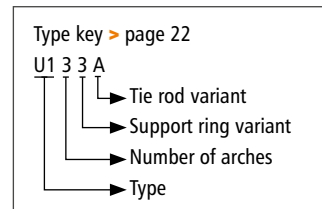


## U130A U140A U150A $\varnothing$ 80 - 4,000 mm



- > Type U130A U140A U150A without vacuum rings
- > Type U131A U141A U151A with internal vacuum rings
- > Type U132A U142A U152A with embedded vacuum rings
- > Type U133A U143A U153A without vacuum rings, with external support rings
- > Type U134A U144A U154A with internal vacuum rings, with external support rings
- > Type U135A U145A U155A with embedded vacuum rings, with external support rings



## Universal expansion joint with three or more arches

**Design:** High elastic, streamlined, triple or multiple wide arch rubber bellows with full faced rubber flanges, designed to compensate all directional movements, have a cycle life in the tens of millions, constructed with a high-grade leak-proof tube, multiple layers of high-strength cord, a seamless cover, and backing flanges with support collar. Optional with vacuum rings and/or external support rings. In compliance with PED 2014/68/EU, FSA Technical Handbook and ASTM F1123 - 87.

**Diameters:**  $\varnothing$  80 to 4,000 mm, custom diameters possible

**Length:** Standard  $L_E = 650$  with 3 arches, type U130A (> page 120–122)  
 Standard  $L_E = 850$  with 4 arches, type U140A (> page 120–122)  
 Standard  $L_E = 1050$  with 5 arches, type U150A (> page 120–122)  
 Custom length on request

**Pressure:** Up to 10 bar depending on diameter and length  
 Vacuum not allowed without vacuum rings, with vacuum rings up to 0.05 bar absolute

**Movement:** For extremely large axial, lateral and angular movements






















**Spring rate:** To calculate the axial and lateral spring rate for multiple arch joints, divide our single arch values of type U110A by the number of arches (> page 296)

**Application:**  
**Cooling water systems,**  
**desalination plants,**  
**drinking water supply,**  
**plant constructions e. g.**  
**in pipelines, on pumps,**  
**as dismantling joints, on**  
**condensers and vessels**



Request assembly instructions at:  
[www.ditec-adam.de/en/contact](http://www.ditec-adam.de/en/contact)

## Bellows elastomers and reinforcements

Elastomer	Fabric	Marking	°C	Application
EPDM	Polyamid		-40   +100	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDM	Aramid		-40   +100	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDMht	Aramid		-40   +120	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDMwras	Polyamid		-40   +100	Drinking water, foodstuffs
EPDMwras	Aramid		-40   +100	Drinking water, foodstuffs
EPDMbeige	Polyamid		-40   +100	Foodstuffs
EPDMbeige	Aramid		-40   +100	Foodstuffs
IIR	Polyamid		-20   +100	Hot water, acids, bases, gases
IIR	Aramid		-20   +100	Hot water, acids, bases, gases
CSM	Polyamid		-20   +100	Strong acids, bases, chemicals
CSM	Aramid		-20   +100	Strong acids, bases, chemicals
NBR	Polyamid		-30   +100	Oils, petrol, solvents, compressed air
NBR	Aramid		-30   +100	Oils, petrol, solvents, compressed air
NBRbeige	Polyamid		-30   +100	Oil, fatty foods
NBRbeige	Aramid		-30   +100	Oil, fatty foods
CR	Polyamid		-20   +90	Cooling water, slightly oily water, seawater
CR	Aramid		-20   +90	Cooling water, slightly oily water, seawater
FPM	Aramid		-20   +180	Corrosive chemicals, petroleum distillates
FPMbeige	Aramid		-20   +180	Oil, fatty foods
NR	Polyamid		-20   +70	Abrasive materials
Silicon	Aramid Glass		-60   +200	Air, saltwater atmosphere, foodstuffs, medical technology

