

LUDECKE

Since 1930. The perfect connection.



Temperature Regulation Quick Connect Coupling System with Automatic Locking Mechanism and Thermo Colour Coding

Edition 1.1



**Temp[®]
Control**
by LUDECKE



LUDECKE MADE IN GERMANY 

Intelligent Technology for Maximum Safety



The patented TempControl by **LUDECKE**® temperature regulation quick connect coupling system features a new and innovative thermo colour coding. It warns the operator of hot media as well as high surface temperatures of the coupling and thus offers reliable protection against potential injuries.

As a result, this coupling is especially suited when using critical media as well as for extreme temperatures between +20°C and +220°C* High-quality FKM O-rings prevent leakages in high-temperature applications.

*subject to used media

Advantages:

- Temperature-sensitive colour coding of the locking sleeve
- Maximum safety against unintended disconnection and unlocking
- Simple and intuitive coupling process
- High-resistance seals for extreme conditions
- Versions with additional O-ring sealing at connection port
- Available for almost all temperature regulation series in various sizes, materials, types of connections and valves

TempControl
by **LUDECKE**

Patented Safety

The TempControl quick connect coupling is based on the tried and tested TempSecure by **LUDECKE**® principle:

A colour coding on the locking sleeve clearly indicates correct and secure connection. At the same time, an automatic safety locking mechanism prevents unintentional disconnection and unlocking.



The disconnecting process can be performed blindly due to the forced guidance of the locking sleeve. However, this requires a deliberate manual unlocking effort. An accidental or unintentional disconnection is almost impossible.

Functional Principle

The colour coding of the TempControl by **LUDECKE**® quick connect coupling system indicates the current temperature of the coupling surface. When the temperature falls below +40°C, the colour coding turns blue - the coupling can be touched without any precautions. When the temperature rises above +40°C the coating reacts. The dark blue surface turns red warning against potential burns.



Important note:

The colour coding works up to a permanent temperature of +140°C, represents the surface temperature of the coupling and serves as visual aid. However, the temperature of the media is not measured. At all times, it is the operator/ user who is responsible for safe and proper use of the product. In case of couplings with free passages, please turn off the media flow before disconnection.

High-Quality Materials



The temperature regulation quick connect coupling is characterized by superior materials and sophisticated technology:

It is made of high-quality brass (plain/ nickel-plated) and high resistant special brass or stainless steel.

The high-performance FKM O-ring has been developed for the special requirements of high-temperature applications. It is optimised for steam/ hot water and guarantees excellent resistance against various media.

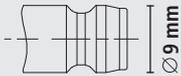
For further information about the TempSecure technology and the product range, please refer to our TempSecure brochure → www.ludecke.com

Temperature Regulation Quick Connect Couplings

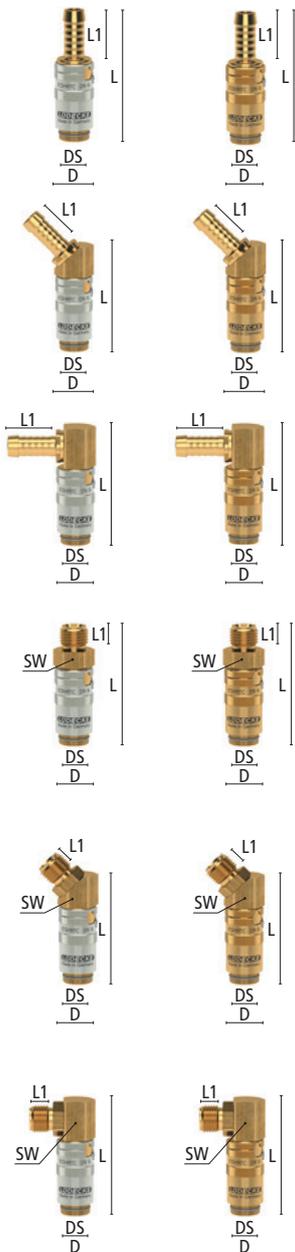
Series ESHMTC Plug size 9 mm - with Automatic Locking Mechanism and Thermo Colour Coding

