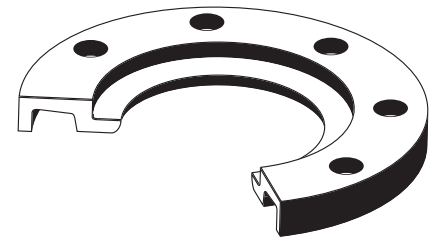
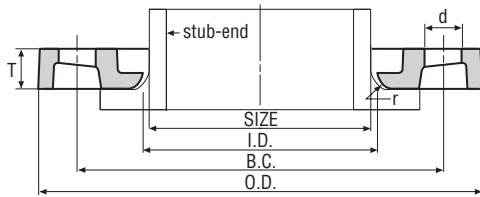


## BUP-SDR

### Convolute Flange/Backup Ring

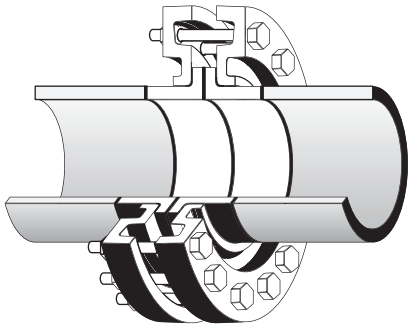


- **Description** Utilizes the patented IPP Deltaflex® flange cross section.
- **Utilization** HDPE and PP thermoplastic piping systems.
- **Materials** Ductile iron, ASTM A536-84.
- **Dimensions** Mate with all 150 lb flanges, ANSI B16.5, B16.47, B16.1 AWWA C207.
- **Finish** Red oxide primed, hot dip galvanized, epoxy coated.

Pipe Diameter	IPP Product Code	Outside Dia. O.D.	Flange Thickness T	Inside Dia. I.D.	Bolt Count N	Dia. Bolt Hole B.D.	Bolt Circle B.C.	Radius r	Weight lbs/pc	Operating <sup>1</sup> Pressure
1/2"	BUP-SDR7-0050C	3.50	0.50	0.90	4	0.63	2.38	0.13	1.0	267
3/4"	BUP-SDR7-0075C	3.88	0.50	1.11	4	0.63	2.75	0.13	1.0	267
1"	BUP-SDR7-01C	4.25	0.56	1.38	4	0.63	3.13	0.13	1.0	267
1 1/4"	BUP-SDR7-0125C	4.63	0.63	1.72	4	0.63	3.50	0.19	2.0	267
1 1/2"	BUP-SDR7-0150C	5.00	0.69	1.97	4	0.63	3.88	0.25	2.0	267
2"	BUP-SDR7-02C	6.00	0.75	2.46	4	0.75	4.75	0.31	3.0	267
2"	BUP-SDR11-02B	6.00	0.50	2.63	4	0.75	4.75	0.20	1.5	160
2 1/2"	BUP-SDR7-0250C	7.00	0.88	2.97	4	0.75	5.50	0.31	4.0	267
3"	BUP-SDR7-03C	7.50	0.94	3.60	4	0.75	6.00	0.40	4.0	267
3"	BUP-SDR11-03B	7.50	0.53	3.75	4	0.75	6.00	0.28	2.5	160
4"	BUP-SDR7-04C	9.00	0.94	4.60	8	0.75	7.50	0.40	5.5	267
4"	BUP-SDR11-04B	9.00	0.55	4.75	8	0.75	7.50	0.28	3.5	160
5"	BUP-SDR7-05C	10.00	0.94	5.69	8	0.88	8.50	0.44	6.0	267
6"	BUP-SDR7-06C	11.00	1.00	6.75	8	0.88	9.50	0.40	7.0	267
6"	BUP-SDR11-06B	11.00	0.63	6.88	8	0.88	9.50	0.28	4.5	160
8"	BUP-SDR7-08C	13.50	1.12	8.75	8	0.88	11.75	0.40	11.0	267
8"	BUP-SDR11-08B	13.50	0.85	8.88	8	0.88	11.75	0.28	8.0	160
10"	BUP-SDR7-10C	16.00	1.19	10.92	12	1.00	14.25	0.40	16.0	267
10"	BUP-SDR11-10B	16.00	0.98	11.00	12	1.00	14.25	0.31	12.0	160
12"	BUP-SDR7-12C	19.00	1.50	12.92	12	1.00	17.00	0.40	23.0	267
12"	BUP-SDR9.3-12B	19.00	1.25	13.13	12	1.00	17.00	0.31	22.0	192
12"	BUP-SDR11-12B	19.00	1.25	13.13	12	1.00	17.00	0.28	20.0	160
14"	BUP-SDR7-14C	21.00	1.63	14.18	12	1.13	18.75	0.40	37.0	267
14"	BUP-SDR11-14B	21.00	1.38	14.38	12	1.13	18.75	0.31	30.0	160
16"	BUP-SDR7-16C	23.50	1.88	16.19	16	1.13	21.25	0.40	49.0	267

