

RUBBER EXPANSION JOINTS

Initially used in FRP (fiberglass reinforced plastic) pipe systems. Thanks to its great elasticity and movement absorption, it offers minimum activation forces. It can solve any problem of other expansion joint types due to its characteristics

PROPERTIES



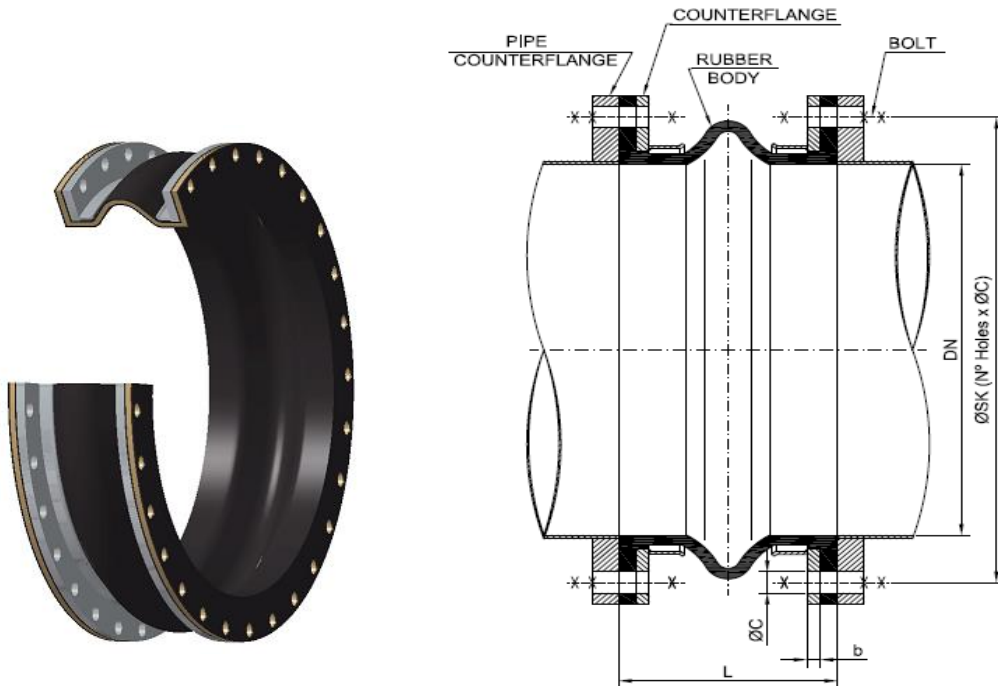
- Custom made manufacture
- Dimensions up to DN 4000 (160")
- Working pressure up to 90bar (1300psi)
- Integrated vulcanized one-piece or split flanges
- Special designs as per customer needs
- Recommended working temperature up to 200°C (390°F)
- Unlimited movements
- PTFE lining available
- Filled arch available
- Double and triple wave available
- Low bolt torque
- Can be used as Dismantling joints

USUALLY INSTALLED IN

- Desalination Plants
- Nuclear Power Plants
- Combined cycles
- Refineries
- Heavy duty pumping
- Mining

SERVICE CONDITIONS	
Nominal Diameter - DN	80 - 4000 mm (3" up to 160")
Working pressure	Up to 90 bar (1300psi)
Test pressure	Up to 135bar (1900psi)
Temperature	Up to 200°C (390°F)

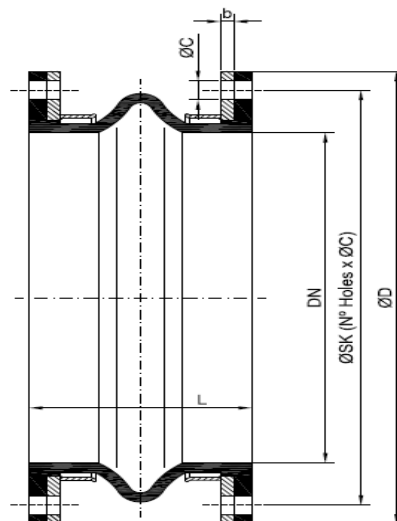
COMPOSITION



MATERIALS		
Flanges*		Carbon steel, Hot dip galvanized, Zinc Plated Carbon steel, Stainless steel 304-316-321, Duplex, Superduplex, others
Rubber body	Inside lining**	EPDM, Neoprene, Nitrile, Butyl, Hypalon, Viton, others
	Outside cover**	EPDM, Neoprene, Nitrile, Butyl, Hypalon, Viton, others
	Reinforcing fabric	Nylon, Polyester or Aramide

* Other materials by request

**Other materials by request



BF-PPS PN10							
DN		Weigth (approx.) Kg.	Length mm.	ØD	ØSK	ØC	No. Holes
mm	inch						
80	3	30	250	200	160	18	4
100	4	30	250	220	180	18	8
125	5	30	250	250	210	18	8
150	6	30	250	285	240	22	8
200	8	40	250	340	295	22	8
250	10	50	250	395	350	22	12
300	12	50	250	445	400	22	12
350	14	60	250	505	460	22	16
400	16	70	250	565	515	26	16
450	18	80	250	615	565	26	20
500	20	90	300	670	620	26	20
600	24	110	300	780	725	30	20
700	28	130	300	895	840	30	24
800	32	160	300	1015	950	33	24
900	36	170	300	1115	1050	33	28
1000	40	200	300	1230	1160	36	28
1200	48	260	300	1455	1380	39	32
1400	56	350	300	1675	1590	42	36
1600	64	440	300	1915	1820	48	40
1800	72	490	300	2115	2020	48	44
2000	80	610	300	2325	2230	48	48
2200	88	710	300	2550	2440	56	52
2400	96	810	300	2760	2650	56	56
2600	104	920	300	2960	2850	56	60
2800	112	1050	300	3180	3070	56	64
3000	120	1260	300	3405	3290	62	68

