B300 ⌀ 50 - 5,000 mm

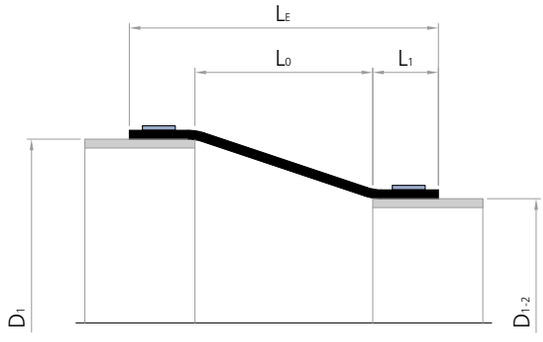
> Type B300

Type key > page 22

B3 0 0

- Support ring variant
- Number of arches
- Type

Cross section B300



Concentric or eccentric reducing expansion joint

Design: Streamlined, concentric or eccentric reducer 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. In compliance with PED 2014/68/EU, FSA Technical Handbook and ASTM F1123 - 87. Available in split-wrap or custom offset arrangements.

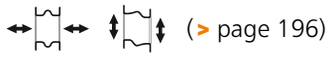
Diameters: ⌀ 50 to 5,000 mm, custom diameters and combinations possible

Length: = Installation gap + 2 x fixing width
L_0 = 75 to 2,100 mm (standard installation gaps) (> page 196)
Custom length on request

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

Pressure: Up to 1 bar depending on diameter and length
Vacuum stability on request

Movement: For low axial compression and lateral movements
For vacuums, the expansion joint can slip of the pipeline (groove as needed at the pipeline end)

 (> page 196)

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

PED 2014/68/EU · KTW WRAS · FDA · <10⁵ Ohm · EX

Request assembly instructions at:
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

Clamps

Design: Depending on pressure and diameters, 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)

B300

> concentric

Potential combination			Movement		
∅ D_1 mm	∅ $D_{1\text{-}2}$	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		
∅ D_1 mm	∅ $D_{1\text{-}2}$	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.

Customised products available

Concentric reducing expansion joint with zipper for maintenance service

Flexible silicone rubber reducer for large axial and lateral displacements