DN 6

Plug Profile (original size)



European Plug Profile



- One-hand quick connect couplings with small dimensions and patented automatic safety locking mechanism
- Forced guidance design with thermo colour coding on the locking sleeve
- Combined pressure-torsion spring and strengthened release sleeve made of high resistant special brass
- For temperature regulation applications with warm or hot water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- To be coupled with plug Series ESHM DN 6
- Versions with additional O-ring sealing at connection port to prevent leakage in high-temperature applications

Materials

- Body, valve body, valve: Brass MS 58 plain
- Sleeve: High resistant special brass plain/ nickel-plated
- Plug: Brass MS 58 plain/ nickel-plated
- Balls: Stainless steel 1.4034
- Springs, retaining ring: Stainless steel 1.4310
- Seals: High-Performance FKM

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	+20°C – +220°C*	6	ISO 228 / DIN 13	One-hand	single/double/straight-thr.	Tempered media	5

Couplings with straight standard hose barb without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No w/o valve	Type No. w valve
Hose i.D. 9	61	18	22.5	9	6	58	ESHMTC 9 TL	ESHMTC 9 TLAB

Couplings with 45° standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No w/o valve	Type No. w valve
Hose i.D. 9	54	18	22.5	9	6	82	ESHMTC 9 TL45	ESHMTC 9 TL45AB

Couplings with 90° standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No w/o valve	Type No. w valve
Hose i.D. 9	56	18	22.5	9	6	91	ESHMTC 9 TL90	ESHMTC 9 TL90AB

Couplings with straight male long thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No w/o valve	Type No. w valve
G 1/4 m	56.5	17	18	11	9	6	73	ESHMTC14AL	ESHMTC14ALAB
G 3/8 m	56.5	19	18	11	9	6	76	ESHMTC38AL	ESHMTC38ALAB
M 14x1.5 m	56.5	17	18	11	9	6	76	ESHMTC1415AL	ESHMTC1415ALAB
M 16x1.5 m	57	19	18	11	9	6	76	ESHMTC1615AL	ESHMTC1615ALAB

Couplings with 45° male long thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No w/o valve	Type No. w valve
G 1/4 m	56	17	18	11	9	6	85	ESHMTC14AL45	ESHMTC14AL45AB
G 3/8 m	56	17	18	11	9	6	101	ESHMTC38AL45	ESHMTC38AL45AB
M 14x1.5 m	56	17	18	11	9	6	87	ESHMTC1415AL45	ESHMTC1415AL4AB
M 16x1.5 m	56	17	18	11	9	6	87	ESHMTC1615AL45	ESHMTC1615AL4AB

Couplings with 90° male long thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No w/o valve	Type No. w valve
G 1/4 m	56	17	18	11	9	6	94	ESHMTC14AL90	ESHMTC14AL90AB
G 3/8 m	56	17	18	11	9	6	100	ESHMTC38AL90	ESHMTC38AL90AB
M 14x1.5 m	56	17	18	11	9	6	96	ESHMTC1415AL90	ESHMTC1415AL9AB
M 16x1.5 m	56	17	18	11	9	6	96	ESHMTC1615AL90	ESHMTC1615AL9AB

Other types/ sizes on request

*Heat resistance of coupling system: up to a maximum of +220°C - subject to media (oil: 220°C, water: 180°C, air: 220°C).

Heat resistance of colour coding: up to a maximum of +140°C.

