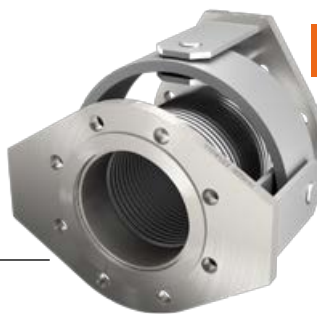


CUSTOMIZED PRODUCTION

STEEL EXPANSION JOINT TYPE SF-33

ANGULAR EXPANSION JOINT CARDANIC MOVABLE

**STRUCTURE TYPE SF-33 / STEEL BELLOWS PN 6, 16**

- 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
- Multiple convolution bellows in various stainless steel grades
- Single 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

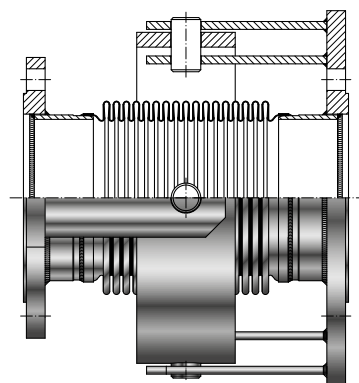
* Check or inquire about the resistance of material grades to temperature and medium.

** Check or inquire about reduction in pressure by temperature.

FLANGES / VERSIONS

- Welded flanges
- Flange drilling for through bolts

	Standard	Others
Dimensions	DN 50 – DN 1000 / PN 6 DN 50 – DN 250 / PN 16 acc. EN 1092-1	ANSI, BS etc. Connection dimensions see technical annex page 213 – 215
Materials	1.0038 (S235JR)	stainless steel etc.
Corrosion protection	anti-corrosion primed	special varnish etc.

**Type SF-33** with inner guide sleeve**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.

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

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

Others: special varnish, etc.

PIPE ENDS**Materials**

Standard: 1.0305 (St 35.8),

1.0038 (S235JR)

Others: stainless steel, etc.

Corrosion protection

Standard: anti-corrosion primed

Others: special varnish, etc.

SPECIAL DESIGN

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

CERTIFICATES

- CE (PED 2014/68/EU)