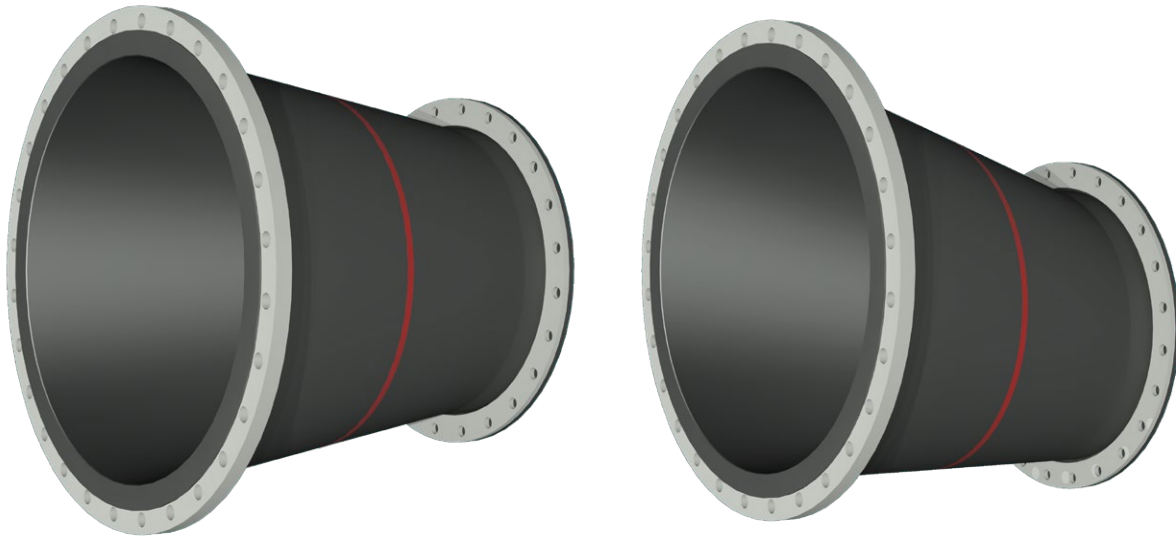
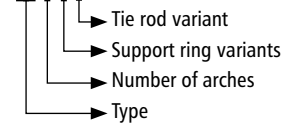


U300A-konz U300A-exz \varnothing 80 - 1,600 mm



Type key > page 22

U3 0 0 A



Concentric or eccentric reducing expansion joint

Design: Concentric or eccentric reducing rubber bellows with full faced rubber flanges, 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 single- or multi-part backing flanges. At high pressure, large diameters and extreme reductions with self-sealing rubber bulge and single-part swivel backing flange at the large diameter. In compliance with PED 2014/68/EU, FSA Technical Handbook and ASTM F1123 - 87.

Diameters: \varnothing 80 to 1,600 mm, custom diameters possible

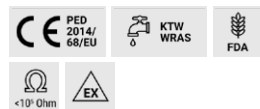
Length: Standard $L_e = 150$ to 2,150 mm (> page 128–129)
Custom length on request

Pressure: Up to 10 bar depending on diameter and length

Movement: For small axial and lateral movements



Application:
Plant construction,
desulphurisation plants,
sand/gravel extraction
industry, dredgers,
food processing e.g. in
gypsum suspension
conveyance lines, on
pumps, vessels, as
vacuum/pressure hoses



Request assembly
instructions at:
[www.ditec-adam.de/
en/contact](http://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

Backing flanges

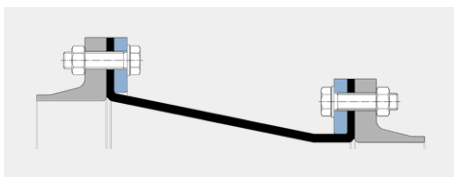
Design: Single- or multi-part round backing flanges with clearance holes
 For high pressure, large diameters and extreme reductions, single-part round swivel backing flange with clearance holes and a groove to accept a rubber bulge at the large diameter

Flange norms: DIN, EN, ANSI, AWWA, BS, JIS, special measurements (> page 298)

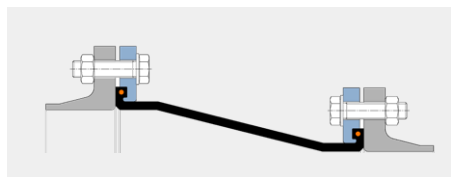
Materials: Carbon steel, stainless steel or aluminium