PTFE-lining: Firmly embedded against chemical attacks on the interior at the rubber bellows, available starting at  $\varnothing$  300 mm. Take the restriction of the listed movement into account (> page 110–113)

## Backing flanges

- Design:** Single- or multi-part, round backing flanges with support collars and clearance holes
- Flange norms:** DIN, EN, ANSI, AWWA, BS, JIS, special measurements (> page 298)
- Materials:** Carbon steel, stainless steel or aluminium
- Coating:** Primed, hot-dip galvanised, special paint

## Accessories

- Protective covers:** Ground protective shield  
Protective shield or cover  
Fire protective cover (> page 58)
- Flow liners:** Cylindrical flow liner  
Conical flow liner  
Telescoping flow liner (> page 57)

### Filled arch:

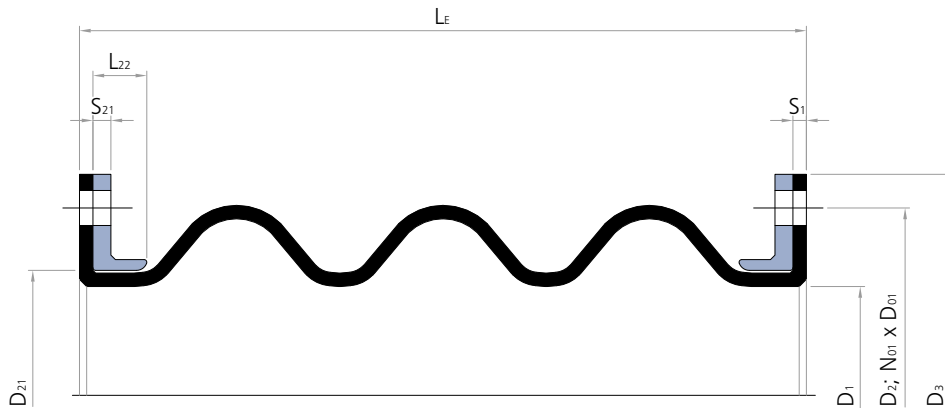


Support rings

TYPE	Support rings	Vacuum ring	Support ring	Pressure	Movement
U130A U140A U150A		None	None	Low pressure, vacuum stability on request	> page 120
U131A U141A U151A		Medium contact, inside the arches	None	Low pressure, for vacuum up to 0.05 bar absolute	> page 121
U132A U142A U152A		No medium contact, embedded in the arches	None	Low pressure, for vacuum up to 0.05 bar absolute	> page 122
U133A U143A U153A		None	External between the arches	Depending on the diameter up to 10 bar, slight vacuum	> page 120
U134A U144A U154A		Medium contact, inside the arches	External between the arches	Depending on the diameter up to 10 bar, for vacuum up to 0.05 bar absolute	> page 121
U135A U145A U155A		No medium contact, embedded in the arches	External between the arches	Depending on the diameter up to 10 bar, for vacuum up to 0.05 bar absolute	> page 122

Materials		
Stainless steel	Carbon steel, rubberised	Carbon steel, embedded

Cross section U130A





Rubber expansion joint with five arches of size  $\varnothing$  3,600 mm for a submerged cooling water intake line



Extremely flexible multi-arch rubber expansion joint of size  $\varnothing$  900 mm destined for a paper mill