1. Operating pressure on an HDPE stub-end with a safety factor of 2.

Continued for sizes 16" through 63" on pg. 12



**Convoluted Flange/Backup Ring**

Pipe Diameter	IPP Product Code	Outside Dia. O.D.	Flange Thickness T	Inside Dia. I.D.	Bolt Count N	Dia. Bolt Hole B.D.	Bolt Circle B.C.	Radius r	Weight lbs/pc	Operating <sup>1</sup> Pressure
16"	BUP-SDR11-16B	23.50	1.65	16.38	16	1.13	21.25	0.35	40.0	160
18"	BUP-SDR7-18C	25.00	1.80	18.20	16	1.25	22.75	0.40	48.0	267
18"	BUP-SDR9-18C	25.00	1.75	18.20	16	1.25	22.75	0.40	48.0	200
18"	BUP-SDR11-18B	25.00	1.67	18.38	16	1.25	22.75	0.35	45.0	160
20"	BUP-SDR9-20B	27.50	2.06	20.38	20	1.25	25.00	0.31	61.0	200
20"	BUP-SDR11-20B	27.50	1.81	20.38	20	1.25	25.00	0.40	55.0	160
22"	BUP-SDR9-22B	29.50	2.13	22.38	20	1.38	27.25	0.31	72.0	200
22"	BUP-SDR11-22B	29.50	2.00	22.38	20	1.38	27.25	0.37	65.0	160
24"	BUP-SDR9-24B	32.00	2.13	24.38	20	1.38	29.50	0.31	91.0	200
24"	BUP-SDR11-24B	32.00	2.17	24.38	20	1.38	29.50	0.40	80.0	160
26"	BUP-SDR7-26B	34.25	2.53	26.38	24	1.38	31.75	0.31	109.0	267
26"	BUP-SDR11-26B	34.25	2.38	26.38	24	1.38	31.75	0.31	104.0	160
26"	BUP-SDR17-26B	34.25	2.00	26.38	24	1.38	31.75	0.25	83.0	100
28"	BUP-SDR9-28B	36.50	2.60	28.38	28	1.38	34.00	0.31	126.0	200
28"	BUP-SDR11-28B	36.50	2.50	28.38	28	1.38	34.00	0.31	116.0	160
28"	BUP-SDR17-28B	36.50	2.06	28.38	28	1.38	34.00	0.50	92.0	100
30"	BUP-SDR9-30B	38.75	2.68	30.38	28	1.38	36.00	0.31	153.0	200
30"	BUP-SDR13.5-30B	38.75	2.50	30.38	28	1.38	36.00	0.31	143.0	128
30"	BUP-SDR26-30B	38.75	2.06	30.38	28	1.38	36.00	0.25	104.0	65
32"	BUP-SDR9-32B	41.75	2.84	32.38	28	1.63	38.50	0.31	175.0	200
32"	BUP-SDR13.5-32B	41.75	2.63	32.38	28	1.63	38.50	0.31	168.0	128
32"	BUP-SDR26-32B	41.75	2.06	32.38	28	1.63	38.50	0.50	111.0	65
34"	BUP-SDR11-34B	43.75	2.93	34.38	32	1.63	40.50	0.31	191.0	160
34"	BUP-SDR17-34B	43.75	2.69	34.38	32	1.63	40.50	0.31	181.0	100
34"	BUP-SDR26-34B	43.75	2.14	34.38	32	1.63	40.50	0.31	137.0	60
36"	BUP-SDR11-36B	46.00	3.14	36.38	32	1.63	42.75	0.31	225.0	160
36"	BUP-SDR17-36B	46.00	2.75	36.38	32	1.63	42.75	0.31	196.0	100
36"	BUP-SDR32.5-36B	46.00	2.06	36.38	32	1.63	42.75	0.50	129.0	50
40"	BUP-SDR13.5-40M	50.75	3.50	39.75	36	1.63	47.25	0.31	307.0	128
40"	BUP-SDR19-40M	50.75	TBA	39.75	36	1.63	47.25	TBA	TBA	89
40" *	BUP-SDR99-40M	53.00	2.00	40.00	36	1.63	49.50	0.50	181.0	16
42"	BUP-SDR13.5-42B	53.00	3.53	42.38	36	1.63	49.50	0.31	396.0	128
42"	BUP-SDR21-42B	53.00	3.00	42.38	36	1.63	49.50	0.31	277.0	80
42"	BUP-SDR39-42B	53.00	2.26	42.38	36	1.63	49.50	0.31	253.0	40
42"	BUP-SDR99-42B	53.00	2.00	42.38	36	1.63	49.50	0.50	157.0	16
48"	BUP-SDR17-48B	59.50	3.82	48.50	44	1.63	56.00	0.25	400.0	100
48"	BUP-SDR26-48B	59.50	3.50	48.50	44	1.63	56.00	0.25	332.0	64
48"	BUP-SDR51-48B	59.50	2.40	48.50	44	1.63	56.00	0.25	301.0	30
54"	BUP-SDR19-54B	66.25	4.10	54.62	44	1.88	62.75	0.19	516.0	89
54"	BUP-SDR26-54B	66.25	3.75	54.62	44	1.88	62.75	0.19	464.0	64
54"	BUP-SDR51-54B	66.25	2.57	54.62	44	1.88	62.75	0.19	318.0	30
63"/60	BUP-SDR19-6360B	73.00	3.15	64.00	52	1.88	69.25	0.20	437.0	64
63"/60	BUP-SDR51-6360B	73.00	2.80	64.00	52	1.88	69.25	0.10	277.0	32
63"/66	BUP-SDR19-6366B	80.00	4.24	64.00	52	1.88	76.00	0.19	890.0	64
63"/66	BUP-SDR51-6366B	80.00	TBA	64.00	52	1.88	76.00	TBA	TBA	32

1. Operating pressure on an HDPE stub-end with a safety factor of 2.

\* 42" Dimensions with a 40" I.D.