STENFLEX

SF-21/1-E08

Steel compensator ▪ Type SF-21

Lateral compensator DN 32 – DN 500

Applications

- **for compensating lateral movement**
- **for reducing tension, damping noise and oscillation in pipes and their system components, e.g.**
  - **pumps**
  - **compressors**
  - **motors**
  - **turbines**
  - **machines**
  - **process plants**
- **for installation in**
  - **industrial applications**
  - **gas and water supply**
  - **exhaust systems**
  - **heating installations**
- **to compensate for installation inaccuracies**

Structure type SF-21

☐ Vacuum-proof lateral compensator consisting of a stainless steel bellows and welded flanges

☐ Flanges with tie rods to absorb reaction force

Steel bellows PN 16

☐ Multiple convolution bellows in various stainless steel grades
☐ One ply or multi-ply structure

Material grade *	Material No. as per DIN EN	Temperature**	Possible uses
Stainless steel	**1.4541**	**-196 °C up to +550 °C**	**Low temperature, acids, lyes, gases, fertilizers**
	1.4404, 1.4571	**+550 °C**	**Media containing chloride, oil, soap, drinking water, food stuff, petrol**

* Check or inquire about the resistance of material grades to temperature and medium.
** Check or inquire about reduction in pressure by temperature.

Tie rod restraints

☐ Outer restraints carried on spherical washers/conical seats

Materials
Standard: tie rods 8.8
Others: stainless steel

Corrosion protection
Standard: electrogalvanized

Flanges

Version
☐ Welded flanges with turned seal
☐ Flange drilling for through bolts

Dimensions
Standard: DN 32 - DN 500 (PN 16) according to DIN 2501
Others: DIN EN, ANSI, BS etc.
Connection dimensions see technical annex

Materials
Standard: 1.0038 (RSt 37-2), 1.0460 (C 22.8)
Others: stainless steel

Corrosion protection
Standard: anti-corrosion primed
Others: special varnish, etc.

Special designs

Other sizes (DN), lengths or pressure ratings on request.

Accessories

☐ Internal guide sleeve
☐ Protective tube
☐ Gas sealings for DVGW-application

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.

Certificates

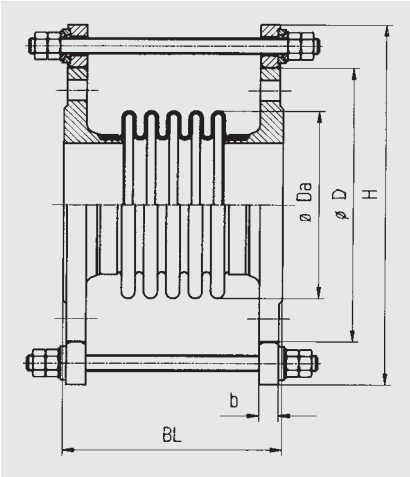
☐ CE (DGR 97/23/EC)
☐ American Bureau of Shipping
☐ Bureau Veritas
☐ DVGW
☐ Germanischer Lloyd
☐ Lloyd´s Register of Shipping

Pressure rate PN 16 standard program

DN	BL mm	Δ lat_{tot} Lateral movement mm	C_{lat} Lateral spring rate N/mm	F_{fric} Friction force restraints N/bar	ø D_a Bellows outer ø mm	PN Flange connec-tion DIN 2501	ø D Flange outer ø mm	H Flange height mm	b Flange thickness mm	Weight approx. kg
32	**150**	**10**	**43**	**3**	**54**	**16**	**140**	**220**	**18**	**4.2**
40	**175**	**10**	**71**	**5**	**66**	**16**	**150**	**230**	**18**	**4.5**
50	**205**	**14**	**94**	**6**	**78**	**16**	**165**	**245**	**18**	**6.2**
65	**210**	**14**	**124**	**8**	**96**	**16**	**185**	**265**	**18**	**7.8**
80	**225**	**13**	**153**	**11**	**115**	**16**	**200**	**280**	**20**	**9.4**
100	**235**	**14**	**203**	**15**	**137**	**16**	**220**	**320**	**20**	**11.9**
125	**265**	**14**	**144**	**21**	**171**	**16**	**250**	**350**	**22**	**14.6**
150	**290**	**14**	**265**	**26**	**197**	**16**	**285**	**385**	**22**	**17.5**
200	**310**	**14**	**536**	**42**	**253**	**16**	**340**	**440**	**24**	**30.0**
250	**335**	**10**	**1758**	**61**	**302**	**16**	**405**	**505**	**26**	**40.0**
300	**420**	**12**	**1906**	**115**	**388**	**16**	**460**	**560**	**28**	**71.0**
350	**430**	**11**	**2435**	**134**	**420**	**16**	**520**	**620**	**30**	**92.0**
400	**435**	**9**	**3484**	**182**	**471**	**16**	**580**	**680**	**32**	**114.0**
450	**440**	**8**	**4794**	**347**	**522**	**16**	**640**	**840**	**40**	**190.0**
500	**445**	**7**	**6361**	**411**	**572**	**16**	**715**	**915**	**44**	**220.0**

Table values refer to +20 °C, bellows material 1.4541, 1000 cycles. Please inquire for deviating values.

Version



Type SF-21
Outer restraints, carried on spherical washers/conical seats (ball joint)