## U130A U140A U150A

> without vacuum rings



## U133A U143A U153A

> without vacuum rings, with external support rings

Installation length (L <sub>E</sub> ) at design pressure																
	up to 6 bar L <sub>E</sub> = 650 mm – U130A U133A					up to 6 bar L <sub>E</sub> = 850 mm – U140A U143A					up to 6 bar L <sub>E</sub> = 1,050 mm – U150A U153A					
	higher pressures on request															
	Movement				A	Movement				A	Movement				A	
∅ mm	mm	mm	±mm	±°	cm <sup>2</sup>	mm	mm	±mm	±°	cm <sup>2</sup>	mm	mm	±mm	±°	cm <sup>2</sup>	
100	159	92	118	61.5	353	212	123	158	67.9	353	265	154	197	72.0	353	
125	159	92	116	55.8	441	212	123	154	63.1	441	265	154	193	67.9	441	
150	159	92	114	50.8	539	212	123	152	58.6	539	265	154	190	64.0	539	
175	159	92	112	46.4	670	212	123	150	54.6	670	265	154	187	60.4	670	
200	159	92	111	42.6	765	212	123	148	50.9	765	265	154	185	57.0	765	
250	159	92	109	36.4	1,029	212	123	145	44.5	1,029	265	154	181	50.9	1,029	
300	159	92	107	31.5	1,346	212	123	143	39.4	1,346	265	154	178	45.8	1,346	
350	159	92	105	27.7	1,713	212	123	141	35.1	1,713	265	154	176	41.3	1,713	
400	159	92	104	24.7	2,075	212	123	139	31.6	2,075	265	154	174	37.6	2,075	
450	159	92	103	22.2	2,507	212	123	137	28.7	2,507	265	154	172	34.4	2,507	
500	159	92	102	20.2	2,971	212	123	136	26.2	2,971	265	154	170	31.6	2,971	
550	159	92	101	18.5	3,442	212	123	135	24.1	3,442	265	154	169	29.2	3,442	
600	159	92	100	17.0	4,015	212	123	134	22.3	4,015	265	154	167	27.2	4,015	
650	159	92	100	15.8	4,560	212	123	133	20.7	4,560	265	154	166	25.4	4,560	
700	159	92	99	14.7	5,230	212	123	132	19.4	5,230	265	154	165	23.7	5,230	
750	159	92	98	13.8	5,836	212	123	131	18.2	5,836	265	154	164	22.3	5,836	
800	159	92	98	13.0	6,604	212	123	130	17.1	6,604	265	154	163	21.1	6,604	
850	159	92	97	12.2	7,268	212	123	130	16.1	7,268	265	154	162	19.9	7,268	
900	159	92	97	11.6	8,123	212	123	129	15.3	8,123	265	154	161	18.9	8,123	
950	159	92	96	11.0	8,858	212	123	128	14.5	8,858	265	154	160	18.0	8,858	
1000	159	92	96	10.4	9,799	212	123	128	13.8	9,799	265	154	160	17.1	9,799	
1050	159	92	95	9.9	10,605	212	123	127	13.2	10,605	265	154	159	16.3	10,605	
1100	159	92	95	9.5	11,652	212	123	127	12.6	11,652	265	154	158	15.6	11,652	
1150	159	92	95	9.1	12,509	212	123	126	12.1	12,509	265	154	158	15.0	12,509	
1200	159	92	94	8.7	13,623	212	123	126	11.6	13,623	265	154	157	14.4	13,623	
1250	159	92	94	8.4	14,569	212	123	125	11.1	14,569	265	154	156	13.8	14,569	
1300	159	92	94	8.1	15,770	212	123	125	10.7	15,770	265	154	156	13.3	15,770	
