

# VOLZ Hose Fittings

## in stainless steel 1.4571 / 316Ti



**Make better connections!**



## **Volz stainless steel hose fittings – outstanding quality**

“Made in Germany” Our factories in Deilingen produce fittings of outstanding quality. We apply strict quality criteria when selecting raw materials sourcing our bar stocks and forging blanks from european countries. No compromises, high quality 1.4571 / 316Ti stainless steel.

## **Fast delivery**

Our excellent storage capacity, combined with our extensive range of equipment allows us to supply a wide range of stainless steel components, at short notice and in large quantities.

## VOLZ use high-grade 1.4571 / 316Ti stainless steel

We are the only supplier of tube couplings and hose fittings to exclusively use 1.4571 / 316Ti stainless steel. We are not satisfied with lesser grades but seek instead to offer you the highest-performing products.

Here are the advantages of 1.4571 / 316Ti stainless steel:

- Austenitic chromium - nickel - molybdenum steel with titanium stabilisation
  - Outstanding corrosion resistance due to the formation of homogeneous, dense passive layer on the surface
  - High temperature stability (up to 700 °C)
  - Suitable for low temperatures
  - Strong mechanical stability, even at high temperatures
  - Good ductility under mechanical stress
  - Medium to high tensile strength (490-700 N/sqmm)
  - Cold forging, cold heading capability
  - Superb welding characteristics with all standard welding processes, e.g. also laser welding
  - Magnetically stable ( $\mu \leq 1.3$ )
  - Resistance against inter- crystalline corrosion is enhanced due to a Ti alloy.
- Fulfills the following standardised test procedures:  
AFNOR NF 05-159 – ASTM A262 Practice E – DIN EN ISO 3651-2



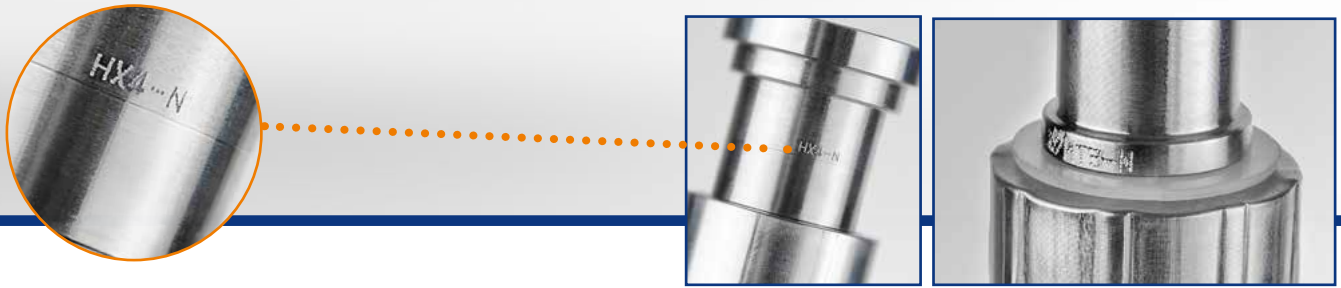
VOLZ uses only high quality seals:

- No compromise on the material used for the seals Standard = Fluorocarbon rubber (FKM) / Viton
- Temperature-resistant up to + 200°C
- Resistant to ageing and, inter alia, resistant to ozone



## State-of-the-art bending technology

There is an increasing demand for larger hose fittings, which present a challenge for the bending processes. We meet with this challenge with the latest production technology. Our bending machines can produce 90° arcs for hose nipples with state of the art uniformity in wall thickness and concentricity. The result, neither the cross section nor the flow characteristics are reduced.



## 100% batch traceability guarantee!

We offer a 100% traceability down to the smelting furnace. Upon request we can provide 3.1 inspection certificates. You can be sure that the fittings you use are manufactured according to extremely high specifications – and are produced with a high level of vertical integration at our company's main site in Deilingen. We supply "Made in Germany" quality.

