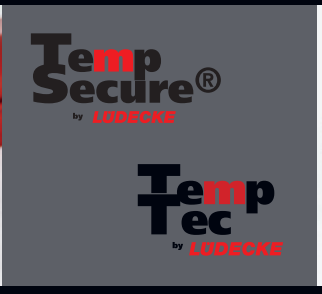
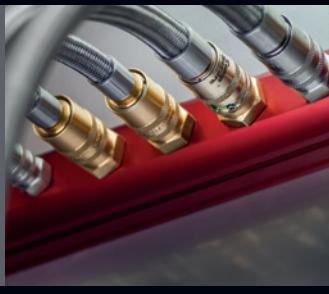
LÜDECKE

Since 1930. The perfect connection.

Quick Connect Couplings and Accessories for Temperature Regulation Applications

Product Range 2018 / 19





LÜDECKE MADE IN GERMANY

The Most Extensive Range of Coupling Systems and Accessories for Temperature Regulation Applications

Plastics processing companies rely on particularly robust and resistant couplings and fittings. The reason: They are used during cooling and heating of moulding units, during injection moulding or pressure casting and have to withstand extreme temperatures.

The high quality TempTec quick connect coupling systems by **LÜDECKE** made of brass and stainless steel guarantee first class quality, complete reliability as well as an easy and fast operation.
Particularly, we would like to point out our TempSecure® series, which offers an effective solution for unintentional disconnection under pressure.

Advantages:

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

Wide Selection

The **LÜDECKE** product range contains a large selection of European and International plug profiles as well as the original Stäubli RPL-Series. These cover the world´s most common used plug profiles.

European Plug Profiles

International Plug Profiles

Original STÄUBLI RPL-Series

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

Valve Designs

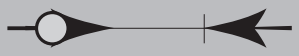
The LÜDECKE quick connect couplings for temperature regulation applications are available in different valve designs.

Straight-Through

Female part (coupling) Male part (plug)

- No valve - neither within the coupling nor within the plug
- Maximum flow rate
- During disconnection: a leakage of the media from the coupling and plug line occurs

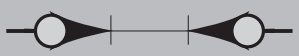
Single Shut-off



Female part (coupling) Male part (plug)

- Straight-through plug
- Coupling with valve
- During disconnection: a media leakage from the plug line is possible

Double Shut-off



Female part (coupling) Male part (plug)

- Valves on both sides (male/female)
- During disconnection: no leakage appears of coupling and plug, constant pressure

Materials

LÜDECKE only uses high-quality material for the temperature regulation products and are adapted for all applications areas.

Brass (plain/ nickel-plated)

Most of the LÜDECKE quick connect couplings consist of brass MS 58. It is a very sturdy material which guarantees high durability and can be excellently galvanized (nickel-plating).

Stainless Steel

For clean-room applications or where aggressive media are used to cool down or heat up, temperature regulation quick connect coupling systems of stainless steel (1.4305) are recommended.

Seals

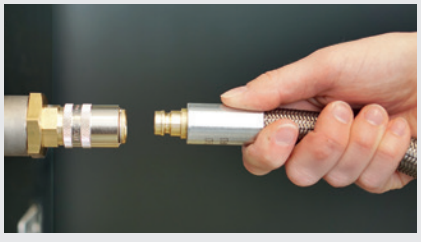
LÜDECKE offers especially for temperature regulation applications standardized highly resistant seals of FKM. These are characterized by being heat-resistant up to 200°C*, optimum glide properties, minimum wear, as well as a high elasticity and a high abrasion resistance which guarantees a significantly higher operation time of the couplings. Depending on the applications, special high-performance seals of FKM (Special-Hitec-FKM-O-ring), EPDM and FFKM are used.

To offer you the optimum solution (subject to application and media) we recommend a consultation with our competent sales and engineering team.

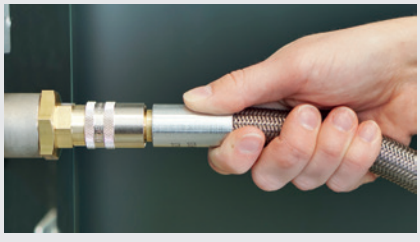
*subject to used media

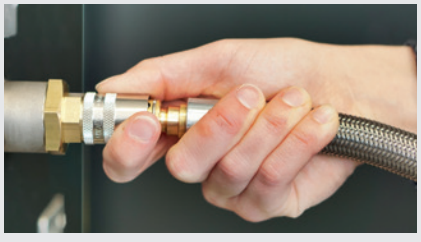
Connecting Within Seconds

The LÜDECKE quick connect couplings are characterized by an extra easy operation.