Coating: Primed, hot-dip galvanised, special paint

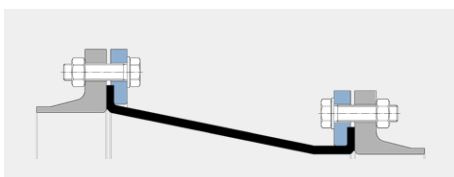
End fitting



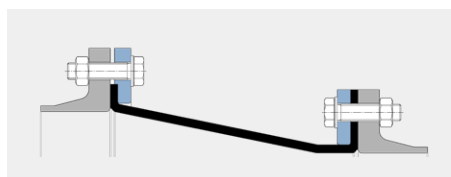
Full faced flanges



Swivel flanged with rubber bulge



Swivel flanged with metal core



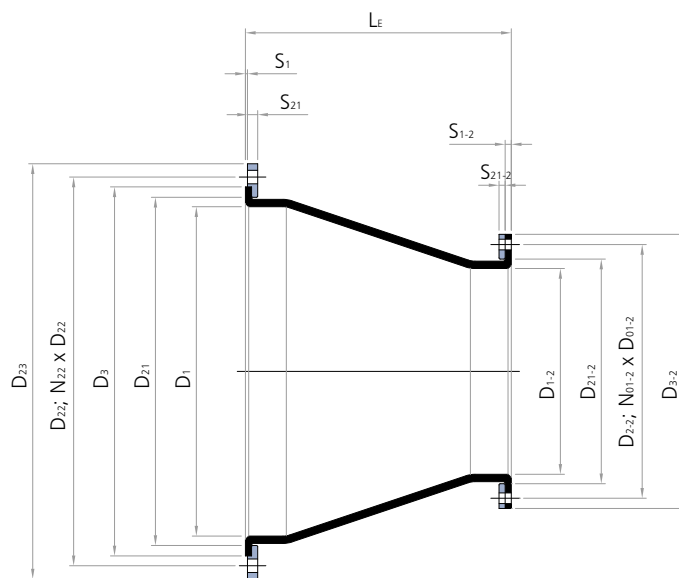
Full faced / swivel flanged combination

126 Universal expansion joints with full faced rubber flange

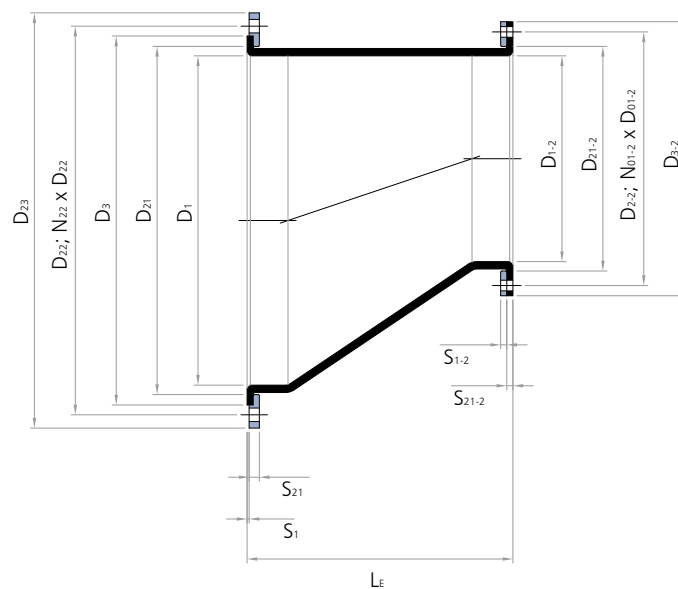
Accessories

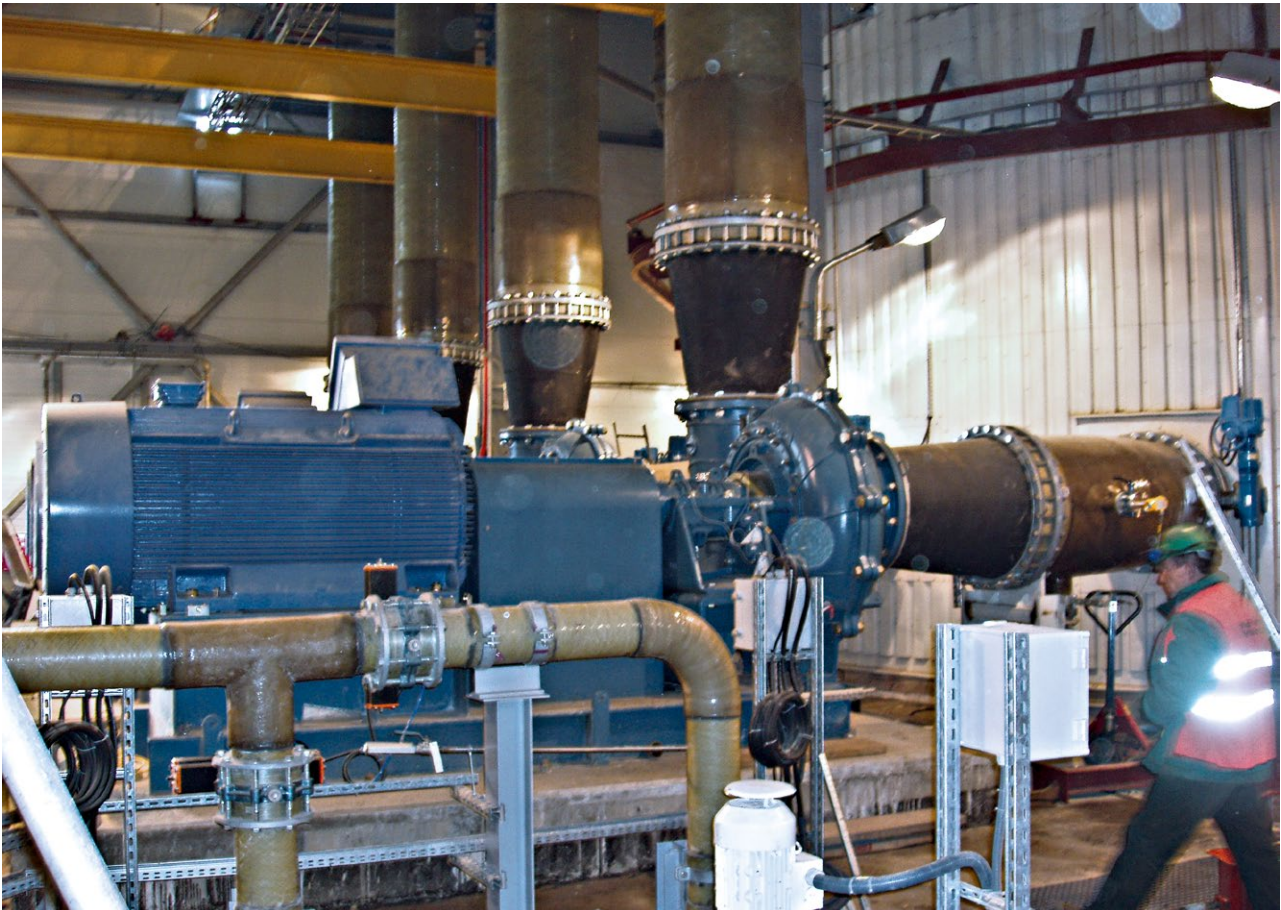
- Tie rods:**
- Type U300E: Tie rods mounted outside in spherical bearings and ball disks to take up the thrust forces from pressure
 - Type U300M: Tie rods mounted outside and inside in spherical bearings and ball disks to take up the thrust forces from pressure and vacuum
- Protective covers:** Ground protective shield
Protective shield or cover
Fire protective cover (> page 58)
- Flow liners:** Cylindrical flow liner
Conical flow liner
Telescoping flow liner (> page 57)

Cross section U300A-konz

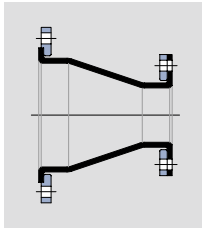


Cross section U300A-exz





Conical expansion joints, type U300A
on the suction and discharge side of a gypsum slurry pump
in a desulphurization unit of a power plant



