

LUDECKE

Since 1930. The perfect connection.




Coupling Systems and Fittings for Cleaning and Compressed Air Applications in the Food Industry

Edition 1.0



**Temp[®]
Secure**
by **LUDECKE**



LUDECKE MADE IN GERMANY 

Quick Connect Couplings and Screwings for Cleaning Applications



For the food processing industry, hygiene is top priority. This is why worktops, machines and premises need to be thoroughly cleaned on a regular basis.

The used devices must meet high requirements due to rough operating conditions, cleaning agents and strict hygiene guidelines.

LUDECKE offers a high-quality system tailored to these special demands. It consists of different fittings (screwings/ quick connect couplings) which will be especially adjusted to the hoses used for cleaning applications.

Screwing

- For precleaning
- When using cleaning agents and high water pressure

Quick connect coupling

- For rinsing with water
- With patented TempSecure by **LUDECKE**® safety locking mechanism

Convincing Performance

Easy & Efficient

- Ergonomic design for optimum ease of use
- Easy handling
- High flow rate due to maximum passage

Safe

- Extremely robust, secure and reliable
- Absolutely leakage-proof and durable (ensures high lifetime)
- Permanent and leakage-free hose assembly
- No risk of injury due to unsuitable assembly methods
- Tried and tested protection against accidental disconnection

Hygienic

- Entirely made of stainless steel
- High resistance against corrosion
- Hygienic smooth surfaces to prevent dirt from collecting
- O-rings which are especially approved for the food industry

Screwing



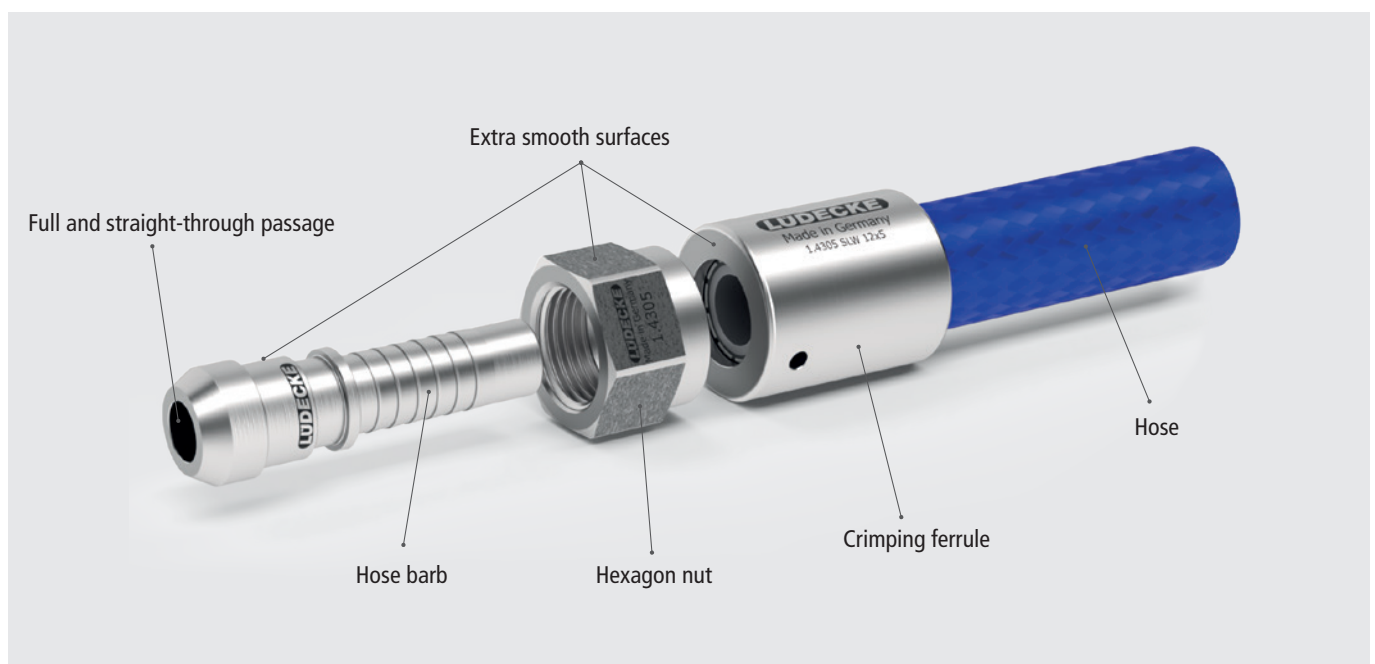
The **LUDECKE** CleanConnect screwing most often is used for applications with cleaning agents and high water pressure. This product provides an innovative and robust connection for a safe hose assembly.

