





# Temperature Regulation



Quick Connect Couplings  
European Plug Profiles



Quick Connect Couplings  
International Plug Profiles



SoftFlow Material Conveying  
Quick Connect Couplings



Manifolds and Colour Coding



Screwings and Components



Hose Clamps,  
Hose Clips and Ferrules



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

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

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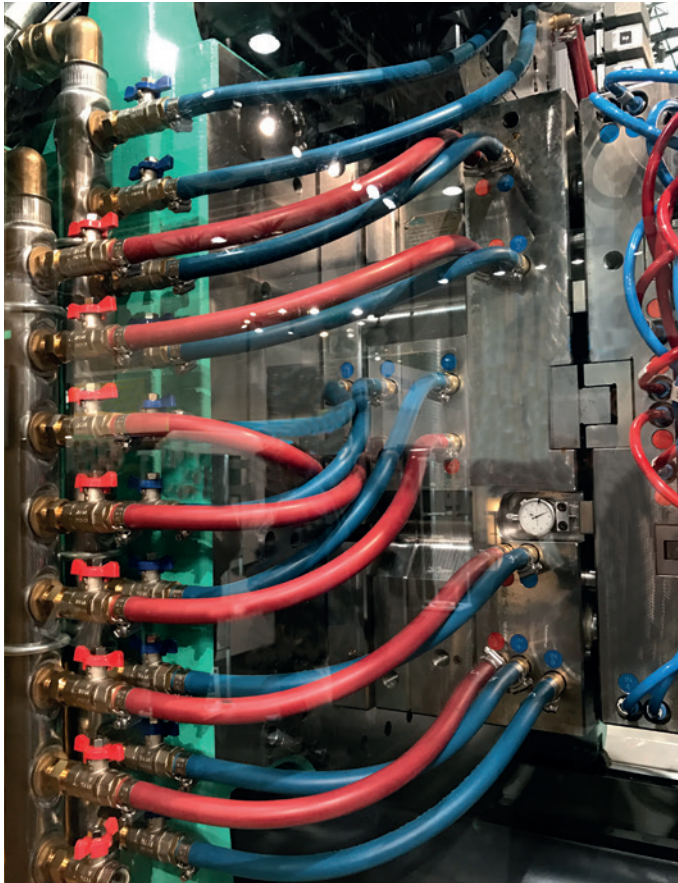
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## Temperature Regulation

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# Safety without Compromise for Temperature Regulation Applications



Plastic processing companies rely on particularly robust and sturdy couplings and fittings. The reason: They are used to cool and heat moulding units during injection moulding or pressure casting and have to withstand extreme temperatures.

The sophisticated TempTec by **LUDECKE**® quick connect couplings guarantee first-class quality, full reliability and are easy and fast to operate.

In particular, we would like to point out our TempSecure by **LUDECKE**® series which offers simple and effective protection against unintentional disconnection under pressure.

#### Advantages:

- High-class material
- Robust, safe and reliable
- Completely leakage-proof and durable
- Easy to couple
- Various sizes, connection and valve types
- Particularly safe and flexible solutions for temperature regulation applications

**Temp  
Tec**  
by **LUDECKE**

## Broad Range

The **LUDECKE** product range contains a large selection of European and International plug profiles. They cover the world's most common plug profiles and ensure high compatibility.




If there is no coupling system in our product range which meets your requirements, we will be pleased to develop an individual solution with you.

# Valve Designs

The **LUDECKE** quick connect couplings for temperature regulation applications are available in different valve designs.

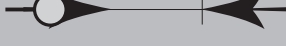
### Straight-Through



Female part (coupling)      Male part (plug)

- No valve - neither within the coupling nor within the plug
- Maximum flow rate
- During disconnection: media will leak from the coupling and plug line

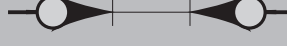
### Single Shut-off



Female part (coupling)      Male part (plug)

- Straight-through plug
- Coupling with valve
- During disconnection: media might leak from the plug line

### Double Shut-off



Female part (coupling)      Male part (plug)

- Valves on both sides (male/female)
- During disconnection: media will stay in the hose of both connection lines, constant pressure is maintained

# Materials

**LUDECKE** only works with premium materials which are customised to the application.

### Brass (plain/ nickel-plated)

Most of the **LUDECKE** quick connect couplings consist of brass MS 58 (machining brass). It is a very sturdy material which guarantees high durability and is perfectly suited for galvanization (nickel, chrome).

### Stainless Steel

For clean-room applications or when aggressive media are used to cool down or heat up moulding units, we recommend quick connect couplings made of stainless steel (1.4305). For further information, please refer to our program for the processing industry.

### High Resistant Special Brass

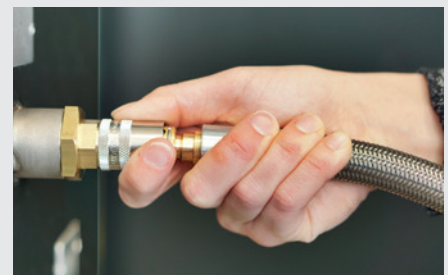
This innovative material combines the processing features of brass and the solidity of stainless steel. High resistant special brass contains no toxic additives nor lead and maintains its natural shine. This material is mainly used in the TempSecure by **LUDECKE**® Series.

### Seals

For temperature regulation applications **LUDECKE** offers high-performance seals made of FKM. They are characterized by great heat resistance, perfect gliding properties, minimum wear as well as high elasticity and high abrasion resistance which guarantee significantly longer life times of couplings. Depending on the requirement, special high-performance seals made of FKM, EPDM and FFKM are used.

# Connecting within Seconds

The **LUDECKE** temperature regulation quick connect couplings are extremely easy to handle.



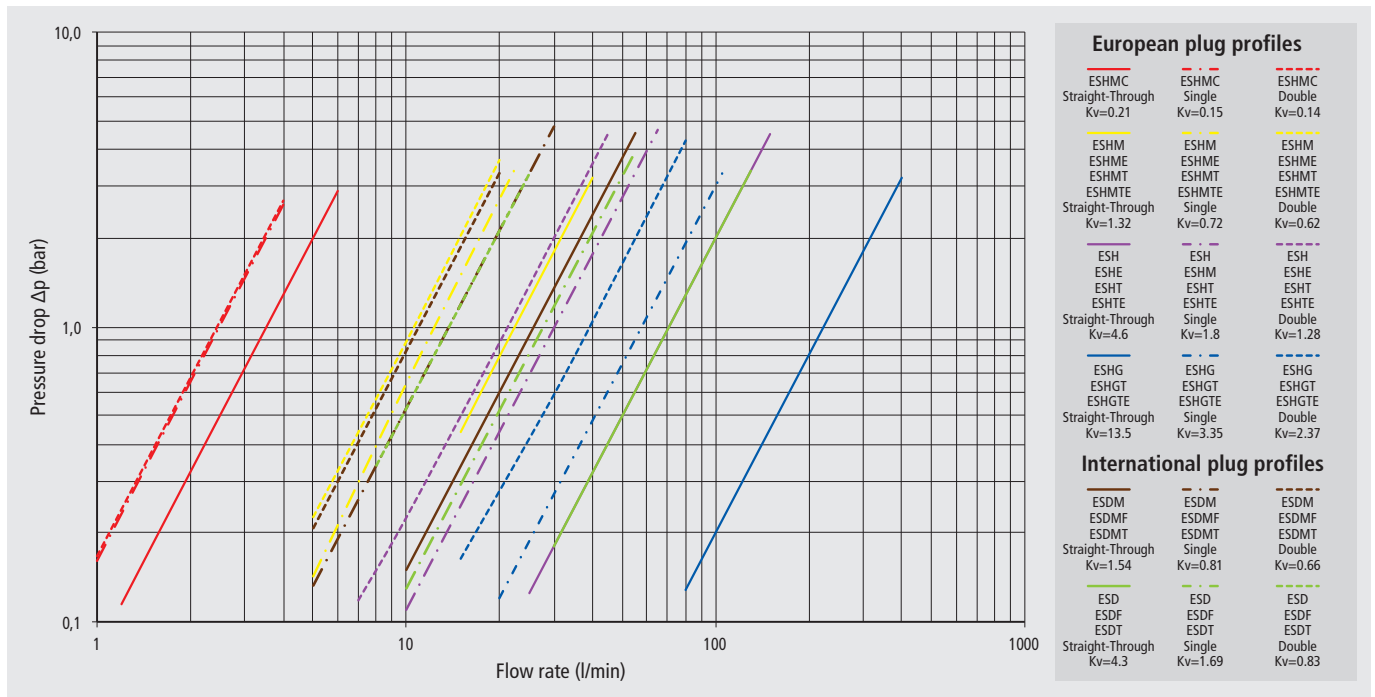
One-hand operation: To connect, simply push the plug into the coupling.

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



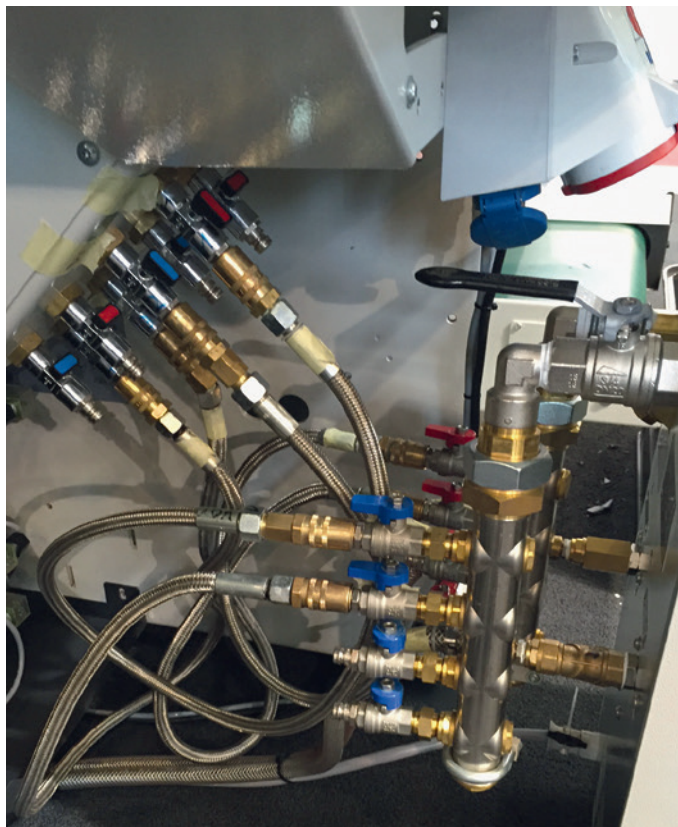
# Flow Chart

The flow rates of the different coupling systems are summarized in the following chart.



## Recommendations when Selecting a Coupling System

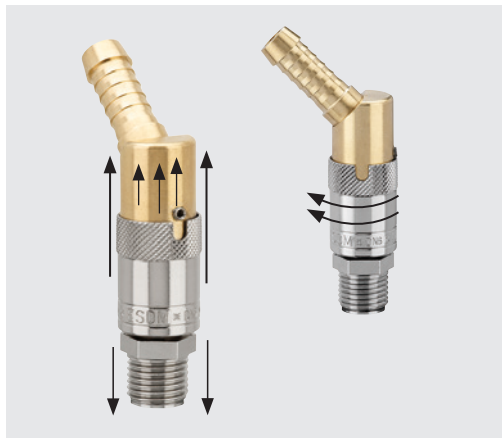
As temperature applications pose a specific safety risk, please adhere to the following:



- For permanent operation with more than 160°C, an exact specification of the coupling should be determined (© Seals, page 145)
- The **LUDECKE** temperature regulation quick connect couplings can be differentiated based on some characteristics:
  - Difference between fine metric threads acc. to DIN 13 and threads acc. to ISO 228 is, that all ISO 228 threads have a turned collar
  - The brass plugs with inch threads are made of nickel-plated brass, brass plugs with metric threads are made of plain brass
  - The sleeves of straight-through couplings are made of nickel-plated brass
  - Colour coding system for distinction between flow and return (© page 189)
- Couplings with extended sleeves can be easily connected and disconnected with countersunk plugs in the mould
- All shut-off couplings are suitable for connection with shut-off plugs
- All couplings can be used via one-hand operation - The Series ESDMF and ESDF couplers have a flat sealing ring on the front end and can be used via two-hand operation

# Flexible Components

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



**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 ESHM, ESHME, ESH, ESHE as well as ESDM and ESD

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



**360° Rotatable Connector**

The hose barb and male thread couplings of the series ESHM and ESH are also available with a rotatable connector, consisting of a high-quality ball-and-socket joint with double O-ring sealing\*.

- Swivel joint absorbs the pulling and rotary motion when opening and closing the tool in the machine and prevents the fast wearing and abrasion of the O-ring inside the coupling through the permanent turning of the plug
- Prevention of leaks in the temperature regulation circuit
- Reduces the danger of bending hoses on their way to the tool

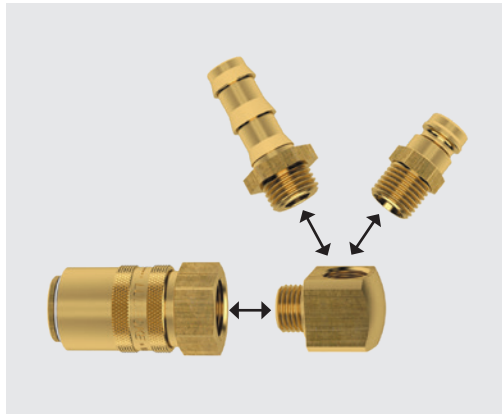
Just add "DR" on Type No. (e.g. ESHM 9 TLABDR), minimum order 20 pieces/type  
Surcharge: 5.01 Euro gross/piece



**Anchoring Concept**

On Request, we offer all couplings with quick-fit hose stem contour to use with quick-fit hoses.

- Safest clamping features (an additional clamp is not necessary). Provides a secure hold in combination with an absolute leakage-free sealing between fitting and hose
- No tools or hose clamps/ clips are necessary to assemble the hose!
- Coloured rings assure an easy and clear marking of unicoloured quick-fit hoses to distinguish the difference between heating or cooling circulations
- Suitable quick-fit hoses are available from various manufacturers and distributors
- Special versions or other sizes/ types on request
- Note the maximum permanent temperature of 100°C!



**Modular System**

For comprehensive flexibility, 45° and 90° elbow connectors are available which can be connected to threaded couplings and hose stems.



# TempSecure by **LUDECKE**<sup>®</sup>

## Temperature Regulation Quick Connect Coupling System with Automatic Safety Locking Mechanism



The patented TempSecure by **LUDECKE**<sup>®</sup> 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.

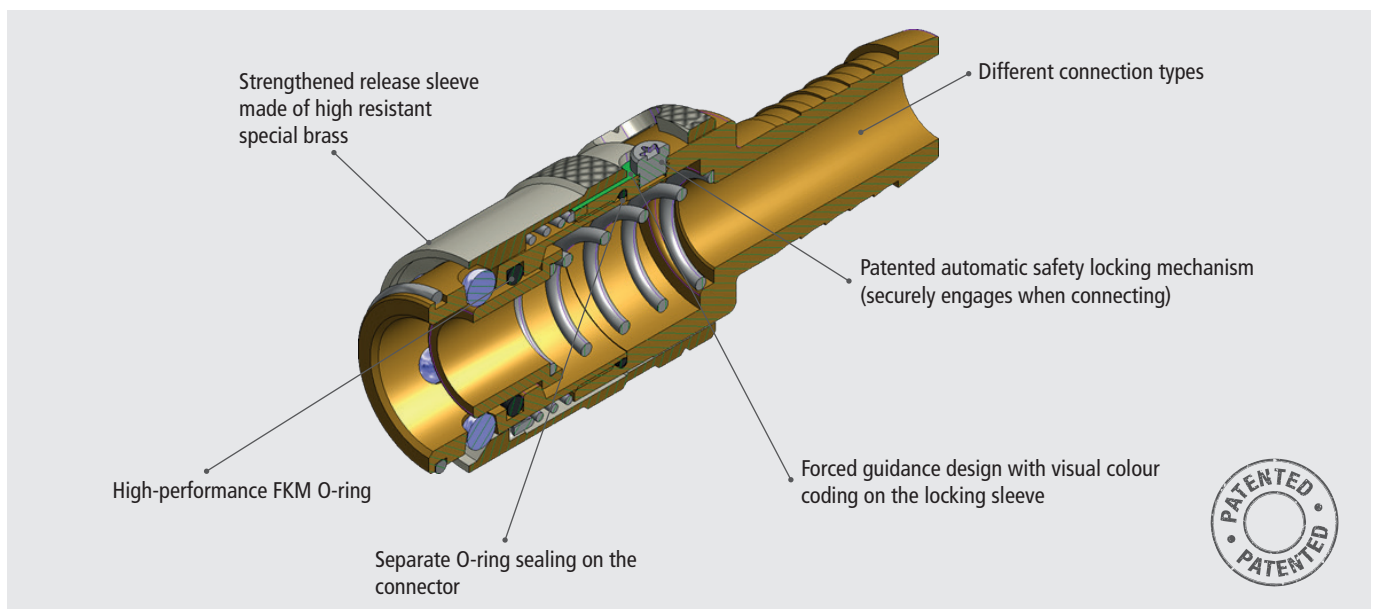
\*subject to used media

### Advantages:

- Maximum safety against unintended disconnection and unlocking
- Simple and intuitive coupling process
- High-temperature seals for best performance
- Versions with additional O-ring sealing at connection port to prevent leakage in high-temperature applications
- Available for almost all **LUDECKE** temperature regulation series in various sizes, materials, connection and valve types

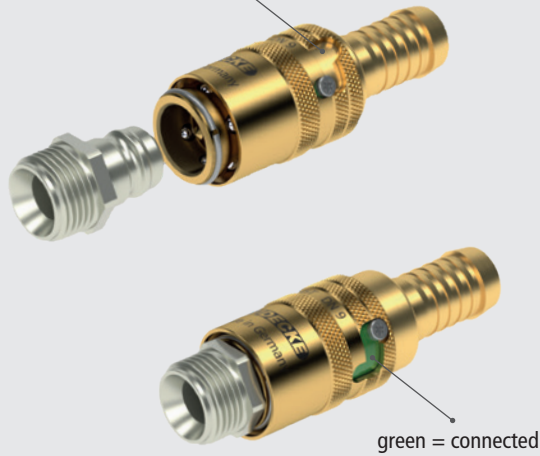
**TempSecure**<sup>®</sup>  
by **LUDECKE**

## High-Quality Materials Guarantee Best Reliability



# Easy - Reliable - Quick

Visual colour coding on the locking sleeve  
brass plain = disconnected



The TempSecure by **LUDECKE**® temperature regulation quick connect coupling system is characterized by its simple and intuitive connecting process. Even under difficult circumstances and obstructed view, this enables safe operation.

The connection is made via automatic locking. An additional colour coding on the locking sleeve clearly indicates correct and secure connection.

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:



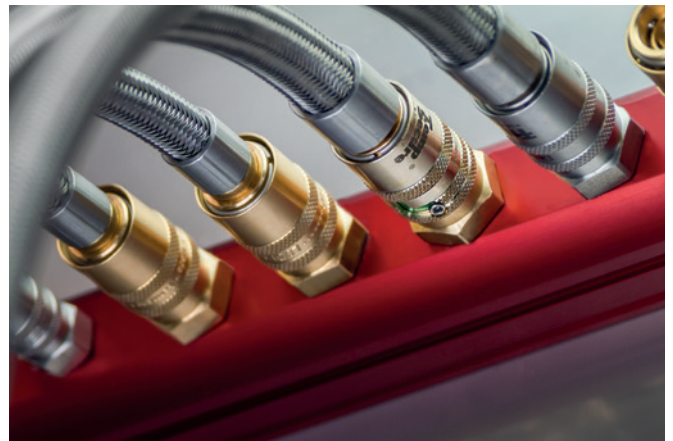
Coupling with one-hand operation - To connect the system, simply push the plug into the safety coupling. The release sleeve automatically slides forward in a twisting motion and engages into the final safety lock position. The coupling is now firmly connected to the plug and secured against unintentional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



The TempSecure coupling is especially suited for applications which require high levels of safety due to the media used and their high temperature.



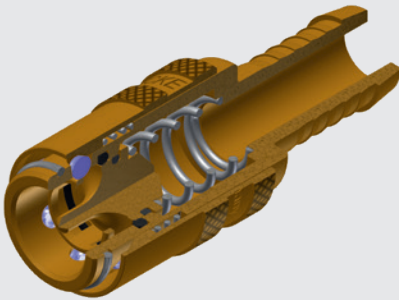
#### The reliable partner for temperature regulation applications

Accidentally decoupled and unlocked?  
Not with the TempSecure by **LUDECKE**® product range:  
Effective protection against injuries and production downtimes.



# Seals for Temperature Regulation Quick Connect 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

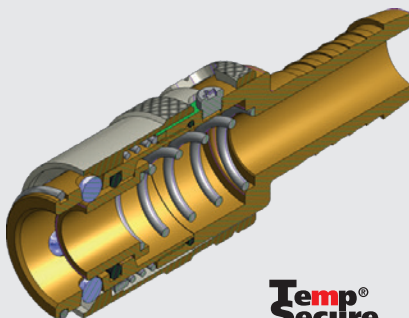
## High-Performance FKM

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.

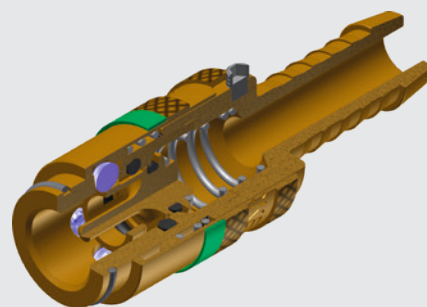
- Extreme heat resistance up to 220°C continuous temperature (oil: 220°C, water: 180°C, air: 220°C)
- High resistance against synthetic oils used as tempered media
- Very good chemical resistance and high resistance against aliphatic hydrocarbons (fuels)
- Steam/ hot water optimised

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. ESHM 9 TLABHV).