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

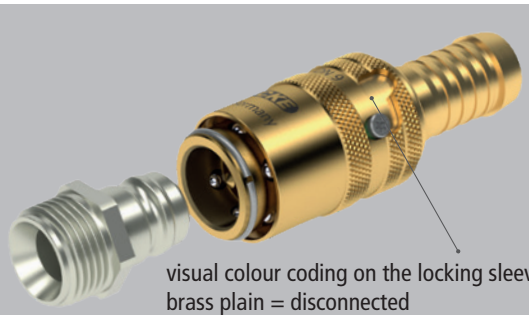




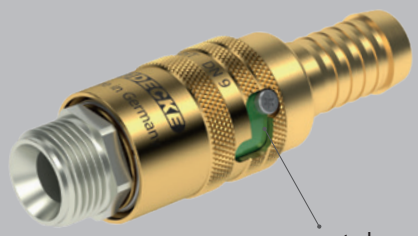
To disconnect, pull back the sleeve of the coupling (automatically disconnected).

Temperature Regulation Quick Connect Coupling System with Automatic Safety Locking Mechanism

Safety without Compromise



visual colour coding on the locking sleeve
brass plain = disconnected



green = connected

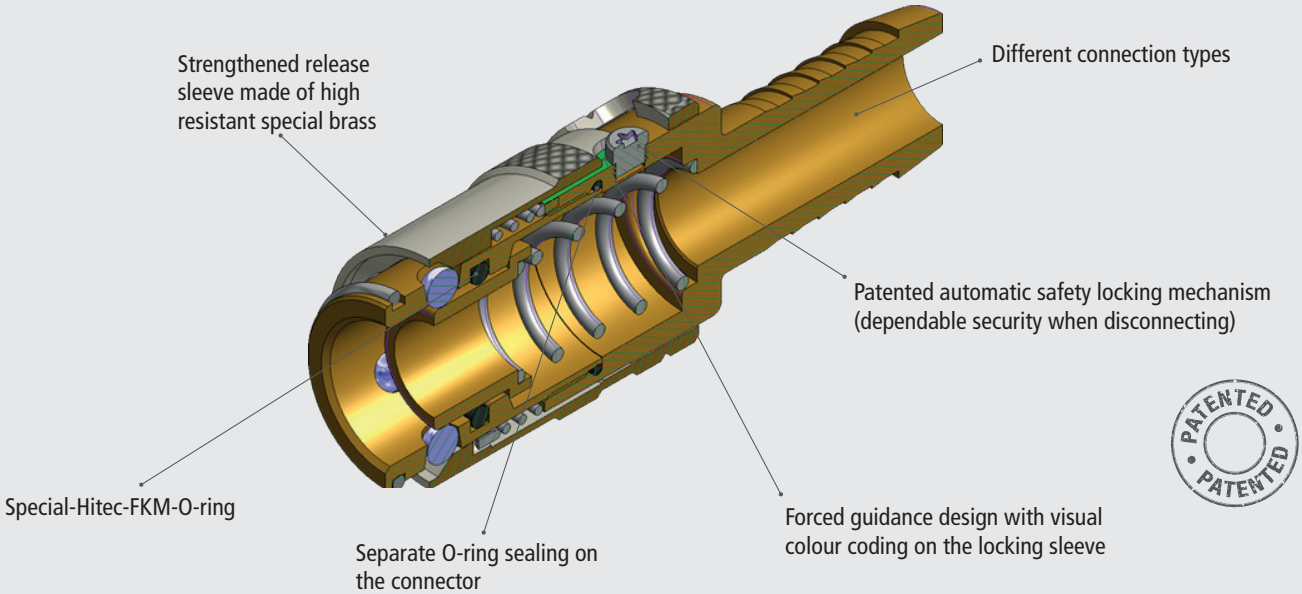
The patented **LÜDECKE** TempSecure® temperature regulation quick connect coupling system features an automatic safety locking mechanism that offers an effective solution for unintentional disconnection and unlocking.