Advantages

- High-quality hose screwing made of stainless steel 1.4305
- Permanent assembly by hose crimping or re-usable hose squeeze nut
- Full and straight-through passage
- For applications with aggressive cleaning agents (e.g. for preliminary cleaning)
- For a working pressure of 35 bar as well as operating temperatures up to 95°C (subject to media)

Quality in Every Component

For hose screwings, we recommend a suitable hose which meets the high standards of the food industry. To find a perfect solution (depending on the requirement) we recommend getting in touch with our competent sales and technical team.



Quick Connect Coupling



The **LUDECKE** CleanConnect quick connect coupling is used in applications that require high flexibility (e.g. rinsing with water).

The product highlight is the automatic safety locking mechanism according to the patented TempSecure by **LUDECKE**® concept. It offers simple and effective protection against unintentional disconnection under pressure and thus can be chosen when working with high temperatures. The ergonomic design provides an easy operation even when wet or when wearing gloves.

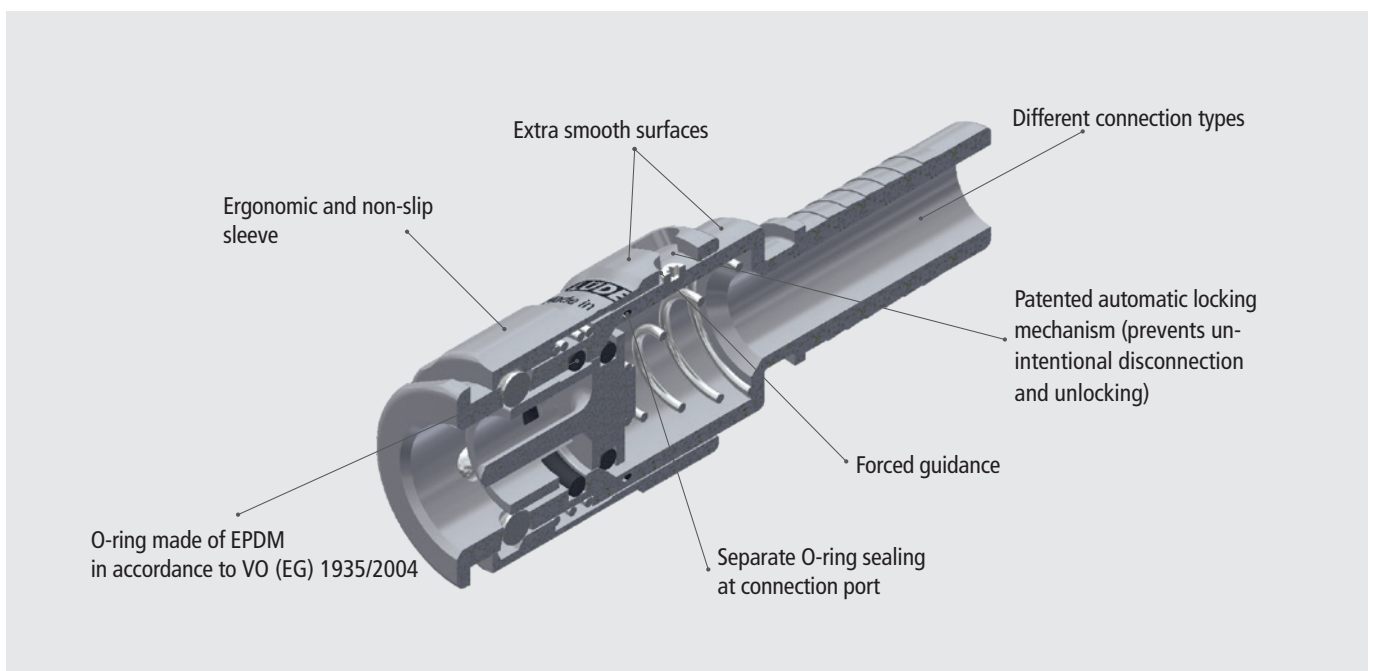
Advantages

- High-quality quick connect coupling made of stainless steel 1.4305
- Different connection and valve types
- TempSecure by **LUDECKE**®: patented temperature regulation quick connect coupling system with automatic locking mechanism
- O-rings which are especially approved for the food industry (VO (EG) 1935/2004)
- For a working pressure of 35 bar as well as operating temperatures up to 95°C (subject to media)

TempSecure
by **LUDECKE**

First-Class Materials