## Proven and tested

The high quality and performance of our products is confirmed by international certificates:

- Det Norske Veritas
- Germanischer Lloyd
- Lloyd's Register
- DVGW
- ABS
- RMRS
- TÜV
- and many more



## Matched Products

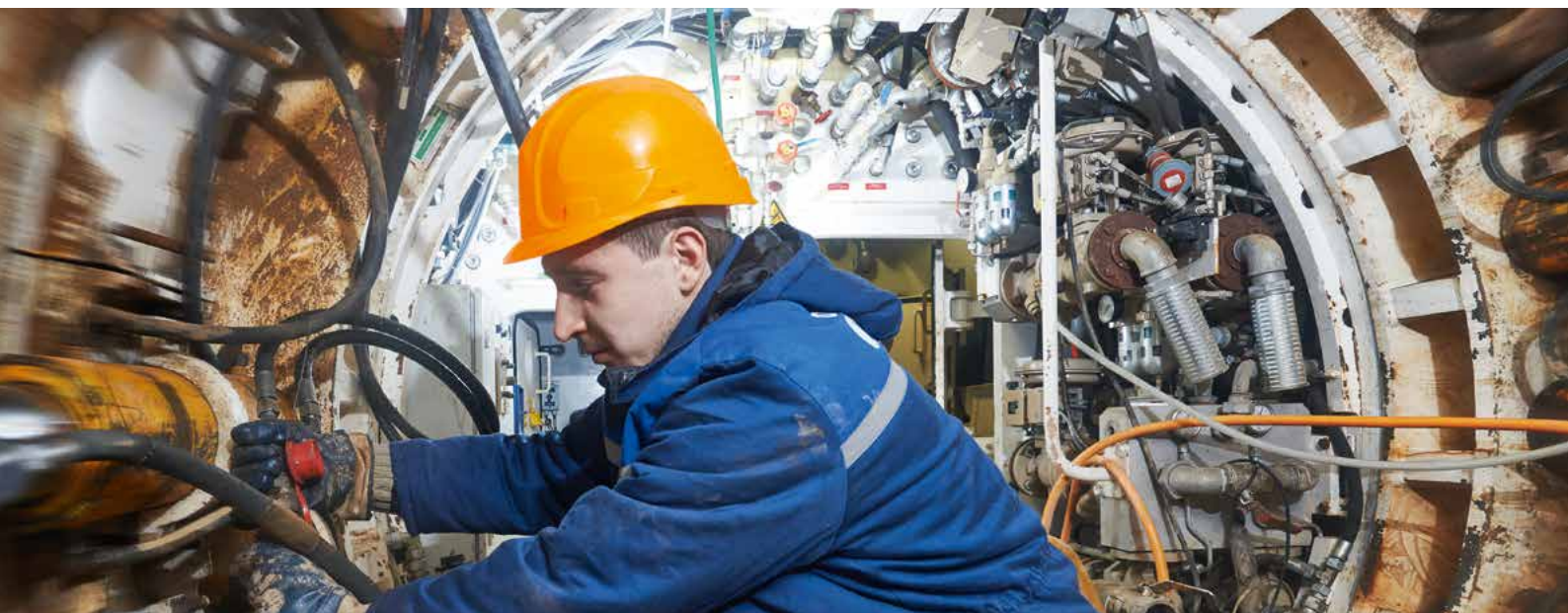
For combinations with well made EN and SAE type hoses, we provide relevant assembly procedures backed by inhouse testing.

Special situations demand a DNV type approval. VOLZ have the approvals, supported by assembly and testing procedures and a program for becoming a VOLZ APPROVED ASSEMBLER. Certificates of accreditation using Manuli, Gates, or SEL hoses with VOLZ fittings. VOLZ continues this program of accreditation and the relevant documentation can be found on our website [www.volz.de](http://www.volz.de).

## Volz hose fittings – tested technology

Our stainless steel hose fittings and ferrules are produced from one piece without welded connections. This prevents typical hazards of multi-part fittings such as badly executed weld points or shrinking.





## Extreme demands – extreme security


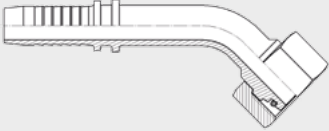
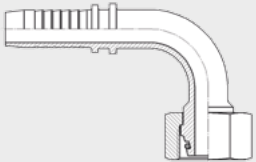

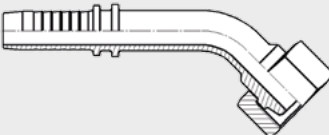
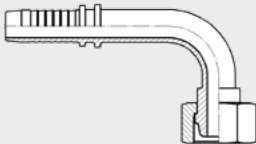