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

# Overview of Quick Connect Couplings with



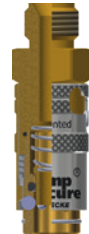
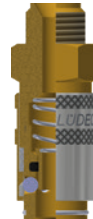
Series

**ESHMC**  
DN 2.7

**ESHM**  
DN 6

**ESHMT**  
DN 6

Plug Profile  
(original size)



## Materials:

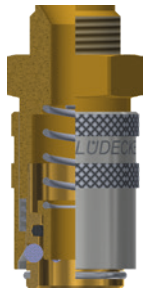
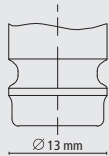
Body:	MS 58 plain	MS 58 plain	MS 58 plain
Sleeve*:	MS 58 (plain/ nickel-plated)	MS 58 (plain/ nickel-plated)	Special Brass (plain/ nickel-plated)
Valve Body:	MS 58 plain	MS 58 plain	MS 58 plain
Valve:	MS 58 plain	MS 58 plain	MS 58 plain
Springs, Retaining Ring:	Stainless Steel 1.4310	Stainless Steel 1.4310	Stainless Steel 1.4310
Balls:	Stainless Steel 1.3541	Stainless Steel 1.4034	Stainless Steel 1.4034
Seals:	FKM	FKM	High-Performance FKM
Special seals for other media on request:	EPDM, FFKM	EPDM, FFKM	EPDM, FFKM
Plug:	MS 58 plain	MS 58 (plain/ nickel-plated)	MS 58 (plain/ nickel-plated)
Max. Working Pressure:	PN 15 bar	PN 15 bar	PN 15 bar
Temperature:	-20°C– +200°C**	-20°C– +200°C**	-20°C– +220°C***
Thread Types:	DIN 13/ DIN 158	ISO 228/ DIN 13/ DIN 158	ISO 228/ DIN 13
Flow Rate:	see chart p. 140	see chart p. 140	see chart p. 140
Connection:	straight/ 45°/ 90°	straight/ 45°/ 90°	straight/ 45°/ 90°
Type of Valve:	single/ double/ straight-through	single/ double/ straight-through	single/ double/ straight-through
Operation:	One-Hand	One-Hand	One-Hand
Page:	148	150	154



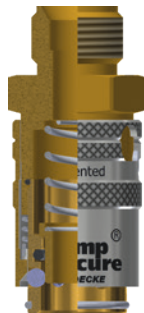
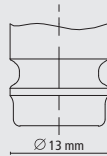
# European Plug Profiles

**Temp  
Secure**  
by **LUDECKE**

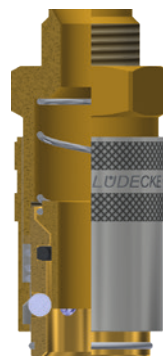
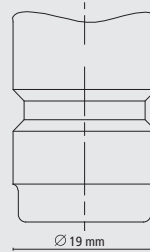
**ESH**  
DN 9



**ESHT**  
DN 9



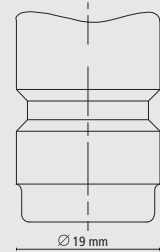
**ESHG**  
DN 13



**Temp  
Secure**  
by **LUDECKE**

**NEW!**

**ESHGT**  
DN 13



MS 58 plain
MS 58 (plain/ nickel-plated)
MS 58 plain
MS 58 plain
Stainless Steel 1.4310
Stainless Steel 1.4034
FKM
EPDM, FFKM
MS 58 (plain/ nickel-plated)
PN 15 bar
-20°C– +200°C**
ISO 228/ DIN 13
see chart p. 140
straight/ 45°/ 90°
single/ double/ straight-through
One-Hand
155

MS 58 plain
Special Brass (plain/ nickel-plated)
MS 58 plain
MS 58 plain
Stainless Steel 1.4310
Stainless Steel 1.4034
High-Performance FKM
EPDM, FFKM
MS 58 (plain/ nickel-plated)
PN 15 bar
-20°C– +220°C***
ISO 228/ DIN 13
see chart p. 140
straight/ 45°/ 90°
single/ double/ straight-through
One-Hand
159

MS 58 plain
MS 58 (plain/ nickel-plated)
MS 58 plain
MS 58 plain
Stainless Steel 1.4310
Stainless Steel 1.4034
FKM
EPDM, FFKM
MS 58 plain
PN 15 bar
-20°C– +200°C**
ISO 228/ DIN 13
see chart p. 140
straight/ 45°/ 90°
single/ double/ straight-through
One-Hand
160

MS 58 plain
Special Brass (plain/ nickel-plated)
MS 58 plain
MS 58 plain
Stainless Steel 1.4310
Stainless Steel 1.4034
High-Performance FKM
EPDM, FFKM
MS 58 (plain/ nickel-plated)
PN 15 bar
-20°C– +220°C***
ISO 228/ DIN 13
see chart p. 140
straight/ 45°/ 90°
single/ double/ straight-through
One-Hand
163

\*couplings with shut-off valve: brass plain, couplings with straight-through valve: brass nickel-plated

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

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

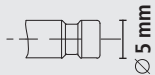
Special Brass: high resistant special brass

# Temperature Regulation Quick Connect Couplings

## Series ESHMC plug size 5 mm

### DN 2.7

Plug Profile (original size)



- One-hand quick connect couplings with smallest dimensions made of brass MS 58
- For temperature regulation applications with hot or cold water as well as tempered oil
- The series DN 2.7 is especially suited for micro-parts production with very small tools in the plastic producing industry to connect cooling lines of moulds
- Optional with straight-through, single or double shut-off valves
- Due to the extended sleeve, plugs counter-sunk in the mould can be easily coupled and decoupled. The angled connections prevent thin-walled hoses from being bent

#### Materials

- Body, valve body, valve, plug: Brass MS 58 plain
- Sleeve: Brass MS 58 plain/ nickel-plated
- Balls: Stainless steel 1.3541
- Springs, retaining ring: Stainless steel 1.4310
- Seals: FKM

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	-20°C – +200°C*	2.7	DIN 13, DIN 158	One-hand	single/ double/ straight-thr.	Tempered Media	Coupl. 5 / Plug. 10

#### Couplings with straight standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 5	35	10	13.5	5	3.5	10	ESHMC 5 TL	ESHMC 5 TLAB

#### Couplings with 45° standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 5	41	10	13.5	5	3.5	8	ESHMC 5 TL-45	ESHMC 5 TL-45AB

#### Couplings with 90° standard hose stem without/with valve

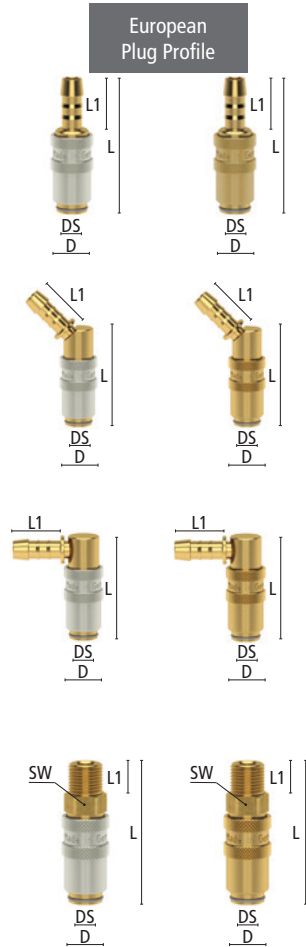
Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 5	29.5	10	13.5	5	3.5	8	ESHMC 5 TL-90	ESHMC 5 TL-90AB

#### Couplings with straight male thread without/with valve

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
M 5x0.5 m	31	9	10	5	5	3.5	9	ESHMC 505 A	ESHMC 505 AAB
M 8x0.75 m	33	9	10	7	5	3.5	10	ESHMC 875 A	ESHMC 875 AAB

Suitable hose clips for hose couplings, double-ear hose clips or crimping ferrules for standard hoses – (☺ page 194 - 197)

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

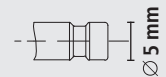


# Temperature Regulation Quick Connect Couplings

plug size 5 mm **Series ESHMC**

**DN 2.7**

Plug Profile (original size)



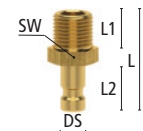
## Plugs with straight standard hose stem without valve

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 5	25	9	13.5	10	5	2.7	3	ESHMC 5 SL



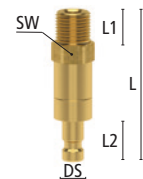
## Plugs with straight male thread without valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
M 5x0.5 m	18	7	5	10	5	2.7	3	ESHMC 505 NA
M 8x0.75 m	20	9	7	10	5	2.7	4	ESHMC 875 NA



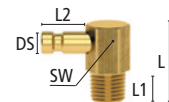
## Plugs with straight male thread with valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
M 5x0.5 m	33	9	5	10	5	2.7	7	ESHMC 505 NAAB
M 8x0.75 m	35	9	7	10	5	2.7	7	ESHMC 875 NAAB



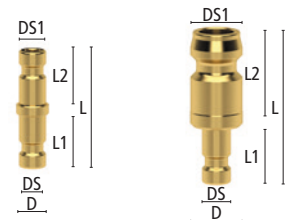
## Plugs with 90° male thread without valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
M 5x0.5 m	15.5	9	5	10	5	2.7	9	ESHMC 505 NA-90
M 8x0.75 m	17.5	9	5	10	5	2.7	11	ESHMC 875 NA-90



## Plug System Adapters

Connection	L	D	L1	L2	DS	DS1	Passage	Weight	Type No.
DN 2.7 - DN 2.7	22	6	10	10	5	5	2.7	3	ESHMC-ESHMC
DN 2.7 - DN 6	26.5	9	10	14	5	9	2.7	9	ESHMC-ESHM



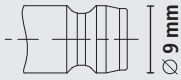


# Temperature Regulation Quick Connect Couplings

## Series ESHM plug size 9 mm

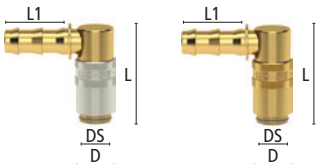
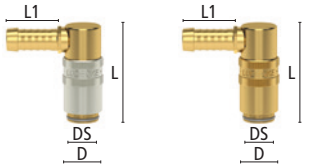
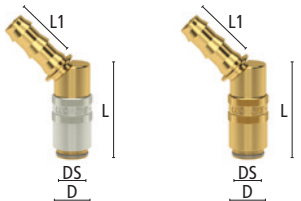
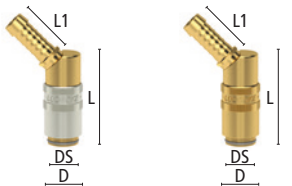
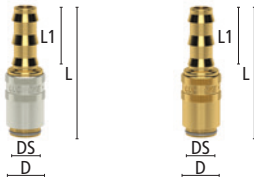
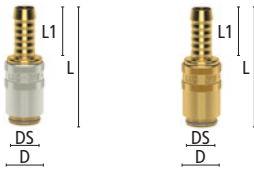
### DN 6

Plug Profile (original size)



Also in Stainless Steel  
Series ESHME  
page 314

European  
Plug Profile



- One-hand quick connect couplings with small dimensions made of brass MS 58
- For Temperature regulation applications with hot or cold water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- Hose couplings available with standard stem profile for standard hoses or quick-fit profile for quick-fit hoses
- All couplings available with security lock, just add „S“ on Type No. (Surcharge: 2.19 Euro gross)

### Materials

- Body, valve body, valve: Brass MS 58 plain
- Sleeve, plug: Brass MS 58 plain/ nickel-plated
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4034
- Seals: FKM

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	-20°C – +200°C*	6	ISO228/ DIN13/ DIN158	One-hand	single/double/straight-thr.	Tempered media	Coupl. 5 / Plug 10

### Couplings with straight standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 6	53	18	22.5	9	5	40	ESHM 6 TL	ESHM 6 TLAB
Hose i.D. 9	53	18	22.5	9	6	45		ESHM 9 TLAB
Hose i.D. 9	53	18	22.5	9	6	45	ESHM 9 TL	
Hose i.D. 13	55	18	22.5	9	6	54	ESHM 13 TL	ESHM 13 TLAB

### Couplings with straight quick-fit hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 6	58.5	18	28	9	5	42	ESHM 6 T	ESHM 6 TAB
Hose i.D. 10	58.5	18	28	9	6	49	ESHM 10 T	ESHM 10 TAB

### Couplings with 45° standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 6	42.5	18	22.5	9	5	58	ESHM 6 TL-45	ESHM 6 TL-45AB
Hose i.D. 9	42.5	18	22.5	9	6	62	ESHM 9 TL-45	ESHM 9 TL-45AB

### Couplings with 45° quick-fit hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 6	42.5	18	33	9	5	59	ESHM 6 T-45	ESHM 6 T-45AB
Hose i.D. 10	42.5	18	33	9	6	68	ESHM 10 T-45	ESHM 10 T-45AB

### Couplings with 90° standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 6	42.5	18	22.5	9	5	58	ESHM 6 TL-90	ESHM 6 TL-90AB
Hose i.D. 9	42.5	18	22.5	9	6	62	ESHM 9 TL-90	ESHM 9 TL-90AB

### Couplings with 90° quick-fit hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 6	42.5	18	28	9	5	59	ESHM 6 T-90	ESHM 6 T-90AB
Hose i.D. 10	42.5	18	28	9	6	68	ESHM 10 T-90	ESHM 10 T-90AB

### Marking rings for easy and clear identification of quick-fit hose lines

Version	D	Colour		Weight	Type No.
For Hose i.D. 6	14	blue	50	0.3	AR-BL 6
For Hose i.D. 6	14	red	50	0.3	AR-RO 6
For Hose i.D. 6	14	yellow	50	0.3	AR-GE 6
For Hose i.D. 10	17	blue	50	0.5	AR-BL 10
For Hose i.D. 10	17	red	50	0.5	AR-RO 10
For Hose i.D. 10	17	yellow	50	0.5	AR-GE 10

To put on coupling or plug stem before assembling the quick-fit hose!

Suitable hose clips, double-ear hose clips or crimping ferrules for standard hoses – (© page 194 - 197)

**Safety instruction:** Only use quick-fit hose stems in combination with suitable quick-fit hoses (up to max. 100°C)!

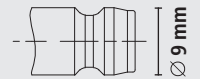
\*subject to media (oil: 200°C, water: 150°C, air: 200°C)

# Temperature Regulation Quick Connect Couplings

plug size 9 mm **Series ESHM**

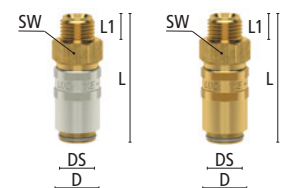
**DN 6**

Plug Profile (original size)



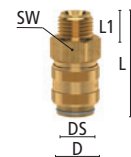
## Couplings with straight male thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
G 1/4 m	48	17	18	9	9	6	60	ESHM 14 A	ESHM 14 AAB
G 3/8 m	48	19	18	9	9	6	70	ESHM 38 A	ESHM 38 AAB
M 10x1 m	46	17	18	7	9	6	60	ESHM 101 A	ESHM 101 AAB
M 14x1.5 m	48	17	18	9	9	6	60	ESHM 1415 A	ESHM 1415 AAB
M 16x1.5 m	48	19	18	9	9	6	70	ESHM 1615 A	ESHM 1615 AAB
G 1/4 m	52	17	18	11	9	6	65	ESHM 14 AL*	ESHM 14 ALAB
G 3/8 m	52	19	18	11	9	6	75	ESHM 38 AL*	ESHM 38 ALAB
M 14x1.5 m	52	17	18	11	9	6	65	ESHM 1415 AL*	ESHM 1415 ALAB



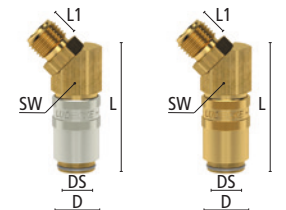
## Couplings with straight male thread (short version) with valve

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No.
G 1/4 m	38	17	18	9	9	6	45	ESHM 14 AKAB



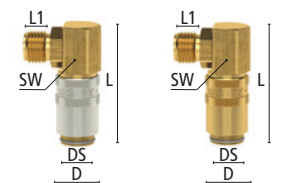
## Couplings with 45° male thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
G 1/4 m	47	17	18	9	9	6	65	ESHM 14 A-45	ESHM 14 A-45AB
G 3/8 m	47	19	18	10	9	6	75	ESHM 38 A-45	ESHM 38 A-45AB
M 10x1 m	47	17	18	7	9	6	65	ESHM 101 A-45	ESHM 101 A-45AB
M 14x1.5 m	47	17	18	9	9	6	65	ESHM 1415 A-45	ESHM 1415A-45AB
M 16x1.5 m	47	19	18	9	9	6	75	ESHM 1615 A-45	ESHM 1615A-45AB
G 3/8 m	47	19	18	11	9	6	80	ESHM 38 AL-45*	ESHM 38 AL-45AB*



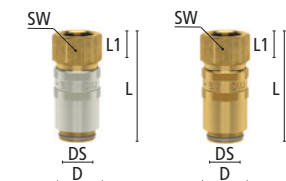
## Couplings with 90° male thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
G 1/4 m	47	17	18	9	9	6	75	ESHM 14 A-90	ESHM 14 A-90AB
G 3/8 m	47	19	18	9	9	6	85	ESHM 38 A-90	ESHM 38 A-90AB
M 10x1 m	47	17	18	7	9	6	75	ESHM 101 A-90	ESHM 101 A-90AB
M 14x1.5 m	47	17	18	9	9	6	75	ESHM 1415 A-90	ESHM 1415A-90AB
M 16x1.5 m	47	19	18	9	9	6	85	ESHM 1615 A-90	ESHM 1615A-90AB
G 3/8 m	47	19	18	11	9	6	90	ESHM 38 AL-90*	ESHM 38 AL-90AB*



## Couplings with straight female thread without/with valve

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
G 1/4 f	41.5	17	18	9	9	6	50	ESHM 14 I	ESHM 14 IAB
G 3/8 f	42	21	18	9	9	6	60	ESHM 38 I	ESHM 38 IAB
M 10x1 f	41.5	17	18	9	9	6	50	ESHM 101 I	ESHM 101 IAB
M 14x1.5 f	41.5	17	18	9	9	6	50	ESHM 1415 I	ESHM 1415 IAB



## Couplings with plug DN 9 - ESH System Adapters and ESHM-ESD System Adapter

Thread connect.	L	D	L1	DS	Passage	Version	Weight	Type No. w/o v.	Type No. w valve
DN 6 - DN 9	44	18	14	9	6	straight	75	ESHMK-ESHS	ESHMK-ESHS-AB
DN 6 - DN 9	49	18	14	9	6	45°	80	ESHMK-ESHS-45	ESHMK-ESHS-45AB
DN 6 - DN 9	47	18	14	9	6	90°	80	ESHMK-ESHS-90	ESHMK-ESHS-90AB
DN 6 - DN 6	47	18	10.5	9	6	straight	70	ESHMK-ESDMS	ESHMK-ESDMS-AB
DN 6 - DN 9	47	18	15.5	9	6	straight	75	ESHMK-ESDS	ESHMK-ESDS-AB

\*Version AL with longer male thread mainly used for assembly with Ermeto fittings.

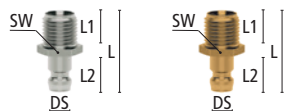
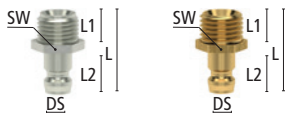
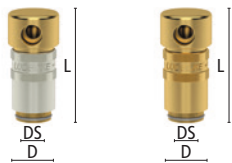
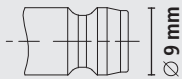


# Temperature Regulation Quick Connect Couplings

## Series ESHM plug size 9 mm

### DN 6

Plug Profile (original size)



#### Diversion coupling for temperature regulation bridges with 90° tube connection without/with valve

Connection	L	D	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Tube 8/6	43	18	9	6	63	ESHM 8-U	ESHM 8-UAB

#### Tube (chamfered) for diversion couplings (temperature regulation tube), hardened brass

Connection	L	D	Passage	Weight	Type No.
Tube 8/6	250	8	6	45	TR 250-8
Tube 8/6	500	8	6	93	TR 500-8

#### Plain End Coupling

Connection	L	D	DS	Weight	Type No.
closed	30	18	9	37	ESHM-B

#### Plugs with straight standard hose stem without valve

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 6	39.5	12	22.5	14	9	5	9	ESHM 6 SL
Hose i.D. 9	39.5	12	22.5	14	9	6	13	ESHM 9 SL
Hose i.D. 13	39.5	16	22.5	14	9	6	17	ESHM 13 SL

#### Plugs with straight quick-fit hose stem without valve

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 6	44	12	28	14	9	5	11	ESHM 6 S
Hose i.D. 10	44	16	28	14	9	6	18	ESHM 10 S

#### Plugs with straight male thread without valve (inner cone DIN 3863)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 m	24	11	7	14	9	6	10	ESHM 18 NA*
G 1/4 m	26	15	9	14	9	6	14	ESHM 14 NA*
G 3/8 m	27	17	9	14	9	6	18	ESHM 38 NA*
M 8x0.75 m	24	11	7	14	9	4.5	9	ESHM 875 NA
M 10x1 m	24	11	7	14	9	6	8	ESHM 101 NA
M 14x1.5 m	26	15	9	14	9	6	14	ESHM 1415 NA
M 16x1.5 m	26	17	9	14	9	6	18	ESHM 1615 NA

#### Plugs with straight male thread and inner hexagon without valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	System	Type No.
G 1/8 m	24	11	7	14	9	6	10	SW5,19mm depth	ESHM 18 NAIB*
G 1/4 m	26	15	9	14	9	6	14	SW5,19mm depth	ESHM 14 NAIB*
M 10x1 m	24	11	7	14	9	6	8	SW5,19mm depth	ESHM 101 NAIB
M 14x1.5 m	26	15	9	14	9	6	14	SW5,19mm depth	ESHM 1415 NAIB

For easy assembly with Allen key countersunk in the tool

\*Plugs with inch thread nickel-plated for simple distinction

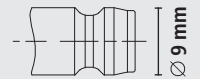


# Temperature Regulation Quick Connect Couplings

plug size 9 mm **Series ESHM**

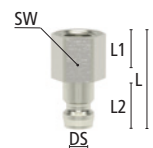
**DN 6**

Plug Profile (original size)



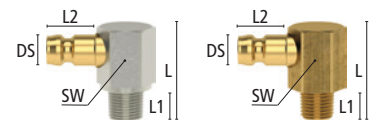
## Plugs with straight female thread without valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 f	27	14	9	14	9	6	15	ESHM 18 NI*
G 1/4 f	27	17	9	14	9	6	19	ESHM 14 NI*
G 3/8 f	27	19	10	14	9	6	25	ESHM 38 NI*



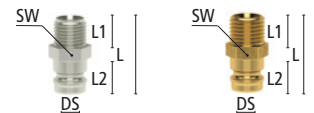
## Plugs with 90° male thread without valve (metrical thread DIN 158/R-thread DIN EN 10226)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
R 1/8 m	27	15	9	14	9	6	35	ESHM 18 NA-90*
R 1/4 m	29	15	11	14	9	6	40	ESHM 14 NA-90*
R 3/8 m	30	17	12	14	9	6	44	ESHM 38 NA-90*
M 8x0.75 m	27	15	9	14	9	4.5	38	ESHM 875 NA-90
M 10x1 m	27	15	9	14	9	6	38	ESHM 101 NA-90
M 14x1.5 m	29	15	11	14	9	6	40	ESHM 1415 NA-90



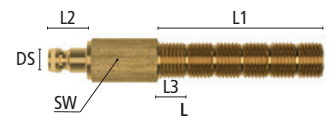
## Plugs with straight male thread with valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 m	40	15	8	14	9	6	13	ESHM 18 NAAB*
G 1/4 m	29	15	12	14	9	6	14	ESHM 14 NAAB*
G 3/8 m	30	17	12	14	9	6	22	ESHM 38 NAAB*
M 14x1.5 m	29	15	12	14	9	6	15	ESHM 1415 NAAB



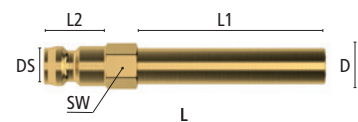
## Plugs with straight male long thread without valve (for length cutting as needed)

Thread connection	L	SW	L1	L2	L3	DS	Passage	Weight	Type No.
G 1/8 m	100	11	60	14	10	9	6	36	ESHM 18-60 NA
G 1/4 m	100	14	60	14	10	9	6	58	ESHM 14-60 NA
G 3/8 m	100	17	60	14	10	9	6	90	ESHM 38-60 NA
M 10x1 m	100	11	60	14	10	9	6	36	ESHM 101-60 NA
M 14x1.5 m	100	14	60	14	10	9	6	61	ESHM 1415-60 NA



## Plug Tubes for countersunk mould threads (for length cutting as needed)

D	L	SW	L1	L2	DS	Passage	Weight	Type No.
8	63	9	42	14	9	5	14	ESHM 63 R
8	100	9	79	14	9	5	20	ESHM 100 R
10	63	11	42	14	9	6	20	ESHM 63 R10
10	100	11	79	14	9	6	41	ESHM 100 R10
10	120	11	99	14	9	6	49	ESHM 120 R
10	240	11	219	14	9	6	103	ESHM 240 R
10	360	11	339	14	9	6	157	ESHM 360 R
14	150	15	127	14	9	6	114	ESHM 150 R-14



## Plug System Adapters

Connection	L	L1	L2	DS	DS1	Weight	Type No.
DN 6 - DN 6	34	14	14	9	9	14	ESHM-ESHM
DN 9 - DN 6	34	14	14	9	13	18	ESH-ESHM
Protection cap (plastic) for plug profile ESHM					100		ESHM-K



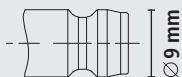
\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

## Series ESHMT Plug size 9 mm - with Automatic Locking Mechanism

### DN 6

Plug Profile (original size)



