

# Walterscheid Tube Fitting Series Designed to deliver

As an innovator in tube connectors, our Walterscheid series offers superior design—enabling exceptional performance in a wide range of applications. Our design features go well beyond simple metallic sealing cutting ring systems to deliver the best possible performance and leak-free operations.



## WALPRO design benefits

- Operators 'feel' when assembly is complete and overtightening is unmistakable, thanks to steadily rising tightening torque with a limit stop feature.
- Increased resistance to high dynamic loads through axial ribs, inner area clamping along the complete tube length, and cutting edges that equally share the holding force.
- Optimized sealing efficiency due to a complete connection between the cutting ring and tube surface. High sealing stress also results in a lower likelihood of leakage.
- Superior assembly characteristics due to cutting edge angles and two cutting edges.
- Safe connections even after repeated assembly. The metallic sealing cutting ring can be assembled and disassembled as often as necessary.
- Lower expenditure, thanks to a reduced need to replace nuts and bodies.

## WALRING design benefits

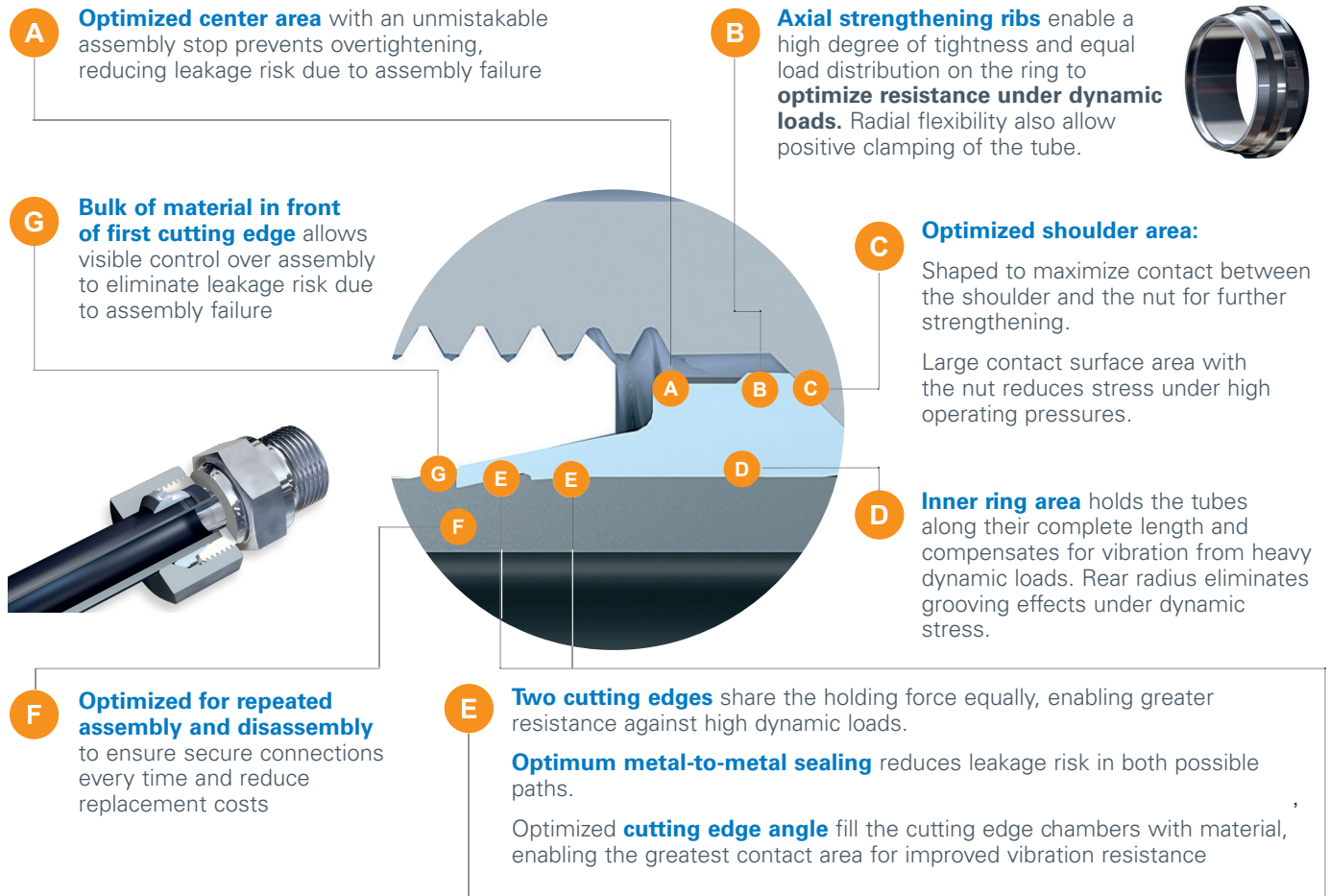
- WALRing offers similar advantages to WALPRO cutting rings.
- No leakage risk with an additional soft seal for primary sealing.
- Easy assembly behavior and a reduced risk of errors due to all components being integrated into a system nut.
- Block assembly design eliminates component tolerances in the assembly process, preventing leakage due to assembly error.