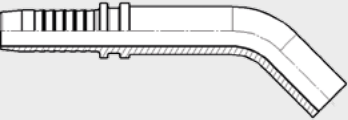
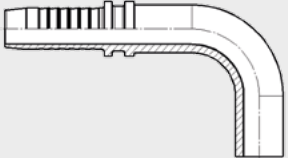
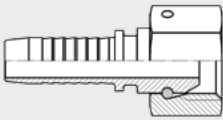
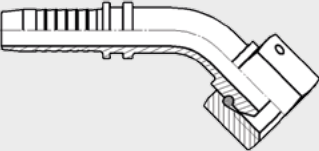
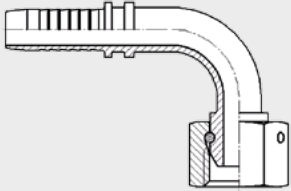
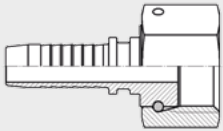
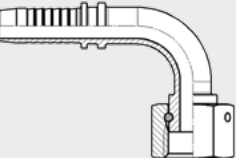

Our hose couplings are often used in places where special requirements are imposed and industry-specific approvals may often be necessary. Our products offer a particularly high service life even under the extreme conditions of many application areas:

- Wind energy systems
- Process plants (e.g. chemical, medical, process industry)
- Shipbuilding & offshore technology
- Diving robots, Remote Operated Vehicles (ROV)
- Oil drilling platforms
- Railway technology
- Machine tools and plastics machinery
- Mobile hydraulics (e.g. winter service vehicles)
- Applications involving high temperatures or steam
- Floodgates and hydropower plants (turbines)
- Paper products and processing
- Systems for the production of biofuels
- Engineering, Construction, and many more



In order to offer you utmost certainty we have quadrupled our test bench capacity. With the endurance tests we conduct according to industry standards, we ensure the best quality and highest reliability for our hose connectors.

## Visual Index

|  |  |   |
|--|--|---|
| <b>DKO</b><br>                                      | <b>DKO 45°</b><br>  | <b>DKO 90°</b><br>                                   |
| <b>DKLL / DKL / DKS</b><br>                         | <b>DKLL / DKL / DKS 45°</b><br>                             | <b>DKLL / DKL / DKS 90°</b><br>                      |
| <b>BE</b><br><b>(Metric Standpipe)</b><br>        | <b>BE 45°</b><br><b>(Metric Standpipe 45°)</b><br>        | <b>BE 90°</b><br><b>(Metric Standpipe 90°)</b><br> |
| <b>DKR</b><br><b>(BSPP Female)</b><br>            | <b>DKR 45°</b><br><b>(BSPP Female 45°)</b><br>            | <b>DKR 90°</b><br><b>(BSPP Female 90°)</b><br>     |
| <b>DKRF</b><br><b>(BSPP Female Flat Seal)</b><br> | <b>DKRF 90°</b><br><b>(BSPP Female Flat Seal 90°)</b><br> | <b>AGJ</b><br><b>(JIC)</b><br>                     |

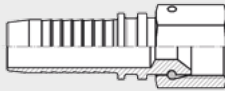
# Volz hose fittings

*Made in Germany*

## Visual Index

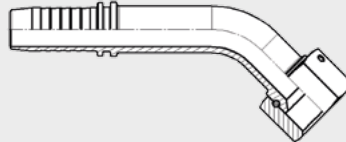
**DKJ**

(JIC Female)



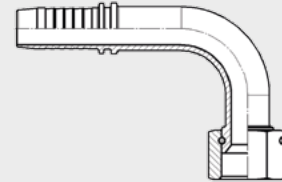
**DKJ 45°**

(JIC Female 45°)



**DKJ 90°**

(JIC Female 90°)



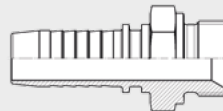
**CE**

(Metric Male)



**AGR**

(BSPP)



**AGR WD**

(BSPP WD)



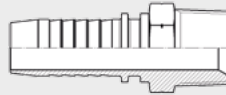
**AGR BSPT-m**

(BSPT Male)



**AGN**

(NPT)



**DSN**

(Hose Connector)



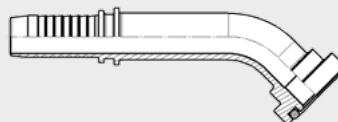
**SFL3 / SFS6**

(Code 61 / 62)



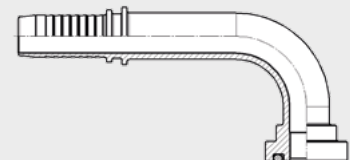
**SFL3 / SFS6 45°**

(Code 61 / 62 45°)