Thus, the coupling is especially suited for the use with aggressive media, such as temperature regulation applications with hot or cold water as well as tempered oil between - 20°C and + 200°C*. High quality FKM-O-rings make the coupling an ideal media carrier especially with high temperature.

- Automatic Safety Locking Mechanism
- Colour Coding
- High temperature resistant
- Simple and intuitive coupling procedure using forced rotation
- Controlled, manual unlocking
- Available for European and International plug profiles
- Available in Brass and Stainless Steel NEW!

*subject to used media

High-Quality Materials Guarantee Best Reliability



The Unlocking Safeguard

Safety for Man and Machine

The **LUDECKE** temperature regulation product range contains alongside the TempSecure® Series, also a simplified unlocking safeguard.

- Disconnection only possible with an exact engagement of the safety pin 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, ESHG, ESHE as well as ESDM and ESD

360° Rotatable Connector

Completely Flexible

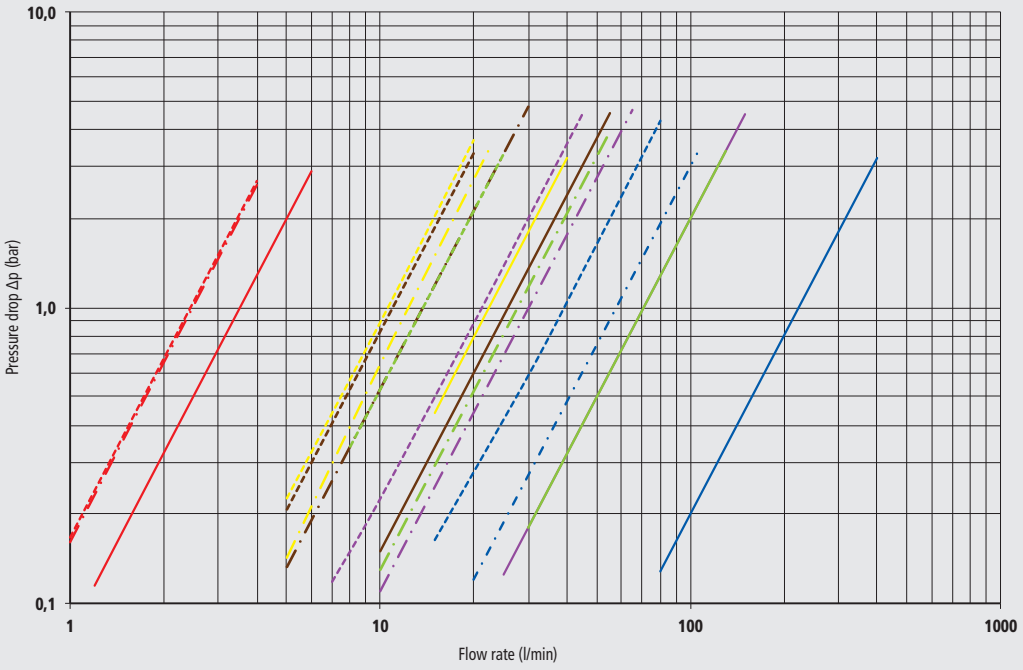
The hose barb and male thread couplings from the series ESHM and ESH are optionally available with a rotatable connector, with a high-quality ball-and-socket joint with double O-ring sealing*.

- Swivel joint withstands 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
- Leaks in the temperature regulation circuit are prevented
- Reduces the danger of bending hoses on their way to the tool

* for other coupling series on request

Flow Chart

The flow rates of our different temperature regulation quick connect coupling systems are summarized in the following chart.