1350	159	92	93	7.8	16,787	212	123	124	10.3	16,787	265	154	155	12.9	16,787	
1400	159	92	93	7.5	18,074	212	123	124	10.0	18,074	265	154	155	12.4	18,074	
1450	159	92	93	7.2	19,162	212	123	124	9.6	19,162	265	154	154	12.0	19,162	
1500	159	92	92	7.0	20,536	212	123	123	9.3	20,536	265	154	154	11.6	20,536	
1600	159	92	92	6.6	23,154	212	123	122	8.7	23,154	265	154	153	10.9	23,154	
1650	159	92	92	6.4	24,384	212	123	122	8.5	24,384	265	154	153	10.6	24,384	
1700	159	92	91	6.2	25,930	212	123	122	8.2	25,930	265	154	152	10.3	25,930	
1800	159	92	91	5.8	28,893	212	123	121	7.8	28,893	265	154	151	9.7	28,893	
1900	159	92	90	5.5	31,952	212	123	121	7.4	31,952	265	154	151	9.2	31,952	
1950	159	92	90	5.4	33,394	212	123	120	7.2	33,394	265	154	150	9.0	33,394	
2000	159	92	90	5.3	35,199	212	123	120	7.0	35,199	265	154	150	8.8	35,199	
2100	159	92	90	5.0	38,603	212	123	119	6.7	38,603	265	154	149	8.3	38,603	
2200	159	92	89	4.8	42,164	212	123	119	6.4	42,164	265	154	149	8.0	42,164	
2250	159	92	89	4.7	43,818	212	123	119	6.2	43,818	265	154	148	7.8	43,818	
2300	159	92	89	4.6	45,882	212	123	118	6.1	45,882	265	154	148	7.6	45,882	
2400	159	92	88	4.4	49,757	212	123	118	5.9	49,757	265	154	147	7.3	49,757	
2500	159	92	88	4.2	53,789	212	123	118	5.6	53,789	265	154	147	7.0	53,789	
2550	159	92	88	4.1	55,655	212	123	117	5.5	55,655	265	154	147	6.9	55,655	
2600	159	92	88	4.0	57,979	212	123	117	5.4	57,979	265	154	146	6.8	57,979	
2700	159	92	88	3.9	62,325	212	123	117	5.2	62,325	265	154	146	6.5	62,325	
2800	159	92	87	3.8	66,829	212	123	116	5.0	66,829	265	154	145	6.3	66,829	
2850	159	92	87	3.7	68,906	212	123	116	4.9	68,906	265	154	145	6.2	68,906	
2900	159	92	87	3.6	71,489	212	123	116	4.8	71,489	265	154	145	6.1	71,489	
3000	159	92	87	3.5	76,307	212	123	116	4.7	76,307	265	154	145	5.9	76,307	
3100	159	92	86	3.4	81,282	212	123	115	4.5	81,282	265	154	144	5.7	81,282	
3150	159	92	86	3.3	83,571	212	123	115	4.5	83,571	265	154	144	5.6	83,571	
3200	159	92	86	3.3	86,413	212	123	115	4.4	86,413	265	154	144	5.5	86,413	
3300	159	92	86	3.2	91,702	212	123	115	4.3	91,702	265	154	143	5.3	91,702	
3400	159	92	86	3.1	97,148	212	123	114	4.1	97,148	265	154	143	5.2	97,148	
3450	159	92	86	3.1	99,650	212	123	114	4.1	99,650	265	154	143	5.1	99,650	
3600	159	92	85	2.9	108,511	212	123	114	3.9	108,511	265	154	142	4.9	108,511	
3800	159	92	85	2.8	120,503	212	123	113	3.7	120,503	265	154	141	4.6	120,503	
4000	159	92	84	2.6	133,123	212	123	113	3.5	133,123	265	154	141	4.4	133,123	

