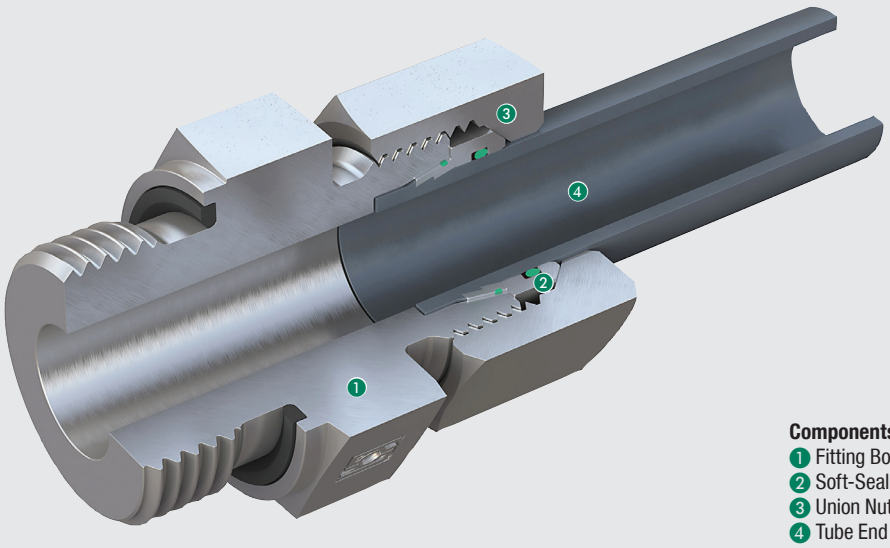
24° Tube Fittings with Soft-Sealing Cutting Ring



Components
1. Fitting Body – ISO 8434-1 / DIN 2353
2. Soft-Sealing Cutting Ring
3. Union Nut – ISO 8434-1 / DIN 3870
4. Tube End

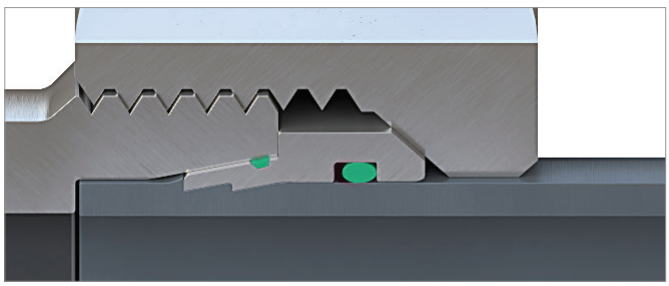
Soft-Sealing Cutting Rings provide an additional safety and protection against potential leakage risks, e.g. caused by the settling of purely metallic sealed connections, temperature fluctuations or considerable pressure and vibration loads in the system. "Sweating effects" on the connection points can be permanently avoided.

The type FI-WDDS Soft-Sealing Cutting Ring of the STAUFF Connect range is characterised by the elastomer sealing, which is located in a specially designed groove close to the rear end of the 24° taper and protected to prevent loss. An additional o-ring is used to secure the secure the second potential leakage path between the cutting ring and the tube – even in the event of unfavourable tolerances

FKM (Viton®) is used as the standard sealing material and enables problem-free use of the system for challenging applications involving high temperatures or aggressive media.

Like all other components in the STAUFF Connect product range, the cutting ring itself is designed as standard with a high-quality zinc/nickel surface coating. With over 1,200 hours of resistance to red rust / base metal corrosion in the salt-spray chamber in accordance with DIN EN ISO 9227, the coating offers most reliable corrosion protection far beyond previously accepted market standards.Even after shipping, handling and assembly of the components, the coating significantly exceeds the requirements for the highest corrosion protection class K5 defined in VDMA Standard Sheet 24576 for tube connectors.

Alternative materials and surface and surface finishings are available on request.



Both elastomer sealings are located in the secondary sealing zone of the connection. Static and dynamic loads in the system are primarily compensated by the tried and tested metallic sealed area. When assembled, the soft-sealing elements are almost completely chambered (as gap-free and cavity-free as technically possible). This prevents extrusion of the sealings and contributes to the excellent longterm stability of the system.

Type FI-WDDS Soft-Sealing Cutting Rings convince through their simple assembly in the fitting body: Use a suitable spanner to tighten the union nut until the point where the cutting ring comes into contact and sits closely with the face side of the fitting body. This point is characterised by a significant increase in force.

Due to the design, the risks of insufficient assembly as well as over-assembly of cutting rings (which can lead to damage or radial constriction of thin-walled tubes) can be significantly reduced.

As a matter of course, the recommended material raise in front of the first edge of the cutting ring after the completed assembly is clearly visible to tube fitters and inspectors and makes it easy to check and confirm the correct assembly – as required by the norm.

Type FI-WDDS Soft-Sealing Cutting Ring are available for all metric tubes with outside diameters between 6 mm and 42 mm / between .24 in and 1.65 in respectively. They even exceed the ISO requirements in pressure and can be used in applications with nominal pressures up to 500 bar / 7250 PSI in the Light Series and up to 800 bar / 11600 PSI in the Heavy Series (depending on series, type and size of the components – pressure reduction factors to be considered).

Users benefit from the great versatility and flexibility of the system, as well as the many combination and adaptation options offered by using standard components from the STAUFF Connect product range (in accordance with the latest versions of the ISO 8434-1 and the DIN 2353 standards). There is therefore no need to duplicate the stock-keeping of similar components with a correspondingly high likelihood of confusion, as is often the case with comparable systems. Material and logistics costs can thus be correspondingly reduced.

Connections using regular, purely metallic sealing double-edge cutting rings can be interchanged without any problems.