

**Eisele**

EISELE **BASICLINE PROGRAM**

STANDARD COMPONENTS FOR PNEUMATICS

**E** QUALITY SOLUTIONS  
MADE BY EISELE



**BASIC**

## EISELE IS QUALITY MADE IN GERMANY

Over 30 patents, more than 3,500 standard articles, and 1,600 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.



**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



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## STANDARD TYPES AT A GLANCE



### Type 1: Screw joint with union nut

The classic connection system for almost all pneumatic applications.

- For the safe and tight assembly of compressed air hoses
- Light in weight but tough in use
- No problem with frequent assembly/disassembly or very tight bending radii
- Especially suitable for installations affected by vibration
- Made of black, deoxidized aluminum
- For hoses made of PE, PA, PU, PTFE/FEP, textiles or fiber-reinforced PVC

### Type 2: Screw joint with union nut and larger nominal width

The connection system that combines simple handling with the full through-flow of high-quality connection systems.

- For the safe and tight assembly of compressed air hoses
- Hard hoses can also be easily assembled
- No problem with frequent assembly/disassembly
- Made of black, deoxidized aluminum
- For hoses made of PE, PA and PU





### Type 3: Plug connector

The connection system with rugged, proven technology for the fast assembly and disassembly of compressed air hoses in pneumatic installations.

- Made of stainless steel, aluminum or nickel-plated brass
- For hoses made of PE, PA, PU, PUR or PTFE



### Type 4: Plug connector with release sleeve

The connection systems with special technology for very fast and safe assembly and disassembly of lightweight compressed air hoses.

- The collet is positioned in a protective housing in front of the release sleeve
- Easy disassembly, even of very dirty connections
- Made of stainless steel, aluminum or nickel-plated brass
- For hoses made of PE, PA, PU, PUR or PTFE





## MANY SOLUTIONS FROM ONE MODULAR SYSTEM,

### EISELE BASICLINE

#### Standard components for pneumatics

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.



BASIC

## FROM STANDARDIZED TO HIGHLY INDIVIDUAL

### 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.







## Screw joints with union nut

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### Classical connection system

- Reliable, robust connection technology
- No damage to hose by union nuts

### Wide range of applications

- Suitable for applications with strong vibrations
- Secure connection even with strong hose movement

### Applications with special hoses

- Special solutions for the use of fabric tubes or hoses with metal braiding

The standard program already contains an extensive range of types.

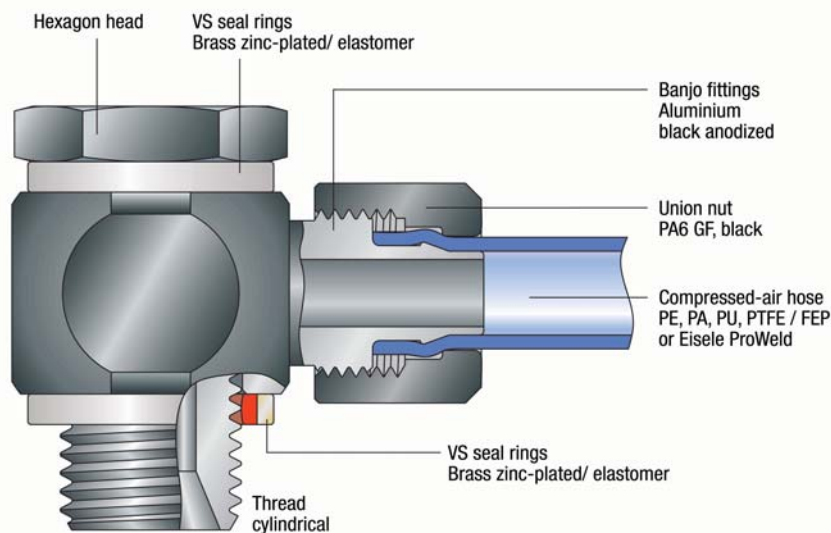
## Range of application

The classical connection system for nearly all applications in pneumatics. Quick assembly and disassembly of compressed-air hoses made of PE (polyethylene), PA (polyamide), PU (polyurethane), PTFE (Teflon)/FEP, ProWeld (PUR) and PVC fiber-reinforced.

## Service conditions

Working pressure range: -0.95 to 15 bar  
 Allowable medium: Air  
 Temperature range: -15 to +70 °C

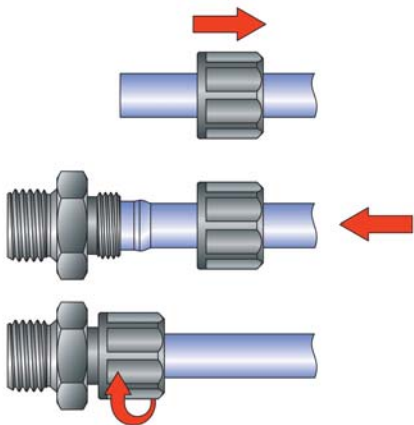
## Functional principle



## Advantages

- Quick assembly and disassembly of compressed-air hoses
- No tools necessary but tightening of plastic union nuts possible with open-ended wrench
- Frequent assembly and disassembly possible
- Low weight
- Robust
- Swivel unions of short design
- With VS seal ring
- Suitable for vacuum

## Handling

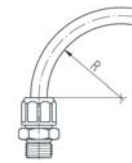


1. Pull union nut over the hose
2. Push hose over hose nipple until it hits the limit stop
3. Tighten union nut by hand

Plastic union nuts may also be tightened with an open-ended wrench. The open-ended wrench skips on the union nut to limit torque.

## Hoses

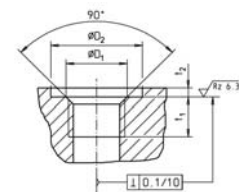
Hose dimension Outside Ø / Inside Ø	Polyethylene (PE) Temperature range -10 to +40°C		Polyamide (PA) Temperature range -20 to +80°C		Polyurethane (PU) Temperature range -35 to +60°C	
	R min.	P max. (bar)	R min.	P max. (bar)	R min.	P max. (bar)
4/2	15	8	25	15	15	8
4,3/3	15	8	25	15	15	7
5/3	20	8	30	15	20	8
6/4	30	8	40	15	30	8
8/6	45	7	55	12	45	7
10/8	60	6	75	12	60	5



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## Connection thread

Thread	Thread depth	Thread counterbore	Counterbore t2 max. (mm)	Torque max.		Thread standards
	t1 min. (mm)	ØD min. (mm)		Plastic seal rings (Ncm)	Al-, VS-Seal rings (Ncm)	
M5	4.5	10	0.5	95	150	Metric thread M: DIN 13 / ISO 965
M10x1	7	15	1	900	1100	
M12x1.5	9.5	18	1.5	900	1400	
M14x1.5	9.5	20	1.5	1100	2100	
M18x1.5	10.5	24	2	2300	3000	
M22x1.5	11.5	28	2.5	3200	4500	Pipe thread G: DIN ISO 228
G1/8	7.5	15	1	900	1100	
G1/4	11	19	1.5	1800	2100	
G3/8	11	23	2	2500	2800	
G1/2	12	27	2.5	3400	4800	



A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.

## Male stud couplings

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Straight male stud couplings

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Angled male stud couplings

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L male stud couplings

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Double screw joints

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Elbow screw joints

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T screw joints

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Cross union

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Bulkhead screw joints

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Single banjo fittings

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## Screw joints for compressed-air hoses made of NBR with metal braiding starting on page 55

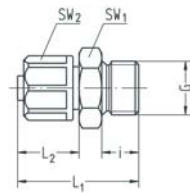
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 Single swivel screw joint	page 55
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Single banjo fittings	page 55
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## Straight male stud coupling



- Whitworth pipe thread
- Material Al black anodized or brass <sup>1)</sup>
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

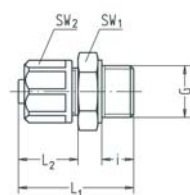
Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece Ms	g/piece
28-0243	<sup>2)</sup> G1/8	4,3/3	14	∅8	6,5	21	10	2,2	-	4
28-0203	<sup>2)</sup> G1/8	5/3	14	∅8	6,5	21	10	2,2	-	4
28-0204	G1/8	6/4	14	13	6,5	24	13	3,1	12	5
28-0206	G1/8	8/6	14	15	6,5	25	14	4,8	13	5
28-0208	G1/8	10/8	14	16	6,5	27	16	5,5	16	6
28-0209	G1/8	11,6/9	17	19	6,5	29,5	17	5,5	-	9
28-0404	G1/4	6/4	17	13	9	27	13	3,1	18	7
28-0406	G1/4	8/6	17	15	9	28	14	4,8	20	7
28-0408	G1/4	10/8	17	16	9	30	16	6,6	21	8
28-0409	G1/4	11,6/9	17	19	9	31	17	7,8	-	10
28-0604	G3/8	6/4	19	13	9	28	13	3,1	-	9
28-0606	G3/8	8/6	19	15	9	29	14	4,8	-	10
28-0608	G3/8	10/8	19	16	9	31	16	6,6	28	10
28-0609	G3/8	11,6/9	19	19	9	32	17	7,8	-	12
28-0610	<sup>3)</sup> G3/8	12,5/10	19	19	9	34,5	19,5	8,3	-	16
28-0612	<sup>3)</sup> G3/8	15/12	22	22	9	34,5	19,5	10	-	21
28-0613	<sup>3)</sup> G3/8	17,6/13	22	24	9	36	21	10	-	23
28-0804	G1/2	6/4	24	13	11	30	13	3,1	-	16
28-0806	G1/2	8 / 6	24	15	11	31	14	4,8	-	16
28-0808	G1/2	10 / 8	24	16	11	33	16	6,6	-	15
28-0809	G1/2	11,6/9	24	19	11	34	17	7,8	-	17
28-0810	<sup>3)</sup> G1/2	12,5 / 10	24	19	11	36,5	19,5	8,3	-	27
28-0812	<sup>3)</sup> G1/2	15 / 12	24	22	11	36,5	19,5	10,8	-	24
28-0813	<sup>3)</sup> G1/2	17,6 / 13	24	24	11	38	21	11,5	-	20

<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Union nut brass black

<sup>3)</sup> Union nut Al black anodized

## Straight male stud coupling

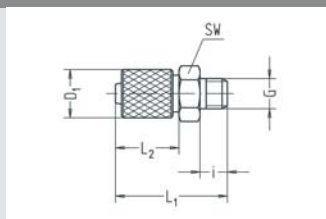


- Whitworth pipe thread
- Thread seal without additional seal
- Material PA6 GF, black
- Union nuts PA6 GF, black
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar

Part no.	G	for hose	Torque max. (Ncm)	SW1	SW2	i	L1	L2	NW	g/piece
28-0204KST	G1/8	6 / 4	130	14	13	6	25,5	13,5	3	3
28-0206KST	G1/8	8 / 6	130	14	15	6	25,5	13,5	4,5	4
28-0404KST	G1/4	6 / 4	250	17	13	8	28,5	13,5	3	5
28-0406KST	G1/4	8 / 6	250	17	15	8	28,5	13,5	4,5	5
28-0409KST	G1/4	11,6 / 9	250	17	19	8	33	18	7	6
28-0606KST	G3/8	8 / 6	500	19	15	10	34	17	4,5	5
28-0609KST	G3/8	11,6 / 9	500	19	19	10	35	18	7	6

## Straight male stud coupling

- M5 thread
- Material brass black
- Union nut brass black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

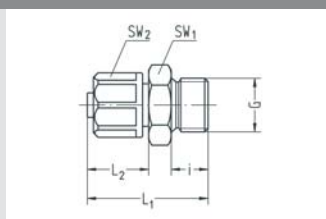


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Part no.	G	for hose	SW	i	L1	L2	D1	NW	g/piece
29-5043	M5	4,3 / 3	8	4,5	18	10	8	2,2	5
29-5003	M5	5 / 3	8	4,5	18	10	8	2,2	4
29-5004	M5	6 / 4	8	4,5	18	10	9	2,2	5

## Straight male stud coupling

- Metric thread
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

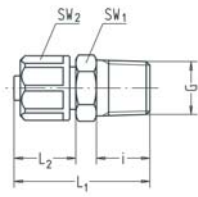


Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece Ms	g/piece
29-5443	<sup>2)</sup> M10x1	4,3 / 3	14	ø8	6,5	21	10	2,2	-	5
29-5403	<sup>2)</sup> M10x1	5 / 3	14	ø8	6,5	21	10	2,2	-	4
29-5404	M10x1	6 / 4	14	13	6,5	24	13	3,1	-	5
29-5406	M10x1	8 / 6	14	15	6,5	25	14	4,8	-	5
29-5408	M10x1	10 / 8	14	16	6,5	27	16	5,5	-	6
29-5604	M12x1,5	6 / 4	17	13	9	27	13	3,1	-	7
29-5606	M12x1,5	8 / 6	17	15	9	28	14	4,8	-	7
29-5608	M12x1,5	10 / 8	17	16	9	30	16	6,5	-	8
29-5804	M14x1,5	6 / 4	17	13	9	27	13	3,1	-	7
29-5806	M14x1,5	8 / 6	17	15	9	28	14	4,8	-	8
29-5808	M14x1,5	10 / 8	17	16	9	30	16	6,6	-	8
29-6204	M18x1,5	6 / 4	22	13	10	29	13	3,1	-	11
29-6206	M18x1,5	8 / 6	22	15	10	30	14	4,8	-	12
29-6208	M18x1,5	10 / 8	22	16	10	32	16	6,6	-	12
29-6604	M22x1,5	6 / 4	27	13	11	30	13	3,1	-	19
29-6606	M22x1,5	8 / 6	27	15	11	31	14	4,8	-	18
29-6608	M22x1,5	10 / 8	27	16	11	33	16	6,6	-	19
29-6612	<sup>3)</sup> M22x1,5	15 / 12	27	22	11	36,5	19,5	10,8	-	27

<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Union nut brass black    <sup>3)</sup> Union nut Al black anodized

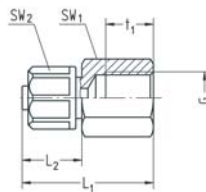
## Straight male stud coupling



- NPT thread
- Seal in thread
- Material brass
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece
30-0204	1/8-NPT	6 / 4	11	13	10	27	13	3,1	11
30-0206	1/8-NPT	8 / 6	12	15	10	28	14	4,8	13
30-0208	1/8-NPT	10 / 8	14	16	10	30	16	5,5	17
30-0404	1/4-NPT	6 / 4	14	13	13	31	13	3,1	17
30-0406	1/4-NPT	8 / 6	14	15	13	32	14	4,8	19
30-0408	1/4-NPT	10 / 8	14	16	13	34	16	6,6	21
30-0604	3/8-NPT	6 / 4	17	13	13	32	13	3,1	29
30-0606	3/8-NPT	8 / 6	17	15	13	33	14	4,8	28
30-0608	3/8-NPT	10 / 8	17	16	13	35	16	6,6	29