Also in Stainless Steel  
Series ESHMT  
Page 316

European  
Plug Profile

- One-hand quick connect couplings with small dimensions and patented automatic safety locking mechanism
- Forced guidance design with visual 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 hot or cold 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 (page 152)
- 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 288/ 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	ESHMT 9 TL	ESHMT 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	ESHMT 9 TL45	ESHMT 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	ESHMT 9 TL90	ESHMT 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	ESHMT14AL	ESHMT14ALAB
G 3/8 m	56.5	19	18	11	9	6	76	ESHMT38AL	ESHMT38ALAB
M 14x1.5 m	56.5	17	18	11	9	6	76	ESHMT1415AL	ESHMT1415ALAB
M 16x1.5 m	57	19	18	11	9	6	76	ESHMT1615AL	ESHMT1615ALAB

### 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	ESHMT14AL45	ESHMT14AL45AB
G 3/8 m	56	17	18	11	9	6	101	ESHMT38AL45	ESHMT38AL45AB
M 14x1.5 m	56	17	18	11	9	6	87	ESHMT1415AL45	ESHMT1415AL45AB
M 16x1.5 m	56	17	18	11	9	6	87	ESHMT1615AL45	ESHMT1615AL45AB

### 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	ESHMT14AL90	ESHMT14AL90AB
G 3/8 m	56	17	18	11	9	6	100	ESHMT38AL90	ESHMT38AL90AB
M 14x1.5 m	56	17	18	11	9	6	96	ESHMT1415AL90	ESHMT1415AL90AB
M 16x1.5 m	56	17	18	11	9	6	96	ESHMT1615AL90	ESHMT1615AL90AB

Other types/ sizes on request

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

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



# Temperature Regulation Quick Connect Couplings

Plug size 13 mm **Series ESH**

- One-hand quick connect couplings made of brass MS 58
- For temperature regulation applications with hot or cold water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- Hose couplings available with standard stem profile for standard hoses or quick-fit profile for quick-fit hoses
- All couplings available with security lock, just add „S“ on Type No. (Surcharge: 2.19 Euro gross)

## Materials

- Body, valve body, valve: Brass MS 58 plain
- Sleeve, plug: Brass MS 58 plain/ nickel-plated
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4034
- Seals: FKM

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	-20°C – +200°C*	9	ISO 228 / DIN 13	One-hand	Single/double/straight-thr.	Tempered media	Coupl. 5 / Plug 10

## 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. 9	61.5	23.5	25	13	7	72	ESH 9 TL	ESH 9 TLAB
Hose i.D. 13	61.5	23.5	25	13	9	81		ESH 13 TLAB
Hose i.D. 13	61.5	23.5	25	13	9	81	ESH 13 TL	

## Couplings with straight quick-fit 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. 10	64.5	23.5	28	13	7	76	ESH 10 T	ESH 10 TAB
Hose i.D. 13	64.5	23.5	28	13	9	84	ESH 13 T	ESH 13 TAB

## 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	51	23.5	30	13	7	103	ESH 9 TL-45	ESH 9 TL-45AB
Hose i.D. 13	51	23.5	30	13	9	109	ESH 13 TL-45	ESH 13 TL-45AB

## Couplings with 45° quick-fit 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. 10	51	23.5	33	13	7	108	ESH 10 T-45	ESH 10 T-45AB
Hose i.D. 13	51	23.5	33	13	9	111	ESH 13 T-45	ESH 13 T-45AB

## 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	51	23.5	30	13	7	105	ESH 9 TL-90	ESH 9 TL-90AB
Hose i.D. 13	51	23.5	30	13	9	111	ESH 13 TL-90	ESH 13 TL-90AB

## Couplings with 90° quick-fit 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. 10	51	23.5	33	13	7	110	ESH 10 T-90	ESH 10 T-90AB
Hose i.D. 13	51	23.5	33	13	9	113	ESH 13 T-90	ESH 13 T-90AB

## Marking rings for easy and clear identification of quick-fit hose lines

Version	D	Colour		Weight	Type No.
For Hose i.D. 10	17	blue	50	0.5	AR-BL 10
For Hose i.D. 10	17	red	50	0.5	AR-RO 10
For Hose i.D. 10	17	yellow	50	0.5	AR-GE 10
For Hose i.D. 13	20	blue	50	0.7	AR-BL 13
For Hose i.D. 13	20	red	50	0.7	AR-RO 13
For Hose i.D. 13	20	yellow	50	0.7	AR-GE 13

To put on coupling or plug stem before assembling the quick-fit hose

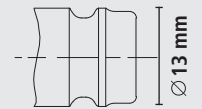
Suitable hose clips, double-ear hose clips or crimping ferrules for standard hoses (© page 194 - 197)

**Safety instruction:** Only use quick-fit hose stems in combination with suitable quick-fit hoses (up to max. 100°C)!

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

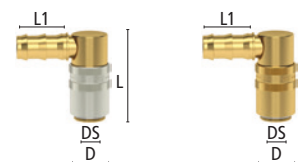
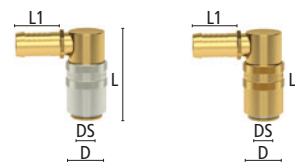
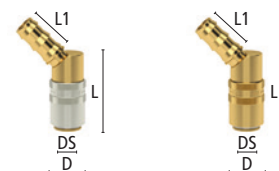
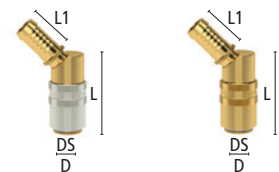
**DN 9**

Plug Profile (original size)



Also in Stainless Steel  
Series ESH  
Page 317

European  
Plug Profile



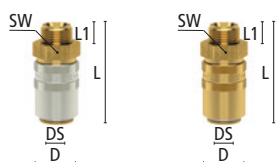
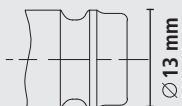


# Temperature Regulation Quick Connect Couplings

**Series ESH** Plug size 13 mm

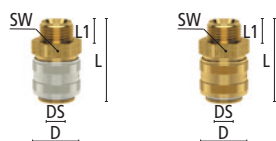
**DN 9**

Plug Profile (original size)



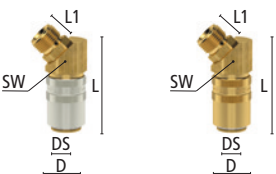
### Couplings with straight male thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	52	22	23.5	9	13	9	90	ESH 14 A	ESH 14 AAB
G 3/8 m	52	22	23.5	9	13	9	94	ESH 38 A	ESH 38 AAB
G 1/2 m	53	24	23.5	10	13	9	95	ESH 12 A	ESH 12 AAB
M 14x1.5 m	56	22	23.5	11	13	9	90	ESH 1415 A	ESH 1415 AAB
M 16x1.5 m	52	22	23.5	9	13	9	93	ESH 1615 A	ESH 1615 AAB
M 18x1.5 m	54	22	23.5	11	13	9	105	ESH 1815 A	ESH 1815 AAB
G 3/8 m	56	22	23.5	11	13	9	105	ESH 38 AL*	ESH 38 ALAB*
G 1/2 m	57	24	23.5	14	13	9	110	ESH 12 AL*	ESH 12 ALAB*
M 16x1.5 m	56	22	23.5	13	13	9	105	ESH 1615 AL*	ESH 1615 ALAB*



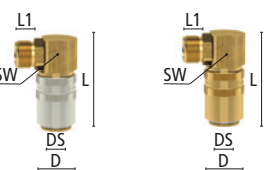
### Couplings with straight male thread (short version) with valve

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 3/8 m	38	22	23.5	9	13	9	61	ESH 38 AK	ESH 38 AKAB



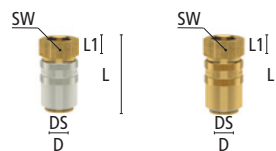
### Couplings with 45° male thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	54	22	23.5	9	13	9	128	ESH 14 A-45	ESH 14 A-45AB
G 3/8 m	54	22	23.5	9	13	9	114	ESH 38 A-45	ESH 38 A-45AB
M 14x1.5 m	56	22	23.5	11	13	9	114	ESH 1415 A-45	ESH 1415 A-45AB
M 16x1.5 m	54	22	23.5	9	13	9	114	ESH 1615 A-45	ESH 1615 A-45AB
G 1/4 m	54	22	23.5	11	13	9	128	ESH 14 AL-45	ESH 14 AL-45 AB
G 3/8 m	58	22	23.5	11	13	9	125	ESH 38 AL-45*	ESH 38 AL-45AB*



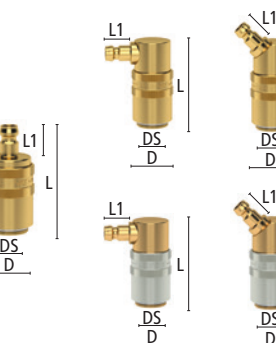
### Couplings with 90° male thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	54	22	23.5	9	13	9	126	ESH 14 A-90	ESH 14 A-90AB
G 3/8 m	54	22	23.5	9	13	9	126	ESH 38 A-90	ESH 38 A-90AB
M 14x1.5 m	56	22	23.5	11	13	8	126	ESH 1415 A-90	ESH 1415 A-90AB
M 16x1.5 m	54	22	23.5	9	13	9	126	ESH 1615 A-90	ESH 1615 A-90AB
G 1/4 m	54	22	23.5	11	13	9	126	ESH 14 AL-90*	ESH 14 AL-90AB
G 3/8 m	58	22	23.5	11	13	9	125	ESH 38 AL-90*	ESH 38 AL-90AB*



### Couplings with straight female thread without/with valve

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 f	44.5	17	23.5	9	13	9	75	ESH 14 I	ESH 14 IAB
G 3/8 f	46	22	23.5	9	13	9	110	ESH 38 I	ESH 38 IAB
G 1/2 f	49	24	23.5	12	13	9	110	ESH 12 I	ESH 12 IAB



### Couplings with Plugs DN 6 - ESHM - System Adapter and ESH-ESD System Adapter

Connection	L	D	L1	DS	Passage	Version	Weight	Type No. w/o valve	Type No. w valve
DN 9 - DN 6	51	23.5	14	13	6	straight	100	ESHK-ESHMS	ESHK-ESHMS-AB
DN 9 - DN 6	51	23.5	14	13	6	45°	100	ESHK-ESHMS-45	ESHK-ESHMS-45AB
DN 9 - DN 6	51	23.5	14	13	6	90°	100	ESHK-ESHMS-90	ESHK-ESHMS-90AB
DN 9 - DN 6	51	23.5	10.5	13	6	straight	85	ESHK-ESDMS	ESHK-ESDMS-AB
DN 9 - DN 9	51	23.5	15.5	13	9	straight	100	ESHK-ESDS	ESHK-ESDS-AB

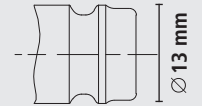
\*Version AL with longer male thread mainly used for assembly with Ermeto fittings.

# Temperature Regulation Quick Connect Couplings

Plug size 13 mm **Series ESH**

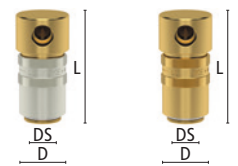
**DN 9**

Plug Profile (original size)



## Diversion coupling for temperature regulation bridges with 90° tube connection without/ with valve

Connection	L	D	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Tube 10/8	53	23.5	13	9	118	ESH 10-U	ESH 10-UAB



## Tube (chamfered) for diversion couplings (temperature regulation tube), hardened brass

Connection	L	D	Passage	Weight	Type No.
Tube 10/8	250	10	8	60	TR 250-10
Tube 10/8	500	10	8	120	TR 500-10



## Plain End Coupling

Connection	L	D	DS	Weight	Type No.
closed	37	23.5	13	67	ESH-B



## Plugs with straight standard hose stem without valve

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 9	39.5	14.5	22.5	14	13	7	23	ESH 9 SL
Hose i.D. 13	42	16	25	14	13	9	25	ESH 13 SL



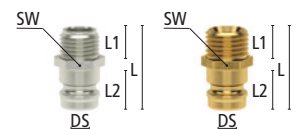
## Plugs with straight quick-fit hose stem without valve

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 10	43.5	14.5	28	14	13	7	24	ESH 10 S
Hose i.D. 13	43.5	16	28	14	13	9	26	ESH 13 S



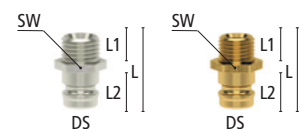
## Plugs with straight male thread without valve (inner cone DIN 3863)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 m	24	15	7	14	13	6	16	ESH 18 NA*
G 1/4 m	26	15	9	14	13	9	17	ESH 14 NA*
G 3/8 m	26	17	9	14	13	9	22	ESH 38 NA*
G 1/2 m	31	22	12	14	13	9	42	ESH 12 NA*
G 3/4 m	35	27	16	14	13	9	110	ESH 34 NA*
M 10x1 m	24	15	7	14	13	6.5	14	ESH 101 NA
M 14x1.5 m	26	15	9	14	13	9	16	ESH 1415 NA
M 16x1.5 m	26	17	9	14	13	9	20	ESH 1615 NA
M 18x1.5 m	26	19	9	14	13	9	25	ESH 1815 NA



## Plugs with straight male thread with inner Hexagon without valve

Thread	L	SW	L1	L2	DS	Passage	Weight	Version	Type No.
G 1/4 m	26	17	9	14	13	9	17	SW8, 17mm depth	ESH 14 NAIB*
M 14x1.5 m	26	17	9	14	13	9	16	SW8, 17mm depth	ESH 1415 NAIB



For easy assembly with Allen key countersunk in the tool

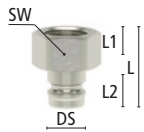
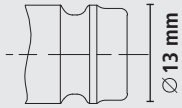
\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

## Series ESH Plug size 13 mm

### DN 9

Plug Profile (original size)



#### Plugs with straight female thread without valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 3/8 f	26	19	10	14	13	9	42	ESH 38 NI*
G 1/2 f	29	24	10	14	13	9	55	ESH 12 NI*

#### Plugs with 90° male thread without valve (metrical thread DIN 158/R-thread DIN EN 10226)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
R 1/4 m	34	17	11	25	13	9	45	ESH 14 NA-90*
M 14x1.5 m	34	17	11	25	13	9	47	ESH 1415 NA-90
R 3/8 m	35	17	12	25	13	9	45	ESH 38 NA-90*

#### Plugs with straight male thread with valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/4 m	30	15	11	14	13	6	24	ESH 14 NAAB*
G 3/8 m	31	17	12	14	13	9	28	ESH 38 NAAB*
G 1/2 m	31	22	12	14	13	9	48	ESH 12 NAAB*
M 14x1.5 m	30	15	11	14	13	6	26	ESH 1415 NAAB
M 16x1.5 m	31	17	12	14	13	9	28	ESH 1615 NAAB
M 18x1.5 m	30	19	12	14	13	9	30	ESH 1815 NAAB

#### Plugs with straight male long thread without valve (for length cutting as needed)

Thread connection	L	SW	L1	L2	L3	DS	Passage	Weight	Type No.
G 1/4 m	100	14	60	14	10	13	9	60	ESH 14-60 NA
G 1/4 m	57	15	34	14	16	13	9	38	ESH 14 NAL18
G 1/4 m	110	15	87	14	16	13	9	75	ESH 14 NAL71
G 3/8 m	100	17	60	14	10	13	9	91	ESH 38-60 NA
M 14x1.5 m	100	14	60	14	10	13	9	55	ESH 1415-60 NA
M 16x1.5 m	100	17	60	14	10	13	9	93	ESH 1615-60 NA

#### Plug Tubes for countersunk mould threads (for length cutting as needed)

D	L	SW	L1	L2	DS	Passage	Weight	Type No.
14	150	15	127	14	13	9	114	ESH 150 R
14	300	15	277	14	13	9	210	ESH 300 R
14	450	15	427	14	13	9	344	ESH 450 R
10	150	15	127	14	13	6	65	ESH 150 R-10

#### Plug System - Adapters

Connection	L	D	L1	L2	DS	DS1	Passage	Weight	Type No.
DN 9 - DN 6	34	14	14	14	9	13	6	18	ESH-ESHM
DN 9 - DN 9	34	14	14	14	13	13	9	24	ESH-ESH

#### Plugs with counterpart system "ARBURG" – System Adapters

System	Thread	L	SW	L1	L2	DS	DS1	Passage	Weight	Type No.
DN 9 ESH-Arburg	-	64	-	22	14	13	14.8	9	77	ESH-ARB
Arburg	G 1/4 f	50	21	22	14	-	14.8	9	85	ARB 14 NI
Arburg	G 3/8 f	50	21	22	14	-	14.8	9	84	ARB 38 NI

Protection cap (plastic) for plug profile ESH	100	ESH-K
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\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

Plug size 13 mm – with Automatic Locking Mechanism **Series ESHT**

- One-hand quick connect couplings with patented automatic safety locking mechanism
- Forced guidance design with visual 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 hot or cold 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 (page 157)
- 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	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	ESHT 13 TL	ESHT 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	ESHT 13 TL45	ESHT 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	ESHT 13 TL90	ESHT 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	12.5	13	9	98	ESHT14AL	ESHT14ALAB
G 3/8 m	56	22	23.5	12.5	13	9	94	ESHT38AL	ESHT38ALAB
M 16x1.5 m	56	22	23.5	12.5	13	9	93	ESHT1615AL	ESHT1615ALAB
M 18x1.5 m	56	22	23.5	12.5	13	9	100	ESHT1815AL	ESHT1815ALAB

## 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	12	13	9	130	ESHT14AL45	ESHT14AL45AB
G 3/8 m	55.5	22	23.5	12.5	13	9	134	ESHT38AL45	ESHT38AL45AB
M 16x1.5 m	55.5	22	23.5	12	13	9	132	ESHT1615AL45	ESHT1615AL45AB

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

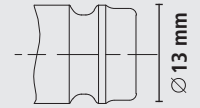
Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	55.5	22	23.5	12.5	13	9	130	ESHT14AL90	ESHT14AL90AB
G 3/8 m	55.5	22	23.5	12.5	13	9	134	ESHT38AL90	ESHT38AL90AB
M 16x1.5 m	55.5	22	23.5	12	13	9	132	ESHT1615AL90	ESHT1615AL90AB

Other types/ sizes on request

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

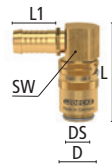
**DN 9**

Plug Profile (original size)



Also in Stainless steel  
Series ESHTe  
Page 319

European  
Plug Profile



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



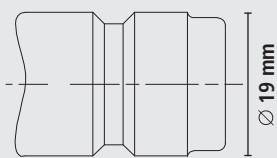


# Temperature Regulation Quick Connect Couplings

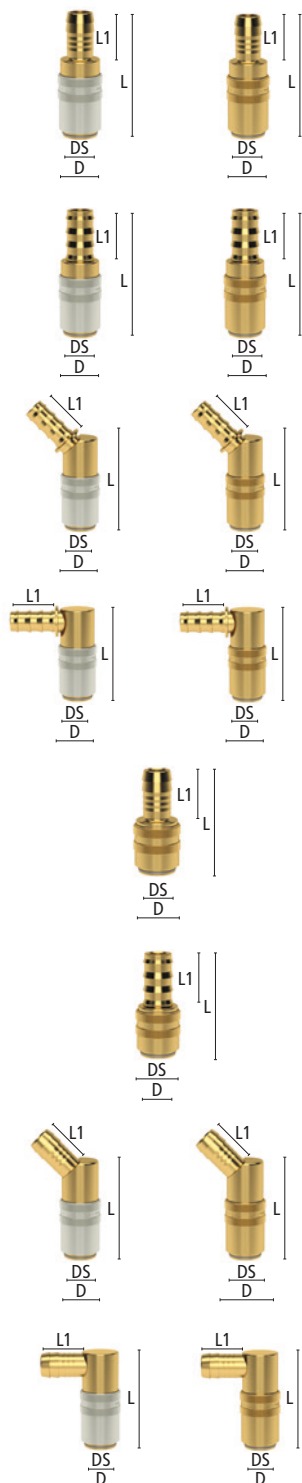
## Series ESHG Plug size 19 mm

### DN 13

Plug Profile (original size)



European Plug Profile



- One-hand quick connect couplings with high flow rates made of brass MS 58
- For temperature regulation applications with hot or cold water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- Hose couplings available with standard stem profile for standard hoses or quick-fit profile for quick-fit hoses
- All couplings available with security lock, just add "S" on Type No. (Surcharge: 2.19 Euro gross)

#### Materials:

- Body, valve body, plug: Brass MS 58 plain
- Sleeve: Brass MS 58 plain/ nickel-plated
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4034
- Seals: FKM

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	-20°C – +200°C*	13	ISO 228 / DIN 13	One-hand	Single/double/straight-through	Tempered media	Coupl. 1 / Plug 5

#### Couplings with straight standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 13	83	31	25	19	9	200	ESHG 13 TL	ESHG 13 TLAB
Hose i.D. 19	92	31	34	19	13	222	ESHG 19 TL	ESHG 19 TLAB

#### Couplings with straight quick-fit hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 16	96	31	38	19	13	222	ESHG 16 T	ESHG 16 TAB
Hose i.D. 19	96	31	38	19	13	240	ESHG 19 T	ESHG 19 TAB

#### Couplings with 45° quick-fit hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 16	82	31	38	19	13	320	ESHG 16 T-45	ESHG 16 T-45AB

#### Couplings with 90° quick-fit hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 16	82	31	38	19	13	320	ESHG 16 T-90	ESHG 16 T-90AB

#### Couplings with straight hose stem – short version without one-hand operation and without valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o valve
Hose i.D. 19	71	31	34	19	13	170	ESHG 19 TLK

#### Couplings with straight quick fit hose stem – short version without one-hand operation and without valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o valve
Hose i.D. 16	75	31	38	19	13	163	ESHG 16 TK
Hose i.D. 19	75	31	38	19	13	180	ESHG 19 TK

#### Couplings with 45° standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 19	78	31	36	19	13	305	ESHG 19 TL-45	ESHG 19 TL-45AB

#### Couplings with 90° standard hose stem without/with valve

Hose connection	L	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Hose i.D. 19	78	31	34	19	13	310	ESHG 19 TL-90	ESHG 19 TL-90AB

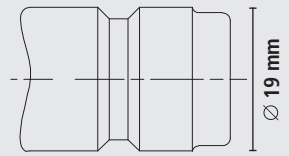
\*subject to media (oil: 200°C, water: 150°C, air: 200°C)

# Temperature Regulation Quick Connect Couplings

Plug size 19 mm **Series ESHG**

**DN 13**

Plug Profile (original size)



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

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
G 1/2 m	74	30	31	12	19	13	228	ESHG 12 A	ESHG 12 AAB
M 24x1.5 m	78	30	31	16	19	13	250	ESHG 2415 A	ESHG 2415 AAB
G 3/4 m	78	30	31	16	19	13	250	ESHG 34 A	ESHG 34 AAB

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

NEW!

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
G 3/4 m	81	30	31	18	19	13	372	ESHG 34 A-45	ESHG 34 A-45AB
M 24x1.5 m	81	30	31	18	19	13	328	ESHG 2415 A-45	ESHG 2415A-45AB

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

NEW!