**SFL3 / SFS6 90°**

(Code 61 / 62 90°)



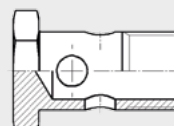
**RGN**

(Banjo Hosetail)



**HSCH**

(Banjo Bolt)



**DKO KÄ**

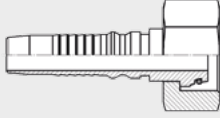

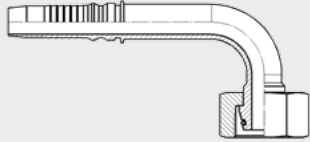
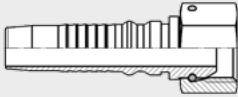
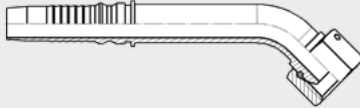

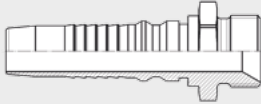

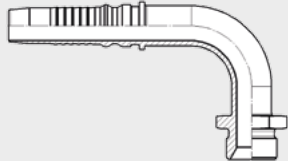


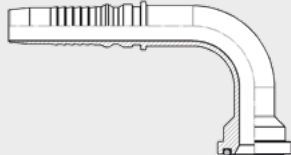
(Water Blaster)




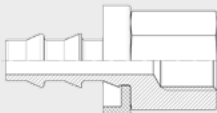


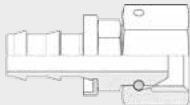
# Volz hose fittings

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## Visual Index

|   |   |   |
|---|---|---|
| <b>DKO - IN</b><br><b>(DKO Interlock)</b><br>                    | <b>DKO 45° - IN</b><br><b>(DKO Interlock 45°)</b><br>                    | <b>DKO 90° - IN</b><br><b>(DKO Interlock 90°)</b><br>                    |
| <b>DKR - IN</b><br><b>(BSPP Female Interlock)</b><br>            | <b>DKR 45° - IN</b><br><b>(BSPP Female Interlock 45°)</b><br>            | <b>DKR 90° - IN</b><br><b>(BSPP Female Interlock 90°)</b><br>            |
| <b>AGR - IN</b><br><b>(BSPP Interlock)</b><br>                 | <b>AGR 45° - IN</b><br><b>(BSPP Interlock 45°)</b><br>                 | <b>AGR 90° - IN</b><br><b>(BSPP Interlock 90°)</b><br>                 |
| <b>SFL3 / SFS6 - IN</b><br><b>(Code 61 / 62 Interlock)</b><br> | <b>SFL3 / SFS6 45° - IN</b><br><b>(Code 61 / 62 Interlock 45°)</b><br> | <b>SFL3 / SFS6 90° - IN</b><br><b>(Code 61 / 62 Interlock 90°)</b><br> |









## Push-lock








|   |  |   |
|---|--|---|
| <b>FPL-AGR</b><br> | <b>FPL-BSPP-f</b><br> | <b>FPL-BSPT</b><br> |
| <b>FPL-DKJ</b><br> | <b>FPL-DKR</b><br>    |   |



# Volz hose fittings

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|           |      |        | Hose-type   |   |   |   |  |   |   |   |
|-----------|------|--------|---|---|---|---|--|---|---|---|
|           |      |        |  |  |  |  |  |  |  |  |
| Hose-type |      |        | 2 TE-EN 854   | 3 TE-EN 854   | 1 ST-EN 853   | 2 ST-EN 853   | 1 SN-EN 853  | 2 SN-EN 853   | 1 SC-EN 857   | 2 SC-EN 857   |
| DN        | size | ID     | no skive  | no skive  | skive 1   | skive 1   | no skive   | no skive  | no skive  | no skive  |
| 05        | 03   | 3/16"  | -   | -   | 200715  | 200726  | -  | -   | -   | -   |
| 06        | 04   | 1/4"   | 200762  | 200762  | 200716  | 200727  | 200747   | 200747  | 221730  | 200747  |
| 08        | 05   | 5/16"  | 200763  | 200763  | 200717  | 200728  | 200748   | 200748  | 221733  | 200748  |
| 10        | 06   | 3/8"   | 200764  | 200764  | 200718  | 200729  | 200749   | 200749  | 221418  | 200749  |
| 12        | 08   | 1/2"   | 200766  | 200766  | 200719  | 200730  | 200750   | 200750  | 221735  | 200750  |
| 16        | 10   | 5/8"   | 200767  | 200767  | 200720  | 200732  | 200752   | 200752  | 221419  | 200752  |
| 20        | 12   | 3/4"   | 200768  | 200768  | 200721  | 200741  | 200753   | 200753  | 221736  | 200753  |
| 25        | 16   | 1"     | 200769  | 200769  | 200722  | 200742  | 200754   | 200754  | 221737  | 200754  |
| 32        | 20   | 1.1/4" | -   | 200770  | 200723  | 200743  | 200755   | 200759  | -   | -   |
| 40        | 24   | 1.1/2" | -   | 200771  | 200724  | 200744  | 200756   | 200760  | -   | -   |
| 50        | 32   | 2"     | -   | 200745  | 200725  | 200745  | 200757   | 200761  | -   | -   |

