

▪ Vacuum rings

Vacuum rings are used in expansion joints working under vacuum and are used to protect the rubber bellows expansion joints against collapse. The rings are flooded in the compensator bellows permanently, so they do not come into contact with the flowing medium. For the production of rings, an acid-resistant steel rod grade 1.4301 with a diameter of $\varnothing 2 - \varnothing 20\text{mm}$ is used.

Depending on the number and location of the rings, expansion joints may have limitations in the range of compensation. Compared with compensators without vacuum rings, the compensation value can be reduced by up to 50%.

vacuum ring



TYPE A



Compensator with 1 ring mounted in the middle of the bellows. It can be used for higher vacuum but its use limits axial compensation

TYPE B



Compensator with 2 rings mounted in the groin. This solution slightly reduces the compensation of the bellows.

Vacuum rings reduce compensation by an average of 50% in each direction.

Because the rings are placed in the working part of the bellows, the compensation of the compensator with vacuum rings is limited compared to the standard compensator.