U300A-konz

> concentric

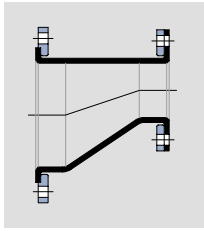
Installation length (L _E) at design pressure					
			up to 6 bar		
			higher pressures on request		
Potential combination			Movement		
∅ D ₁ mm	∅ D ₁₋₂ mm	Length mm			
100	80	160	2	2	5
	80	235	3	2	7
125	100	175	2	2	5
	80	310	4	3	9
150	100	250	3	3	7
	125	175	2	2	5
	80	460	7	5	12
200	100	400	6	4	11
	125	325	5	3	9
	150	250	3	3	7
250	80	660	10	7	17
	100	600	9	6	15
	125	525	8	5	13
	150	450	7	5	11
	200	300	4	3	8
300	80	810	12	8	19
	100	750	12	8	18
	125	675	10	7	16
	150	600	9	6	14
	200	450	7	5	11
	250	350	5	4	8
350	80	960	15	10	22
	100	900	14	9	21
	125	825	13	8	19
	150	750	12	8	17
	200	600	10	6	14
	250	500	7	5	12
	300	350	5	4	8
400	100	1050	17	11	23
	125	975	16	10	22
	150	900	15	9	20
	200	750	12	8	17
	250	650	10	7	15
	300	500	8	5	11
	350	350	5	4	8
500	150	1250	21	13	26
	200	1100	19	11	23
	250	1000	17	10	21
	300	850	14	9	18
	350	700	11	7	15
	400	550	9	6	12
	450	400	6	4	8
600	200	1400	25	14	28
	250	1300	23	13	26
	300	1150	21	12	23
	350	1000	18	10	20
	400	850	15	9	17
	450	700	12	7	14
	500	550	9	6	11
700	250	1600	30	16	31
	300	1450	27	15	28
	350	1300	24	13	25
	400	1150	21	12	22
	450	1000	18	10	19
	500	850	15	9	17
	600	550	9	6	11
800	300	1800	35	18	34
	350	1650	32	17	31
	400	1500	29	15	28
	450	1350	26	14	25
	500	1200	23	12	23
	600	900	16	9	17
	700	600	10	6	11

Installation length (L _E) at design pressure					
			up to 6 bar		
			higher pressures on request		
Potential combination			Movement		
∅ D ₁ mm	∅ D ₁₋₂ mm	Length mm			
900	350	1950	39	20	36
	400	1800	36	18	33
	450	1650	33	17	30
	500	1500	30	15	27
	600	1200	24	12	22
	700	900	17	9	16
	800	600	10	6	11
1000	400	2100	43	21	37
	450	1950	40	20	35
	500	1800	37	18	32
	600	1500	31	15	27
	700	1200	24	12	21
	800	900	17	9	16
1100	900	600	10	6	11
	450	2300	49	23	40
	500	2150	46	22	37
	600	1850	39	19	32
	700	1550	32	16	27
	800	1250	26	13	22
	900	950	18	10	16
1200	1000	650	11	7	11
	500	2450	53	25	42
	600	2150	47	22	37
	700	1850	40	19	31
	800	1550	33	16	26
	900	1250	26	13	21
	1000	950	19	10	16
1300	1100	650	11	7	11
	600	2450	55	25	41
	700	2150	48	22	36
	800	1850	41	19	31
	900	1550	34	16	26
	1000	1250	27	13	21
	1100	950	19	10	16
1400	1200	650	12	7	11
	700	2500	57	25	41
	800	2200	50	22	36
	900	1900	43	19	31
	1000	1600	36	16	26
	1100	1300	28	13	21
	1200	1000	20	10	16
1500	1300	700	12	7	11
	800	2500	59	25	40
	900	2200	51	22	35
	1000	1900	44	19	31
	1100	1600	36	16	26
	1200	1300	29	13	21
	1300	1000	21	10	16
1600	1400	700	12	7	11
	900	2500	60	25	40
	1000	2200	53	22	35
	1100	1900	45	19	30
	1200	1600	37	16	25
	1300	1300	29	13	21
	1400	1000	21	10	16

The specified movements may vary depending on the design pressure. Also available with restraints type "E" or type "M". Intermediate sizes or other diameter combinations as well as other length on request.

The movement capability of the expansion joints given in the tables is determined for flange dimensions according to DIN PN6. In case of deviating flange dimensions, please contact us.

