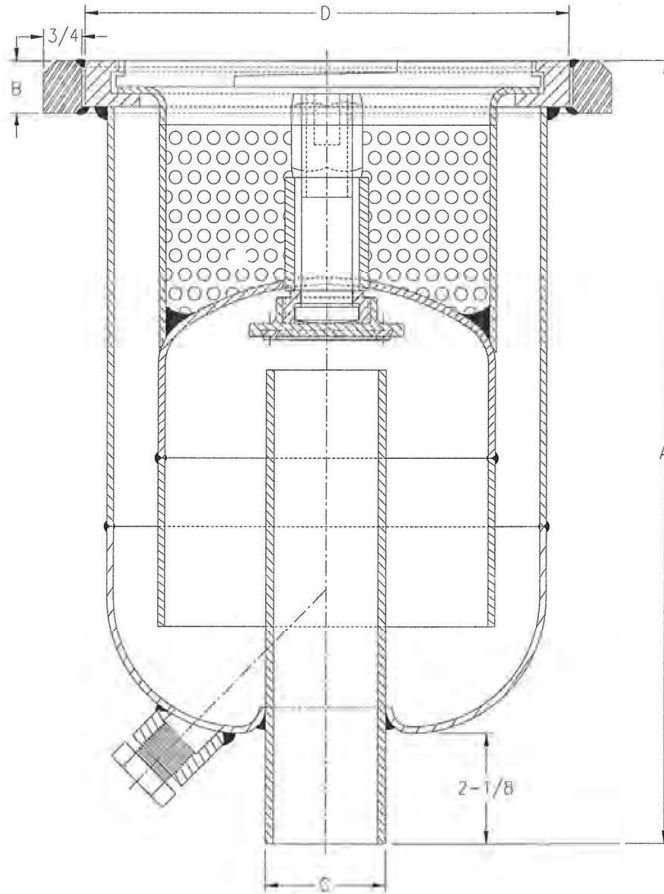
(*) Denotes seal size. Substitute 2 for 2" seal or 4 or 4"

Also Available in W&O 70/30, Aluminum Body, and Bronze Body:

Size	W&O Part #	W&O Part #	W&O Part #	A 2" Seal	A 4" Seal	B	C	D	Est. Weight
	70/30 Body	Aluminum Body	Bronze Body						
1-1/2	510208.300	510108.300	511108.300	7.000	9.000	3.188	4.609	5.000	6.02
2	510208.400	510108.400	511108.400	7.563	9.563	3.188	5.172	5.563	16.12
2-1/2	510208.450	510108.450	511108.450	8.063	10.063	4.125	6.172	6.625	19.94
3	510208.500	510108.500	511108.500	8.781	10.781	4.813	7.109	7.625	31.84

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.

**Wrought Deck Drains
Type T 6" Seal
DWG 1385789**

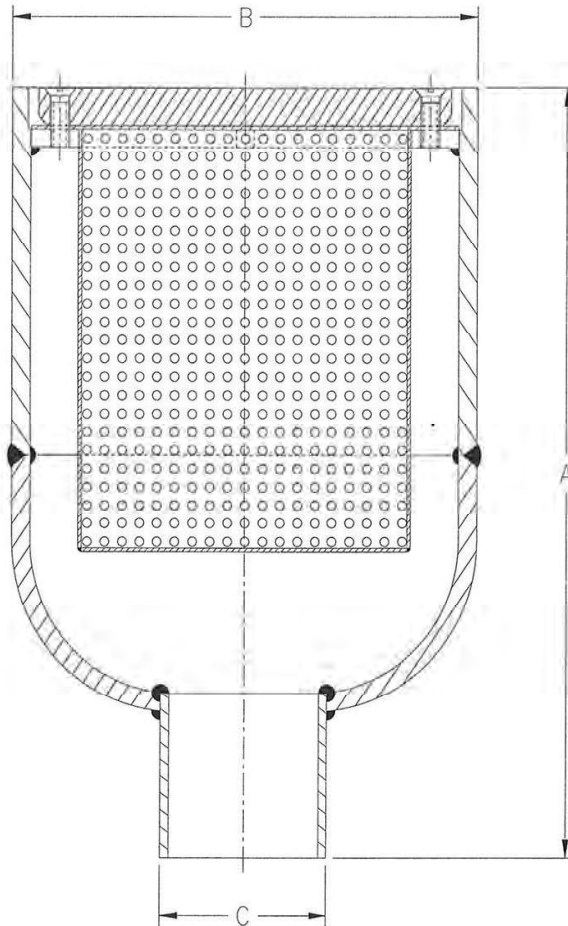


Type T

11

Size	Premier	W&O	Premier	W&O	Premier	W&O	A	B	C	D
	Part #	Part #	Part #	Part #	Part #	Part #				
	70/30 Body	70/30 Body	90/10 Body	90/10 Body	Internals Kit Only	Internals Kit Only				
2	DD76T400	510279.400	DD96T400	510379.400	DDK6T400	511179.400.REPAIRKIT	15.125	1.000	2.375	9.500

**Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.



Type S

Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	A	B	C
	70/30 Full Body Assembly	70/30 Full Body Assembly	Internals Kit Only	Internals Kit Only			
2	DD7SB400	51020S.400	DDKSB400	51110S.400.REPAIRKIT	10.500	6.625	2.375

** Drain shown with optional steel compensation ring. Please specify if needed by adding "CR" to end of part number.



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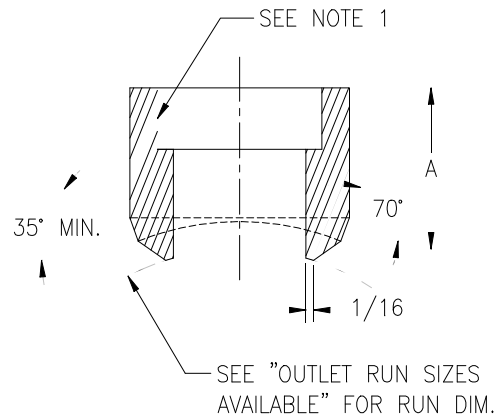
Copper-Nickel Branch Outlets

- Intended use with Copper-Nickel Pipe IAW MIL-T-16420

- A wide variety of types:
 - 3000 PSI Socket Weld and Threaded
 - 400 PSI Socket Weld and Silver Braze
 - CL-200 Butt Weld
 - CL-700 Butt Weld

- Principal Dimensions from:
 - 3000 PSI Socket Weld and Threaded
 - ANSI B16.11 – 1996 Revision
 - 400 PSI Socket Weld
 - Premier Dwg. 804-8577030
 - 400 PSI Silver Braze
 - MIL-F-1183
 - CL-200 Butt Weld
 - BUSHIPS Dwg. 810-1385880
 - CL-700 Butt Weld
 - MIL-F-24202

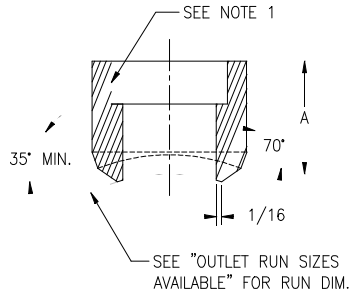
Outlets
3000 PSI Socket Weld
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3000 PSI Socket Weld

Iron Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Outlet Run Sizes Available	A	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	B9100040	695202.040	B7100040	695302.040	1/4 x 1/4	0.750	0.11
	B9111040		B7111040		(3/8--3/4) x 1/4		
	B914T040		B714T040		(1-36) x 1/4		
3/8	B9100060	695202.060	B7100060	695302.060	3/8 x 3/8	0.810	0.19
	B9111060		B7111060		(1/2--3/4) x 3/8		
	B9137060		B7137060		(1-4) x 3/8		
	B91AK060		B71AK060		(4-1/2--36) x 3/8		
1/2	B9100100	695202.100	B7100100	695302.100	1/2 x 1/2	1.000	0.30
	B9111100		B7111100		(3/4--1) x 1/2		
	B9135100		B7135100		(1-1/4--3-1/2) x 1/2		
	B919Q100		B719Q100		(4--36) x 1/2		
3/4	B9100150	695202.150	B7100150	695302.150	3/4 x 3/4	1.060	0.46
	B9111150		B7111150		(1 - 1-1/4) x 3/4		
	B9132150		B7132150		(1-1/2 - 2-1/2) x 3/4		
	B916L150		B716L150		(3 - 32) x 3/4		
	B91T2150		B71T2150		(34 - 36) x 3/4		
1	B9100200	695202.200	B7100200	695302.200	1 x 1	1.310	0.68
	B9111200		B7111200		(1-1/4 - 1-1/2) x 1		
	B9132200		B7132200		(2 - 3) x 1		
	B9169200		B7169200		(3-1/2 - 11) x 1		
	B91GB200		B71GB200		(12 - 36) x 1		
1-1/4	B9100250	695202.250	B7100250	695202.300	1-1/4 x 1-1/4	1.310	1.14
	B91100250		B7110250		1-1/2 x 1-1/4		