Reduction of movement for expansion joints with PTFE lining: axial compression: -33 %; axial extension: -66 %; lateral displacement: -50 %; angular movement: -66 %. Angular movement only possible with guided external support ring. In the event of axial extension and simultaneous lateral displacement the above movements are reduced (> page 29). Larger movements on request.

The movement capability of the expansion joints given in the tables is determined for flange dimensions according to DIN PN6. In case of deviating flange dimensions, please contact us.

### Customised products available



### U131A U141A U151A

> with internal vacuum rings



### U134A U144A U154A

> with internal vacuum rings, with external support rings

Installation length (L <sub>E</sub> ) at design pressure															
up to 6 bar L <sub>E</sub> = 650 mm – U131A U134A					up to 6 bar L <sub>E</sub> = 850 mm – U141A U144A					up to 6 bar L <sub>E</sub> = 1,050 mm – U151A U154A					
higher pressures on request															
Movement				A	Movement				A	Movement				A	
mm	mm	±mm	±°	cm <sup>2</sup>	mm	mm	±mm	±°	cm <sup>2</sup>	mm	mm	±mm	±°	cm <sup>2</sup>	mm
159	30	118	61.5	353	212	41	158	67.9	353	265	51	197	72.0	353	100
159	30	116	55.8	441	212	41	154	63.1	441	265	51	193	67.9	441	125
159	30	114	50.8	539	212	41	152	58.6	539	265	51	190	64.0	539	150
159	30	112	46.4	670	212	41	150	54.6	670	265	51	187	60.4	670	175
159	30	111	42.6	765	212	41	148	50.9	765	265	51	185	57.0	765	200
159	30	109	36.4	1,029	212	41	145	44.5	1,029	265	51	181	50.9	1,029	250
159	30	107	31.5	1,346	212	41	143	39.4	1,346	265	51	178	45.8	1,346	300
159	30	105	27.7	1,713	212	41	141	35.1	1,713	265	51	176	41.3	1,713	350
159	30	104	24.7	2,075	212	41	139	31.6	2,075	265	51	174	37.6	2,075	400
159	30	103	22.2	2,507	212	41	137	28.7	2,507	265	51	172	34.4	2,507	450
159	30	102	20.2	2,971	212	41	136	26.2	2,971	265	51	170	31.6	2,971	500
159	30	101	18.5	3,442	212	41	135	24.1	3,442	265	51	169	29.2	3,442	550
159	30	100	17.0	4,015	212	41	134	22.3	4,015	265	51	167	27.2	4,015	600
159	30	100	15.8	4,560	212	41	133	20.7	4,560	265	51	166	25.4	4,560	650
159	30	99	14.7	5,230	212	41	132	19.4	5,230	265	51	165	23.7	5,230	700
159	30	98	13.8	5,836	212	41	131	18.2	5,836	265	51	164	22.3	5,836	750
159	30	98	13.0	6,604	212	41	130	17.1	6,604	265	51	163	21.1	6,604	800
159	30	97	12.2	7,268	212	41	130	16.1	7,268	265	51	162	19.9	7,268	850
159	30	97	11.6	8,123	212	41	129	15.3	8,123	265	51	161	18.9	8,123	900
159	30	96	11.0	8,858	212	41	128	14.5	8,858	265	51	160	18.0	8,858	950
159	30	96	10.4	9,799	212	41	128	13.8	9,799	265	51	160	17.1	9,799	1000
159	30	95	9.9	10,605	212	41	127	13.2	10,605	265	51	159	16.3	10,605	1050