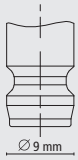
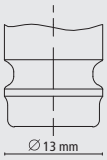
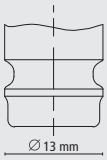
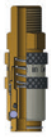
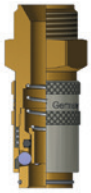
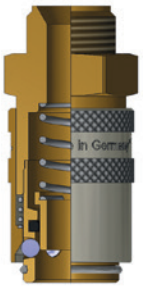
European plug profiles

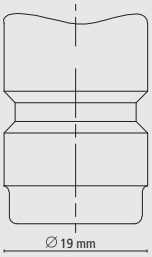
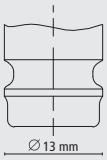
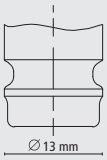
ESHMC Straight-Through Kv=0.21	ESHMC Single Kv=0.15	ESHMC Double Kv=0.14
ESHM ESHME ESHMT ESHMTE Straight-Through Kv=1.32	ESHM ESHME ESHMT ESHMTE Single Kv=0.72	ESHM ESHME ESHMT ESHMTE Double Kv=0.62
ESH ESHE ESHT ESHTE Straight-Through Kv=4.6	ESH ESHM ESHT ESHTE Single Kv=1.8	ESH ESHE ESHT ESHTE Double Kv=1.28
ESHG Straight-Through Kv=13.5	ESHG Single Kv=3.35	ESHG Double Kv=2.37

International plug profiles

ESDM ESDMF ESDMT Straight-Through Kv=1.54	ESDM ESDMF ESDMT Single Kv=0.81	ESDM ESDMF ESDMT Double Kv=0.66
ESD ESDF ESDT Straight-Through Kv=4.3	ESD ESDF ESDT Single Kv=1.69	ESD ESDF ESDT Double Kv=0.83

Quick Connect Couplings with European Plug Profiles

Series	ESHMC	ESHM	ESHMT	ESH	ESHT
	DN 2.7	DN 6	DN 6	DN 9	DN 9
Plug profile (original size)					
					
					
Materials:					
Body:	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain
Sleeve*:	Brass MS 58 (plain/n-pl.)	Brass MS 58 (plain/n-pl.)	hrsb (plain/nickel-plated)	Brass MS 58 (plain/ nickel-pl.)	hrsb (plain/nickel-plated)
Valve Body:	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain
Valve:	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain
Springs, Retaining Ring:	Stainless Steel 1.4310	Stainless Steel 1.4310	Stainless Steel 1.4310	Stainless Steel 1.4310	Stainless Steel 1.4310
Balls:	Stainless Steel 1.3541	Stainless Steel 1.4034	Stainless Steel 1.4034	Stainless Steel 1.4034	Stainless Steel 1.4034
Seals:	FKM (PTFE-coated)	FKM (PTFE-coated)	Special-Hitec-FKM-O-Ring	FKM (PTFE-coated)	Special-Hitec-FKM-O-Ring
Special seals for other media on request:	EPDM, FFKM	EPDM, FFKM	EPDM, FFKM	EPDM, FFKM	EPDM, FFKM
Plug:	Brass MS 58 (plain/n-pl.)	Brass MS 58 (plain/n-pl.)	Brass MS 58 (plain/n-pl.)	Brass MS 58 (plain/n-pl.)	Brass MS 58 (plain/n-pl.)
Max. Working Pressure:	PN 15 bar	PN 15 bar	PN 15 bar	PN 15 bar	PN 15 bar
Temperature:	-20°C– +200°C**	-20°C– +200°C**	-20°C– +200°C***	-20°C– +200°C**	-20°C– +200°C***
Thread Types:	DIN 13	ISO 228, DIN 13	ISO 228, DIN 13	ISO 228, DIN 13	ISO 228, DIN 13
Flow rate:	see chart p. 5	see chart p. 5	see chart p. 5	see chart p. 5	see chart p. 5
Connection:	straight/45°/90°	straight/45°/90°	straight/45°/90°	straight/45°/90°	straight/45°/90°
Type of Valve:	single/double/straight-through	single/double/straight-through	single/double/straight-through	single/double/straight-through	single/double/straight-through
Operation:	one-hand	one-hand	one-hand	one-hand	one-hand

ESHG DN 13	ESHME DN 6	NEW! Temp Secure by LUDECKE ESHMTE DN 6	ESHE DN 9	NEW! Temp Secure by LUDECKE ESHTE DN 9
				
				
				
