















SF-33-D15

# Steel expansion joint - Type SF-33

Angular expansion joint, cardanic movable





# **Applications**

- for compensating angular movement in angular and deflecting pipe routings
- as double or triple joint compensation system for large movements
- for reducing tension
- for installation in ■ industrial applications **■** pipe line and plant construction

## Structure type SF-33

- ☐ Vacuum-proof angular expansion joint consisting of a stainless steel bellows with pipe ends and welded flanges
- ☐ Welded cardan hinge restraints to absorb reaction force

# Steel bellows PN 6 / 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		Low temperature, acids, lyes, gases, fertilizers
	1.4404, 1.4571		Media containing chloride, oil, soap, drinking water, food stuff, petrol

Check or inquire about the resistance of material grades to temperature and medium.

# Flanges

#### Version

☐ Welded flanges

☐ Flange drilling for through bolts

#### **Dimensions**

Standard: DN 50 - DN 500 (PN 6)

DN 50 - DN 250 (PN 16) according to EN 1092

Others: DIN EN, ANSI, BS etc. Connection dimensions see technical

annex

# **Materials**

Standard: 1.0038 (S235JR) Others: stainless steel, etc.

#### **Corrosion protection**

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

### Pipe ends

#### **Materials**

Standard: 1.0305 (St 35.8),

1.0038 (S235JR)

#### **Corrosion protection**

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

Others: stainless steel, 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.

## Cardan hinge restraints

- ☐ Pivot of joint bars at center of bellows
- ☐ Hinge restraints control bellows movement

#### **Materials**

Standard: 1.0038 (S235JR) Others: stainless steel, etc.

# **Corrosion protection**

Standard: anti-corrosion primed special varnish, etc.

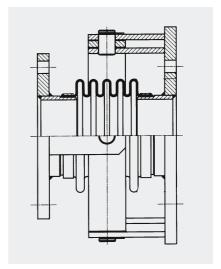
#### Special designs

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

#### Certificates

□ CE (DGR 97/23/EC)

#### Version



Type SF-33

Check or inquire about reduction in pressure by temperature.