B100

NB 50 – NB 1500

▶ **Type B100**

Type key ▶ page 20

B1 0 0

- Support ring variant
- Number of arches
- Type

Universal expansion joint without arch

Design: Cylindrical rubber bellows with a sleeve for clamped fixing

Nominal diameters: Standard NB 50 to NB 1500, intermediate sizes possible

Installation length: = Installation gap + 2 x fixing width
Standard installation gaps L_0 = 125 to 250 mm
(▶ page 138–139)
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

Movement: For slight axial compression and lateral movements
(▶ page 138–139)
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

KTW · FDA · Ω <10^5 Ohm · EX

Rubber bellows

Rubber grades			Carrier
up to 100 °C:	EPDM	Cooling water, hot water, seawater, acids, dilute chlorine compounds	Nylon fabric Polyester fabric Kevlar fabric Glass fibre fabric Steel mesh
	EPDM, drinking water approved	Drinking water	
	EPDM, white, food grade	Foodstuffs	
	EPDM, abrasion-resistant	Abrasive materials, Water-sand extraction	
	EPDM, insulating	Electrical systems construction	
	IIR	Hot water, acids, bases, gases	
	CSM	Strong acids, bases, chemicals	
	NBR	Oils, petrol, solvents, compressed air	
	NBR, bright, food grade	Oil, fatty foods	
up to 80 °C:	CR	Cooling water, slightly oily water, seawater	
up to 70 °C:	NR	Abrasive materials	
up to 150 °C:	HNBR	Oils, petrol, solvents, compressed air	
up to 180 °C:	FPM	Corrosive chemicals, petroleum distillates	
up to 200 °C:	Silicon (Q)	Air, saltwater atmosphere	
	Silicon (Q), white, food grade	Foodstuffs, medical technology	
PTFE lining:	Permanently embedded against chemical attacks on the interior at the rubber bellows, Take the restriction of the listed movement into account (▶ page 138–139)		

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

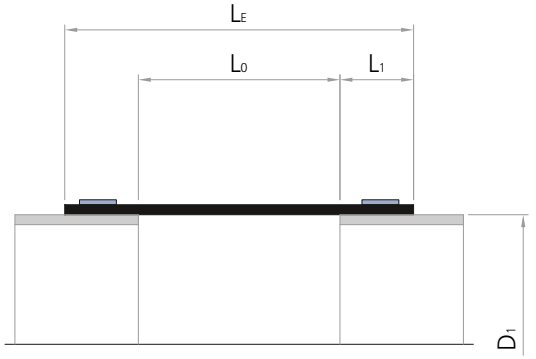
Width:

Endless clamp belt:	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)

Planning help B100



B100

▶ without arch

HENNLICH

Installation gap

NB	L_0 = 125 mm					L_0 = 150 mm					L_0 = 175 mm				
	Movement				A	Movement				A	Movement				A
	mm	mm	±mm	±°	cm²	mm	mm	±mm	±°	cm²	mm	mm	±mm	±°	cm²
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

Recommended sizes
Additional possible sizes

Reduction of movement for expansion joints with PTFE lining:
axial compression: -33 %; lateral displacement: -25 %.
Larger movements see type B110.

Installation gap															
L_0 = 200 mm					L_0 = 225 mm					L_0 = 250 mm					
Movement				A	Movement				A	Movement				A	NB
mm	mm	±mm	±°	cm²	mm	mm	±mm	±°	cm²	mm	mm	±mm	±°	cm²	
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**

Individual fabrication possible