**Outlets
3000 PSI Socket Weld
(Page 2 of 2)**

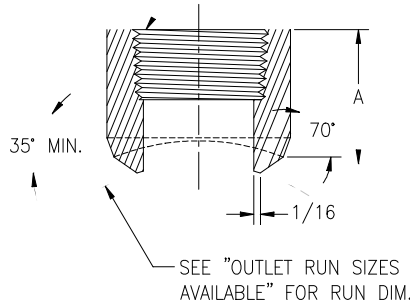


3000 PSI Socket Weld

Iron Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Outlet Run Sizes Available	A	Est. Weight
	90/10	90/10	70/30	70/30			
1-1/4	B9121250	695202.250	B7121250	695302.250	(2 - 2-1/2) x 1-1/4	1.310	1.14
	B9143250		B7143250		(3 - 4-1/2) x 1-1/4		
	B9187250		B7187250		(5 - 12) x 1-1/4		
	B91GA250		B71GA250		(14 - 36) x 1-1/4		
1-1/2	B9100300	695202.300	B7100300	695302.300	1-1/2 x 1-1/2	1.380	1.22
	B9110300		B7110300		2 x 1-1/2		
	B9120300		B7120300		2-1/2 x 1-1/2		
	B9132300		B7132300		(3 - 4) x 1-1/2		
	B9163300		B7163300		(4-1/2 - 7) x 1-1/2		
	B91AA300		B71AA300		(8 - 26) x 1-1/2		
2	B9100400	695202.400	B7100400	695302.400	2 x 2	1.500	2.14
	B9110400		B7110400		2-1/2 x 2		
	B9121400		B7121400		(3 - 3-1/2) x 2		
	B9142400		B7142400		(4 - 5) x 2		
	B9173400		B7173400		(6 - 9) x 2		
	B91B6400		B71B6400		(10 - 20) x 2		
2-1/2	B9100450	695202.450	B7100450	695302.450	2-1/2 x 2-1/2	1.810	3.62
	B9110450		B7110450		3 x 2-1/2		
	B9120450		B7120450		3-1/2 x 2-1/2		
	B9131450		B7131450		(4 - 4-1/2) x 2-1/2		
	B9151450		B7151450		(5 - 6) x 2-1/2		
	B9172450		B7172450		(7 - 9) x 2-1/2		
	B91A4450		B71A4450		(10 - 16) x 2-1/2		
	B91F8450		B71F8450		(18 - 36) x 2-1/2		
3	B9100500	695202.500	B7100500	695302.500	3 x 3	2.000	4.60
	B9110500		B7110500		3-1/2 x 3		
	B9120500		B7120500		4 x 3		
	B9130500		B7130500		4-1/2 x 3		
	B9140500		B7140500		5 x 3		
	B9151500		B7151500		(6 - 7) x 3		
	B9171500		B7171500		(8 - 9) x 3		
	B9193500		B7193500		(10 - 14) x 3		
	B91DA500		B71DA500		(16 - 24) x 3		
	B91H5500		B71H5500		(26 - 36) x 3		
3-1/2		695202.550		695302.550		2.250	7.75
4	B9100600	695202.600	B7100600	695302.600	4 x 4	2.250	9.50
	B9110600		B7110600		4-1/2 x 4		
	B9120600		B7120600		5 x 4		
	B9130600		B7130600		6 x 4		
	B9140600		B7140600		7 x 4		
	B9150600		B7150600		8 x 4		
	B9161600		B7161600		(9 - 10) x 4		
	B9181600		B7181600		(11 - 12) x 4		
	B91A1600		B71A1600		(14 - 16) x 4		
	B91C1600		B71C1600		(18 - 20) x 4		
	B91E6600		B71E6600		(24 - 36) x 4		

SEE NOTE 1

**Outlets
3000 PSI Threaded
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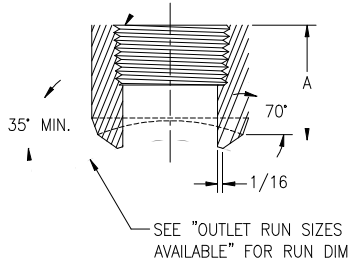


3000 PSI Threaded

Iron Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Outlet Run Sizes Available	A	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	B9200040	695201.040	B7200040	695301.040	1/4 x 1/4	0.750	0.12
	B9211040		B7211040		(3/8 - 3/4) x 1/4		
	B924T040		B724T040		(1 - 3/8) x 1/4		
3/8	B9200060	695201.060	B7200060	695301.060	3/8 x 3/8	.810	0.20
	B9211060		B7211060		(1/2 - 3/4) x 3/8		
	B9237060		B7237060		(1 - 4) x 3/8		
	B92AK060		B72AK060		(4-1/2 - 3/8) x 3/8		
1/2	B9200100	695201.100	B7200100	695301.100	1/2 x 1/2	1.000	0.30
	B9211100		B7211100		(3/4 - 1) x 1/2		
	B9235100		B7235100		(1-1/4 - 3-1/2) x 1/2		
	B929Q100		B729Q100		(4 - 3/8) x 1/2		
3/4	B9200150	695201.150	B7200150	695301.150	3/4 x 3/4	1.060	0.44
	B9211150		B7211150		(1 - 1-1/4) x 3/4		
	B9232150		B7232150		(1-1/2 - 2-1/2) x 3/4		
	B926L150		B726L150		(3 - 3/8) x 3/4		
	B92T2150		B72T2150		(34 - 3/8) x 3/4		
1	B9200200	695201.200	B7200200	695301.200	1 x 1	1.310	0.62
	B9211200		B7211200		(1-1/4 - 1-1/2) x 1		
	B9232200		B7232200		(2 - 3) x 1		
	B9269200		B7269200		(3-1/2 - 11) x 1		
	B92GB200		B72GB200		(12 - 3/8) x 1		
1-1/4	B9200250	695201.250	B7200250	695301.250	1-1/4 x 1-1/4	1.310	1.08
	B9210250		B7210250		1-1/2 x 1-1/4		
	B9221250		B7221250		(2 - 2-1/2) x 1-1/4		
	B9243250		B7243250		(3 - 4-1/2) x 1-1/4		
	B9287250		B7287250		(5 - 12) x 1-1/4		
	B92GA250		B72GA250		(14 - 3/8) x 1-1/4		
1-1/2	B9200300	695201.300	B7200300	695301.300	1-1/2 x 1-1/2	1.380	1.58
	B9210300		B7210300		2 x 1-1/2		
	B9220300		B7220300		2-1/2 x 1-1/2		
	B9232300		B7232300		(3 - 4) x 1-1/2		
	B9263300		B7263300		(4-1/2 - 7) x 1-1/2		
	B92AA300		B72AA300		(8 - 26) x 1-1/2		
	B92M4300		B72M4300		(28 - 3/8) x 1-1/2		

SEE NOTE 1

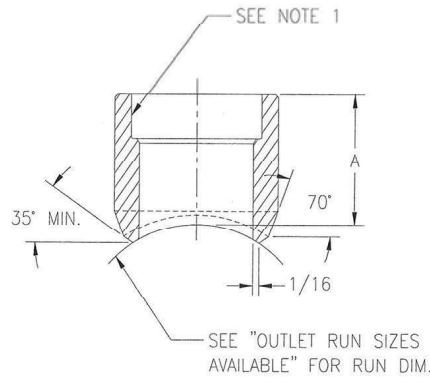
**Outlets
3000 PSI Threaded
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3000 PSI Threaded

Iron Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Outlet Run Sizes Available	A	Est. Weight
	90/10	90/10	70/30	70/30			
2	B9200400	695201.400	B7200400	695301.400	2 x 2	1.500	2.04
	B9210400		B7210400		2-1/2 x 2		
	B9221400		B7221400		(3 - 3-1/2) x 2		
	B9242400		B7242400		(4 - 5) x 2		
	B9273400		B7273400		(6 - 9) x 2		
	B92B6400		B72B6400		(10 - 20) x 2		
	B92G6400		B72G6400		(24 - 36) x 2		
2-1/2	B9200450	695201.450	B7200450	695301.450	2-1/2 x 2-1/2	1.810	3.22
	B9210450		B7210450		3 x 2-1/2		
	B9220450		B7220450		3-1/2 x 2-1/2		
	B9231450		B7231450		(4 - 4-1/2) x 2-1/2		
	B9251450		B7251450		(5 - 6) x 2-1/2		
	B9272450		B7272450		(7 - 9) x 2-1/2		
	B92A4450		B72A4450		(10 - 16) x 2-1/2		
	B92F8450		B72F8450		(18 - 36) x 2-1/2		
3	B9200500	695201.500	B7200500	695301.500	3 x 3	2.000	3.88
	B9210500		B7210500		3-1/2 x 3		
	B9220500		B7220500		4 x 3		
	B9230500		B7230500		4-1/2 x 3		
	B9240500		B7240500		5 x 3		
	B9251500		B7251500		(6 - 7) x 3		
	B9271500		B7271500		(8 - 9) x 3		
	B9293500		B7293500		(10 - 14) x 3		
	B92DA500		B72DA500		(16 - 24) x 3		
	B92H5500		B72H5500		(26 - 36) x 3		
3-1/2		695201.550		695301.550		2.125	5.22
4	B9200600	695201.600	B7200600	695301.600	4 x 4	2.250	6.40
	B9210600		B7210600		4-1/2 x 4		
	B9220600		B7220600		5 x 4		
	B9230600		B7230600		6 x 4		
	B9240600		B7240600		7 x 4		
	B9250600		B7250600		8 x 4		
	B9261600		B7261600		(9 - 10) x 4		
	B9281600		B7281600		(11 - 12) x 4		
	B92A1600		B72A1600		(14 - 16) x 4		
	B92C1600		B72C1600		(18 - 20) x 4		
	B92E6600		B72E6600		(24 - 36) x 4		

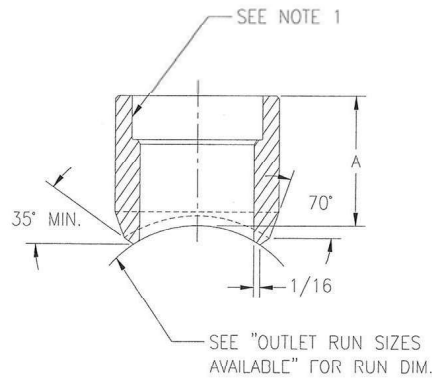
**Outlets
400 PSI Socket Weld
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400 PSI Socket Weld

