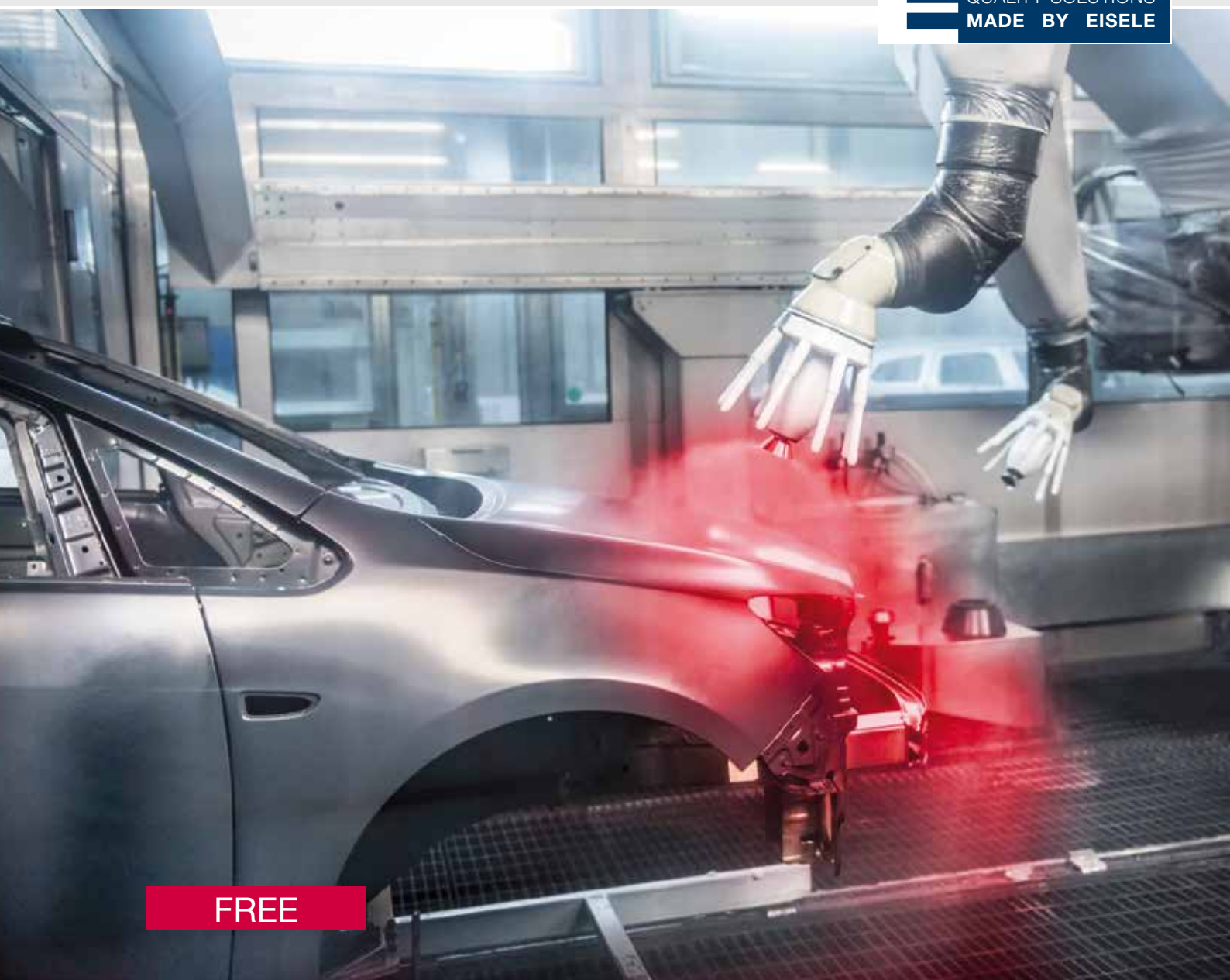


# Eisele

## EISELE **FREE**LINE PROGRAM CONNECTIONS FOR PAINT HOSES

QUALITY SOLUTIONS  
MADE BY EISELE



FREE

## EISELE CONNECTIONSOLUTIONS ESPECIALLY FOR PAINT HOSES

Painting applications require thorough rinsing of the lines when the colour is changed. The cleaning process must be simple and yet extremely reliable. Absolute purity is important, since even minimal residue can result in mixing and therefore corruption of the colour hues or inhomogeneity. However, paints are manufactured so that they adhere well to surfaces and flow evenly into every gap, in order to create a permanent surface seal. In corners, edges and dead zones of conventional hoses and pipes, this often causes problems and downtimes during cleaning. Eisele connections for paint hoses are the ideal solution.



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### SERIES 1600



#### Threaded connections for elimination of dead zones

Originally developed as an exclusive customer solution, the advanced high-quality connections of the 1600 series are now available to the entire painting industry for the first time. Their design allows safe and reliable internal cleaning of the hoses and pipes before changing media. They are manufactured from stainless steel 1.4301/1.4307 and the collet for secure holding of the hose is made of brass nickel-plated. As a threaded plug-in fitting with a hose they offer a maintenance-friendly, easy-to-assemble and flexible alternative to classic pipework and are just as easy to clean.

Thanks to the design, which eliminates dead zones, it is not necessary to disassemble systems for cleaning. The high-quality stainless steel connections are also a good choice from the point of view of economy and ecology, due to minimised product loss, longer component life and the fact that they are fully recyclable.


### SERIES 3800



#### Premium joint-free threaded connections

Joint-free connections require no hose modification, which allows even faster assembly of the low dead zone connections of the 3800 series. The low-gap connections provide a high-quality solution for applications that do not have to fulfil the most stringent requirements.

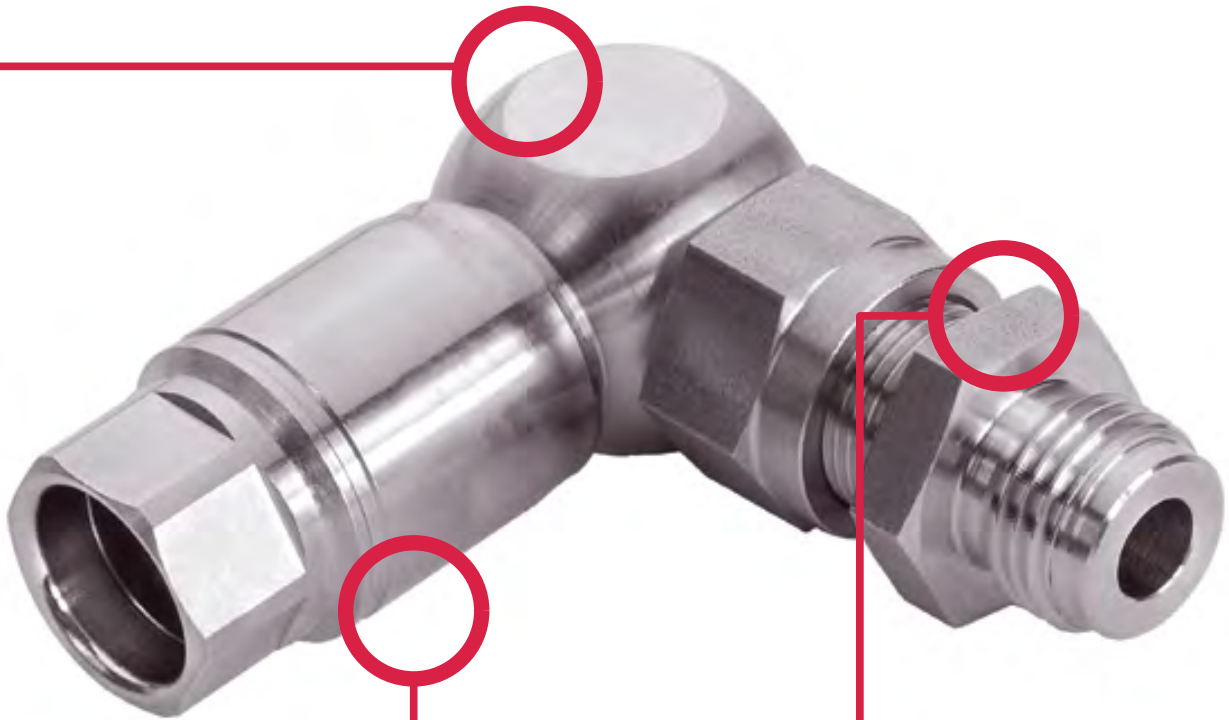
The connections are size- and weight-optimised, which makes them ideal for locations with limited installation space and where acceleration and movement take place.

