

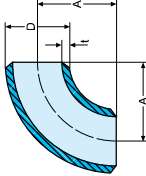
Butt welding fittings ASME standards

Standard grades according to ASTM A / ASME SA403, 304/L and 316/L (dual marked and certified), ASME B16.9, annealed and quenched, bevelled ends acc. to ASME B16.25, hardness acc. to NACE MR0175, IC acc. to ASTM A262E and PMI tested. With certificate acc. to EN10204/3.1.

Special grades according to ASTM A815 in grades UNS S31803, UNS S32750, ASME B16.9, annealed and quenched, bevelled ends acc. to ASME B16.25, hardness acc. to NACE MR0175, G48A for UNS S32750 and PMI tested. With certificate acc. to EN10204/3.1.

Long radius elbows 90°

ASTM A403 / A815 ASME B16.9

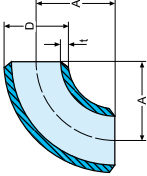


● WP-S = made from seamless pipe
▲ WP-W = made from welded pipe or plate

Nominal pipe size	Schedule	Dimensions in mm	A	Weight kg/pc	304L	316L	UNS S31803	UNS S32750
½"	10s	21.3	2.11	38.1	●/▲	●/▲	●	●
	40s	21.3	2.77	38.1	●/▲	●/▲	●	●
	80s	21.3	3.73	38.1	●	●		
¾"	160	21.3	4.78	38.1	●	●		
	10s	26.7	2.11	38.1	●/▲	●/▲	●	
	40s	26.7	2.87	38.1	●/▲	●/▲	●	●
1"	80s	26.7	3.91	38.1	●	●		
	160	26.7	5.56	38.1	●/▲	●/▲	●	
	10s	33.4	2.77	38.1	●/▲	●/▲	●	●
1¼"	40s	33.4	3.38	38.1	●/▲	●/▲	●	●
	80s	33.4	4.55	38.1	●	●		
	160	33.4	6.35	38.1	●	●		
1½"	10s	42.2	2.77	47.6	●/▲	●/▲	●	
	40s	42.2	3.56	47.6	●/▲	●/▲	●	
	80s	42.2	4.85	47.6	●	●		
2"	160	42.2	6.35	47.6	●/▲	●/▲	●	
	10s	48.3	2.77	57.2	●/▲	●/▲	●	●
	40s	48.3	3.68	57.2	●/▲	●/▲	●	●
2½"	80s	48.3	5.08	57.2	●	●		
	160	48.3	7.14	57.2	●	●		
3"	10s	60.3	2.77	76.2	●/▲	●/▲	●	●
	40s	60.3	3.91	76.2	●/▲	●/▲	●	●
	80s	60.3	5.54	76.2	●	●		
3½"	160	60.3	8.74	76.2	●	●		
	10s	73.0	3.05	95.3	●/▲	●/▲	●	
	40s	73.0	5.16	95.3	●/▲	●/▲	●	
4"	80s	73.0	7.01	95.3	●	●		
	160	73.0	9.52	95.3	●	●		
4½"	10s	88.9	3.05	114.3	●/▲	●/▲	●	●
	40s	88.9	5.49	114.3	●/▲	●/▲	●	●
	80s	88.9	7.62	114.3	●	●		
5"	160	88.9	11.13	114.3	●	●		
	10s	101.6	3.05	133.4	●/▲	●/▲	●	
	40s	101.6	5.74	133.4	●	●		
5½"	10s	114.3	3.05	152.4	●/▲	●/▲	●	●
	40s	114.3	6.02	152.4	●/▲	●/▲	●	●
	80s	114.3	8.56	152.4	●	●		
6"	160	114.3	13.49	152.4	●	●		

Long radius elbows 90°

ASTM A403 / A815 ASME B16.9



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

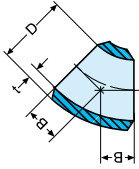
Nominal pipe size	Schedule	Dimensions in mm	A	Weight kg/pc	304L	316L	UNS S31803	UNS S32750
5"	10s	141.3	3.40	190.5	●/▲	●/▲	▲	
	40s	141.3	6.55	190.5	●/▲	●/▲	●	
	80s	141.3	9.53	190.5	●	●		
6"	10s	168.3	3.40	228.6	●/▲	●/▲	●/▲	
	40s	168.3	7.11	228.6	●/▲	●/▲	●	●
	80s	168.3	10.97	228.6	●	●		
8"	10s	219.1	3.76	304.8	●/▲	●/▲	▲	
	40s	219.1	8.18	304.8	●/▲	●/▲	●	●
	80s	219.1	12.70	304.8	●	●		
10"	10s	273.1	4.19	381.0	●/▲	●/▲	▲	
	40s	273.1	9.27	381.0	●/▲	●/▲	●	●
	80s	273.1	12.70	381.0	●	●		
12"	10s	323.9	4.57	457.2	▲	▲	▲	
	40s	323.9	9.53	457.2	▲	▲	▲	
	80s	323.9	12.70	457.2	▲	▲		
14"	10s	355.6	4.78	533.4	▲	▲	▲	
	40s	355.6	9.53	533.4	▲	▲	▲	
	80s	355.6	12.70	533.4	▲	▲		
16"	10s	406.4	4.78	609.6	▲	▲	▲	
	40s	406.4	9.53	609.6	▲	▲	▲	
	80s	406.4	12.70	609.6	▲	▲		
18"	10s	457.2	4.78	685.8	▲	▲	▲	
	40s	457.2	9.53	685.8	▲	▲	▲	
	80s	457.2	12.70	685.8	▲	▲		
20"	10s	508.0	5.54	762.0	▲	▲	▲	
	40s	508.0	11.08	762.0	▲	▲	▲	
	80s	508.0	16.61	762.0	▲	▲		
24"	10s	609.6	6.35	914.4	▲	▲	▲	
	40s	609.6	12.70	914.4	▲	▲	▲	
	80s	609.6	19.05	914.4	▲	▲		