159	30	95	9.5	11,652	212	41	127	12.6	11,652	265	51	158	15.6	11,652	1100
159	30	95	9.1	12,509	212	41	126	12.1	12,509	265	51	158	15.0	12,509	1150
159	30	94	8.7	13,623	212	41	126	11.6	13,623	265	51	157	14.4	13,623	1200
159	30	94	8.4	14,569	212	41	125	11.1	14,569	265	51	156	13.8	14,569	1250
159	30	94	8.1	15,770	212	41	125	10.7	15,770	265	51	156	13.3	15,770	1300
159	30	93	7.8	16,787	212	41	124	10.3	16,787	265	51	155	12.9	16,787	1350
159	30	93	7.5	18,074	212	41	124	10.0	18,074	265	51	155	12.4	18,074	1400
159	30	93	7.2	19,162	212	41	124	9.6	19,162	265	51	154	12.0	19,162	1450
159	30	92	7.0	20,536	212	41	123	9.3	20,536	265	51	154	11.6	20,536	1500
159	30	92	6.6	23,154	212	41	122	8.7	23,154	265	51	153	10.9	23,154	1600
159	30	92	6.4	24,384	212	41	122	8.5	24,384	265	51	153	10.6	24,384	1650
159	30	91	6.2	25,930	212	41	122	8.2	25,930	265	51	152	10.3	25,930	1700
159	30	91	5.8	28,893	212	41	121	7.8	28,893	265	51	151	9.7	28,893	1800
159	30	90	5.5	31,952	212	41	121	7.4	31,952	265	51	151	9.2	31,952	1900
159	30	90	5.4	33,394	212	41	120	7.2	33,394	265	51	150	9.0	33,394	1950
159	30	90	5.3	35,199	212	41	120	7.0	35,199	265	51	150	8.8	35,199	2000
159	30	90	5.0	38,603	212	41	119	6.7	38,603	265	51	149	8.3	38,603	2100
159	30	89	4.8	42,164	212	41	119	6.4	42,164	265	51	149	8.0	42,164	2200
159	30	89	4.7	43,818	212	41	119	6.2	43,818	265	51	148	7.8	43,818	2250
159	30	89	4.6	45,882	212	41	118	6.1	45,882	265	51	148	7.6	45,882	2300
159	30	88	4.4	49,757	212	41	118	5.9	49,757	265	51	147	7.3	49,757	2400
159	30	88	4.2	53,789	212	41	118	5.6	53,789	265	51	147	7.0	53,789	2500
159	30	88	4.1	55,655	212	41	117	5.5	55,655	265	51	147	6.9	55,655	2550
159	30	88	4.0	57,979	212	41	117	5.4	57,979	265	51	146	6.8	57,979	2600
159	30	88	3.9	62,325	212	41	117	5.2	62,325	265	51	146	6.5	62,325	2700
159	30	87	3.8	66,829	212	41	116	5.0	66,829	265	51	145	6.3	66,829	2800
159	30	87	3.7	68,906	212	41	116	4.9	68,906	265	51	145	6.2	68,906	2850
159	30	87	3.6	71,489	212	41	116	4.8	71,489	265	51	145	6.1	71,489	2900
159	30	87	3.5	76,307	212	41	116	4.7	76,307	265	51	145	5.9	76,307	3000
159	30	86	3.4	81,282	212	41	115	4.5	81,282	265	51	144	5.7	81,282	3100
159	30	86	3.3	83,571	212	41	115	4.5	83,571	265	51	144	5.6	83,571	3150
159	30	86	3.3	86,413	212	41	115	4.4	86,413	265	51	144	5.5	86,413	3200
159	30	86	3.2	91,702	212	41	115	4.3	91,702	265	51	143	5.3	91,702	3300
159	30	86	3.1	97,148	212	41	114	4.1	97,148	265	51	143	5.2	97,148	3400
159	30	86	3.1	99,650	212	41	114	4.1	99,650	265	51	143	5.1	99,650	3450
159	30	85	2.9	108,511	212	41	114	3.9	108,511	265	51	142	4.9	108,511	3600
159	30	85	2.8	120,503	212	41	113	3.7	120,503	265	51	141	4.6	120,503	3800
159	30	84	2.6	133,123	212	41	113	3.5	133,123	265	51	141	4.4	133,123	4000