Content overview		Page	Series
EISELE FREELINE	 <p><b>Connectors for connections without dead spaces</b></p> <p>The established solution for applications without dead spaces</p>	5	1600
	 <p><b>Comfort screw-in connectors for connections w/o gaps</b></p> <p>Fittings made of stainless steel 1.4404</p>	15	3800
	 <p><b>Accessoires for the Eisele FREELINE</b></p> <p>Ideal supplement to the Eisele FREELINE connections</p>	21	ACC
	 <p><b>Plastic hoses</b></p> <p>PA, PTFE, FEP and PFA</p>	23	99
	<b>Article number index</b>	29	
	<b>General terms and conditions</b>	30	



## Connectors for connections without dead spaces

1600



Patent-registered and  
innovativ

- For applications without dead spaces, where no accumulation of the system is allowed

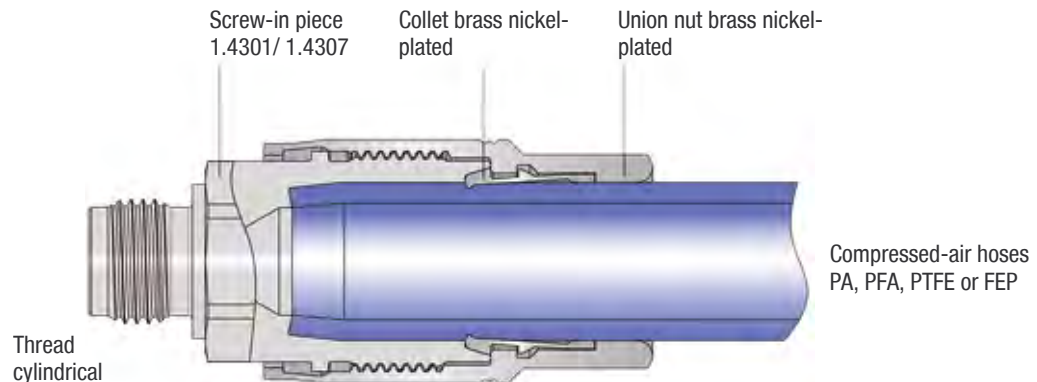
Flexible and  
safe in handling

- With the combined plug-screw-mounting the hose-fitting connection could be mounted by only one rotation of the union nut
- Unintentional opening of the union nut is not possible

Versatile and  
quick applicable

- Quick, economic assembly and disassembly; low system costs
- Hose conditioning possible on-site. Hoses don't have to be pre-fabricated

## Functional principle



### Advantages

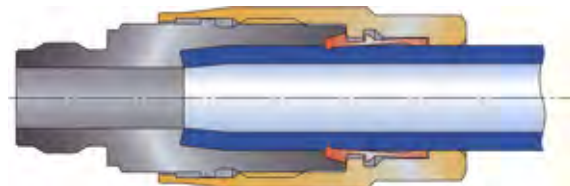
- Patent-registered solution without dead spaces
- No gaps for accumulation
- Internal sterilization possible
- Simple internal cleaning
- Quick changes of the medium possible
- Simple and safe sealing concept
- No necessity of an additional sealing, no compatibility problems
- well-engineered connection system
- small sizes available

### additional options

- Complete stainless-steel version for corrosive areas
- Other materials
- Thread designs to your requirements (on request)
- Integrated valves, e.g. with check valve or throttle function
- Patent registered colour coding



Hose disconnected



Hose connected

## Service conditions

- Working pressure range: 0 to 25 bar
- Temperature range: 0 to + 80°C no gaps where accumulation is possible
- Full through flow
- Material with media contact: 1.4301/ 1.4307
- Suitable for hoses made of PA, PTFE and FEP; other materials on request
- Simple and safe sealing concept
- No necessity of an additional sealing, no compatibility problems
- Well-engineered connection system
- Small sizes available



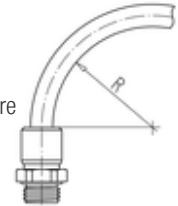
## Hoses

Hose dimension		PA		PTFE		FEP		PFA	
Outside-Ø	Inside-Ø	Temperature range -60 to +100°C		Temperature range -190 to +260°C		Temperature range -35 to +120°C		Temperature range -20 to +150°C	
		R min.	Burst pressure (20°C)	R min.	Burst pressure (20°C)	R min.	Burst pressure (20°C)	R min.	Burst pressure (20°C)
5 (+0,1/-0,1)	3	25	112 bar	25	60 bar	35	52 bar	-	-
6 (+0,1/-0,1)	4	30	89 bar	35	48 bar	40	40 bar	12	60 bar
9 (+0,1/-0,1)	6	45	89 bar	55	48 bar	-	-	-	-
12 (+0,15/-0,1)	9	60	63 bar	100	40 bar	-	-	29	50 bar

The mounted hoses are not to be exposed to tensile loading.

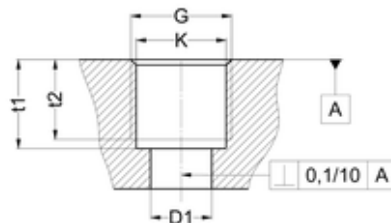
Important notes for the use of hoses made of PA, PFA, PTFE and FEP:

- The outside diameter of hoses must be free of grooves and other damages (e.g. damage from installation tools).
- Prior to assembly, use the Eisele hose cutter Art. No. 99605-0014 or Art. No. 99606-0022 to cut hoses at a right angle. Ensure that hoses are not being deformed or damaged during the cutting process.
- Afterwards the hose must be finished regarding the Eisele mounting instruction.



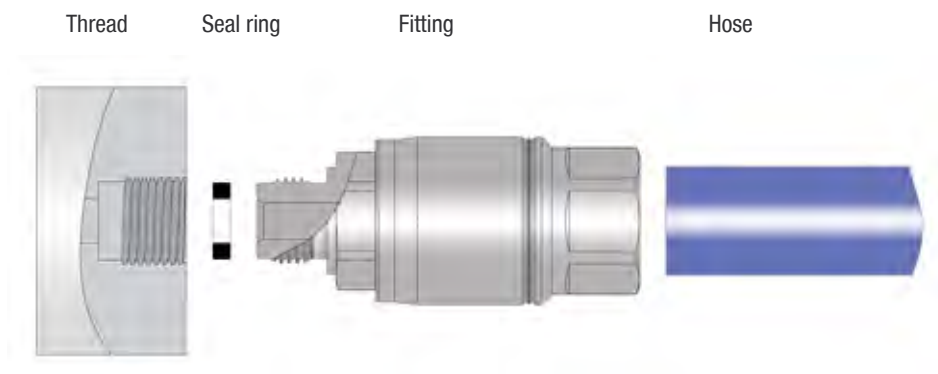
## Connection thread

Thread	Core hole-Ø K (mm)	Thread counterbore		ØD1 (mm)	Torque max. (Nm)	Seal ring	Thread standards
		t1 min. (mm)	t2 min. (mm)				
G1/8	8,7 (±0,1)	9,7 (+0,1)	8,5 (+0,5)	5	12	3615-02	Pipe thread G: DIN ISO 228
G1/4	11,75 (±0,1)	11,7 (+0,1)	10,5 (+0,5)	8	12	3615-04	
G3/8	15,2 (±0,1)	13,7 (+0,1)	12 (+0,5)	10	12	3615-06	



## Handling

Assembly regarding Eisele mounting instruction



## Assembly instructions

Designation	Article number
Screw-in plugconnector	1628-XXXXXX
Elbow-screw-in plugconnector, lockable	1661-XXXXXX
Elbow-screw-in plugconnector 45°, lockable	1663-XXXXXX
L-screw-in plugconnector, lockable	1658-XXXXXX
T-screw-in plugconnector, lockable	1662-XXXXXX
Y-screw-in plugconnector, lockable	1619-XXXXXX
Bulkhead-plugconnector, hose/hose, two-piece	1680-XXXXXX
Bulkhead-plugconnector, hose/pipe	1694-XXXXXX
Elbow-bulkhead plugconnector, hose/hose, two-piece	1614-XXXXXX
Elbow-bulkhead plugconnector, hose/pipe, two-piece	1615-XXXXXX and 1616-XXXXXX

### 1. Screw in threaded plug-in connection

Remove the plug from the threaded connection, if necessary.

Check whether the seal ring (inner-sealing) is inserted.

The threads can be coated with Loctite 542 all the way around to prevent damage to the threads and to increase the torque (counter-clockwise rotation/loosening of hose).

Screw in the plug-in connection using a strengthened 4 mm Allen key or corresponding open-end spanner insert and tighten to 12 Nm. Watch out for the direction of the arrow on the torque wrench.

### 2. Mounting of the bulkhead and angled bulkhead plug-in connections

Unscrew one connection side (size 17, 19 or 22). Unscrew hexagon (size 17 or 22). Insert threaded bolt in bulkhead plate hole. Screw on hexagon nut and tighten firmly, while counter-holding with a wrench. Screw in connection side and tighten cap nut to 25 Nm, while counter-holding with a wrench.

### 3. Preparation of the hose for mounting

Cut hose to length using hose cutter 99606-0022. Fasten a suitable hose processing tool (e.g. for hose 5/3 – WZ660-03) in a drill or cordless screwdriver. Use a rotating hose processing tool, applying slight pressure, to remove material from hose end to produce a clean face area perpendicular to the hose axis (use a speed of about 300 rpm).

Remove hose processing tool and visually check hose for impurities and blow out, if necessary. Take into account that the hose length will be shortened during this process.

### 4. Marking the insertion depth

Push the processed hose end all the way into the matching sleeve for hose marking (e.g. for hose 5/3 – WZ688-05). Mark the insertion depth on the hose using a felt-tipped pen.

The insertion depth does not always have to be marked. It is used to get a feel for the required hose insertion depth during final assembly.

### 5. Mounting the hose

Loosen the threaded sleeve on the hose connection  $\frac{3}{4}$  of a revolution until you feel the stop. Insert hose past the pressure point firmly onto the base of the hose connection. The front face must be pushed all the way to the stop, since the end serves as the sealing surface. Watch out for the insertion depth, if applicable.