## Screw joint with female thread



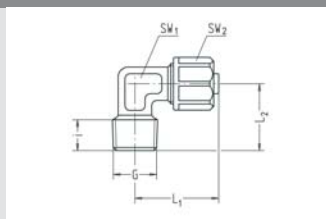
- Whitworth pipe thread
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	L1	L2	t1	NW	g/piece
17-0143	<sup>1)</sup> G1/8	4,3 / 3	14	∅8	22	10	8	2,2	6
17-0103	<sup>1)</sup> G1/8	5 / 3	14	∅8	22	10	8	2,2	6
17-0104	G1/8	6 / 4	14	13	25	13	8	3,1	6
17-0106	G1/8	8 / 6	14	15	26	14	8	4,8	6
17-0108	G1/8	10 / 8	14	16	28	16	8	6,6	7
17-0304	G1/4	6 / 4	17	13	31	13	12	3,1	9
17-0306	G1/4	8 / 6	17	15	32	14	12	4,8	10
17-0308	G1/4	10 / 8	17	16	34	16	12	6,6	11
17-0504	G3/8	6 / 4	22	13	31	13	12	3,1	14
17-0506	G3/8	8 / 6	22	15	32	14	12	4,8	15
17-0508	G3/8	10 / 8	22	16	34	16	12	6,6	16
17-0509	G3/8	11,6 / 9	22	19	35	17	12	7,8	17
17-0510	<sup>2)</sup> G3/8	12,5 / 10	22	19	37,5	19,5	12	8,3	21
17-0704	G1/2	6 / 4	27	13	34	13	14	3,1	23
17-0706	G1/2	8 / 6	27	15	35	14	14	4,8	24
17-0708	G1/2	10 / 8	27	16	37	16	14	6,6	25
17-0710	<sup>2)</sup> G1/2	12,5 / 10	27	19	41,5	19,5	14	8,3	32
17-0712	<sup>2)</sup> G1/2	15 / 12	27	22	41,5	19,5	14	10,8	34

<sup>1)</sup> Union nut brass black    <sup>2)</sup> Union nut Al black anodized

## Elbow screw-in connector

- Whitworth pipe thread conical
- Seal in thread
- Material Ms
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

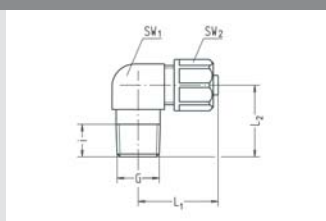


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Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece
61-0204	R1/8	6 / 4	10	13	6,5	23	17	3,1	17
61-0206	R1/8	8 / 6	10	15	6,5	24	17	4,8	18
61-0208	R1/8	10 / 8	10	16	6,5	26	17	5,5	19
61-0404	R1/4	6 / 4	10	13	10	23	20	3,1	21
61-0406	R1/4	8 / 6	10	15	10	24	20	4,8	22
61-0408	R1/4	10 / 8	10	16	10	26	20	6,5	22

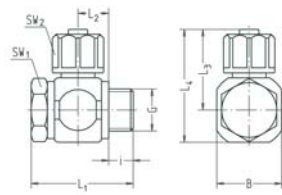
## Elbow screw-in connector

- Whitworth pipe thread conical
- Seal in thread
- Material PA6 GF, black
- Union nuts PA6 GF, black
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	G	for hose	Torque max. (Ncm)	SW1	SW2	i	L1	L2	NW	g/piece
61-0204KST	R1/8	6 / 4	130	12	13	8	23	18	3	4
61-0206KST	R1/8	8 / 6	130	12	15	8	25	18	4,5	5
61-0404KST	R1/4	6 / 4	250	12	13	11	24,5	22	3	5
61-0406KST	R1/4	8 / 6	250	12	15	11	26,5	22	4,5	6
61-0409KST	R1/4	11,6 / 9	250	17	19	11	26,5	25	7	10
61-0609KST	R3/8	11,6 / 9	500	17	19	11	27	24	7	11

## Single swivel screw joint, short model



- Whitworth pipe thread
- VS seal rings
- Material Al black anodized or brass <sup>1)</sup>
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

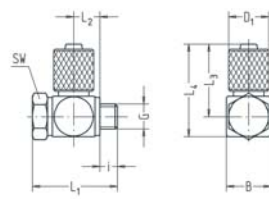
Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	NW	g/piece
34-0243K	<sup>2)</sup> G1/8	4,3 / 3	14	∅8	5,5	28,5	9,5	18,5	26,5	16	2,2	15
34-0203K	<sup>2)</sup> G1/8	5 / 3	14	∅8	5,5	28,5	9,5	18,5	26,5	16	2,2	15
34-0204K	G1/8	6 / 4	14	13	5,5	28,5	9,5	21,5	29,5	16	3,1	15
34-0206K	G1/8	8 / 6	14	15	5,5	28,5	9,5	22,5	30,5	16	4,5	16
34-0208K	G1/8	10 / 8	14	16	5,5	28,5	9,5	24,5	32,5	16	4,5	17
34-0209K	G1/8	11,6 / 9	14	19	5,5	33	11,7	24,5	32	20	4,5	20
34-0404K	G1/4	6 / 4	17	13	7,5	30,5	9,5	23	33	20	3,1	21
34-0406K	G1/4	8 / 6	17	15	7,5	30,5	9,5	24	34	20	4,8	22
34-0408K	G1/4	10 / 8	17	16	7,5	30,5	9,5	26	36	20	6,5	22
34-0409K	G1/4	11,6 / 9	17	19	7,5	35	11,7	26,5	36	20	6,5	27
34-0604K	G3/8	6 / 4	22	13	7,5	31,5	9,5	24,5	35,5	22	3,1	27
34-0606K	G3/8	8 / 6	22	15	7,5	31,5	9,5	25,5	36,5	22	4,8	27
34-0608K	G3/8	10 / 8	22	16	7,5	31,5	9,5	27,5	38,5	22	6,6	28
34-0609K	G3/8	11,6 / 9	22	19	8	38,5	12,7	29	41	24	7,8	41
34-0610K	<sup>3)</sup> G3/8	12,5 / 10	22	19	8	38,5	12,7	31,5	43,5	24	8,3	45
34-0804K	G1/2	6 / 4	27	13	9	33,5	9,5	27,5	41,5	29	3,1	41
34-0806K	G1/2	8 / 6	27	15	9	33,5	9,5	28,5	42,5	29	4,8	42
34-0808K	G1/2	10 / 8	27	16	9	33,5	9,5	30,5	44,5	29	6,6	43
34-0810K	<sup>3)</sup> G1/2	12,5 / 10	27	19	9	41	13,2	34,5	49,5	30	8,3	64
34-0812K	<sup>3)</sup> G1/2	15 / 12	27	22	9	41	13,2	34,5	49,5	30	10,8	66
34-0813K	<sup>3)</sup> G1/2	17,6 / 13	27	24	9	47	16,2	36	51	30	11,5	81

<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Union nut brass black

<sup>3)</sup> Union nut Al black anodized

## Single swivel screw joint, short model



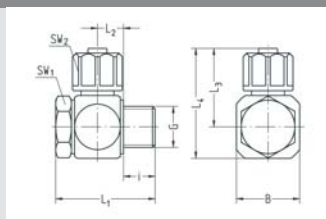
- M5 thread
- PVC seal rings
- Banjo fitting and union nut brass black
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	D1	B	NW	g/piece
35-5043K	M5	4,3 / 3	8	3,5	17	5,2	14	18	8	8,5	2,2	8
35-5003K	M5	5 / 3	8	3,5	17	5,2	14	18	8	8,5	2,2	8
35-5004K	M5	6 / 4	8	3,5	17	5,2	14	18	9	8,5	2,4	9



## Single swivel screw joint, short model

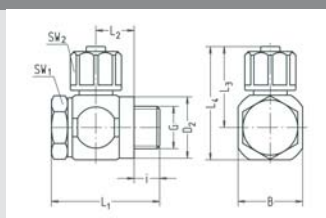
- Whitworth pipe thread
- Sealing without seal rings
- Banjo fitting and union nut PA6 GF, black
- Banjo bolt Al black anodized
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	NW	g/piece
34-0204KKST	G1/8	6 / 4	14	13	8	28,5	8,2	25	32,5	16	3	10
34-0206KKST	G1/8	8 / 6	14	15	8	28,5	8,2	26,5	34	16	4,5	11
34-0404KKST	G1/4	6 / 4	17	13	10	30,5	8,2	26	36,5	20	3	14
34-0406KKST	G1/4	8 / 6	17	15	10	30,5	8,2	27,5	38	20	4,5	15

## Single swivel screw joint

- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

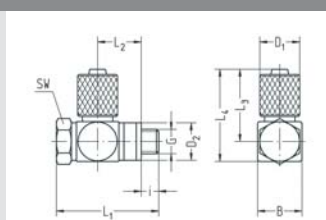


Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
34-0243	1) G1/8	4,3 / 3	14	ø8	6	30,5	11,8	18,5	26,5	16	14,9	2,2	14
34-0203	1) G1/8	5 / 3	14	ø8	6	30,5	11,8	18,5	26,5	16	14,9	2,2	14
34-0204	G1/8	6 / 4	14	13	6	30,5	11,8	21,5	29,5	16	14,9	3,1	14
34-0206	G1/8	8 / 6	14	15	6	30,5	11,8	22,5	30,5	16	14,9	4,5	15
34-0208	G1/8	10 / 8	14	16	6	30,5	11,8	24,5	32,5	16	14,9	4,5	15
34-0404	G1/4	6 / 4	17	13	8	32,5	11,8	23	33	20	18,9	3,1	20
34-0406	G1/4	8 / 6	17	15	8	32,5	11,8	24	34	20	18,9	4,8	21
34-0408	G1/4	10 / 8	17	16	8	32,5	11,8	26	36	20	18,9	6,5	22
34-0604	G3/8	6 / 4	22	13	8	33,5	11,8	24,5	35,5	22	22,9	3,1	26
34-0606	G3/8	8 / 6	22	15	8	33,5	11,8	25,5	36,5	22	22,9	4,8	27
34-0608	G3/8	10 / 8	22	16	8	33,5	11,8	27,5	38,5	22	22,9	6,6	27
34-0804	G1/2	6 / 4	27	13	10	36	11,8	27,5	41,5	29	26,9	3,1	40
34-0806	G1/2	8 / 6	27	15	10	36	11,8	28,5	42,5	29	26,9	4,8	41
34-0808	G1/2	10 / 8	27	16	10	36	11,8	30,5	44,5	29	26,9	6,6	42

<sup>1)</sup> Union nut brass black

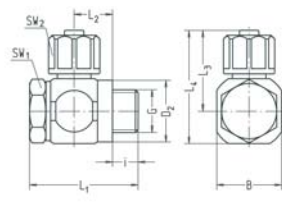
## Single swivel screw joint

- M5 thread
- PVC seal rings
- Banjo fitting and union nut brass black
- Banjo bolt galvanized steel
- Spacer ring Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW1	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
35-5043	M5	4,3 / 3	8	3,5	20,5	8,7	14	18	8,5	8	8	2,2	9
35-5003	M5	5 / 3	8	3,5	20,5	8,7	14	18	8,5	8	8	2,2	9
35-5004	M5	6 / 4	8	3,5	20,5	8,7	14	18	8,5	9	8	2,4	10

## Single swivel screw joint



- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
35-5443	1) 2) M10x1	4,3 / 3	14	ø8	6	30,5	11,8	18,5	26,5	16	14,9	2,2	14
35-5403	1) 2) M10x1	5 / 3	14	ø8	6	30,5	11,8	18,5	26,5	16	14,9	2,2	14
35-5404	2) M10x1	6 / 4	14	13	6	30,5	11,8	21,5	29,5	16	14,9	3,1	14
35-5406	2) M10x1	8 / 6	14	15	6	30,5	11,8	22,5	30,5	16	14,9	4,5	15
35-5408	2) M10x1	10 / 8	14	16	6	30,5	11,8	24,5	32,5	16	14,9	4,5	16
35-5604	M12x1,5	6 / 4	17	13	8	32,5	11,8	23	33	20	17,9	3,1	21
35-5606	M12x1,5	8 / 6	17	15	8	32,5	11,8	24	34	20	17,9	4,8	22
35-5608	M12x1,5	10 / 8	17	16	8	32,5	11,8	26	36	20	17,9	5,5	22
35-5804	M14x1,5	6 / 4	17	13	8	32,5	11,8	23	33	20	19,9	3,1	21
35-5806	M14x1,5	8 / 6	17	15	8	32,5	11,8	24	34	20	19,9	4,8	22
35-5808	M14x1,5	10 / 8	17	16	8	32,5	11,8	26	36	20	19,9	6,5	22
35-6204	M18x1,5	6 / 4	22	13	9	34,5	11,8	25	37	24	23,9	3,1	29
35-6206	M18x1,5	8 / 6	22	15	9	34,5	11,8	26	38	24	23,9	4,8	30
35-6208	M18x1,5	10 / 8	22	16	9	34,5	11,8	28	40	24	23,9	6,6	30
35-6604	M22x1,5	6 / 4	27	13	10	36	11,8	27,5	41,5	29	27,9	3,1	42
35-6606	M22x1,5	8 / 6	27	15	10	36	11,8	28,5	42,5	29	27,9	4,8	42
35-6608	M22x1,5	10 / 8	27	16	10	36	11,8	30,5	44,5	29	27,9	6,6	43
35-6612K	3) 4) M22x1,5	15 / 12	27	22	10,5	41	12,5	34,5	49,5	30	27	10,8	62

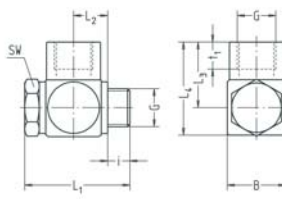
<sup>1)</sup> Union nut brass black

<sup>2)</sup> Spacer ring PA6 GF, black

<sup>3)</sup> Union nut Al black anodized

<sup>4)</sup> 2 seal rings PVC

## Single swivel connector, short model

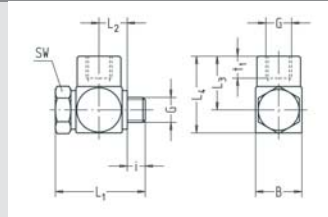


- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	SW	i	L1	L2	L3	L4	B	t1	NW	g/piece
134-0201K	G1/8	14	5,3	28,5	9,6	14,5	22	16	7	4,5	15
134-0403K	G1/4	17	7,5	35	11,7	21	30,5	20	10	6,5	28
134-0605K	G3/8	22	7	38,5	13,2	23	35	24	10	9	42
134-0807K	G1/2	27	9	47	16,2	27,5	42,5	30	12	11,5	74

## Single swivel connector, short model

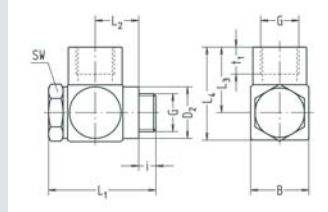
- Metric thread
- PVC seal rings
- Ring connection brass black
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	SW	i	L1	L2	L3	L4	B	t1	NW	g/piece
135-4241K	M3	5	2,5	11,6	3,5	6,2	9	5,6	3	1,5	1
135-5049K	M5	8	3	17	5,5	10	14,5	9	5	2,4	5