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
G 3/4 m	81	30	31	18	19	13	380	ESHG 34 A-90	ESHG 34 A-90AB
M 24x1.5 m	81	30	31	18	19	13	338	ESHG 2415 A-90	ESHG 2415 A90AB

## Couplings with straight female thread without/with valve

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
G 3/4 f	78	33	31	16	19	13	270	ESHG 34 I	ESHG 34 IAB

## Diversion coupling for temperature regulation bridges with 90° tube connection without/with valve

Connection	L	D	DS	Passage	Weight	Type No. w/o v.	Type No. w valve
Tube 14/12	80	31	19	12	350	ESHG 14-U	ESHG 14-UAB

## Tube (chamfered) for diversion couplings (temperature regulation tube) hardened brass

Connection	L	D	Passage	Weight	Type No.
Tube 14/12	500	14	12	170	TR 500-14

## Marking rings for easy and clear identification of quick-fit hose lines

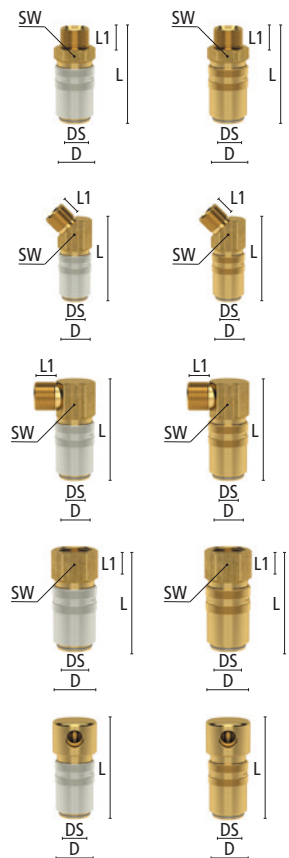
Version	D	Colour	Weight	Type No.
For Hose i.D. 16	25	blue	10	AR-BL 16
For Hose i.D. 16	25	red	10	AR-RO 16
For Hose i.D. 16	25	yellow	10	AR-GE 16

To put on coupling or plug stem before assembling the quick-fit hose

Suitable hose clips, double-ear hose clips or crimping ferrules for standard hoses (© page 194 - 197)

Other types/ sizes on request

**Safety instruction:** Only use quick-fit hose stems in combination with suitable quick-fit hoses (up to max. 100°C)!

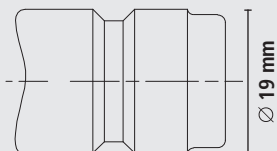


# Temperature Regulation Quick Connect Couplings

**Series ESHG** Plug size 19 mm

**DN 13**

Plug Profile (original size)



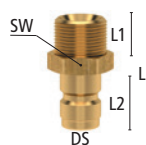
### Plugs with straight standard hose stem without valve

Hose connection	L	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 13	54	25	27	19	9	52	ESHG 13 SL
Hose i.D. 19	63	34	27	19	13	81	ESHG 19 SL



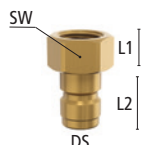
### Plugs with straight quick-fit hose stem without valve

Hose connection	L	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 16	67	38	27	19	13	63	ESHG 16 S
Hose i.D. 19	67	38	27	19	13	93	ESHG 19 S



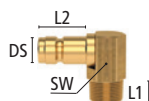
### Plugs with straight male thread without valve (inner cone DIN 3863)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/2 m	47	22	12	27	19	13	64	ESHG 12 NA*
G 3/4 m	51	27	16	27	19	13	107	ESHG 34 NA*
M 24x1.5 m	51	27	16	27	19	13	97	ESHG 2415 NA



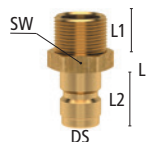
### NEW! Plugs with straight female thread without valve

Thread connection	L	L1	L2	DS	Passage	Weight	Type No.
G 1/2 f	42	12	27	19	13	77	ESHG 12 NI
G 3/4 f	42	12	27	19	13	60	ESHG 34 NI



### Plugs with 90° male thread without valve (metrical thread DIN 158/ R-thread DIN EN 10226)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
R 1/2 m	47	24	16	27	19	13	100	ESHG 12 NA-90*
M 24x1.5 m	47	24	16	27	19	13	105	ESHG 2415 NA-90



### Plugs with straight male thread with valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/2 m	47	22	12	27	19	13	84	ESHG 12 NAAB*
G 3/4 m	51	27	16	27	19	13	90	ESHG 34 NAAB*
M 24x1.5 m	51	27	16	27	19	13	86	ESHG 2415 NAAB

Protection cap (plastic) for plug profile ESHG

100

ESHG-K

\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

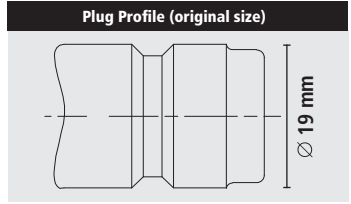
## Plug size 19 mm – with Automatic Locking Mechanism **Series ESHGT**

- One-hand quick connect couplings with patented automatic safety locking mechanism
- Forced guidance design with visual 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 hot or cold water as well as tempered oil**
- Optional with straight-through, single or double shut-off valves
- To be coupled with plug series ESHG DN 13 (page 162)
- Versions with additional O-ring sealing at connection port to prevent leakage in high-temperature applications

**DN 13**

### Materials

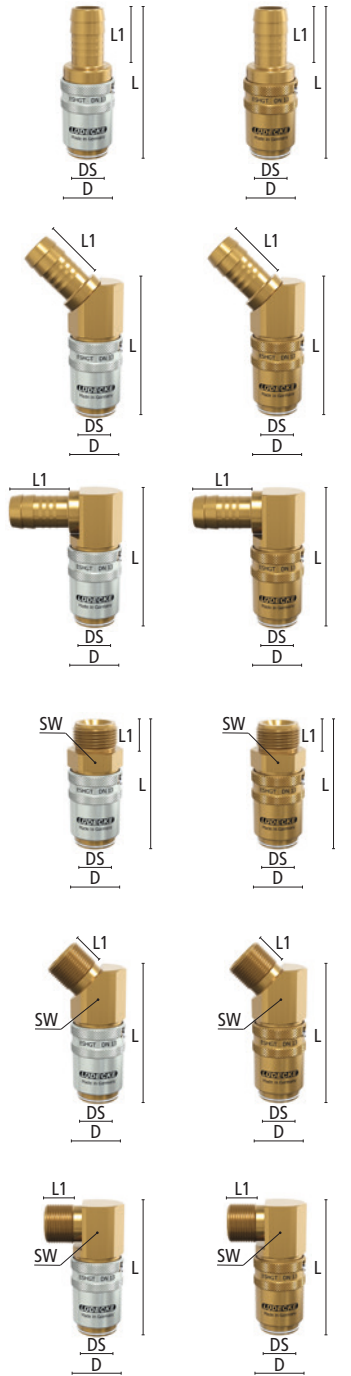
- Body, valve body, valve, plug: Brass MS 58 plain
- Sleeve: High resistant special brass plain/ nickel-plated
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4034
- Seals: High-Performance FKM



Also in Stainless steel  
Series ESHGTE  
Page 320

European  
Plug Profile

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	-20°C – +220°C*	13	ISO 228 / DIN 13	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	82	32.5	25	19	9	131	ESHGT 13 TL	ESHGT 13 TLAB
Hose i.D. 19	90	32.5	34	19	14	210	ESHGT 19 TL	ESHGT 19 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. 13	82	32.5	25	19	9	131	ESHGT 13 TL45	ESHGT 13 TL45AB
Hose i.D. 19	90	32.5	34	19	14	210	ESHGT 19 TL45	ESHGT 19 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. 13	82	32.5	25	19	9	131	ESHGT 13 TL90	ESHGT 13 TL90AB
Hose i.D. 19	90	32.5	34	19	14	210	ESHGT 19 TL90	ESHGT 19 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 1/2 m	76	30	32.5	15	19	13	226	ESHGT12AL	ESHGT12ALAB
G 3/4 m	77	30	32.5	16	19	13	252	ESHGT34AL	ESHGT34ALAB
M 24x1.5 m	77	30	32.5	16	19	13	242	ESHGT2415AL	ESHGT2415ALAB

### 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 1/2 m	81	30	32.5	16	19	13	332	ESHGT12AL45	ESHGT12AL45AB
G 3/4 m	81	30	32.5	16	19	13	357	ESHGT34AL45	ESHGT34AL45AB
M 24x1.5 m	81	30	32.5	17	19	13	348	ESHGT2415AL45	ESHGT2415AL45AB

### 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 1/2 m	81	30	32.5	16	19	13	334	ESHGT12AL90	ESHGT12AL90AB
G 3/4 m	81	30	32.5	16	19	13	361	ESHGT34AL90	ESHGT34AL90AB
M 24x1.5 m	81	30	32.5	17	19	13	350	ESHGT2415AL90	ESHGT2415AL90AB

Other types/ sizes on request

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

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





# Overview of Quick Connect Couplings with



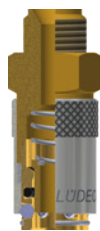
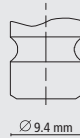
Series

**ESDM**  
DN 6

**ESDMT**  
DN 6

**ESDMF**  
DN 6

Plug profile  
(original size)



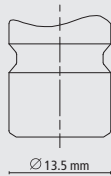
## Materials:

Body:	MS 58 plain	MS 58 plain	MS 58 plain
Sleeve*:	MS 58 (plain/ nickel-plated)	Special Brass (plain/ nickel-plated)	MS 58 (plain/ nickel-plated)
Valve body:	MS 58 plain	MS 58 plain	MS 58 plain
Valve:	MS 58 plain	MS 58 plain	MS 58 plain
Springs, Retaining Ring:	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
Seals:	FKM	High-Performance FKM	FKM (flat sealing)
Special seals for other media on request:	EPDM, FFKM	EPDM, FFKM	-
Plug:	MS 58 (plain/ nickel-plated)	MS 58 (plain/ nickel-plated)	MS 58 (plain/ nickel-plated)
Max. Working Pressure:	PN 15 bar	PN 15 bar	PN 15 bar
Temperature:	-20°C– +200°C**	-20°C– +220°C***	-20°C– +200°C**
Thread Types:	ISO 228, DIN 13	ISO 228, DIN 13	ISO 228, DIN 13
Flow rate:	see chart p. 140	see chart p. 140	see chart p. 140
Connection:	straight/ 45°/ 90°	straight/ 45°/ 90°	straight/ 45°/ 90°
Type of Valve:	single/ double/ straight-through	single/ double/ straight-through	single/ double/ straight-through
Operation:	One-Hand	One-Hand	Two-Hands
Page:	166	170	171

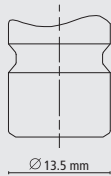
# International Plug Profiles



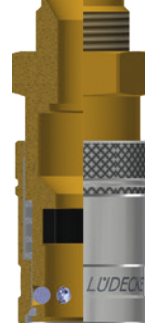
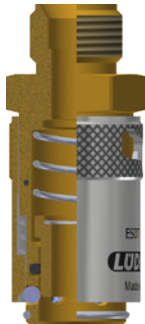
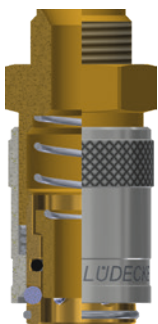
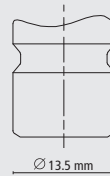
**ESD**  
DN 9



**ESDT**  
DN 9



**ESDF**  
DN 9



MS 58 plain
MS 58 (plain/ nickel-plated)
MS 58 plain
MS 58 plain
Stainless Steel 1.4310
Stainless Steel 1.4034
FKM
EPDM, FFKM
MS 58 (plain/ nickel-plated)
PN 15 bar
-20°C– +200°C**
ISO 228, DIN 13
see chart p. 140
straight/ 45°/ 90°
single/ double/ straight-through
One-Hand
175

MS 58 plain
Special Brass (plain/ nickel-plated)
MS 58 plain
MS 58 plain
Stainless Steel 1.4310
Stainless Steel 1.4034
High-Performance FKM
EPDM, FFKM
MS 58 (plain/ nickel-plated)
PN 15 bar
-20°C– +220°C***
ISO 228, DIN 13
see chart p. 140
straight/ 45°/ 90°
single/ double/ straight-through
One-Hand
179

MS 58 plain
MS 58 (plain/ nickel-plated)
MS 58 plain
MS 58 plain
Stainless Steel 1.4310
Stainless Steel 1.4034
FKM (flat sealing)
-
MS 58 (plain/ nickel-plated)
PN 15 bar
-20°C– +200°C**
ISO 228, DIN 13
see chart p. 140
straight/ 45°/ 90°
single/ double/ straight-through
Two-Hands
180

\*Couplings with shut-off valve: brass plain, couplings with straight-through valve: brass nickel-plated

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

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

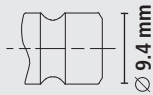
Special Brass: high resistant special brass

# Temperature Regulation Quick Connect Couplings

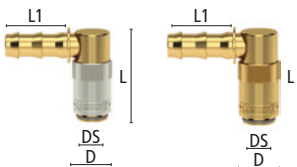
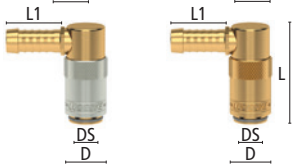
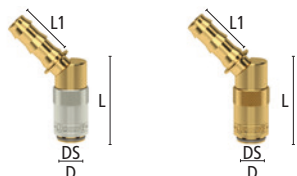
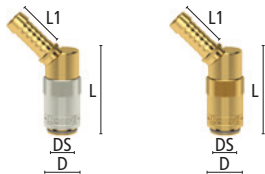
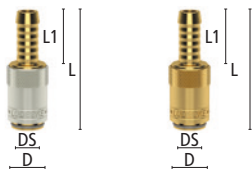
## Series ESDM Plug size 9.4 mm

### DN 6

Plug Profile (original size)



International Plug Profile



- One-hand quick connect couplings with small dimensions made of Brass MS 58
- For temperature regulation applications with hot or cold water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- Hose couplings available with standard stem profile for standard hoses or quick-fit profile for quick-fit hoses
- All couplings available with security lock, just add "S" on Type No. (Surcharge: 2.19 Euro gross)

#### Materials

- Body, valve body, valve: Brass MS 58 plain
- Sleeve, plug: Brass MS 58 plain/ nickel-plated
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4034
- Seals: FKM

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	-20°C – +200°C*	6	ISO 228 / DIN 13	One-hand	Single/double/straight-through	Tempered media	Coupl. 5 / Plug 10

#### 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. 6	51	18	22.5	9.4	5	40	ESDM 6 TL	ESDM 6 TLAB
Hose i.D. 9	51	18	22.5	9.4	6	45	ESDM 9 TL	
Hose i.D. 9	51	18	22.5	9.4	6	45		ESDM 9 TLAB
Hose i.D. 13	53	18	25	9.4	6	54	ESDM 13 TL	ESDM 13 TLAB

#### Couplings with straight quick-fit hose stem without/with valve

Hose connect.	L	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Hose i.D. 6	56.5	18	28	9.4	5	40	ESDM 6 T	ESDM 6 TAB
Hose i.D. 10	56.5	18	28	9.4	6	46	ESDM 10 T	ESDM 10 TAB

#### 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. 6	40.5	18	25.5	9.4	5	58	ESDM 6 TL-45	ESDM 6 TL-45AB
Hose i.D. 9	40.5	18	25.5	9.4	6	62	ESDM 9 TL-45	ESDM 9 TL-45AB

#### Couplings with 45° quick-fit 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. 6	40.5	18	28	9.4	5	63	ESDM 6 T-45	ESDM 6 T-45AB
Hose i.D. 10	40.5	18	28	9.4	6	67	ESDM 10 T-45	ESDM 10 T-45AB

#### 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. 6	40.5	18	25.5	9.4	5	58	ESDM 6 TL-90	ESDM 6 TL-90AB
Hose i.D. 9	40.5	18	25.5	9.4	6	62	ESDM 9 TL-90	ESDM 9 TL-90AB

#### Couplings with 90° quick-fit 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. 6	40.5	18	28	9.4	5	63	ESDM 6 T-90	ESDM 6 T-90AB
Hose i.D. 10	40.5	18	28	9.4	6	67	ESDM 10 T-90	ESDM 10 T-90AB

#### Marking rings for easy and clear identification of quick-fit hose lines

Version	D	Colour		Weight	Type No.
For Hose i.D. 6	14	blue	50	0.3	AR-BL 6
For Hose i.D. 6	14	red	50	0.3	AR-RO 6
For Hose i.D. 6	14	yellow	50	0.3	AR-GE 6
For Hose i.D. 10	17	blue	50	0.5	AR-BL 10
For Hose i.D. 10	17	red	50	0.5	AR-RO 10
For Hose i.D. 10	17	yellow	50	0.5	AR-GE 10

To put on coupling or plug stem before assembling the quick-fit hose

Suitable hose clips, double-ear hose clips or crimping ferrules for standard hoses – (© page 194 - 197)

**Safety instruction:** Only use quick-fit hose stems in combination with suitable quick-fit hoses (up to max. 100°C)!

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

# Temperature Regulation Quick Connect Couplings

Plug size 9.4 mm **Series ESDM**

**DN 6**

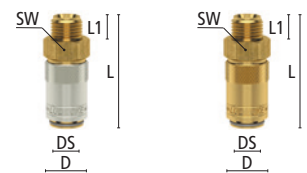
Plug Profile (original size)



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

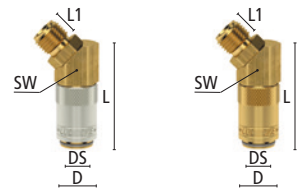
Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	46	17	18	9	9.4	6	60	ESDM 14 A	ESDM 14 AAB
G 3/8 m	46	19	18	9	9.4	6	70	ESDM 38 A	ESDM 38 AAB
M 10x1 m	44	17	18	7	9.4	6	60	ESDM 101 A	ESDM 101 AAB
M 14x1.5 m	46	17	18	9	9.4	6	60	ESDM 1415 A	ESDM 1415 AAB
M 16x1.5 m	46	19	18	9	9.4	6	70	ESDM 1615 A	ESDM 1615 AAB
G 1/4 m	50	17	18	13	9.4	6	61	ESDM 14 AL	ESDM 14 ALAB
G 3/8 m	50	19	18	13	9.4	6	75	ESDM 38 AL	ESDM 38 ALAB
M 14x1.5 m	50	17	18	13	9.4	6	65	ESDM 1415 AL	ESDM 1415 ALAB

Version AL with longer male thread mainly used for assembly with Ermeto fittings



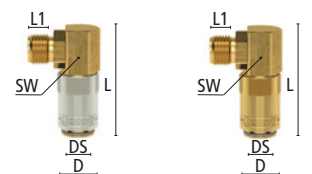
## Couplings with 45° male thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	45	17	18	9	9.4	6	65	ESDM 14 A-45	ESDM 14 A-45AB
G 3/8 m	45	19	18	9	9.4	6	75	ESDM 38 A-45	ESDM 38 A-45AB
M 10x1 m	45	17	18	7	9.4	6	65	ESDM 101 A-45	ESDM 101 A-45AB
M 14x1.5 m	45	17	18	9	9.4	6	65	ESDM 1415 A-45	ESDM 1415A-45AB
M 16x1.5 m	45	19	18	9	9.4	6	75	ESDM 1615 A-45	ESDM 1615A-45AB



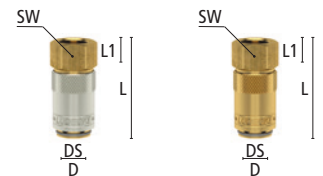
## Couplings with 90° male thread without/with valve (inner cone DIN 3863)

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	45	17	18	9	9.4	6	75	ESDM 14 A-90	ESDM 14 A-90AB
G 3/8 m	45	19	18	9	9.4	6	85	ESDM 38 A-90	ESDM 38 A-90AB
M 10x1 m	45	17	18	7	9.4	6	75	ESDM 101 A-90	ESDM 101 A-90AB
M 14x1.5 m	45	17	18	9	9.4	6	75	ESDM 1415 A-90	ESDM 1415A-90AB
M 16x1.5 m	45	19	18	9	9.4	6	85	ESDM 1615 A-90	ESDM 1615A-90AB



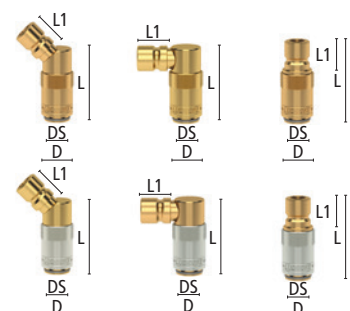
## Couplings with straight female thread without/with valve

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 f	40	17	18	9	9.4	6	50	ESDM 14 I	ESDM 14 IAB
G 3/8 f	40	21	18	9	9.4	6	54	ESDM 38 I	ESDM 38 IAB
M 10x1 f	40	17	18	9	9.4	6	50	ESDM 101 I	ESDM 101 IAB
M 14x1.5 f	40	17	18	9	9.4	6	50	ESDM 1415 I	ESDM 1415 IAB



## Couplings with plug DN 9 - ESDM and ESDM-ESHM System Adapters

Connection	L	D	L1	DS	Passage	Version	Weight	Type No. w/o valve	Type No. w valve
DN 6 - DN 9	50.5	18	15.5	9.4	6	straight	75	ESDMK-ESDS	ESDMK-ESDS-AB
DN 6 - DN 9	45	18	15.5	9.4	6	45°	80	ESDMK-ESDS-45	ESDMK-ESDS-45AB
DN 6 - DN 9	45	18	15.5	9.4	6	90°	80	ESDMK-ESDS-90	ESDMK-ESDS-90AB
DN 6 - DN 6	50	18	14	9.4	6	straight	70	ESDMK-ESHMS	ESDMK-ESHMS-AB
DN 6 - DN 9	50	18	14	9.4	6	straight	75	ESDMK-ESHS	ESDMK-ESHS-AB



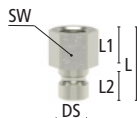
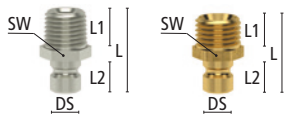


# Temperature Regulation Quick Connect Couplings

## Series ESDM Plug size 9.4 mm

### DN 6

Plug Profile (original size)



#### Diversion coupling for temperature regulation bridges for tube connection 90° with/without valve

Connection	L	D	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Tube 8/6	41	18	9.4	6	63	ESDM 8-U	ESDM 8-UAB

#### Tube (chamfered) for diversion couplings (temperature regulation tube), hardened brass

Connection	L	D	Passage	Weight	Type No.
Tube 8/6	250	8	6	45	TR 250-8
Tube 8/6	500	8	6	93	TR 500-8

#### Plain End Coupling

Connection	L	D	DS	Weight	Type No.
closed	30	18	9.4	37	ESDM-B

#### Plugs with straight standard hose stem without valve

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 6	39.5	12	22.5	10.5	9.4	5	9	ESDM 6 SL
Hose i.D. 9	39.5	12	22.5	10.5	9.4	6	13	ESDM 9 SL
Hose i.D. 13	39.5	15	22.5	10.5	9.4	6	17	ESDM 13 SL

#### Plugs with straight male thread without valve (inner cone DIN 3863)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 m	22	11	8	10.5	9.4	6	10	ESDM 18 NA*
R 1/8 m	25	11	11	10.5	9.4	6	12	ESDM 18 NAR*
G 1/4 m	23	14	9	10.5	9.4	6	14	ESDM 14 NA*
R 1/4 m	26	14	12	10.5	9.4	6	16	ESDM 14 NAR*
G 3/8 m	23.5	17	9	10.5	9.4	6	18	ESDM 38 NA*
M 8x0.75 m	20.5	11	7	10.5	9.4	4.5	9	ESDM 875 NA
M 10x1 m	22	11	7	10.5	9.4	6	8	ESDM 101 NA
M 14x1.5 m	23	14	9	10.5	9.4	6	10	ESDM 1415 NA
M 16x1.5 m	23	17	9	10.5	9.4	6	18	ESDM 1615 NA

#### Plugs with straight female thread without valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 f	22	14	9	10.5	9.4	6	15	ESDM 18 NI*
G 1/4 f	23	17	9	10.5	9.4	6	19	ESDM 14 NI*
G 3/8 f	23	19	10	10.5	9.4	6	25	ESDM 38 NI*

\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

Plug size 9.4 mm **Series ESDM**

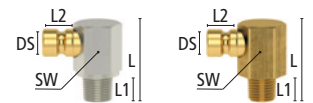
**DN 6**

Plug Profile (original size)



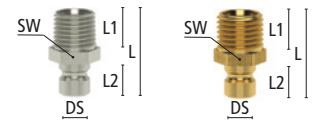
## Plugs with 90° male thread without valve (metrical thread DIN 158/ R-thread DIN EN 10226)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
R 1/8 m	27	15	9	10.5	9.4	6	35	ESDM 18 NA-90*
R 1/4 m	29	15	11	10.5	9.4	6	35	ESDM 14 NA-90*
R 3/8 m	30	17	12	10.5	9.4	6	35	ESDM 38 NA-90*
M 8x0.75 m	27	15	9	10.5	9.4	4.5	38	ESDM 875 NA-90
M 10x1 m	27	15	9	10.5	9.4	6	38	ESDM 101 NA-90
M 14x1.5 m	29	15	11	10.5	9.4	6	40	ESDM 1415 NA-90



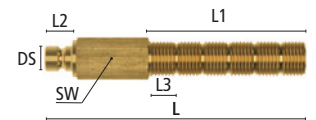
## Plugs with straight male thread with valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/4 m	25.5	14	11	10.5	9.4	6	14	ESDM 14 NAAB*
R 1/4 m	28.5	14	14	10.5	9.4	6	18	ESDM 14 NARAB*
G 3/8 m	26.5	17	11	10.5	9.4	6	22	ESDM 38 NAAB*
M 14x1.5 m	25.5	15	11	10.5	9.4	6	15	ESDM 1415 NAAB



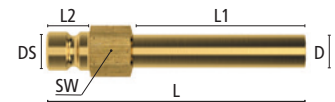
## Plugs with straight male long thread without valve (for length cutting as needed)

Thread connection	L	SW	L1	L2	L3	DS	Passage	Weight	Type No.
G 1/8 m	100	11	60	10.5	10	9.4	6	36	ESDM 18-60 NA
G 1/4 m	100	14	60	10.5	10	9.4	6	58	ESDM 14-60 NA
G 3/8 m	100	17	60	10.5	10	9.4	6	90	ESDM 38-60 NA
M 10x1 m	100	11	60	10.5	10	9.4	6	36	ESDM 101-60 NA
M 14x1.5 m	100	14	60	10.5	10	9.4	6	61	ESDM 1415-60 NA



## Plug Tubes for countersunk mould threads (for length cutting as needed)

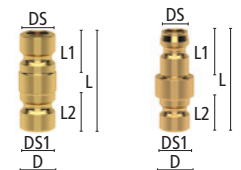
D	L	SW	L1	L2	DS	Passage	Weight	Type No.
8	63	11	42	10.5	9.4	6	14	ESDM 68 R
8	100	11	79	10.5	9.4	6	20	ESDM 100 R
10	63	11	42	10.5	9.4	6	20	ESDM 63 R10
10	100	11	79	10.5	9.4	6	38	ESDM 100 R10
10	120	11	102	10.5	9.4	6	49	ESDM 120 R
10	240	11	222	10.5	9.4	6	102	ESDM 240 R
10	360	11	342	10.5	9.4	6	154	ESDM 360 R




NEW!  
NEW!

