

## DOUBLE EXPANSION JOINT WITH O-RING

Double expansion joint is sometimes referred to as back-to-back expansion joint.

Installation of Expansion Joints:

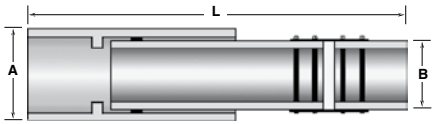
- When the duct is shorter than 50 ft., no Expansion Joint needed
- When the duct is between 50 ft. up to 200 ft., install one Expansion Joint at the mid point
- If the duct is longer than 200 ft., install one Expansion Joint every 200 ft. apart

Note: All Expansion Joints have a yellow line on the nipple end of the joint for proper installation.

Nominal Size	Type	IPS Item No.		A	B	L - Min	L - Max	Weight	
		Belowground	Aboveground					lbs	kg
¾	SW	07A-SW-39	07C-SW-39	1.20 (30)	17 (432)	29 (737)	45 (1143)	0.84	(0.38)
1	SW	10A-SW-39	10C-SW-39	1.46 (37)	17 (432)	29 (737)	45 (1143)	0.94	(0.43)
1¼	SW	12A-SW-39	12C-SW-39	1.81 (46)	17 (432)	29 (737)	45 (1143)	1.14	(0.52)
1½	SW	15A-SW-39	15C-SW-39	2.04 (52)	17 (432)	29 (737)	45 (1143)	1.63	(0.74)
2	SW	20A-SW-39	20C-SW-39	2.54 (65)	17 (432)	29 (737)	45 (1143)	1.88	(0.85)
3	SW	30A-SW-39	30C-SW-39	3.66 (93)	17 (432)	29 (737)	45 (1143)	2.97	(1.35)
4	SW	40A-SW-39	40C-SW-39	4.61 (117)	17 (432)	29 (737)	45 (1143)	3.56	(1.62)
4	HW	40A-HW-39	40C-HW-39	4.69 (119)	17 (432)	29 (737)	45 (1143)	4.80	(2.18)
5	SW	50A-SW-39	50C-SW-39	5.68 (144)	17 (432)	29 (737)	45 (1143)	4.46	(2.03)
5	MW	50A-MW-39	50C-MW-39	5.79 (147)	17 (432)	29 (737)	45 (1143)	5.94	(2.70)
5	HW	50A-HW-39	50C-HW-39	5.85 (149)	17 (432)	29 (737)	45 (1143)	6.44	(2.92)
6	SW	60A-SW-39	60C-SW-39	6.75 (171)	17 (432)	29 (737)	45 (1143)	4.95	(2.25)
6	MW	60A-MW-39	60C-MW-39	6.85 (174)	17 (432)	29 (737)	45 (1143)	7.03	(3.19)
6	HW	60A-HW-39	60C-HW-39	6.91 (176)	17 (432)	29 (737)	45 (1143)	8.07	(3.66)

Nominal Size	Type	ID Item No.		A	B	L - Min	L - Max	Weight	
		Belowground	Aboveground					lbs	kg
2	SW	20B-SW-39	20D-SW-39	2.30 (58)	17 (432)	29 (737)	45 (1143)	1.68	(0.76)
2½	SW	25B-SW-39	25D-SW-39	2.80 (71)	17 (432)	29 (737)	45 (1143)	2.08	(0.94)
3	SW	30B-SW-39	30D-SW-39	3.30 (84)	17 (432)	29 (737)	45 (1143)	2.38	(1.08)
3½	SW	35B-SW-39	35D-SW-39	3.80 (96)	17 (432)	29 (737)	45 (1143)	2.97	(1.35)
4	SW	40B-SW-39	40D-SW-39	4.30 (109)	17 (432)	29 (737)	45 (1143)	3.42	(1.55)
4	HW	40B-HW-39	40D-HW-39	4.39 (111)	17 (432)	29 (737)	45 (1143)	4.55	(2.07)
4½	SW	45B-SW-39	45D-SW-39	4.80 (122)	17 (432)	29 (737)	45 (1143)	3.71	(1.68)
4½	HW	45B-HW-39	45D-HW-39	4.89 (124)	17 (432)	29 (737)	45 (1143)	5.15	(2.34)
5	SW	50B-SW-39	50D-SW-39	5.30 (135)	17 (432)	29 (737)	45 (1143)	4.21	(1.91)
5	MW	50B-MW-39	50D-MW-39	5.39 (137)	17 (432)	29 (737)	45 (1143)	5.59	(2.54)
5	HW	50B-HW-39	50D-HW-39	5.42 (138)	17 (432)	29 (737)	45 (1143)	6.53	(2.97)
6	SW	60B-SW-39	60D-SW-39	6.30 (160)	17 (432)	29 (737)	45 (1143)	5.05	(2.29)
6	MW	60B-MW-39	60D-MW-39	6.39 (162)	17 (432)	29 (737)	45 (1143)	6.68	(3.03)
6	HW	60B-HW-39	60D-HW-39	6.42 (163)	17 (432)	29 (737)	45 (1143)	7.82	(3.55)