Brass MS 58 plain Brass MS 58 (plain/n-pl.) Brass MS 58 plain Brass MS 58 plain Stainless Steel 1.4310 Stainless Steel 1.4034 FKM (PTFE-coated) EPDM, FFKM Brass MS 58 (plain/n-pl.) PN 15 bar -20°C– +200°C** ISO 228, DIN 13 see chart p. 5 straight/45°/90° single/double/straight-through one-hand	Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4310 Stainless Steel 1.4034 FKM (PTFE-coated) EPDM, FFKM Stainless Steel 1.4305 PN 15 bar -20°C– +200°C** ISO 228, DIN 13 see chart p. 5 straight/45°/90° single/double/straight-through one-hand	Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4310 Stainless Steel 1.4034 Special-Hitec-FKM-O-ring EPDM, FFKM Stainless Steel 1.4305 PN 15 bar -20°C– +200°C*** ISO 228, DIN 13 see chart p. 5 straight/45°/90° single/double/straight-through one-hand	Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4310 Stainless Steel 1.4034 FKM (PTFE-coated) EPDM, FFKM Stainless Steel 1.4305 PN 15 bar -20°C– +200°C*** ISO 228, DIN 13 see chart p. 5 straight/45°/90° single/double/straight-through one-hand	Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4305 Stainless Steel 1.4310 Stainless Steel 1.4034 Special-Hitec-FKM-O-ring EPDM, FFKM Stainless Steel 1.4305 PN 15 bar -20°C– +200°C*** ISO 228, DIN 13 see chart p. 5 straight/45°/90° single/double/straight-through one-hand

*coupling with valve: Brass plain, coupling without valve: Brass nickel-plated

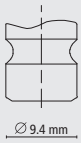
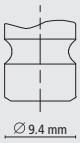
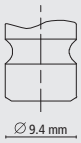
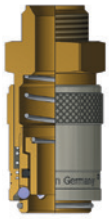
**subject to media (oil: 200°C, water: 150°C, air: 200°C)

***subject to media (oil: 200°C, water: 160°C, air: 200°C)

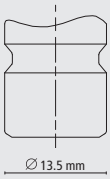
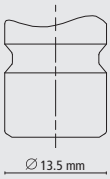
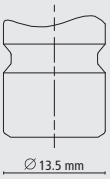
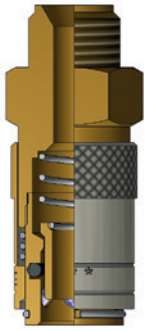
hrsb = high resistant special brass material

n-pl. = nickel-plated

Quick Connect Couplings with International Plug

	ESDM DN 6	ESDMT DN 6	ESDMF DN 6
Series		NEW!	
Plug profile (original size)			
			
			
Materials:			
Body:	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain
Sleeve*:	Brass MS 58 (plain/nickel-pl.)	hrsb (plain/nickel-plated)	Brass MS 58 (plain/ nickel-plated)
Valve Body:	Brass MS 58 plain	Brass MS 58 plain	Brass MS 58 plain
Valve:	Brass MS 58 plain	Brass MS 58 plain	Brass 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 (PTFE coated)	Special-Hitec-FKM-O-ring	FKM (flat sealing)
Special seals for other media on request:	EPDM, FFKM	EPDM, FFKM	-
Plug:	Brass MS 58 (plain/nickel-pl.)	Brass MS 58 (plain/nickel-pl.)	Brass MS 58 (plain/nickel-pl.)
Max. Working Pressure:	PN 15 bar	PN 15 bar	PN 15 bar
Temperature:	-20°C– +200°C**	-20°C– +200°C***	-20°C– +200°C**
Thread Types:	ISO 228, DIN 13	ISO 228, DIN 13	ISO 228, DIN 13
Flow rate:	see chart p. 5	see chart p. 5	see chart p. 5
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

Profiles

ESD DN 9	ESDT DN 9	ESDF DN 9
		
		
		