## Single swivel joint

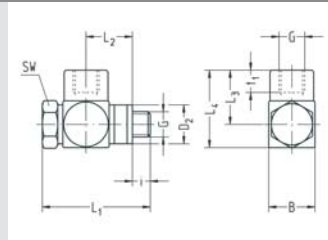
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	SW	i	L1	L2	L3	L4	B	t1	D2	NW	g/piece
134-0201	G1/8	14	6	31	12	14,5	22	16	7	14,9	4,5	13
134-0403	G1/4	17	8	37	14	21	30,5	20	10	18,9	6,5	26
134-0605	G3/8	22	8	41	15,5	23	35	24	10	22,9	9	40
134-0807	G1/2	27	10	49,5	18,5	27,5	42,5	30	12	26,9	11,5	74

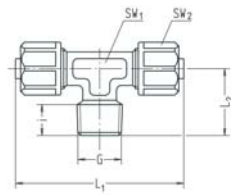
## Single swivel joint

- M5 thread
- PVC seal rings
- Ring connection brass black
- Banjo bolt galvanized steel
- Spacer ring Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	SW	i	L1	L2	L3	L4	B	t1	D2	NW	g/piece
135-5049	M5	8	3	20,5	9	10	14,5	9	5	8	2,4	6

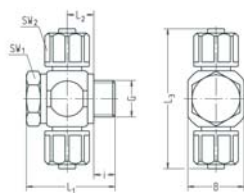
## T screw-in joint



- Whitworth pipe thread conical
- Seal in thread
- Material brass
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece
62-0204	R1/8	6 / 4	10	13	6,5	46	17	3,1	24
62-0206	R1/8	8 / 6	10	15	6,5	48	17	4,8	26
62-0208	R1/8	10 / 8	10	16	6,5	52	17	5,5	27
62-0404	R1/4	6 / 4	10	13	10	46	20	3,1	28
62-0406	R1/4	8 / 6	10	15	10	48	20	4,8	30
62-0408	R1/4	10 / 8	10	16	10	52	20	6,5	31

## Double swivel screw joint, short model



- Whitworth pipe thread
- VS seal rings
- Material Al black anodized or brass <sup>1)</sup>
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	B	NW	g/piece
38-0243K <sup>2)</sup>	G1/8	4,3 / 3	14	∅8	5,5	28,5	9,5	37	16	2,2	17
38-0203K <sup>2)</sup>	G1/8	5 / 3	14	∅8	5,5	28,5	9,5	37	16	2,2	16
38-0204K	G1/8	6 / 4	14	13	5,5	28,5	9,5	43	16	3,1	17
38-0206K	G1/8	8 / 6	14	15	5,5	28,5	9,5	45	16	4,5	19
38-0208K	G1/8	10 / 8	14	16	5,5	28,5	9,5	49	16	4,5	20
38-0404K	G1/4	6 / 4	17	13	7,5	30,5	9,5	46	20	3,1	24
38-0406K	G1/4	8 / 6	17	15	7,5	30,5	9,5	48	20	4,8	25
38-0408K	G1/4	10 / 8	17	16	7,5	30,5	9,5	52	20	6,5	27
38-0604K	G3/8	6 / 4	22	13	7,5	31,5	9,5	48	22	3,1	29
38-0606K	G3/8	8 / 6	22	15	7,5	31,5	9,5	50	22	4,8	31
38-0608K	G3/8	10 / 8	22	16	7,5	31,5	9,5	54	22	6,6	32
38-0609K	G3/8	11,6 / 9	22	19	8	38,5	12,7	58	24	7,8	47
38-0804K	G1/2	6 / 4	27	13	9	33,5	9,5	54	29	3,1	43
38-0806K	G1/2	8 / 6	27	15	9	33,5	9,5	56	29	4,8	44
38-0808K	G1/2	10 / 8	27	16	9	33,5	9,5	60	29	6,6	45
38-0813K <sup>3)</sup>	G1/2	17,6 / 13	27	24	9	47	16,2	72	30	11,5	95

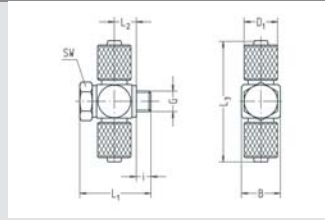
<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Union nut brass black

<sup>3)</sup> Union nut Al black anodized

## Double swivel screw joint, short model

- M5 thread
- PVC seal rings
- Banjo fitting and union nuts brass black
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

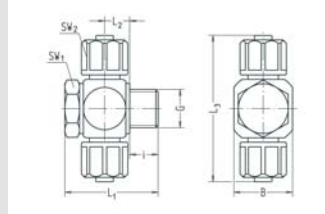


Part no.	G	for hose	SW	i	L1	L2	L3	D1	B	NW	g/piece
39-5043K	M5	4,3 / 3	8	3,5	17	5,2	28	8	8,5	2,2	11
39-5003K	M5	5 / 3	8	3,5	17	5,2	28	8	8,5	2,2	11
39-5004K	M5	6 / 4	8	3,5	17	5,2	28	9	8,5	2,4	12

10

## Double swivel screw joint, short model

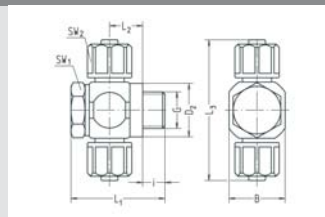
- Whitworth pipe thread
- Sealing without seal rings
- Banjo fitting and union nuts PA6 GF, black
- Banjo bolt Al black anodized
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	B	NW	g/piece
38-0204KKST	G1/8	6 / 4	14	13	8	28,5	8,2	50	16	3	11
38-0206KKST	G1/8	8 / 6	14	15	8	28,5	8,2	53	16	4,5	12
38-0404KKST	G1/4	6 / 4	17	13	10	30,5	8,2	52	20	3	15
38-0406KKST	G1/4	8 / 6	17	15	10	30,5	8,2	55	20	4,5	16

## Double swivel screw joint

- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

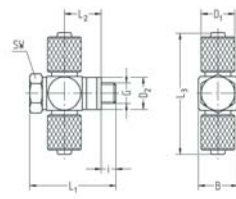


Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	B	D2	NW	g/piece
38-0243	1) G1/8	4,3 / 3	14	ø8	6	30,5	11,8	37	16	14,9	2,2	16
38-0203	1) G1/8	5 / 3	14	ø8	6	30,5	11,8	37	16	14,9	2,2	16
38-0204	G1/8	6 / 4	14	13	6	30,5	11,8	43	16	14,9	3,1	16
38-0206	G1/8	8 / 6	14	15	6	30,5	11,8	45	16	14,9	4,5	18
38-0208	G1/8	10 / 8	14	16	6	30,5	11,8	49	16	14,9	4,5	19
38-0404	G1/4	6 / 4	17	13	8	32,5	11,8	46	20	18,9	3,1	22
38-0406	G1/4	8 / 6	17	15	8	32,5	11,8	48	20	18,9	4,8	24
38-0408	G1/4	10 / 8	17	16	8	32,5	11,8	52	20	18,9	6,5	25
38-0604	G3/8	6 / 4	22	13	8	33,5	11,8	48	22	22,9	3,1	28
38-0606	G3/8	8 / 6	22	15	8	33,5	11,8	50	22	22,9	4,8	29
38-0608	G3/8	10 / 8	22	16	8	33,5	11,8	54	22	22,9	6,6	30
38-0804	G1/2	6 / 4	27	13	10	36	11,8	54	29	26,9	3,1	42
38-0806	G1/2	8 / 6	27	15	10	36	11,8	56	29	26,9	4,8	44
38-0808	G1/2	10 / 8	27	16	10	36	11,8	60	29	26,9	6,6	45

<sup>1)</sup> Union nut brass black



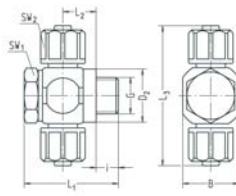
## Double swivel screw joint



- M5 thread
- PVC seal rings
- Banjo fitting and union nuts brass black
- Banjo bolt galvanized steel
- Spacer ring Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	D2	NW	g/piece
39-5043	M5	4,3 / 3	8	3,5	20,5	8,7	28	8,5	8	8	2,2	12
39-5003	M5	5 / 3	8	3,5	20,5	8,7	28	8,5	8	8	2,2	13
39-5004	M5	6 / 4	8	3,5	20,5	8,7	28	8,5	9	8	2,4	13

## Double swivel screw joint



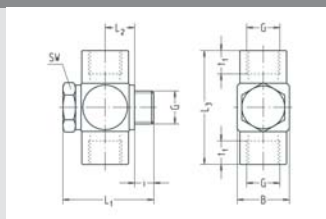
- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	B	D2	NW	g/piece
39-5443	1) 2) M10x1	4,3 / 3	14	ø8	6	30,5	11,8	37	16	14,9	2,2	16
39-5403	1) 2) M10x1	5 / 3	14	ø8	6	30,5	11,8	37	16	14,9	2,2	16
39-5404	2) M10x1	6 / 4	14	13	6	30,5	11,8	43	16	14,9	3,1	16
39-5406	2) M10x1	8 / 6	14	15	6	30,5	11,8	45	16	14,9	4,5	18
39-5408	2) M10x1	10 / 8	14	16	6	30,5	11,8	49	16	14,9	4,5	19
39-5604	M12x1,5	6 / 4	17	13	8	32,5	11,8	46	20	17,9	3,1	23
39-5606	M12x1,5	8 / 6	17	15	8	32,5	11,8	48	20	17,9	4,8	24
39-5608	M12x1,5	10 / 8	17	16	8	32,5	11,8	52	20	17,9	5,5	25
39-5804	M14x1,5	6 / 4	17	13	8	32,5	11,8	46	20	19,9	3,1	23
39-5806	M14x1,5	8 / 6	17	15	8	32,5	11,8	48	20	19,9	4,8	25
39-5808	M14x1,5	10 / 8	17	16	8	32,5	11,8	52	20	19,9	6,5	26
39-6204	M18x1,5	6 / 4	22	13	9	34,5	11,8	50	24	23,9	3,1	31
39-6206	M18x1,5	8 / 6	22	15	9	34,5	11,8	52	24	23,9	4,8	33
39-6208	M18x1,5	10 / 8	22	16	9	34,5	11,8	56	24	23,9	6,6	34
39-6604	M22x1,5	6 / 4	27	13	10	36	11,8	54	29	27,9	3,1	44
39-6606	M22x1,5	8 / 6	27	15	10	36	11,8	56	29	27,9	4,8	45
39-6608	M22x1,5	10 / 8	27	16	10	36	11,8	60	29	27,9	6,6	46

<sup>1)</sup> Union nut brass black    <sup>2)</sup> Spacer ring PA6 GF, black

## Double swivel joint, short model

- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

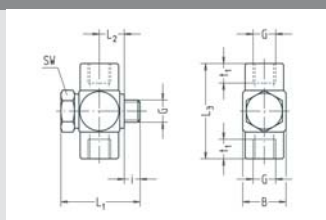


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Part no.	G	SW	i	L1	L2	L3	B	t1	NW	g/piece
138-0201K	G1/8	14	5,3	28,5	9,6	29	16	7	4,5	18
138-0403K	G1/4	17	7,5	35	11,7	42	20	10	6,5	31
138-0605K	G3/8	22	7	38,5	13,2	46	24	10	9	44
138-0807K	G1/2	27	9	47	16,2	55	30	12	11,5	81

## Double swivel joint, short model

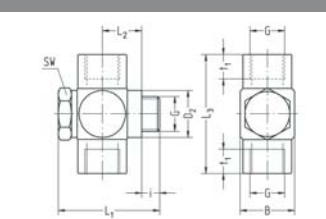
- Metric thread
- PVC seal rings
- Ring connection brass black
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	SW	i	L1	L2	L3	B	t1	NW	g/piece
139-4241K	M3	5	2,5	11,6	3,5	12,4	5,6	3	1,5	1
139-5049K	M5	8	3	17	5,5	20	9	5	2,4	5

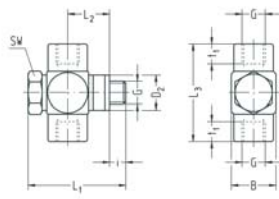
## Double swivel joint

- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	SW	i	L1	L2	L3	B	t1	D2	NW	g/piece
138-0201	G1/8	14	6	31	12	29	16	7	14,9	4,5	16
138-0403	G1/4	17	8	37	14	42	20	10	18,9	6,5	33
138-0605	G3/8	22	8	41	15,5	46	24	10	22,9	9	46
138-0807	G1/2	27	10	49,5	18,5	55	30	12	26,9	11,5	88

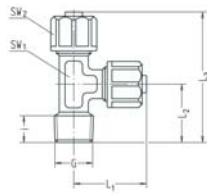
## Double swivel joint



- M5 thread
- PVC seal rings
- Ring connection brass black
- Banjo bolt galvanized steel
- Spacer ring Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	SW	i	L1	L2	L3	B	t1	D2	NW	g/piece
139-5049	M5	8	3	20,5	9	20	9	5	8	2,4	6

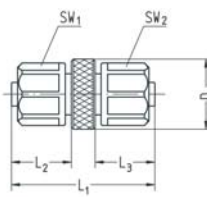
## L screw-in joint



- Whitworth pipe thread conical
- Seal in thread
- Material brass
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	NW	g/piece
58-0204	R1/8	6 / 4	10	13	6,5	23	17	40	3,1	25
58-0206	R1/8	8 / 6	10	15	6,5	24	17	41	4,8	27
58-0208	R1/8	10 / 8	10	16	6,5	26	17	43	5,5	27
58-0404	R1/4	6 / 4	10	13	10	23	20	43	3,1	28
58-0406	R1/4	8 / 6	10	15	10	24	20	44	4,8	30
58-0408	R1/4	10 / 8	10	16	10	26	20	46	6,5	31

## Double screw joint

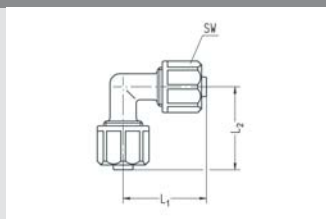


- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	for hose A	for hose B	SW1	SW2	L1	L2	L3	D1	NW	g/piece
32-0406	6 / 4	8 / 6	13	15	33	13	14	16	3,1	8
32-0408	6 / 4	10 / 8	13	16	35	13	16	16	3,1	9
32-0608	8 / 6	10 / 8	15	16	36	14	16	16	4,8	10
33-5604	6 / 4	6 / 4	13	13	32	13	13	16	3,1	7
33-5606	8 / 6	8 / 6	15	15	34	14	14	16	4,8	9
33-5808	10 / 8	10 / 8	16	16	38	16	16	16	6,6	10

## Elbow screw joints

- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

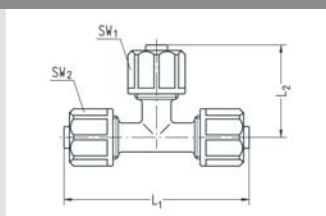


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Part no.	for hose	SW	L1	L2	NW	g/piece
77-0400	6 / 4	13	23	23	3,1	7
77-0600	8 / 6	15	24	24	4,8	8
77-0800	10 / 8	16	26	26	6,6	9