Iron Pipe Size	Premier Part #	Premier Part #	Premier Outlet Run Sizes Available	A
	90/10	70/30		
1/4	B9300040	B7300040	1/4 x 1/4	0.750
	B9312040	B7312040	(3/8 x 3/4) x 1/4	
	B934T040	B734T040	(1 - 36) x 1/4	
3/8	B9300060	B7300060	3/8 x 3/8	0.810
	B9311060	B7311060	(1/2 - 3/4) x 3/8	
	B9325060	B7325060	(1 - 3) x 3/8	
	B929N060	B729N060	(3-1/2 - 36) x 3/8	
1/2	B9300100	B7300100	1/2 x 1/2	1.000
	B9311100	B7311100	(3/4 - 1) x 1/2	
	B9333100	B7333100	(1-1/4 - 2-1/2) x 1/2	
	B937N100	B737N100	(3 - 36) x 1/2	
3/4	B9300150	B7300150	3/4 x 3/4	1.060
	B9311150	B7311150	1 x 3/4	
	B9321150	B7321150	(1-1/4 x 1-1/2) x 3/4	
	B9344150	B7344150	(2 - 4) x 3/4	
	B939K150	B739K150	(4-1/2 - 36) x 3/4	
1	B9300200	B7300200	1 x 1	1.310
	B9311200	B7311200	(1-1/4 - 1-1/2) x 1	
	B9331200	B7331200	(2 - 2-1/2) x 1	
	B9355200	B7355200	(3 - 6) x 1	
	B93BG200	B73BG200	(7 - 36) x 1	
1-1/4	B9300250	B7300250	1-1/4 x 1-1/4	1.310
	B9310250	B7310250	1-1/2 x 1-1/4	
	B9320250	B7320250	2 x 1-1/4	
	B9331250	B7331250	(2-1/2 - 3) x 1-1/4	
	B9353250	B7353250	(3-1/2 - 5) x 1-1/4	
	B9398250	B7398250	(6 - 16) x 1-1/4	
	B93BG250	B73BG250	(18 - 36) x 1-1/4	

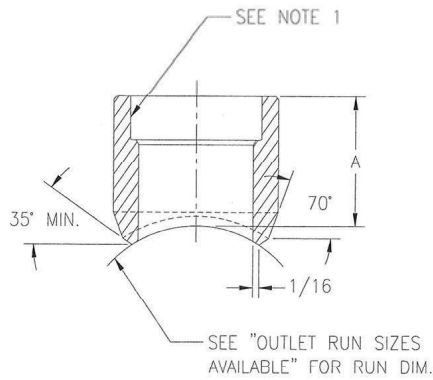
**Outlets
400 PSI Socket Weld
(Page 2 of 3)**



400 PSI Socket Weld

Iron Pipe Size	Premier Part #	Premier Part #	Premier Outlet Run Sizes Available	A
	90/10	70/30		
1-1/2	B9300300	B7300300	1-1/2 x 1-1/2	1.380
	B9310300	B7310300	2 x 1-1/2	
	B9320300	B7320300	2-1/2 x 1-1/2	
	B9331300	B7331300	(3 - 3-1/2) x 1-1/2	
	B9352300	B7352300	(4 - 5) x 1-1/2	
	B9385300	B7385300	(6 - 11) x 1-1/2	
	B93EB300	B73EB300	(12 - 36) x 1-1/2	
2	B9300400	B7300400	2 x 2	1.500
	B9310400	B7310400	2-1/2 x 2	
	B9320400	B7320400	3 x 2	
	B9331400	B7331400	(3-1/2 - 4) x 2	
	B9351400	B7351400	(4-1/2 x 5) x 2	
	B9372400	B7372400	(6 - 8) x 2	
	B93A5400	B73A5400	(9 - 16) x 2	
	B93EB400	B73EB400	(18 - 36) x 2	
2-1/2	B9300450	B7300450	2-1/2 x 2-1/2	1.810
	B9310450	B7310450	3 x 2-1/2	
	B9320450	B7320450	3-1/2 x 2-1/2	
	B9331450	B7331450	(4 - 4-1/2) x 2-1/2	
	B9350450	B7350450	5 x 2-1/2	
	B9361450	B7361450	(6 - 7) x 2-1/2	
	B9382450	B7382450	(8 - 10) x 2-1/2	
	B93A4450	B73A4450	(11 - 18) x 2-1/2	
	B93G7450	B73G7450	(20 - 36) x 2-1/2	

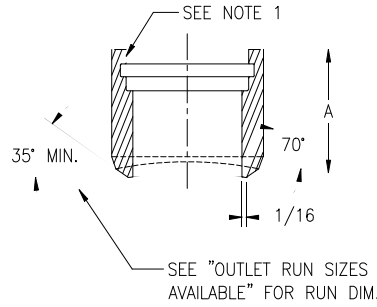
**Outlets
400 PSI Socket Weld
(Page 3 of 3)**



400 PSI Socket Weld

Iron Pipe Size	Premier Part #	Premier Part #	Premier Outlet Run Sizes Available	A
	90/10	70/30		
3	B9300500	B7300500	3 x 3	2.000
	B9310500	B7310500	3-1/2 x 3	
	B9320500	B7320500	4 x 3	
	B9330500	B7330500	4-1/2 x 3	
	B9340500	B7340500	5 x 3	
	B9350500	B7350500	6 x 3	
	B9361500	B7361500	(7 - 8) x 3	
	B9382500	B7382500	(9 - 11) x 3	
	B93A2500	B73A2500	(12 - 16) x 3	
	B93E4500	B73E4500	(18 - 28) x 3	
B93K3500	B73K3500	(30 - 36) x 3		
3-1/2	B9300550	B7300550	3-1/2 x 3-1/2	2.125
	B9310550	B7310550	4 x 3-1/2	
	B9320550	B7320550	4-1/2 x 3-1/2	
	B9330550	B7330550	5 x 3-1/2	
	B9340550	B7340550	6 x 3-1/2	
	B9350550	B7350550	7 x 3-1/2	
	B9361550	B7361550	(8 - 9) x 3-1/2	
	B9382550	B7382550	(10 - 12) x 3-1/2	
	B93B1550	B73B1550	(14 - 16) x 3-1/2	
B93D2550	B73D2550	(18 - 24) x 3-1/2		
B93F5550	B73F5550	(26 - 36) x 3-1/2		
4	B9300600	B7300600	4 x 4	2.250
	B9310600	B7310600	4-1/2 x 4	
	B9320600	B7320600	5 x 4	
	B9330600	B7330600	6 x 4	
	B9340600	B7340600	7 x 4	
	B9350600	B7350600	8 x 4	
	B9361600	B7361600	(9 - 10) x 4	
	B9381600	B7381600	(11 - 12) x 4	
	B93A1600	B73A1600	(14 - 16) x 4	
	B93C1600	B73C1600	(18 - 20) x 4	
	B93E5600	B73E5600	(24 - 34) x 4	
	B93L0600	B73L0600	36 x 4	

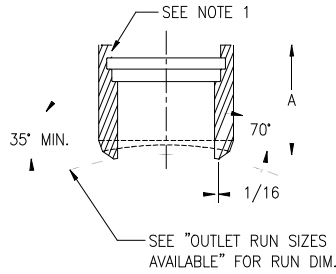
Outlets
400 PSI Silver Braze
 (Page 1 of 2)



Silver-Braze Outlet

Iron Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Outlet Run Sizes Available	A	Est. Weight
	90/10	90/10	70/30	70/30			
1/4	B9400040	695208.040	B7400040	695308.040	1/4 x 1/4	0.750	0.12
	B9412040		B7412040		(3/8 – 3/4) x 1/4		
	B944T040		B744T040		(1 – 36) x 1/4		
3/8	B9400060	695208.060	B7400060	695308.060	3/8 x 3/8	.810	0.20
	B9411060		B7411060		(1/2 – 3/4) x 3/8		
	B9425060		B7425060		(1 – 3) x 3/8		
	B949N060		B749N060		(3-1/2 - 36) x 3/8		
1/2	B9400100	695208.100	B7400100	695308.100	1/2 x 1/2	1.000	0.30
	B9411100		B7411100		(3/4 – 1) x 1/2		
	B9433100		B7433100		(1-1/4 – 2-1/2) x 1/2		
	B947N100		B747N100		(3 – 36) x 1/2		
3/4	B9400150	695208.150	B7400150	695308.150	3/4 x 3/4	1.060	0.44
	B9411150		B7411150		1 x 3/4		
	B9421150		B7421150		(1-1/4 – 1-1/2) x 3/4		
	B9444150		B7444150		(2 – 4) x 3/4		
	B949K150		B749K150		(4-1/2 – 36) x 3/4		
1	B9400200	695208.200	B7400200	695308.200	1 x 1	1.310	0.62
	B9411200		B7411200		(1-1/4 – 1-1/2) x 1		
	B9431200		B7431200		(2 – 2-1/2) x 1		
	B9455200		B7455200		(3 – 6) x 1		
	B94BG200		B74BG200		(7 – 36) x 1		
1-1/4	B9400250	695208.250	B7400250	695308.250	1-1/4 x 1-1/4	1.310	1.08
	B9410250		B7410250		1-1/2 x 1-1/4		
	B9420250		B7420250		2 x 1-1/4		
	B9431250		B7431250		(2-1/2 – 3) x 1-1/4		
	B9453250		B7453250		(3-1/2 – 5) x 1-1/4		
	B9498250		B7498250		(6 – 16) x 1-1/4		
	B94J8250		B74J8250		(18 – 36) x 1-1/4		
1-1/2	B9400300	695208.300	B7400300	695308.300	1-1/2 x 1-1/2	1.380	1.58
	B9410300		B7410300		2 x 1-1/2		
	B9420300		B7420300		2-1/2 x 1-1/2		
	B9431300		B7431300		(3 – 3-1/2) x 1-1/2		
	B9452300		B7452300		(4 – 5) x 1-1/2		
	B9485300		B7485300		(6 – 11) x 1-1/2		
	B94EB300		B74EB300		(12 – 36) x 1-1/2		