BF-PPS PN16							
DN		Weigth (approx.) Kg.	Length mm.	ØD	ØSK	ØC	No. Holes
mm	inch						
80	3	30	250	200	160	18	8
100	4	30	250	220	180	18	8
125	5	30	250	250	210	18	8
150	6	30	250	285	240	22	8
200	8	40	250	340	295	22	12
250	10	50	250	405	355	26	12
300	12	50	250	460	410	26	12
350	14	60	250	520	470	26	16
400	16	70	250	580	525	30	16
450	18	80	250	640	585	30	20
500	20	90	300	715	650	33	20
600	24	110	300	840	770	36	20
700	28	130	300	910	840	36	24
800	32	160	300	1025	950	39	24
900	36	170	300	1125	1050	39	28
1000	40	200	300	1255	1170	42	28
1200	48	260	300	1485	1390	48	32
1400	56	350	300	1685	1590	48	36
1600	64	440	300	1930	1820	56	40
1800	72	490	300	2130	2020	56	44
2000	80	610	300	2345	2230	62	48

BF-PPS ANSI150#										
DN		Weigth (approx.)	Length	ØD		ØSK		ØC		No.Holes
mm	Inch	Kg	mm.	Inch	mm	Inch	mm	Inch	mm	
80	3	30	250	7 1/2	191	6	15	¾	19	4
100	4	30	250	9	229	7 1/2	191	¾	19	8
125	5	30	250	10	254	8 1/2	216	7/8	22	8
150	6	30	250	11	279	9 1/2	241	7/8	22	8
200	8	40	250	13 1/2	343	11 3/4	298	7/8	22	8
250	10	50	250	16	406	14 1/4	362	1	25	12
300	12	50	250	19	483	17	432	1	25	12
350	14	60	250	21	533	18 3/4	476	1 1/8	29	12
400	16	70	250	23 1/2	597	21 1/4	540	1 1/8	29	16
450	18	80	250	25	635	22 3/4	578	1 ¼	32	16
500	20	90	300	27 1/2	699	25	635	1 ¼	32	20
550	22	90	300	29 1/2	749	27 1/5	692	1 3/8	35	20
600	24	110	300	32	813	29 1/2	749	1 3/8	35	20
650	26	110	300	34 1/4	870	31 3/4	807	1 3/8	35	24
700	28	130	300	36 1/2	927	34	864	1 3/8	35	28
750	30	130	300	38 3/4	984	36	914	1 3/8	35	28
800	32	160	300	41 3/4	1061	38 1/2	978	1 5/8	41	28
850	34	160	300	43 3/4	1111	40 1/2	1029	1 5/8	41	32
900	36	170	300	46	1168	42 3/4	1086	1 5/8	41	32
950	38	170	300	48 3/4	1238	45 1/4	1149	1 5/8	41	32
1000	40	200	300	50 3/4	1289	47 1/4	1200	1 5/8	41	36
1100	44	230	300	53	1403	49 1/2	1315	1 5/8	41	40
1200	48	260	300	55 1/4	1511	51 3/4	1422	1 5/8	41	44
1250	50	260	300	57 1/4	1569	53 3/4	1480	1 5/8	48	44
1300	52	320	300	59 1/2	1626	56	1537	1 5/8	48	44
1350	54	320	300	61 3/4	1683	58 1/4	1594	1 7/8	48	44
1400	56	350	300	64	1746	60 1/2	1651	1 7/8	48	48
1500	60	400	300	66 1/4	1854	62 3/4	1759	1 7/8	48	52

ACCESSORIES

- Tie rods
- PTFE lining
- Inner sleeve
- Vacuum rings
- Protective cover
- Fire resistant cover

MOVEMENTS CHART						
DN		Length	Axial (mm.)		Lateral	Angular
mm.	inch.	mm.	Compression	Elongation	mm.	A
80	3	250	40	20	20	35
100	4	250	40	20	20	30
125	5	250	40	20	20	25
150	6	250	40	20	20	20
200	8	250	45	20	25	15
250	10	250	45	20	25	15
300	12	250	45	20	25	12
350	14	250	50	30	30	12
400	16	250	50	30	30	10
450	18	250	50	30	30	10
500	20	300	50	30	30	9
600	24	300	50	30	30	8
700	28	300	50	30	30	7
800	32	300	50	30	30	6
900	36	300	50	30	30	5
1000	40	300	50	30	30	5
1100	44	300	50	30	30	5
1200	48	300	50	30	30	5
1300	52	300	50	30	30	4
1400	56	300	50	30	30	4
1500	60	300	50	30	30	3
1600	64	300	50	30	30	3
1800	72	300	50	30	30	3
2000	80	300	50	30	30	2
2200	88	300	50	30	30	2
2400	96	300	50	30	30	2
2600	104	300	50	30	30	2
2800	112	300	50	30	30	2
3000	120	300	50	30	30	2