VOSS

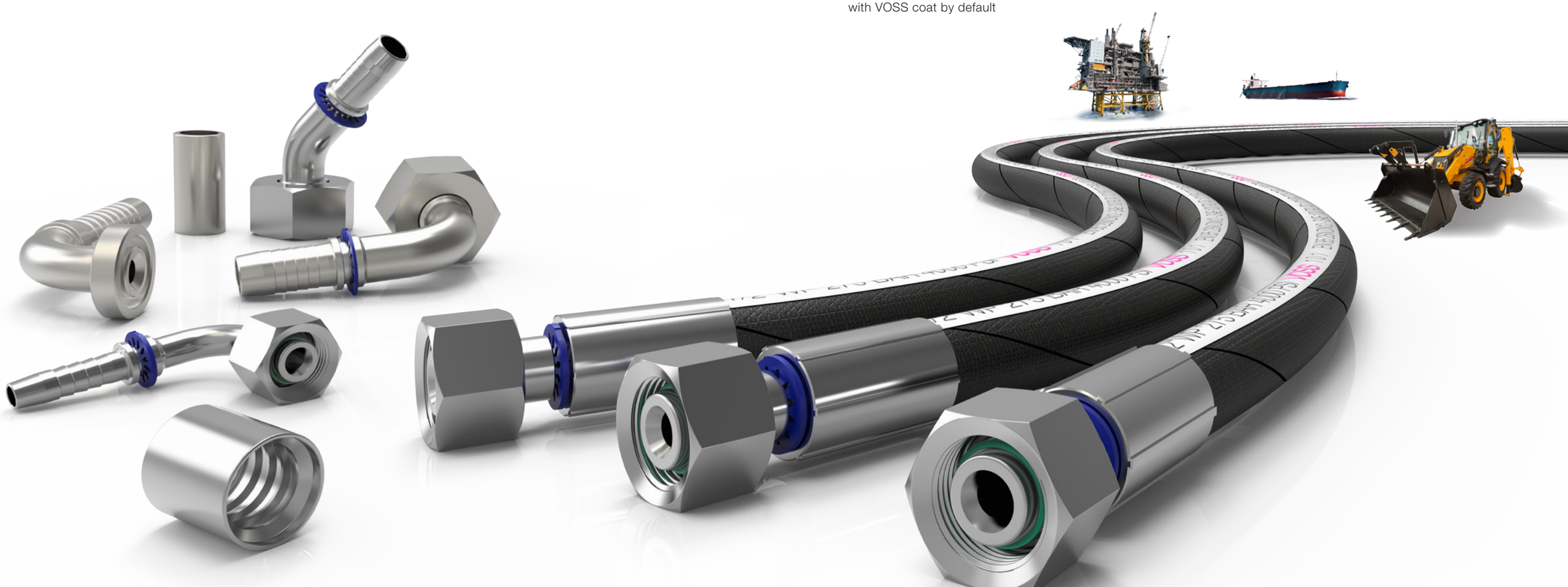
VOSS Fluid hose fittings – Safety and Flexibility for your connection systems

One-hundred percent committed to your requirements

Hydraulic systems are only as productive as each individual component. So VOSS Fluid places the same high demands on the quality on its hose fittings as the rest of the range. That concerns their leakage and assembly reliability as well as their versatility and durability. The synergy between VOSS Fluid hose fittings and other VOSS connection systems always guarantees a matching offer in every application.

First class hose fittings for the highest demands

All components and systems from VOSS are perfectly matched. Uniform values and parameters make assembly easier, more reliable and increase leak prevention and the load capacity. In addition, as the standard VOSS Fluid solutions provide exemplary corrosion protection that has set the benchmark in the market and significantly increases the product service lives.



Good connections for successful technology

Synergy and commitment for higher productivity

There are many reasons for using hose fittings from VOSS Fluid. Here are some of the main reasons:

- Tried and tested solutions through decades of competency and expertise
- Transmission of the values based on the experience gained from tube connections on hose fittings
- Perfect harmonization between fittings and connections
- Greatest leak prevention through standardization of the system components
- Efficient assembly reliability through matching assembly criteria
- Durability through maximum corrosion protection with VOSS coat by default
- Versatility through many different product solution versions
- Permanent product availability through a global network of authorized dealers
- Logistics and purchasing advantages since everything comes from one, single source including the services for all product groups
- Consulting and application competence with consideration of the entire system for the perfect solution