Tighten threaded sleeve using a suitable socket wrench or box-end wrench insert with a torque wrench to 8 Nm.

### 6. Removing the hose

Use a suitable socket wrench, box-end wrench insert or box-end wrench to loosen the threaded sleeve  $\frac{3}{4}$  of a revolution (counter-clockwise) until you feel the stop. Use an open-end wrench to counter-hold the hose connection, if necessary.

Pull out the hose.

**Important:** A hose end that was already connected cannot be reconnected! The hose must be processed again!



7. Replacement of the plug-in connection

Remove hose (see no. 5).  
Unscrew the plug-in connection.  
Eliminate any impurities.  
Insert new seal ring (inner-sealing).  
Hose must be re-processed (see no. 3).  
Continue assembly (see no. 4 and 5).

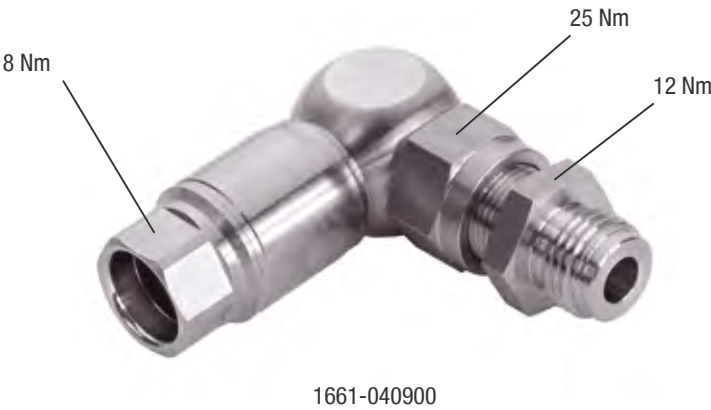
8. Tightening torque of cap nut

For all two-part plug-in connections, such as

Designation	Article number
Elbow-screw-in plugconnector, lockable	1661-XXXXXX
Elbow-screw-in plugconnector 45°, lockable	1663-XXXXXX
L-screw-in plugconnector, lockable	1658-XXXXXX
T-screw-in plugconnector, lockable	1662-XXXXXX
Y-screw-in plugconnector, lockable	1619-XXXXXX
Bulkhead-plugconnector, hose/hose, two-piece	1680-XXXXXX
Elbow-bulkhead plugconnector, hose/hose, two-piece	1614-XXXXXX
Elbow-bulkhead plugconnector, hose/pipe, two-piece	1615-XXXXXX and 1616-XXXXXX

the cap nut size 17 must be tightened to 25 Nm.

**Example of the torques on a connection for a hose 12/9:**



## Threaded connectors

starting on page 11



Straight threaded connectors

page 11



Angled threaded connectors

page 11



T connectors

page 12



Y connectors

page 12



Bulkhead connectors

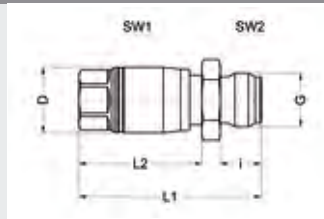
page 13

## Accessories

starting on page 22

## Screw-in plugconnector

- Whitworth pipe thread
- Frame components with media contact:  
Material stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar

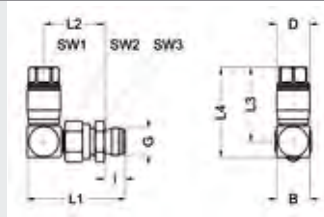


1600

Part no.	G	for hose	SW1	SW2	i	L1	L2	D	NW	g/piece
1628-020300	G1/8	OD5 (5/3)	11	14	8	38	ca. 23,5	12,4	2,3	27
1628-020400	G1/8	OD6 (6/4)	11	14	8	38	ca. 23,5	12,9	3,3	25
1628-020600	G1/8	OD 9 (9/6)	13	12	8	40	ca. 27	15,9	4,2	31
1628-020900	G1/8	OD12 (12/9)	15	14	8	44	ca. 30	18,8	4,2	40
1628-040300	G1/4	OD5 (5/3)	11	17	10	39,5	ca. 25	12,4	2,3	32
1628-040400	G1/4	OD6 (6/4)	11	17	10	39,5	ca. 25	12,9	3,3	32
1628-040600	G1/4	OD 9 (9/6)	13	17	10	44,5	ca. 30	15,9	5,2	41
1628-040900	G1/4	OD12 (12/9)	15	17	10	47,5	ca. 33	18,8	6	49
1628-060600	G3/8	OD 9 (9/6)	13	19	12	47	ca. 30	15,9	5,2	53
1628-060900	G3/8	OD12 (12/9)	15	19	12	50	ca. 33	18,8	8,2	57

## Elbow-screw-in plugconnector, lockable

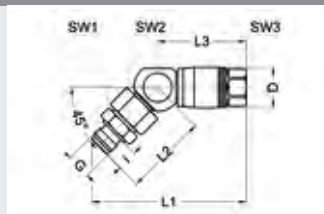
- Whitworth pipe thread
- Frame components with media contact:  
Material stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar



Part no.	G	for hose	SW1	SW2	i	L1	L2	B	D	NW	g/piece
1661-020400	G1/8	OD6 (6/4)	11	15	8	41,1	25,6	14	12,9	3,3	60
1661-020600	G1/8	OD 9 (9/6)	13	15	8	42,5	26,5	16	15,9	5	74
1661-020900	G1/8	OD12 (12/9)	15	15	8	43,4	26,5	17	18,8	5	83
1661-040400	G1/4	OD6 (6/4)	11	17	10	45,8	28,3	14	12,9	5,2	66
1661-040600	G1/4	OD 9 (9/6)	13	17	10	47,2	29,2	16	15,9	5,2	80
1661-040900	G1/4	OD12 (12/9)	15	17	10	48	29,5	17	18,8	5,2	89
1661-060600	G3/8	OD 9 (9/6)	13	17	12	49,7	29,7	16	15,9	5,2	90
1661-060900	G3/8	OD12 (12/9)	15	17	12	50,6	30,1	17	18,8	5,2	99

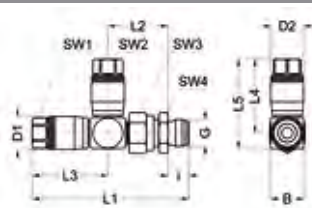
## Elbow-screw-in plugconnector 45°, lockable

- Whitworth pipe thread
- Frame components with media contact:  
Material stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar



Part no.	G	for hose	SW1	SW2	i	L1	L2	D	NW	g/piece
1663-020400	G1/8	OD6 (6/4)	14	15	8	58,5	32,5	12,9	5	56
1663-020600	G1/8	OD 9 (9/6)	14	15	8	63	33	15,9	5	67
1663-020900	G1/8	OD12 (12/9)	14	15	8	64	33	18,8	5	44

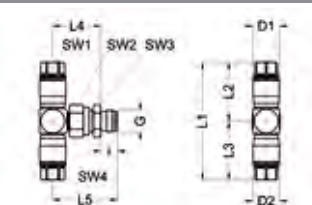
## L-screw-in plugconnector, lockable



- Whitworth pipe thread
- Frame components with media contact:  
Material stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar

Part no.	G	for hose A	for hose B	SW1	SW2	i	L1	L2	L3	L4	L5	D1	D2	B	NW	g/piece
1658-020606	G1/8	OD 9 (9/6)	OD 9 (9/6)	13	13	8	74,9	30,2	36,7	35,5	43	15,9	15,9	16	4,2	106
1658-020609	G1/8	OD 9 (9/6)	OD12 (12/9)	15	13	8	77,9	30,2	39,7	35,5	43	15,9	18,8	16	5	113
1658-020909	G1/8	OD12 (12/9)	OD12 (12/9)	15	15	8	78,7	30,6	40,1	38,5	46	18,8	18,8	17	5	122
1658-040606	G1/4	OD 9 (9/6)	OD 9 (9/6)	13	13	10	75,9	29,2	36,7	35,5	43	15,9	15,9	16	4,2	112
1658-040609	G1/4	OD 9 (9/6)	OD12 (12/9)	15	13	10	78,9	29,2	39,7	35,5	43	15,9	18,8	16	5,2	119
1658-040909	G1/4	OD12 (12/9)	OD12 (12/9)	15	15	10	79,7	29,6	40,1	38,5	46	18,8	18,8	17	5,2	128

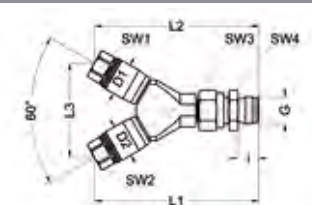
## T-screw-in plugconnector, lockable



- Whitworth pipe thread
- Frame components with media contact:  
Material stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar

Part no.	G	for hose A	for hose B	SW1	SW2	SW3	SW4	i	L1	L2	L3	L4	L5	D1	D2	NW	g/piece
1662-020606	G1/8	OD 9 (9/6)	OD 9 (9/6)	13	17	14	13	8	71	35,5	35,5	30,2	38,2	15,9	15,9	5	105
1662-020609	G1/8	OD 9 (9/6)	OD12 (12/9)	13	17	14	15	8	74	35,5	38,5	29,6	37,6	15,9	18,8	5	115
1662-020909	G1/8	OD12 (12/9)	OD12 (12/9)	15	17	14	15	8	77	38,5	38,5	30,6	38,6	18,8	18,8	5	122
1662-040606	G1/4	OD 9 (9/6)	OD 9 (9/6)	13	17	17	13	10	71	35,5	35,5	29,2	39,2	15,9	15,9	5,2	111
1662-040609	G1/4	OD 9 (9/6)	OD12 (12/9)	13	17	17	15	10	74	35,5	38,5	29,6	39,6	15,9	18,8	5,2	121
1662-040909	G1/4	OD12 (12/9)	OD12 (12/9)	15	17	17	15	10	77	38,5	38,5	29,6	39,6	18,8	18,8	5,2	128

## Y-screw-in plugconnector, lockable

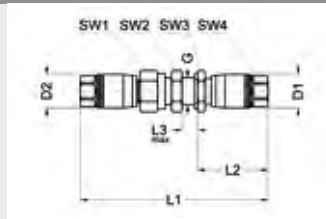


- Whitworth pipe thread
- Frame components with media contact:  
Material stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar

Part no.	G	for hose A	for hose B	SW1	SW2	SW3	SW4	i	L1	L2	L3	D1	D2	NW	g/piece
1619-020606	G1/8	OD 9 (9/6)	OD 9 (9/6)	13	13	17	14	8	79	79	45,5	15,9	15,9	5	135
1619-020609	G1/8	OD 9 (9/6)	OD12 (12/9)	15	13	17	14	8	81,5	79	47	18,8	15,9	5	126
1619-020909	G1/8	OD12 (12/9)	OD12 (12/9)	15	15	17	14	8	81,5	81,5	48,5	18,8	18,8	5	148
1619-040606	G1/4	OD 9 (9/6)	OD 9 (9/6)	13	13	17	17	10	80	80	45,5	15,9	15,9	5,2	141
1619-040609	G1/4	OD 9 (9/6)	OD12 (12/9)	15	13	17	17	10	82,5	80	47	18,8	15,9	5,2	148
1619-040909	G1/4	OD12 (12/9)	OD12 (12/9)	15	15	17	17	10	82,5	82,5	48,5	18,8	18,8	5,2	148
1619-060606	G3/8	OD 9 (9/6)	OD 9 (9/6)	13	13	17	19	12	82,5	82,5	45,5	15,9	15,9	5,2	151
1619-060609	G3/8	OD 9 (9/6)	OD12 (12/9)	15	13	17	19	12	85	82,5	47	18,8	15,9	5,2	158
1619-060909	G3/8	OD12 (12/9)	OD12 (12/9)	15	15	17	19	12	85	85	48,5	18,8	18,8	5,2	164

## Bulkhead-plugconnector, hose/hose, two-piece

- Frame components with media contact:  
Material: Stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material: Brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar

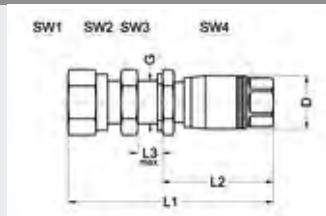


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Part no.	for hose A	for hose B	SW1	SW2	SW3	SW4	L1	L2	L3 max.	G	D1	D2	NW	g/piece
1680-000404	OD6 (6/4)	OD6 (6/4)	17	17	17	11	79,5	30	6	M13x1	12,9	12,9	3,3	80
1680-000406	OD6 (6/4)	OD 9 (9/6)	17	17	17	13	84,5	35	6	M13x1	12,9	15,9	3,3	89
1680-000606	OD 9 (9/6)	OD 9 (9/6)	17	17	17	13	89,5	35	6	M13x1	15,9	15,9	5,2	96
1680-000609	OD 9 (9/6)	OD12 (12/9)	17	17	17	15	92,5	38	6	M13x1	15,9	18,8	5,2	104
1680-000909	OD12 (12/9)	OD12 (12/9)	19	17	17	15	96	38	6	M13x1	18,8	18,8	6,8	114

## Bulkhead-plugconnector, hose/pipe

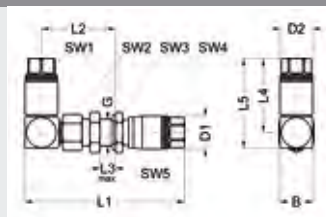
- Frame components with media contact:  
Material: Stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material: Brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar



Part no.	for hose A	for pipe B	SW1	SW2	SW3	SW4	L1	L2	L3 max.	G	D	NW	g/piece
1694-000404	OD6 (6/4)	6	14	17	17	11	59,5	ca. 30	6	M13x1	12,9	3,3	60
1694-000607	OD 9 (9/6)	9	17	17	17	13	63	ca. 35	6	M13x1	15,9	5,2	67
1694-000907	OD12 (12/9)	9	17	17	19	15	66,5	ca. 38	6	M13x1	18,8	7	116
1694-000609	OD 9 (9/6)	12	22	22	22	13	67	ca. 37,5	6	M18x1,5	15,9	5,2	77
1694-000909	OD12 (12/9)	12	22	22	22	15	70	ca. 39	6	M18x1,5	18,8	8,2	119

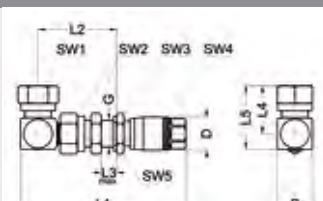
## Elbow-bulkhead plugconnector, hose/hose, two-piece

- Frame components with media contact:  
Material: Stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material: Brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar



Part no.	for hose A	for hose B	SW1	SW2	SW3	SW4	L1	L2	L3 max.	L4	L5	G	D1	D2	B	NW	g/piece
1614-000606	OD 9 (9/6)	OD 9 (9/6)	13	17	17	13	79,2	36,2	6	35,5	43	M13x1	15,9	15,9	16	5	117
1614-000609	OD 9 (9/6)	OD12 (12/9)	13	17	19	15	82,2	36,2	6	35,5	43	M13x1	18,8	15,9	16	5	125
1614-000906	OD12 (12/9)	OD 9 (9/6)	15	17	17	13	80,1	36,6	6	38,5	46	M13x1	15,9	18,8	17	5,2	126
1614-000909	OD12 (12/9)	OD12 (12/9)	15	17	19	15	83,1	36,6	6	38,5	46	M13x1	18,8	18,8	17	5,2	134

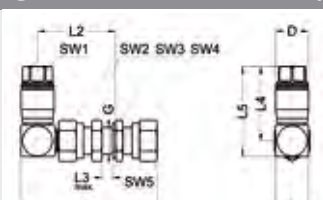
## Elbow-bulkhead plugconnector, hose/pipe, two-piece



- Frame components with media contact:  
Material: Stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material: Brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar

Part no.	for hose A	for pipe B	SW1	SW2	SW3	SW4	L1	L2	L3	L4	L5	G	D	B	NW	g/piece
									max.							
1615-000607	OD 9 (9/6)	9	17	17	17	13	80,1	36,6	6	23	30,5	M13x1	15,9	17	5,2	119
1615-000609	OD 9 (9/6)	12	22	17	17	13	81,1	36,6	6	30,5	38	M13x1	15,9	19	5,2	149
1615-000907	OD12 (12/9)	9	17	17	19	15	83,1	36,6	6	23	30,5	M13x1	18,8	17	5,2	127
1615-000909	OD12 (12/9)	12	22	17	19	15	84,1	36,6	6	30,5	38	M13x1	18,8	19	5,2	157

## Elbow-bulkhead plugconnector, hose/pipe, two-piece



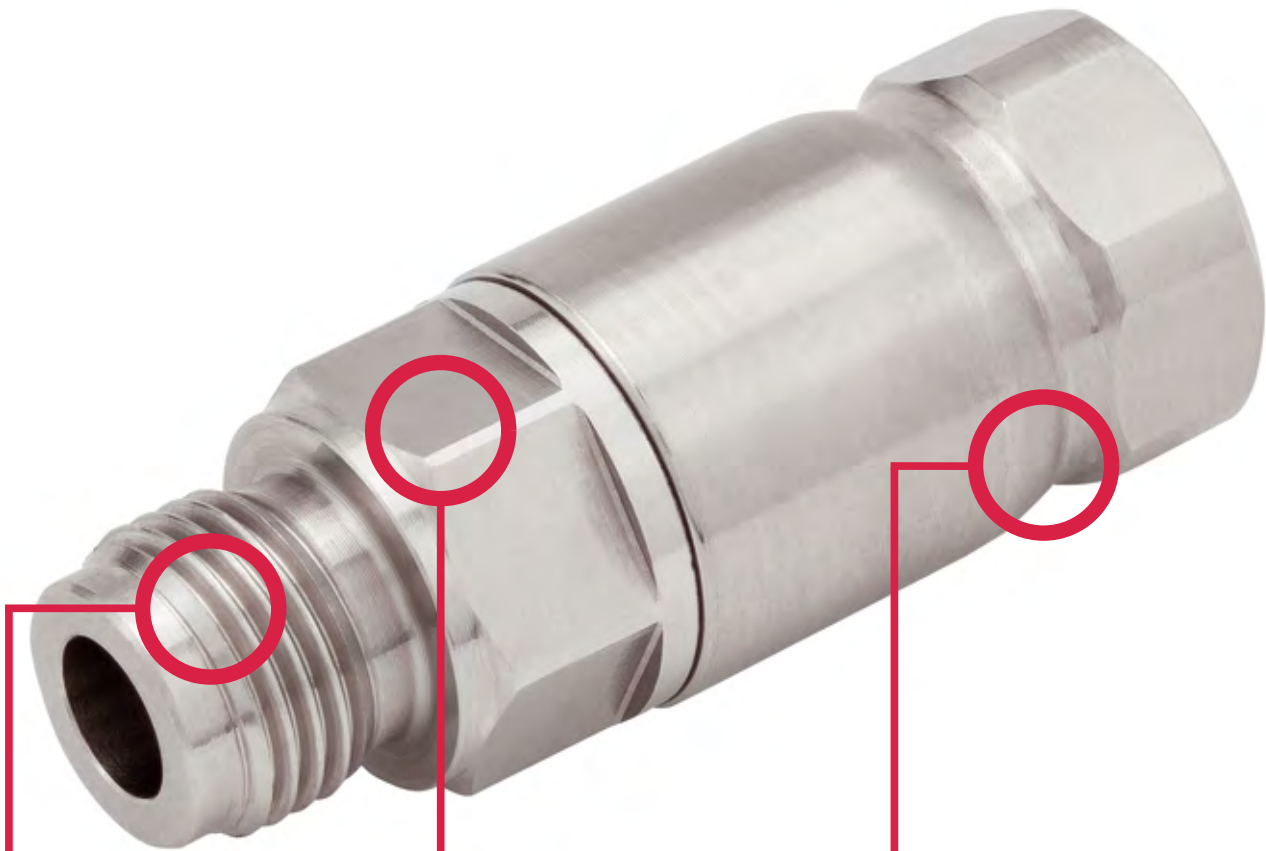
- Frame components with media contact:  
Material: Stainless steel 1.4301/1.4307
- Frame components without media contact:  
Material: Brass chemically nickel-plated
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar

Part no.	for hose A	for pipe B	SW1	SW2	SW3	SW4	L1	L2	L3	L4	L5	G	D	B	NW	g/piece
									max.							
1616-000607	OD 9 (9/6)	9	13	17	17	17	66	36,2	6	35,5	43	M13x1	15,9	16	5,2	113
1616-000609	OD 9 (9/6)	12	13	17	22	22	70	36,2	6	35,5	43	M13x1	15,9	16	5,2	144
1616-000907	OD12 (12/9)	9	15	17	17	17	67	36,6	6	38,5	46	M13x1	18,8	17	5,2	123
1616-000909	OD12 (12/9)	12	15	17	22	22	70,9	36,6	6	38,5	46	M13x1	18,8	17	5,2	154



## Comfort screw-in connectors for connections without gaps

3800



Patent-registered and  
innovativ

- For applications without dead spaces, where hardly none accumulation of the system is allowed

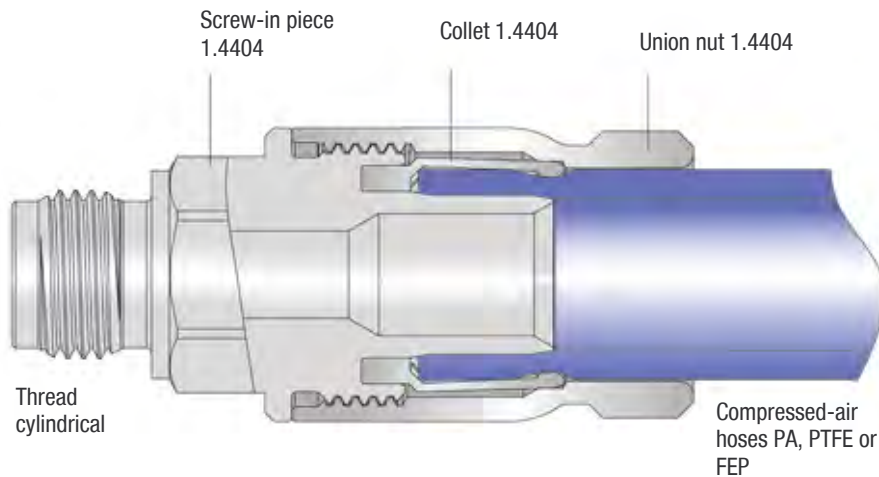
Flexible and  
safe in handling

- With the combined plug-screw-mounting the hose-fitting connection could be mounted by only one rotation of the union nut
- Unintentional opening of the union nut is not possible

Versatile and  
quick applicable

- Quick, economic assembly and disassembly; low system costs
- Quick assembly of the hose; no additional preparation of the hose

## Functional principle



### Advantages

- Patent-registered solution nearly without dead spaces
- No gaps for accumulation
- Internal sterilization possible
- Simple internal cleaning
- Quick changes of the medium possible
- Simple and safe sealing concept
- well-engineered connection system
- small sizes available

### additional options

- Other materials
- Thread designs to your requirements (on request)
- Integrated valves, e.g. with check valve or throttle function

## Service conditions

- Working pressure range: -0,95 to 25 bar
- Temperature range: 0 to + 80°C, depending on the hose-material and the pressure
- No gaps where accumulation is possible
- Huge through flow
- Fitting made of stainless steel 1.4404
- Suitable for hoses made of PE, PA, PTFE and FEP; other materials on request
- Simple and safe sealing concept
- well-engineered connection system

## Range of application

### Packaging systems

Quick product changes with minimal residue in the system

### Pharmaceutical and medical technology sectors

Sterilization of the system enables high efficiency

### Clean-room technology

Connectors for clean-room technology on request

### Cleaning systems

Cleaning and washing systems with minimal danger of germs

### Lines for food industry

No accumulation in dead spaces; ensures continuously fresh products

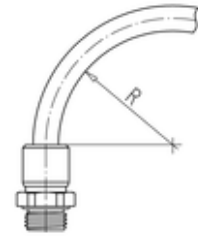
## Hoses

Hose dimension		Polyethylene (PE) Temperature range -10 to +40°C		Polyamide (PA) Temperature range -60 to +80°C		Teflon (PTFE) Temperature range -190 to +260°C		PFA Temperature range -20 to +150°C	
Outside-Ø	Inside-Ø	R min.	Burst pressure (20°C)	R min.	Burst pressure (20°C)	R min.	Burst pressure (20°C)	R min.	Burst pressure (20°C)
9 (+0,1/-0,1)	6 (+0,1/-0,1)	-	-	45	89 bar	55	48 bar	-	-
12 (+0,15/-0,1)	9 (+0,15/-0,1)	75	21 bar	60	63 bar	100	40 bar	29	50 bar

The mounted hoses are not to be exposed to tensile loading.

Important notes for the use of hoses made of PE, PA, FEP, PTFE and PFA:

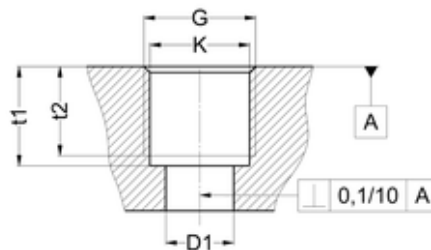
- The outside diameter of hoses must be free of grooves and other damages (e.g. damage from installation tools).
- Prior to assembly, use the Eisele hose cutter Art. No. 99605-0014 or Art. No. 99606-0022 to cut hoses at a right angle. Ensure that hoses are not being deformed or damaged during the cutting process.



3800

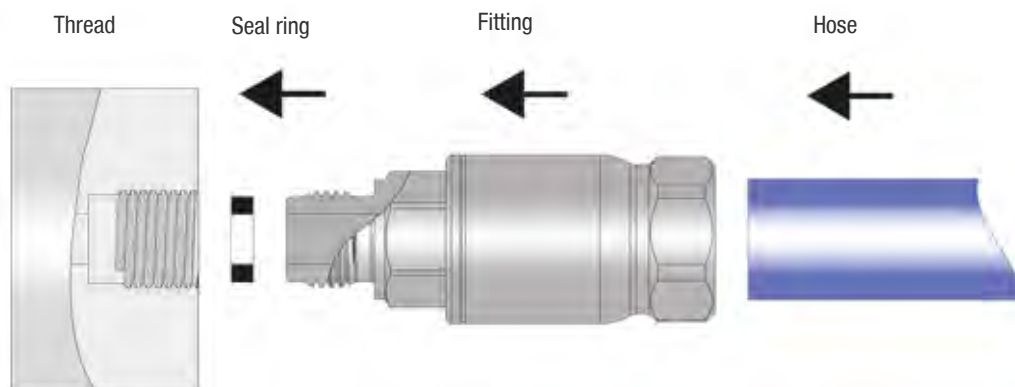
## Connection thread

Thread	Core hole-Ø K (mm)	Thread counterbore		ØD1 (mm)	Torque max. (Nm)	Seal ring	Thread standards
		t1 min. (mm)	t2 min. (mm)				
G1/8	8,7 (±0,1)	9,7 (+0,1)	8,5 (+0,5)	5	12	3615-02	Pipe thread G: DIN ISO 228
G1/4	11,75 (±0,1)	11,7 (+0,1)	10,5 (+0,5)	8	12	3615-04	
G3/8	15,2 (±0,1)	13,7 (+0,1)	12 (+0,5)	10	12	3615-06	



## Handling

Assembly instruction regarding Eisele drawing M3828-...