Nominal Size	Type	Item No.		A	B	L - Min	L - Max	Weight	
		Belowground	Aboveground					lbs	kg
2	XW	20B-XW-39	20D-XW-39	3.000 (76)	17 (432)	29 (737)	45 (1143)	6.24	(2.83)
2½	XW	25B-XW-39	25D-XW-39	3.525 (90)	17 (432)	29 (737)	45 (1143)	7.63	(3.46)
3	XW	30B-XW-39	30D-XW-39	4.000 (102)	17 (432)	29 (737)	45 (1143)	9.01	(4.09)
3½	XW	35B-XW-39	35D-XW-39	4.525 (115)	17 (432)	29 (737)	45 (1143)	10.42	(4.72)
4	XW	40B-XW-39	40D-XW-39	5.000 (127)	17 (432)	29 (737)	45 (1143)	11.78	(5.35)
5	XW	50B-XW-39	50D-XW-39	6.000 (152)	17 (432)	29 (737)	45 (1143)	14.55	(6.61)
6	XW	60B-XW-39	60D-XW-39	7.000 (178)	17 (432)	29 (737)	45 (1143)	19.25	(8.74)



## ALIGNMENT/EXPANSION FITTING, WITH O-RINGS

Alignment/Expansion fitting is sometimes referred to as an Expansion/Deflection joint.

(The clamps holding the rubber sleeve connecting the two nipples are made from stainless steel for corrosion protection.)

Same instructions & note as above

Nominal Size	Type	IPS Item No.		A	B	L - Min	L - Max	Weight	
		Belowground	Aboveground					lbs	kg
¾	SW	07A-SW-31	07C-SW-31	1.20 (30)	1.1 (27)	37 (940)	51 (1295)	1.19	(0.54)
1	SW	10A-SW-31	10C-SW-31	1.46 (37)	1.3 (34)	37 (940)	51 (1295)	1.33	(0.60)
1¼	SW	12A-SW-31	12C-SW-31	1.81 (46)	1.7 (42)	37 (940)	51 (1295)	1.61	(0.73)
1½	SW	15A-SW-31	15C-SW-31	2.04 (52)	1.9 (49)	37 (940)	51 (1295)	2.31	(1.05)
2	SW	20A-SW-31	20C-SW-31	2.54 (65)	2.4 (61)	37 (940)	51 (1295)	2.66	(1.21)
3	SW	30A-SW-31	30C-SW-31	3.66 (93)	3.5 (89)	37 (940)	51 (1295)	4.20	(1.91)
4	SW	40A-SW-31	40C-SW-31	4.61 (117)	4.5 (114)	37 (940)	51 (1295)	5.04	(2.29)
4	HW	40A-HW-31	40C-HW-31	4.69 (119)	4.5 (115)	37 (940)	51 (1295)	6.79	(3.08)
5	SW	50A-SW-31	50C-SW-31	5.68 (144)	5.5 (141)	37 (940)	51 (1295)	6.30	(2.86)
5	MW	50A-MW-31	50C-MW-31	5.79 (147)	5.6 (142)	37 (940)	51 (1295)	8.40	(3.81)
5	HW	50A-HW-31	50C-HW-31	5.85 (149)	5.6 (143)	37 (940)	51 (1295)	9.10	(4.13)
6	SW	60A-SW-31	60C-SW-31	6.75 (171)	6.5 (166)	37 (940)	51 (1295)	7.00	(3.18)
6	MW	60A-MW-31	60C-MW-31	6.85 (174)	6.6 (167)	37 (940)	51 (1295)	9.94	(4.51)
6	HW	60A-HW-31	60C-HW-31	6.91 (176)	6.6 (168)	37 (940)	51 (1295)	11.41	(5.18)