Classic examples for added value – hose fixtures in the DKO variant

The highest targets are maximum impermeability and prevention

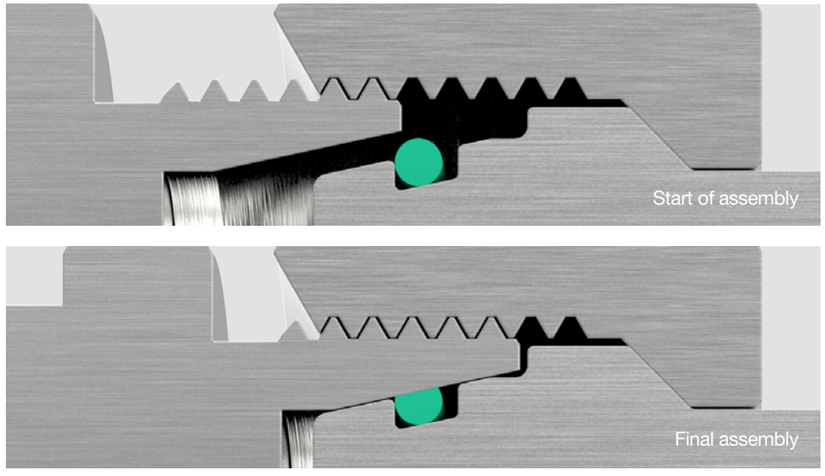
Hose connections that are produced based on VOSS conical seal couplings with O-rings provide huge safety bonuses even under dynamic loads and vibrations. Their structural details in depth:

- Long-lasting stability through a metallic conical seal on the coupling body and additional soft seal
- Reduced amount of work required through shorter torque distances and lower tractive forces
- Higher impermeability through embedded O-ring made of FKM (as standard)
- For applications with high operating pressures, vibrations, pulses or temperature fluctuations

Ideal for high loads

Hose fittings in the DKO variant can be simply and reliably mounted. Their connection dimensions exactly match ISO 8434-1. With their dimensional equivalence they can easily be built-into existing connection systems. Here are some other reasons that they are enjoying ever-increasing use:

- Improved leak prevention and precise sealing
- Higher pressure resistance and functional reliability even under extreme operating conditions such as fluid shocks, bend-change stresses and vibrations
- Simple, fast and reliable assembly
- Repeat assemblies often possible without any problems



Far-sight for increased assembly reliability

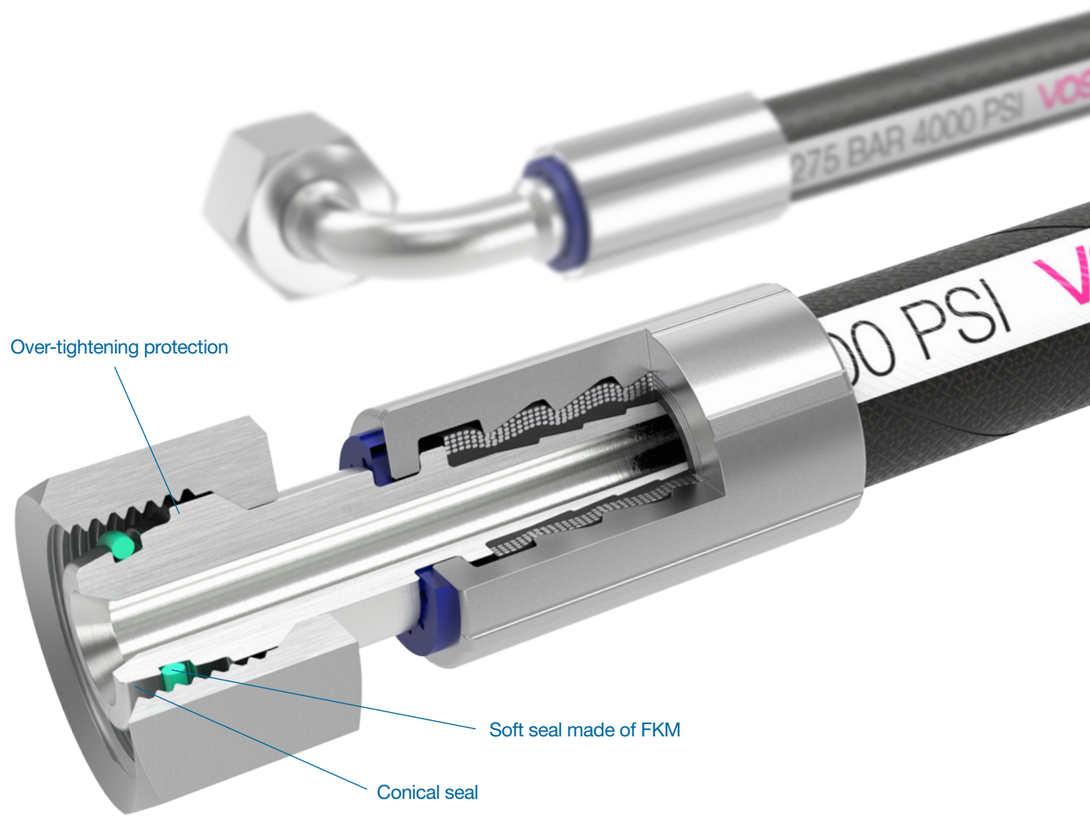
Over-tightening protection prevents faults

If the tightening torques are exceeded during assembly, leaks are possible in the sealing area of connected hydraulic components

In contrast, VOSS Fluid has a built-in over-tightening protection in its hose fittings as well as in its tube couplings.