For quick connect couplings, we recommend a suitable hose which meets the high standards of the food industry. We are pleased to find a perfect solution in cooperation with you.



Simple - Hygienic - Fast

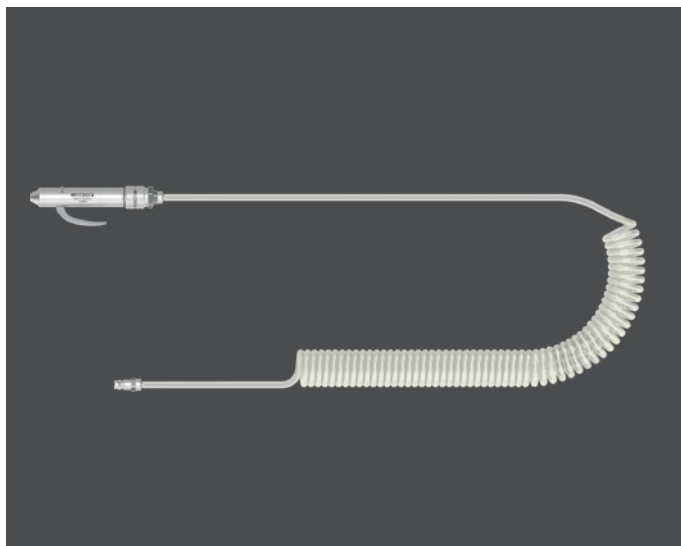


To connect the system, simply push the plug into the safety coupling. The sleeve automatically slides forward in a twisting motion and engages into the final safety lock position. The coupling is now firmly connected to the plug and secured against unintentional opening.



To release the plug from the safety coupling, the sleeve has to be pulled back manually and with force. The plug can only be removed from the safety coupling by deliberately pulling/twisting.

Compressed Air Range for the Food Industry



Along with the fittings and quick connect coupling systems, **LUDECKE** also offers components for compressed air applications in the food industry:

- Compressed air blow-off gun with a DN 7.2 connecting plug made of stainless steel 1.4305
- Spiralled hose with food approval for use with quick connect coupling and plug DN 7.2 made of stainless steel 1.4305

Screwings for Cleaning Applications

made of Stainless Steel 1.4305



- High-quality hose screwing made of stainless steel 1.4305
- Hose screwing for hose crimping consisting of: hose barb with 60° cone and hexagon nut or hose barb with male thread and 60° cone and crimping ferrule
- High pressure and temperature range
- Absolutely leakage-proof and durable
- Hygienic smooth surfaces as well as smooth and straight-through passage to prevent dirt from collecting
- For cleaning applications in the food industry (e.g. for applications with aggressive cleaning agents), etc.

