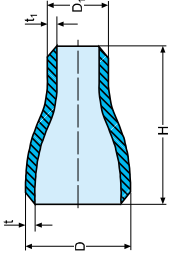


Concentric reducers

ASTM A403 / A815 ASME B16.9

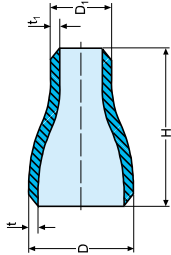


● WP-S = made from seamless pipe
▲ WP-W = made from welded pipe or plate

Nominal pipe size	Schedule	Dimensions in mm D D1	t	t1	H	Weight kg/pc	304L	316L	UNS S31803	UNS S32750
¾ x ½"	10s	26.7 21.3	2.11	2.11	39.3	0.090	●/▲	●/▲	●	●
	40s	26.7 21.3	2.87	2.77	39.3	0.230	●	●/▲	●	●
	80s	26.7 21.3	3.91	3.73	39.3	0.159		●		
1 x ½"	10s	33.4 21.3	2.77	2.11	50.8	0.100	●/▲	●/▲	●	●
	40s	33.4 21.3	3.38	2.77	50.8	0.140	●/▲	●/▲	●	●
	80s	33.4 21.3	4.55	3.73	50.8	0.163		●		
1 x ¾"	10s	33.4 26.7	2.77	2.11	50.8	0.100	●/▲	●/▲	●	●
	40s	33.4 26.7	3.38	2.87	50.8	0.116	●/▲	●/▲	●	●
	80s	33.4 26.7	4.55	3.91	50.8	0.175		●		
1¼ x ½"	10s	42.2 21.3	2.77	2.11	50.8	0.103		●/▲		
	40s	42.2 21.3	3.56	2.77	50.8	0.132	●			
	80s	42.2 21.3	4.85	3.91	50.8	0.187				
1¼ x 1"	10s	42.2 33.4	2.77	2.77	50.8	0.180	●	●/▲	●	●
	40s	42.2 33.4	3.56	3.38	50.8	0.140	●	●/▲	●	●
	80s	42.2 33.4	4.85	4.55	50.8	0.245		●		
1½ x ½"	10s	48.3 21.3	2.77	2.11	63.5	0.150	▲	●/▲		
	40s	48.3 21.3	3.68	2.77	63.5	0.200		●/▲		
	80s	48.3 21.3	5.08	3.91	63.5	0.310		●		
1½ x 1"	10s	48.3 33.4	2.77	2.77	63.5	0.170	●/▲	●/▲	●	●
	40s	48.3 33.4	3.68	3.38	63.5	0.220	●	●/▲	●	●
	80s	48.3 33.4	5.08	4.55	63.5	0.308		●		
1½ x 1¼"	10s	48.3 42.2	2.77	2.77	63.5	0.195	●/▲	●/▲	●	●
	40s	48.3 42.2	3.68	3.56	63.5	0.255	●	●/▲	●	●
	80s	48.3 42.2	5.08	4.85	63.5	0.330		●		
2 x ½"	10s	60.3 21.3	5.54	3.73	76.2	0.330	●			
	40s	60.3 21.3	7.27	5.08	76.2	0.458				
	80s	60.3 21.3	10.16	7.62	76.2	0.706				
2 x ¾"	10s	60.3 26.7	2.77	2.11	76.2	0.214	●	●	●	●
	40s	60.3 26.7	3.91	2.87	76.2	0.300		●		
	80s	60.3 26.7	5.08	3.91	76.2	0.458				
2 x 1"	10s	60.3 33.4	2.77	2.77	76.2	0.233	●/▲	●/▲	●	●
	40s	60.3 33.4	3.91	3.38	76.2	0.322	●/▲	●/▲	●	●
	80s	60.3 33.4	5.54	4.55	76.2	0.458		●		
2 x 1¼"	10s	60.3 42.2	2.77	2.77	76.2	0.255	●/▲	●/▲	●	●
	40s	60.3 42.2	3.91	3.56	76.2	0.352	●	●/▲	●	●
	80s	60.3 42.2	5.08	4.85	76.2	0.458		●		
2 x 1½"	10s	60.3 48.3	2.77	2.77	76.2	0.273	●/▲	●/▲	●	●
	40s	60.3 48.3	3.91	3.68	76.2	0.372	●/▲	●/▲	●	●
	80s	60.3 48.3	5.54	5.08	76.2	0.522		●		

