B300

NB 50 – NB 4000

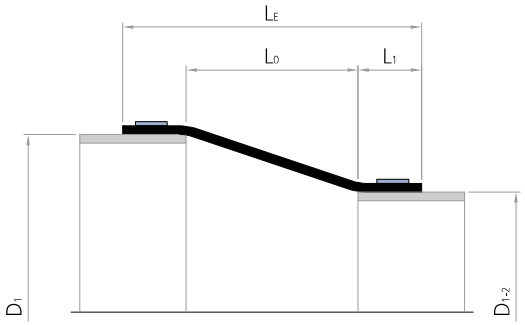
▶ **Type B300**

Type key ▶ page 20

B3 0 0

- Support ring variant
- Number of arches
- Type

Planning help B300



Conical universal expansion joint

Design: Conical-concentric rubber bellows with a sleeve for clamped fixing

Nominal diameters: Standard NB 80 to NB 4000, intermediate sizes or other nominal diameter combinations possible

Installation length: = Installation gap + 2 x fixing width
Standard installation gap L_0 = 75 to 2,100 mm
(▶ page 148)
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 1 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 148)
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

Fastening clamps

Design: Depending on pressure and nominal diameters, 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)

B300

▶ concentric

Potential combination			Movement		
NB D_1	NB D_{1-2}	Gap mm	mm	mm	±mm
100	80	60	1	0	2
125	80	135	2	0	4
	100	75	1	0	2
150	80	210	3	0	6
	100	150	2	0	4
	125	75	1	0	2
200	80	360	6	0	10
	100	300	5	0	8
	125	225	4	0	6
	150	150	2	0	4
250	80	510	8	0	13
	100	450	7	0	11
	125	375	6	0	9
	150	300	5	0	8
	200	150	3	0	4
300	80	660	11	0	16
	100	600	10	0	14
	125	525	9	0	13
	150	450	8	0	11
	200	300	5	0	7
	250	150	3	0	4
350	80	810	14	0	19
	100	750	13	0	17
	125	675	12	0	16
	150	600	10	0	14
	200	450	8	0	10
	250	300	5	0	7
	300	150	3	0	3
400	100	900	16	0	20
	125	825	15	0	18
	150	750	13	0	17
	200	600	11	0	13
	250	450	8	0	10
	300	300	6	0	7
	350	150	3	0	3
500	150	1050	19	0	22
	200	900	17	0	19
	250	750	14	0	16
	300	600	12	0	13
	350	450	9	0	10
	400	300	6	0	6
	450	150	3	0	3
600	200	1200	23	0	24
	250	1050	21	0	21
	300	900	18	0	18
	350	750	15	0	15
	400	600	12	0	12
	450	450	9	0	9
	500	300	6	0	6
700	250	1350	27	0	26
	300	1200	25	0	23
	350	1050	22	0	20
	400	900	19	0	17
	450	750	16	0	15
	500	600	13	0	12
	600	300	7	0	6
800	300	1500	32	0	28
	350	1350	29	0	25
	400	1200	26	0	23
	450	1050	23	0	20
	500	900	20	0	17
	600	600	13	0	11
	700	300	7	0	6

Potential combination			Movement		
NB D_1	NB D_{1-2}	Gap mm	mm	mm	±mm
900	350	1650	36	0	30
	400	1500	33	0	27
	450	1350	30	0	25
	500	1200	27	0	22
	600	900	21	0	16
	700	600	14	0	11
	800	300	7	0	5
1000	400	1800	40	0	32
	450	1650	37	0	29
	500	1500	34	0	27
	600	1200	28	0	21
	700	900	21	0	16
	800	600	14	0	11
	900	300	7	0	5
1100	450	1950	45	0	34
	500	1800	42	0	31
	600	1500	36	0	26
	700	1200	29	0	21
	800	900	22	0	16
	900	600	15	0	10
	1000	300	8	0	5
1200	500	2100	50	0	36
	600	1800	43	0	31
	700	1500	37	0	25
	800	1200	30	0	20
	900	900	23	0	15
	1000	600	15	0	10
	1100	300	8	0	5
1300	600	2100	52	0	35
	700	1800	45	0	30
	800	1500	38	0	25
	900	1200	31	0	20
	1000	900	23	0	15
	1100	600	16	0	10
	1200	300	8	0	5
1400	700	2100	53	0	34
	800	1800	46	0	29
	900	1500	39	0	25
	1000	1200	32	0	20
	1100	900	24	0	15
	1200	600	16	0	10
	1300	300	8	0	5
1500	800	2100	55	0	34
	900	1800	47	0	29
	1000	1500	40	0	24
	1100	1200	32	0	19
	1200	900	25	0	14
	1300	600	17	0	10
	1400	300	8	0	5
1600	900	2100	56	0	33
	1000	1800	49	0	28
	1100	1500	41	0	24
	1200	1200	33	0	19
	1300	900	25	0	14
	1400	600	17	0	9
	1500	300	9	0	5

The specified movements may vary depending on the design pressure.

Individual fabrication possible

Universal expansion joint, type B310
as a drum connection
NB 900 / NB 650, 0.1 bar