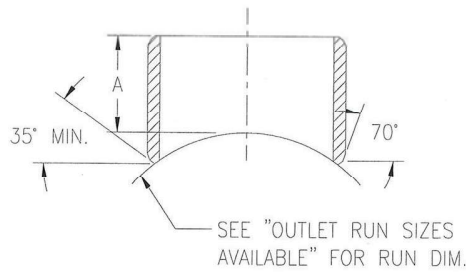
Outlets
400 PSI Silver Braze
 (Page 2 of 2)



Silver-Braze Outlet

Iron Pipe Size	Premier Part #	W&O Part #	Premier Part #	W&O Part #	Premier Outlet Run Sizes Available	A	Est. Weight
	90/10	90/10	70/30	70/30			
2	B9400400	695208.400	B7400400	695308.400	2 x 2	1.500	2.04
	B9410400		B7410400		2-1/2 x 2		
	B9420400		B7420400		3 x 2		
	B9431400		B7431400		(3-1/2 x 4) x 2		
	B9451400		B7451400		(4-1/2 - 5) x 2		
	B9472400		B7472400		(6 - 8) x 2		
	B94A5400		B74A5400		(9 - 16) x 2		
	B94GB400		B74GB400		(18 - 36) x 2		
2-1/2	B9400450	695208.450	B7400450	695308.450	2-1/2 x 2-1/2	1.810	3.22
	B9410450		B7410450		3 x 2-1/2		
	B9420450		B7420450		3-1/2 x 2-1/2		
	B9431450		B7431450		(4 - 4-1/2) x 2-1/2		
	B9450450		B7450450		5 x 2-1/2		
	B9461450		B7461450		(6 - 7) x 2-1/2		
	B9482450		B7482450		(8 - 10) x 2-1/2		
	B94A4450		B74A4450		(11 - 18) x 2-1/2		
B94G7450	B74G7450	(20 - 36) x 2-1/2					
3	B9400500	695208.500	B7400500	695308.500	3 x 3	2.000	3.88
	B9410500		B7410500		3-1/2 x 3		
	B9420500		B7420500		4 x 3		
	B9430500		B7430500		4-1/2 x 3		
	B9440500		B7440500		5 x 3		
	B9450500		B7450500		6 x 3		
	B9461500		B7461500		(7 - 8) x 3		
	B9482500		B7482500		(9 - 11) x 3		
	B94A2500		B74A2500		(12 - 16) x 3		
	B94E4500		B74E4500		(18 - 28) x 3		
	B94K3500		B74K3500		(30 - 36) x 3		
3-1/2	B9400550	695208.550	B7400550	695308.550	3-1/2 x 3-1/2	2.125	5.22
	B9410550		B7410550		4 x 3-1/2		
	B9420550		B7420550		4-1/2 x 3-1/2		
	B9430550		B7430550		5 x 3-1/2		
	B9440550		B7440550		6 x 3-1/2		
	B9450550		B7450550		7 x 3-1/2		
	B9461550		B7461550		(8 - 9) x 3-1/2		
	B9482550		B7482550		(10 - 12) x 3-1/2		
	B94B1550		B74B1550		(14 - 16) x 3-1/2		
	B94D2550		B74D2550		(18 - 24) x 3-1/2		
	B94F5550		B74F5550		(26 - 36) x 3-1/2		
4	B9400600	695208.600	B7400600	695308.600	4 x 4	2.250	6.40
	B9410600		B7410600		4-1/2 x 4		
	B9420600		B7420600		5 x 4		
	B9430600		B7430600		6 x 4		
	B9440600		B7440600		7 x 4		
	B9450600		B7450600		8 x 4		
	B9461600		B7461600		(9 - 10) x 4		
	B9481600		B7481600		(11 - 12) x 4		
	B944A1600		B744A1600		(14 - 16) x 4		
	B944C1600		B744C1600		(18 - 20) x 4		

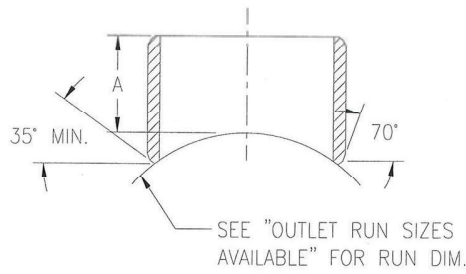
**Outlets
CL-200 Butt Weld
(Page 1 of 3)**



CL-200 Butt Weld

Iron Pipe Size	Premier Part #	Premier Part #	Premier Outlet Run Sizes Available	A
	90/10	70/30		
1/4	B9500040	B7500040	1/4 x 1/4	0.750
	B9512040	B7512040	(3/8 - 3/4) x 1/4	
	B954t040	B754t040	(1 - 36) x 1/4	
3/8	B9500060	B7500060	3/8 x 3/8	0.810
	B9511060	B7511060	(1/2 - 3/4) x 3/8	
	B9525060	B7525060	(1 - 3) x 3/8	
	B959N060	B759N060	(3-1/2 - 36) x 3/8	
1/2	B9500100	B7500100	1/2 x 1/2	1.000
	B9511100	B7511100	(3/4 - 1) x 1/2	
	B9534100	B7534100	(1-1/4 - 3) x 1/2	
	B958M100	B758M100	(3-1/2 x 36) x 1/2	
3/4	B9500150	B7500150	3/4 x 3/4	1.060
	B9511150	B7511150	1 x 3/4	
	B9521150	B7521150	(1-1/4 - 1-1/2) x 3/4	
	B9544150	B7544150	(2 - 4) x 3/4	
	B959K150	B759K150	(4-1/2 - 36) x 3/4	
1	B9500200	B7500200	1 x 1	1.310
	B9511200	B7511200	(1-1/4 - 1-1/2) x 1	
	B9531200	B7531200	(2 - 2-1/2) x 1	
	B9555200	B7555200	(3 - 6) x 1	
	B95BG200	B75BG200	(7 - 36) x 1	
1-1/4	B9500250	B7500250	1-1/4 x 1-1/4	1.310
	B9510250	B7510250	1-1/2 x 1-1/4	
	B9520250	B7520250	2 x 1-1/4	
	B9531250	B7531250	(2-1/2 x 3) x 1-1/4	
	B9553250	B7553250	(3-1/2 x 5) x 1-1/4	
	B9598250	B7598250	(6 - 16) x 1-1/4	
	B95J8250	B75J8250	(18 - 36) x 1-1/4	
1-1/2	B9500300	B7500300	1-1/2 x 1-1/2	1.380
	B9510300	B7510300	2 x 1-1/2	
	B9520300	B7520300	2-1/2 x 1-1/2	
	B9531300	B7531300	(3 - 3-1/2) x 1-1/2	
	B9552300	B7552300	(4 - 5) x 1-1/2	
	B9585300	B7585300	(6 - 11) x 1-1/2	
	B95EB300	B75EB300	(12 - 36) x 1-1/2	

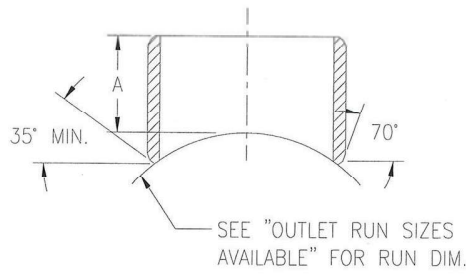
**Outlets
CL-200 Butt Weld
(Page 2 of 3)**



CL-200 Butt Weld

Iron Pipe Size	Premier Part #	Premier Part #	Premier Outlet Run Sizes Available	A
	90/10	70/30		
2	B9500400	B7500400	2 x 2	1.500
	B9510400	B7510400	2-1/2 x 2	
	B9520400	B7520400	3 x 2	
	B9531400	B7531400	(3-1/2 - 4) x 2	
	B9551400	B7551400	(4-1/2 - 5) x 2	
	B9572400	B7572400	(6 - 8) x 2	
	B95A5400	B75A5400	(9 - 16) x 2	
	B95G8400	B75G8400	(18 - 36) x 2	
2-1/2	B9500450	B7500450	2-1/2 x 2-1/2	1.620
	B9510450	B7510450	3 x 2-1/2	
	B9520450	B7520450	3-1/2 x 2-1/2	
	B9531450	B7531450	(4 - 4-1/2) x 2-1/2	
	B9550450	B7550450	5 x 2-1/2	
	B9560450	B7560450	6 x 2-1/2	
	B9572450	B7572450	(7 - 9) x 2-1/2	
	B95A3450	B75A3450	(10 - 14) x 2-1/2	
	B95E6450	B75E6450	(16 - 30) x 2-1/2	
	B95M2450	B75M2450	(32 - 36) x 2-1/2	
3	B9500500	B7500500	3 x 3	1.750
	B9510500	B7510500	3-1/2 x 3	
	B9520500	B7520500	4 x 3	
	B9530500	B7530500	4-1/2 x 3	
	B9540500	B7540500	5 x 3	
	B9550500	B7550500	6 x 3	
	B9561500	B7561500	(7 - 8) x 3	
	B9582500	B7582500	(9 - 11) x 3	
	B95B2500	B75B2500	(12 - 16) x 3	
	B95E4500	B75E4500	(18 - 28) x 3	
B95K3500	B75K3500	(30 - 36) x 3		
3-1/2	B9500550	B7500550	3-1/2 x 3-1/2	1.880
	B9510550	B7510550	4 x 3-1/2	
	B9520550	B7520550	4-1/2 x 3-1/2	
	B9530550	B7530550	5 x 3-1/2	
	B9540550	B7540550	6 x 3-1/2	
	B9550550	B7550550	7 x 3-1/2	
	B9561550	B7561550	(8 - 9) x 3-1/2	
	B9582550	B7582550	(10 - 12) x 3-1/2	
	B95B1550	B75B1550	(14 - 16) x 3-1/2	
	B95D2550	B75D2550	(18 - 24) x 3-1/2	
B95F5550	B75F5550	(26 - 36) x 3-1/2		