Concentric reducers

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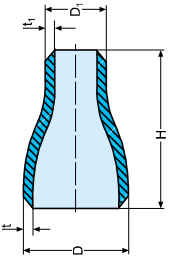


● WP-S = made from seamless pipe
▲ WP-W = made from welded pipe or plate

Nominal pipe size	Schedule	Dimensions in mm D D1	t	t1	H	Weight kg/pc	304L	316L	UNS S31803	UNS S32750
2½ x 1"	10s	73.0 33.4	3.05	2.77	88.9	0.430		●		
	40s	73.0 33.4	3.05	2.77	88.9	0.336	●/▲	●/▲	●	●
	80s	73.0 33.4	3.05	2.77	88.9	0.661		●		
2½ x 2"	10s	73.0 60.3	3.05	2.77	88.9	0.430	●/▲	●/▲	●	●
	40s	73.0 60.3	3.05	2.77	88.9	0.724	●	●/▲	●	●
	80s	73.0 60.3	3.05	2.77	88.9	0.938		●		
3 x 1"	10s	88.9 33.4	3.05	2.77	88.9	0.455	●/▲	●/▲	●	●
	40s	88.9 33.4	3.05	2.77	88.9	0.726	●	●		
	80s	88.9 33.4	3.05	2.77	88.9	0.750		●		
3 x 1½"	10s	88.9 48.3	3.05	2.77	88.9	0.449	●/▲	●/▲	●	●
	40s	88.9 48.3	3.05	2.77	88.9	0.783	●	●/▲	●	●
	80s	88.9 48.3	3.05	2.77	88.9	1.105		●		
3 x 2"	10s	88.9 60.3	3.05	2.77	88.9	0.484	●/▲	●/▲	●	●
	40s	88.9 60.3	3.05	2.77	88.9	1.000	●/▲	●/▲	●	●
	80s	88.9 60.3	3.05	2.77	88.9	1.178		●		
3 x 2½"	10s	88.9 73.0	3.05	3.05	88.9	0.548	●/▲	●/▲	●	●
	40s	88.9 73.0	3.05	3.05	88.9	0.933	●	●/▲	●	●
	80s	88.9 73.0	3.05	3.05	88.9	1.193		●		
4 x 1½"	10s	114.3 48.3	3.05	2.77	101.6	0.630		▲		
	40s	114.3 48.3	3.05	2.77	101.6	1.180		●		
	80s	114.3 48.3	3.05	2.77	101.6	1.665		●		
4 x 2"	10s	114.3 60.3	3.05	2.77	101.6	0.665	●/▲	●/▲	●	●
	40s	114.3 60.3	3.05	2.77	101.6	1.270	●/▲	●/▲	●	●
	80s	114.3 60.3	3.05	2.77	101.6	1.780		●		
4 x 2½"	10s	114.3 73.0	3.05	3.05	101.6	0.706	●/▲	●/▲	●	●
	40s	114.3 73.0	3.05	3.05	101.6	1.370	●	●/▲	●	●
	80s	114.3 73.0	3.05	3.05	101.6	1.780		●		
4 x 3"	10s	114.3 88.9	3.05	3.05	101.6	0.758	●/▲	●/▲	●	●
	40s	114.3 88.9	3.05	3.05	101.6	1.450	●/▲	●/▲	●	●
	80s	114.3 88.9	3.05	3.05	101.6	2.120		●		
5 x 2½"	10s	141.3 73.0	3.40	3.05	127.0	1.200	●			
	40s	141.3 73.0	3.40	3.05	127.0	1.250	●/▲	●/▲	▲	▲
	80s	141.3 73.0	3.40	3.05	127.0	2.270		▲		
5 x 3"	10s	141.3 88.9	3.40	3.05	127.0	1.330	●/▲	●/▲	▲	▲
	40s	141.3 88.9	3.40	3.05	127.0	2.270	●	●/▲	●	●
	80s	141.3 88.9	3.40	3.05	127.0	2.270		●		
5 x 4"	10s	141.3 114.3	3.40	3.05	139.7	1.530	●/▲	●/▲	●	●
	40s	141.3 114.3	3.40	3.05	139.7	3.040	●/▲	●/▲	●	●
	80s	141.3 114.3	3.40	3.05	139.7	5.030		●		
6 x 3"	10s	168.3 88.9	7.11	5.49	139.7	1.650	●/▲	●/▲	▲	▲
	40s	168.3 88.9	7.11	5.49	139.7	3.300	●/▲	●/▲	●	●
	80s	168.3 88.9	7.11	5.49	139.7	5.540		●		
6 x 4"	10s	168.3 114.3	7.11	6.02	139.7	1.650	●/▲	●/▲	▲	▲
	40s	168.3 114.3	7.11	6.02	139.7	3.300	●/▲	●/▲	●	●
	80s	168.3 114.3	7.11	6.02	139.7	5.540		●		
6 x 5"	10s	168.3 141.4	7.11	6.55	139.7	1.780	▲	●/▲	▲	▲
	40s	168.3 141.4	7.11	6.55	139.7	3.570	●/▲	●/▲	●	●
	80s	168.3 141.4	7.11	6.55	139.7	5.540		●		

