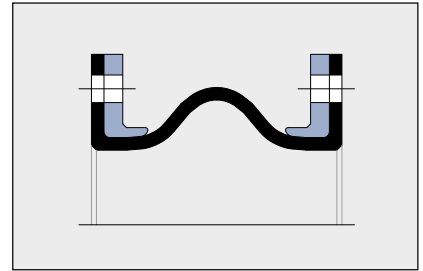


Expansion joint technology > Fixing types

Flanged fixing

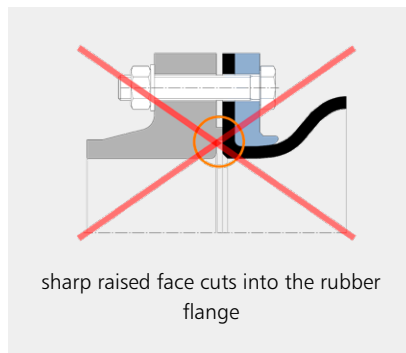
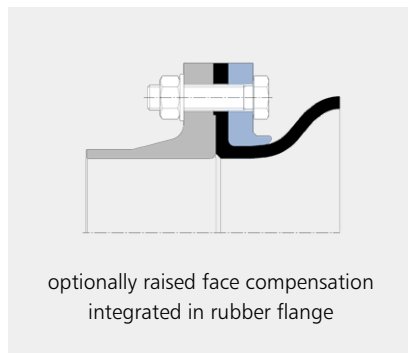
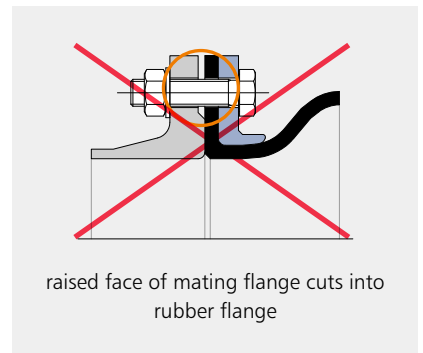
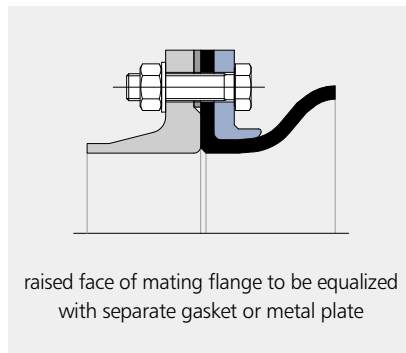
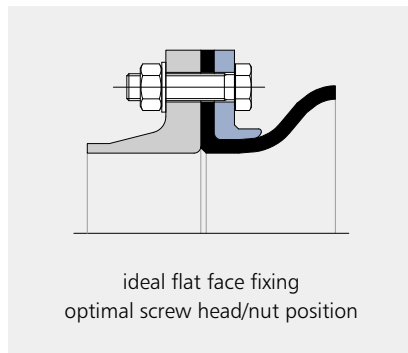
With full faced rubber flanges and backing flanges

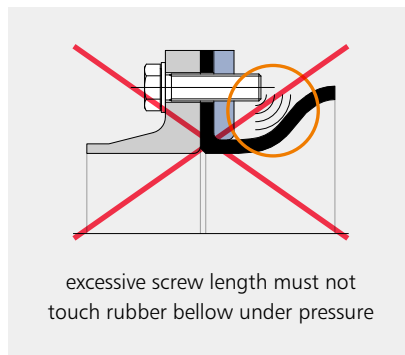
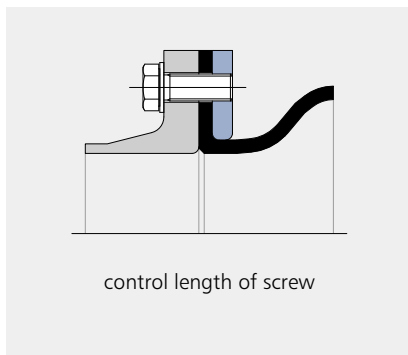
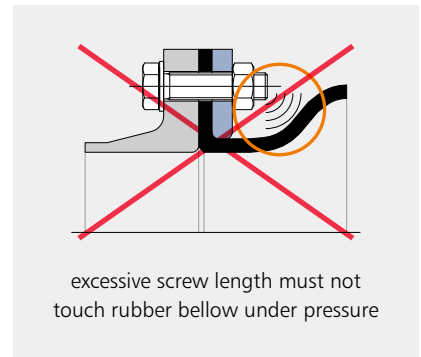
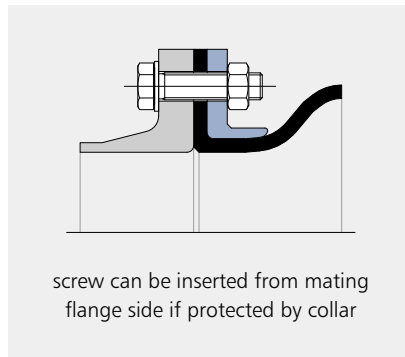
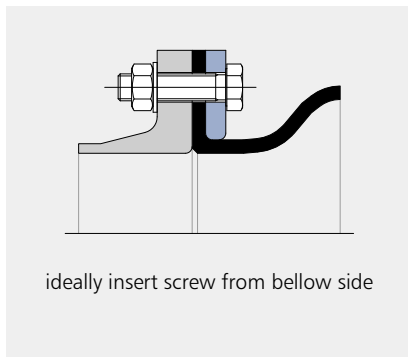
A full face integral rubber flange design with backing flanges is available for types without, with single and multiple arch design. The rubber flange of the bellows is molded in an equal thickness to the flange diameter. The backing flanges are designed as flat press-on flanges with or without support collars. The manufacturing process is economical for very large diameters also. For transport reasons, the backing flanges can also be delivered in a split construction. Hereto special measurements such as cutting through the holes or end plates to connect the backing flange parts to form an integral flange on-site need to be taken.



The fixing of the expansion joint needs to be performed in keeping with specific rules in order to assure reliable sealing of the flange connection. Ideally full face rubber flanges shall be clamped to flat face pipe flanges. It is essentially required that any recess or raised face of pipe flanges must be equalized in order to avoid damaging of the rubber flange surface. If the recess or raised face is specified in advance ditect can offer to integrate the negative of the recess or raised face into the rubber flange. Then no extra measurements such as separate steel plates or additional rubber gaskets to flatten the surface need to be taken onsite.

Full face rubber expansion joints are self-sealing. So an additional separate gasket is not required.





Glass reinforced epoxy piping (GRP) specialities

Flanges of glass reinforced epoxy piping cannot withstand the required tightening torques of full-faced rubber expansion joint fixed to without cracking depending from design pressure and pipe standard. In order to avoid special measurements on the GRP pipe flange ditec has developed a special sealing technology in the bellows rubber flange to lower the torques by approx. 50%. This also eliminates the need for any grooves for O-rings in the GRP flange and the most economic flat face GRP flange can be applied.

In case of expansion joints in GRP pipelines with collar flange fixing and backed steel rings the rubber flange surface shall have a raised face up to the outer diameter of the GRP stub to avoid cutting of sharp edges into the rubber.

