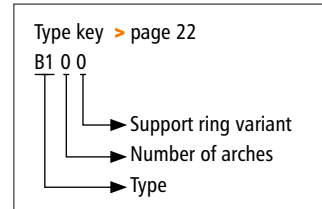


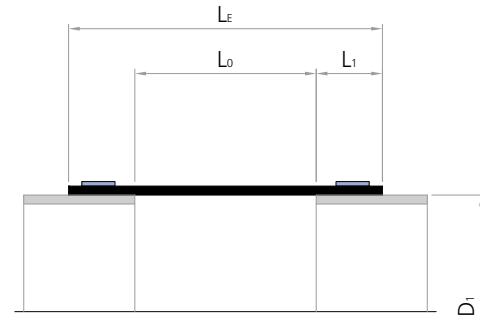
**B100** ∅ 50 - 5,000 mm



> Type B100



Cross section B100



**Universal expansion joint without arch**

**Design:** Streamlined, cylindrical slip-on sleeve type rubber bellows, 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 fixing clamps. Optional with embedded support rings. In compliance with PED 2014/68/EU, FSA Technical Handbook and ASTM F1123 - 87. Available in split-wrap or custom offset arrangements.

**Diameters:** ∅ 50 to 5,000 mm, custom diameters possible

**Length:** = Installation gap + 2 x fixing width  
 $L_0 = 125$  to  $250$  mm (standard installation gaps) (> page 174)  
 Custom length on request

**Fixing width:** At least 40 mm  
 Depends on pressure, diameter and clamp type

**Pressure:** Up to 6 bar depending on diameter and length  
 Vacuum stability on request

**Movement:** For low axial and lateral movements  
 For axial extension or vacuum, the expansion joint can slip of the pipeline (groove as needed at the pipeline end)






















**Application:**  
 Power plants, plant construction, food processing, wastewater treatment plants, industrial facilities, e. g. to disconnect pipelines, on oscillating conveyor systems, on sieving machines



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 Ø 300 mm. Take the restriction of the listed movement into account (> page 174)

## Clamps

**Design:** Depending on pressure and diameter, endless clamp belt, screw thread belt, small clamps or hinge bolt clamps. At higher pressures, 2 parallel clamps per side

**Width:** Endless clamp belt: ¾"  
Screw thread belt: ½"  
Small clamp: depending on Ø: 9–12 mm  
Hinge bolt clamp: depending on Ø: 18–30 mm

**Materials:** Endless clamp belt with screw lugs (tongs): 1.7300  
Screw thread belt with threaded screw lugs: 1.4310  
Small clamp, belt and housing: 1.4016 (Screw steel galvanised)  
Hinge bolt clamp, belt and housing: 1.4016 (Screw steel galvanised)



# B100

> without arch

Installation gap															
∅ mm	L <sub>0</sub> = 125 mm					L <sub>0</sub> = 150 mm					L <sub>0</sub> = 175 mm				
	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	±°	
50	6	0	10	0	29	8	0	11	0	29	9	0	13	0	29
65	6	0	9	0	45	8	0	11	0	45	9	0	13	0	45
80	6	0	9	0	62	8	0	10	0	62	9	0	12	0	62
100	6	0	8	0	103	8	0	10	0	103	9	0	12	0	103
125	6	0	8	0	153	8	0	10	0	153	9	0	11	0	153
150	6	0	8	0	222	8	0	9	0	222	9	0	11	0	222
175	6	0	7	0	295	8	0	9	0	295	9	0	10	0	295
200	6	0	7	0	377	8	0	9	0	377	9	0	10	0	377
250	6	0	7	0	585	8	0	8	0	585	9	0	10	0	585
300	6	0	7	0	824	8	0	8	0	824	9	0	9	0	824
350	6	0	6	0	993	8	0	8	0	993	9	0	9	0	993
400	6	0	6	0	1,297	8	0	8	0	1,297	9	0	9	0	1,297
450	6	0	6	0	1,642	8	0	7	0	1,642	9	0	9	0	1,642
500	6	0	6	0	2,027	8	0	7	0	2,027	9	0	8	0	2,027
550	6	0	6	0	2,452	8	0	7	0	2,452	9	0	8	0	2,452
600	6	0	6	0	2,919	8	0	7	0	2,919	9	0	8	0	2,919
650	6	0	6	0	3,425	8	0	7	0	3,425	9	0	8	0	3,425
700	6	0	6	0	3,973	8	0	7	0	3,973	9	0	8	0	3,973
750	6	0	6	0	4,560	8	0	7	0	4,560	9	0	8	0	4,560
800	6	0	5	0	5,189	8	0	7	0	5,189	9	0	8	0	5,189
850	6	0	5	0	5,858	8	0	6	0	5,858	9	0	8	0	5,858
900	6	0	5	0	6,567	8	0	6	0	6,567	9	0	7	0	6,567
1000	6	0	5	0	8,107	8	0	6	0	8,107	9	0	7	0	8,107
1100	6	0	5	0	9,607	8	0	6	0	9,607	9	0	7	0	9,607
1200	6	0	5	0	11,404	8	0	6	0	11,404	9	0	7	0	11,404
1300	6	0	5	0	13,376	8	0	6	0	13,376	9	0	7	0	13,376
1400	6	0	5	0	15,504	8	0	6	0	15,504	9	0	7	0	15,504
1500	6	0	5	0	17,789	8	0	6	0	17,789	9	0	7	0	17,789