|           |      |        | Hose-type   |   |   |   |   |   |   |
|-----------|------|--------|---|---|---|---|---|---|---|
|           |      |        |  |  |  |  |  |  |  |
| Hose-type |      |        | R 7 - EN 855 SAE 100 R7   | Teflon-schlauch T1  | Teflon-Well-schlauch W1   | 4 SP-EN 856   | 4 SH-EN 856 Interlock   | R 13-EN 856 Interlock   | SAE 100 R 15 Interlock  |
| DN        | size | ID     | no skive  | no skive  | no skive  | skive 1   | skive 2   | skive 2   | skive 2   |
| 05        | 03   | 3/16"  | 200795  | 200787  | -   | -   | -   | -   | -   |
| 06        | 04   | 1/4"   | 200796  | 200788  | 200812  | 200772  | -   | -   | -   |
| 08        | 05   | 5/16"  | 200797  | 200789  | -   | -   | -   | -   | -   |
| 10        | 06   | 3/8"   | 200798  | 200790  | 200813  | 200773  | -   | -   | -   |
| 12        | 08   | 1/2"   | 209679  | 200791  | 200814  | 200774  | -   | -   | -   |
| 16        | 10   | 5/8"   | 209680  | 200792  | 200815  | 200775  | -   | -   | -   |
| 20        | 12   | 3/4"   | 209681  | 200793  | 200021  | 200776  | 114471  | 114471  | 114471  |
| 25        | 16   | 1"     | 209682  | 200794  | 200802  | 200777  | 114472  | 114472  | 114472  |
| 32        | 20   | 1.1/4" | -   | -   | 200816  | 200778  | 114463  | 114469  | 114469  |
| 40        | 24   | 1.1/2" | -   | -   | 208168  | 200779  | 114464  | 114470  | 114470  |
| 50        | 32   | 2"     | -   | -   | 208169  | 200780  | 114465  | 114473  | -   |



## Push-lock – easy and ready to use!

Our Push-lock nipples for hoses are made for the quick and secure assembly on SAE100R6 / EN 854 type hose. Elaborate pressing in the pressing machine is not necessary. Simply attach, and the hose will hold firm. Naturally they are made from 1.4571 / 316Ti stainless steel.

### The advantages of Volz Push-lok nipples:

- Quick and easy assembly
- No pressing / pressing machine required
- No adherence of crimp dimensions
- No clamps or casing necessary
- Easy disassembly by cutting the hose

### Potential applications for Push-lock with SAE100R6 / EN 854:

- Air pressure lines
- Cooling lines
- Fuel lines
- Lubricant/oil lines
- Return lines
- and many more



## Brilliant in action: Low friction nuts by Volz

Volz Nuts made of 1.4571 / 316Ti stainless steel with low friction coating are characterised by their easy assembly: Due to minimal friction values and reduced torques, they are easy to assemble and minimise cold welding. Their longevity is also proven with repeat disassembly.

### The advantages of low friction coating:

- Optimal installation results thanks to minimal friction values
- Significantly reduced torques compared to basic stainless steel nuts
- Can be reassembled several times
- Assembly without cold welding
- Increased leak proofing
- No discolorations as with silver coatings.
- Dimensions: 15L–42L and 16S–38S

### For your safety we also offer you:

- Volz manufacturer's mark and material identification
- 3.1 certificate
- 100% Batch traceability.

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



The Volz Group employs a total of 390 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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