



**Make better connections!**





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



*»Our efforts are geared to ensuring that the fluid engineering industry can still rely on tube couplings  
"Made in Germany" 100 years from now. Worldwide.«*

### **Proven: our stainless steel range**

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

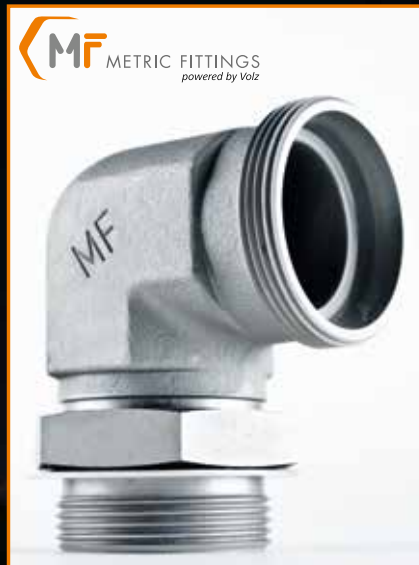
- Compatible with most makes of hose
- Certified by DNV, Lloyds, TÜV and others
- Large portfolio available from stock
- Special parts deliverable at short notice thanks to in-house production "Made in Germany"
- 3.1 documentation – 100 % traceability (subject to a charge)
- 1.4571-(316Ti) – top quality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



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





## Volz. Made in Germany.



- 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 inventory, 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 corrosion resistance literally and Volz is proud to set the standard, tolerate no exceptions. V4A is particularly important at high salt levels, marine applications for example. Volz offer you 100% material and batch traceability at your request.

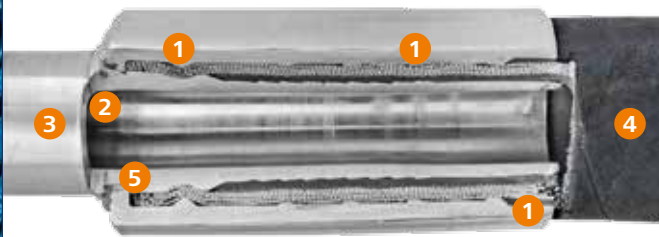
#### The benefits to you at a glance:

- Carbon steel and stainless steel from under one roof
- High product quality „Made in Germany“ with inspected delivery chain
- Competent technical advice, on site if required
- High delivery rate thanks to holding of stocks



# Fittings are our speciality.

## Hose Fittings



- 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 >720h corrosion resistance to red 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 Wire nail sits in a 1/2 or 1/4 shell instead of a full shell. This achieves better installation results. Processing in a clamping device guarantees true assembly.
- 6 Pressure loss is reduced thanks to the optimised drilling.

## Ferrules



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



- JIC screw fittings and adapters made of stainless steel 1.4571 (316Ti) in many standard configurations and dimensions. Examples:
- JIC (SAE 514, ISO 8434-3) 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



- 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 depend on the quality.



The Volz Group employs a total of 340 people. Most of these are employed in the headquarters in Deilingen. Internationally we are also active with marketing companies in Turkey, Ukraine, Australia, Shanghai, Singapore, Russia and North America. The company also involves itself locally, especially in the fields of trainees and bringing together family and job.

**Volz Gruppe GmbH**

Gartenstraße 6  
78586 Deilingen (Germany)

**T** +49 7426 939-550

**F** +49 7426 939-555

[www.volz.de](http://www.volz.de) | [info@volz.de](mailto:info@volz.de)

**Australia**

Volz Australia Pty. Ltd.  
Albury  
**T** +61 2 6023 6433  
**F** +61 2 6023 6431

Perth  
**T** +61 8 9418-7239  
**F** +61 8 9418-4167

**China**

Volz China Representative Office Shanghai  
**T** +86 21 58358161  
**F** +86 21 58352732

**Russia**

Volz RUS LLC  
Sankt Petersburg  
**T** +7 812 309-7555  
**F** +7 812 309-7555

**Singapore**

Volz Asia Pte. Ltd.  
Singapore  
**T** +65 9321 8198  
**F** +65 6862 4595

**Turkey**

Volz Hidrolik Pnömatik  
Müh. Ltd. Sti.  
Pendik-Dörtüol  
Istanbul  
**T** +90 216 5072307  
**F** +90 216 3797943

**Ukraine**

Volz Ukraine LLC  
Sumy  
**T** +38 0542 663891  
**F** +38 0542 663892