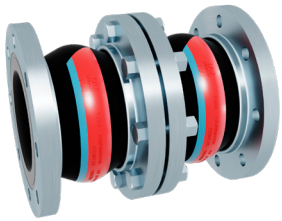
STENFLEX®

RUBBER EXPANSION JOINT TYPE AS-1D

FLAME-PROOF

TWIN-CONVOLUTED UNIVERSAL EXPANSION JOINT DN 25 – DN 250



STRUCTURE TYPE AS-1D / RUBBER BELLOWS PN 16

- Universal expansion joint (double shafted), consisting of a rubber bellows and rotable flanges
- Highly elastic molded bellows in various rubber grades
- Steel wire cord reinforcement
- Wire-reinforced self-sealing rubber rim
- Electrical impedance < 100 Ohm (DIN IEC 93, VDE 0303-30)

Rubber grade*	EPDM	NBR
Colour code	orange/blue	red/blue
Possible uses	Hot water, acids, lyes	hydrocarbon containing liquids

*Check or inquire about the resistance of the rubber grade to temperature and medium.

Technical design	
Max. perm. operating pressure	16 bar*
Max. perm. temperature	+130 °C
Bursting pressure	≥ 50 bar
Vacuum operation	DN 25 – 50 without vacuum supporting ring, DN 65 – 400 with vacuum supporting ring

Max. operating pressure to be set 30 % lower for shock loads.
*Please consider a decrease of pressure due to temperature (see technical annex).

FLANGES / VERSIONS

- Rotable flanges with stabilizing collar
- Flange drilling for through bolts, DN 25 with Drill holes
- Special machined groove for rubber rim

	Standard	**Others**
Dimensions	EN 1092	ANSI, BS etc. Connection dimensions see technical annex page 213 – 215
Materials	1.0038 (S235JR)	1.4541, 1.4571 etc.
Corrosion protection	electrogalvanized	hot-dip galvanized, special varnish, special coating, etc.

NOTE

Please comply with the general technical instructions regarding reaction force, moving force, fixed point load, installation instructions etc.

Subject to technical alterations and deviations resulting from the manufacturing process.

Chemicals used for water treatment (particularly in heating systems and coolant systems) can corrode the materials of the rubber expansion joint. According to VDI Directive 2035, DIN 4809 part 1 and VGB R 455P, the manufacturer of the chemicals must state that the materials used in the expansion joint, especially for the rubber bellows, will not be damaged by the chemicals.

APPLICATIONS

- for reducing thermal and mechanical tension in pipes and their system components, e.g
  - pumps
  - compressors
  - engines
- for muffling vibration and noise
  - at appliances
  - in cooling water and lub oil pipes
- for compensating axial, lateral and angular movement
- to compensate for installation inaccuracies
- to meet fire protection regulations
- shipbuilding industry
- in heating plants

CERTIFICATES

- CE (PED 2014/68/EU)
- American Bureau of Shipping
- DNV GL® / DNV®
- Bureau Veritas
- Lloyd's Register of Shipping
- TÜV/DIN 4809 (DN 25 – 200)
- TÜV Süd (KTA)
- MED
- Others see technical annex

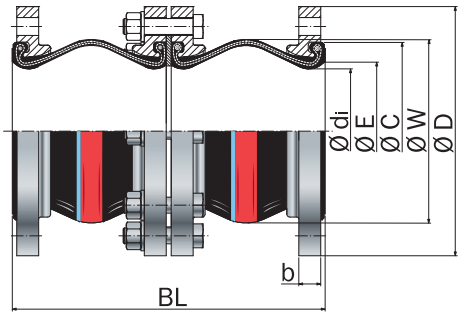
DIMENSIONS STANDARD PROGRAM

DN	BL* mm	Pressure rate bar	Ø dj Bellows inner Ø mm	Ø C Raised face outer Ø mm	Ø E Raised face inner Ø mm	Ø W*** Convolution Ø mm	PN Flange connection EN 1092	Ø D Flange outer Ø mm	b Flange thickness mm
25	255	16	31±3	72	39	78	16**	115	16
32	255	16	31±3	72	39	78	16	140	16
32	305	16	31±3	72	39	88	16	140	16
40	255	16	39±3	81	45	86	16	150	16
40	305	16	39±3	81	45	96	16	150	16
50	255	16	49±3	95	56	97	16	165	16
50	305	16	49±3	95	56	107	16	165	16
65	255	16	65±3	115	72	113	16	185	18
65	305	16	65±3	115	72	123	16	185	18
80	305	16	77±3	127	84	135	16	200	20
100	305	16	100±3	151	109	160	16	220	20
125	305	16	127±3	178	133	184	16	250	22
150	305	16	153±3	206	161	212	16	285	22
175	305	16	176±3	230	185	236	16	315	22
200	305	10	202±3	260	209	265	10	340	25
200	355	10	202±3	260	209	265	10	340	25
250	355	10	252±3	313	262	318	10	395	25
250	405	10	252±3	313	262	318	10	395	25

* DN 25 up to DN 300 also available as type RS-1 in length 265.
** Flanges with drill holes M 12.
*** unpressurized
From DN 200 pressure rate 16 bar also available with flanges PN 16. Please contact us for further flange dimensions.

ACCESSORIES

- Vakuumstützring
- Leitrohr
- Schutzhaube
- Schutzrohr



Type AS-1D

Universal expansion joint (double shafted) without restraint

MOVEMENT COMPENSATION

DN	BL mm	Δ ax Axial movement Compression - mm	Δ ax Axial movement Elongation + mm	Δ lat Lateral movement ± mm	Δ ang* Angular movement ± ∢ degrees	A** Effective bellows cross sectional area at 16 bar cm²	Permissible vacuum w/o supporting ring at length BL bar absolute	Weight approx. kg
25	255	60	20	55	50	0	0	4,9
32	255	60	20	55	50	0	0	7,4
32	305	70	30	65	50	-14	0,5	7,6
40	255	60	20	55	50	0	0	8,3
40	305	70	30	65	50	-25	0,7	8,5
50	255	60	20	55	50	0	0	9,7
50	305	70	30	65	50	-14	0,7	10,1
65	255	60	20	38	50	0	0	12,1
65	305	70	30	53	40	-25	0,7	12,5
80	305	80	20	38	40	12	0,2	16,2
100	305	80	20	30	30	9	0,4	17,9
125	305	80	20	25	30	18	0,65	23,5
150	305	80	20	20	24	52	0,65	29,3
175	305	80	20	17	20	54	0,7	35,2
200	305	40	40	21	16	285	0,8	42,6
200	355	90	30	25	16	56	0,7	43,2
250	355	90	30	21	14	191	0,7	57,6
250	405	70	30	21	12	54	0,5	58,2

* Larger Δ ang possible for compressed installation length.
**Effective bellows cross sectional area is a theoretical value.
Please inquire for simultaneous (different) movement.