## T screw joints

- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

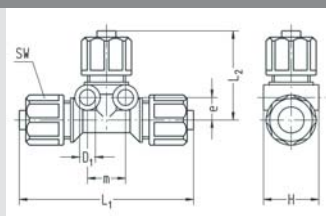


Part no.		for hose A	for hose B	SW1	SW2	L1	L2	NW	g/piece
78-4300	1)	4,3 / 3	4,3 / 3	ø8	ø8	28	19	2,2	14
78-0300	1)	5 / 3	5 / 3	ø8	ø8	28	19	2,2	14
78-0400		6 / 4	6 / 4	13	13	46	23	3,1	10
78-0600		8 / 6	8 / 6	15	15	48	24	4,8	11
78-0604		8 / 6	6 / 4	15	13	48	23	3,1	10
78-0800		10 / 8	10 / 8	16	16	52	26	6,6	14
78-0804		10 / 8	6 / 4	16	13	52	23	3,1	13
78-0806		10 / 8	8 / 6	16	15	52	24	4,8	13

<sup>1)</sup> Material brass black, union nuts brass black

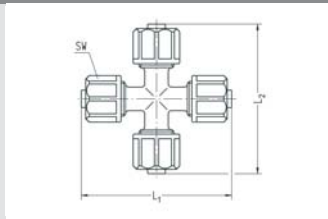
## T screw joints

- Material PA6 GF, black
- Union nuts PA6 GF, black
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	for hose	SW	L1	L2	H	D1	e	m	NW	g/piece
78-0400KST	6 / 4	13	54	28,5	15,5	5	13,5	12	3	8
78-0600KST	8 / 6	15	54	28,5	17,5	5	14,5	12	4,5	10
78-0900KST	11,6 / 9	19	63	32	22	5	16,5	15,5	7	25

## 4-way screw joint

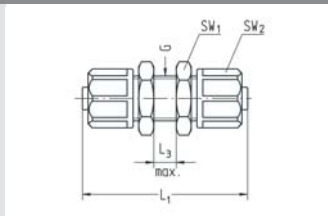


- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

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Part no.	for hose	SW	L1	L2	NW	g/piece
79-0400	6 / 4	13	46	46	3,1	12
79-0600	8 / 6	15	48	48	4,8	14
79-0800	10 / 8	16	52	52	6,6	17

## Bulkhead screw joint

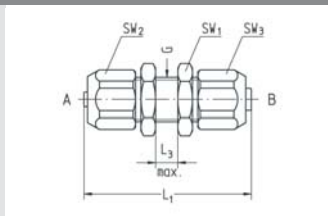


- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	for hose	G	SW1	SW2	L1	L3 max.	NW	g/piece
80-0303	1) 5 / 3	M7x0,5	9	∅8	37	7	2,2	11
80-4343	1) 4,3 / 3	M7x0,5	9	∅8	37	7	2,2	12
80-0404K	1) 6 / 4	M8x0,5	10	∅9	37	7	3,1	14
80-0404	6 / 4	M10x1	14	13	42	7	3,1	9
80-0606	8 / 6	M12x1	17	15	44	7	4,8	13
80-0808	10 / 8	M14x1	17	16	48	7	6,6	14
80-0909	11,6 / 9	M16x1	22	19	55	8	7,8	25

<sup>1)</sup> Material brass black, union nuts brass black

## Bulkhead screw joint



- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

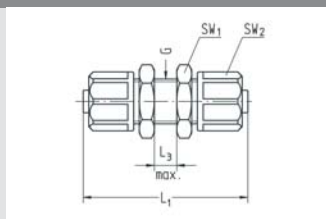
Part no.	for hose A	for hose B	G	SW1	SW2	SW3	L1	L3 max.	NW	g/piece
81-0304	1) 5 / 3	6 / 4	M8x0,5	10	∅8	∅9	37	7	2,2	8
81-0406	6 / 4	8 / 6	M12x1	17	13	15	43	7	3,1	18
81-0408	2) 6 / 4	10 / 8	M14x1	17	13	16	45	7	3,1	17
81-0608	2) 8 / 6	10 / 8	M14x1	17	15	16	46	7	4,8	16

<sup>1)</sup> Material brass black, union nuts brass black

<sup>2)</sup> Union nuts PA6 GF, black

## Bulkhead screw joint

- Material PA6 GF, black
- Jam nuts Al black anodized
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar

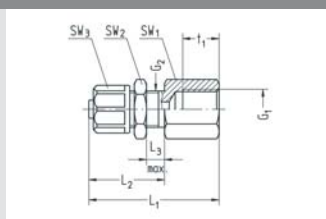


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Part no.	for hose	G	SW1	SW2	L1	L3 max.	NW	g/piece
80-0404KST	6 / 4	M10x1	14	13	51,5	11	3	7
80-0606KST	8 / 6	M12x1	17	15	51,5	11	4,5	10
80-0909KST	11,6 / 9	M16x1	22	19	61,5	14	7	19

## Bulkhead screw joint with female thread

- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

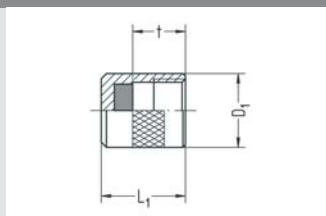


Part no.	G1	for hose	G2	SW1	SW2	SW3	L1	L2	L3 max.	t1	NW	g/piece	
107-4903	1)	M5	5 / 3	M7x0,5	8	9	∅8	28	21	7	5	2,2	4
107-4943	1)	M5	4,3 / 3	M7x0,5	8	9	∅8	28	21	7	5	2,2	4
107-4904	1)	M5	6 / 4	M8x0,5	10	10	∅9	28	21	7	5	3,1	6
106-0104		G1/8	6 / 4	M10x1	14	14	13	38	26	7	8	3,1	9
106-0106		G1/8	8 / 6	M12x1	14	17	15	39	27	7	8	4,8	11
106-0306		G1/4	8 / 6	M12x1	17	17	15	45	27	7	12	4,8	15
106-0506		G3/8	8 / 6	M12x1	19	17	15	46	27	7	12	4,8	15
106-0308		G1/4	10 / 8	M14x1	17	17	16	47	29	7	12	6,6	16
106-0508		G3/8	10 / 8	M14x1	19	17	16	48	29	7	12	6,6	16
106-0509		G3/8	11,6 / 9	M16x1	19	22	19	51	32	8	12	7,8	22

<sup>1)</sup> Material brass black, union nuts brass black

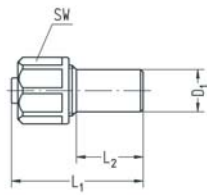
## Sealing nut with seal

- Sealing NBR (Perbunan)
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	for hose	L1	t	D1	g/piece
25-5300	6 / 4	15	9,5	12	3
25-5500	8 / 6	16	10,5	14	3
25-5700	10 / 8	18	12,5	15,5	4

## Soldering screw joint

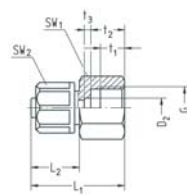


- Material brass
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	for hose	L1	L2	SW	L1	L2	D1	NW	g/piece
82-0604	6 / 4	23	13	∅9	23	13	6	3,1	5
82-1004	6 / 4	30	17	13	30	17	10	3,1	11
82-1006	8 / 6	31	17	15	31	17	10	4,8	13
82-1208	10 / 8	33	17	16	33	17	12	6,6	16
82-1410	1) 12,5 / 10	39,5	20	19	39,5	20	14	8,3	30
82-1612	1) 15 / 12	39,5	20	22	39,5	20	16	10,8	38

1) Union nuts Al black anodized

## Screw joint for pressure gauge



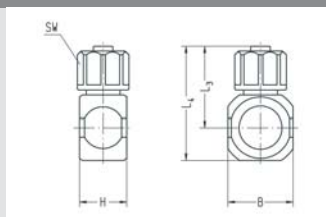
- Whitworth pipe thread and metric thread
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	L1	L2	t1	t2	t3	D2	NW	g/piece
26-5304	M10x1	6 / 4	14	13	27	13	8	11	2	5,5	3,1	6
26-5306	M10x1	8 / 6	14	15	28	14	8	11	2	5,5	4,8	7
27-0304	G1/4	6 / 4	17	13	27	13	8	11	2	5,5	3,1	8
27-0306	G1/4	8 / 6	17	15	28	14	8	11	2	5,5	4,8	9
27-0308	G1/4	10 / 8	17	16	30	16	8	11	2	6,5	6,5	9



## Single banjo fittings

- For banjo bolts with Whitworth pipe thread / metric thread
- Material Al black anodized or brass<sup>1)</sup>
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



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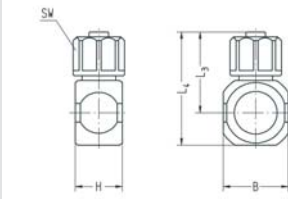
Part no.	for banjo bolt	for hose	SW	H	L3	L4	B	NW	g/piece Ms	g/piece
34-02431	<sup>2)</sup> G1/8	4,3 / 3	∅8	14,5	18,5	26,5	16	2,2	-	8
34-02031	<sup>2)</sup> G1/8	5 / 3	∅8	14,5	18,5	26,5	16	2,2	-	8
34-02041	G1/8	6 / 4	13	14,5	21,5	29,5	16	3,1	23	8
34-02061	G1/8	8 / 6	15	14,5	22,5	30,5	16	4,8	25	9
34-02081	G1/8	10 / 8	16	14,5	24,5	32,5	16	6,6	26	10
34-02091	G1/8	11,6 / 9	19	19	24,5	32	20	7,8	-	13
34-04041	G1/4	6 / 4	13	14,5	23	33	20	3,1	29	11
34-04061	G1/4	8 / 6	15	14,5	24	34	20	4,8	31	11
34-04081	G1/4	10 / 8	16	14,5	26	36	20	6,6	32	12
34-04091	G1/4	11,6 / 9	19	19	26,5	36	20	7,8	-	16
34-06041	G3/8	6 / 4	13	14,5	24,5	35,5	22	3,1	-	10
34-06061	G3/8	8 / 6	15	14,5	25,5	36,5	22	4,8	-	11
34-06081	G3/8	10 / 8	16	14,5	27,5	38,5	22	6,6	-	11
34-06091	G3/8	11,6 / 9	19	21	29	41	24	7,8	-	23
34-06101	<sup>3)</sup> G3/8	12,5 / 10	19	21	31,5	43,5	24	8,3	-	26
34-08041	G1/2	6 / 4	13	14,5	27	41,5	29	3,1	-	16
34-08061	G1/2	8 / 6	15	14,5	28	42,5	29	4,8	-	16
34-08081	G1/2	10 / 8	16	14,5	30	44,5	29	6,6	-	17
34-08101	<sup>3)</sup> G1/2	12,5 / 10	19	22	34,5	49,5	30	8,3	-	36
34-08121	<sup>3)</sup> G1/2	15 / 12	22	22	34,5	49,5	30	10,8	-	38
34-08131	<sup>3)</sup> G1/2	17,6 / 13	24	28	36	51	30	11,5	-	51

<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Union nut brass black

<sup>3)</sup> Union nut Al black anodized

## Single banjo fittings



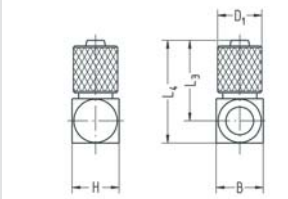
- For banjo bolts with metric thread
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.		for banjo bolt M	for hose	SW	H	L3	L4	B	NW	g/piece Ms	g/piece
34-02431	2)	M10x1	4,3 / 3	ø8	14,5	18,5	26,5	16	2,2	-	8
34-02031	2)	M10x1	5 / 3	ø8	14,5	18,5	26,5	16	2,2	-	8
34-02041		M10x1	6 / 4	13	14,5	21,5	29,5	16	3,1	23	8
34-02061		M10x1	8 / 6	15	14,5	22,5	30,5	16	4,8	25	9
34-02081		M10x1	10 / 8	16	14,5	24,5	32,5	16	6,6	26	10
35-56041		M12x1,5	6 / 4	13	14,5	23	33	20	3,1	-	11
35-56061		M12x1,5	8 / 6	15	14,5	24	34	20	4,8	-	12
35-56081		M12x1,5	10 / 8	16	14,5	26	36	20	6,6	-	13
35-58041		M14x1,5	6 / 4	13	14,5	23	33	20	3,1	-	10
35-58061		M14x1,5	8 / 6	15	14,5	24	34	20	4,8	-	11
35-58081		M14x1,5	10 / 8	16	14,5	26	36	20	6,6	-	11
35-62041		M18x1,5	6 / 4	13	14,5	25	37	24	3,1	-	12
35-62061		M18x1,5	8 / 6	15	14,5	26	38	24	4,8	-	12
35-62081		M18x1,5	10 / 8	16	14,5	28	40	24	6,6	-	13
35-66041		M22x1,5	6 / 4	13	14,5	27,5	41,5	29	3,1	-	14
35-66061		M22x1,5	8 / 6	15	14,5	28,5	42,5	29	4,8	-	15
35-66081		M22x1,5	10 / 8	16	14,5	30,5	44,5	29	6,6	-	16
35-66121	3)	M22x1,5	15 / 12	22	22	34,5	49,5	30	10,8	-	36

<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Union nut brass black    <sup>3)</sup> Union nut Al black anodized

## Single banjo fittings

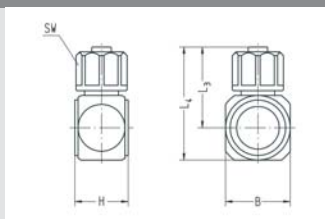


- For banjo bolts with thread M5
- Material brass black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	for banjo bolt	for hose	H	L3	L4	D1	B	NW	g/piece
35-50431	M5	4,3 / 3	8,5	14	18	8	8,5	2,2	6
35-50031	M5	5 / 3	8,5	14	18	8	8,5	2,2	6
35-50041	M5	6 / 4	8,5	14	18	9	8,5	3,1	6
35-50431-1	M5 (for throttle)	4,3 / 3	8,5	14	18	8	8,5	1,8	5
35-50031-1	M5 (for throttle)	5 / 3	8,5	14	18	8	8,5	1,8	5
35-50041-1	M5 (for throttle)	6 / 4	8,5	14	18	9	8,5	1,8	6

## Single banjo fittings

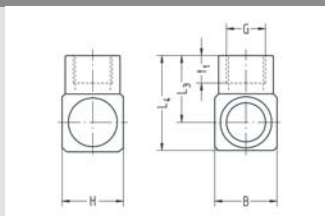
- For banjo bolts with Whitworth pipe thread
- Sealing without additional seal rings
- Material PA6 GF, black
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	for banjo bolt	for hose	SW	H	L3	L4	B	NW	g/piece
34-02041KST	G1/8	6 / 4	13	16,5	25	32,5	16	3	5
34-02061KST	G1/8	8 / 6	15	16,5	26,5	34	16	4,5	6
34-04041KST	G1/4	6 / 4	13	16,5	26	36,5	20	3	6
34-04061KST	G1/4	8 / 6	15	16,5	27,5	38	20	4,5	7

## Single banjo

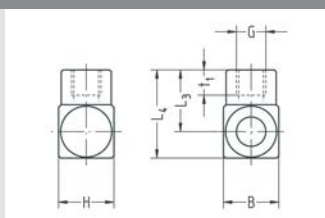
- For banjo bolts with Whitworth pipe thread
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	for banjo bolt	G	H	L3	L4	B	t1	NW	g/piece
134-02013	G1/8	G1/8	14,8	14,5	22	16	7	5	8
134-04033	G1/4	G1/4	19	21	30,5	20	10	8	16
134-06053	G3/8	G3/8	22	23	35	24	10	10	22
134-08073	G1/2	G1/2	28	27,5	42,5	30	12	12	45

