

# 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	22	25	13	7	72	ESH 9 TL	ESH 9 TLAB
Hose i.D. 13	61.5	22	25	13	9	81		ESH 13 TLAB
Hose i.D. 13	61.5	22	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	22	28	13	7	76	ESH 10 T	ESH 10 TAB
Hose i.D. 13	64.5	22	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	22	30	13	7	103	ESH 9 TL-45	ESH 9 TL-45AB
Hose i.D. 13	51	22	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	22	33	13	7	108	ESH 10 T-45	ESH 10 T-45AB
Hose i.D. 13	51	22	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	22	30	13	7	105	ESH 9 TL-90	ESH 9 TL-90AB
Hose i.D. 13	51	22	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	22	33	13	7	110	ESH 10 T-90	ESH 10 T-90AB
Hose i.D. 13	51	22	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

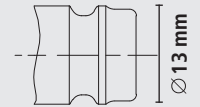
Suitable hose clips, double-ear hose clips or crimping ferrules for standard hoses (© page 194 - 197)

**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)

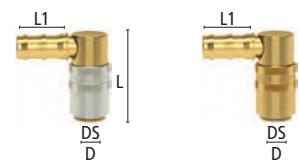
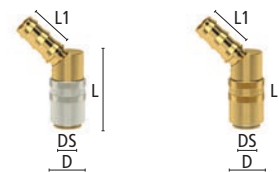
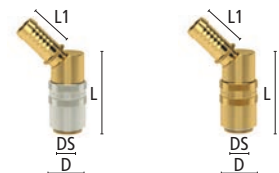
**DN 9**

Plug Profile (original size)



Also in Stainless Steel  
Series ESHE  
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European  
Plug Profile

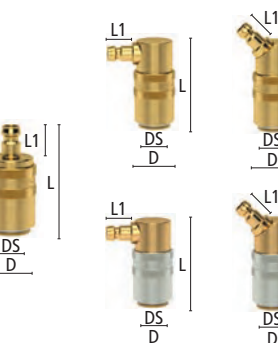
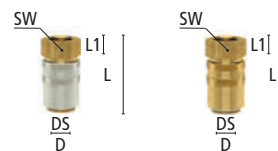
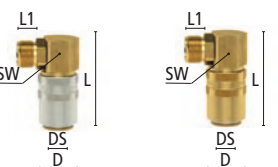
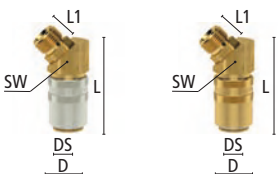
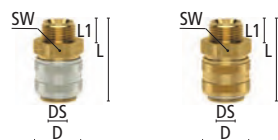
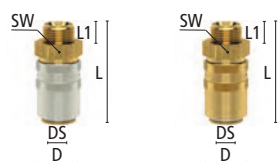
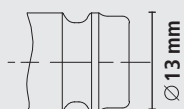


# Temperature Regulation Quick Connect Couplings

**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	22	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	22	14	13	6	straight	100	ESHK-ESHMS	ESHK-ESHMS-AB
DN 9 - DN 6	51	22	14	13	6	45°	100	ESHK-ESHMS-45	ESHK-ESHMS-45AB
DN 9 - DN 6	51	22	14	13	6	90°	100	ESHK-ESHMS-90	ESHK-ESHMS-90AB
DN 9 - DN 6	51	22	10.5	13	6	straight	85	ESHK-ESDMS	ESHK-ESDMS-AB
DN 9 - DN 9	51	22	15.5	13	9	straight	100	ESHK-ESDS	ESHK-ESDS-AB

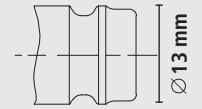
\*Version AL with longer male thread mainly used for assembly with Ermeto fittings.

# 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	22	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	22	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



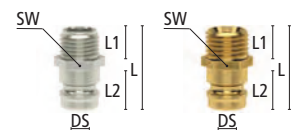
## Plugs with straight quick-fit hose stem without valve

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



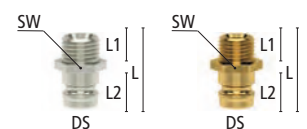
## Plugs with straight male thread without valve (inner cone DIN 3863)

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

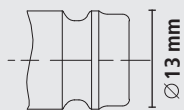
\*Plugs with inch thread nickel-plated for simple distinction

# 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