Customised products available



U300A-exz

> eccentric

Installation length (L _E) at design pressure					
			up to 6 bar		
			higher pressures on request		
Potential combination			Movement		
∅ D ₁ mm	∅ D ₁₋₂ mm	Length mm			
			mm	mm	± mm
100	80	160	2	2	5
	80	235	3	2	7
125	100	175	2	2	5
	80	310	4	3	9
150	100	250	3	3	7
	125	175	2	2	5
	80	460	7	5	12
200	100	400	6	4	11
	125	325	5	3	9
	150	250	3	3	7
250	80	660	10	7	17
	100	600	9	6	15
	125	525	8	5	13
	150	450	7	5	11
	200	300	4	3	8
300	80	810	12	8	19
	100	750	12	8	18
	125	675	10	7	16
	150	600	9	6	14
	200	450	7	5	11
	250	350	5	4	8
350	80	960	15	10	22
	100	900	14	9	21
	125	825	13	8	19
	150	750	12	8	17
	200	600	10	6	14
	250	500	7	5	12
	300	350	5	4	8
400	100	1050	17	11	23
	125	975	16	10	22
	150	900	15	9	20
	200	750	12	8	17
	250	650	10	7	15
	300	500	8	5	11
	350	350	5	4	8
500	150	1250	21	13	26
	200	1100	19	11	23
	250	1000	17	10	21
	300	850	14	9	18
	350	700	11	7	15
	400	550	9	6	12
450	400	6	4	8	
600	200	1400	25	14	28
	250	1300	23	13	26
	300	1150	21	12	23
	350	1000	18	10	20
	400	850	15	9	17
	450	700	12	7	14
500	550	9	6	11	
700	250	1600	30	16	31
	300	1450	27	15	28
	350	1300	24	13	25
	400	1150	21	12	22
	450	1000	18	10	19
	500	850	15	9	17
600	550	9	6	11	
800	300	1800	35	18	34
	350	1650	32	17	31
	400	1500	29	15	28
	450	1350	26	14	25
	500	1200	23	12	23
	600	900	16	9	17
700	600	10	6	11	

Installation length (L _E) at design pressure					
			up to 6 bar		
			higher pressures on request		
Potential combination			Movement		
∅ D ₁ mm	∅ D ₁₋₂ mm	Length mm			
			mm	mm	± mm
900	350	1950	39	20	36
	400	1800	36	18	33
	450	1650	33	17	30
	500	1500	30	15	27
	600	1200	24	12	22
	700	900	17	9	16
800	600	10	6	11	
1000	400	2100	43	21	37
	450	1950	40	20	35
	500	1800	37	18	32
	600	1500	31	15	27
	700	1200	24	12	21
	800	900	17	9	16
900	600	10	6	11	
1100	450	2300	49	23	40
	500	2150	46	22	37
	600	1850	39	19	32
	700	1550	32	16	27
	800	1250	26	13	22
	900	950	18	10	16
	1000	650	11	7	11
1200	500	2450	53	25	42
	600	2150	47	22	37
	700	1850	40	19	31
	800	1550	33	16	26
	900	1250	26	13	21
	1000	950	19	10	16
	1100	650	11	7	11
1300	600	2450	55	25	41
	700	2150	48	22	36
	800	1850	41	19	31
	900	1550	34	16	26
	1000	1250	27	13	21
	1100	950	19	10	16
	1200	650	12	7	11
1400	700	2500	57	25	41
	800	2200	50	22	36
	900	1900	43	19	31
	1000	1600	36	16	26
	1100	1300	28	13	21
	1200	1000	20	10	16
	1300	700	12	7	11
1500	800	2500	59	25	40
	900	2200	51	22	35
	1000	1900	44	19	31
	1100	1600	36	16	26
	1200	1300	29	13	21
	1300	1000	21	10	16
	1400	700	12	7	11
1600	900	2500	60	25	40
	1000	2200	53	22	35
	1100	1900	45	19	30
	1200	1600	37	16	25
	1300	1300	29	13	21
	1400	1000	21	10	16
1500	700	13	7	11	

The specified movements may vary depending on the design pressure. Also available with restraints type "E" or type "M". Intermediate sizes or other diameter combinations as well as other length on request.

The movement capability of the expansion joints given in the tables is determined for flange dimensions according to DIN PN6. In case of deviating flange dimensions, please contact us.

Customised products available