

Make better connections!



**We've got everything you need.
What we don't have, we can make for you.**



»Of course, our products have the many licences and certificates required.«

Proven: our stainless steel range

Hosetails, ferrules and adapters, as well as 24° DIN cutting ring couplings and 37° flared tube (JIC) couplings

- Compatible with most makes of hose
- Certified by DNV, Lloyd's, TÜV and others
- Large portfolio available from stock
- Special parts deliverable at short notice thanks to in-house production "Made in Germany"
- 3.1 documentation – 100 % traceability (subject to a charge)
- 1.4571-(316Ti) – top quality stainless steel for optimum performance

Low-friction stainless steel nuts

- Considerably reduced tightening torques compared to bright stainless steel nuts
- Simple, reliable assembly without cold welding
- Can be reassembled at least 8 times
- Less risk of leaks

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Consistent: our carbon steel range

Large variety of banjo fittings

- Optimal solution for installation in confined spaces
- Special parts supplied quickly thanks to in-house production
- Competent advice from dedicated experts in tube connection technology

DIN tube couplings with zinc-nickel surface protection and pressure ranges exceeding the standard values

- Consistently high quality for optimum performance as regards pressure and assembly reliability
- ZnNi is currently considered to be the best type of corrosion protection
- Constantly increasing product range available from stock



Fittings are our speciality. For the safety of the railway industry.



1 Hydraulics in the power car

- High-temperature compressors with PTFE hoses in combination with 1.4571 (316Ti) hose fittings and ferrules,
- Hydraulic connections between hydraulic drives, motors, control blocks, etc.
- Optional carbon steel with ZnNi surface or 1.4571 (316Ti) stainless steel

2 Compressed air brake systems

- With fixed pipework or flexible hose lines
- 1.4571 (316Ti) stainless steel guarantees the corrosion resistance of safety elements

The advantages of our ZnNi coating:

- Resistance against white rust >1,000 h according to salt-spray test ISO 9227
- Low tendency towards contact corrosion with aluminium; greatly delayed in the case of stainless steel
- Zinc-nickel at least 8 µm with thick-layer passivation maximum 500 nanometers and top sealer
- High abrasion protection
- High temperature stability

Public Discussion – Causes of Nickel Allergies.

The EU's Consumer Goods Ordinance governs the permissible amounts of nickel release from objects with prolonged skin contact, e.g. watches, jewelry with high content of nickel in stainless steel, etc. Though this requirement is not relevant for Volz products, as they do not fall under this regulation, nonetheless, we have had our products tested.

Your health is important to us!

The nickel release test of the ZnNi coating of Volz products according to DIN EN 12472 and DIN EN 1811 resulted in nickel release of 0.06 µg/cm²/week. This value is far below the permissible threshold of 0.5 µg/cm²/week. This low value demonstrates the Volz commitment to Public Health and Safety.



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- 3 Hydraulic/hydrostatic drive systems
- 4 Hydraulic/pneumatic couplings
- 5 Supply lines for air-conditioning systems, refrigerant lines, etc.
- 6 Pneumatic door systems
- 7 Hydraulic implement
- 8 Hydraulic implement in the field of loading technology
- 9 Hydraulically operated track technology

Volz – Make better connections!

The Volz Group can be your best fittings solution provider. As we manufacture inhouse, you get Volz Quality. We craft an extensive range of 316Ti stainless steel (Volz brand) DIN 2353 tube fittings, hose connections and adaptors. Volz also make carbon steel (Metric Fittings brand) DIN 2353 zinc-nickel coated tube fittings. Enjoy our wide range of products, all manufactured with German precision and attention to performance. Volz is a third generation family company with our Head Office, production and quality control located in Deilingen, Germany. Volz has outlets worldwide.

An example of our high quality standard: Stainless steel 1.4571! (316Ti)!

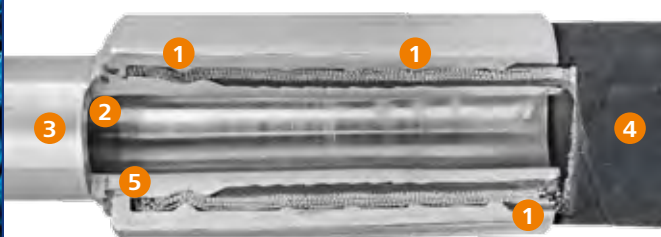
We use only V4A material, namely 1.4571 (316Ti). This is because we take acid and corrosion resistance literally and Volz is proud to set the standard, without exception. V4A is particularly important at high salt levels, marine applications for example. Volz offer you 100% material and batch traceability at your request.

The benefits to you at a glance:

- Carbon steel and stainless steel from under one roof
- High product quality „Made in Germany“ with inspected delivery chain
- extremely high corrosion and acid resistance
- Competent technical advice, on site if required
- Short delivery times, thanks to ample warehousing

Fittings are our speciality.