Temperature Regulation Quick Connect Couplings

Plug size 9 mm - with Automatic Locking Mechanism and Thermo Colour Coding

Series ESHTC

- One-hand quick connect couplings with patented automatic safety locking mechanism
- Forced guidance design with thermo colour coding on the locking sleeve
- Combined pressure-torsion spring and strengthened release sleeve made of high resistant special brass
- **For temperature regulation applications with warm or hot water as well as tempered oil**
- Optional with straight-through, single or double shut-off valves
- To be coupled with plug series ESH DN 9
- Versions with additional O-ring sealing at connection port to prevent leakage in high-temperature applications

Materials

- Body, valve body, valve: Brass MS 58 plain
- Sleeve: high resistant special brass plain/ nickel-plated
- Plug: Brass MS 58 plain/ nickel-plated
- Balls: Stainless steel 1.4034
- Springs, retaining ring: Stainless steel 1.4310
- Seals: High-Performance FKM

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	+20°C – +220°C*	9	ISO 228 / DIN 13 / DIN 158	One-hand	Single/double/straight-through	Tempered media	5

Couplings with straight standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Hose i.D. 13	63	23.5	25	13	9	81	ESHTC 13 TL	ESHTC 13 TLAB

Couplings with 45° standard hose stem without/with valve

Hose connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Hose i.D. 13	55.5	22	23.5	25	13	9	138	ESHTC 13 TL45	ESHTC 13 TL45AB

Couplings with 90° standard hose stem without/with valve

Hose connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Hose i.D. 13	55.5	22	23.5	25	13	9	140	ESHTC 13 TL90	ESHTC 13 TL90AB

Couplings with straight male long thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	56	22	23.5	11	13	9	98	ESHTC14AL	ESHTC14ALAB
G 3/8 m	56	22	23.5	12.5	13	9	94	ESHTC38AL	ESHTC38ALAB
M 16x1.5 m	56	22	23.5	12.5	13	9	93	ESHTC1615AL	ESHTC1615ALAB
M 18x1.5 m	56	22	23.5	12.5	13	9	100	ESHTC1815AL	ESHTC1815ALAB

Couplings with 45° male long thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	55.5	22	23.5	11	13	9	130	ESHTC14AL45	ESHTC14AL45AB
G 3/8 m	55.5	22	23.5	12.5	13	9	134	ESHTC38AL45	ESHTC38AL45AB
M 16x1.5 m	55.5	22	23.5	12	13	9	132	ESHTC1615AL45	ESHTC1615AL45AB

Couplings with 90° male long thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	55.5	22	23.5	11	13	9	130	ESHTC14AL90	ESHTC14AL90AB
G 3/8 m	55.5	22	23.5	12.5	13	9	134	ESHTC38AL90	ESHTC38AL90AB
M 16x1.5 m	55.5	22	23.5	12	13	9	132	ESHTC1615AL90	ESHTC1615AL90AB

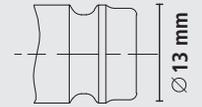
Other types/ sizes on request

*Heat resistance of coupling system: up to a maximum of +220°C - subject to media (oil: 220°C, water: 180°C, air: 220°C).

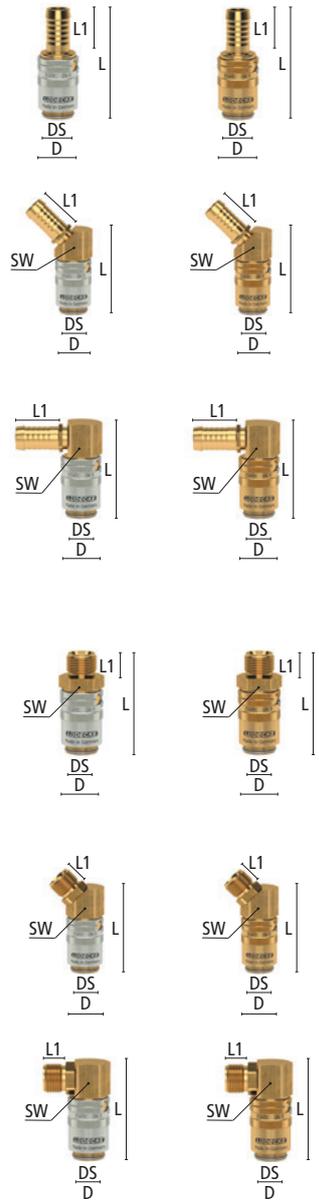
Heat resistance of colour coding: up to a maximum of +140°C.

DN 9

Plug Profile (original size)



European Plug Profile



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