## Plug System Adapters

Connection	L	D	L1	L2	DS	DS1	Passage	Weight	Type No.
DN 6 – DN 6	27	10	10.5	10.5	9.4	9.4	6	14	ESDM-ESDM
DN 9 – DN 6	31	14	15.5	10.5	9.4	13.5	6	18	ESD-ESDM
DN 6 – DN 6	31	12	10.5	14	9	9.4	6	14	ESDM-ESHM
DN 6 – DN 9	31	14	10.5	14	13	9.4	6	18	ESDM-ESH



Protection cap (plastic) for plug profile ESDM  100 ESDM-K

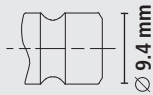
\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

## Series ESDMT Plug size 9.4 mm – with Automatic Locking Mechanism

### DN 6

Plug Profile (original size)



International Plug Profile



- One-hand quick connect couplings with small dimensions and patented automatic safety locking mechanism
- Forced guidance design with visual 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 hot or cold water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- To be coupled with plug series ESDM DN 6 (page 168)
- Versions with additional O-ring sealing at connection port to prevent leakage with 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
- Springs, retaining ring: Stainless steel 1.4310 • Balls: Stainless steel 1.4034 • 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 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	60	18	22.5	9.4	6	55	ESDMT 9 TL	ESDMT 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	51	18	22.5	9.4	6	78	ESDMT 9 TL45	ESDMT 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	55	18	22.5	9.4	6	87	ESDMT 9 TL90	ESDMT 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	55.5	17	18	11	9.4	6	69	ESDMT14AL	ESDMT14ALAB
M 14x1.5 m	55.5	17	18	11	9.4	6	70	ESDMT1415AL	ESDMT1415ALAB

#### 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	51	17	18	11	9.4	6	81	ESDMT14AL45	ESDMT14AL45AB
M 14x1.5 m	51	17	18	11	9.4	6	82	ESDMT1415AL45	ESDMT1415AL45AB

#### 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	17	18	11	9.4	6	90	ESDMT14AL90	ESDMT14AL90AB
M 14x1.5 m	55	17	18	11	9.4	6	91	ESDMT1415AL90	ESDMT1415AL90AB

Other types/ sizes on request

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

# Temperature Regulation Quick Connect Couplings

Plug size 9.4 mm **Series ESDMF**

- Quick connect couplings with small dimensions made of brass MS 58, flat-sealing with two-hand operation
- For temperature regulation applications with hot or cold water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- Hose couplings available with standard stem profile for standard hoses or quick-fit profile for quick-fit hoses

## Materials

- Body, valve body, valve: Brass MS 58 plain
- Sleeve, plug: Brass MS 58 plain/ nickel-plated
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4034
- Seals: FKM (flat-sealing)

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	☒
PN 15 bar	-20°C – +200°C*	6	ISO 228 / DIN 13	Two-hands	Single/double/straight-through	Tempered media	Coupl. 5 / Plug 10

## 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. 6	51	17	22.5	9.4	5	40	ESDMF 6 TL	ESDMF 6 TLAB
Hose i.D. 9	51	17	22.5	9.4	6	45	ESDMF 9 TL	ESDMF 9 TLAB
Hose i.D. 13	53	17	25	9.4	6	54	ESDMF 13 TL	ESDMF 13 TLAB

## NEW! Couplings with straight quick-fit 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. 6	57.5	17	28	9.4	5	42	ESDMF 6 T	ESDMF 6 TAB
Hose i.D. 10	57.5	17	28	9.4	7	49	ESDMF 10 T	ESDMF 10 TAB

## 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. 6	41.5	17	25.5	9.4	5	58	ESDMF 6 TL-45	ESDMF 6 TL-45AB
Hose i.D. 9	41.5	17	25.5	9.4	6	62	ESDMF 9 TL-45	ESDMF 9 TL-45AB

## NEW! Couplings with 45° quick-fit 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. 6	41.5	17	28	9.4	5	62	ESDMF 6 T-45	ESDMF 6 T-45AB
Hose i.D. 10	41.5	17	28	9.4	7	66	ESDMF 10 T-45	ESDMF 10 T-45AB

## 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. 6	41.5	17	25.5	9.4	5	58	ESDMF 6 TL-90	ESDMF 6 TL-90AB
Hose i.D. 9	41.5	17	25.5	9.4	6	62	ESDMF 9 TL-90	ESDMF 9 TL-90AB

## NEW! Couplings with 90° quick-fit 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. 6	41.5	17	28	9.4	5	62	ESDMF 6 T-90	ESDMF 6 T-90AB
Hose i.D. 10	41.5	17	28	9.4	7	66	ESDMF 10 T-90	ESDMF 10 T-90AB

## Marking rings for easy and clear identification of quick-fit hose lines

Version	D	Colour	☒	Weight	Type No.
For Hose i.D. 6	14	blue	50	0.3	AR-BL 6
For Hose i.D. 6	14	red	50	0.3	AR-RO 6
For Hose i.D. 6	14	yellow	50	0.3	AR-GE 6
For Hose i.D. 10	17	blue	50	0.5	AR-BL 10
For Hose i.D. 10	17	red	50	0.5	AR-RO 10
For Hose i.D. 10	17	yellow	50	0.5	AR-GE 10

To put on coupling or plug stem before assembling the quick-fit hose

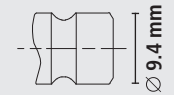
Suitable hose clips, double-ear hose clips or crimping ferrules for standard hoses – (© page 194 - 197)

**Safety instruction:** Only use quick-fit hose stems in combination with suitable quick-fit hoses (up to max. 100°C)!

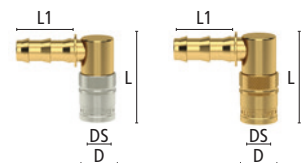
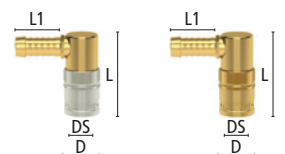
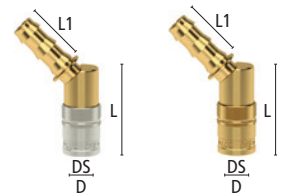
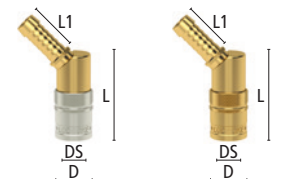
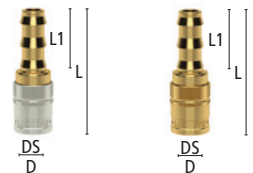
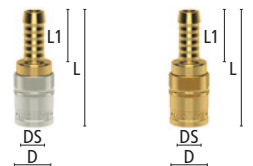
\*subject to media (oil: 200°C, water: 150°C, air: 200°C)

**DN 6**

Plug Profile (original size)



International Plug Profile



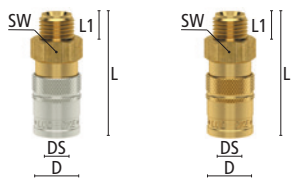


# Temperature Regulation Quick Connect Couplings

## Series ESDMF Plug size 9.4 mm

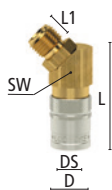
### DN 6

Plug Profile (original size)



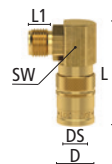
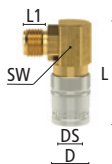
#### Couplings with straight male thread without/with valve (inner cone DIN 3863)

Thread Connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	46	17	17	13	9.4	6	60	ESDMF 14 A	ESDMF 14 AAB
G 3/8 m	46	19	17	13	9.4	6	70	ESDMF 38 A	ESDMF 38 AAB
M 10x1 m	44	17	17	7	9.4	6	60	ESDMF 101 A	ESDMF 101 AAB
M 14x1.5 m	46	17	17	13	9.4	6	60	ESDMF 1415 A	ESDMF 1415 AAB
M 16x1.5 m	46	19	17	13	9.4	6	70	ESDMF 1615 A	ESDMF 1615 AAB



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

Thread Connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	45	17	17	9	9.4	6	65	ESDMF 14 A-45	ESDMF 14 A-45AB
G 3/8 m	45	19	17	9	9.4	6	75	ESDMF 38 A-45	ESDMF 38 A-45AB
M 10x1 m	45	17	17	7	9.4	6	65	ESDMF 101 A-45	ESDMF 101A-45AB
M 14x1.5 m	45	17	17	9	9.4	6	65	ESDMF 1415 A-45	ESDMF1415A-45AB
M 16x1.5 m	45	19	17	9	9.4	6	75	ESDMF 1615 A-45	ESDMF1615A-45AB



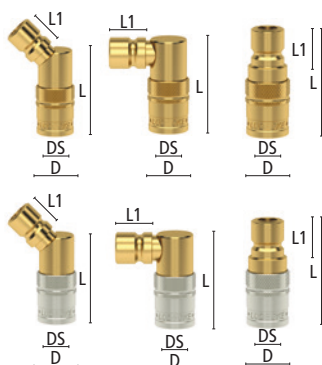
#### Couplings with 90° male thread without/with valve (inner cone DIN 3863)

Thread Connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	45	17	17	9	9.4	6	75	ESDMF 14 A-90	ESDMF 14 A-90AB
G 3/8 m	45	19	17	9	9.4	6	85	ESDMF 38 A-90	ESDMF 38 A-90AB
M 10x1 m	45	17	17	7	9.4	6	75	ESDMF 101 A-90	ESDMF 101A-90AB
M 14x1.5 m	45	17	17	9	9.4	6	75	ESDMF 1415 A-90	ESDMF1415A-90AB
M 16x1.5 m	45	19	17	9	9.4	6	85	ESDMF 1615 A-90	ESDMF1615A-90AB



#### Couplings with straight female thread without/with valve

Thread Connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 f	40	17	17	9	9.4	6	50	ESDMF 14 I	ESDMF 14 IAB
G 3/8 f	40	21	17	9	9.4	6	54	ESDMF 38 I	ESDMF 38 IAB
M 10x1 f	40	17	17	9	9.4	6	50	ESDMF 101 I	ESDMF 101 IAB
M 14x1.5 f	40	17	17	9	9.4	6	50	ESDMF 1415 I	ESDMF 1415 IAB



#### Couplings with plug DN 6 - ESDMF and ESDMF-ESHM-System Adapters

Connection	L	D	L1	DS	Passage	Version	Weight	Type No. w/o valve	Type No. w valve
DN 6 - DN 9	50.5	17	15.5	9.4	6	straight	75	ESDMFK-ESDS	ESDMFK-ESDS-AB
DN 6 - DN 9	45	17	15.5	9.4	6	45°	80	ESDMFK-ESDS-45	ESDMFK-ESDS45AB
DN 6 - DN 9	45	17	15.5	9.4	6	90°	80	ESDMFK-ESDS-90	ESDMFK-ESDS90AB
DN 6 - DN 6	50	17	14	9.4	6	straight	70	ESDMFK-ESHMS	ESDMFK-ESHMS-AB
DN 6 - DN 9	50	17	14	9.4	6	straight	75	ESDMFK-ESHS	ESDMFK-ESHS-AB

# Temperature Regulation Quick Connect Couplings

Plug size 9.4 mm **Series ESDMF**

**DN 6**

Plug Profile (original size)



## Diversion coupling for temperature regulation bridges for tube connection 90° with/without valve

Connection	L	D	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Tube 6/8	42	17	9.4	6	63	ESDMF 8-U	ESDMF 8-UAB



## Tube (chamfered) for diversion couplings (temperature regulation tube), hardened brass

Connection	L	D	Passage	Weight	Type No.
Tube 8/6	250	8	6	45	TR 250-8
Tube 8/6	500	8	6	93	TR 500-8



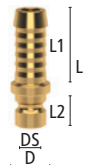
## Plain End Coupling

Connection	L	D	DS	Weight	Type No.
closed	30	17	9.4	37	ESDMF-B



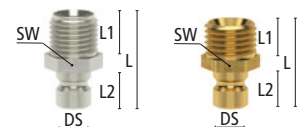
## Plugs with standard hose stem without valve

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 6	39.5	12	22.5	10.5	9.4	5	9	ESDM 6 SL
Hose i.D. 9	39.5	12	22.5	10.5	9.4	6	13	ESDM 9 SL
Hose i.D. 13	39.5	15	22.5	10.5	9.4	6	17	ESDM 13 SL



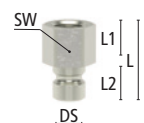
## Plugs with straight male thread without valve (inner cone DIN 3863)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 m	22	11	8	10.5	9.4	6	10	ESDM 18 NA*
R 1/8 m	25	11	11	10.5	9.4	6	12	ESDM 18 NAR*
G 1/4 m	23	14	9	10.5	9.4	6	14	ESDM 14 NA*
R 1/4 m	26	14	12	10.5	9.4	6	16	ESDM 14 NAR*
G 3/8 m	23.5	17	9	10.5	9.4	6	18	ESDM 38 NA*
M 8x0.75 m	20.5	11	7	10.5	9.4	4.5	9	ESDM 875 NA
M 10x1 m	22	11	7	10.5	9.4	6	8	ESDM 101 NA
M 14x1.5 m	23	14	9	10.5	9.4	6	10	ESDM 1415 NA
M 16x1.5 m	23	17	9	10.5	9.4	6	18	ESDM 1615 NA



## Plugs with straight female thread without valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 f	22	14	9	10.5	9.4	6	15	ESDM 18 NI*
G 1/4 f	23	17	9	10.5	9.4	6	19	ESDM 14 NI*
G 3/8 f	23	19	10	10.5	9.4	6	25	ESDM 38 NI*



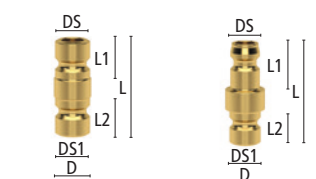
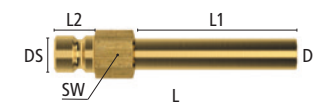
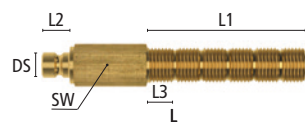
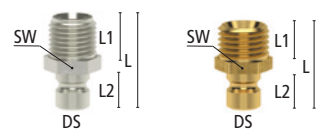
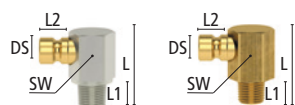
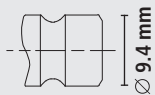
\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

**Series ESDMF** Plug size 9.4 mm

**DN 6**

Plug Profile (original size)



## Plugs with 90° male thread without valve (metrical thread DIN 158/ R-thread DIN EN 10226)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
R 1/8 m	27	15	9	10.5	9.4	6	35	ESDM 18 NA-90*
R 1/4 m	29	15	11	10.5	9.4	6	35	ESDM 14 NA-90*
R 3/8 m	30	17	12	10.5	9.4	6	35	ESDM 38 NA-90*
M 8x0.75 m	27	15	9	10.5	9.4	4.5	38	ESDM 875 NA-90
M 10x1 m	27	15	9	10.5	9.4	6	38	ESDM 101 NA-90
M 14x1.5 m	29	15	11	10.5	9.4	6	40	ESDM 1415 NA-90

## Plugs with straight male thread with valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/4 m	25.5	14	11	10.5	9.4	6	14	ESDM 14 NAAB*
R 1/4 m	28.5	14	14	10.5	9.4	6	18	ESDM 14 NARAB*
G 3/8 m	26.5	17	11	10.5	9.4	6	22	ESDM 38 NAAB*
M 14x1.5 m	25.5	15	11	10.5	9.4	6	15	ESDM 1415 NAAB

## Plugs with straight male long thread without valve (for length cutting as needed)

Thread connection	L	SW	L1	L2	L3	DS	Passage	Weight	Type No.
G 1/8 m	100	11	60	10.5	9	9.4	6	36	ESDM 18-60 NA
G 1/4 m	100	14	60	10.5	9	9.4	6	58	ESDM 14-60 NA
G 3/8 m	100	17	60	10.5	9	9.4	6	90	ESDM 38-60 NA
M 10x1 m	100	11	60	10.5	9	9.4	6	36	ESDM 101-60 NA
M 14x1.5 m	100	14	60	10.5	9	9.4	6	61	ESDM 1415-60 NA

## Plug Tubes for countersunk mould threads (for length cutting as needed)

D	L	SW	L1	L2	DS	Passage	Weight	Type No.
8	63	11	42	10.5	9.4	6	14	ESDM 68 R
8	100	11	79	10.5	9.4	6	20	ESDM 100 R
10	63	11	42	10.5	9.4	6	20	ESDM 63 R10
10	100	11	79	10.5	9.4	6	38	ESDM 100 R10
10	120	11	102	10.5	9.4	6	49	ESDM 120 R
10	240	11	222	10.5	9.4	6	102	ESDM 240 R
10	360	11	342	10.5	9.4	6	154	ESDM 360 R

## Plug System Adapters

Connection	L	D	L1	L2	DS	DS1	Passage	Weight	Type No.
DN 6 – DN 6	27	10	10.5	10.5	9.4	9.4	6	14	ESDM-ESDM
DN 9 – DN 6	31	14	15.5	10.5	9.4	13.5	6	18	ESD-ESDM
DN 6 – DN 6	31	12	10.5	14	9	9.4	6	14	ESDM-ESHM
DN 6 – DN 9	31	14	10.5	14	13	9.4	6	18	ESDM-ESH

Protection cap (plastic) for plug profile ESDM 100 ESDM-K

\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

Plug size 13.5 mm **Series ESD**

- One-hand quick connect couplings made of brass MS 58
- For temperature regulation applications with hot or cold water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- Hose couplings available with standard stem profile for standard hoses or quick-fit profile for quick-fit hoses
- All couplings available with security lock with a surcharge, just add "S" on Type No. (Surcharge: 2.19 Euro gross)

## Materials

- Body, valve body, valve: Brass MS 58 plain
- Sleeve, plug: Brass MS 58 plain/ nickel-plated
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4034
- Seals: FKM

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	-20°C – +200°C*	9	ISO 228 / DIN 13	One-hand	Single/double/straight-through	Tempered media	Coupl. 5 / Plug 10

## 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. 9	61.5	24	25	13.5	7	72	ESD 9 TL	ESD 9 TLAB
Hose i.D. 13	61.5	24	25	13.5	9	81	ESD 13 TL	
Hose i.D. 13	61.5	24	25	13.5	9	81		ESD 13 TLAB

## NEW! Couplings with straight quick-fit 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. 10	64.5	24	28	13.5	7	88	ESD 10 T	ESD 10 TAB
Hose i.D. 13	64.5	24	28	13.5	9	90	ESD 13 T	ESD 13 TAB

## 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	51	24	30	13.5	7	103	ESD 9 TL-45	ESD 9 TL-45AB
Hose i.D. 13	51	24	30	13.5	9	109	ESD 13 TL-45	ESD 13 TL-45AB

## NEW! Couplings with 45° quick-fit 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. 10	51	24	28	13.5	7	112	ESD 10 T-45	ESD 10 T-45AB
Hose i.D. 13	51	24	28	13.5	9	118	ESD 13 T-45	ESD 13 T-45AB

## 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	51	24	30	13.5	7	105	ESD 9 TL-90	ESD 9 TL-90AB
Hose i.D. 13	51	24	30	13.5	9	111	ESD 13 TL-90	ESD 13 TL-90AB

## NEW! Couplings with 90° quick-fit 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. 10	51	24	28	13.5	7	115	ESD 10 T-90	ESD 10 T-90AB
Hose i.D. 13	51	24	28	13.5	9	121	ESD 13 T-90	ESD 13 T-90AB

## Marking rings for easy and clear identification of quick-fit hose lines

Version	D	Colour		Weight	Type No.
For Hose i.D. 10	17	blue	50	0.5	AR-BL 10
For Hose i.D. 10	17	red	50	0.5	AR-RO 10
For Hose i.D. 10	17	yellow	50	0.5	AR-GE 10
For Hose i.D. 13	20	blue	50	0.7	AR-BL 13
For Hose i.D. 13	20	red	50	0.7	AR-RO 13
For Hose i.D. 13	20	yellow	50	0.7	AR-GE 13

To put on coupling or plug stem before assembling the quick-fit hose

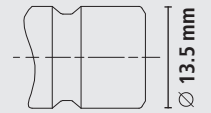
Suitable hose clips, double-ear hose clips or crimping ferrules for standard hoses – (© page 194 - 197)

**Safety instruction:** Only use quick-fit hose stems in combination with suitable quick-fit hoses (up to max. 100°C)!

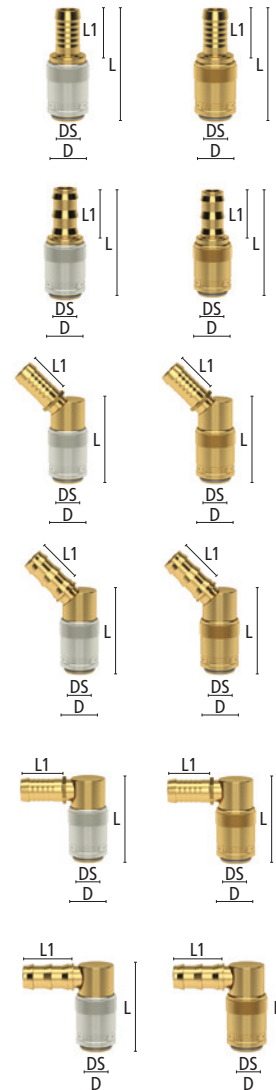
\*subject to media (oil: 200°C, water: 150°C, air: 200°C)

**DN 9**

Plug Profile (original size)



International Plug Profile

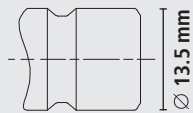


# Temperature Regulation Quick Connect Couplings

**Series ESD** Plug size 13.5 mm

**DN 9**

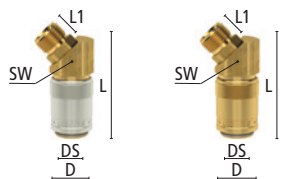
Plug Profile (original size)



### Couplings with straight male 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	52	22	24	9	13.5	9	90	ESD 14 A	ESD 14 AAB
G 3/8 m	52	22	24	9	13.5	9	94	ESD 38 A	ESD 38 AAB
G 1/2 m	53	24	24	10	13.5	9	95	ESD 12 A	ESD 12 AAB
M 16x1.5 m	52	22	24	9	13.5	9	93	ESD 1615 A	ESD 1615 AAB
G 3/8 m	52	22	24	11	13.5	9	94	ESD 38 AL	ESD 38 ALAB
G 1/2 m	54.5	24	24	12	13.5	9	110	ESD 12 AL	ESD 12 ALAB
M 16x1.5 m	52	22	24	11	13.5	9	105	ESD 1615 AL	ESD 1615 ALAB

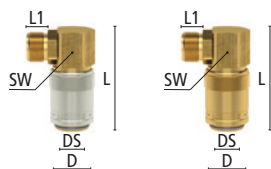
Version AL with long male thread mainly used for assembly with Ermeto fittings.