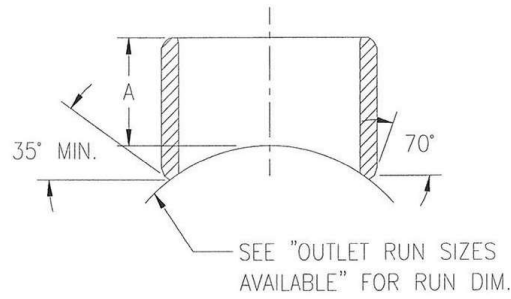
**Outlets
CL-200 Butt Weld
(Page 3 of 3)**



CL-200 Butt Weld

Iron Pipe Size	Premier Part #	Premier Part #	Premier Outlet Run Sizes Available	A
	90/10	70/30		
4	B9500600	B7500600	4 x 4	2.000
	B9510600	B7510600	4-1/2 x 4	
	B9520600	B7520600	5 x 4	
	B9530600	B7530600	6 x 4	
	B9540600	B7540600	7 x 4	
	B9550600	B7550600	8 x 4	
	B9561600	B7561600	(9 - 10) x 4	
	B9581600	B7581600	(11 - 12) x 4	
	B95A1600	B75A1600	(14 - 16) x 4	
	B95C1600	B75C1600	(18 - 20) x 4	
	B95E5600	B75E5600	(24 - 34) x 4	
B95L0600	B75L0600	36 x 4		
5	B9500650	B7500650	5 x 5	2.250
	B9510650	B7510650	6 x 5	
	B9520650	B7520650	7 x 5	
	B9530650	B7530650	8 x 5	
	B9540650	B7540650	9 x 5	
	B9550650	B7550650	10 x 5	
	B9561650	B7561650	(11 - 12) x 5	
	B9580650	B7580650	14 x 5	
	B9591650	B7591650	(16 - 18) x 5	
	B95B0650	B75B0650	20 x 5	
	B95D2650	B75D2650	(24 - 28) x 5	
B95F3650	B75F3650	(30 - 36) x 5		
6	B9500700	B7500700	6 x 6	2.380
	B9510700	B7510700	7 x 6	
	B9520700	B7520700	8 x 6	
	B9530700	B7530700	9 x 6	
	B9540700	B7540700	10 x 6	
	B9550700	B7550700	11 x 6	
	B9560700	B7560700	12 x 6	
	B9570700	B7570700	14 x 6	
	B9580700	B7580700	16 x 6	
	B9590700	B7590700	18 x 6	
	B95A0700	B75A0700	20 x 6	
	B95B1700	B75B1700	(24 - 26) x 6	
	B95D2700	B75D2700	(28 - 32) x 6	
B95G1700	B75G1700	(34 - 36) x 6		

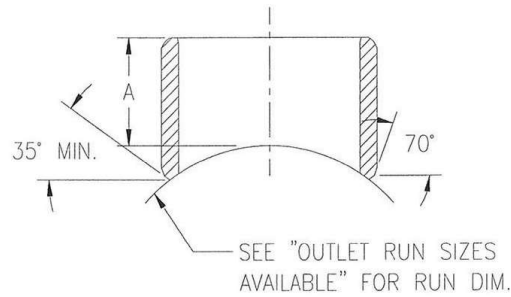
**Outlets
CL-700 Butt Weld
(Page 1 of 2)**



CL-700 Butt Weld

Iron Pipe Size	Premier Part #	Premier Outlet Run Sizes Available	A
	70/30		
1/4	B7600040	1/4 x 1/4	0.620
	B7612040	(3/8 - 3/4) x 1/4	
	B764T040	(1 - 36) x 1/4	
3/8	B760060	3/8 x 3/8	0.750
	B7611060	(1/2 - 3/4) x 3/8	
	B7636060	(1 - 3-1/2) x 3/8	
	B76AL060	(4 - 36) x 3/8	
1/2	B7600100	1/2 x 1/2	0.750
	B7611100	(3/4 - 1) x 1/2	
	B7634100	(1-1/4 - 3) x 1/2	
	B768M100	(3-1/2 - 36) x 1/2	
3/4	B7600150	3/4 x 3/4	0.880
	B7610150	1 x 3/4	
	B7622150	(1-1/4 - 2) x 3/4	
	B7649150	(2 - 8) x 3/4	
	B76EE150	(9 - 36) x 3/4	
1	B7600200	1 x 1	1.060
	B7611200	(1-1/4 - 1-1/2) x 1	
	B7632200	(2 - 3) x 1	
	B7667200	(3-1/2 - 9) x 1	
	B76ED200	(10 - 36) x 1	

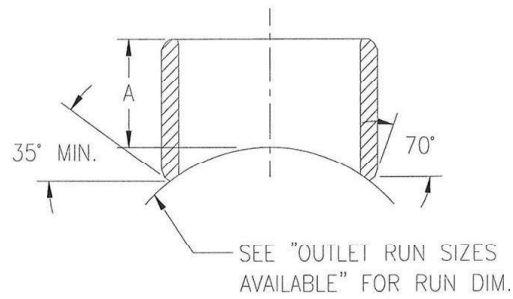
**Outlets
CL-700 Butt Weld
(Page 2 of 3)**



CL-700 Butt Weld

Iron Pipe Size	Premier Part #	Premier Outlet Run Sizes Available	A
	70/30		
1-1/4	B7600250	1-1/4 x 1-1/4	1.250
	B7610250	1-1/2 x 1-1/4	
	B7620250	2 x 1-1/4	
	B7631250	(2-1/2 - 3) x 1-1/4	
	B7653250	(3-1/2 - 5) x 1-1/4	
	B7699250	(6 - 18) x 1-1/4	
	B76K7250	(20 - 36) x 1-1/4	
1-1/2	B7600300	1-1/2 x 1-1/2	1.310
	B7610300	2 x 1-1/2	
	B7620300	2-1/2 x 1-1/2	
	B7632300	(3 - 4) x 1-1/2	
	B7669300	(4-1/2 - 7) x 1-1/2	
	B76A9300	(8 - 24) x 1-1/2	
	B76L5300	(26 - 36) x 1-1/2	
2	B7600400	2 x 2	1.500
	B7610400	2-1/2 x 2	
	B7620400	3 x 2	
	B7631400	(3-1/2 - 4) x 2	
	B7651400	(4-1/2 - 5) x 2	
	B7672400	(6 - 8) x 2	
	B76A5400	(9 - 16) x 2	
	B76GB400	(18 - 36) x 2	
2-1/2	B7600450	2-1/2 x 2-1/2	1.620
	B7610450	3 x 2-1/2	
	B7620450	3-1/2 x 2-1/2	
	B7631450	(4 - 4-1/2) x 2-1/2	
	B7650450	5 x 2-1/2	
	B7661450	(6 - 7) x 2-1/2	
	B7683450	(8 - 11) x 2-1/2	
	B76C4450	(12 - 20) x 2-1/2	
	B76H6450	(24 - 36) x 2-1/2	

**Outlets
CL-700 Butt Weld
(Page 3 of 3)**



CL-700 Butt Weld

Iron Pipe Size	Premier Part #	Premier Outlet Run Sizes Available	A
	70/30		
3	B7600500	3 x 3	1.750
	B7610500	3-1/2 x 3	
	B7620500	4 x 3	
	B7630500	4-1/2 x 3	
	B7640500	5 x 3	
	B7650500	6 x 3	
	B7661500	(7 - 8) x 3	
	B7682500	(9 - 11) x 3	
	B76B3500	(12 - 16) x 3	
	B76E5500	(18 - 28) x 3	
	B76L2500	(30 - 36) x 3	
3-1/2	B7600550	3-1/2 x 3-1/2	1.880
	B7610550	4 x 3-1/2	
	B7620550	4-1/2 x 3-1/2	
	B7630550	5 x 3-1/2	
	B7640550	6 x 3-1/2	
	B7650550	7 x 3-1/2	
	B7661550	(8 - 9) x 3-1/2	
	B7682550	(10 - 12) x 3-1/2	
	B76B2550	(14 - 18) x 3-1/2	
	B76E2550	(20 - 30) x 3-1/2	
	B76K2550	(32 - 36) x 3-1/2	
4	B7600600	4 x 4	2.000
	B7610600	4-1/2 x 4	
	B7620600	5 x 4	
	B7630600	6 x 4	
	B7640600	7 x 4	
	B7650600	8 x 4	
	B7661600	(9 - 10) x 4	
	B7681600	(11 - 12) x 4	
	B76A1600	(14 - 16) x 4	
	B76C1600	(18 - 20) x 4	
	B76E7600	(24 - 36) x 4	