Materials

- Hose barb, hexagon nut, crimping ferrule, thread stem, double nipple: Stainless Steel 1.4305

| Max. Working Pressure | Temperature | Thread | Media | |
|-----------------------|-------------|---------|------------------------------------|---|
| PN 35 bar** | up to +95°C | ISO 228 | Water with cleaning agents / steam | 5 |

Hose barbs with 60° sealing cone and hexagon nut for hose crimping

| Thread connection | Hose connection | L | SW | L1 | L2 | Passage | Weight | Type No. |
|-------------------|-----------------|------|----|----|----|---------|--------|------------------|
| G 1/2 f | Hose i.D. 13 | 42 | 27 | 12 | 34 | 9.5 | 67 | STE 1213 PH-...* |
| G 3/4 f | Hose i.D. 19 | 69.5 | 32 | 16 | 34 | 14.5 | 142 | STE 3419 PH-...* |

Hose connection with crimping ferrule type PHE

Hose barbs with male thread and 60° cone for hose crimping

| Thread connection | Hose connection | L | SW | L1 | L2 | Passage | Weight | Type No. |
|-------------------|-----------------|------|----|----|----|---------|--------|------------------|
| G 1/2 m | Hose i.D. 13 | 63.5 | 22 | 14 | 34 | 9.5 | 57 | TAE 1213 PH-...* |
| G 3/4 m | Hose i.D. 19 | 66.5 | 27 | 16 | 34 | 14.5 | 117 | TAE 3419 PH-...* |

Hose connection with crimping ferrule type PHE

Crimping ferrules (hydraulic crimping)

| Version | L | D | D1 | Weight | Type No. |
|--------------|----|----|----|--------|-------------|
| Hose i.D. 15 | 37 | 30 | 23 | 61 | PHE-13-...* |
| Hose i.D. 19 | 37 | 36 | 29 | 75 | PHE-19-...* |

Thread stems with male thread and 60° cone and hose squeeze nut

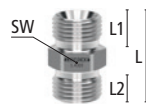
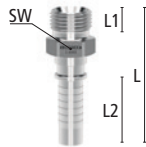
| Thread connection | Hose connection | L | SW | L1 | L2 | SW1 | Passage | Weight | Type No. |
|-------------------|-----------------|------|----|----|----|-----|---------|--------|------------------|
| G 1/2 m | Hose i.D. 13 | 71 | 22 | 25 | 14 | 27 | 10 | 168 | TAE 1213 TQ-...* |
| G 3/4 m | Hose i.D. 19 | 73.5 | 27 | 25 | 16 | 32 | 13 | 245 | TAE 3419 TQ-...* |

Double Nipples with male threads on both sides

| Thread connection | L | SW | L1 | L2 | Passage | Weight | Type No. |
|-------------------|----|----|----|----|---------|--------|----------|
| G 1/2 m - G 1/2 m | 36 | 22 | 14 | 14 | 13 | 56 | D 12 E |
| G 3/4 m - G 3/4 m | 40 | 27 | 16 | 16 | 13 | 114 | D 34 E |
| G 3/4 m - G 1/2 m | 38 | 27 | 16 | 12 | 13 | 92 | D 3412 E |

*the final article number can be determined upon selection of hose to be used and consulting our sales team

**subject to temperature, assembly and hose



Quick Connect Couplings for Cleaning Applications

made of Stainless Steel 1.4305 with Automatic Locking Mechanism **Series ESHGTE**

- One-hand quick connect couplings made of stainless steel 1.4305 with patented automatic safety locking mechanism
- Forced guidance design with visual coding on the locking sleeve
- Hygienic smooth surfaces to prevent dirt from collecting
- O-rings, according to the food sector (VO (EG) 1935/2004) and to the drinking water sector (according to elastomer guide line, DVGW W 270, DVGW W 534)
- **For cleaning applications in the food industry, etc.**
- **Optional with straight-through, single or double shut-off valves**
- Versions with additional O-ring sealing at connection port to prevent leakage in high-temperature applications