### Couplings with 45° male 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 3/8 m	54	22	24	9	13.5	9	114	ESD 38 A-45	ESD 38 A-45AB
M 16x1.5 m	54	22	24	9	13.5	9	114	ESD 1615 A-45	ESD 1615 A-45AB
G 3/8 m	54	22	24	11	13.5	9	125	ESD 38 AL-45	ESD 38 AL-45AB

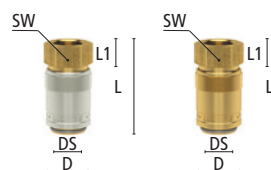
Version AL with long male thread mainly used for assembly with Ermeto fittings.



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

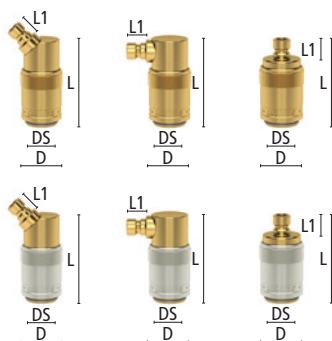
Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 3/8 m	54	22	24	9	13.5	9	126	ESD 38 A-90	ESD 38 A-90AB
M 16x1.5 m	54	22	24	9	13.5	9	126	ESD 1615 A-90	ESD 1615 A-90AB
G 3/8 m	54	22	24	11	13.5	9	125	ESD 38 AL-90	ESD 38 AL-90AB

Version AL with long male thread mainly used for assembly with Ermeto fittings.



### Couplings with straight female thread without/with valve

Thread connection	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 f	44.5	17	24	9	13.5	9	75	ESD 14 I	ESD 14 IAB
G 3/8 f	46	22	24	9	13.5	9	84	ESD 38 I	ESD 38 IAB
G 1/2 f	49	24	24	12	13.5	9	110	ESD 12 I	ESD 12 IAB



### Couplings with plug DN 6 - ESHM - System Adapter and ESH-ESD System Adapter

Connection	L	D	L1	DS	Passage	Version	Weight	Type No. w/o valve	Type No. w valve
DN 9 - DN 6	48	24	10.5	13.5	6	straight	85	ESDK-ESDMS	ESDK-ESDMS-AB
DN 9 - DN 6	54	24	10.5	13.5	6	45°	100	ESDK-ESDMS-45	ESDK-ESDMS-45AB
DN 9 - DN 6	54	24	10.5	13.5	6	90°	100	ESDK-ESDMS-90	ESDK-ESDMS-90AB
DN 9 - DN 6	51	24	14	13.5	6	straight	85	ESDK-ESHMS	ESDK-ESHMS-AB
DN 9 - DN 9	51	24	14	13.5	9	straight	100	ESDK-ESHS	ESDK-ESHS-AB

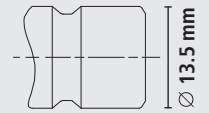


# Temperature Regulation Quick Connect Couplings

Plug size 13.5 mm **Series ESD**

**DN 9**

Plug Profile (original size)



## Diversion coupling for temperature regulation bridges for tube connection 90° with/without valve

Connection	L	D	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Tube 10/8	53	24	13.5	8	118	ESD 10-U	ESD 10-UAB

## Tube (chamfered) for diversion coupling (temperature regulation tube), hardened brass

Connection	L	D	Passage	Weight	Type No.
Tube 10/8	250	10	8	60	TR 250-10
Tube 10/8	500	10	8	120	TR 500-10

## Plain End Coupling

Connection	L	D	DS	Weight	Type No.
closed	37	24	13.5	67	ESD-B

## Plugs with standard hose stem without valve

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 6	41	14.5	22.5	15.5	13.5	5	20	ESD 6 SL
Hose i.D. 9	41	14.5	22.5	15.5	13.5	7	23	ESD 9 SL
Hose i.D. 13	43.5	16	25	15.5	13.5	9	25	ESD 13 SL

## Plugs with straight male thread without valve (inner cone DIN 3863)

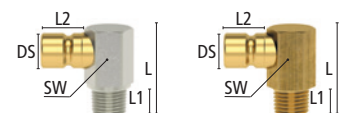
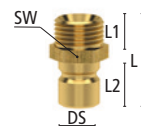
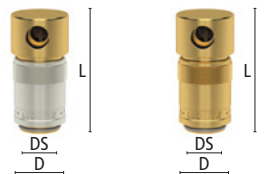
Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 m	27	15	7	15.5	13.5	6	16	ESD 18 NA*
G 1/4 m	29	15	9	15.5	13.5	9	17	ESD 14 NA*
R 1/4 m	32	15	12	15.5	13.5	9	21	ESD 14 NAR*
G 3/8 m	29	17	9	15.5	13.5	9	22	ESD 38 NA*
R 3/8 m	32	17	12	15.5	13.5	9	26	ESD 38 NAR*
G 1/2 m	32	22	12	15.5	13.5	9	42	ESD 12 NA*
G 3/4 m	36.5	27	16	15.5	13.5	9	77	ESD 34 NA*
M 10x1 m	27	15	7	15.5	13.5	6.5	14	ESD 101 NA
M 14x1.5 m	29	15	9	15.5	13.5	9	16	ESD 1415 NA
M 16x1.5 m	29	17	9	15.5	13.5	9	20	ESD 1615 NA

## Plugs with straight female thread without valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/4 f	27	17	9	15.5	13.5	9	21	ESD 14 NI*
G 3/8 f	27.5	22	10	15.5	13.5	9	32	ESD 38 NI*
G 1/2 f	29.5	24	12	15.5	13.5	9	55	ESD 12 NI*

## Plugs with 90° male thread without valve (metrical thread DIN 158/ R-thread DIN EN 10226)

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
R 1/4 m	35.5	17	11	15.5	13.5	9	45	ESD 14 NA-90*
R 3/8 m	35.5	17	12	15.5	13.5	9	45	ESD 38 NA-90*
M 14x1.5 m	35.5	17	11	15.5	13.5	9	47	ESD 1415 NA-90



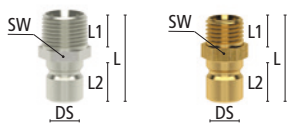
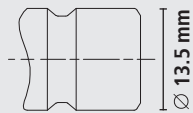
\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

## Series ESD Plug size 13.5 mm

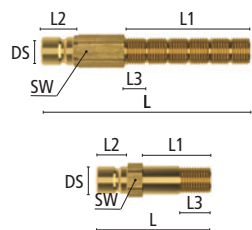
### DN 9

Plug Profile (original size)



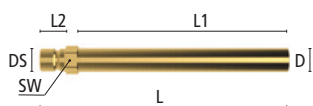
#### Plugs with straight male thread with valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/4 m	30	15	9.5	15.5	13.5	6	24	ESD 14 NAAB*
G 3/8 m	31	17	10.5	15.5	13.5	9	28	ESD 38 NAAB*
R 3/8 m	34	17	13.5	15.5	13.5	9	32	ESD 38 NARAB*
M 14x1.5 m	30	15	9.5	15.5	13.5	6	26	ESD 1415 NAAB
M 16x1.5 m	31	17	10.5	15.5	13.5	9	28	ESD 1615 NAAB



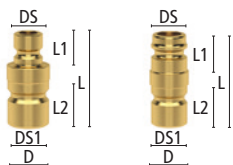
#### Plugs with straight male long thread without valve (for length cutting as needed)

Thread connection	L	SW	L1	L2	L3	DS	Passage	Weight	Type No.
G 1/4 m	100	14	60	15.5	10	13.5	9	60	ESD 14-60 NA
G 1/4 m	57	15	34	15.5	16	13.5	9	38	ESD 14 NAL18
G 1/4 m	110	15	87	15.5	16	13.5	9	75	ESD 14 NAL71
G 3/8 m	100	17	60	15.5	10	13.5	9	91	ESD 38-60 NA
M 14x1.5 m	100	14	60	15.5	10	13.5	9	55	ESD 1415-60 NA
M 16x1.5 m	100	17	60	15.5	10	13.5	9	93	ESD 1615-60 NA



#### Plug Tubes for countersunk mould threads (for length cutting as needed)

D	L	SW	L1	L2	DS	Passage	Weight	Type No.
14	150	15	127	15.5	13.5	9	114	ESD 150 R
14	300	15	277	15.5	13.5	9	230	ESD 300 R
14	450	15	427	15.5	13.5	9	344	ESD 450 R



#### Plug System Adapters

Connection	L	D	L1	L2	DS	DS1	Passage	Weight	Type No.
DN 9 - DN 6	31	14	15.5	10.5	13.5	9.4	6	18	ESD-ESDM
DN 9 - DN 9	34	14	15.5	15.5	13.5	13.5	9	24	ESD-ESD
DN 9 - DN 9	34	14	15.5	14	13.5	13	9	24	ESD-ESH

#### Protection cap (plastic) for plug profile ESD

100

ESD-K

\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

Plug size 13.5 mm – with Automatic Locking Mechanism **Series ESDT**

- One-hand quick connect couplings with patented automatic safety locking mechanism
- Forced guidance design with visual 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 hot or cold water as well as tempered oil
- Optional with straight-through, single or double shut-off valves
- To be coupled with plug series ESD DN 9 (page 177)
- Versions with additional O-ring sealing at connection port to prevent leakage in high-temperature applications

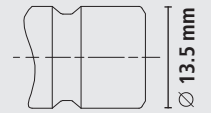
## Materials

- 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 288/ DIN 13	One-hand	Single/double/straight-through	Tempered media	5

**DN 9**

Plug Profile (original size)



International Plug Profile

## 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	64.5	24	25	13.5	9	94	ESDT 13 TL	ESDT 13 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. 13	57	24	25	13.5	9	147	ESDT 13 TL45	ESDT 13 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. 13	57	24	25	13.5	9	149	ESDT 13 TL90	ESDT 13 TL90AB

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

Thread connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 3/8 m	57.5	22	24	12.5	13.5	9	108	ESDT38AL	ESDT38ALAB
M 16x1.5 m	57.5	22	24	12.5	13.5	9	107	ESDT1615AL	ESDT1615ALAB

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

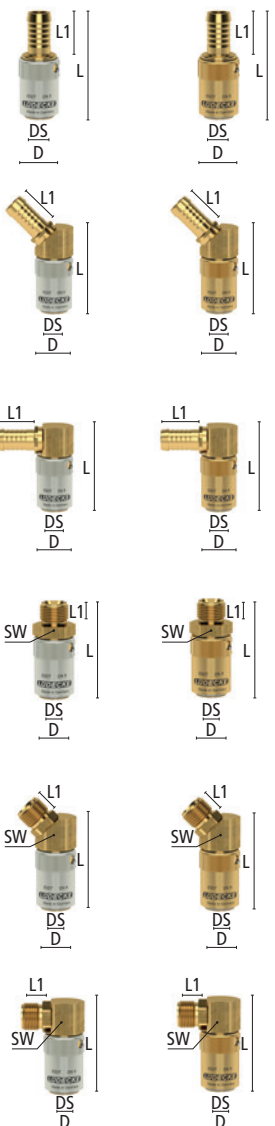
Thread connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 3/8 m	57	22	24	12.5	13.5	9	144	ESDT38AL45	ESDT38AL45AB
M 16x1.5 m	57	22	24	12.5	13.5	9	140	ESDT1615AL45	ESDT1615AL45AB

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

Thread connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 3/8 m	57	22	24	12.5	13.5	9	146	ESDT38AL90	ESDT38AL90AB
M 16x1.5 m	57	22	24	12.5	13.5	9	143	ESDT1615AL90	ESDT1615AL90AB

Other types / sizes on request

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



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

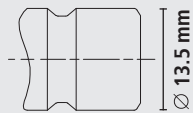


# Temperature Regulation Quick Connect Couplings

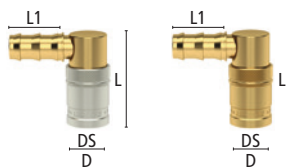
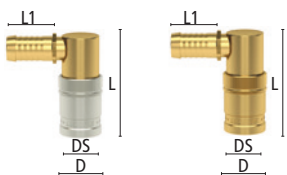
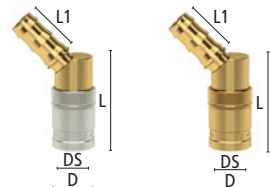
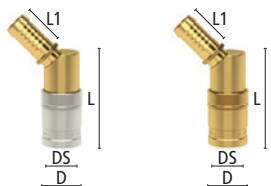
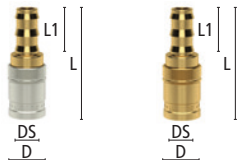
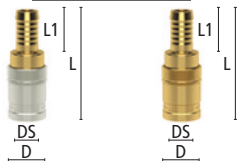
## Series ESDF Plug size 13.5 mm

### DN 9

Plug Profile (original size)



International Plug Profile



- Quick connect couplings made of brass MS 58, flat-sealing with two-hand operation
- For temperature regulation applications with hot or cold water as well as tempered oil
- Optional available with straight-through, single or double shut-off valves
- Hose couplings available with standard stem profile for standard hoses or quick-fit profile for quick-fit hoses

#### Materials

- Body, valve body, valve: Brass MS 58 plain
- Sleeve, plug: Brass MS 58 plain/ nickel-plated
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4034
- Seals: FKM (flat-sealing)

Max. Working Pressure	Temperature	DN	Thread	Operation	Type of valve	Media	
PN 15 bar	-20°C – +200°C*	9	ISO 228 / DIN 13	Two-hands	Single/double/straight-through	Tempered media	Coupl. 5 / Plug 10

#### 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. 9	61.5	22	25	13.5	7	72	ESDF 9 TL	ESDF 9 TLAB
Hose i.D. 13	61.5	22	25	13.5	9	81	ESDF 13 TL	ESDF 13 TLAB

#### NEW! Couplings with straight quick-fit 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. 10	69.5	22	28	13.5	7	97	ESDF 10 T	ESDF 10 TAB
Hose i.D. 13	69.5	22	28	13.5	9	104	ESDF 13 T	ESDF 13 TAB

#### 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	51	22	30	13.5	7	103	ESDF 9 TL-45	ESDF 9 TL-45AB
Hose i.D. 13	51	22	30	13.5	9	109	ESDF 13 TL-45	ESDF 13 TL-45AB

#### NEW! Couplings with 45° quick-fit 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. 10	55.5	22	28	13.5	7	128	ESDF 10 T-45	ESDF 10 T-45AB
Hose i.D. 13	55.5	22	28	13.5	9	134	ESDF 13 T-45	ESDF 13 T-45AB

#### 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	55.5	22	30	13.5	7	105	ESDF 9 TL-90	ESDF 9 TL-90AB
Hose i.D. 13	55.5	22	30	13.5	9	111	ESDF 13 TL-90	ESDF 13 TL-90AB

#### NEW! Couplings with 90° quick-fit 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. 10	55.5	22	28	13.5	7	131	ESDF 10 T-90	ESDF 10 T-90AB
Hose i.D. 13	55.5	22	28	13.5	9	137	ESDF 13 T-90	ESDF 13 T-90AB

#### Marking rings for easy and clear identification of quick-fit hose lines

Version	D	Colour		Weight	Type No.
For Hose i.D. 10	17	blue	50	0.5	AR-BL 10
For Hose i.D. 10	17	red	50	0.5	AR-RO 10
For Hose i.D. 10	17	yellow	50	0.5	AR-GE 10
For Hose i.D. 13	20	blue	50	0.7	AR-BL 13
For Hose i.D. 13	20	red	50	0.7	AR-RO 13
For Hose i.D. 13	20	yellow	50	0.7	AR-GE 13

To put on coupling or plug stem before assembling the quick-fit hose

Suitable hose clips, double-ear hose clips or crimping ferrules for standard hoses (© page 194 - 197)

**Safety instruction:** Only use quick-fit hose stems in combination with suitable quick-fit hoses (up to max. 100°C)!

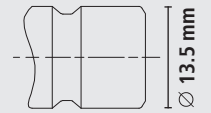
\*subject to media (oil: 200°C, water: 150°C, air: 200°C)

# Temperature Regulation Quick Connect Couplings

Plug size 13.5 mm **Series ESDF**

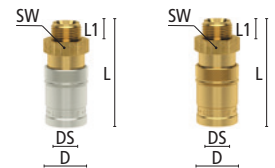
**DN 9**

Plug Profile (original size)



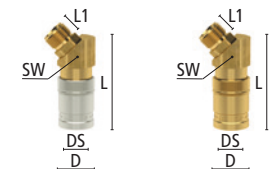
## Couplings with straight male thread without/with valve (inner cone DIN 3863)

Thread connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 m	52	22	22	9	13.5	9	90	ESDF 14 A	ESDF 14 AAB
G 3/8 m	52	22	22	11	13.5	9	94	ESDF 38 A	ESDF 38 AAB
G 1/2 m	53	24	22	12	13.5	9	95	ESDF 12 A	ESDF 12 AAB
M 16x1.5 m	52	22	22	11	13.5	9	93	ESDF 1615 A	ESDF 1615 AAB



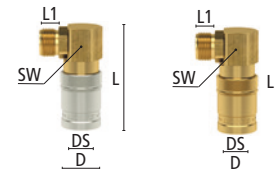
## Couplings with 45° male thread without/with valve (inner cone DIN 3863)

Thread connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 3/8 m	54	22	22	11	13.5	9	114	ESDF 38 A-45	ESDF 38 A-45AB
M 16x1.5 m	54	22	22	11	13.5	9	114	ESDF 1615 A-45	ESDF 1615A-45AB



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

Thread connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 3/8 m	54	22	22	11	13.5	9	126	ESDF 38 A-90	ESDF 38 A-90AB
M 16x1.5 m	54	22	22	11	13.5	9	126	ESDF 1615 A-90	ESDF 1615A-90AB



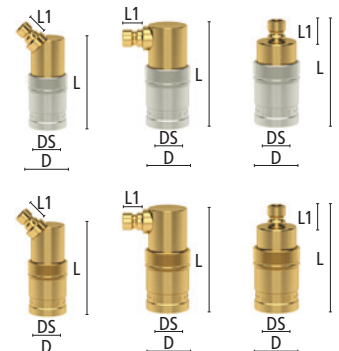
## Couplings with straight female thread without/with valve

Thread connect.	L	SW	D	L1	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
G 1/4 f	44.5	17	22	9	13.5	9	75	ESDF 14 I	ESDF 14 IAB
G 3/8 f	46	22	22	9	13.5	9	84	ESDF 38 I	ESDF 38 IAB
G 1/2 f	49	24	22	12	13.5	9	110	ESDF 12 I	ESDF 12 IAB



## Couplings with plug DN 6 - ESHM - System Adapter and ESH-ESDF System Adapter

Connection	L	D	L1	DS	Passage	Version	Weight	Type No. w/o valve	Type No. w valve
DN 9 - DN 6	48	22	10.5	13.5	6	straight	85	ESDFK-ESDMS	ESDFK-ESDMS-AB
DN 9 - DN 6	54	22	10.5	13.5	6	45°	100	ESDFK-ESDMS-45	ESDFK-ESDMS45AB
DN 9 - DN 6	54	22	10.5	13.5	6	90°	100	ESDFK-ESDMS-90	ESDFK-ESDMS90AB
DN 9 - DN 6	51	22	14	13.5	6	straight	85	ESDFK-ESHMS	ESDFK-ESHMS-AB
DN 9 - DN 9	51	22	14	13.5	9	straight	100	ESDFK-ESHS	ESDFK-ESHS-AB



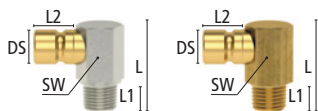
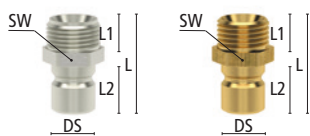
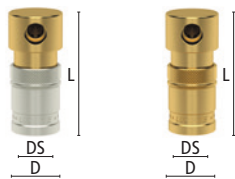
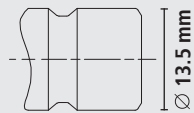


# Temperature Regulation Quick Connect Couplings

**Series ESDF** Plug size 13.5 mm

**DN 9**

Plug Profile (original size)



**Diversion coupling for temperature regulation bridges for tube connection 90° with/without valve**

Connection	L	D	DS	Passage	Weight	Type No. w/o valve	Type No. w valve
Tube 10/8	58	22	13.5	8	118	ESDF 10-U	ESDF 10-UAB

**Tube (chamfered) for diversion couplings (temperature regulation tube), hardened brass**

Connection	L	D	Passage	Weight	Type No.
Tube 10/8	250	10	8	60	TR 250-10
Tube 10/8	500	10	8	120	TR 500-10

**Plain End Coupling**

Connection	L	D	DS	Weight	Type No.
closed	37	22	13.5	67	ESDF-B

**Plugs with standard hose stem without valve**

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 6	41	14.5	22.5	15.5	13.5	5	20	ESD 6 SL
Hose i.D. 9	41	14.5	22.5	15.5	13.5	7	23	ESD 9 SL
Hose i.D. 13	43.5	16	25	15.5	13.5	9	25	ESD 13 SL

**Plugs with straight male thread without valve (inner cone DIN 3863)**

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/8 m	27	15	7	15.5	13.5	6	16	ESD 18 NA*
G 1/4 m	29	15	9	15.5	13.5	9	17	ESD 14 NA*
R 1/4 m	32	15	12	15.5	13.5	9	21	ESD 14 NAR*
G 3/8 m	29	17	9	15.5	13.5	9	22	ESD 38 NA*
R 3/8 m	32	17	12	15.5	13.5	9	26	ESD 38 NAR*
G 1/2 m	32	22	12	15.5	13.5	9	42	ESD 12 NA*
G 3/4 m	36.5	27	16	15.5	13.5	9	77	ESD 34 NA*
M 10x1 m	27	15	7	15.5	13.5	6.5	14	ESD 101 NA
M 14x1.5 m	29	15	9	15.5	13.5	9	16	ESD 1415 NA
M 16x1.5 m	29	17	9	15.5	13.5	9	20	ESD 1615 NA

**Plugs with straight female thread without valve**

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/4 f	27	17	9	15.5	13.5	9	21	ESD 14 NI*
G 3/8 f	27.5	22	10	15.5	13.5	9	32	ESD 38 NI*
G 1/2 f	29.5	24	12	15.5	13.5	9	55	ESD 12 NI*

**Plugs with 90° male thread without valve (metrical thread DIN 158/ R-Thread DIN EN 10226)**

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
R 1/4 m	35.5	17	11	15.5	13.5	9	45	ESD 14 NA-90*
M 14x1.5 m	35.5	17	11	15.5	13.5	9	47	ESD 1415 NA-90
R 3/8 m	35.5	17	12	15.5	13.5	9	45	ESD 38 NA-90*

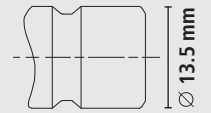
\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

Plug size 13.5 mm **Series ESDF**

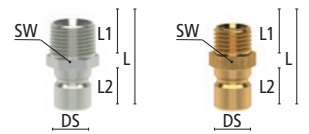
**DN 9**

Plug Profile (original size)



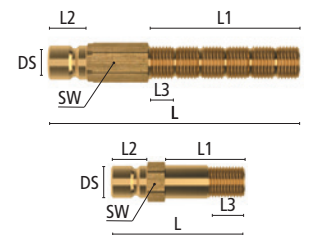
## Plugs with straight male thread with valve

Thread connection	L	SW	L1	L2	DS	Passage	Weight	Type No.
G 1/4 m	30	15	9.5	15.5	13.5	6	24	ESD 14 NAAB*
G 3/8 m	31	17	10.5	15.5	13.5	9	28	ESD 38 NAAB*
R 3/8 m	34	17	13.5	15.5	13.5	9	32	ESD 38 NARAB*
M 14x1.5 m	30	15	9.5	15.5	13.5	6	26	ESD 1415 NAAB
M 16x1.5 m	31	17	10.5	15.5	13.5	9	28	ESD 1615 NAAB



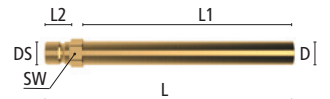
## Plugs with straight male long thread without valve (for length cutting as needed)

Thread connection	L	SW	L1	L2	L3	DS	Passage	Weight	Type No.
G 1/4 m	100	14	60	15.5	10	13.5	9	60	ESD 14-60 NA
G 1/4 m	57	15	34	15.5	16	13.5	9	38	ESD 14 NAL18
G 1/4 m	110	15	87	15.5	16	13.5	9	75	ESD 14 NAL71
G 3/8 m	100	17	60	15.5	10	13.5	9	91	ESD 38-60 NA
M 14x1.5 m	100	14	60	15.5	10	13.5	9	55	ESD 1415-60 NA
M 16x1.5 m	100	17	60	15.5	10	13.5	9	93	ESD 1615-60 NA



## Plug Tubes for countersunk mould threads (for length cutting as needed)

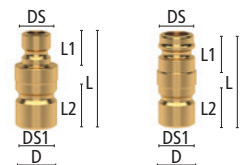
D	L	SW	L1	L2	DS	Passage	Weight	Type No.
14	150	15	127	15.5	13.5	9	114	ESD 150 R
14	300	15	277	15.5	13.5	9	230	ESD 300 R
14	450	15	427	15.5	13.5	9	344	ESD 450 R



NEW!  
NEW!