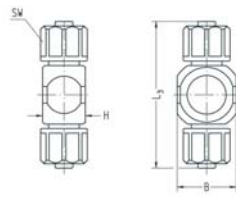
## Single banjo

- For banjo bolts with metric thread
- Material brass black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	for banjo bolt	G	H	L3	L4	B	t1	NW	g/piece
135-42413	M3	M3	5,6	6,2	9	5,6	3	1,5	1
135-50493	M5	M5	9	10	14,5	9	5	3	2
135-50493-1	M5 (for throttle)	M5	9	10	14,5	9	4,5	1,7	2

## Double banjo fittings



- For banjo bolts with Whitworth pipe thread / metric thread
- Material Al black anodized or brass <sup>1)</sup>
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

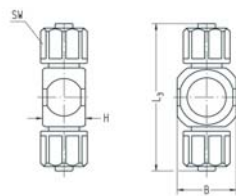
Part no.		for banjo bolt	for hose	SW	H	L3	B	NW	g/piece Ms	g/piece
38-02431	2)	G1/8	4,3 / 3	ø8	14,5	37	16	2,2	-	10
38-02031	2)	G1/8	5 / 3	ø8	14,5	37	16	2,2	-	10
38-02041		G1/8	6 / 4	13	14,5	43	16	3,1	27	10
38-02061		G1/8	8 / 6	15	14,5	45	16	4,8	30	12
38-02081		G1/8	10 / 8	16	14,5	49	16	6,6	33	13
38-04041		G1/4	6 / 4	13	14,5	46	20	3,1	34	13
38-04061		G1/4	8 / 6	15	14,5	48	20	4,8	37	14
38-04081		G1/4	10 / 8	16	14,5	52	20	6,6	39	15
38-06041		G3/8	6 / 4	13	14,5	48	22	3,1	-	12
38-06061		G3/8	8 / 6	15	14,5	50	22	4,8	-	14
38-06081		G3/8	10 / 8	16	14,5	54	22	6,6	-	14
38-06091		G3/8	11,6 / 9	19	21	58	24	7,8	-	28
38-08041		G1/2	6 / 4	13	14,5	54	29	3,1	-	18
38-08061		G1/2	8 / 6	15	14,5	56	29	4,8	-	19
38-08081		G1/2	10 / 8	16	14,5	60	29	6,6	-	20
38-08131	3)	G1/2	17,6 / 13	24	28	72	30	11,5	-	65

<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Union nut brass black

<sup>3)</sup> Union nut Al black anodized

## Double banjo fittings



- For banjo bolts with metric thread
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.		for banjo bolt M	for hose	SW	H	L3	B	NW	g/piece Ms	g/piece
38-02431	2)	M10x1	4,3 / 3	ø8	14,5	37	16	2,2	-	10
38-02031	2)	M10x1	5 / 3	ø8	14,5	37	16	2,2	-	10
38-02041		M10x1	6 / 4	13	14,5	43	16	3,1	27	10
38-02061		M10x1	8 / 6	15	14,5	45	16	4,8	30	12
38-02081		M10x1	10 / 8	16	14,5	49	16	6,6	33	13
39-56041		M12x1,5	6 / 4	13	14,5	46	20	3,1	-	13
39-56061		M12x1,5	8 / 6	15	14,5	48	20	4,8	-	15
39-56081		M12x1,5	10 / 8	16	14,5	52	20	6,6	-	16
39-58041		M14x1,5	6 / 4	13	14,5	46	20	3,1	-	12
39-58061		M14x1,5	8 / 6	15	14,5	48	20	4,8	-	13
39-58081		M14x1,5	10 / 8	16	14,5	52	20	6,6	-	14
39-62041		M18x1,5	6 / 4	13	14,5	50	24	3,1	-	13
39-62061		M18x1,5	8 / 6	15	14,5	52	24	4,8	-	15
39-62081		M18x1,5	10 / 8	16	14,5	56	24	6,6	-	16
39-66041		M22x1,5	6 / 4	13	14,5	54	29	3,1	-	16
39-66061		M22x1,5	8 / 6	15	14,5	56	29	4,8	-	18
39-66081		M22x1,5	10 / 8	16	14,5	60	29	6,6	-	19

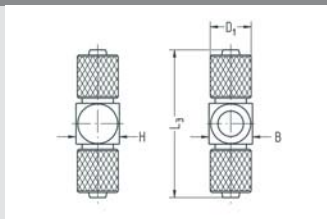
<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Union nut brass black

<sup>3)</sup> Union nut Al black anodized

## Double banjo fittings

- For banjo bolts with thread M5
- Material brass black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

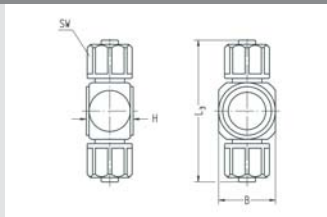


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Part no.	for banjo bolt	for hose	H	L3	D1	B	NW	g/piece
39-50431	M5	4,3 / 3	8,5	28	8	8,5	2,2	8
39-50031	M5	5 / 3	8,5	28	8	8,5	2,2	8
39-50041	M5	6 / 4	8,5	28	9	8,5	3,1	9
39-50431-1	M5 (for throttle)	4,3 / 3	8,5	28	8	8,5	1,8	8
39-50031-1	M5 (for throttle)	5 / 3	8,5	28	8	8,5	1,8	8
39-50041-1	M5 (for throttle)	6 / 4	8,5	28	9	8,5	1,8	9

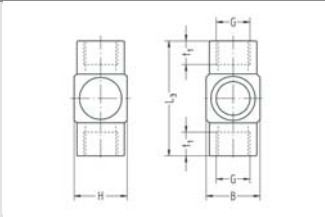
## Double banjo fittings

- For banjo bolts with Whitworth pipe thread
- Sealing without additional seal rings
- Material PA6 GF, black
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	for banjo bolt	for hose	SW	H	L3	B	NW	g/piece
38-02041KST	G1/8	6 / 4	13	16,5	50	16	3	6
38-02061KST	G1/8	8 / 6	15	16,5	53	16	4,5	7
38-04041KST	G1/4	6 / 4	13	16,5	52	20	3	7
38-04061KST	G1/4	8 / 6	15	16,5	55	20	4,5	8

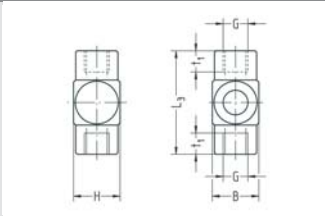
## Double banjo



- For banjo bolts with Whitworth pipe thread
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	for banjo bolt	G	H	L3	B	t1	NW	g/piece
138-02013	G1/8	G1/8	14,8	29	16	7	5	11
138-04033	G1/4	G1/4	19	42	20	10	8	20
138-06053	G3/8	G3/8	22	46	24	10	10	29
138-08073	G1/2	G1/2	28	55	30	12	12	58

## Double banjo

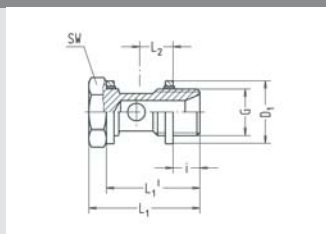


- For banjo bolts with metric thread
- Material brass black
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	for banjo bolt	G	H	L3	B	t1	NW	g/piece
139-42413	M3	M3	5,6	12,4	5,6	3	1,5	1
139-50493	M5	M5	9	20	9	5	3	2
139-50493-1	M5 (for throttle)	M5	9	20	9	4,5	1,7	2

## Banjo bolt, short model

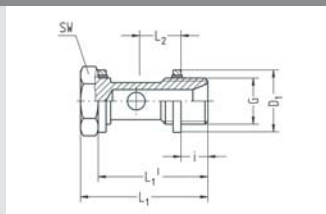
- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5



Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
534-0200K	G1/8	14	5,5	28,5	24,5	9,5	14,7	4,5	7
534-0400K	G1/4	17	7,5	30,5	26,5	9,5	17,7	6,5	10
534-0600K	G3/8	22	7,5	31,5	26,5	9,5	21,8	9	17
534-0800K	G1/2	27	9	33,5	28	9,5	26,3	11,5	25

## Banjo bolt, short model for high banjos

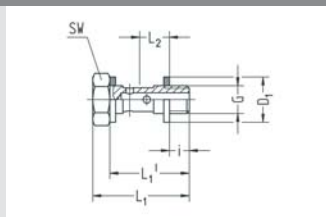
- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo with H greater 14.5



Part no.	G	fits banjo with H	SW	i	L1	L1'	L2	D1	NW	g/piece
534-0419K	G1/4	19	17	7,5	35	31	11,7	17,7	6,5	11
534-0621K	G3/8	21 and 22	22	8	38,5	33,5	12,7	21,8	9	19
534-0828K	G1/2	28	27	9	47	41,5	16,2	26,3	11,5	30

## Banjo bolt, short model

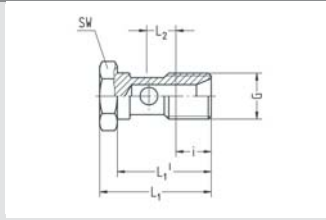
- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	fits banjo with H	SW	i	L1	L1'	L2	D1	NW	g/piece
35-4200K	M3	5,5	5	2,5	11,6	9,6	3,5	5	1,5	1
35-5000K	M5	8,5 and 9	8	3,5 (3)	17	14	5,2 (5,5)	7,5	2,4	3



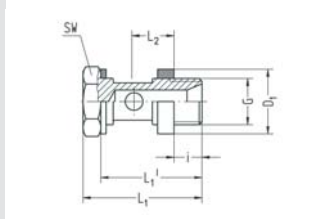
## Banjo bolt, short model



- For 1 banjo fitting
- Whitworth pipe thread
- Material Al black anodized
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar
- Fits banjo fitting KST with H = 16.5

Part no.	G	SW	i	L1	L1'	L2	NW	g/piece
534-02002KKST	G1/8	14	8	28,5	24,5	8,2	4,5	5
534-04002KKST	G1/4	17	10	30,5	26,5	8,2	6,5	8

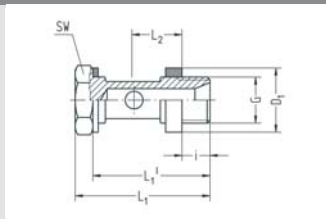
## Banjo bolt



- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5

Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
534-0200	G1/8	14	6	30,5	26,5	11,8	14,9	4,5	6
534-0400	G1/4	17	8	32,5	28,5	11,8	18,9	6,5	10
534-0600	G3/8	22	8	33,5	28,5	11,8	22,9	9	16
534-0800	G1/2	27	10	36	30,5	11,8	26,9	11,5	25

## Banjo bolt for high banjos

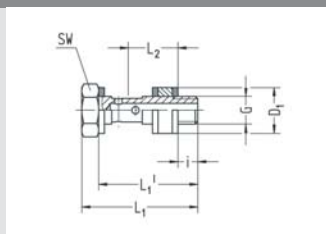


- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo with H greater 14.5

Part no.	G	fits banjo with H	SW	i	L1	L1'	L2	D1	NW	g/piece
534-0215	G1/8	15 and 15,5	14	6	31	27	12	14,9	4,5	6
534-0419	G1/4	19	17	8	37	33	14	18,9	6,5	10
534-0422	G1/4	22	17	8	40	36	15,5	18,9	6,5	11
534-0621	G3/8	21 and 22	22	9	41	36	15	22,9	9	18
534-0624	G3/8	24	22	8	43	38	16,5	22,9	9	18
534-0628	G3/8	28	22	8	47	42	18,5	22,9	9	18
534-0828	G1/2	28	27	10	49,5	44	18,5	26,9	11,5	29
534-1028	G3/4	28	32	14	58	51	21	33	15	55
534-1036	G3/4	36	32	14	66	59	25	33	15	62
534-1236	G1	36	41	16	70	61	25	40	20	107

## Banjo bolt

- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 8.5 (and 9)

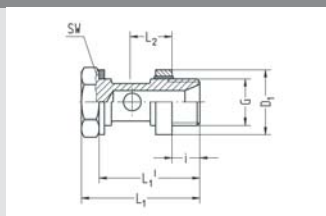


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Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
35-5000	M5	8	3,5 (3)	20,5	17,5	8,7 (9)	8	2,4	4

## Banjo bolt

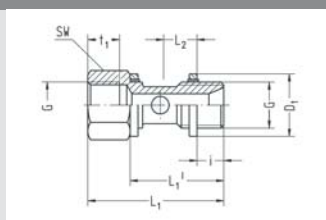
- For 1 banjo fitting
- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo with H = 14.5



Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
535-5400	M10x1	14	6	30,5	30,5	11,8	14,9	4,5	6
535-5600	M12x1,5	17	8	32,5	32,5	11,8	17,9	5,5	9
535-5800	M14x1,5	17	8	32,5	32,5	11,8	19,9	6,5	11
535-6200	M18x1,5	22	9	34,5	34,5	11,8	23,9	10	18
535-6600	M22x1,5	27	10	36	36	11,8	27,9	11,5	28

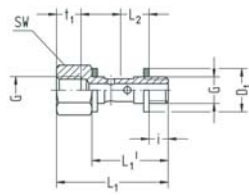
## Banjo bolt with female thread, short model

- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5



Part no.	G	SW	i	L1	L1'	L2	D1	t1	NW	g/piece
548-0200K	G1/8	14	5,5	34	24,5	9,5	14,7	6,5	5,2	18
548-0400K	G1/4	17	7,5	38,5	26,5	9,5	17,7	9	7,2	29
548-0600K	G3/8	22	7,5	39,5	26,5	9,5	21,8	9	9,2	48
548-0800K	G1/2	27	9	44	28	9,5	26,3	11	11,8	77

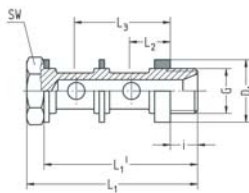
## Banjo bolt with female thread, short model



- Short design for 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 8,5

Part no.	G	SW	i	L1	L1'	L2	D1	t1	NW	g/piece
239-5000K	M5	8	3,5 (3)	20,5	14	5,2 (5,5)	7,5	4,5	2,4	3

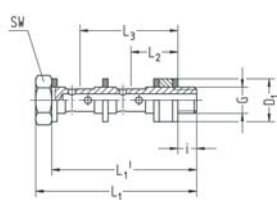
## Double banjo bolt for swivel distributor



- For 2 banjo fittings
- Whitworth pipe thread
- Plastic seal rings
- Material burnished steel
- Temperature range -10 to +70 °C
- Working pressure range 0 to 15 bar
- Fits banjo fitting with H = 14.5

Part no.	G	SW	i	L1	L1'	L2	L3	D1	NW	g/piece
50-0200	G1/8	14	8	49,5	45,5	11,8	28,3	14,9	6	19
50-0400	G1/4	17	10,5	52,5	48	11,8	28,3	18,9	8,5	30
50-0600	G3/8	22	11,5	54	49	11,8	28,3	22,9	11	50
50-0800	G1/2	27	12,5	56	50	11,8	28,3	26,9	13,8	92