Hose Fittings (only available in 1.4571)



- 1 Internal and external skive assembly ensure optimal safety. A hose, finished inside and out, ensures optimal compression.
- 2 Single-part, solder-free fitting for maximum security
- 3 Different fitting configurations in the standard range (3000/6000 PSI flange, DKO, BSPP, NPT, UNO, JIC), plus numerous step sizes.
- 4 Conforming hoses from many manufacturers may be used. Ask about our third party accreditation program.
- 5 Stop limiters for assistance in locating of the hose tail in the hose and the ferrule in the suspension zone

Adjustable Elbow Fittings



- 1 Threaded plug shape E in accordance with DIN 3852-11 and ISO 1179-2. By removing the outer metal ring, threaded plug shape F in accordance with DIN 3852 T3 and ISO 6149 is also possible.
- 2 Metric and BSPP JIC threads

The following applies for all components:

- Low construction height for limited installation space
- Low pressure losses
- Reduced number of possible leakage paths
- Available in carbon steel and stainless steel
- Standard WEE design
- Upon request also as VEE, TEE, LEE

Connectors



- 1 Assembly stop limiter preventing over tightening.
- 2 Increased pressure levels throughout the entire range thanks to the use of high-quality raw materials
- 3 Zinc-nickel surface protection with >1,000h corrosion resistance to white rust
- 4 O-ring with reduced pre-tensioning for leak prevention. Standard sealing material is Perbunan (carbon steel), Viton is standard in 1.4571 fittings and available as an option for carbon steel.
- 5 Instead of sitting in a 1/2 or 1/4 shell, the wire nut sits in a full shell and thus achieves better installation results.
- 6 Pressure loss is reduced thanks to the optimised drilling.

Ferrules (only available in 1.4571)



Ferrules for standard hose types :

- Braided hose (ST, SN, SC)
- Spiral hose (SP, SH, R9R, R13, R15)
- Textile hose
- PTFE hose (corrugated pipe, smooth pipe)
- Thermoplastic (R7, R8)
- Special solutions

- 1 Optimised ferrule design depends upon the hose type; a universal hose tail is offered that is suitable for hose type specific ferrules.
- 2 Batch traceability

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Check Valves



- 1 Standard: 1 bar opening pressure, other opening pressures can be delivered quickly
- 2 Nominal flow maximised through the use of optimised components
- 3 Check valves either of stainless steel 1.4571 (316Ti) or carbon steel with ZnNi surface protection available

- 4 Different connection configurations:
 - 24° pipe connection / 24° pipe connection
 - 24° pipe connection / screw-in thread (metric / BSPP)
 - Internal thread on both ends (metric / BSPP)
- 5 *Stainless steel:* Metallic sealing edge for use at high temperatures or with aggressive media
Carbon steel: Elastomer seal
- 6 Elastomer seal in the closing direction

Banjo Couplings



- 1 Internal elastomer O-ring seal and additional metallic seal. In applications with high temperatures or aggressive media the O-ring can be removed.

- 2 Optimised through flow and reduced pressure loss thanks to:
 - Tapered banjo bolt,
 - Bores in flow direction,
 - Rounded edges mean less swirling
- 3 Optional metallic or elastomer seal.
- 4 Different thread shapes available. Metric or BSPP threads available as standard.

Alternating Valves



- 1 Carbon steel alternating valves with high-quality corrosion protection (zinc-nickel)

Flared Tube (JIC) Couplings and Adapters (only available in 1.4571)



JIC screw fittings and adapters made of stainless steel 1.4571 (316Ti) in many standard configurations and dimensions. Examples:

- JIC (SAE514,I-SO8434-3) to other thread styles: Metric, BSPP, BSPT, JIC, NPT, NPTF, UNO, SAE flange and more
- NPT to JIC, BSP, BSPT, Metric, UNO

- 1 JIC-adapter (SAE 514, ISO 8434-3)

Low-friction stainless steel nuts

(only available in 1.4571)



- 1 Low-friction coating:
 - Optimal installation results thanks to minimal friction values
 - Can be reassembled up to eight times
 - No cold welding, even without grease
 - No discolorations like with the silver coating
- 2 Volz manufacturer's mark and material identification
- 3 Batch traceability
- 4 Low-friction coating:
Dimensions: 15L-42L and 16S-38S

If you buy straight from the producer,
you can rely on the quality.



The Volz Group employs a total of 400 people. Regionally, the company is particularly involved in the reconciliation of family and working life. Our company was very honoured to be awarded with the FamilyNET award.

We offer you »Made in Germany« quality and quick delivery wherever in the world your plant is located. Our sales companies in Turkey, Ukraine, Australia, China, Singapore, Russia and North America deliver to you quickly and reliably. And in many other countries we work with carefully selected and competent partners who are well known and well established in the field of hydraulics.

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