Brass MS 58 plain Brass MS 58 (plain/nickel-plated) Brass MS 58 plain Brass MS 58 plain Stainless steel 1.4310 Stainless steel 1.4034 FKM (PTFE coated) EPDM, FFKM Brass MS 58 (plain/nickel-pl.) PN 15 bar -20°C– +200°C** ISO 228, DIN 13 see chart p. 5 straight/45°/90° single/double/straight-through one-hand	Brass MS 58 plain hrsb (plain/nickel-plated) Brass MS 58 plain Brass MS 58 plain Stainless steel 1.4310 Stainless steel 1.4034 Special-Hitec-FKM-O-ring EPDM, FFKM Brass MS 58 (plain/nickel-pl.) PN 15 bar -20°C– +200°C*** ISO 228, DIN 13 see chart p. 5 straight/45°/90° single/double/straight-through one-hand	Brass MS 58 plain Brass MS 58 (plain/nickel-plated) Brass MS 58 plain Brass MS 58 plain Stainless steel 1.4310 Stainless steel 1.4034 FKM (flat sealing) - Brass MS 58 (plain/nickel-pl.) PN 15 bar -20°C– +200°C** ISO 228, DIN 13 see chart p. 5 straight/45°/90° single/double/straight-through two-hands

*coupling with valve: Brass MS plain, coupling without valve: Brass MS nickel-plated

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

***subject to media (oil: 200°C, water: 160°C, air: 200°C)

hrsb = High Resistant Special Brass

n-pl. = nickel-plated

Original STÄUBLI RPL Series

The Original STÄUBLI RPL Series is perfectly suitable for cold or hot water circuits for the temperature regulation in moulds on injection presses. They are offered in different sizes, connection types and with different coloured rings.

Series	RPL 06	RPL 08	RPL 12
			
Materials:			
Body:	Brass nickel-plated	Brass nickel-plated	Brass nickel-plated
Sleeve:	Brass nickel-plated	Brass nickel-plated	Brass nickel-plated
Valve body:	Brass nickel-plated	Brass nickel-plated	Brass nickel-plated
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:	Nitril (NBR)	Nitril (NBR)	Nitril (NBR)
Socket:	Brass nickel-plated	Brass nickel-plated	Brass nickel-plated
Max. Working Pressure:	PN 10 bar	PN 10 bar	PN 10 bar
Temperature:	-15°C– +90°C	-15°C– +90°C	-15°C– +90°C
Thread Types:	DIN 2999, ISO 228, DIN 13	DIN 2999, ISO 228, DIN 13	DIN 2999, ISO 228, DIN 13
Connection:	straight	straight/45°/90°	straight/45°/90°
Type of Valve:	straight-through	straight-through	straight-through
Operation:	one-hand	one-hand	one-hand

Accessories for Original Stäubli Quick Connect Couplings:

- Replacement nitril seals for plugs
- Colour identification collar for hose
- Protective dust cap for socket

Temperature Regulation Accessories

Manifolds for Temperature Regulation Lines

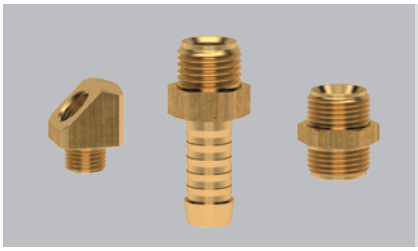
The **LÜDECKE** manifolds made of aluminium or stainless steel enable a clearly arranged composition of temperature regulation lines, which increases the working and production safety. The manifold guarantees a central in flow and out flow to the temperature regulation tool and saves energy and hose lines.

- Manifolds made of Aluminium
- Manifolds made of Stainless Steel

SoftFlow Material Conveying Quick Connect Couplings

The **LÜDECKE** SoftFlow Material Conveying Quick Connect Couplings are a high quality quick coupling system for pressure or vacuum-conveying of bulk material or liquids (e.g. for vacuum-conveying of granulate material in the plastics industry).
The SoftFlow products are easy to handle because of the quick coupling principle with ball shut-off and light weight. Due to the use of stainless steel for the coupling body, they are characterized by less abrasion.

Screwings and Components



LÜDECKE offers an extensive range of connecting fittings made of brass.

- Connection tubes
- Hose stems
- Connection nipples

Hose Clamps, Hose Clips and Ferrules

For hose assembly of fittings, different assembly methods from strong clamps to light clips or ferrules can be used subject to application, media, pressure or hose material. Selection criteria are: safety of the assembly, solvability, quickness, necessary devices, as well as cleanliness, or injury risk free.

- Double-Ear Hose Clips
- High Performance Hose Clips made of steel or stainless steel
- Ferrules for Low Pressure Hose Lines
- Hand-operated Assembly Machine

LÜDECKE

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Since 1930. The perfect connection.

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