The principle: If a fitter tightens past the optimum end of assembly, the front face of the over-tightening protection and the connecting piece collide. A noticeable increase in force indicates the end of the assembly to the worker. The front faces that contact prevent a further increase in force in the 24° cone, which prevents a spreading of the connection cone while also preventing damage to the contact surfaces.

The over-tightening protection does not impede retightening the connection. Even repeat assemblies are perfectly possible, in particular because the components are protected against deformation.



Perfection lies in the details

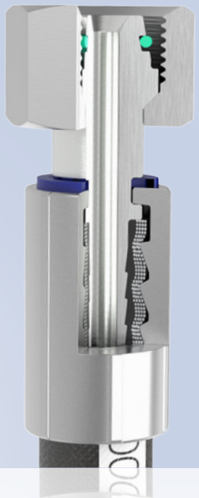
Solutions for all variants

Against the background of diverse stresses on hoses, normally three different embedding methods are used for perfectly fitting the hose fixtures. They differ in the casing of the elastomer in the deformation area and each exhibits different, application-specific thicknesses.

The best up front: The VOSS Fluid range covers the entire bandwidth of the hydraulic hoses that are most common on the market including fittings of up to 2 inches and across all pressure ranges. That means we can always provide you with the best solution during the consulting process.

Skive

The top outer layer of the hose material is precisely removed. The nipple and mount structurally create a positively locked unit. The wire insert of the hose is applied to the mount without any stress. The advantage during this is the strong frictional connection between the hose and the fitting and the associated high pressure resistance and impermeability. The process is predominantly used in the high-pressure area



No Skive

Here, the hose elastomers remain unskived. Instead, the fitting is pushed over the hose and pressed with the sleeve. The advantages here are simple and clean assembly. Due to the comparatively low interactive forces between the hose material and the fitting, the technology is used more commonly for systems with low pressure loads.

Double Skive

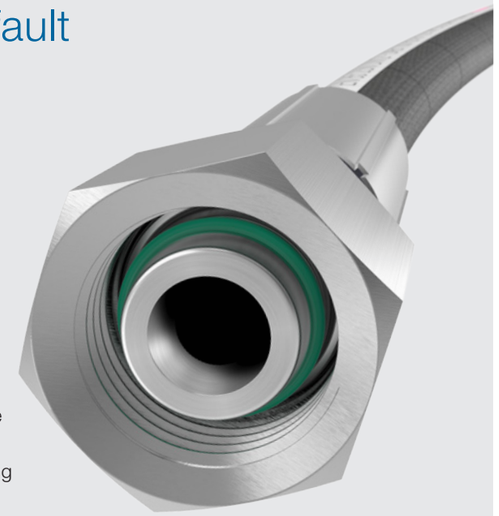
In addition to the outer layer, a defined, short section of the inner layer of the hose material is also skived off. That achieves an especially strong form closure in the mount area. At the same time, the elastomer is exposed to lower stresses. The advantage of this technology is the continuously improved tear-protection which is why it is commonly used in demanding applications and high-pressure areas.

Extremely long-lasting by default

Fittings with endurance thanks to VOSS coat corrosion protection

VOSS coat stands for maximum corrosion protection thanks to a zinc nickel based surface. It is the result of continuous optimizations and many years of experience in the production processes and customer applications. VOSS has been setting standards with VOSS coat since 2007:

- 1,000 hrs. corrosion resistance during the salt spray test under practical conditions
- More than 2,000 hrs. of corrosion resistance during the salt spray test under laboratory conditions in the unmounted state
- Many times more resistant to damages of the base layer
- Sustainable production by using the latest in-house galvanizing



Locations and sales network

VOSS Fluid is represented globally with their own subsidiaries. In addition regional requirements are covered by an international, comprehensive network of renowned sales parties. These specialized distributors pre-fabricate and assemble VOSS Fluid products in flexible lot sizes and act as an extended arm of our company. For you that means you can assume high availability of VOSS Fluid products and services everywhere.

VOSS Fluid system components are produced at the following locations in Europe:

VOSS Fluid GmbH
Lüdenscheider Str. 52-54
51688 Wipperfürth
Germany
Tel. +49 2267 63-0
fluid@voss.net
www.voss-fluid.net

VOSS S.A.U
Paseo del Comercio, 90
Apartado Correos, 1014
08203 Sabadell
Spain
Tel. +34 93 71-06262
info@es.voss.net
www.es.voss.net

VOSS S.r.l.
Via A. Olivetti 5/g
23875 OSNAGO (LC)
Italy
Tel. +39 039 9300570
info@it.voss.net
www.it.voss.net

VOSS Fluid Larga s.r.l.
Via Stoppani,
1323875 OSNAGO (LC)
Italy
Tel. +39 039 58445
Fax. +39 039 9520010
info@voss-fluid-larga.net
www.voss-fluid-larga.com

VOSS Distribution S.a.r.l.
57 Route de Crécy
28500 Vernouillet
France
Tel. +33 237 380190
info@fr.voss.net
www.fr.voss.net