Long radius elbows 45°

ASTM A403 / A815 ASME B16.9

Order example:

- = FBBLR45-304L-3-10s
- ▲ = FBBLR45-W304L-3-10s
- = FBBLR45-31803-3-10s



FBBLR45

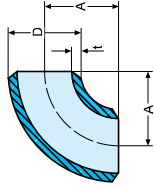
						● WP-S = made from seamless pipe ▲ WP-W = made from welded pipe or plate	
Nominal pipe size	Schedule	Dimensions in mm D t	B	Weight kg/pc	304L	316L	UNS S31803
½"	10s	21.3	2.11	15.9		●	●
	40s	21.3	2.77	15.9	●	●	
¾"	10s	26.7	2.11	19.0	●	●	●
	40s	26.7	2.87	19.0	●	●	
1"	10s	33.4	2.77	22.2	●▲	●▲	●
	40s	33.4	3.38	22.2	●▲	●▲	
1¼"	10s	42.4	2.77	25.4	●▲	●▲	
	40s	42.4	3.56	25.4	●▲	●▲	
1½"	10s	48.3	2.77	28.6	●▲	●▲	●
	40s	48.3	3.68	28.6	●	●▲	
2"	10s	60.3	2.77	34.9	●▲	●▲	●
	40s	60.3	3.91	34.9	▲	●▲	●
2½"	10s	73.0	3.05	44.5	●▲	●▲	
	40s	73.0	5.16	44.5	●▲	●▲	
3"	10s	88.9	3.05	50.8	●▲	●▲	●
	40s	88.9	5.49	50.8	●▲	●▲	●
4"	10s	114.3	3.05	63.5	●▲	●▲	●
	40s	114.3	6.02	63.5	●▲	●▲	●
5"	10s	141.3	3.40	79.4	▲	▲	
	40s	141.3	6.55	79.4	●▲	●▲	
6"	10s	168.3	3.40	95.3	●▲	●▲	●▲
	40s	168.3	7.11	95.3	●▲	●▲	
8"	10s	219.1	3.76	127.0	●▲	●▲	▲
	40s	219.1	8.18	127.0	●▲	●▲	●
10"	10s	273.1	4.19	159.0	●▲	●▲	▲
	40s	273.1	9.27	159.0	●▲	●▲	
12"	10s	323.9	4.57	190.5	▲	▲	▲
	40s	323.9	9.53	190.5	▲	▲	
14"	10s	355.6	4.78	222.3	▲	▲	
	40s	355.6	9.53	222.3	▲	▲	
16"	10s	406.4	4.78	254.0	▲	▲	
	40s	406.4	9.53	254.0	▲	▲	
20"	10s	508.0	5.54	317.5	▲	▲	
	40s	508.0	11.08	317.5	▲	▲	
24"	10s	609.6	6.35	381.0	▲	▲	
	40s	609.6	12.7	381.0	▲	▲	

Short radius elbows 90°

ASTM A403 ASME B16.28 / ASME B16.9

Order example:

- = FBBSR-316L-4-10s
- ▲ = FBBSR-W316L-4-10s



FBBSR

						● WP-S = made from seamless pipe ▲ WP-W = made from welded pipe or plate	
Nominal pipe size	Schedule	Dimensions in mm D t	A	Weight kg/pc	304L	316L	
1"	10s	33.4	2.77	25.4	●▲	●▲	●▲
	40s	33.4	3.38	25.4	●	●	●
1¼"	10s	42.4	2.77	31.8	●	●	●
	40s	42.4	3.56	31.8	●	●	●
1½"	10s	48.3	2.77	38.1	●▲	●▲	●▲
	40s	48.3	3.68	38.1	●	●	●
2"	10s	60.3	2.77	50.8	●▲	●▲	●▲
	40s	60.3	3.91	50.8	●	●	●
2½"	10s	73.0	3.05	63.5	●▲	●▲	●▲
	40s	73.0	5.16	63.5	●	●	●
3"	10s	88.9	3.05	76.2	●▲	●▲	●▲
	40s	88.9	5.49	76.2	●	●	●
4"	10s	114.3	3.05	101.6	▲	▲	●▲
	40s	114.3	6.02	101.6	●	●	●
5"	10s	141.3	3.40	127.0	●	●	●▲
	40s	141.3	6.55	127.0	●	●	●
6"	10s	168.3	3.40	152.4	●▲	●▲	●▲
	40s	168.3	7.11	152.4	●	●	●▲
8"	10s	219.1	3.76	203.2	▲	▲	●
	40s	219.1	8.18	203.2	●▲	●▲	●▲
10"	10s	273.1	4.19	254.0	▲	▲	▲
	40s	273.1	9.27	254.0	▲	▲	▲
12"	10s	323.9	4.57	304.8	▲	▲	▲
	40s	323.9	9.53	304.8	▲	▲	▲
14"	10s	355.6	4.78	355.6	▲	▲	▲
	STD	355.6	9.53	355.6	▲	▲	▲
16"	10s	406.4	4.78	406.4	▲	▲	▲
	STD	406.4	9.53	406.4	▲	▲	▲
18"	10s	457.2	4.19	457.2	▲	▲	▲
	STD	457.2	9.27	457.2	▲	▲	▲
20"	10s	508.0	4.78	508.0	▲	▲	▲
	STD	508.0	9.53	508.0	▲	▲	▲
24"	10s	609.6	6.35	609.6	▲	▲	▲
	STD	609.6	12.7	609.6	▲	▲	▲