Materials

- Body, sleeve, valve body, valve, plug: Stainless Steel 1.4305
- Springs, retaining ring: Stainless Steel 1.4310
- Balls: Stainless Steel 1.4024
- Seals: EPDM (others on request)

| Max. Working Pressure | Temperature | DN | Thread | Type of valve | Operation | Media | |
|-----------------------|-------------|----|---------|------------------|-----------|------------------------------------|---|
| PN 35 bar** | up to +95°C | 13 | ISO 228 | straight-through | One-hand | Water with cleaning agents / steam | 5 |

Couplings with hose squeeze nut

| Hose connection | L | SW | D | L1 | SW1 | Passage | Weight | Type No. |
|-----------------|-------|----|----|----|-----|---------|--------|-------------------|
| Hose i.D. 13 | 104.5 | 27 | 34 | 29 | 27 | 10 | 328 | ESHGTE 13 TQ-...* |
| Hose i.D. 19 | 104.5 | 27 | 34 | 29 | 32 | 13 | 389 | ESHGTE 19 TQ-...* |

Couplings for hose crimping

| Hose connection | L | D | L1 | Passage | Weight | Type No. |
|-----------------|----|----|------|---------|--------|--------------------|
| Hose i.D. 13 | 98 | 34 | 41.5 | 9.5 | 224 | ESHGTE 13 TPH-...* |
| Hose i.D. 19 | 93 | 34 | 41.5 | 13 | 257 | ESHGTE 19 TPH-...* |

Hose connection with crimping ferrule type PHE (☺ page 6)

Couplings with female thread

| Thread connection | L | SW | D | L1 | Weight | Type No. |
|-------------------|------|----|----|----|--------|----------------|
| G 1/2 f | 69.5 | 27 | 34 | 12 | 238 | ESHGTE 12 I-HE |
| G 3/4 f | 69.5 | 32 | 34 | 12 | 244 | ESHGTE 34 I-HE |

Plugs with female thread

| Thread connection | L | SW | L1 | L2 | DS | Weight | Type No. |
|-------------------|------|----|----|----|----|--------|-------------|
| G 1/2 f | 42 | 27 | 10 | 27 | 19 | 72 | ESHGE 12 NI |
| G 3/4 f | 42.5 | 32 | 10 | 27 | 19 | 86 | ESHGE 34 NI |

Plugs with male thread and 60° cone

| Thread connection | L | SW | L1 | L2 | DS | Weight | Type No. |
|-------------------|----|----|----|----|----|--------|-------------|
| G 1/2 m | 49 | 22 | 14 | 27 | 19 | 66 | ESHGE 12 NA |
| G 3/4 m | 51 | 27 | 16 | 27 | 19 | 101 | ESHGE 34 NA |

Plugs with hose squeeze nut

| Hose connection | L | SW | L1 | L2 | DS | SW1 | Weight | Type No. |
|-----------------|------|----|----|----|----|-----|--------|------------------|
| Hose i.D. 13 | 84 | 22 | 25 | 27 | 19 | 27 | 173 | ESHGE 13 SQ-...* |
| Hose i.D. 19 | 84.5 | 27 | 25 | 27 | 19 | 32 | 232 | ESHGE 19 SQ-...* |

Plugs for hose crimping

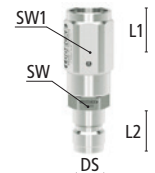
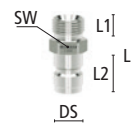
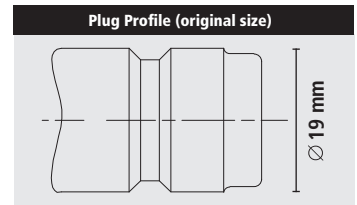
| Hose connection | L | D | L1 | DS | Passage | Weight | Type No. |
|-----------------|------|----|----|----|---------|--------|--------------------|
| Hose i.D. 13 | 70.5 | 22 | 34 | 19 | 9.5 | 53 | ESHGTE 13 SPH-...* |
| Hose i.D. 19 | 70.5 | 22 | 34 | 19 | 13 | 92 | ESHGTE 19 SPH-...* |