## WALFORM design benefits

- Patented nose design provides secondary metallic sealing to eliminate any risk of leakage in the only possible path.
- Positive locking between the stud and tube ensures absolute reliability under extreme dynamic loads.
- Locked-in retaining tube removes any risk of disconnection and enables WALFORM to be used in safety-critical applications.
- No turning of the tube during the assembly process eradicates the risk of assembly failure.



# WALPRO components



# WALFORM components

A

## Primary sealing ensured through WALFORM tube fitting soft-seal, eliminating leakage.

Symmetrical seal negates handling mistakes and eliminates the risk of assembly failure.

Soft seal available in different materials (HNBR, NBR, or EPDM) for high variance in applications (e.g. high temperature, aggressive media).

Patented WALFORM tube fitting nose design provides secondary metallic sealing for the only possible leak path.

Positive locking between stud and tube, guarantees reliability under high dynamic loads.

Locked retaining tube prevents broken connections, ideal for applications where safety is critical.



B

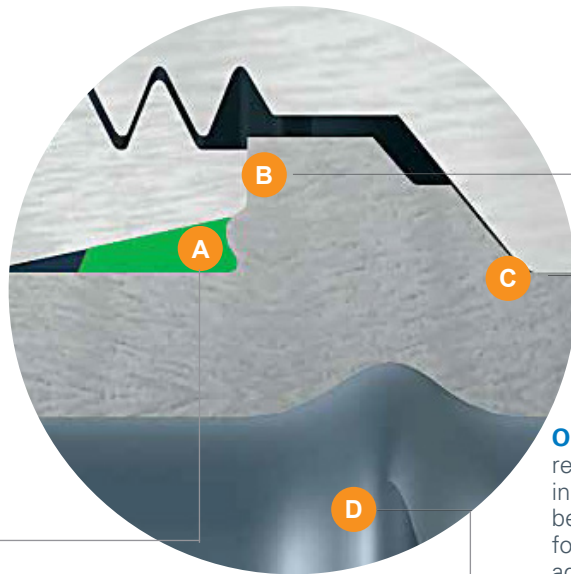
## Block assembly design:

Eliminates component tolerances in the assembly process, preventing leakage due to assembly error.

Ensures unmistakable increase in torque when completing assembly to stop leakage risk due to excessive tightening.

Considerably reduces required torque and tightening turns for lower cycle times and operator comfort.

Enables repeated assembly without sacrificing system performance.



**Optimized radius** for reduced groove effect in the area of maximum bending torque allows for the highest resistance against vibration and dynamic loads.

No sharp contact surface with the nut eliminates the risk of system failure due to groove effect.

Optimized design enables double the required bending strength for the cutting ring.

D

**Achieves double-sealed performance easily**, using less expensive components than any other forming system: Standard DIN-Nut, DIN-Fittings and specific WALFORM tube fitting seal. Standard sealing material is FKM (Viton).