Installation gap															
∅ mm	L <sub>0</sub> = 200 mm					L <sub>0</sub> = 225 mm					L <sub>0</sub> = 250 mm				
	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	±°	
10	0	15	0	29	11	0	17	0	29	13	0	19	0	29	50
10	0	14	0	45	11	0	16	0	45	13	0	18	0	45	65
10	0	14	0	62	11	0	16	0	62	13	0	17	0	62	80
10	0	13	0	103	11	0	15	0	103	13	0	17	0	103	100
10	0	13	0	153	11	0	14	0	153	13	0	16	0	153	125
10	0	12	0	222	11	0	14	0	222	13	0	15	0	222	150
10	0	12	0	295	11	0	13	0	295	13	0	15	0	295	175
10	0	12	0	377	11	0	13	0	377	13	0	14	0	377	200
10	0	11	0	585	11	0	12	0	585	13	0	14	0	585	250
10	0	11	0	824	11	0	12	0	824	13	0	13	0	824	300
10	0	10	0	993	11	0	12	0	993	13	0	13	0	993	350
10	0	10	0	1,297	11	0	11	0	1,297	13	0	13	0	1,297	400
10	0	10	0	1,642	11	0	11	0	1,642	13	0	12	0	1,642	450
10	0	10	0	2,027	11	0	11	0	2,027	13	0	12	0	2,027	500
10	0	9	0	2,452	11	0	11	0	2,452	13	0	12	0	2,452	550
10	0	9	0	2,919	11	0	10	0	2,919	13	0	12	0	2,919	600
10	0	9	0	3,425	11	0	10	0	3,425	13	0	11	0	3,425	650
10	0	9	0	3,973	11	0	10	0	3,973	13	0	11	0	3,973	700
10	0	9	0	4,560	11	0	10	0	4,560	13	0	11	0	4,560	750
10	0	9	0	5,189	11	0	10	0	5,189	13	0	11	0	5,189	800
10	0	9	0	5,858	11	0	10	0	5,858	13	0	11	0	5,858	850
10	0	9	0	6,567	11	0	10	0	6,567	13	0	11	0	6,567	900
10	0	8	0	8,107	11	0	9	0	8,107	13	0	10	0	8,107	1000
10	0	8	0	9,607	11	0	9	0	9,607	13	0	10	0	9,607	1100
10	0	8	0	11,404	11	0	9	0	11,404	13	0	10	0	11,404	1200
10	0	8	0	13,376	11	0	9	0	13,376	13	0	10	0	13,376	1300
10	0	8	0	15,504	11	0	9	0	15,504	13	0	10	0	15,504	1400
10	0	8	0	17,789	11	0	9	0	17,789	13	0	10	0	17,789	1500

Recommended sizes  
Further possible sizes

Reduction of movement for expansion joints with PTFE lining:  
axial compression: -33 %; lateral displacement: -50 %.  
Larger movements see type B110.

Customised products available



Pipe penetration seal and clamped EPDM rubber expansion joint  
penetration seal made from silicone rubber with open seam  
for afterwards closing on site