Concentric reducers

ASTM A403 / A815 ASME B16.9



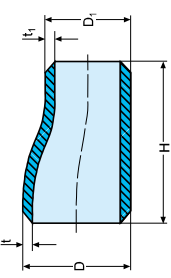
● WP-S = made from seamless pipe
▲ WP-W = made from welded pipe or plate

Nominal pipe size	Schedule	Dimensions in mm		t	t ₁	H	Weight kg/pc	304L	316L	UNS S31803	UNS S32750
8 x 4"	10s	219.1	114.3	3.76	3.05	152.4	2.560	●/▲	●/▲	▲	▲
	40s	219.1	114.3	8.18	6.02	152.4	5.100	●/▲	●/▲	●/▲	●/▲
8 x 5"	10s	219.1	141.3	3.76	3.40	152.4	2.630	●/▲	●/▲	●/▲	●/▲
	40s	219.1	141.3	8.18	6.55	152.4	5.400	●	●	●	●
8 x 6"	10s	219.1	168.3	3.76	3.40	152.4	2.740	●/▲	●/▲	▲	▲
	40s	219.1	168.3	8.18	7.11	152.4	5.640	●/▲	●/▲	●/▲	●/▲
10 x 6"	10s	273.1	168.3	4.19	3.40	177.8	4.140	▲	●/▲	▲	▲
	40s	273.1	168.3	9.27	7.11	177.8	8.780	▲	●/▲	●/▲	●/▲
10 x 8"	10s	273.1	219.1	4.19	3.76	177.8	4.500	▲	●/▲	▲	▲
	40s	273.1	219.1	9.27	8.18	177.8	9.580	▲	●/▲	●/▲	●/▲
12 x 6"	10s	323.9	168.3	4.57	3.40	203.2	5.920	▲	▲	▲	▲
	40s	323.9	168.3	9.53	7.11	203.2	11.800	▲	▲	▲	▲
12 x 8"	10s	323.9	219.1	4.57	3.76	203.2	6.310	▲	▲	▲	▲
	40s	323.9	219.1	9.53	8.18	203.2	13.700	▲	▲	▲	▲
12 x 10"	10s	323.9	273.1	4.57	4.19	203.2	6.780	▲	▲	▲	▲
	40s	323.9	273.1	9.53	9.27	203.2	14.700	▲	▲	▲	▲
14 x 8"	10s	355.6	219.1	4.78	3.76	330.2	12.070	▲	▲	▲	▲
	40s	355.6	219.1	9.53	8.18	330.2	24.140	▲	▲	▲	▲
14 x 10"	10s	355.6	273.1	4.78	4.19	330.2	13.210	▲	▲	▲	▲
	40s	355.6	273.1	9.53	9.27	330.2	26.420	▲	▲	▲	▲
16 x 8"	10s	406.4	219.1	4.78	3.76	355.6	15.000	▲	▲	▲	▲
	40s	406.4	219.1	9.53	8.18	355.6	30.000	▲	▲	▲	▲
16 x 10"	10s	406.4	273.1	4.78	4.19	355.6	15.370	▲	▲	▲	▲
	40s	406.4	273.1	9.53	9.27	355.6	30.740	▲	▲	▲	▲
16 x 12"	10s	406.4	323.9	4.78	4.57	355.6	16.520	▲	▲	▲	▲
	40s	406.4	323.9	9.53	9.27	355.6	33.040	▲	▲	▲	▲
16 x 14"	10s	406.4	355.6	4.78	4.78	355.6	17.240	▲	▲	▲	▲
	40s	406.4	355.6	9.53	9.53	355.6	34.480	▲	▲	▲	▲
18 x 14"	10s	457.2	355.6	4.78	4.78	381.0	19.710	▲	▲	▲	▲
	40s	457.2	355.6	9.53	9.53	381.0	39.420	▲	▲	▲	▲
18 x 16"	10s	457.2	406.4	4.78	4.78	381.0	20.940	▲	▲	▲	▲
	40s	457.2	406.4	9.53	9.53	381.0	41.880	▲	▲	▲	▲
20 x 16"	10s	508.0	406.4	5.54	4.78	508.0	36.010	▲	▲	▲	▲
	40s	508.0	406.4	11.08	9.53	508.0	72.020	▲	▲	▲	▲
20 x 18"	10s	508.0	457.2	5.54	4.78	508.0	38.010	▲	▲	▲	▲
	40s	508.0	457.2	11.08	9.53	508.0	76.020	▲	▲	▲	▲
24 x 20"	10s	609.6	508.0	6.35	5.54	508.0	50.610	▲	▲	▲	▲
	40s	609.6	508.0	12.70	11.08	508.0	101.220	▲	▲	▲	▲

