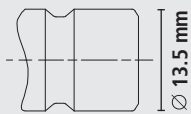


# Temperature Regulation Quick Connect Couplings

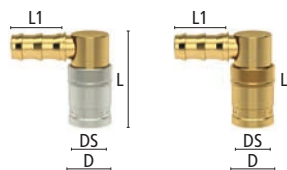
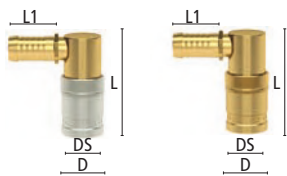
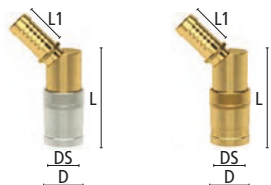
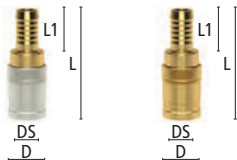
## Series ESDF Plug size 13.5 mm

### 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)!

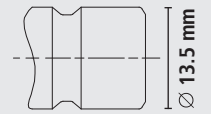
\*subject to media (oil: 200°C, water: 150°C, air: 200°C)

# Temperature Regulation Quick Connect Couplings

Plug size 13.5 mm **Series ESDF**

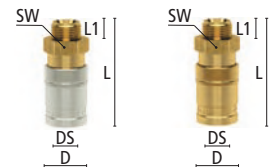
**DN 9**

Plug Profile (original size)



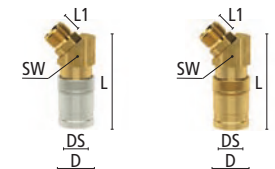
## Couplings with straight male thread without/with valve (inner cone DIN 3863)

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



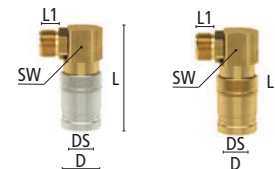
## Couplings with 45° male thread without/with valve (inner cone DIN 3863)

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



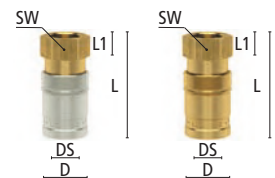
## Couplings with 90° male thread without/with valve (inner cone DIN 3863)

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



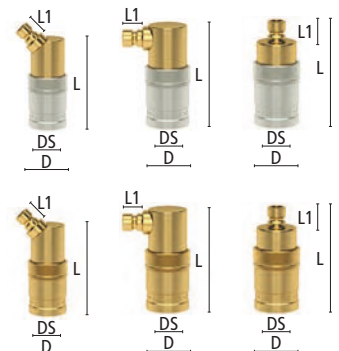
## Couplings with straight female thread without/with valve

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

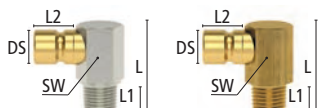
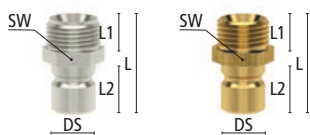
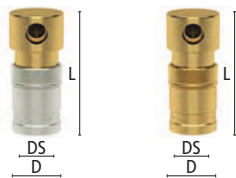
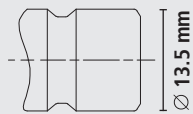


# Temperature Regulation Quick Connect Couplings

**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*

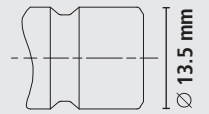
\*Plugs with inch thread nickel-plated for simple distinction

# Temperature Regulation Quick Connect Couplings

Plug size 13.5 mm **Series ESDF**

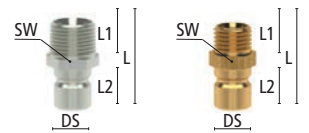
**DN 9**

Plug Profile (original size)



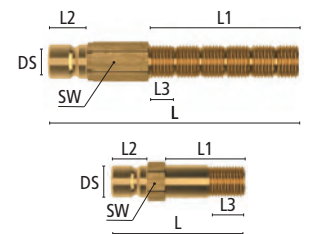
## Plugs with straight male thread with valve

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



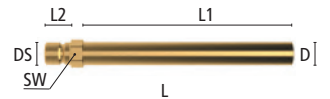
## Plugs with straight male long thread without valve (for length cutting as needed)

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)

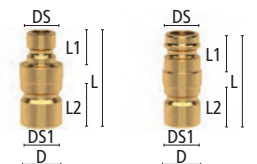
D	L	SW	L1	L2	DS	Passage	Weight	Type No.
14	150	15	127	15.5	13.5	9	114	ESD 150 R
14	300	15	277	15.5	13.5	9	230	ESD 300 R
14	450	15	427	15.5	13.5	9	344	ESD 450 R



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.