Contents

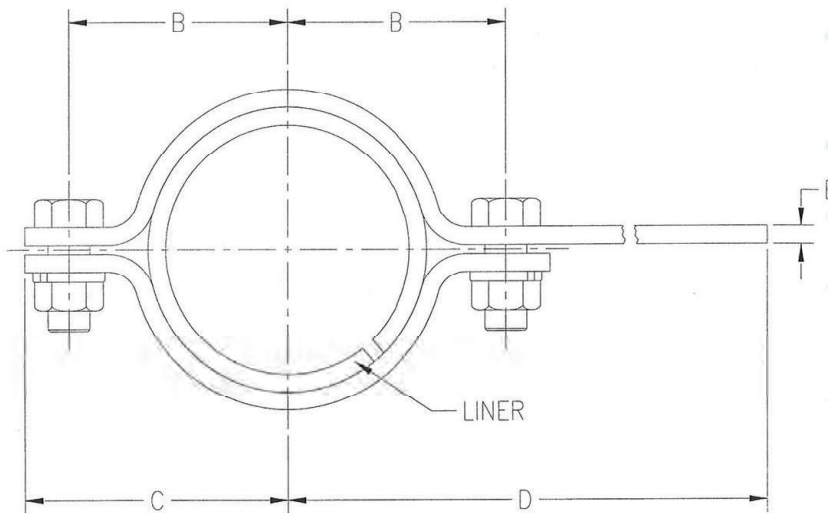
Type 1	1
Type 2	2
Type 4	3
Type 5	4
Type 7	5
Type 38	6
Type 35B.....	7
Aluminum Support Clip Assembly	8



Pipe Hangers

- Pipe Hangers conform to the dimensional requirements of Navships Dwg. 810-4714432 Revision J.
- Material to be A-36 Steel.
- Fasteners to be Grade 2 or Grade 5.
- Neoprene Liner iaw ASTM D-2000-75E Shore A 60. 1/4 and 3/8 NPS hangers have 1/8" liners. All other sizes have 1/4" liners.
- Hangers supplied uncoated unless specified by customer.

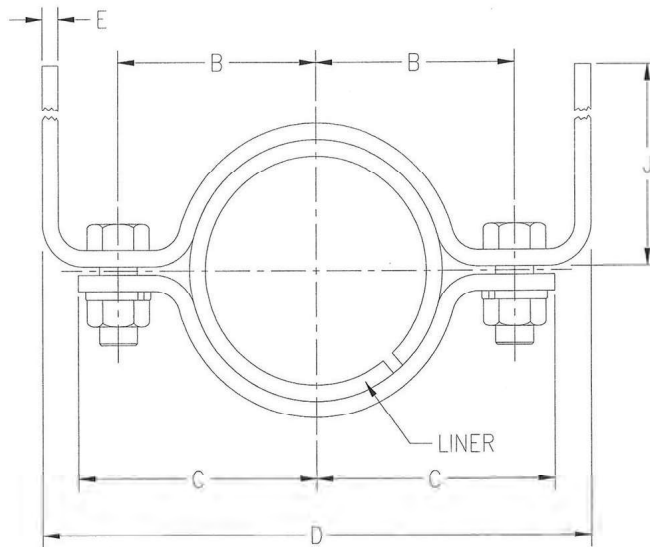
Pipe Hangers
Type 1
Dwg. 810-4714432



Type 1

Nominal Pipe Size	Premier Part #	W&O Part #	B	C	D	E	Bolt Size	Est. Weight (Lbs.)
1/4	PH431040	548901.040	1.188	1.688	15 Max.	0.188	3/8	1.30
3/8	PH431060	548901.060	1.125	1.750	15 Max.	0.188	3/8	1.40
1/2	PH431100	548901.100	1.500	2.000	15 Max.	0.188	3/8	1.50
3/4	PH431150	548901.150	1.688	2.188	15 Max.	0.188	3/8	1.60
1	PH431200	548901.200	1.813	2.313	15 Max.	0.188	3/8	2.10
1-1/4	PH431250	548901.250	2.000	2.500	15 Max.	0.188	3/8	2.20
1-1/2	PH431300	548901.300	2.125	2.625	15 Max.	0.188	3/8	2.50
2	PH431400	548901.400	2.500	3.0125	15 Max.	0.250	1/2	2.80
2-1/2	PH431450	548901.450	2.813	3.438	15 Max.	0.250	1/2	2.90
3	PH431500	548901.500	3.125	3.750	15 Max.	0.250	1/2	3.00
3-1/2	PH431550	548901.550	3.375	4.000	15 Max.	0.250	1/2	3.10
4	PH431600	548901.600	3.750	4.500	15 Max.	0.250	5/8	3.40
5	PH431650	548901.650	4.375	5.375	15 Max.	0.250	3/4	3.90
6	PH431700	548901.700	4.938	5.938	15 Max.	0.250	3/4	6.00
8	PH431750	548901.750	6.125	7.125	15 Max.	0.375	3/4	6.90
10	PH431800	548901.800	7.188	8.188	15 Max.	0.375	1	7.40
12	PH431820	548901.820	8.375	9.625	15 Max.	0.375	1	8.40

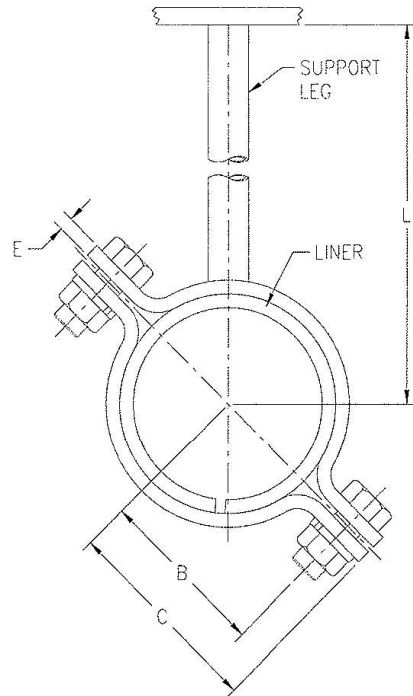
**Pipe Hangers
Type 2
Dwg. 810-4714432**



Type 2

Nominal Pipe Size	Premier Part #	W&O Part #	B	C	D	E	J	Bolt Size	Est. Weight (Lbs.)
1/4	PH432040	548432.040	1.188	1.688	4.500	0.188	15 Max.	3/8	1.30
3/8	PH432060	548432.060	1.125	1.750	4.625	0.188	15 Max.	3/8	1.40
1/2	PH432100	548432.100	1.500	2.000	5.125	0.188	15 Max.	3/8	1.50
3/4	PH432150	548432.150	1.688	2.188	5.500	0.188	15 Max.	3/8	1.60
1	PH432200	548432.200	1.813	2.313	5.750	0.188	15 Max.	3/8	2.10
1-1/4	PH432250	548432.250	2.000	2.500	6.125	0.188	15 Max.	3/8	2.20
1-1/2	PH432300	548432.300	2.125	2.625	6.375	0.188	15 Max.	3/8	2.50
2	PH432400	548432.400	2.500	3.125	7.375	0.250	15 Max.	1/2	2.80
2-1/2	PH432450	548432.450	2.813	3.438	8.000	0.250	15 Max.	1/2	2.90
3	PH432500	548432.500	3.125	3.750	8.625	0.250	15 Max.	1/2	4.30
3-1/2	PH432550	548432.550	3.375	4.000	9.125	0.250	15 Max.	1/2	4.40
4	PH432600	548432.600	3.750	4.500	10.125	0.250	15 Max.	5/8	4.80
5	PH432650	548432.650	4.375	5.375	11.625	0.250	15 Max.	3/4	5.50
6	PH432700	548432.700	4.938	5.938	12.750	0.250	15 Max.	3/4	8.80
8	PH432750	548432.750	6.125	7.125	15.500	0.375	15 Max.	3/4	9.80
10	PH432800	548432.800	7.188	8.188	17.625	0.375	15 Max.	1	10.50
12	PH432820	548432.820	8.375	9.625	20.375	0.375	15 Max.	1	12.00

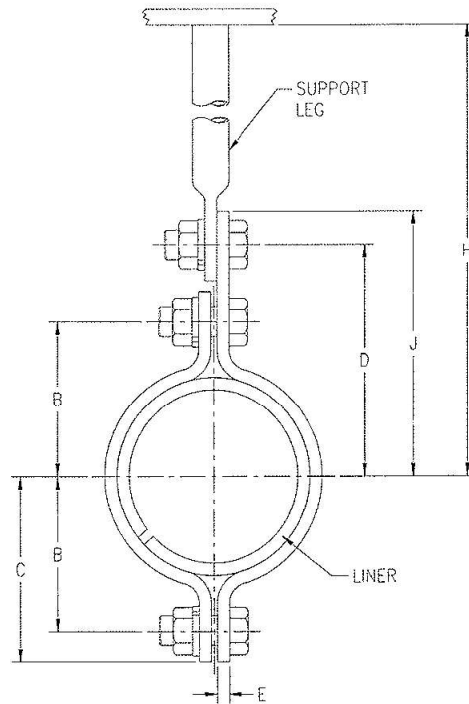
Pipe Hangers
Type 4
Dwg. 810-4714432



Type 4

Nominal Pipe Size	Premier Part #	W&O Part #	B	C	E	L	Bolt Size	Est. Weight (Lbs.)
1/4	PH434040	548436.040	1.188	1.688	0.188	15 Max.	3/8	1.20
3/8	PH434060	548436.060	1.250	1.750	0.188	15 Max.	3/8	1.30
1/2	PH434100	548436.100	1.500	2.000	0.188	15 Max.	3/8	1.40
3/4	PH434150	548436.150	1.688	2.188	0.188	15 Max.	3/8	1.50
1	PH434200	548436.200	1.813	2.313	0.188	15 Max.	3/8	2.00
1-1/4	PH434250	548436.250	2.000	2.500	0.188	15 Max.	3/8	2.10
1-1/2	PH434300	548436.300	2.125	2.625	0.188	15 Max.	3/8	2.40
2	PH434400	548436.400	2.500	3.125	0.250	15 Max.	1/2	2.70
2-1/2	PH434450	548436.450	2.813	3.438	0.250	15 Max.	1/2	2.80
3	PH434500	548436.500	3.125	3.750	0.250	15 Max.	1/2	2.90
3-1/2	PH434550	548436.550	3.375	4.000	0.250	15 Max.	1/2	3.00
4	PH434600	548436.600	3.750	4.500	0.250	15 Max.	5/8	3.30
5	PH434650	548436.650	4.375	5.375	0.250	15 Max.	3/4	3.80
6	PH434700	548436.700	4.938	5.938	0.250	15 Max.	3/4	5.80
8	PH434750	548436.750	6.125	7.125	0.375	15 Max.	3/4	6.80
10	PH434800	548436.800	7.188	8.188	0.375	15 Max.	1	7.30
12	PH434820	548436.820	8.375	9.625	0.375	15 Max.	1	8.20