Reduction of movement for expansion joints with PTFE lining: axial compression: -33 %; axial extension: -0 %; lateral displacement: -50 %; angular movement: -0 %.

Angular movement only possible with guided external support ring.

In the event of axial extension and simultaneous lateral displacement the above movements are reduced ( > page 29). Larger movements on request.

The movement capability of the expansion joints given in the tables is determined for flange dimensions according to DIN PN6. In case of deviating flange dimensions, please contact us.

**Customised products available**



**U132A U142A U152A**

> with embedded vacuum rings



**U135A U145A U155A**

> with embedded vacuum rings, with external support rings

Installation length (L<sub>E</sub>) at design pressure

Ø mm	up to 6 bar L <sub>E</sub> = 650 mm – U132A U135A					up to 6 bar L <sub>E</sub> = 850 mm – U142A U145A					up to 6 bar L <sub>E</sub> = 1,050 mm – U152A U155A				
	Movement				A cm <sup>2</sup>	Movement				A cm <sup>2</sup>	Movement				A cm <sup>2</sup>
	mm	mm	± mm	± °		mm	mm	± mm	± °		mm	mm	± mm	± °	
100	105	28	115	59.8	320	140	38	154	66.5	320	175	47	192	70.7	320
125	105	28	113	54.0	405	140	38	150	61.5	405	175	47	188	66.4	405
150	105	28	111	48.9	499	140	38	148	56.9	499	175	47	185	62.3	499
175	105	28	109	44.5	625	140	38	146	52.7	625	175	47	182	58.5	625
200	105	28	108	40.7	716	140	38	144	49.0	716	175	47	180	55.0	716
250	105	28	106	34.5	973	140	38	141	42.6	973	175	47	177	48.8	973
300	105	28	104	29.8	1,282	140	38	139	37.5	1,282	175	47	174	43.6	1,282
350	105	28	103	26.2	1,640	140	38	137	33.3	1,640	175	47	171	39.3	1,640
400	105	28	102	23.3	1,995	140	38	135	29.9	1,995	175	47	169	35.6	1,995
450	105	28	100	20.9	2,419	140	38	134	27.1	2,419	175	47	167	32.4	2,419
500	105	28	99	19.0	2,875	140	38	133	24.7	2,875	175	47	166	29.8	2,875
550	105	28	99	17.4	3,339	140	38	132	22.7	3,339	175	47	164	27.5	3,339
600	105	28	98	16.0	3,904	140	38	130	21.0	3,904	175	47	163	25.5	3,904
650	105	28	97	14.8	4,441	140	38	130	19.5	4,441	175	47	162	23.7	4,441
700	105	28	96	13.8	5,102	140	38	129	18.2	5,102	175	47	161	22.2	5,102
750	105	28	96	12.9	5,701	140	38	128	17.0	5,701	175	47	160	20.9	5,701
800	105	28	95	12.1	6,461	140	38	127	16.0	6,461	175	47	159	19.7	6,461
850	105	28	95	11.4	7,118	140	38	126	15.1	7,118	175	47	158	18.6	7,118
900	105	28	94	10.8	7,964	140	38	126	14.3	7,964	175	47	157	17.6	7,964
950	105	28	94	10.3	8,692	140	38	125	13.6	8,692	175	47	156	16.8	8,692
1000	105	28	93	9.8	9,625	140	38	125	13.0	9,625	175	47	156	16.0	9,625
1050	105	28	93	9.3	10,423	140	38	124	12.4	10,423	175	47	155	15.2	10,423
1100	105	28	93	8.9	11,461	140	38	123	11.8	11,461	175	47	154	14.6	11,461
1150	105	28	92	8.5	12,311	140	38	123	11.3	12,311	175	47	154	14.0	12,311
1200	105	28	92	8.2	13,417	140	38	123	10.9	13,417	175	47	153	13.4	13,417
1250	105	28	92	7.8	14,356	140	38	122	10.4	14,356	175	47	153	12.9	14,356
1300	105	28	91	7.5	15,548	140	38	122	10.0	15,548	175	47	152	12.4	15,548
1350	105	28	91	7.3	16,559	140	38	121	9.7	16,559	175	47	152	12.0	16,559