## Plug System Adapters

Connection	L	D	L1	L2	DS	DS1	Passage	Weight	Type No.
DN 9 - DN 6	31	14	15.5	10.5	13.5	9.4	6	18	ESD-ESDM
DN 9 - DN 9	34	14	15.5	15.5	13.5	13.5	9	24	ESD-ESD
DN 9 - DN 9	34	14	15.5	14	13.5	13	9	24	ESD-ESH



Protection cap (plastic) for plug profile ESD

100

ESD-K

\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Accessories

## SoftFlow Material Conveying Quick Connect Couplings



The **LUDECKE** SoftFlow Material Conveying Quick Connect Couplings are a high-quality quick coupling system for pressure or vacuum-conveying bulk materials or liquids (e.g. for vacuum-conveying granulate material in the plastics industry).

The SoftFlow products are easy to handle because of their quick coupling principle with ball shut-off and their light weight. Due to the use of stainless steel for the coupling body, they are very low-wearing.

**Soft  
Flow**  
by **LUDECKE**

## Manifolds for Temperature Regulation Lines



The **LUDECKE** manifolds made of aluminium or stainless steel allow for a clean layout of temperature regulation lines leading to increased work and production safety. The manifold guarantees a central inflow and out-flow to the temperature regulation tool and saves energy and hose lines.

## Colour Coding



A red or blue anodized aluminium ring for the sleeve can be ordered to easily label and identify flow and return lines of the tempered circuit.

We offer these rings for the series ESHM, ESHME, ESH and ESHE. They are also individually available for self-assembly. To install, simply slide the ring on the coupling sleeve.

## Screwings and Components



**LUDECKE** offers an extensive range of connecting fittings made of brass.

- Connection tubes
- Hose stems
- Connection nipples

## Hose Clamps, Hose Clips and Ferrules



To fix hoses to fittings, different assembly methods can be used ranging from robust clamps to light clips to ferrules. The assembly method depends on the application, media, pressure or hose material. Criteria are: safety level of fixation, removability, easiness and devices needed for assembly as well as cleanliness and protection against injury.

- Double-Ear Hose Clips
- High-Performance Hose Clips made of Steel or Stainless Steel
- Ferrules for Low Pressure Hose Lines
- Hand-Operated Assembly Machine

# SoftFlow Material Conveying Quick Connect Couplings

made of Stainless Steel 1.4305

**DN 41**

- High-quality quick coupling system for pressure or vacuum-conveying bulk material or liquids, eg. for vacuum-conveying granulate material in the plastics industry
- Low wearing due to coupling body made of stainless steel
- Coupling sleeve, plug and cap made of aluminium (hard coated)
- Full, straight-through passage without profile narrowing
- Light weight, easy to handle
- Quick coupling principle with ball shut-off for easy operation
- Easy manual replacement of sealing rings
- Perfectly adapted hose stems for PVC or polyurethane spiral hoses
- Plug and coupling for tube connection with double O-ring sealing and fixing with screw

Max. Working Pressure	Temperature	DN	Operation	Type of valve	Vacuum	Media	
PN 10 bar	-15° – +95° C	41	Two-hands	Straight-through	Vacuum	Plastic granulate	1



### SoftFlow Coupling with hose stem

Hose connection	L	D	L1	DS	Passage	Weight	Type No.
Hose i.D. 38	82	65	45	49	34	340	GRK 38 T
Hose i.D. 40	82	65	45	49	36	340	GRK 40 T
Hose i.D. 45	82	65	45	49	41	340	GRK 45 T
Hose i.D. 50	82	65	45	49	41	360	GRK 50 T

For hose clips type HS/ HSE (© Page 194 - 195)



### SoftFlow Vacuum Coupling for tube connection\*

Connection	L	D	L1	DS	Passage	Weight	Type No.
Tube AD 38	70	65	30	49	34	480	GRK 38 R
Tube AD 40	70	65	30	49	36	480	GRK 40 R
Tube AD 45	70	65	30	49	41	520	GRK 45 R
Tube AD 50	70	65	30	49	41	580	GRK 50 R

\*Attention: Only suitable for vacuum applications, sealing with O-ring, fixing with screw



### SoftFlow Coupling with female thread

Thread connection	SW	L	D	L1	DS	Passage	Weight	Type No.
G 1 1/2 f	55	68	65	19	49	41	560	GRK 15 I
G 2 f	60	68	65	19	49	41	650	GRK 20 I



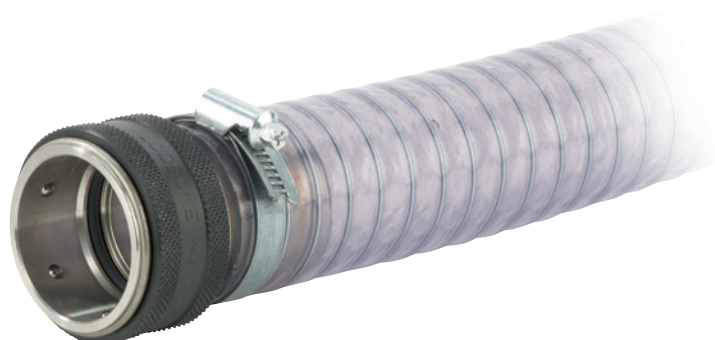
### SoftFlow Cap Coupling with chain

L	D	DS	Chain Length	Weight	Type No.
48	68	49	170	320	GRK-V

### Original Sealing Ring for coupling

Type	Size	Material		Weight	Type No.
O-ring	45 x 5	NBR	10	6	GRK-D

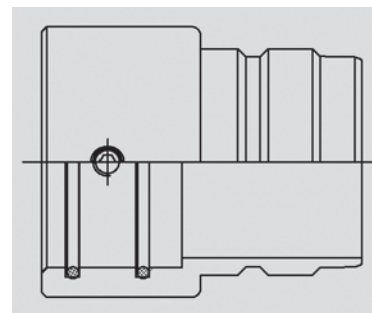
Adapted hose stems for other hose dimensions/ types on request





## Materials

- Sleeve: Aluminium (hard coated)
- Valve body, plug: Stainless steel 1.4305
- Springs, retaining ring: Stainless steel 1.4310
- Balls: Stainless steel 1.4304
- Seals: NBR
- Screw: Stainless steel 1.4301
- Plug: Aluminium (hard coated)



### SoftFlow Plug with hose stem

Hose connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Hose i.D. 38	83	55	45	36	49	34	310	GRS 38 T
Hose i.D. 40	83	55	45	36	49	36	315	GRS 40 T
Hose i.D. 45	83	55	45	36	49	41	330	GRS 45 T
Hose i.D. 50	83	55	45	36	49	41	360	GRS 50 T

For hose clips type HS/ HSE (© Page 194 - 195)



### SoftFlow Vacuum Plug for tube connection\*

Connection	L	D	L1	L2	DS	Passage	Weight	Type No.
Tube AD 38	68.5	58	30	36	49	34	360	GRS 38 R
Tube AD 40	68.5	58	30	36	49	36	370	GRS 40 R
Tube AD 45	68.5	58	30	36	49	41	385	GRS 45 R
Tube AD 50	68.5	58	30	36	49	41	420	GRS 50 R

\*Attention: Only suitable for vacuum applications, sealing with O-ring, fixing with screw



### SoftFlow Plug with female thread

Thread connection	SW	L	D	L1	L2	DS	Passage	Weight	Type No.
G 1 1/2 f	55	65	59	19	36	49	41	350	GRS 15 I
G 2 f	60	65	59	19	36	49	41	380	GRS 20 I

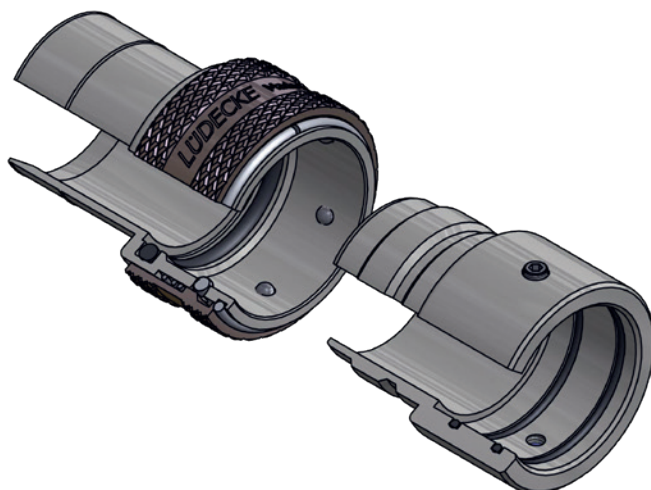


### SoftFlow Cap Plug with chain

L	D	L1	DS	Length chain	Weight	Type No.
60	58	36	49	170	195	GRS-V



Special types/versions, i.e. with bulkhead-screwing, plug or colour coding, and other sizes on request



# Manifolds for Temperature Regulation Lines

made of Aluminium (Anodised) and Stainless steel 1.4401

- Manifolds made of blue and red anodised aluminium or stainless steel 1.4401, for a clean layout of inflow and outflow to the temperature regulation tool, can be mounted at the machine
- Increases the working and production safety with its clean layout of temperature regulation lines, saves energy and hose lines because of the central inflow of the temperature regulation media to the machine
- A central inflow and outflow to the temperature regulation tool, as many outlets as necessary to the mould tool thanks to of the modular construction and different lengths
- Profile can be extended or combined as often as desired due to the bar connector system
- Stainless steel manifolds mainly for applications with aggressive media
- Lateral inlet thread G 3/4 f, top outlet thread G 1/4 f for coupling Series DN 6 and DN 9
- Other types/ versions on request

## Materials:

- Manifolds: Aluminium anodised/ Stainless steel 1.4401
- Plain End Plug: Brass MS 58

Max. Working Pressure	Temperature	Thread	Media	
PN 15 bar	-20°C – +200°C	ISO 228	Tempered media	1

## Manifolds made of Aluminium

G*	G1**	L	B	L1	L2	L3	L4	ØC	A	D	B1	Colour	Weight	Type No.
2 x G 3/4 f	4 x G 1/4 f	190	43.5	75.6	30	41.5	57.2	4.5	41.3	38	31	blue	500	VB 34144-190 B
2 x G 3/4 f	4 x G 1/4 f	190	43.5	75.6	30	41.5	57.2	4.5	41.3	38	31	red	500	VB 34144-190 R
2 x G 3/4 f	6 x G 1/4 f	266	43.5	151.6	30	41.5	57.2	4.5	41.3	38	31	blue	700	VB 34146-266 B
2 x G 3/4 f	6 x G 1/4 f	266	43.5	151.6	30	41.5	57.2	4.5	41.3	38	31	red	700	VB 34146-266 R
2 x G 3/4 f	8 x G 1/4 f	342	43.5	227.6	30	41.5	57.2	4.5	41.3	38	31	blue	900	VB 34148-342 B
2 x G 3/4 f	8 x G 1/4 f	342	43.5	227.6	30	41.5	57.2	4.5	41.3	38	31	red	900	VB 34148-342 R
2 x G 3/4 f	10 x G 1/4 f	418	43.5	303.6	30	41.5	57.2	4.5	41.3	38	31	blue	1100	VB 341410-418 B
2 x G 3/4 f	10 x G 1/4 f	418	43.5	303.6	30	41.5	57.2	4.5	41.3	38	31	red	1100	VB 341410-418 R

## Manifolds made of Stainless Steel 1.4401

G*	G1**	L	B	L1	L2	L3	L4	ØC	A	D	B1	Weight	Type No.
2 x G 3/4 f	4 x G 1/4 f	190	43.5	75.6	30	41.5	57.2	4.5	41.3	38	31	1490	VBE 34144-190

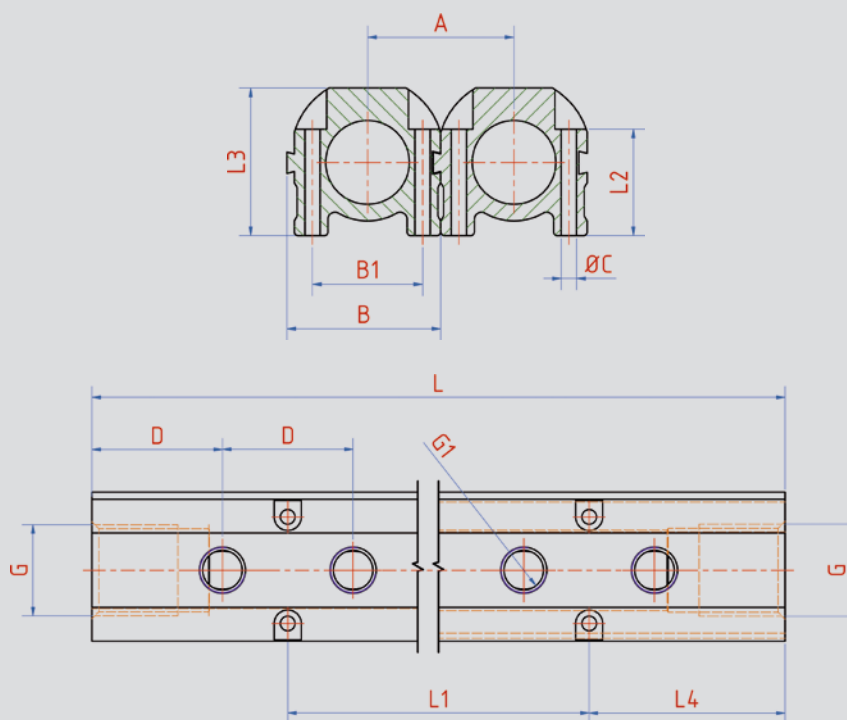
## Plain End Plug for Manifolds

Thread	Inner Hexagon		Weight	Type No.
G 3/4 m	SW 12	5	80	VBS-34

\*Thread connection on the side

\*\*Thread connection on the top

3- and 4-way Manifolds made of brass (© page 124)




- Easy identification and distinction of inflow and outflow lines of the tempered circuit with red or blue anodised colour coding (for the series ESHM, ESHME, ESH, ESHE)
- The specified series can be ordered with aluminium ring on the sleeve. Minimum order quantity: 20 pieces/ type. When ordering, simply add "R" or "B" to a standard article number, e.g. ESH 13 TLR or ESHM 9 TLABB (Surcharge: 2.19 Euro gross/ piece)
- The rings are also available for self-assembly. To install, simply slide the ring on the coupling sleeve

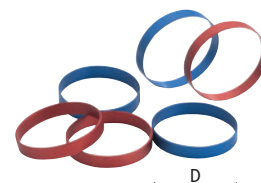
#### Materials:

- Colour coding: Aluminium anodised

#### Marking rings for temperature regulation couplings

for coupling type	D	Colour		Weight	Type No.
ESHME, ESHM (DN 6)	17	red	50	1	ESHM-CR-R
ESHME, ESHM (DN 6)	17	blue	50	1	ESHM-CR-B
ESHE, ESH (DN 9)	22	red	50	2	ESH-CR-R
ESHE, ESH (DN 9)	22	blue	50	2	ESH-CR-B

Other coupling series available on request.



# Screwings and Components

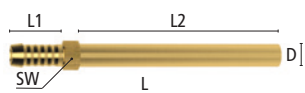
## Brass MS 58 plain

- For temperature regulation applications with hot or cold water as well as tempered oil
- Hose couplings available with standard stem profile for standard hoses or quick-fit profile for quick-fit hoses

### Materials:

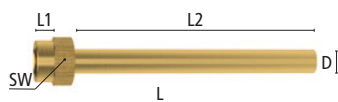
- Screwings, components: Brass MS 58 plain

Max. Working Pressure	Temperature	Thread	Inner Cone	Media
PN 15 bar	-20°C – +200°C	ISO 228 / DIN 13	DIN 3863	Tempered media



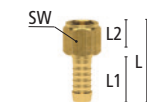
### Standard hose stem tubes for counter-sunk mould threads (for length cutting as needed)

Hose connection	L	SW	D	L1	L2	Passage	Weight	Type No.
Hose i.D. 9	120	11	10	22.5	90.5	6	50	ESHM 120 RS
Hose i.D. 13	150	15	14	25	115	9	114	ESH 150 RS



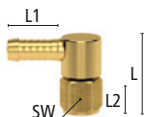
### Female thread tubes for counter-sunk mould threads (for length cutting as needed)

Thread connection	L	SW	D	L1	L2	Passage	Weight	Type No.
M 14x1.5 f	120	17	10	12	104.5	6	60	ESHM 120 RI
M 16x1.5 f	150	22	14	12	134.5	9	130	ESH 150 RI



### Standard hose stems with outer cone DIN 3863 and hexagon nut (straight, 45° and 90°)

Thread connect.	Hose con.	L	SW	L1	L2	Version	Passage	Weight	Type No.
G 1/4 f	Hose i.D. 9	40	17	23.5	10.5	straight	6	31	ST 149 MHL
G 1/4 f	Hose i.D. 9	52	17	22.5	10.5	45°	6	60	ST 149 MHL-45
G 1/4 f	Hose i.D. 9	34	17	22.5	10.5	90°	6	60	ST 149 MHL-90
G 3/8 f	Hose i.D. 13	41	22	27	10	straight	9	50	ST 3813 MHL
G 3/8 f	Hose i.D. 13	56	22	22.5	10	45°	9	80	ST 3813 MHL-45
G 3/8 f	Hose i.D. 13	40	22	22.5	10	90°	9	80	ST 3813 MHL-90
G 3/4 f	Hose i.D. 19	52	32	32	14	straight	13	130	ST 3419 MHL
M 14x1.5 f	Hose i.D. 9	40	17	23.5	10.5	straight	6	33	ST 14159 MHL
M 14x1.5 f	Hose i.D. 9	52	17	22.5	10.5	45°	6	60	ST 14159 MHL-45
M 14x1.5 f	Hose i.D. 9	34	17	22.5	10.5	90°	6	60	ST 14159 MHL-90
M 16x1.5 f	Hose i.D. 13	41	22	27	10	straight	9	50	ST 161513 MHL
M 16x1.5 f	Hose i.D. 13	56	22	22.5	10	45°	9	80	ST 161513MHL-45
M 16x1.5 f	Hose i.D. 13	40	22	22.5	10	90°	9	80	ST 161513MHL-90
M 24x1.5 f	Hose i.D. 19	52	30	32	14	straight	13	132	ST 241519 MHL



### Male thread connection nipples with inner cone DIN 3863 – 60° cone

Thread connection	L	SW	L1	L2	Passage	Weight	Type No.
2 x G 1/4 m	23	17	9	9	6	21	D 14 MH
2 x G 3/8 m	23	19	9	9	9	39	D 38 MH
2 x G 1/2 m	30	22	12	12	13	46	D 12 MH
2 x G 3/4 m	40	27	16	16	13	125	D 34 MH
G 1/4 m - M 14x1.5 m	23	17	9	9	6	23	D 14-1415 MH
G 1/4 m - M 16x1.5 m	23	19	9	9	6	27	D 14-1615 MH
G 3/8 m - M 14x1.5 m	23	19	9	9	8	30	D 38-1415 MH
G 3/8 m - M 16x1.5 m	23	19	9	9	9	39	D 38-1615 MH
G 1/2 m - M 14x1.5 m	30	22	12	9	6	55	D 12-1415 MH
G 1/2 m - M 16x1.5 m	30	22	12	9	9	55	D 12-1615 MH
G 1/2 m - M 24x1.5 m	36	27	12	16	13	114	D 12-2415 MH
G 3/4 m - M 24x1.5 m	40	27	16	16	13	105	D 34-2415 MH
2 x M 14x1.5 m	23	17	9	9	6	30	D 1415 MH
2 x M 16x1.5 m	23	19	9	9	9	26	D 1615 MH
2 x M 24x1.5 m	40	27	16	16	13	25	D 2415 MH
M 14x1.5 m - M 16x1.5 m	23	17	9	9	9	20	D 1415-1615 MH
M 14x1.5 m - M 18x1.5 m	26	19	9	12	9	35	D 1415-1815 MH
M 16x1.5 m - M 18x1.5 m	26	19	9	12	9	37	D 1615-1815 MH

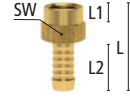


# Screwings and Components

Brass MS 58 plain

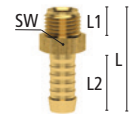
## Female thread standard hose stems

Thread connect.	Hose con.	L	SW	L1	L2	Passage	⊠	Weight	Type No.
M 14x1.5 f	Hose i.D. 9	37.5	17	12	22.5	6	10	20	TI 14159 MHL
M 16x1.5 f	Hose i.D. 13	40	22	12	25	9	10	45	TI 161513 MHL
M 24x1.5 f	Hose i.D. 19	55	30	18	35	13	10	108	TI 241519 MHL



## Male thread standard hose stems with inner cone DIN 3863 – 60° cone

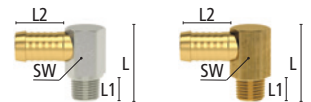
Thread connect.	Hose con.	L	SW	L1	L2	Passage	⊠	Weight	Type No.
M 8x0.75 m	Hose i.D. 6	33.5	11	7	22.5	4.5	10	13	G 875-6 THL
M 8x0.75 m	Hose i.D. 9	33.5	11	7	22.5	4.5	10	19	G 875-9 THL
M 10x1 m	Hose i.D. 9	33.5	11	7	22.5	6	10	20	G 101-9 THL
G 1/8 m	Hose i.D. 9	33.5	11	7	22.5	6	10	20	G 18-9 THL
G 1/4 m	Hose i.D. 9	37.5	15	9	22.5	6	10	21	G 14-9 THL
G 1/4 m	Hose i.D. 13	40	15	9	25	8	10	34	G 14-13 THL
M 12x1.5 m	Hose i.D. 13	40	15	9	25	7	10	35	G 1215-13 THL
M 14x1.5 m	Hose i.D. 13	40	15	9	25	9	10	36	G 1415-13 THL
G 3/8 m	Hose i.D. 9	37.5	17	9	22.5	6	10	27	G 38-9 THL
G 3/8 m	Hose i.D. 13	40	17	9	25	9	10	36	G 38-13 THL
M 16x1.5 m	Hose i.D. 13	40	17	9	25	9	10	36	G 1615-13 THL
G 1/2 m	Hose i.D. 19	50	22	12	35	13	10	73	G 12-19 THL
M 24x1.5 m	Hose i.D. 19	56	27	16	35	13	10	114	G 2415-19 THL
G 3/4 m	Hose i.D. 19	56	27	16	35	13	10	125	G 34-19 THL