Nominal Size	Type	ID Item No.		A	B	L - Min	L - Max	Weight	
		Belowground	Aboveground					lbs	kg
2	SW	20B-SW-31	20D-SW-31	2.30 (58)	2.2 (55)	37 (940)	51 (1295)	2.38	(1.08)
2½	SW	25B-SW-31	25D-SW-31	2.80 (71)	2.7 (68)	37 (940)	51 (1295)	2.94	(1.34)
3	SW	30B-SW-31	30D-SW-31	3.30 (84)	3.2 (80)	37 (940)	51 (1295)	3.36	(1.53)
3½	SW	35B-SW-31	35D-SW-31	3.80 (96)	3.7 (93)	37 (940)	51 (1295)	4.20	(1.97)
4	SW	40B-SW-31	40D-SW-31	4.30 (109)	4.2 (106)	37 (940)	51 (1295)	4.83	(2.19)
4	HW	40B-HW-31	40D-HW-31	4.39 (111)	4.2 (107)	37 (940)	51 (1295)	6.44	(2.92)
4½	SW	45B-SW-31	45D-SW-31	4.80 (122)	4.7 (118)	37 (940)	51 (1295)	5.25	(2.38)
4½	HW	45B-HW-31	45D-HW-31	4.89 (124)	4.7 (119)	37 (940)	51 (1295)	7.28	(3.31)
5	SW	50B-SW-31	50D-SW-31	5.30 (135)	5.2 (131)	37 (940)	51 (1295)	5.95	(2.70)
5	MW	50B-MW-31	50D-MW-31	5.39 (137)	5.2 (132)	37 (940)	51 (1295)	7.91	(3.59)
5	HW	50B-HW-31	50D-HW-31	5.42 (138)	5.2 (133)	37 (940)	51 (1295)	9.24	(4.20)
6	SW	60B-SW-31	60D-SW-31	6.30 (160)	6.2 (156)	37 (940)	51 (1295)	7.14	(3.24)
6	MW	60B-MW-31	60D-MW-31	6.39 (162)	6.2 (157)	37 (940)	51 (1295)	9.45	(4.29)
6	HW	60B-HW-31	60D-HW-31	6.42 (163)	6.2 (158)	37 (940)	51 (1295)	11.06	(5.02)

Nominal Size	Type	Item No.		A	B	L - Min	L - Max	Weight	
		Belowground	Aboveground					lbs	kg
2	XW	20B-XW-31	20D-XW-31	3.000 (76)	2.50 (64)	37 (940)	51 (1295)	8.82	(4.00)
2½	XW	25B-XW-31	25D-XW-31	3.525 (90)	3.00 (76)	37 (940)	51 (1295)	10.78	(4.89)
3	XW	30B-XW-31	30D-XW-31	4.000 (102)	3.50 (89)	37 (940)	51 (1295)	12.74	(5.78)
3½	XW	35B-XW-31	35D-XW-31	4.525 (115)	4.00 (102)	37 (940)	51 (1295)	14.70	(6.67)
4	XW	40B-XW-31	40D-XW-31	5.000 (127)	4.50 (114)	37 (940)	51 (1295)	16.66	(7.56)
5	XW	50B-XW-31	50D-XW-31	6.000 (152)	5.50 (140)	37 (940)	51 (1295)	20.58	(9.34)
6	XW	60B-XW-31	60D-XW-31	7.000 (178)	6.50 (165)	37 (940)	51 (1295)	24.50	(11.12)