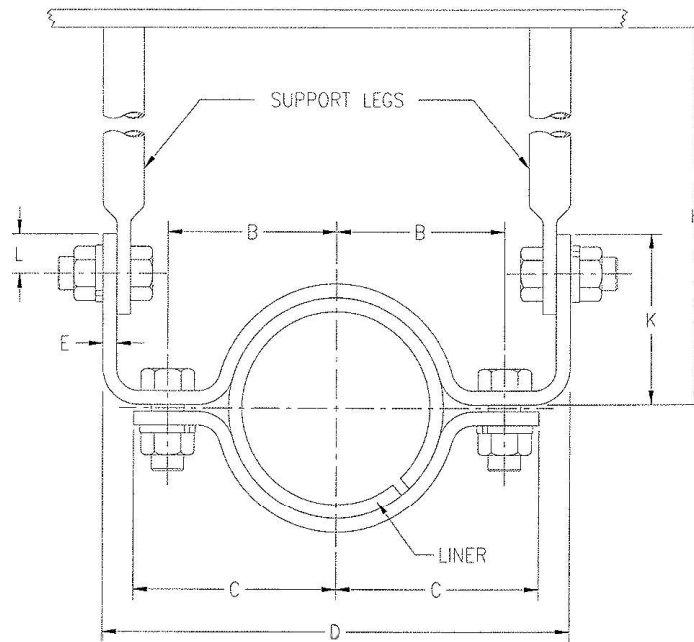
**Pipe Hangers
Type 5
Dwg 810-4714432**



Type 5

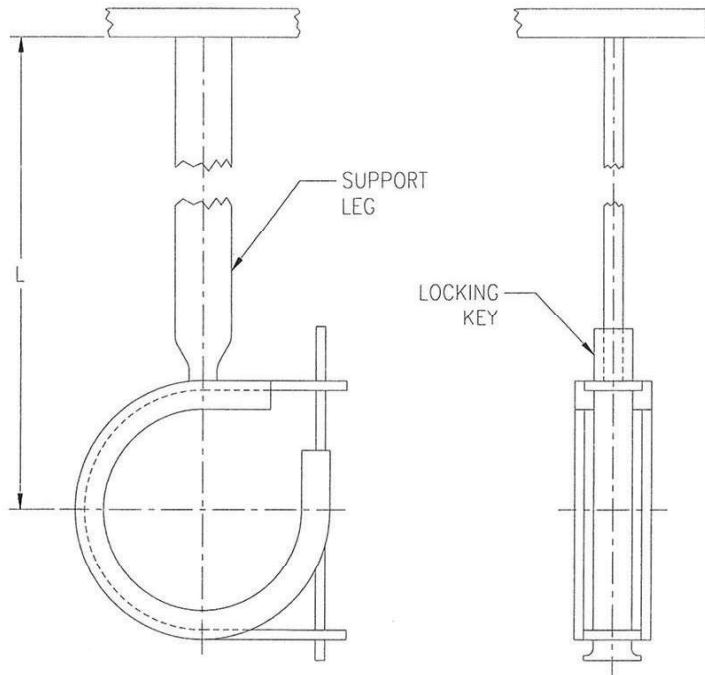
Nominal Pipe Size	Premier Part #	W&O Part #	B	C	D	E	J	H	Bolt Size	Est. Weight (Lbs.)
1/4	PH435040	548437.040	1.188	1.688	2.563	0.188	3.063	15 Min.	3/8	1.20
3/8	PH435060	548437.060	1.250	1.750	2.625	0.188	3.125	15 Min.	3/8	1.30
1/2	PH435100	548437.100	1.500	2.000	2.938	0.188	3.438	15 Min.	3/8	1.40
3/4	PH435150	548437.150	1.688	2.188	3.125	0.188	3.625	15 Min.	3/8	1.50
1	PH435200	548437.200	1.813	2.313	3.250	0.188	3.750	15 Min.	3/8	2.00
1-1/4	PH435250	548437.250	2.000	2.500	3.438	0.188	3.938	15 Min.	3/8	2.10
1-1/2	PH435300	548437.300	2.125	2.625	3.563	0.188	4.063	15 Min.	3/8	2.40
2	PH435400	548437.400	2.500	3.125	4.188	0.250	4.813	15 Min.	1/2	2.70
2-1/2	PH435450	548437.450	2.813	3.438	4.500	0.250	5.125	15 Min.	1/2	2.80
3	PH435500	548437.500	3.125	3.750	4.813	0.250	5.438	15 Min.	1/2	2.90
3-1/2	PH435550	548437.550	3.375	4.000	5.063	0.250	5.688	15 Min.	1/2	3.00
4	PH435600	548437.600	3.750	4.500	5.688	0.250	6.438	15 Min.	5/8	3.30
5	PH435650	548437.650	4.375	5.375	6.938	0.250	7.938	15 Min.	3/4	3.80
6	PH435700	548437.700	4.938	5.938	7.688	0.250	8.688	15 Min.	3/4	5.80
8	PH435750	548437.750	6.125	7.125	8.875	0.375	9.875	15 Min.	3/4	6.80
10	PH435800	548437.800	7.188	8.188	9.938	0.375	10.938	15 Min.	1	7.30
12	PH435820	548437.820	8.375	9.625	11.750	0.375	13.000	15 Min.	1	8.20

Pipe Hangers
Type 7
Dwg. 810-4714432



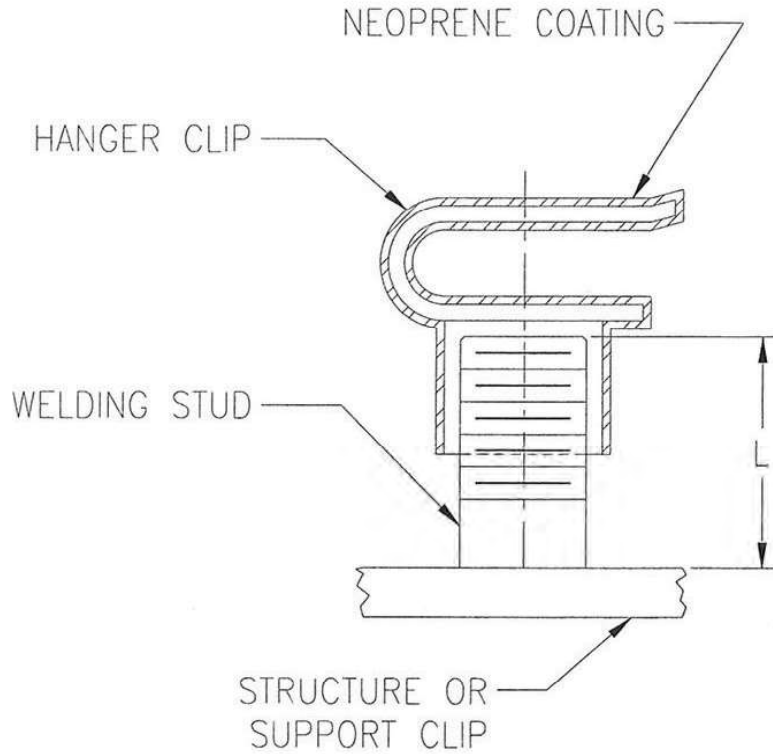
Type 7

NPS	Premier Part #	W&O Part #	B	C	D	E	H	K	L	Bolt Size	Est. Weight (Lbs.)
1/4	PH437040	548438.040	1.188	1.688	4.500	0.188	15 Min.	2.625	0.500	3/8	1.20
3/8	PH437060	548438.060	1.250	1.750	4.625	0.188	15 Min.	2.625	0.500	3/8	1.30
1/2	PH437100	548438.100	1.500	2.000	5.125	0.188	15 Min.	2.625	0.500	3/8	1.40
3/4	PH437150	548438.150	1.688	2.188	5.500	0.188	15 Min.	2.625	0.500	3/8	1.50
1	PH437200	548438.200	1.813	2.313	5.750	0.188	15 Min.	2.625	0.500	3/8	2.00
1-1/4	PH437250	548438.250	2.000	2.500	6.125	0.188	15 Min.	2.625	0.500	3/8	2.10
1-1/2	PH437300	548438.300	2.125	2.625	6.375	0.188	15 Min.	2.625	0.500	3/8	2.40
2	PH437400	548438.400	2.500	3.125	7.375	0.250	15 Min.	2.875	0.625	1/2	2.70
2-1/2	PH437450	548438.450	2.813	3.438	8.000	0.250	15 Min.	2.875	0.625	1/2	2.80
3	PH437500	548438.500	3.125	3.750	8.625	0.250	15 Min.	2.875	0.625	1/2	2.90
3-1/2	PH437550	548438.550	3.375	4.000	9.125	0.250	15 Min.	2.875	0.625	1/2	3.00
4	PH437600	548438.600	3.750	4.500	10.125	0.250	15 Min.	3.125	0.750	5/8	3.30
5	PH437650	548438.650	4.375	5.375	11.625	0.250	15 Min.	3.375	0.750	3/4	3.80
6	PH437700	548438.700	4.938	5.938	12.750	0.250	15 Min.	3.375	0.750	3/4	5.80
8	PH437750	548438.750	6.125	7.125	15.500	0.375	15 Min.	3.625	0.750	3/4	6.80
10	PH437800	548438.800	7.188	8.188	17.625	0.375	15 Min.	3.625	0.750	1	7.30
12	PH437820	548438.820	8.375	9.625	20.375	0.375	15 Min.	4.875	1.250	1	8.20