While the figure illustrates a bell-shaped reducer, the use of a conical reducer is not prohibited.

Eccentric reducers

ASTM A403 ASME B16.9

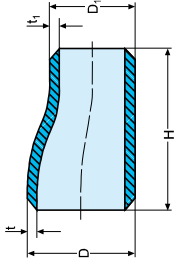


● WP-S = made from seamless pipe
▲ WP-W = made from welded pipe or plate

Nominal pipe size	Schedule	Dimensions in mm		t	t ₁	H	Weight kg/pc	304L	316L
¾ x ½"	10s	26.7	21.3	2.11	2.11	39.3	0.090	●/▲	●/▲
	40s	26.7	21.3	2.87	2.77	39.3	0.130	●	●
1 x ½"	10s	33.4	21.3	2.77	2.11	50.8	0.100	●/▲	●/▲
	40s	33.4	21.3	3.38	2.77	50.8	0.140	●/▲	●/▲
1 x ¾"	10s	33.4	26.7	2.77	2.11	50.8	0.110	●/▲	●/▲
	40s	33.4	26.7	3.38	2.87	50.8	0.150	●/▲	●/▲
1½ x ¾"	10s	42.2	26.7	2.77	2.11	50.8	0.118	●	●
	40s	42.2	26.7	3.38	2.77	50.8	0.120	●	●
1½ x 1"	10s	42.2	33.4	2.77	2.77	50.8	0.157	●	●
	40s	42.2	33.4	3.56	3.38	50.8	0.157	●	●
1½ x 1½"	10s	48.3	21.3	3.68	2.77	63.5	0.200	●	●
	40s	48.3	21.3	4.55	3.91	63.5	0.245	●	●
1½ x 2"	10s	48.3	26.7	2.77	2.11	63.5	0.170	▲	●/▲
	40s	48.3	26.7	3.68	2.87	63.5	0.220	●	●
1½ x 2½"	10s	48.3	33.4	2.77	2.77	63.5	0.170	●/▲	●/▲
	40s	48.3	33.4	3.68	3.38	63.5	0.220	●/▲	●/▲
1½ x 3"	10s	48.3	42.2	2.77	2.77	63.5	0.195	●	●
	40s	48.3	42.2	3.68	3.38	63.5	0.255	●	●
2 x ¾"	10s	60.3	26.7	5.54	3.91	76.2	0.458	●	●
	40s	60.3	26.7	11.08	7.62	76.2	0.916	●	●
2 x 1"	10s	60.3	33.4	2.77	2.77	76.2	0.233	●/▲	●/▲
	40s	60.3	33.4	3.91	3.38	76.2	0.322	●/▲	●/▲
2 x 1½"	10s	60.3	42.2	2.77	2.77	76.2	0.255	▲	▲
	40s	60.3	42.2	5.54	4.85	76.2	0.478	●	●
2 x 2"	10s	60.3	48.3	3.91	3.68	76.2	0.372	●/▲	●/▲
	40s	60.3	48.3	5.54	5.08	76.2	0.522	●	●
2½ x 2"	10s	73.0	60.3	3.05	2.77	88.9	0.430	●/▲	●/▲
	40s	73.0	60.3	5.16	3.91	88.9	0.783	●	●
3 x 1"	10s	88.9	33.4	5.49	3.38	88.9	0.726	▲	▲
	40s	88.9	33.4	11.08	7.62	88.9	1.452	▲	▲
3 x 1½"	10s	88.9	48.3	3.05	2.77	88.9	0.449	●/▲	●/▲
	40s	88.9	48.3	5.49	3.68	88.9	0.783	●	●
3 x 2"	10s	88.9	60.3	3.05	2.77	88.9	0.484	●/▲	●/▲
	40s	88.9	60.3	5.49	3.91	88.9	0.846	●/▲	●/▲
3 x 2½"	10s	88.9	73.0	3.05	2.77	88.9	0.548	●/▲	●/▲
	40s	88.9	73.0	5.49	5.16	88.9	0.933	●	●