## Double banjo bolt for swivel distributor

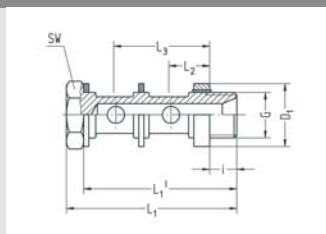


- For 2 banjo fittings
- M5 thread
- PVC seal rings
- Material galvanized steel
- Spacer ring Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar
- Fits banjo fitting with H = 8.5

Part no.	G	SW	i	L1	L1'	L2	L3	D1	NW	g/piece
51-5000	M5	8	3,5	30	27	8,7	18,3	8	2,4	5

## Double banjo bolt for swivel distributor

- For 2 banjo fittings
- Metric thread
- PVC seal rings
- Spacer seal ring Al / elastomer
- Material burnished steel
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar
- Fits banjo fitting with H = 14.5

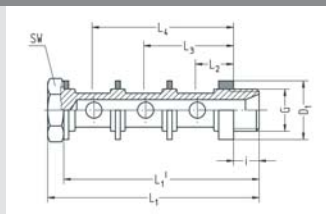


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Part no.	G	SW	i	L1	L1'	L2	L3	D1	NW	g/piece
51-5400	M10x1	14	8	49,5	45,5	11,8	28,3	14,9	6	19
51-5600	M12x1,5	17	10,5	52,5	48	11,8	28,3	17,9	6,8	31
51-5800	M14x1,5	17	10,5	52,5	48	11,8	28,3	19,9	8,5	35

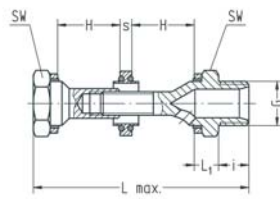
## Triple banjo bolt for swivel distributor

- For 3 banjo fittings
- Whitworth pipe thread
- Plastic seal rings
- Material burnished steel
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar
- Fits banjo fitting with H = 14.5



Part no.	G	SW	i	L1	L1'	L2	L3	L4	D1	NW	g/piece
52-0200	G1/8	14	8	66	62	11,8	28,3	44,8	14,9	6	24
52-0400	G1/4	17	10,5	69	64,5	11,8	28,3	44,8	18,9	8,5	37
52-0600	G3/8	22	11,5	70,5	65,5	11,8	28,3	44,8	22,9	11	59
52-0800	G1/2	27	12,5	72,5	66,5	11,8	28,3	44,8	26,9	13,8	98

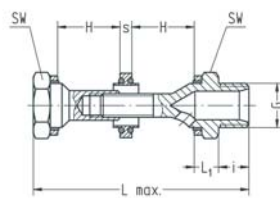
## Double swivel distributor



- For 2 banjo fittings
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5 and KST 16.5

Part no.	G	SW	i	L max.	2H min	2H max	L1	s	NW	Material	g/piece
190-0200	G1/8	14	7	55	29	32	6,2	3,5	5,5	steel bronzed	23
184-0400	G1/4	17	9	55	29	29	6,7	3,5	8	Al	16
184-0600	G3/8	22	9	57	29	29	7,7	3,5	10	Al	27
184-0800	G1/2	27	12	64	29	29	8,7	4,5	13	Al	47

## Double swivel distributor

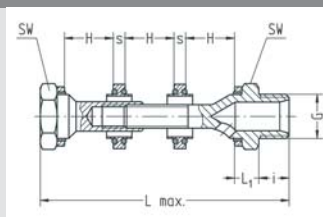


- For 2 banjo fittings
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H greater than 14.5

Part no.	G	SW	i	L max.	2H min	2H max	L1	s	NW	Material	g/piece
190-0200	G1/8	14	7	55	29	32	6,2	3,5	5,5	steel bronzed	23
190-0400	G1/4	17	9	72	36	46	6,7	3,5	8	Al	17
190-0600	G3/8	22	9	74	36	46	7,7	3,5	10	Al	30
190-0800	G1/2	27	12	90	40	56	8,7	4,5	13	Al	54

## Triple swivel distributor

- For 3 banjo fittings
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H greater than 14.5

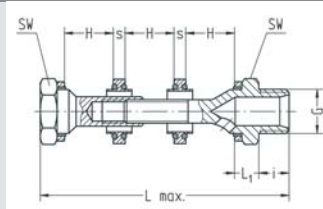


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Part no.	G	SW	i	L max.	3H min	3H max	L1	s	NW	Material	g/piece
192-0200	G1/8	14	7	74,5	43,5	48	6,2	3,5	5,5	steel bronzed	30
186-0400	G1/4	17	9	73	43,5	43,5	6,7	3,5	8	Al	19
186-0600	G3/8	22	9	75	43,5	43,5	7,7	3,5	10	Al	32
186-0800	G1/2	27	12	88,5	43,5	50	8,7	4,5	13	Al	57

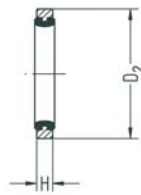
## Triple swivel distributor

- For 3 banjo fittings
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H greater than 14.5



Part no.	G	SW	i	L max.	3H min	3H max	L1	s	NW	Material	g/piece
192-0200	G1/8	14	7	74,5	43,5	48	6,2	3,5	5,5	steel bronzed	30
192-0400	G1/4	17	9	95,5	57	66	6,7	3,5	8	Al	23
192-0600	G3/8	22	9	97,5	57	66	7,7	3,5	10	Al	41
192-0800	G1/2	27	12	122,5	66	84	8,7	4,5	13	Al	70

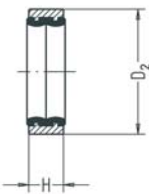
## VS seal ring



- For Whitworth pipe thread
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Large torque possible
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar

Part no.	for thread	D2	H	g/piece
515-0122	G1/8 and M10x1	14,7	2,2	1,02
515-0322	G1/4	17,7	2,2	1,23
515-0522	G3/8	21,8	2,2	1,56
515-0722	G1/2	26,3	2,2	2,04

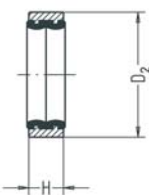
## VS spacer seal ring



- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar

Part no.	for thread	D2	H	g/piece
515-0150MS	G1/8 and M10x1	14,7	4,5	2,0
515-0350MS	G1/4	17,7	4,5	2,5
515-0550MS	G3/8	21,8	4,5	3,0
515-0750MS	G1/2	26,3	4,5	4,0

## VS spacer seal ring



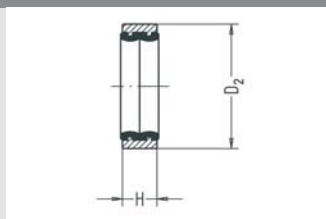
- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar

Part no.	for thread	D2	H	g/piece
515-0150AL	G1/8 and M10x1	14,7	4,5	1,0
515-0350AL	G1/4	17,7	4,5	1,5
515-0550AL	G3/8	21,8	4,5	2,0
515-0750AL	G1/2	26,3	4,5	2,0



## VS spacer seal ring

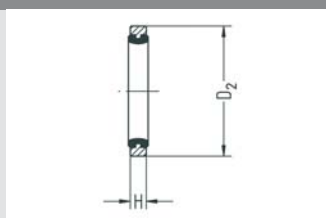
- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar



Part no.	for thread	D2	H	g/piece
514-5550AL	M12x1,5	17,9	4,5	1,31
514-5750AL	M14x1,5	19,9	4,5	1,42
514-6150AL	M18x1,5	23,9	4,5	1,67
514-6550AL	M22x1,5	27,9	4,5	1,91

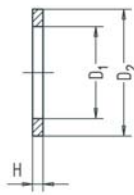
## VS seal ring

- For whitworth pipe thread
- Sealing material FPM, FDA compliant according to 21 CFR 177.2600
- Spacer ring 1.4307
- Large torque possible
- Undetachable
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 30 bar



Part no.	for thread	D2	H	g/piece
915-0122	G1/8 and M10x1	14,7	2,2	1
915-0322	G1/4	17,7	2,2	1

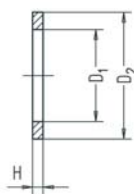
## seal ring



- For Whitworth pipe thread and metric thread
- Material aluminum
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to +15 bar

Part no.	for thread	D1	D2	H	g/piece
14-49AL	M5	5	7,6	1	0,06
14-55AL	M12x1,5	12,2	16	1,5	0,29
14-57AL	M14x1,5	14,1	18,2	1,5	0,39
14-61AL	M18x1,5	18,2	22	1,5	0,42
14-65AL	M22x1,5	22,2	27	1,5	0,64
15-01AL	G1/8 and M10x1	10,2	14	1,5	0,25
15-03AL	G1/4	13,2	18,2	1,5	0,45
15-05AL	G3/8	17,1	22	1,5	0,56
15-07AL	G1/2	21,2	26	1,5	0,60
14-5720AL	M14x1,5	14,1	18,2	2	0,49
14-6120AL	M18x1,5	18,2	22	2	0,50
14-6520AL	M22x1,5	22,2	27	2	0,88
15-0120AL	G1/8 and M10x1	10,2	14	2	0,31
15-0320AL	G1/4	13,2	18,2	2	0,58
15-0520AL	G3/8	17,1	22	2	0,71
15-0720AL	G1/2	21,2	26	2	0,86
15-1120AL	G1	33	39	2	2

## seal ring

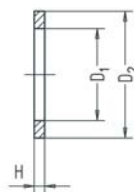


- For Whitworth pipe thread and metric thread
- Material PVC
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to +15 bar

Part no.	for thread	D1	D2	H	g/piece
14-41PVC	M3	3	5	0,8	0,01
14-49PVC	M5	5	7,6	1	0,03
14-55PVC	M12x1,5	12	16	1,5	0,07
14-57PVC	M14x1,5	14,1	18,2	1,5	0,22
14-61PVC	M18x1,5	18	22	1,5	0,1
14-65PVC	M22x1,5	22,2	27	1,5	0,38
15-01PVC	G1/8 and M10x1	10,2	14	1,5	0,14
15-03PVC	G1/4	13,2	18,2	1,5	0,24
15-05PVC	G3/8	17,1	22	1,5	0,31
15-07PVC	G1/2	21,2	26	1,5	0,34
15-0120PVC	G1/8 and M10x1	10,2	14	2	0,20
15-0320PVC	G1/4	13,2	18,2	2	0,35
15-0520PVC	G3/8	17,1	22	2	0,41
15-0720PVC	G1/2	21,2	26	2	0,50
15-0920PVC	G3/4	26,6	33	2	0,82
15-1120PVC	G1	33,4	39	2	0,91

## seal ring

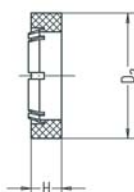
- For metric threads
- Material PA
- Temperature range -10 to +60 °C
- Working pressure range 0 to +15 bar



Part no.	for thread	D1	D2	H	g/piece
14-49PA	M5	5	7,6	1	0,06

## Spacer seal ring

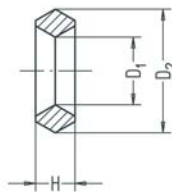
- For Whitworth pipe thread
- Material PA6 GF, black
- Undetachable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	for thread	D2	H	g/piece
534-015010	G1/8 and M10x1	14,9	4,5	0,54
534-035010	G1/4	18,9	4,5	0,81
534-055010	G3/8	22,9	4,5	1,13
534-075010	G1/2	26,9	4,5	1,21

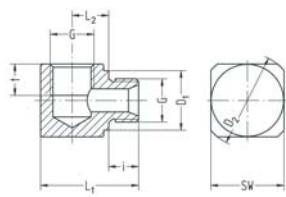
## Seal ring for manometer

- For manometer
- Material aluminum
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to +15 bar



Part no.	for thread	D1	D2	H	g/piece
13-01AL	G1/8 and M10x1	4,2	8,5	3	0,20
13-03AL	G1/4	6	11	3,5	0,37

## Elbow screw-in connector



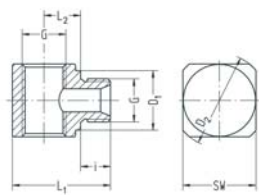
- Whitworth pipe thread and metric thread
- Material Al black anodized / brass <sup>1)</sup>
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	SW	i	L1	L2	D1	D2	NW	g/piece Ms	g/piece
85-0102	G1/8	15	6,5	23	9	14	20	5	25	8
85-0304	G1/4	22	9	29	11	18	28,5	7	65	22
85-0506	G3/8	27	9	32	12,5	22	35	10	-	35
85-0708	G1/2	36	11	40,5	15,8	26	46	12	-	80
87-4950 <sup>2)</sup>	M5	10	4,5	14	5,3	7,5	13	2	7	-
87-5354	M10x1	15	6,5	23	9	14	20	5	-	8
87-5758	M14x1,5	22	9	29	11	18	28,5	7	-	21

<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Material brass black

## T screw-in piece



- Whitworth pipe thread and thread M5
- Material Al black anodized / brass <sup>1)</sup>
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to 15 bar

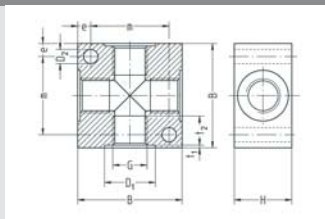
Part no.	G	SW	i	L1	L2	D1	D2	NW	g/piece Ms	g/piece
86-0102	G1/8	15	6,5	23	9	14	20	5	23	8
86-0304	G1/4	22	9	29	11	18	28,5	7	59	20
86-0506	G3/8	27	9	32	12,5	22	35	10	-	31
86-0708	G1/2	36	11	40,5	15,8	26	46	12	-	72
88-4950 <sup>2)</sup>	M5	10	4,5	14	5,3	7,5	13	2	6	-

<sup>1)</sup> When ordering please add "MS" to Part No.