Hose connection with crimping ferrule type PHE (☺ page 6)

*the final article number can be determined upon selection of hose to be used and consulting our sales team

**subject to temperature, assembly and hose

DN 13

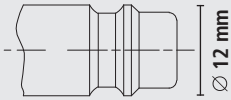


Quick Connect Couplings

Series ESE single/ double shut-off, straight-through

DN 7.2

Plug Profile (original size)



- Universal one-hand quick connect couplings made of stainless steel 1.4305 (on request in stainless steel 1.4404)
- Suitable for low vacuum at low couple force compared to all other compatible products
- For compressed air supply at increased purity and hygiene regulations or when conveying different media (gases, chemicals, lacquers, pharmaceuticals)
- Several fields of application in pharmacy, chemical industry, medical technology, food industry, clean-room applications as well as for sophisticated pneumatic applications

Materials

- Body, sleeve, valve body, valve, pins, plug: Stainless Steel 1.4305
- Springs, retaining ring: Stainless Steel 1.4310
- Seals: FKM (EPDM or FFKM on request)

| Max. Working Press. | Temperature | DN | Thread | Operation | Type of valve + Flow Rate | Medium | Area | |
|---------------------|-----------------|----|-----------------|-----------|--|---------|-----------|-------------------|
| PN 15 bar | -20°C – +220°C* | 6 | ISO 288/ DIN 13 | One-hand | Single: 1150l/min - Double: 660 l/min - Straight: 2150 l/min | Diverse | Worldwide | Coup. 1/ Plugs. 5 |

Couplings with hose squeeze nut (single shut-off)

| Hose connection | L | SW | D | L1 | SW1 | Weight | Sleeve Type No. smooth | Type No. knurled |
|-----------------|----|----|----|-----|-----|--------|---------------------------|------------------|
| Hose 8x12 | 48 | 22 | 27 | 9.5 | 17 | 107 | ESEG 812 TQ | ESER 812 TQ |

Plugs with hose squeeze nut (straight-through)

| Hose connection | L | SW | L1 | L2 | SW1 | Weight | Type No. |
|-----------------|----|----|-----|----|-----|--------|------------|
| Hose 8x12 | 42 | 17 | 9.5 | 20 | 19 | 51 | ESE 812 SQ |

Couplings with hose squeeze nut (double shut-off)

| Hose connection | L | SW | D | L1 | SW1 | Weight | Sleeve Type No. smooth | Type No. knurled |
|-----------------|----|----|----|-----|-----|--------|---------------------------|------------------|
| Hose 8x12 | 48 | 22 | 27 | 9.5 | 17 | 107 | ESEG 812 TQAB | ESER 812 TQAB |

Plugs with hose squeeze nut (double shut-off)

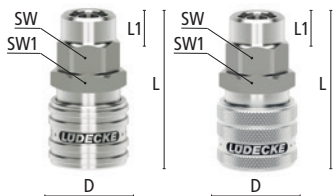
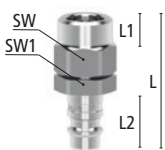
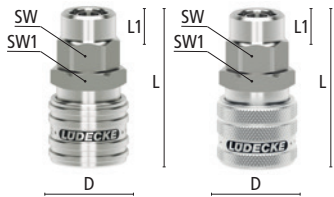
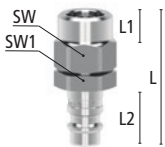
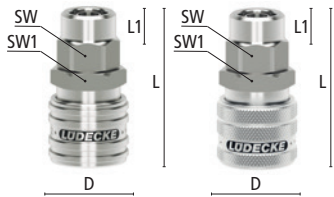
| Hose connection | L | SW | L1 | L2 | SW1 | Weight | Type No. |
|-----------------|----|----|-----|----|-----|--------|--------------|
| Hose 8x12 | 42 | 17 | 9.5 | 20 | 19 | 51 | ESE 812 SQAB |

