

# Temperature Regulation Quick Connect Couplings



The temperature regulation quick connect couplings made of stainless steel are perfectly adapted to temperature regulation applications with cold or hot water and tempered oil in clean room areas as well as for increased hygiene regulations.

In addition to the standard coupling systems, the patented TempSecure by **LUDECKE**® series is also available in stainless steel. It is used for particularly high temperatures and critical applications.

#### Advantages:

- High-quality materials (Stainless Steel 1.4305)
- Robust, safe, absolutely leakage-proof and durable
- Easy to couple
- For temperature regulation lines and various media (e.g. water, steam, oil)
- Different sizes, connection and valve types
- TempSecure by **LUDECKE**®: patented temperature regulation quick connect coupling system with automatic locking mechanism

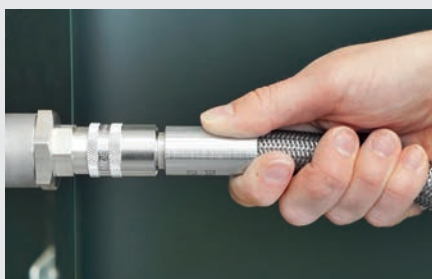
**Temp  
Tec**®  
by **LUDECKE**

## Connected in Seconds

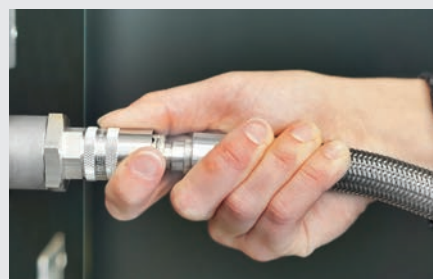
The **LUDECKE** quick connect couplings are very easy to handle.



One-hand operation: To connect, simply push the plug into the coupling.



To disconnect, pull back the sleeve from the coupling (comes with automatic locking mechanism in shut-off couplings).



# Flexible Components

The **LUDECKE** temperature regulation product range can be extended with various features and thus be ideally adapted to the respective requirements.



## TempSecure by **LUDECKE**® Safety Quick Connect Coupling

The patented TempSecure by **LUDECKE**® temperature regulation quick connect coupling system features an automatic safety locking mechanism which prevents unintentional disconnection and unlocking.

As a result, this coupling is especially suited when using aggressive media as well as for temperature regulation applications with hot or cold water and tempered oil between -20°C and +200°C\*. Superior FKM-O-rings make the coupling an ideal media carrier especially in high-temperature applications.

\*subject to used media

### Advantages:

- Maximum safety against unintended disconnection and unlocking
- Simple and intuitive coupling process with forced guidance
- Visual colour coding (DN 6, DN 9)
- Controlled, manual disconnection
- High-temperature seals for high-performance
- Versions with additional O-ring sealing at connection port to prevent leakage in high-temperature applications
- Available in various sizes, connections and valve types

**TempSecure**  
by **LUDECKE**



## Security Lock

In addition to the TempSecure by **LUDECKE**® series, we offer a simplified security lock.

- Disconnection only possible when safety pin engaged correctly into sleeve notch
- Prevention of fluid or pressure loss in the circulation during operation
- Prevention of human injury and harm to the environment, machine and tool
- Available for the series ESHME and ESHE

Just add "S" on Type No. (e.g. ESHME 9 TLS)  
Surcharge 2.19 Euro gross/ piece



## Colour Coding

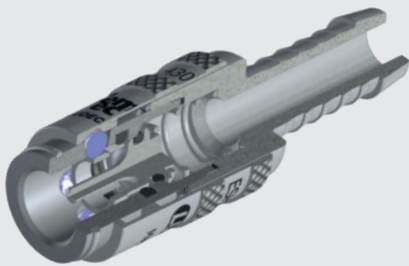
A red or blue anodized aluminium ring for the sleeve can be ordered to easily identify and distinguish between flow and return lines of the tempered circuit (for series ESHME and ESHE).

The rings are also sold individually for self-assembly. For installation, simply slide the ring on the coupling sleeve.