<sup>2)</sup> Material brass black

## Distributor block

- Whitworth pipe thread and metric thread
- Material Al black anodized
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to 15 bar

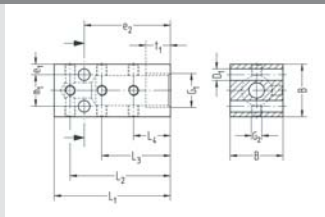


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Part no.	G	B	H	D1	D2	t1	t2	e	m	g/piece
83-01	G1/8	30	17	15,2	4,5	0,5	8,5	4	22	31
83-03	G1/4	40	22	19,5	5,5	0,5	12,5	5	30	71
83-05	G3/8	45	26	23,5	5,5	0,5	12,5	5	35	101
83-07	G1/2	50	32	27,5	6,5	0,5	14,5	6	38	143
84-53	M10x1	30	17	15,2	4,5	0,5	8,5	4	22	31
84-57	M14x1,5	40	22	20,5	5,5	0,5	12,5	5	30	67
84-65	M22x1,5	50	32	28,5	6,5	0,5	14,5	6	38	136

## Distributor block equipped

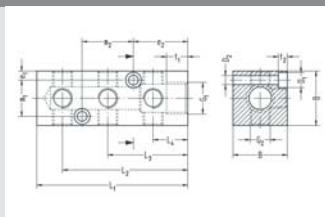
- With 9 exits
- Material Al black anodized
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to 15 bar



Part no.	G1	G2	B	L1	L2	L3	L4	D1	t1	e1	e2	m1	g/piece
104-4101	G1/8	M3	15	33	28,5	19,5	10,5	3,3	7	3	24,5	9	15

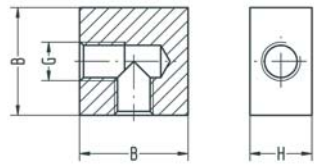
## Distributor block equipped

- With 9 exits
- Material Al black anodized
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to 15 bar



Part no.	G1	G2	B	L1	L2	L3	L4	D1	D2	t1	t2	e1	e2	m1	m2	g/piece
104-0105	G3/8	G1/8	30	80	68	44	20	9,5	5,5	12	5	5,2	30	19,5	28	150
104-0307	G1/2	G1/4	36	100	83	53	23	10,5	6,5	14	6	6	36	24	34	265
104-4901	G1/8	M5	20	50	42	27	12	7,5	4,5	8	4	4	18	12	18	45

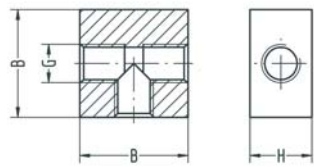
## Elbow piece



- Material Al black anodized
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	B	H	g/piece
100-49	M5	14	8	3

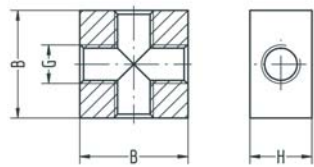
## T piece



- Material Al black anodized
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	B	H	g/piece
101-49	M5	14	8	3

## 4-way piece



- Material Al black anodized
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	B	H	g/piece
102-49	M5	14	8	3

## Service conditions

Working pressure range: 0.95 to 10 bar  
 Allowable medium: Air  
 Temperature range: -10 to +60 °C

Data provided depend on hoses used.

## Range of application

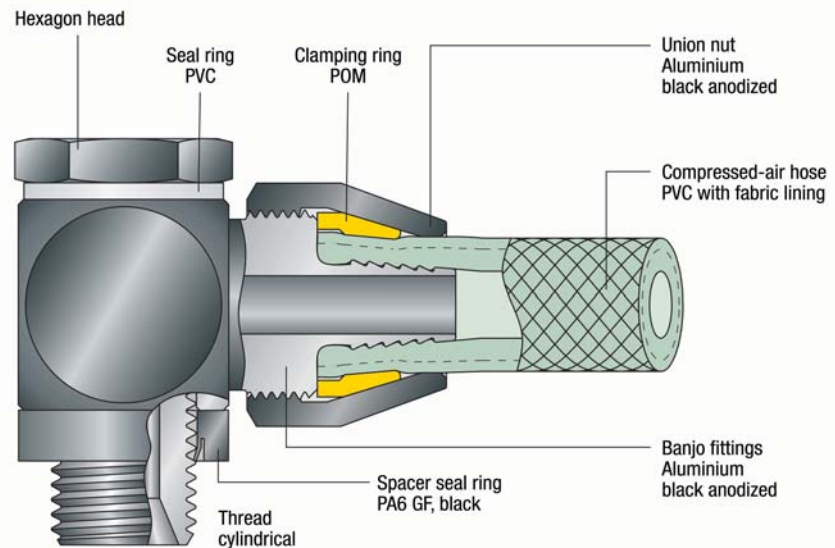
The screw joint system especially developed for the use of compressed-air hoses made of PVC with fabric lining.

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## Functional principle

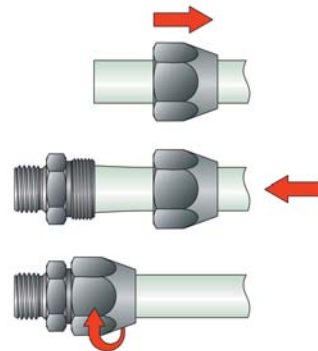
### Advantages

- Quick assembly of compressed-air hoses
- Frequent assembly and disassembly possible
- No hose clamp necessary
- Low weight
- Robust
- Suitable for vacuum



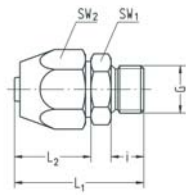
## Handling

1. Lightly grease outer hose end and push union nut over the hose
2. Push hose over hose nipple until it hits the limit stop
3. Tighten union nut up to the collar





## Straight male stud coupling



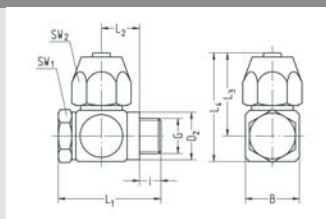
- For compressed-air hoses made of PVC with fabric lining
- Whitworth pipe thread
- Material Al black anodized / POM
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 10 bar

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Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece
68-0204	G1/8	10 / 4	17	17	6,5	30,5	19	3,4	12
68-0206	G1/8	12 / 6	17	19	6,5	32,5	20,5	4,6	14
68-0404	G1/4	10 / 4	17	17	9	33	19	3,4	12
68-0406	G1/4	12 / 6	17	19	9	35	20,5	5,2	14
68-0408	G1/4	14 / 8	22	22	9	38	23	7	23
68-0409	G1/4	15 / 9	22	24	9	38,5	23,5	7,5	27
68-0410	G1/4	16 / 10	22	24	9	38,5	23,5	7,5	27
68-0604	G3/8	10 / 4	19	17	9	33	19	3,4	14
68-0606	G3/8	12 / 6	19	19	9	35	20,5	5,2	16
68-0608	G3/8	14 / 8	22	22	9	38	23	7	23
68-0609	G3/8	15 / 9	22	24	9	38,5	23,5	7,5	27
68-0610	G3/8	16 / 10	22	24	9	38,5	23,5	8,5	27
68-0612	G3/8	21 / 12	27	30	9	41	25	9	45
68-0613	G3/8	20 / 13	27	30	9	41	25	10	46
68-0804	G1/2	10 / 4	24	17	11	36	19	3,4	20
68-0806	G1/2	12 / 6	24	19	11	37,5	20,5	5,2	22
68-0808	G1/2	14 / 8	24	22	11	40	23	7	27
68-0809	G1/2	15 / 9	24	24	11	40,5	23,5	7,5	32
68-0810	G1/2	16 / 10	24	24	11	40,5	23,5	8,5	31
68-0812	G1/2	21 / 12	27	30	11	43	25	9	48
68-0813	G1/2	20 / 13	27	30	11	43	25	11	48
68-1013	G3/4	20 / 13	32	30	14	47	25	11	58
68-1019	G3/4	26 / 19	36	41	14	55	33	15	114
68-1219	G1	26 / 19	41	41	16	59	33	15	130

## Single swivel screw joint

- For compressed-air hoses made of PVC with fabric lining
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized / POM
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 10 bar

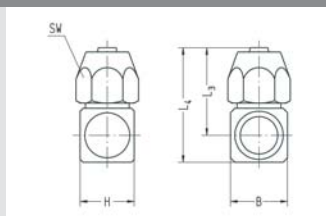


10

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
174-0204	G1/8	10 / 4	14	17	5,5	31	12,3	26,5	34	16	14,9	3,4	20
174-0406	G1/4	12 / 6	17	19	8	37	14	30	39,5	20	18,9	5,2	31
174-0408	G1/4	14 / 8	17	22	8	40	15,5	32,5	42	22	18,9	6,5	40
174-0409	G1/4	15 / 9	17	24	8	40	15,5	32,5	42	22	18,9	6,5	44
174-0606	G3/8	12 / 6	22	19	8	38	14	32,5	44,5	24	22,9	5,2	41
174-0608	G3/8	14 / 8	22	22	8	41	15,5	35	47	24	22,9	7	52
174-0609	G3/8	15 / 9	22	24	8	41	15,5	35	47	24	22,9	7,5	54
174-0610	G3/8	16 / 10	22	24	8	43	16,5	35,5	47,5	24	22,9	8,5	57
174-0612	G3/8	21 / 12	22	30	8	47	18,5	37	49	28	22,9	9	78
174-0613	G3/8	20 / 13	22	30	8	47	18,5	37	49	28	22,9	9	79
174-0813	G1/2	20 / 13	27	30	10	49,5	18,5	40	55	30	26,9	11	98
174-1013	G3/4	20 / 13	32	30	14	58	21	43	61	36	33	11	133
174-1019	G3/4	26 / 19	32	41	14	66	25	51	69	36	33	15	208
174-1219	G1	26 / 19	41	41	16	70	25	55	77	44	40	15	272

## Single banjo fittings

- For banjo bolt with Whitworth pipe thread
- For compressed-air hoses made of PVC with fabric lining
- Material Al black anodized / POM
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 10 bar



Part no.	for banjo bolt	for hose	SW	H	L3	L4	B	NW	g/piece
174-02041	G1/8	10 / 4	17	15,5	26,5	34	16	3,4	14
174-04061	G1/4	12 / 6	19	19	30	39,5	20	5,2	21
174-04081	G1/4	14 / 8	22	22	32,5	42	22	7	30
174-04091	G1/4	15 / 9	24	22	32,5	42	22	7,5	34
174-06061	G3/8	12 / 6	19	19	32,5	44,5	24	5,2	25
174-06081	G3/8	14 / 8	22	22	35	47	24	7	34
174-06091	G3/8	15 / 9	24	22	35	47	24	7,5	37
174-06101	G3/8	16 / 10	24	24	35,5	47,5	24	8,5	39
174-06121	G3/8	21 / 12	30	28	37	49	28	9	60
174-06131	G3/8	20 / 13	30	28	37	49	28	11	61
174-08131	G1/2	20 / 13	30	28	40	55	30	11	69
174-10131	G3/4	20 / 13	30	28	43	61	36	11	77
174-10191	G3/4	26 / 19	41	36	51	69	36	15	144
174-12191	G1	26 / 19	41	36	55	77	44	15	165

## Range of application

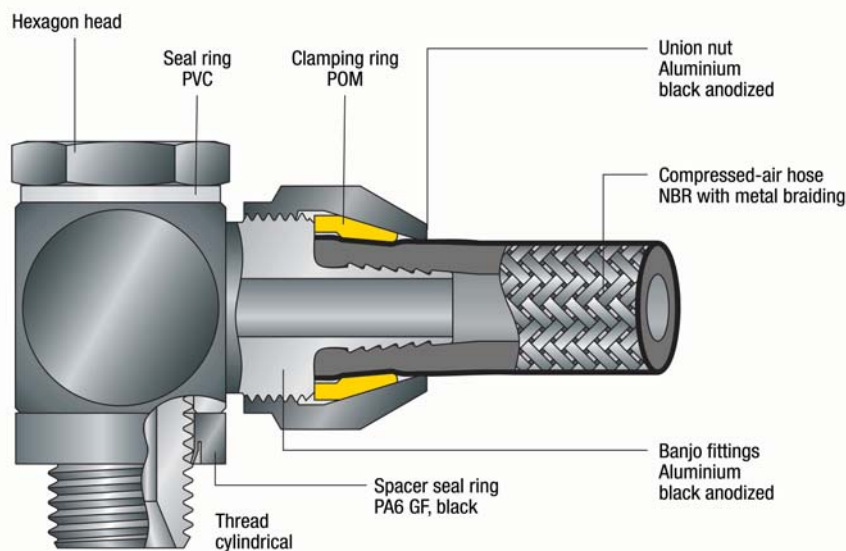
The screw joint system especially developed for the use of compressed-air hoses made of NBR with metal braiding.

## Service conditions

Working pressure range: 0 to 10 bar  
 Allowable medium: Air  
 Temperature range: -10 to +60 °C

Data provided depend on hoses used.

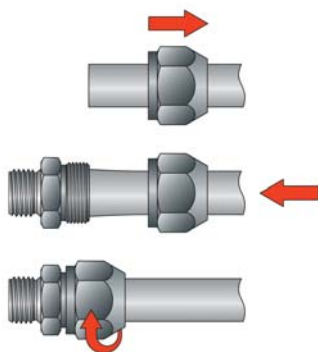
## Functional principle



## Advantages

- Quick assembly of compressed-air hoses
- Frequent assembly and disassembly possible
- No risk of accident from protruding wires of the metal braiding
- No hose clamp necessary
- Low weight
- Robust

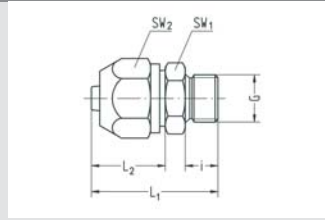
## Handling



1. Push union nut over the hose and slightly wet the inside of the hose with oil
2. Push hose over hose nipple until it hits the limit stop
3. Tighten union nut up to the collar

## Straight male stud coupling

- For compressed-air hoses made of NBR (Perbunan) with metal braiding
- Whitworth pipe thread
- Material Al black anodized / POM
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar

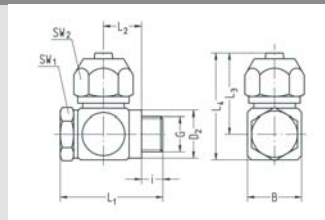


10

Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece
178-0204	G1/8	7 / 4	17	17	6,5	30,5	19	3,4	12
178-0206	G1/8	9 / 6	17	19	6,5	32,5	20,5	4,6	15
178-0404	G1/4	7 / 4	17	17	9	33	19	3,4	12
178-0406	G1/4	9 / 6	17	19	9	35	20,5	5,2	15
178-0409	G1/4	12 / 9	22	22	9	38	23	7	23
178-0606	G3/8	9 / 6	19	19	9	35	20,5	5,2	17
178-0609	G3/8	12 / 9	22	22	9	38	23	7	23
178-0806	G1/2	9 / 6	24	19	11	37,5	20,5	5,2	23
178-0809	G1/2	12 / 9	24	22	11	40	23	7	26

## Single swivel screw joint

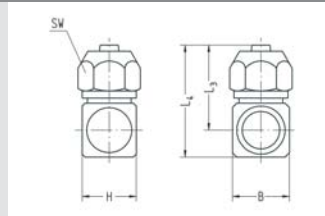
- For compressed-air hoses made of NBR (Perbunan) with metal braiding
- Whitworth pipe thread
- Material Al black anodized / POM
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
182-0204	G1/8	7 / 4	14	17	5,5	31	12,3	26,5	34	16	14,9	3,4	19
182-0406	G1/4	9 / 6	17	19	8	37	14	30	39,5	20	18,9	5,2	32
182-0409	G1/4	12 / 9	17	22	8	40	15,5	32,5	42	22	18,9	6,5	40
182-0609	G3/8	12 / 9	22	22	8	41	15,5	35	47	24	22,9	7	50

## Single banjo fittings

- For banjo bolt with Whitworth pipe thread
- For compressed-air hoses made of NBR (Perbunan) with metal braiding
- Material Al black anodized / POM
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	for banjo bolt	for hose	SW	H	L3	L4	B	NW	g/piece
182-02041	G1/8	7 / 4	17	15,5	26,5	34	16	3,4	13
182-04061	G1/4	9 / 6	19	19	30	39,5	20	5,2	21
182-04091	G1/4	12 / 9	22	22	32,5	42	22	7	30
182-06091	G3/8	12 / 9	22	22	35	47	24	7	32



## Screw joints with larger nominal width

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### Full hose through-flow

- Full flow possible because of larger nominal widths

### Easy and secure handling

- Simplified and safe screwed joints, can be assembled even in tight spaces

### Maximum range of application

- Applies to all types of media and not only air; therefore also suitable e.g. for low pressure applications

## Range of application

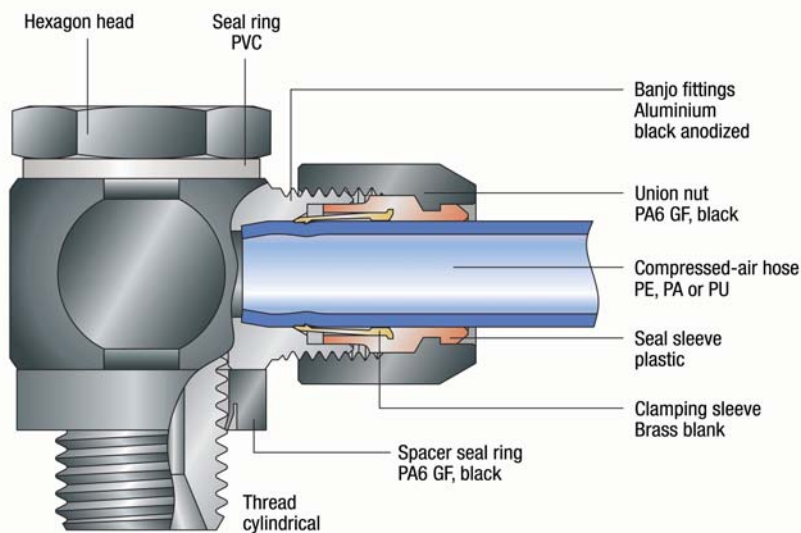
The connection system with full through-flow and easy handling. Very quick and simplified assembly of compressed-air hoses made of PE (polyethylene), PA (polyamide), PU (polyurethane), and ProWeld.

