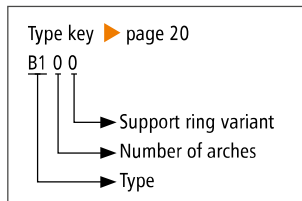


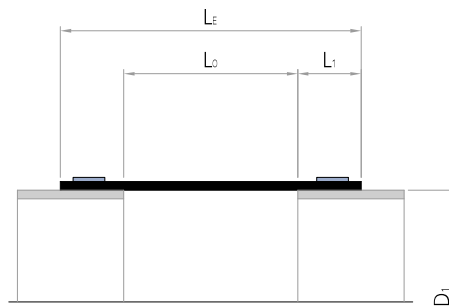
B100

NB 50 – NB 4000

► Type B100



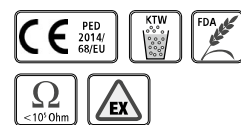
Planning help B100



Universal expansion joint without arch






















- Design:** Cylindrical rubber bellows with a sleeve for clamped fixing
- Nominal diameters:** Standard NB 50 to NB 4000, intermediate sizes possible
- Installation length:** = Installation gap + 2 x fixing width
Standard installation gaps $L_0 = 125$ to 250 mm (► page 126)
Other installation gaps on request
- Fixing width:** Depends on pressure, nominal diameter and clamp design, at least 40 mm
- Pressure:** Depending on the nominal diameter and installation length up to 6 bar
Vacuum stability on request. Design in accordance with Pressure Equipment Directive PED 2014/68/EU
- Movement:** For slight axial compression and lateral movements (► page 126)
For axial extension or vacuums, the expansion joint can be drawn from 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



Assembly instruction download
www.ditec-adam.de/en/downloads.html

Rubber bellows

Rubber	Fabric	Marking	Max.	Application
EPDM	Nylon		100 °C	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDM	Kevlar		100 °C	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDMht	Kevlar		120 °C	Cooling water, hot water, seawater, acids, dilute chlorine compounds
EPDMtw	Nylon		100 °C	Drinking water
EPDMtw	Kevlar		100 °C	Drinking water
EPDMaf	Nylon		100 °C	Abrasive materials, water-sand extraction
EPDMaf	Kevlar		100 °C	Abrasive materials, water-sand extraction
EPDMbeige	Nylon		100 °C	Foodstuffs
EPDMbeige	Kevlar		100 °C	Foodstuffs
IIR	Nylon		100 °C	Hot water, acids, bases, gases
IIR	Kevlar		100 °C	Hot water, acids, bases, gases
CSM	Nylon		100 °C	Strong acids, bases, chemicals
CSM	Kevlar		100 °C	Strong acids, bases, chemicals
NBR	Nylon		100 °C	Oils, petrol, solvents, compressed air
NBR	Kevlar		100 °C	Oils, petrol, solvents, compressed air
NBRbeige	Nylon		100 °C	Oil, fatty foods
NBRbeige	Kevlar		100 °C	Oil, fatty foods
CR	Nylon		90 °C	Cooling water, slightly oily water, seawater
CR	Kevlar		90 °C	Cooling water, slightly oily water, seawater
FPM	Kevlar		180 °C	Corrosive chemicals, petroleum distillates
FPMbeige	Kevlar		180 °C	Oil, fatty foods
NR	Nylon		70 °C	Abrasive materials
Silicon	Kevlar or glass		200 °C	Air, saltwater atmosphere, foodstuffs, medical technology

PTFE-lining: Permanently embedded against chemical attacks on the interior at the rubber bellows, available starting at NB 300. Take the restriction of the listed movement into account (▶ page 126)

Fastening clamps

Design:	Depending on pressure and the nominal diameter, endless clamp belt, screw thread belt, small clamps or hinge bolt clamps. At higher pressures, 2 adjacent clamps per fastening side	
Width:	Endless clamp belt:	$\frac{3}{4}$ "
	Screw thread belt:	$\frac{1}{2}$ "
	Small clamp:	depending on \varnothing : 9–12 mm
	Hinge bolt clamp:	depending on \varnothing : 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															
NB	L ₀ = 125 mm					L ₀ = 150 mm					L ₀ = 175 mm				
	Movement				A cm ²	Movement				A cm ²	Movement				A cm ²
	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															
NB	L ₀ = 200 mm					L ₀ = 225 mm					L ₀ = 250 mm				
	Movement				A cm ²	Movement				A cm ²	Movement				A cm ²
	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
Additional possible sizes

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

Individual fabrication possible