For additional information see page 321

# O-Rings for Temperature Regulation Couplings

## FKM:



**LUDECKE** offers high-resistant seals made of FKM for temperature regulation applications.

### Advantages:

- Heat resistant up to 200°C (oil: 200°C, water: 150°C, air: 200°C)
- Highly resistant against all common tempered media
- Significantly better gliding properties and minimum wear (low adhesive tendency)
- High elasticity (no crack formation) according to DIN 53504
- High abrasion resistance of the O-ring
- Significantly increased life times of couplings

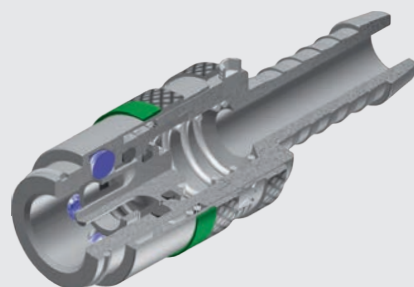
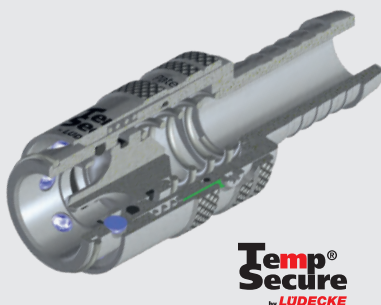
## High-Performance FKM

The temperature regulation couplings of the TempSecure by **LUDECKE**® series contain a high-performance FKM sealing ring which has been developed for the special requirements of high-temperature applications.

- Extreme heat resistance up to 220°C continuous temperature (oil: 220°C, water: 180°C, air: 220°C)
- High resistance against synthetic oils used as tempered media
- Very good chemical resistance and high resistance against aliphatic hydrocarbons (fuels)
- Steam/ hot water optimised

On request, the high-performance FKM sealing ring is also available for other temperature regulation couplings (For easy identification, the coupling sleeve is marked with a green anodized aluminium ring).

Surcharge: 3.75 Euro gross/ piece - When ordering, simply add "HV" to the standard article number (e.g. ESHME 9 TLABHV).



Other special seals (e.g. EPDM, FFKM) on request.

# Overview of Temperature Regulation Quick Connect Couplings

**Temp<sup>®</sup>  
Secure**  
by LUDECKE

**Temp<sup>®</sup>  
Secure**  
by LUDECKE

**Temp<sup>®</sup>  
Secure**  
by LUDECKE

Series

**ESHME**  
DN 6

**ESHMTE**  
DN 6

**ESHE**  
DN 9

**ESHTe**  
DN 9

**NEW!**  
**ESHGTE**  
DN 13

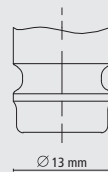
Plug Profile  
(original size)



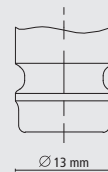
Ø 9 mm



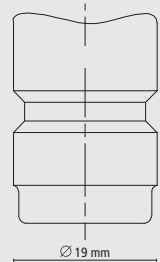
Ø 9 mm



Ø 13 mm



Ø 13 mm



Ø 19 mm



## Materials

Body:

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Sleeve:

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Valve body:

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Valve:

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Springs, Retaining ring:

Stainless Steel 1.4310

Stainless Steel 1.4310

Stainless Steel 1.4310

Stainless Steel 1.4310

Stainless Steel 1.4310

Balls:

Stainless Steel 1.4034

Stainless Steel 1.4034

Stainless Steel 1.4034

Stainless Steel 1.4034

Stainless Steel 1.4034

Seals:

FKM

High-Performance FKM

FKM

High-Performance FKM

High-Performance FKM

Special seals for  
other media on  
request:

EPDM, FFKM

EPDM, FFKM

EPDM, FFKM

EPDM, FFKM

EPDM, FFKM

Plug:

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Stainless Steel 1.4305

Max. Working Pressure:

PN 15 bar

PN 15 bar

PN 15 bar

PN 15 bar

PN 15 bar

Temperature:

-20°C – +200°C\*

-20°C – +220°C\*\*

-20°C – +200°C\*

-20°C – +220°C\*\*

-20°C – +220°C\*\*

Thread Types:

ISO 228/ DIN 13

ISO 228/ DIN 13

ISO 228/ DIN 13

ISO 228/ DIN 13

ISO 228/ DIN 13

Flow Rate:

Kv = 0.72

Kv = 0.72

Kv = 1.8

Kv = 1.8

Kv = 1.8

Single shut-off:

straight / 45° / 90°

straight / 45° / 90°

straight / 45° / 90°

straight / 45° / 90°

straight

Version:

single shut-off/ double

single shut-off/ double

single shut-off/ double

single shut-off/ double

single shut-off/ double

Type of Valve:

shut-off/ straight-through

shut-off/ straight-through

shut-off/ straight-through

shut-off/ straight-through

shut-off/ straight-through

Operation:

One-Hand

One-Hand

One-Hand

One-Hand

One-Hand

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\*subject to media (oil: 200°C, water: 150°C, air: 200°C)

\*\*subject to media (oil: 220°C, water: 180°C, air: 220°C)