1400	105	28	91	7.0	17,837	140	38	121	9.3	17,837	175	47	151	11.5	17,837
1450	105	28	90	6.8	18,918	140	38	120	9.0	18,918	175	47	151	11.2	18,918
1500	105	28	90	6.5	20,283	140	38	120	8.7	20,283	175	47	150	10.8	20,283
1600	105	28	90	6.1	22,885	140	38	119	8.2	22,885	175	47	149	10.1	22,885
1650	105	28	89	6.0	24,108	140	38	119	7.9	24,108	175	47	149	9.8	24,108
1700	105	28	89	5.8	25,645	140	38	119	7.7	25,645	175	47	148	9.5	25,645
1800	105	28	89	5.5	28,592	140	38	118	7.3	28,592	175	47	148	9.0	28,592
1900	105	28	88	5.2	31,636	140	38	117	6.9	31,636	175	47	147	8.6	31,636
1950	105	28	88	5.0	33,071	140	38	117	6.7	33,071	175	47	147	8.3	33,071
2000	105	28	88	4.9	34,867	140	38	117	6.6	34,867	175	47	146	8.1	34,867
2100	105	28	87	4.7	38,256	140	38	116	6.3	38,256	175	47	146	7.8	38,256
2200	105	28	87	4.5	41,801	140	38	116	6.0	41,801	175	47	145	7.4	41,801
2250	105	28	87	4.4	43,447	140	38	116	5.8	43,447	175	47	145	7.2	43,447
2300	105	28	87	4.3	45,503	140	38	115	5.7	45,503	175	47	144	7.1	45,503
2400	105	28	86	4.1	49,363	140	38	115	5.5	49,363	175	47	144	6.8	49,363
2500	105	28	86	3.9	53,379	140	38	115	5.3	53,379	175	47	143	6.5	53,379
2550	105	28	86	3.9	55,238	140	38	114	5.2	55,238	175	47	143	6.4	55,238
2600	105	28	86	3.8	57,553	140	38	114	5.1	57,553	175	47	143	6.3	57,553
2700	105	28	85	3.6	61,883	140	38	114	4.9	61,883	175	47	142	6.0	61,883
2800	105	28	85	3.5	66,371	140	38	113	4.7	66,371	175	47	142	5.8	66,371
2850	105	28	85	3.5	68,442	140	38	113	4.6	68,442	175	47	142	5.7	68,442
2900	105	28	85	3.4	71,016	140	38	113	4.5	71,016	175	47	141	5.6	71,016
3000	105	28	85	3.3	75,818	140	38	113	4.4	75,818	175	47	141	5.4	75,818
3100	105	28	84	3.2	80,777	140	38	112	4.2	80,777	175	47	140	5.3	80,777
3150	105	28	84	3.1	83,060	140	38	112	4.2	83,060	175	47	140	5.2	83,060
3200	105	28	84	3.1	85,893	140	38	112	4.1	85,893	175	47	140	5.1	85,893
3300	105	28	84	3.0	91,166	140	38	112	4.0	91,166	175	47	140	5.0	91,166
3400	105	28	84	2.9	96,597	140	38	111	3.9	96,597	175	47	139	4.8	96,597
3450	105	28	83	2.9	99,091	140	38	111	3.8	99,091	175	47	139	4.7	99,091
3600	105	28	83	2.7	107,928	140	38	111	3.7	107,928	175	47	139	4.5	107,928
3800	105	28	83	2.6	119,888	140	38	110	3.5	119,888	175	47	138	4.3	119,888
4000	105	28	82	2.5	132,477	140	38	110	3.3	132,477	175	47	137	4.1	132,477

Reduction of movement for expansion joints with PTFE lining: axial compression: -0 %; axial extension: -0 %; lateral displacement: -0 %; angular movement: -0 %.

Angular movement only possible with guided external support ring.

In the event of axial extension and simultaneous lateral displacement the above movements are reduced ( > page 29). Larger movements on request.

The movement capability of the expansion joints given in the tables is determined for flange dimensions according to DIN PN6. In case of deviating flange dimensions, please contact us.

Customised products available



High flexible FPM rubber bellow for a tumbler screening machine



Universal expansion joint, type U142A  
with PTFE lining for a sulphuric acid reclamation plant  
Ø 2,800 mm, -0.15 bar, 80°C