## Threaded connectors

starting on page 19



Straight threaded connectors

page 19



Angled threaded connectors

page 19



Bulkhead connectors

page 19

Accessories series 3800

page 22

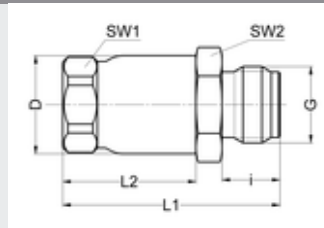
## Accessories

starting on page 22

3800

## Screw-in connector

- Whitworth pipe thread
- Material 1.4404
- Temperature range 0 to +80 °C
- Working pressure range -0,95 to 25 bar
- Specified data depending on the material of the hose
- Assembly instructions M3628-...

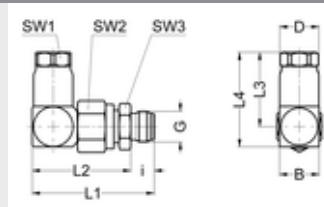


Part no.	G	for hose	SW1	SW2	i	L1	L2	D	NW	g/piece
3828-020600	G1/8	OD 9 (9/6)	13	12	8	37	23	14	5	25
3828-040900	G1/4	OD12 (12/9)	15	17	10	37,5	23	16,8	7	33
3828-060900	G3/8	OD12 (12/9)	15	19	12	40	23	16,8	7	41

3800

## Elbow screw-in connector, lockable

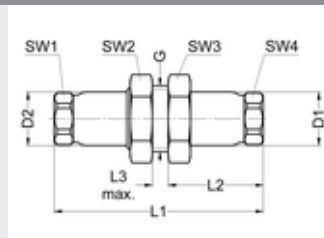
- Whitworth pipe thread
- Material 1.4404
- Temperature range 0 to +80 °C
- Working pressure range -0,95 to 25 bar
- Specified data depending on the material of the hose
- Assembly instructions M3628-...



Part no.	G	for hose	SW1	SW2	SW3	i	L1	L2	L3	L4	B	D	NW	g/piece
3861-020600	G1/8	OD 9 (9/6)	13	15	14	8	42,5	34,5	29	37	15	14	5	65
3861-040900	G1/4	OD12 (12/9)	15	19	17	10	52	33	31,6	40,2	17	16,8	7	104
3861-060900	G3/8	OD12 (12/9)	15	19	19	12	54,5	33,5	31,6	40,2	17	16,8	7	116

## Bulkhead connector

- Whitworth pipe thread
- Material 1.4404
- Temperature range 0 to +80 °C
- Working pressure range -0,95 to 25 bar
- Specified data depending on the material of the hose
- Assembly instructions M3628-...



Part no.	for hose A	for hose B	SW1	SW2	SW3	SW4	L1	L2	L3 max.	G	D1	D2	NW	g/piece
3880-000606	OD 9 (9/6)	OD 9 (9/6)	13	19	19	13	59	27	6	M16x1,5	14	14	5	67
3880-000909	OD12 (12/9)	OD12 (12/9)	15	24	24	15	66	30	6	G1/2	16,8	16,8	7	110





## Accessories



ACC

## Seal ring



- For Whitworth pipe thread
- Material PTFE
- Temperature range 0 to +80 °C
- Working pressure range 0 to 25 bar

Part no.	for thread	D1	D2	H	g/piece
3615-02	G1/8	5,5	8,5	2,2	0,10
3615-04	G1/4	8,6	11,5	2,2	0,20
3615-06	G3/8	10,6	14,9	2,2	0,40

## Hose sharpener



- Hose sharpener for Series 1600 and 3600

ACC

Part no.	for hose	g/piece
WZ660-09	OD12 (12/9)	56

## Sleeve for hose marking



- Sleeve to mark the hose for Series 1600 and 3600
- To determine how deep the hose must be pushed inside the fitting

Part no.	for hose
WZ688-12	OD12 (12/9)

## Tool case

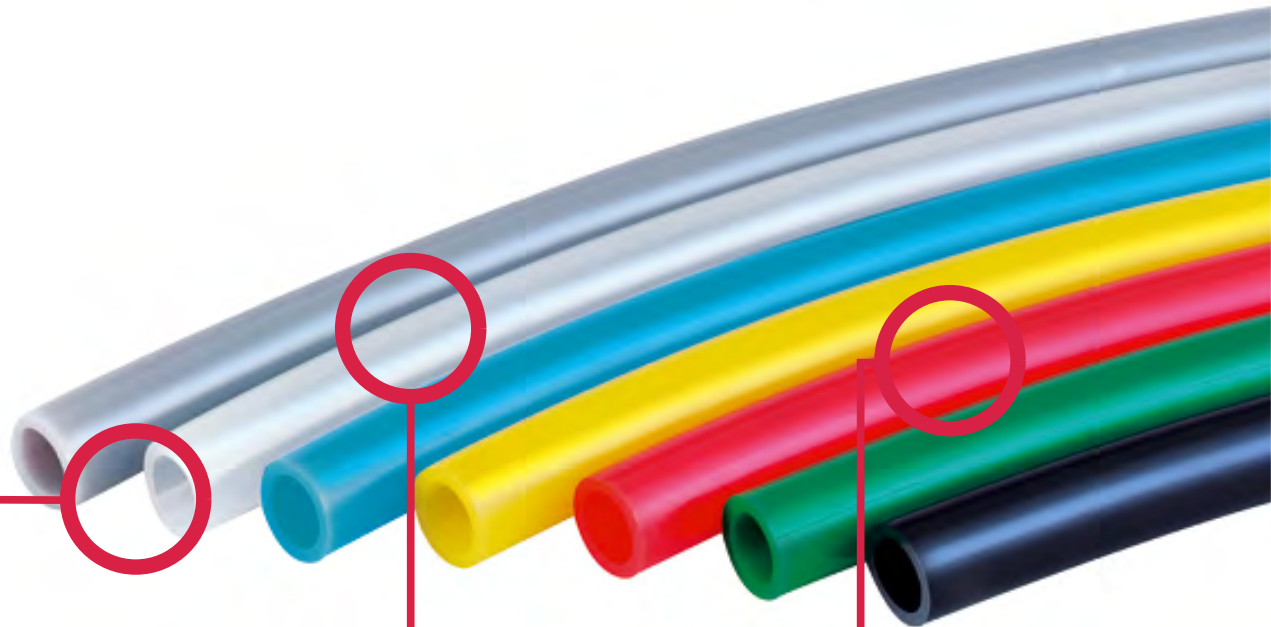


## Contents of tool box:

- Torque wrench, standardised (various sizes)
- Plug-in box-end wrench, open (various sizes)
- Square plug-in adapter 3/8
- Handle with sliding element
- Sleeve for hose marking (various sizes)
- Countersink for plastic hose (various sizes)
- Box-end wrench, open (various sizes)
- Hose cutter for compressed air hose
- Socket wrench
- Extension (various sizes)

Part no.	g/piece
WZ660E	4200

## Plastic hoses



### Versatile range of hoses

- Standard compressed-air hoses as well as hoses for special applications and appropriate accessories
- Different hose materials for different application areas

### Color and code versions possible

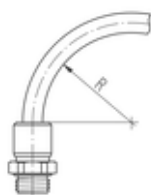
- Hoses can be delivered in many common colors, e.g. to indicate different fluids
- Labeling of hoses for coding possible too

### Package solutions of connectors and hoses

- Secure combinations of EISELE connectors and their matching hoses
- Through limited tolerances also very suitable for applications with a high demand on freedom of leakage

On request we also offer hose solutions in other colors, sizes and materials.

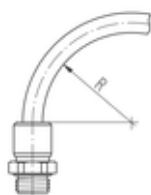
## Compressed-air hose PTFE



- Made of polytetrafluoroethylene (PTFE, Teflon)
- Color natural
- External calibration; for use with Eisele plug connectors
- Temperature range -190 to +260 °C
- Operating pressure = burst pressure: safety (common factor 2 to 3)
- Free of plasticizers, PWIS and copper
- Resistant to UV and solvents
- FDA compliant according to 21 CFR 177.2600
- Flame-retardant according to UL94 V0 to V2

Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 20°C	Minimum burst pressure at 50°C	min. allowable bend radius	g/m
99001-0402	4 / 2	80 bar	52 bar	16	20,3
99001-4303	4,3 / 3	36 bar	21 bar	35	16,1
99001-0503	5 / 3	60 bar	41,5 bar	25	27,1
99001-0604	6 / 4	48 bar	31 bar	35	33,8
99001-0806	8 / 6	36 bar	23,5 bar	65	47,3
99001-0906	9 / 6	48 bar	31 bar	55	76,0
99001-1008	10 / 8	28 bar	18 bar	100	60,8
99001-1209	12 / 9	40 bar	18 bar	100	106,4
99001-1411	14 / 11	28 bar	18 bar	140	126,7

## Compressed-air hose FEP

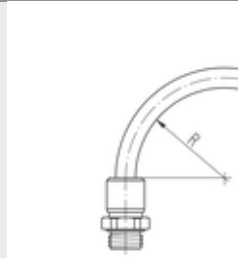


- Made of fluorinated ethylene-propylene copolymer (FEP)
- Color crystal clear
- External calibration; for use with Eisele plug connectors
- Temperature range -35 to +120 °C
- Operating pressure = burst pressure: Safety (common factor 2 to 3)
- Very flexible
- Free of plasticizer and copper
- Flame-retardant according to UL94 V0 to V2
- Resistant to UV, hydrolysis and microbes
- Stabilized against thermal degradation and light
- FDA compliant according to 21 CFR 177.2600

Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 20°C	Minimum burst pressure at 60°C	min. allowable bend radius	g/m
99501-0402	4 / 2	84 bar	70 bar	25	21,0
99501-0503	5 / 3	60 bar	52 bar	35	28,0
99501-0604	6 / 4	50 bar	40 bar	40	35,0
99501-0806	8 / 6	36 bar	29 bar	65	49,0
99501-1008	10 / 8	28 bar	22 bar	100	63,0

## Compressed-air hose PFA

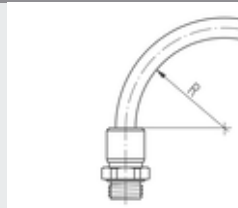
- Made of Perfluoro Alkoxyalkane (PFA)
- Color natural
- External calibration; for use with Eisele plug connectors
- Temperature range -20 to +150 °C (at zero pressure -70 to +260°C)
- Operating pressure = burst pressure: Safety (common factor 2 to 3)
- Free of plasticizer and PWIS
- Resistant to UV, hydrolysis, microbes and solvents
- Stable against thermal degradation
- Resistant to weld spatter
- FDA compliant according to 21 CFR 177.2600



Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 20°C	Minimum burst pressure at 60°C	min. allowable bend radius	g/m
99221-0403	4 / 3	-	-	-	-
99221-0425	4 / 2,5	44 bar	33 bar	11	12,0
99221-0604	6 / 4	60 bar	39 bar	12	34,0
99221-0806	8 / 6	44 bar	33 bar	25	49,0
99221-1007	10 / 7	53 bar	37 bar	22	87,0
99221-1209	12 / 9	50 bar	37 bar	29	125,0
99221-1210	12 / 10	-	-	-	-

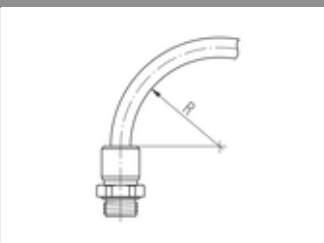
## Compressed-air hose PE

- Made of polyethylene (PE)
- Color black (red, blue, green, yellow, natural, brown, orange and grey: specify when placing order; subject to extra charge)
- External calibration; for use with Eisele plug connectors
- Temperature range -10 to +40 °C
- Free of plasticizer and halogen



Part no.	Outside Ø / Inside Ø	Maximum allowable working pressure at 23 °C (reference value)	min. allowable bend radius	g/m
99004-0402	4 / 2	20 bar	20	8,7
99004-4303	4,3 / 3	13 bar	20	6,9
99004-0503	5 / 3	15 bar	25	11,6
99004-0604	6 / 4	13 bar	30	14,5
99004-0806	8 / 6	8 bar	40	20,3
99004-1008	10 / 8	6 bar	60	26,0
99004-1209	12 / 9	9 bar	60	45,6
99004-1210	12 / 10	5 bar	85	31,9
99004-1411	14 / 11	8 bar	90	54,3
99004-1512	15 / 12	7 bar	90	58,7
99004-1613	16 / 13	6 bar	90	63,0

## Compressed-air hose PA



- Made of polyamide (PA)
- Color black (red, blue, green, yellow, natural, brown, orange and grey: specify when placing order; subject to extra charge)
- External calibration; for use with Eisele plug connectors
- Temperature range -60 to +100 °C
- Operating pressure = burst pressure: safety (common factor 2 to 3)
- Suitable for vacuum
- Free of PWIS and halogen

Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 20°C	Minimum burst pressure at 60°C	min. allowable bend radius	g/m
99005-0402	4 / 2	145 bar	82 bar	20	9,7
99005-4303	4,3 / 3	76 bar	43 bar	20	7,7
99005-0503	5 / 3	112 bar	64 bar	25	12,9
99005-0504	5 / 4	-	-	-	-
99005-0604	6 / 4	89 bar	51 bar	30	16,2
99005-0806	8 / 6	63 bar	36 bar	40	22,7
99005-0906	9 / 6	89 bar	51 bar	45	36,1
99005-1008	10 / 8	49,5 bar	28 bar	60	29,1
99005-1209	12 / 9	63 bar	36 bar	60	51,0
99005-1210	12 / 10	39,5 bar	22,5 bar	85	35,6
99005-1411	14 / 11	53 bar	30 bar	80	60,7
99005-1512	15 / 12	49,5 bar	28 bar	90	65,5
99005-1613	16 / 13	46 bar	26 bar	90	70,4



- For compressed-air hoses with outer-Ø 14 mm
- Material plastic black / steel
- Packaging unit 1 piece

99

Part no.		g/piece
99605-0014	Hose cutter for outer diameter up to 14	30
99605-00149	Spare blade for outer diameter up to 14	1



- For compressed-air hoses with outer-Ø 22 mm
- Material zinc die-casting / steel
- Packaging unit 1 piece

Part no.		g/piece
99606-0022	Hose cutter for outer diameter up to 22 (with bag)	240
99606-00229	Spare blade for outer diameter up to 22	2





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1619-020909	12	99004-0604	25
1619-040606	12	99004-0806	25
1619-040609	12	99004-1008	25
1619-040909	12	99004-1209	25
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1628-040600	11	99005-0806	26
1628-040900	11	99005-1008	26
1628-060600	11	99005-0906	26
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1658-020606	12	99005-1210	26
1658-020609	12	99005-1411	26
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1661-020900	11	99221-1007	25
1661-040400	11	99221-1209	25
1661-040600	11	99221-0403	25
1661-040900	11	99221-1210	25
1661-060600	11	99501-0402	24
1661-060900	11	99501-0503	24
1662-020606	12	99501-0604	24
1662-020609	12	99501-0806	24
1662-020909	12	99501-1008	24
1662-040606	12	99605-0014	26
1662-040609	12	99605-00149	26
1662-040909	12	99606-0022	26
1663-020400	11	99606-00229	26
1663-020600	11		
1663-020900	11		
1680-000404	13		
1680-000406	13		
1680-000606	13		
1680-000609	13		
1680-000909	13		
1694-000404	13		
1694-000607	13		
1694-000609	13		
1694-000907	13		
1694-000909	13		

## § 1 General

(1) These conditions of sale shall apply to agreements that are concluded between Eisele Pneumatics GmbH & Co. KG, Waiblingen (hereinafter “Eisele”) and its business customers (hereinafter “Customer”), insofar as these conditions of sale are validly incorporated. General terms and conditions of the Customer that contradict or deviate from these conditions of sale shall not form part of the agreement unless Eisele expressly consents in writing to the application of such general terms and conditions. These conditions of sale shall also apply if we unconditionally perform deliveries to the Customer while being aware of general terms and conditions of the Customer that contradict or deviate from these conditions of sale.

(2) Any arrangements reached between Eisele and the Customer with respect to an agreement shall be in writing. If the Customer does not agree with the application of these conditions of sale, it shall notify Eisele hereof without undue delay.

(3) These conditions of sale shall only apply vis-à-vis entrepreneurs within the meaning of sec. 310(1) German Civil Code. Within the scope of ongoing business relations our conditions of sale shall also apply to future deliveries and services unless they are expressly agreed on anew.

## § 2 Offers; order acceptance

(1) Unless the offer expressly provides otherwise, the offers from Eisele shall be without obligation and exclusively understood as an invitation to submit an offer. Any agreements between Eisele and the Customer shall require written order confirmation by Eisele vis-à-vis the Customer.

(2) Descriptions and price information in catalogs, price lists, circulars, brochures or the like shall not be binding and shall merely serve to provide general information to prospective customers about the services offered by Eisele, unless we expressly confirmed this information when concluding an agreement. This also applies, in particular, to illustrations as well as to details regarding the size and weight of our products and services.

## § 3 Delivery periods, partial deliveries

(1) Any agreed delivery period shall begin, unless otherwise specified, on the day on which the order confirmation is received by the Customer.

(2) Eisele’s compliance with the delivery obligation requires the timely and proper fulfillment of the Customer’s cooperation obligations. Eisele reserves the right to plead non-performance.

(3) Eisele shall have the right to withhold delivery from the Customer if Eisele has a payable claim against the Customer.

(4) Eisele shall have the right to make partial deliveries to an extent that is reasonable for the Customer.

(5) Unforeseeable events of force majeure such as, in particular, war, riot, strike, lockout, measures by public authorities and resulting limitations of the capacity of pre-suppliers shall release Eisele from its delivery obligation for the duration of such events and for an additional two weeks. Should any of the aforementioned events last more than 6 weeks, both parties shall have the right to rescind the agreement if it becomes unreasonable for Eisele to render services.

## § 4 Transport, shipping, insurance

Shipments shall be made ex works from the Waiblingen site (Incoterms 2010). Should this be deviated from, the customer shall nevertheless bear the risk associated with the delivery unless expressly otherwise specified.

## § 5 Price

Prices shall be set in euros.

## § 6 Payments

(1) Invoices shall become payable immediately following receipt of the goods without a cash discount deduction, unless otherwise explicitly agreed.

(2) If Eisele accepts payment by bill of exchange, this shall be done on account of performance only. All bill of exchange expenses shall be borne by the Customer; it shall not be entitled to a cash discount deduction.

