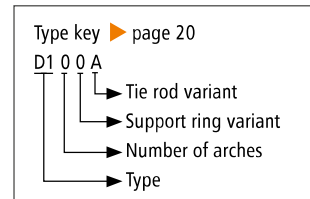


D100A

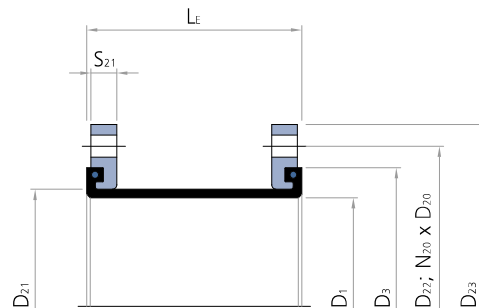
NB 40 – NB 1200



► Type D100A



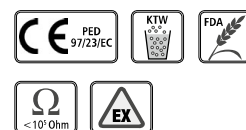
Planning help D100A



Universal expansion joint without arch






















- Design:** Hydrodynamic, cylindrical rubber bellows with self-sealing rubber bulges and swivel backing flanges
Optionally with embedded pressure or vacuum support rings
- Nominal diameters:** NB 40 to NB 1200, intermediate sizes possible
- Installation length:** Standard $L_E = 150$ to 400 mm (► page 104)
Other installation lengths on request
- Pressure:** Depending on the nominal diameter and installation length up to 10 bar
Vacuum stability on request. Design in accordance with Pressure Equipment Directive PED 2014/68/EU
- Movement:** For small axial and lateral movements (► page 104)

Application:
Plant construction,
sand/gravel extraction
industry, dredgers,
food processing e. g. as
suction/pressure hoses,
in conveyor lines, on
pumps and vessels



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

Flanges

Design: Single-part, swivel, round backing flanges with clearance holes and groove to accommodate the rubber bulges

Flange norms: DIN, EN, ANSI, AWWA, BS, JIS, special measurements (▶ page 256)

Materials:

- Carbon steel: 1.0038 (S235JRG2)
1.0570 (S355J2G3)
- Stainless steel: 1.4301 (X5CrNi18-10)
1.4571 (X6CrNiMoTi17-12-2)
- Aluminium: AlMg3
- Other materials on request

Coating: Primed, hot-dip galvanised, special paint

Optional accessories

Protective hood: UV protection cover
Ground protective cover
Fire protection cover
Splash protective cover (▶ page 44)

Flow liners: Cylindrical flow liner
Conical flow liner
Telescoping flow liner (▶ page 43)



D100A
▶ without arch

Installation length (L _E) at design pressure															
NB	up to 10 bar L _E = 150 mm					up to 10 bar L _E = 200 mm higher pressures on request					up to 10 bar L _E = 250 mm				
	Movement				A cm ²	Movement				A cm ²	Movement				A cm ²
	mm	mm	±mm	±°		mm	mm	±mm	±°		mm	mm	±mm	±°	
40	8	5	12	0	10	10	6	16	0	10	13	8	20	0	10
50	8	5	11	0	16	10	6	15	0	16	13	8	19	0	16
65	8	5	11	0	28	10	6	14	0	28	13	8	18	0	28
80	8	5	10	0	43	10	6	14	0	43	13	8	17	0	43
100	8	5	10	0	69	10	6	13	0	69	13	8	17	0	69
125	8	5	10	0	115	10	6	13	0	115	13	8	16	0	115
150	8	5	9	0	170	10	6	12	0	170	13	8	15	0	170
200	8	5	9	0	278	10	6	12	0	278	13	8	14	0	278
250	8	5	8	0	449	10	6	11	0	449	13	8	14	0	449
300	8	5	8	0	656	10	6	11	0	656	13	8	13	0	656
350	8	5	8	0	855	10	6	10	0	855	13	8	13	0	855
400	8	5	8	0	1,195	10	6	10	0	1,195	13	8	13	0	1,195
450	8	5	7	0	1,514	10	6	10	0	1,514	13	8	12	0	1,514
500	8	5	7	0	1,886	10	6	10	0	1,886	13	8	12	0	1,886
600	8	5	7	0	2,706	10	6	9	0	2,706	13	8	12	0	2,706
700	8	5	7	0	3,750	10	6	9	0	3,750	13	8	11	0	3,750
800	8	5	7	0	4,914	10	6	9	0	4,914	13	8	11	0	4,914
900	8	5	6	0	6,193	10	6	9	0	6,193	13	8	11	0	6,193
1000	8	5	6	0	7,667	10	6	8	0	7,667	13	8	10	0	7,667
1100	8	5	6	0	9,297	10	6	8	0	9,297	13	8	10	0	9,297
1200	8	5	6	0	11,085	10	6	8	0	11,085	13	8	10	0	11,085

Installation length (L _E) at design pressure															
NB	up to 10 bar L _E = 300 mm					up to 10 bar L _E = 350 mm higher pressures on request					up to 10 bar L _E = 400 mm				
	Movement				A cm ²	Movement				A cm ²	Movement				A cm ²
	mm	mm	±mm	±°		mm	mm	±mm	±°		mm	mm	±mm	±°	
40	15	9	24	0	10	18	11	28	0	10	20	12	32	0	10
50	15	9	23	0	16	18	11	27	0	16	20	12	30	0	16
65	15	9	22	0	28	18	11	25	0	28	20	12	29	0	28
80	15	9	21	0	43	18	11	24	0	43	20	12	28	0	43
100	15	9	20	0	69	18	11	23	0	69	20	12	27	0	69
125	15	9	19	0	115	18	11	22	0	115	20	12	25	0	115
150	15	9	18	0	170	18	11	21	0	170	20	12	24	0	170
200	15	9	17	0	278	18	11	20	0	278	20	12	23	0	278
250	15	9	17	0	449	18	11	19	0	449	20	12	22	0	449
300	15	9	16	0	656	18	11	19	0	656	20	12	21	0	656
350	15	9	15	0	855	18	11	18	0	855	20	12	21	0	855
400	15	9	15	0	1,195	18	11	18	0	1,195	20	12	20	0	1,195
450	15	9	15	0	1,514	18	11	17	0	1,514	20	12	20	0	1,514
500	15	9	14	0	1,886	18	11	17	0	1,886	20	12	19	0	1,886
600	15	9	14	0	2,706	18	11	16	0	2,706	20	12	19	0	2,706
700	15	9	13	0	3,750	18	11	16	0	3,750	20	12	18	0	3,750
800	15	9	13	0	4,914	18	11	15	0	4,914	20	12	18	0	4,914
900	15	9	13	0	6,193	18	11	15	0	6,193	20	12	17	0	6,193
1000	15	9	13	0	7,667	18	11	15	0	7,667	20	12	17	0	7,667
1100	15	9	12	0	9,297	18	11	14	0	9,297	20	12	16	0	9,297
1200	15	9	12	0	11,085	18	11	14	0	11,085	20	12	16	0	11,085

For larger movements see type D110A.

Individual fabrication possible