Eccentric reducers

ASTM A403 ASME B16.9



FBRE

● WP-S = made from seamless pipe
▲ WP-W = made from welded pipe or plate

Nominal pipe size	Schedule	Dimensions in mm		t	t ₁	H	Weight kg/pc	304L	316L
		D	D ₁						
4 x 1½"	10s	114.3	48.3	3.05	2.77	101.6	0.630		▲
4 x 2"	10s	114.3	60.3	3.05	2.77	101.6	0.865	●/▲	●/▲
4s		114.3	60.3	6.02	3.91	101.6	1.270	●/▲	●/▲
4 x 2½"	10s	114.3	73.0	3.05	3.05	101.6	0.706	●/▲	●/▲
4s		114.3	73.0	6.02	5.16	101.6	1.370	●	●
4 x 3"	10s	114.3	88.9	3.05	3.05	101.6	0.768	●/▲	●/▲
4s		114.3	88.9	6.02	5.49	101.6	1.450	●/▲	●/▲
5 x 3"	10s	141.3	88.9	3.40	3.05	127.0	1.250	●	●
4s		141.3	88.9	6.55	5.49	127.0	2.270		●
5 x 4"	10s	141.3	114.3	3.40	3.05	127.0	1.330		●
4s		141.3	114.3	6.55	6.02	127.0	2.500		●
6 x 3"	10s	168.3	88.9	3.40	3.05	139.7	1.530	●/▲	●/▲
4s		168.3	88.9	7.11	5.49	139.7	3.040	●/▲	●/▲
6 x 4"	10s	168.3	114.3	3.40	3.05	139.7	1.650	●/▲	●/▲
4s		168.3	114.3	7.11	6.02	139.7	3.300	●/▲	●
6 x 5"	10s	168.3	141.3	3.40	3.40	139.7	1.780		▲
4s		168.3	141.3	7.11	6.55	139.7	3.570		●
8 x 4"	10s	219.1	114.4	3.76	3.05	152.4	2.560	●/▲	●/▲
4s		219.1	114.4	8.18	6.02	152.4	5.100	●/▲	●/▲
8 x 5"	10s	219.1	141.3	3.76	3.05	152.4	2.630	●	●
4s		219.1	141.3	8.18	6.02	152.4	5.400	●	●
8 x 6"	10s	219.1	168.3	3.76	3.40	152.4	2.760	●/▲	●/▲
4s		219.1	168.3	8.18	7.11	152.4	5.640	●/▲	●/▲
10 x 6"	10s	273.1	168.3	4.19	3.40	177.8	4.140	▲	▲
4s		273.1	168.3	9.27	7.11	177.8	8.780		▲
10 x 8"	10s	273.1	219.1	4.19	3.76	177.8	4.500	▲	▲
4s		273.1	219.1	9.27	8.18	177.8	9.580	▲	▲
12 x 6"	10s	323.9	168.3	4.57	3.40	203.2	5.920	▲	▲
4s		323.9	168.3	9.53	7.11	203.2	11.800	▲	▲
12 x 8"	10s	323.9	219.1	4.57	3.76	203.2	6.310	▲	▲
4s		323.9	219.1	9.53	8.18	203.2	13.700	▲	▲
12 x 10"	10s	323.9	273.1	4.57	4.19	203.2	6.780	▲	▲
4s		323.9	273.1	9.53	9.27	203.2	14.700	▲	▲
14 x 8"	10s	355.6	219.1	4.78	3.76	330.2	12.070	▲	▲
14 x 10"	10s	355.6	273.1	4.78	4.19	330.2	13.210		▲
14 x 12"	10s	355.6	323.9	4.78	4.19	330.2	14.270	▲	▲
16 x 10"	10s	406.4	273.1	4.78	4.19	355.6	15.370	▲	▲
16 x 12"	10s	406.4	323.9	4.78	4.19	355.6	16.520	▲	▲