(3) As long as the Customer is not merely in arrears by an insignificant amount, Eisele can make the performance of services to be rendered contingent on prepayment by the Customer. Should the prepayment not be made within a reasonable time limit, Eisele shall have the right to cancel all orders not yet filled if the consideration has not been paid by the customer by the time at which the time limit expires.

## § 7 Reservation of title

(1) Eisele reserves title to the goods until all of Eisele’s claims against the Customer that have already arisen have been paid in full. In this connection the legal grounds on which Eisele’s claims against the Customer are based are irrelevant. This also includes, in particular, balance claims from current account. Claims for which a bill of exchange is negotiated or a check is issued to Eisele shall not be deemed satisfied until the bill of exchange or check is paid or cashed.

(2) The Customer shall, without undue delay, inform Eisele in writing of intervention by third parties such as, for example, attachment or execution by means of which rights of Eisele (in particular, Eisele’s reservation of title) are impaired.

(3) If the third party is not able to reimburse Eisele for the in-court and out-of-court costs of an action pursuant to sec. 771 German Code of Civil Procedure, the Customer shall be liable for the resulting shortfall.

(4) The processing or alteration of goods by the Customer shall always be carried out on behalf of Eisele. If the product is processed with other objects not belonging to Eisele, Eisele shall acquire joint ownership of the new thing based on the ratio of the value of the goods to the other processed items at the time of the processing. Otherwise, the thing arising from the processing shall be subject to the same provisions as the goods for which title is reserved.

(5) The Customer may resell the reserved goods only within the scope of its regular business operations. It shall be entitled and authorized to resell the reserved goods provided that the claims it accrues against its purchasers or third parties due to the resale, transfer to Eisele. The claims of the Customer arising from the resale of the reserved goods are now assigned to Eisele. Eisele accepts such assignment. The Customer shall not be entitled to otherwise dispose of the reserved goods; in particular, it may not pledge or assign the reserved goods by way of security. The Customer’s right to sell the reserved goods shall expire in the event of a considerable worsening of the Customer’s financial situation (insolvency, threatening insolvency, opening of insolvency proceedings) if the Customer ceases making payments from the proceeds collected and/or gets into arrears.

(6) The Customer shall be authorized to collect the assigned claims until revocation by Eisele. Eisele shall have the right to revoke the collection authorization at any time. The Customer shall not have the right to assign the claim to third parties. Eisele shall not make any use of the right of revocation as long as the Customer duly complies with its payment obligations. At Eisele’s request, the Customer shall inform its purchasers of the assignment to Eisele and provide Eisele with the necessary information and documents for collecting the claim. With respect to the expiry of the Customer’s collection authorization, para. 5 shall apply mutatis mutandis.

(7) Eisele undertakes, upon the Customer’s request, to release the security to which it is entitled in accordance with the above

provisions insofar as its realizable value exceeds the claims to be secured by more than 10%. Eisele shall have the right to decide which security is released.

## § 8 Rights

Eisele shall reserve its copyrights in illustrations, drawings, calculations, drafts and other documents that were prepared by Eisele. This shall apply, in particular, to written documents that are designated as "confidential". The Customer must receive Eisele's express written consent before passing on such documents to third parties.

## § 9 Guarantee, inspection

(1) Insignificant discrepancies, in particular technical improvements or product enhancements, shall not constitute defects within the meaning of sec. 434 German Civil Code.

(2) Furthermore, it shall not constitute a defect where the products are not free from anti-wetting substances, in particular silicone or light lubrication. Although the products are silicone-free when they leave production, it cannot be guaranteed that the products will be absolutely free from silicone or entirely free from other anti-wetting substances, since Eisele's suppliers (packaging suppliers) cannot issue any corresponding guarantees.

(3) The goods delivered within the scope of commercial transactions shall be inspected by the Customer without undue delay and, if a defect is detected, this shall be notified in writing, without undue delay, no later than within two weeks after receiving the goods (patent defect) or after discovery of the defect (latent defect).

(4) If it can be demonstrated that the goods have a defect at the time of the transfer of risk, the Customer can demand subsequent performance. Eisele can decide whether to repair or replace the defective goods. The Customer shall have the right to a reduction or to rescind the agreement if subsequent performance fails. This is the case if two replacement deliveries were also defective or two repair attempts were unsuccessful. Should goods that are allegedly defective, but actually fault-free, be returned, Eisele shall be at liberty to charge the Customer a reasonable amount to cover expenses incurred by Eisele in this connection, in particular for the repeated inspection of the goods.

(5) Warranty claims of the Customer based on defects shall become statute-barred 12 months after delivery of the goods. This shall not apply with respect to items that, due to their customary manner of use, were used for a building and caused the defectiveness of that building; in this case the claim shall only become statute-barred after five years. There shall be no warranty claim for downgraded goods, special items, waste and goods that are not new. There shall be no claims to reduction or the exercise of a right of rescission if the claim to subsequent performance has become statute-barred.

## § 10 Liability

(1) Eisele shall not be liable for direct or indirect damage (for example, due to an operational interruption or lost profits of the Customer), irrespective of the legal grounds therefor.

(2) The above exclusion of liability shall not apply:

(i) in the event of willful or grossly negligent breaches of duty by the governing bodies, employees or vicarious agents of Eisele;  
(ii) in the event of an injury to life, limb or health;  
(iii) in the event of a breach of material contractual duties. In the latter case, liability of Eisele shall, however, be limited to damage typically foreseeable upon conclusion of the agreement. For damage that could not be foreseen by Eisele, liability shall be limited to the value of the order.

(3) The above restrictions and limitations shall not be applied to liability provisions that are required by law, such as, for example, those of the Product Liability Act.

## § 11 Final provisions, applicable law, jurisdiction

(1) Agreements between Eisele and the Customer shall be exclusively governed by German law to the exclusion of the United Nations Convention on Contracts for the International Sale of Goods (CISG) and private international law.

(2) Waiblingen shall be the sole place of jurisdiction for all disputes arising from or in connection with the business relations between Eisele and the Customer, provided that the Customer is a dealer. The place of jurisdiction shall also apply to actions pertaining to checks or bills of exchange.

(3) Should a provision of these conditions of sale be or become invalid or impracticable, this shall not affect the validity of the remaining conditions of sale. Eisele and the Customer undertake, in such a case, to replace the invalid or impractical provision with a valid or practicable provision that comes as close as possible to the spirit and purpose of the provision to be replaced.

(4) Should these conditions of sale contain an unintended omission, this shall be filled with a provision that Eisele and the Customer would have agreed on had they considered the need for a provision governing the respective issue.

Waiblingen, August 2011

\* \* \*





## EISELE IS QUALITY MADE IN GERMANY



**From EISELE connection components you may expect:**

- + Highest tightness and safety
- + Ruggedness and long lifetimes
- + Vacuum-compatible products
- + Easy mounting and disassembly
- + Special connections for a broad range of applications

Over 30 patents, more than 5,000 standard articles, and 2,000 customized solutions impressively underline our top quality performance. Whether the solution is configured from standard components or individually customized: all EISELE products boast convincing quality, long lifetimes and sophisticated technology.

Our company is loyal to its philosophy and its roots. Germany is the place where we find our highly qualified employees – the workforce responsible for our company's output. With a manufacturing depth of almost 100%, and stock keeping at the production site itself, we can optimally supply our customers, and respond quickly to fulfill needs and technical specifications. EISELE is part of a global logistics network that guarantees the fast availability of our products on the global market.

DIN EN ISO 9001: 2008 – EISELE has been certified since 1994. We have continuously been updating this quality standard and will continue to maintain it with future certifications. The elements of our basic philosophy include sustainable quality, flexibility and continuous improvement.



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EISELE **BASICLINE** gives our customers a wide choice of our stock of approx. 3,500 standardized connection components. We can therefore deliver at very short notice a complete range of screw joints, plug connectors, matching hoses and a wide spectrum of accessories.

Many of these EISELE products are authorized for use by the major automotive manufacturers like Audi, Daimler or Volkswagen.

### EISELE INOXLINE

#### Stainless steel connection solutions

Stainless steel connections are frequently called for systems in the food and pharmaceutical sectors – and they are essential for many applications. Based on the design of our tried-and-tested standard components, we supply a broad range of media-resistant connections made of corrosion-proof and acid-resistant stainless steel. The connections are equally tough enough for aggressive production environments and cleaning products.



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### EISELE LIQUIDLINE

#### Connections for cooling water

The through-flow-optimized connections in the EISELE **LIQUIDLINE** are perfectly suited for applications with closed cooling-water cycles.

All parts in contact with media are made of a brass alloy not susceptible to dezincification. When combined with the hoses, connections with FPM seals are resistant to many media as well as high temperatures.

### EISELE MULTILINE

#### Multiple couplings for multiple media connections

From plant installations, to maintenance and repair, the couplings in the EISELE **MULTILINE** join separate components or complete modules in a safe, efficient and space-saving way with the simple, centralized, plug and screw joint connectors. In machines with combined air and liquid inlets, the connections discourage assembly mistakes. They can also be coupled and uncoupled under pressure thanks to the integrated shut-off valves.







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Lise-Meitner-Straße 8/1  
71332 Waiblingen | Germany

Telephone +49 (0) 7151-1719-0  
Fax +49 (0) 7151-1719-17

info@eisele.eu  
www.eisele.eu

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