

## ZAKO flange couplings

The ZAKO programme of flange couplings caters to tubing systems with outside diameters of between 16 and 120 mm. Both the connecting and the tube-to-port flange couplings are available for standard (250 bar) or high pressure (400 bar) and are classified accordingly in the standard and high-pressure series. VOSS offers the SAE and square flanges listed in this catalogue (Fig. 1 and 2).

To pre-assemble the ZAKO flange couplings, press the ZAKO ring into the tube end (similar to the flared cone of BV-10 tube couplings in conjunction with 10° flared cones). The tube fixture for both systems is therefore identical (see Fig. 3). The difference lies in the fact that the flared cone is sealed by means of a DKO head. On the tube side, sealing is achieved with high surface pressure at the flared section and the labyrinth seal effect of the small teeth on the cone surface. The flange presses a large area of the tube end against the ZAKO ring, ensuring especially high holding forces. As a result, the system remains leak-tight even when exposed to vibrations or reverse bending stress.

Hydraulic engineers appreciate the following characteristics of ZAKO flanges:

- Particularly suitable for extreme loading.
- Notching and incision-free tube holding with the 10° flared cone principle.
- Use of standard coupling bores.
- Easy assembly, even with thick-walled tubes.
- Minimisation of assembly errors, as the ZAKO ring must be pre-assembled in an assembly aid.

- Suitable for stainless-steel tubes with tolerances according to DIN 2391-C.
- Complete range of flanges in the standard and high-pressure lines with hole patterns according to SAE and square flange.

### Note on safety:

A wide range of different operating conditions often cause loads on tube connections with unforeseeable parameters. To ensure safe operation, please observe the following:

- In addition to the outer diameter of the tube, also take the wall thickness into account.
- VOSS 10° flared couplings may only be pre-assembled with the specially designed VOSS pre-assembly devices.
- Always observe the assembly instructions of the device used!

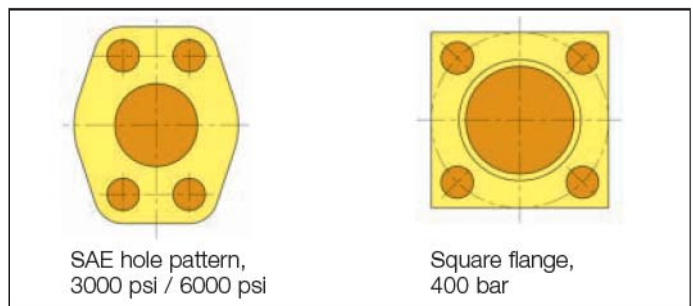


Fig. 1

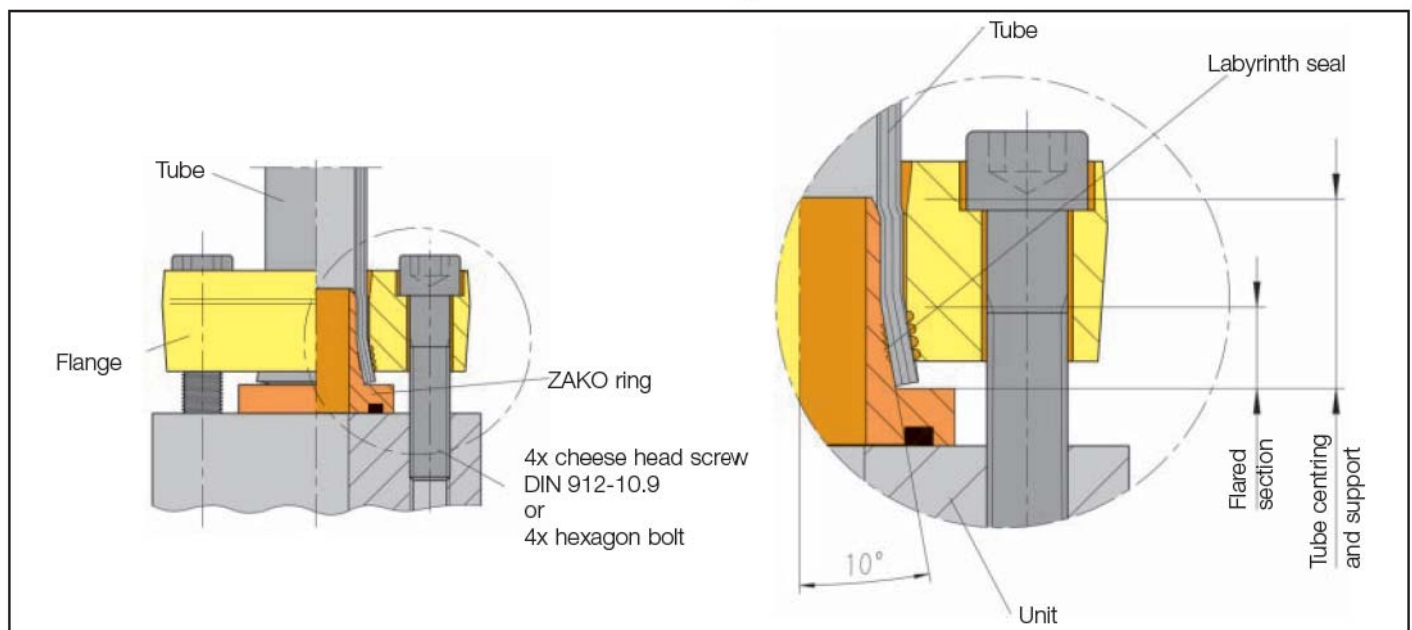


Fig. 2