Couplings with hose squeeze nut (straight-through)

| Hose connection | L | SW | D | L1 | SW1 | Weight | Sleeve Type No. smooth | Type No. knurled |
|-----------------|----|----|----|-----|-----|--------|---------------------------|------------------|
| Hose 8x12 | 48 | 22 | 27 | 9.5 | 17 | 107 | ESEG 812 TQO | ESER 812 TQO |

O-rings approved for the food industry (VO (EG) 1935/2004)

*subject to media and sealing materials



MODY CleanConnect Spiral Hoses made of Polyurethane

Both Sides with Straight Ends for the Food Industry and Pharmacy

- High resistance to abrasion, pressure and wear as well as extreme and constant recoil of the spirals
- Perfect elasticity, flexibility, can be driven over, crush-resistant, free of taste and smell
- Resistant to microbes and hydrolysis, oil, gas and chemicals, good cold flexibility
- Polyurethane food-safe according to FDA 21 CFR 177.2600 and 178.2010, EU regulation 10/2011 and the newest regulation 2015/174
- Approved according to the EU regulation 1935/2004
- Production process according to GMP EC 2023/2006
- For pneumatic applications as well as for liquids, gases and abrasive solids
- For applications in the food industry (e.g. food conveying: dry, watery, acidic and fatty foods), pharmaceutical industry (FDA, EU regulation)

Materials

- Hose: Polyurethane (polyether-based polyurethane)
- Coupling, plug: Stainless steel 1.4305

| Max. Work. Pressure | Temperature | Media | Colours | Short End | Long End | |
|---------------------|---------------|---------|-------------|-----------|----------|---|
| PN 12 bar | -40°C – +90°C | Diverse | Transparent | 100 | 500 | 1 |

MODY CleanConnect Spiral Hoses made of Polyurethane

| i.D./-o.D. | Connection | Max. Work. Length | | Block Length | | Weight | |
|------------|---------------------------|-------------------|------|--------------|----------|--------|--------------|
| | | Hose Length | | Outer Spiral | Type No. | | |
| 8/12 | without | 3000 | 4700 | 240 | 75 | 345 | PUL 8123 |
| 8/12 | without | 6000 | 7600 | 400 | 75 | 555 | PUL 8126 |
| 8/12 | without | 8000 | 9700 | 540 | 75 | 710 | PUL 8128 |
| 8/12 | ESE-coupling + plug rigid | 3000 | 4700 | 240 | 75 | 505 | PUL 8123 ESE |
| 8/12 | ESE-coupling + plug rigid | 6000 | 7600 | 400 | 75 | 715 | PUL 8126 ESE |
| 8/12 | ESE-coupling + plug rigid | 8000 | 9700 | 540 | 75 | 870 | PUL 8128 ESE |

MODY CleanConnect Polyurethane Hose, non-coiled (minimum quantity 10 m/type)

| Hose i.D./o.D. | Weight g/m | Type No. |
|----------------|------------|----------|
| 8/12 | 80 | PUL 812 |

Food-Safe



Compressed Air Blow-off Valve

made of Stainless Steel

- Blow-off valve made of stainless steel for permanent use at heavy working conditions
- For cleaning of worktops or work pieces in applications with strict hygiene requirements

Materials

- Blow-off valve: Stainless steel 1.4305
- Handle: Stainless steel 1.4308

| Max. Working Pressure | Temperature | Media | |
|-----------------------|---------------|----------------|---|
| PN 12 bar | -40°C – +90°C | Compressed Air | 1 |

Compressed Air Blow-off Valve made of Stainless Steel

| Connection | Version | Nozzle bore | L | D | Weight | Type No. |
|------------|-----------------|-------------|-----|----|--------|----------|
| Plug ESE | with nozzle HE2 | 2 | 108 | 22 | 277 | AHLE ESE |



LÜDECKE

LÜDECKE

Since 1930. The perfect connection.

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