Type 38

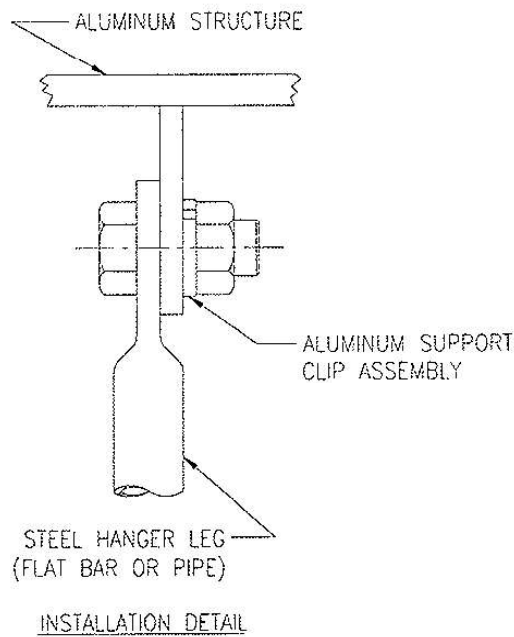
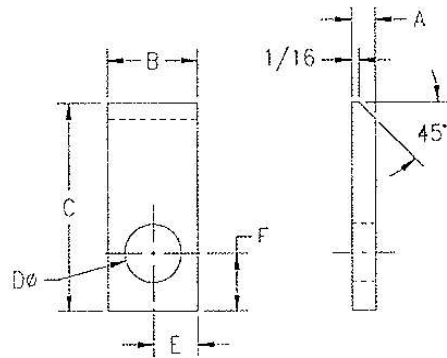
Nominal Pipe Size	Premier Part #	W&O Part #	L
1/4	PH438040	548439.040	18 Max.
3/8	PH438060	548439.060	18 Max.
1/2	PH438100	548439.100	18 Max.
3/4	PH438150	548439.150	18 Max.
1	PH438200	548439.200	18 Max.
1-1/4	PH438250	548439.250	18 Max.
1-1/2	PH438300	548439.300	18 Max.
2	PH438400	548439.400	18 Max.



Type 35B

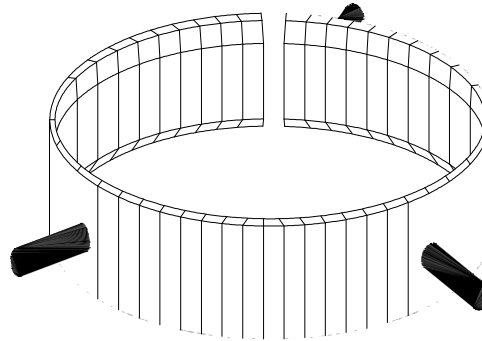
Nominal Pipe Size	Premier Part #	W&O Part #	L - Max. Stud Length
1/4 NPS	PH35B040	54835B.040.A	2-3/4 Max.
1/4 OD	PH35B004	54835B.004.A	2-3/4 Max.
3/8 OD	PH35B006	54835B.006.A	2-3/4 Max.
1/2 OD	PH35B010	54835B.010.A	2-3/4 Max.

**Aluminum Support
Clip Assembly**



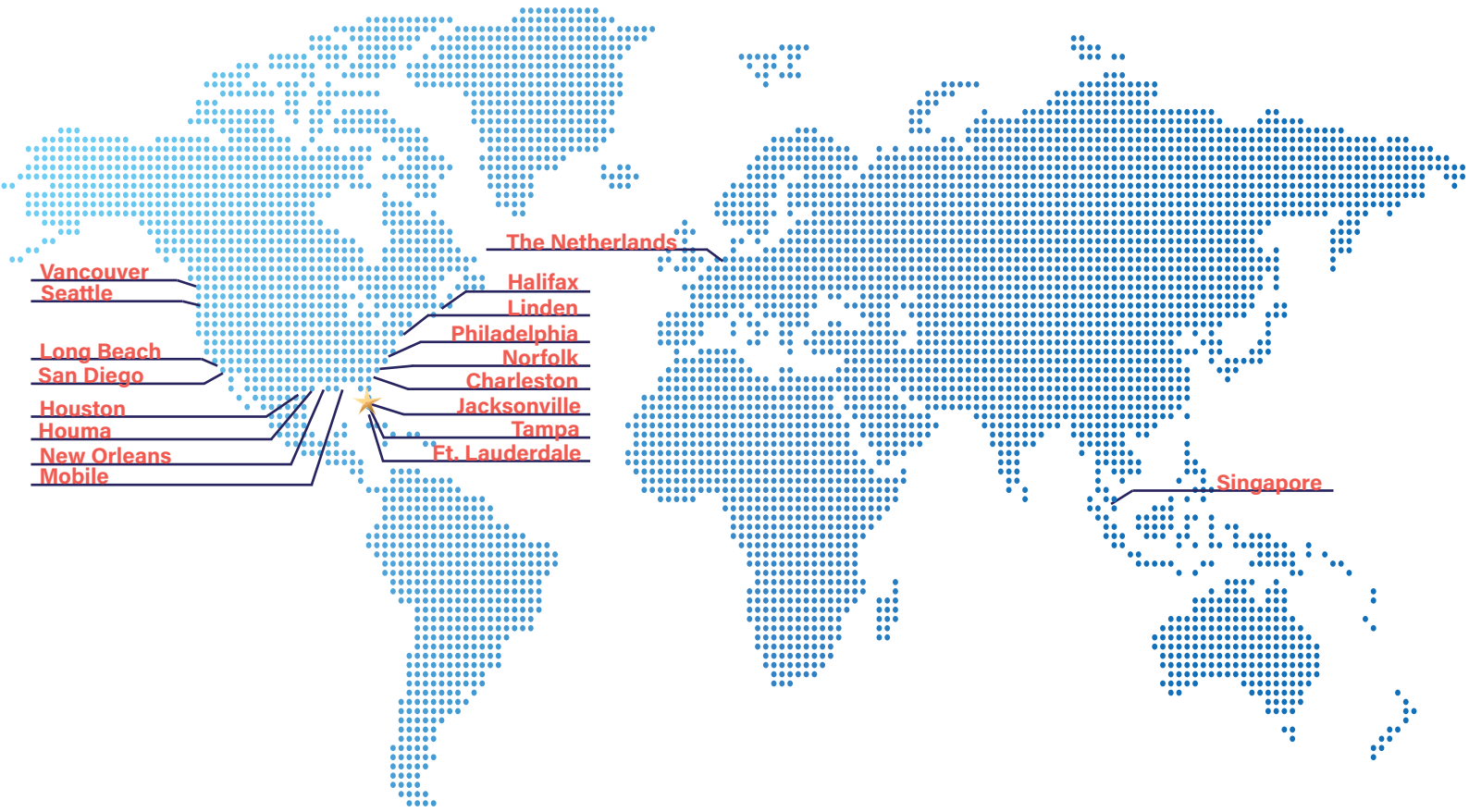
Aluminum Support – Clip Assembly

Assembly	A	B	C	D	E	F	Hanger Type	Nominal Pipe Size
98	1/4	1-1/4	5	7/16	5/8	5/8	1, 2, 4, 5, 7	1-1/4 - 1-1/2
95	1/2	1-1/4	4	9/16	5/8	5/8	1, 2, 4, 5, 7	2 - 3-1/2
94	1/2	1-1/2	4	11/16	3/4	3/4	1, 2, 4, 5, 7	4
93	1/2	2	4	13/16	1	1	1, 2, 4, 5, 7	5
92	1/2	2-1/2	4	13/16	1-1/4	1-1/4	1, 2, 4, 5, 7	6
91	1/2	3-1/2	4	13/16	1-3/4	1-3/4	2, 4, 5, 7	8



Backing Ring

Nominal Pipe Size	Backing Ring Material				Est. Weight
	Premier Part #	W&O Part #	Premier Part #	W&O Part #	
	90/10 CuNi	90/10 CuNi	70/30 CuNi	70/30 CuNi	
1	BR910200	549991.200	BR710200	549992.200	0.125
1-1/4	BR910250	549991.250	BR710250	549992.250	0.195
1-1/2	BR910300	549991.300	BR710300	549992.300	0.250
2	BR910400	549991.400	BR710400	549992.400	0.295
2-1/2	BR910450	549991.450	BR710450	549992.450	0.350
3	BR910500	549991.500	BR710500	549992.500	0.395
3-1/2	BR910550	549991.550	BR710550	549992.550	0.450
4	BR910600	549991.600	BR710600	549992.600	0.495
5	BR910650	549991.650	BR710650	549992.650	0.595
6	BR910700	549991.700	BR710700	549992.700	0.795
8	BR910750	549991.750	BR710750	549992.750	1.000
10	BR910800	549991.800	BR710800	549992.800	1.500
12	BR910820	549991.820	BR710820	549992.820	1.900



 <p>\$50+ mil STANDING INVENTORY</p>	 <p>330 DEDICATED MARITIME PROS</p>	 <p>18 LOCATIONS GLOBALLY</p>	 <p>40+ yrs IN THE MARITIME INDUSTRY</p>
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