E

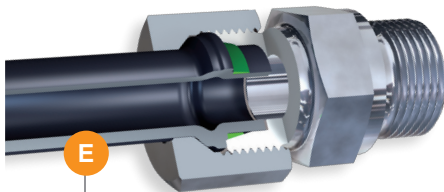
E

## Designed for flexibility: Short clamping area enables

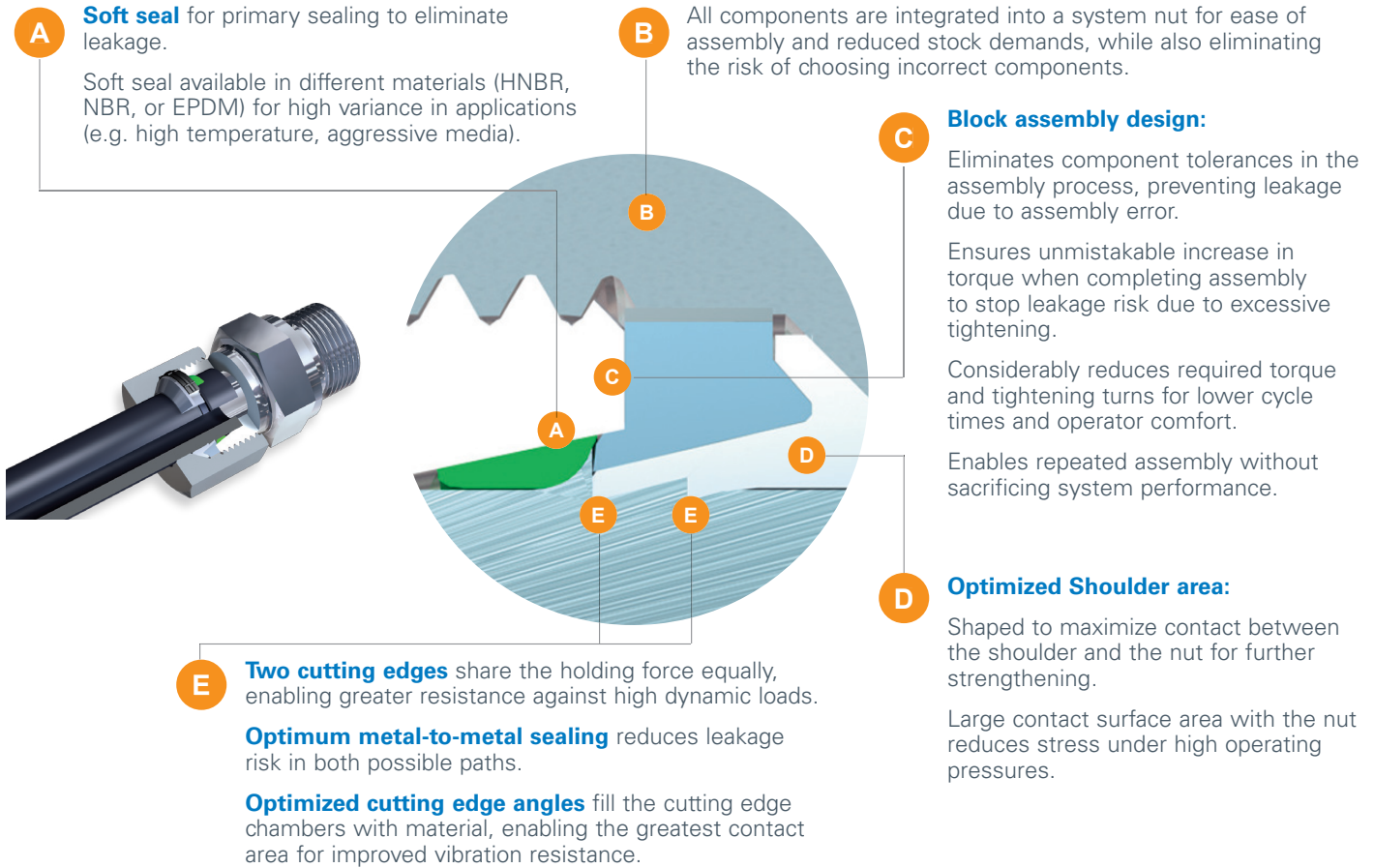
forming system to create short bending lengths.

No need to turn the tube during assembly eliminates failures.

Smoothed transition of stress areas in clamping zone, because of optimized clamping grips, eliminates risk of failure under dynamic load.



# WALRING components



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