## Male thread standard hose stems 90° (metric threads DIN 158/ R-thread DIN EN 10226)

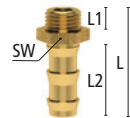
Thread connect.	Hose con.	L	SW	L1	L2	Passage	⊠	Weight	Type No.
M 5x0.5 m	Hose i.D. 5	15.5	9	5	18	2.7	10	9	ESHMC505-5SL-90
M 8x0.75 m	Hose i.D. 5	17.5	9	5	20	2.7	10	11	ESHMC875-5SL-90
M 8x0.75 m	Hose i.D. 9	27	15	9	20	4.5	10	35	ESHM 875-9SL-90
M 10x1 m	Hose i.D. 9	27	15	9	20	6	10	38	ESHM 101-9SL-90
R 1/8 m	Hose i.D. 9	27	15	9	20	6	10	38	ESHM 18-9SL-90*
M 14x1.5 m	Hose i.D. 13	34	17	11	24	9	10	47	ESH 1415-13SL90
R 1/4 m	Hose i.D. 13	34	17	11	24	9	10	48	ESH 14-13SL-90*
R 1/2 m	Hose i.D. 19	47	24	16	32	13	10	158	ESHG 12-19SL-90*
M 24x1.5 m	Hose i.D. 19	47	24	16	32	13	10	165	ESHG2415-19SL90

Suitable hose clips, double-ear clips or crimping ferrules for standard hoses (© Page 194 - 197)



## Male thread quick-fit hose stems for quick-fit hoses – 60° cone

Thread connect.	Hose con.	L	SW	L1	L2	Passage	⊠	Weight	Type No.
M 10x1 m	Hose i.D. 6	41	11	9	28	6	10	20	G 101-6 TH
G 1/8 m	Hose i.D. 6	39	14	7	28	4	10	16	G 18-6 TH
G 1/4 m	Hose i.D. 6	39	17	7	28	4	10	19	G 14-6 TH
G 1/8 m	Hose i.D. 10	39	14	7	28	5	10	21	G 18-10 TH
G 1/4 m	Hose i.D. 10	39	17	7	28	7	10	23	G 14-10 TH
G 1/4 m	Hose i.D. 13	39	17	7	28	9	10	28	G 14-13 TH
M 14x1.5 m	Hose i.D. 10	42	15	9	28	7	10	26	G 1415-10 TH
G 3/8 m	Hose i.D. 10	43	17	10	28	7	10	32	G 38-10 TH
G 3/8 m	Hose i.D. 13	43	17	10	28	9	10	36	G 38-13 TH
G 1/2 m	Hose i.D. 10	43	22	10	28	7	10	41	G 12-10 TH
G 1/2 m	Hose i.D. 13	43	22	10	28	9	10	41.5	G 12-13 TH
G 1/2 m	Hose i.D. 16	58	22	12	38	13	10	70	G 12-16 TH
G 3/4 m	Hose i.D. 16	62	27	16	38	13	10	120	G 34-16 TH
G 3/4 m	Hose i.D. 19	62	27	16	38	14	10	135	G 34-19 TH



## Quick-fit hose menders with/without safety collar for quick-fit hoses

Hose connection	L	L1	Passage	Version	⊠	Weight	Type No.
Hose i.D. 13	58	28	10	w safety collar	10	24	SV 13 R-TH
Hose i.D. 13	47	22.5	10	w/o safety collar	10	26	SV 13 R-THO
Hose i.D. 16	47	22.5	10	w/o safety collar	10	39	SV 16 R-THO

**Safety instruction:** Only use quick-fit hose stems in combination with suitable quick-fit hoses!

Coloured marking rings (© Page 189)

\*Hose stems with inch threads are nickel-plated for simple distinction





# Screwings and Components

Brass MS 58 plain



## Angle screwings for 45° or 90° connections for use as modular system

Thread connection	L	SW	L1	L2	Version	Weight		Type No.
G 1/4 m - G 1/4 f	29	20	8	10	45°	42	5	W 14 IA-45
G 1/4 m - G 1/4 f	29	20	8	13.5	90°	53	5	W 14 IA-90

To be combined with female thread couplings, male thread stems and male plugs G 1/4"



## Swivel head screwing for fine adjustments of air nozzles

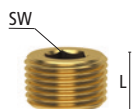
Thread connection	L	SW	D	L1	L2	Displacement		Weight	Type No.
G 1/4 m - G 1/4 f	53	22	27	9	10	approx. 47°	10	104	KGV 14

(Temperature -20°C/+100°C)



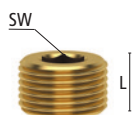
## Male thread- / Female thread reducing nipples

Thread connection	L	SW	L1		Weight	Type No.
M 14x1.5 m - M 10x1 f	11	17	7	10	10	R 1415-101 NH
M 18x1.5 m - M 14x1.5 f	14	22	9	10	15	R 1815-1415 NH
G 1/4 m - G 1/8 f	11	17	7	10	10	R 14-18 NH
G 3/8 m - G 1/4 f	13	19	9	10	15	R 38-14 NH
G 1/2 m - G 3/8 f	18	24	12	10	19	R 12-38 NH
M 24x1.5 m - M 16x1.5 f	24	27	16	10	58	R 2415-1615 NH
G 3/4 m - G 1/2 f	24	27	16	10	55	R 34-12 NH



## Locking screws with inner hexagon DIN 906 with tapered male thread

Thread connection	L	SW		Weight	Type No.
M 8x0.75 m	8	4	10	3	VS 875
M 10x1 m	8	5	10	3.5	VS 101
M 12x1.5 m	8	6	10	6	VS 1215
M 14x1.5 m	10	7	10	11	VS 1415
R 1/8 m	8	5	10	7.5	VS 18*
R 1/4 m	10	7	10	11	VS 14*
R 3/8 m	10	8	10	13	VS 38*
R 1/2 m	10	10	10	18	VS 12*



## Locking screws with inner hexagon DIN 906 with parallel male thread

Thread connection	L	SW		Weight	Type No.
M 8x0.75 m	8	4	10	3	VS 875 ZY
M 10x1 m	8	5	10	3.5	VS 101 ZY
M 12x1.5 m	8	6	10	6	VS 1215 ZY
M 14x1.5 m	10	7	10	11	VS 1415 ZY
G 1/8 m	8	5	10	7.5	VS 18 ZY*
G 1/4 m	10	7	10	11	VS 14 ZY*
G 3/8 m	10	8	10	13	VS 38 ZY*
G 1/2 m	10	10	10	18	VS 12 ZY*



NEW!

## Expanding Mandrel Sealing Plugs


D	L	D1		Weight	Type No.
6	11.8	M 3	10	1	VSSD 6
8	11.8	M 4	10	2.5	VSSD 8
9	11.8	M 4	10	3	VSSD 9
10	14.3	M 6	10	5	VSSD 10
12	14.3	M 6	10	7	VSSD 12
15	16.3	M 8	10	12.5	VSSD 15
16	16.3	M 8	10	15	VSSD 16

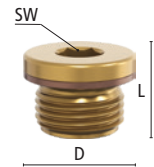
\*Lockings screws with inch threads are nickel-plated for simple distinction

# Screwings and Components


Brass MS 58 plain

## NEW! Locking screw with collar

Thread	L	SW	D		Weight	Type No.
M 7x1 m	11	3	11	10	5	VSB 71
M 9x1 m	11	4	13	10	7	VSB 91
M 10x1 m	11	5	14	10	8	VSB 101
M 11x1 m	11	5	15	10	9.5	VSB 111
M 12x1.5 m	15	6	17	10	15	VSB 1215
M 14x1.5 m	15	6	19	10	21	VSB 1415
G 1/8 m	11	5	16	10	8	VSB 18
G 1/4 m	15	6	18	10	18	VSB 14
G 3/8 m	15	8	22	10	27	VSB 38
G 1/2 m	18	10	26	10	50	VSB 12
G 3/4 m	20	12	32	10	90	VSB 34




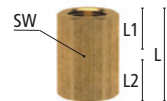
## NEW! Screwable sealing plugs (max. 10 bar, temperature: -20°C - +180°C)

Ø	L	Torx		Weight	Type No.
6	9.5	10	10	2	VSO 6
7	9.5	10	10	2.5	VSO 7
8	10	10	10	3.5	VSO 8
10	10.5	20	10	5.5	VSO 10
12	11	20	10	8.5	VSO 12
14	14.5	30	10	14	VSO 14
16	14	30	10	19	VSO 16




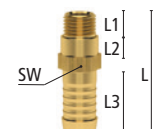
## Female thread combination nipples

Thread connection	L	SW	L1	L2		Weight	Type No.
2 x G 1/4 f	26	17	12	12	10	21	U 14 NH
G 1/2 f - M 14x1.5 f	24	27	14	10	10	45	U 12-1415 NH
G 1/2 f - M 16x1.5 f	24	27	14	10	10	46	U 12-1615 NH
G 3/4 f - M 14x1.5 f	28	32	18	10	10	75	U 34-1415 NH
G 3/4 f - M 16x1.5 f	28	32	18	10	10	77	U 34-1615 NH



## Male thread standard hose stems with collar

Thread connection	Hose con.	L	SW	L1	L2	L3	Passage		Weight	Type No.
G 1/8 m	Hose i.D. 9	40	11	7	7	22.5	6	10	15	G 189 TA
G 1/4 m	Hose i.D. 13	47	15	9	7	25	9	10	33	G 1413 TA
G 1/2 m	Hose i.D. 19	62	22	12	10	32	13	5	100	G 1219 TA
G 3/4 m	Hose i.D. 19	62	27	12	10	32	13	5	150	G 3419 TA
M 10x1 m	Hose i.D. 9	40	11	7	7	22.5	6	10	15	G 1019 TA
M 12x1.5 m	Hose i.D. 13	47	15	9	7	25	8	10	33	G 121513 TA
M 14x1.5 m	Hose i.D. 13	47	15	9	7	25	9	10	33	G 141513 TA
M 24x1.5 m	Hose i.D. 19	62	27	12	10	32	13	5	140	G 241519 TA



# High-Performance Hose Clips

made of Steel W1 (DIN 3017)

- High-performance hose clips made of steel W1, free of chrome VI, zinc-plated and thick layer passivated
- Optimum sealing through high belt tension – maximum strip safety
- Hose-protective through rounded edges and smooth band insides
- Thinner screw body with new suspension, hence improved tightening and fracture torque
- Material and clamp range stamped at inner band side
- Hexagon screw with cross-slotted head
- Optimum distribution of tension over complete hose diameter
- Up to size 90 in boxes, sizes 100-180 in plastic bags, from size 190 individually
- For safe, fast and removable assembly of various hoses and fittings for different media

## Materials

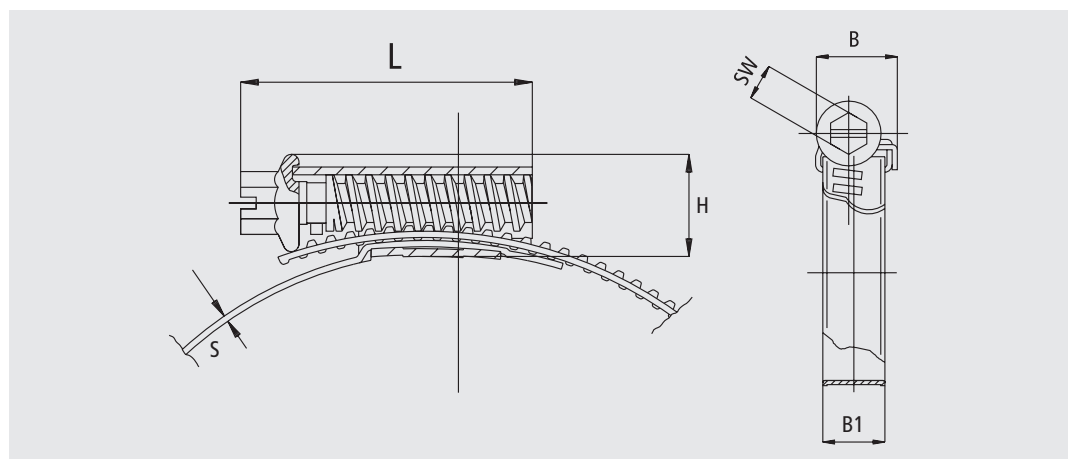
- Band, body, screw: Steel W1 zinc-plated and thick layer passivated

Norm

DIN 3017

## High-Performance Hose Clips, band and lock made of steel W 1, zinc-plated

Range				torque		band width						
mm	inch	B	SW	Max.Nm	L	H	B1	S	band-thickness	Weight	Type No.	
8-12	5/18-1/2	14	7	2-2.5	20.5	11.5	9	0.7	100	12	HS 12	
10-16	5/18-5/8	14	7	2-2.5	20.5	11.5	9	0.8	100	13	HS 16	
12-22	1/2-3/4	14	7	3-3.5	24	11.5	9	0.8	100	16	HS 20	
16-27	5/8-1	16	7	5-5.5	31	13	9	0.8	100	17	HS 25	
20-32	3/4-1 1/4	16	7	5-5.5	31	13	12	0.8	50	27	HS 32	
25-40	1-1 5/8	16	7	5-5.5	31	13	12	1.0	50	32	HS 40	
30-45	1 3/8-1 3/4	16	7	5-5.5	31	13	12	1.0	50	33	HS 45	
35-50	1 1/4-2	16	7	5-5.5	31	13	12	1.0	50	35	HS 50	
40-60	1 5/8-2 3/8	16	7	5-5.5	31	13	12	1.0	25	39	HS 60	
50-70	2-2 3/4	16	7	5-5.5	31	13	12	1.0	25	43	HS 70	
60-80	2 3/8-3 1/8	16	7	5-5.5	31	13	12	1.0	25	45	HS 80	
70-90	2 3/4-3 1/2	16	7	5-5.5	37	13	12	1.0	25	52	HS 90	
80-100	3 1/8-4	16	7	5-5.5	37	13	12	1.0	10	53	HS 100	
90-110	3 1/2-4 3/8	16	7	5-5.5	37	13	12	1.0	10	53	HS 110	
100-120	4-4 3/4	16	7	5-5.5	37	13	12	1.0	10	58	HS 120	
110-130	4 3/8-5 1/8	16	7	5-5.5	37	13	12	1.0	10	60	HS 130	
120-140	4 3/4-5 1/2	16	7	5-5.5	37	13	12	1.0	10	63	HS 140	
130-150	5 1/8-5 7/8	16	7	5-5.5	37	13	12	1.0	5	69	HS 150	
140-160	5 1/2-6 1/4	16	7	5-5.5	37	13	12	1.0	5	71	HS 160	
150-170	5 7/8-6 5/8	16	7	5-5.5	37	13	12	1.0	5	74	HS 170	
160-180	6 1/4-7	16	7	5-5.5	37	13	12	1.0	5	77	HS 180	
170-190	6 1/2-7 1/2	16	7	5-5.5	37	13	12	1.0	1	79	HS 190	
180-200	7 1/8-8	16	7	5-5.5	37	13	12	1.0	1	81	HS 200	
190-210	7 1/2-8 1/4	16	7	5-5.5	37	13	12	1.0	1	86	HS 210	
200-220	8-8 3/4	16	7	5-5.5	37	13	12	1.0	1	92	HS 220	
210-230	8 1/8-9	16	7	5-5.5	37	13	12	1.0	1	98	HS 230	
220-240	8 3/4-9 3/8	16	7	5-5.5	37	13	12	1.0	1	101	HS 240	
230-250	9-9 3/4	16	7	5-5.5	37	13	12	1.0	1	105	HS 250	
240-260	9 3/8-10 1/4	16	7	5-5.5	37	13	12	1.0	1	108	HS 260	
250-270	9 3/4-10 1/2	16	7	5-5.5	37	13	12	1.0	1	112	HS 270	
260-280	10 1/4-11	16	7	5-5.5	37	13	12	1.0	1	116	HS 280	



# High-Performance Hose Clips

made of Stainless Steel W5 (DIN 3017)

- High performance hose clips made of stainless steel W5
- Optimum sealing through high belt tension – maximum strip safety
- Hose-protective through rounded edges
- Stamped band
- Thinner screw body with new suspension, hence improved tightening and fracture torque
- Material and clamp range stamped at inner band side
- Hexagon screw with cross-slotted head
- Optimum distribution of tension over complete hose diameter
- Up to size 90 in boxes, size 100 in plastic bags
- For safe, fast and removable assembly of various hoses and fittings for different media

## Materials

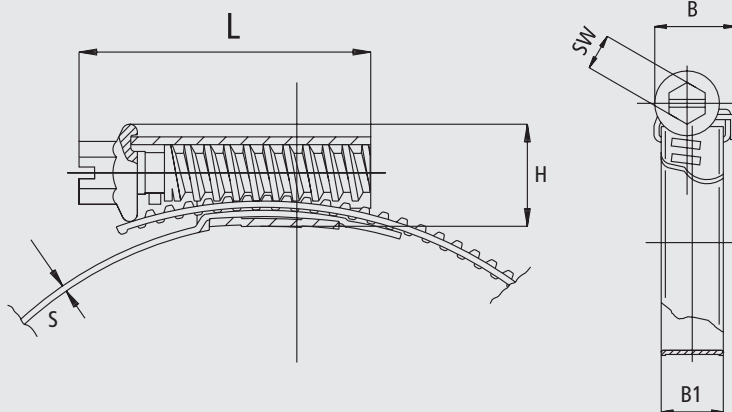
- Band, body, screw: Stainless steel W5

Norm

DIN 3017

## High-Performance Hose Clips, band and lock made of stainless steel W 5

Range				torque			band-width					
mm	inch	B	SW	Max. Nm.	L	H	B1	S		Weight	Type No.	
8-12	5/18-1/2	10.5	6	1.5	17	9.5	8	0.7	100	6	HSE 12	
8-16	5/18-5/8	14	7	2-2.5	21	14	9	0.8	100	11	HSE 16	
12-20	1/2-3/4	14	7	2-2.5	24	14	9	0.8	100	13	HSE 20	
16-25	5/8-1	14	7	3-3.5	24	14	9	0.8	100	14	HSE 25	
20-32	3/4-1 1/4	14	7	3-3.5	24	14	9	0.8	100	15	HSE 32	
25-40	1-1 5/8	14	7	3-3.5	26	14	9	0.8	50	18	HSE 40	
32-50	1 1/4-2	14	7	3-3.5	26	14	9	0.8	50	18	HSE 50	
40-60	1 5/8-2 3/8	14	7	3-3.5	26	14	9	1.0	25	20	HSE 60	
50-70	2-2 3/4	14	7	3-3.5	26	14	9	1.0	25	21	HSE 70	
60-80	2 3/8-3 1/8	14	7	3-3.5	26	14	9	1.0	25	23	HSE 80	
70-90	2 3/4-3 1/2	14	7	3-3.5	26	14	9	1.0	25	25	HSE 90	
80-100	3 1/8-4	14	7	3-3.5	26	14	9	1.0	10	28	HSE 100	



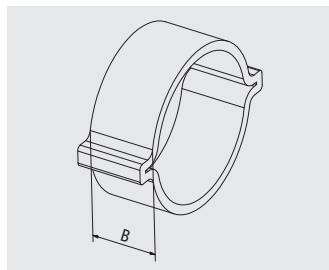
# Double-Ear Hose Clips

- Clips made of special reliable steel zinc plated and blue chromated (free of chrome VI)
- Easy and fast assembly with pincer
- Concentric and strong clamp-effect, safe and unsolvable
- No risk of injury
- To assemble hoses and fittings for various media

## Materials

- Clips: Unbreakable special reliable steel, zinc-plated and blue chromated (free of chrome VI)

100



## Double-Ear Hose Clips

Hose-o.D./ Range	B	Weight	Type No.
5-7	5.5	1	ZOS 5-7
7-9	6	2	ZOS 7-9
9-11	6	2	ZOS 9-11
11-13	6	3	ZOS 11-13
13-15	7	4	ZOS 13-15
14-17	7.5	4	ZOS 14-17
15-18	8	5	ZOS 15-18
17-20	8	5	ZOS 17-20
19-21	7	5	ZOS 19-21
20-23	9	8	ZOS 20-23
22-25	9	9	ZOS 22-25
23-27	9	9	ZOS 23-27
25-28	9	10	ZOS 25-28
27-31	9	12	ZOS 27-31
31-34	9	13	ZOS 31-34
34-37	9	16	ZOS 34-37
37-40	9	17	ZOS 37-40
40-43	9	18	ZOS 40-43



Special assembly pincer	L	H	Weight	Type No.
	220	50	332	ZOSZ



# Ferrules for Low Pressure Hose Lines

- Ferrules made of annealed steel zinc-plated and yellow passivated
- Easy, fast and absolutely safe hose crimping with **LUDECKE** hand-operated assembly machine SPR-333 up to type LPH-23
- No risk of injury, clean and unsolvable connection
- For crimping of various hoses and fittings for different media

## Materials

- Body: annealed steel zinc-plated and yellow passivated

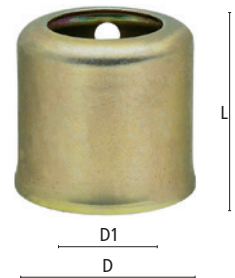
Max. Working Pressure

PN 16 bar

## Ferrules for Low Pressure Hose Lines

D	for hose		L	D1	Assembly-M.	Weight	☐	Type No.
	DIN 20018	water PVC						
12.5			17	8.5	SPR 333	3	100	LPH-12.5
13.5		6x3	20	9.3	SPR 333	5	100	LPH-13.5
14.5	6x3.5		17	10	SPR 333	5	100	LPH-14.5
16		8x3	17	11.5	SPR 333	5	100	LPH-16
18	9x3.5	10x3	20	13.5	SPR 333	7	100	LPH-18
19		12x3	20	13.9	SPR 333	9	100	LPH-19
19.5			26	14.5	SPR 333	10	100	LPH-19.5
21			32	16.5	SPR 333	12	100	LPH-21
22			32	17	SPR 333	16	100	LPH-22
23		13x3	32	17	SPR 333	18	100	LPH-23
25	13x5		32	17		19	100	LPH-25
28	15x6		32	20.5		22	100	LPH-28
30.5		19x4	33	24.3		24	100	LPH-30
33	19x6		35	24.8		40	25	LPH-33
38		25x4.5	35	28		47	25	LPH-38
41	25x7		40	30		64	25	LPH-41

For higher working pressure we recommend hydraulic crimping with turned steel-ferrules type PH (☐ page 245) or on request.



# Hand-Operated Assembly Machine

for Low Pressure Ferrules

- Crimping machine for easy and safe assembly of low-pressure hoses from 3 to 16 mm Hose i.D.
- **Clean:** Exact assembling of fitting, hose and ferrule through centric crimping of the ferrule
- **Simple:** Fast assembling quick and easy
- **Reliable:** Improved safety through perfect fit
- **Safe:** Reduced danger of injury
- With two crimping-jaw sets for crimping range from 3 to 9 mm and from 10 to 16 mm.
- **Flexible:** For mobile use

## Assembly Machine

for hose		Hose o.D./		e.g. for fitting	☐	Weight	Type No.
Hose i.D.	Range	suitable ferrule					
3-16	10-22	LPH 12.5-23	Pneumatic-Connect., ES-Couplings	1	12.2 kg	SPR-333	