## Service conditions

Working pressure range: 0 to 10 bar  
 Allowable medium: Air  
 Temperature range: -10 to +70 °C

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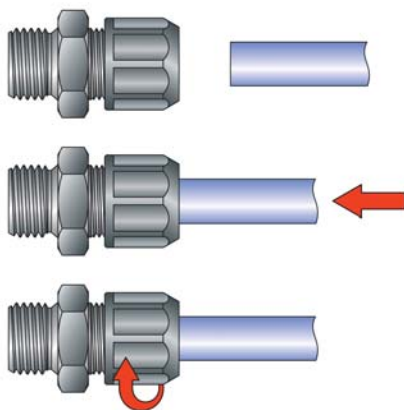
## Functional principle



## Advantages

- Quick and simplified assembly of compressed-air hoses
- Easy assembly even of stiff compressed-air hoses
- No tools necessary but tightening of plastic union nuts possible with open-ended wrench
- Frequent assembly and disassembly possible
- Full hose through-flow
- Low weight
- Short design with VS seal rings available

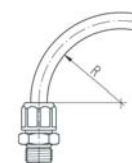
## Handling



1. Push hose into screw joint up to the limit stop
2. Tighten union nut by hand
3. Plastic union nuts may also be tightened with an open-ended wrench. The open-ended wrench skips on the union nut to limit torque.

## Hoses

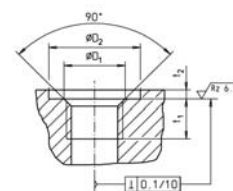
Hose dimension Outside Ø / Inside Ø	Polyethylene (PE) Temperature range -10 to +40°C		Polyamide (PA) Temperature range -20 to +80°C		Polyurethane (PU) Temperature range -35 to +60°C	
	R min.	P max. (bar)	R min.	P max. (bar)	R min.	P max. (bar)
4/2	15	8	25	15	15	8
4,3/3	15	8	25	15	15	7
5/3	20	8	30	15	20	8
6/4	30	8	40	15	30	8
8/6	45	7	55	12	45	7
10/8	60	6	75	12	60	5



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## Connection thread

Thread	Thread depth	Thread counterbore	Counterbore	Torque max.		Thread standards
	t1 min. (mm)	ØD min. (mm)	t2 max. (mm)	Plastic seal rings (Ncm)	Al-, VS-Seal rings (Ncm)	
M5	4.5	10	0.5	95	150	Metric thread M: DIN 13 / ISO 965
M10x1	7	15	1	900	1100	
M12x1.5	9.5	18	1.5	900	1400	
M14x1.5	9.5	20	1.5	1100	2100	
M18x1.5	10.5	24	2	2300	3000	
M22x1.5	11.5	28	2.5	3200	4500	Pipe thread G: DIN ISO 228
G1/8	7.5	15	1	900	1100	
G1/4	11	19	1.5	1800	2100	
G3/8	11	23	2	2500	2800	
G1/2	12	27	2.5	3400	4800	

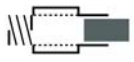


A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.



## Threaded connectors

starting on page 61



Straight threaded connectors

page 61



Angled threaded connectors

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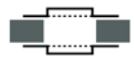


T threaded connectors

page 65

## Plug connector

starting on page 66



Double connectors

page 66



Elbow connectors

page 66



T connectors

page 66



Bulkhead connectors

page 67

## Plug

starting on page 67



Sealing plug

page 67

## Accessories

starting on page 64

Banjo fittings

page 64

Banjo bolt

page 63

Union nut with cutting ring

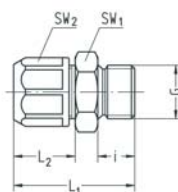
page 72

Seal rings

page 73

## Straight male stud coupling

- Whitworth pipe thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



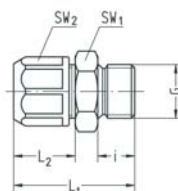
12

Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece
528-0202	1) G1/8	4/2	14	ø9	7	21,5	10,5	2	5
528-0243	1) G1/8	4,3/3	14	ø9	7	21,5	10,5	3	5
528-0203	1) G1/8	5/3	14	ø10	7	22	11	3	6
528-0204	G1/8	6/4	14	14	7	25,5	14,5	4	5
528-0206	G1/8	8/6	14	16	7	26	15	5,5	5
528-0208	G1/8	10/8	15	17	7	27	16	5,5	6
528-0404	G1/4	6/4	17	14	9	28	14,5	4	7
528-0406	G1/4	8/6	17	16	9	28,5	15	6	7
528-0408	G1/4	10/8	17	17	9	29,5	16	8	7
528-0604	G3/8	6/4	22	14	9	29	14,5	4	12
528-0606	G3/8	8/6	22	16	9	29,5	15	6	12
528-0608	G3/8	10/8	22	17	9	30,5	16	8	12
528-0804	G1/2	6/4	27	14	11	31,5	14,5	4	18
528-0806	G1/2	8/6	27	16	11	32	15	6	19
528-0808	G1/2	10/8	27	17	11	33	16	8	19

<sup>1</sup> Union nuts brass black / brass

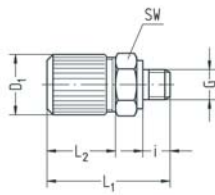
## Straight male stud coupling

- Metric thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece
529-5404	M10x1	6/4	14	14	7	25,5	14,5	4	5
529-5406	M10x1	8/6	14	16	7	26	15	5,5	5
529-5408	M10x1	10/8	15	17	7	27	16	5,5	5
529-5604	M12x1,5	6/4	17	14	9	28	14,5	4	7
529-5606	M12x1,5	8/6	17	16	9	28,5	15	6	7
529-5608	M12x1,5	10/8	17	17	9	29,5	16	6,5	7
529-5804	M14x1,5	6/4	17	14	9	28	14,5	4	7
529-5806	M14x1,5	8/6	17	16	9	28,5	15	6	7
529-5808	M14x1,5	10/8	17	17	9	29,5	16	8	7

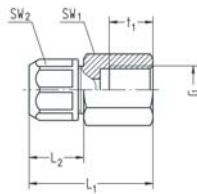
## Straight male stud coupling



- M5 thread
- Material brass black
- Union nut brass black / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.	G	for hose	SW	i	L1	L2	D1	NW	g/piece
529-5002	M5	4/2	8	4,5	18,5	10,5	9	2	5
529-5043	M5	4,3/3	8	4,5	18,5	10,5	9	2,2	5
529-5003	M5	5/3	9	4,5	20	11	10	2,2	7
529-5004	M5	6/4	10	4,5	21	12	11	2,2	8

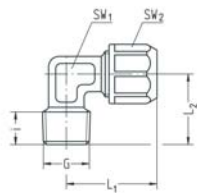
## Screw joint with female thread



- Whitworth pipe thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.	G	for hose	SW1	SW2	L1	L2	t1	NW	g/piece
517-0104	G1/8	6/4	14	14	29	14,5	8	4	7
517-0106	G1/8	8/6	14	16	29,5	15	8	6	7
517-0108	G1/8	10/8	15	17	30,5	16	8	8	8
517-0304	G1/4	6/4	17	14	33,5	14,5	12	4	11
517-0306	G1/4	8/6	17	16	34	15	12	6	11
517-0308	G1/4	10/8	17	17	35	16	12	8	11

## Elbow screw-in connector

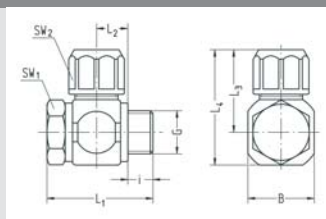


- Whitworth pipe thread conical
- Material brass
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	NW	g/piece
561-0204	R1/8	6/4	11	14	6,5	25	17	4	16
561-0206	R1/8	8/6	11	16	6,5	25,5	17	5,5	16
561-0208	R1/8	10/8	13	17	6,5	26,5	17	5,5	23
561-0404	R1/4	6/4	11	14	10	25	20	4	20
561-0406	R1/4	8/6	11	16	10	25,5	20	6	20
561-0408	R1/4	10/8	13	17	10	26,5	20	8	23

## Single swivel screw joint, short model

- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



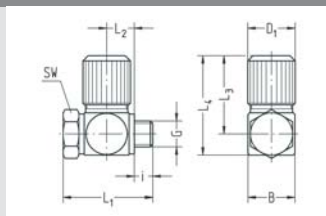
12

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	NW	g/piece
534-0202K	1) G1/8	4/2	14	ø9	5,5	28,5	9,5	18,5	26,5	16	2	16
534-0243K	1) G1/8	4,3/3	14	ø9	5,5	28,5	9,5	18,5	26,5	16	3	16
534-0203K	1) G1/8	5/3	14	ø10	5,5	28,5	9,5	19	27	16	3	16
534-0204K	G1/8	6/4	14	14	5,5	28,5	9,5	23	31	16	4	16
534-0206K	G1/8	8/6	14	16	5,5	28,5	9,5	23,5	31,5	16	4,5	16
534-0208K	G1/8	10/8	14	17	5,5	28,5	9,5	24,5	32,5	16	4,5	16
534-0404K	G1/4	6/4	17	14	7,5	30,5	9,5	24,5	34,5	20	4	21
534-0406K	G1/4	8/6	17	16	7,5	30,5	9,5	25	35	20	6	22
534-0408K	G1/4	10/8	17	17	7,5	30,5	9,5	26	36	20	6,5	22
534-0604K	G3/8	6/4	22	14	7,5	31,5	9,5	26	37,5	22	4	27
534-0606K	G3/8	8/6	22	16	7,5	31,5	9,5	26,5	38	22	6	28
534-0608K	G3/8	10/8	22	17	7,5	31,5	9,5	27,5	39	22	8	28
534-0804K	G1/2	6/4	27	14	9	33,5	9,5	28,5	43	29	4	41
534-0806K	G1/2	8/6	27	16	9	33,5	9,5	29	43,5	29	6	41
534-0808K	G1/2	10/8	27	17	9	33,5	9,5	30	44,5	29	8	42

<sup>1</sup> Union nuts brass black / brass

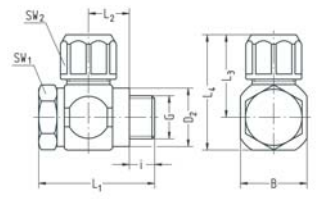
## Single swivel screw joint, short model

- M5 thread
- PVC seal rings
- Banjo fittings brass black
- Union nut brass black / brass
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	D1	B	NW	g/piece
535-5002K	M5	4/2	8	3,5	17	5,2	14,5	18,5	9	8,5	2	9
535-5043K	M5	4,3/3	8	3,5	17	5,2	14,5	18,5	9	8,5	2,4	9
535-5003K	M5	5/3	8	4	19	6	15,5	20	10	10	2,4	12
535-5004K	M5	6/4	8	4,5	20,5	6,5	16,5	21	11	11	2,4	12

## Single swivel screw joint

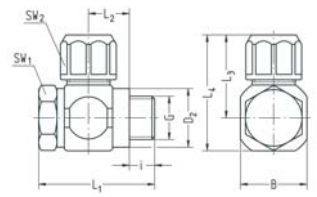


- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

12

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
534-0204	G1/8	6/4	14	14	6	30,5	11,8	23	31	16	14,9	4	15
534-0206	G1/8	8/6	14	16	6	30,5	11,8	23,5	31,5	16	14,9	4,5	15
534-0208	G1/8	10/8	14	17	6	30,5	11,8	24,5	32,5	16	14,9	4,5	15
534-0404	G1/4	6/4	17	14	8	32,5	11,8	24,5	34,5	20	18,9	4	21
534-0406	G1/4	8/6	17	16	8	32,5	11,8	25	35	20	18,9	6	21
534-0408	G1/4	10/8	17	17	8	32,5	11,8	26	36	20	18,9	6,5	21
534-0604	G3/8	6/4	22	14	8	33,5	11,8	26	37,5	22	22,9	4	26
534-0606	G3/8	8/6	22	16	8	33,5	11,8	26,5	38	22	22,9	6	26
534-0608	G3/8	10/8	22	17	8	33,5	11,8	27,5	39	22	22,9	8	27
534-0804	G1/2	6/4	27	14	10	36	11,8	28,5	43	29	26,9	4	41
534-0806	G1/2	8/6	27	16	10	36	11,8	29	43,5	29	26,9	6	41
534-0808	G1/2	10/8	27	17	10	36	11,8	30	44,5	29	26,9	8	41

## Single swivel screw joint



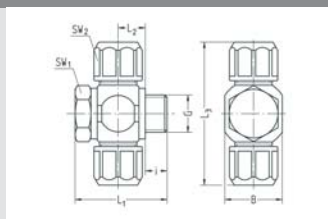
- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
535-5404	M10x1	6/4	14	14	6	30,5	11,8	23	31	16	14,9	4	15
535-5406	1) M10x1	8/6	14	16	6	30,5	11,8	23,5	31,5	16	14,9	4,5	15
535-5408	1) M10x1	10/8	14	17	6	30,5	11,8	24,5	32,5	16	14,9	4,5	15
535-5604	M12x1,5	6/4	17	14	8	32,5	11,8	24	34	20	17,9	4	21
535-5606	M12x1,5	8/6	17	16	8	32,5	11,8	24,5	34,5	20	17,9	5,5	21
535-5608	M12x1,5	10/8	17	17	8	32,5	11,8	25,5	35,5	20	17,9	5,5	21
535-5804	M14x1,5	6/4	17	14	8	32,5	11,8	25	35	20	19,9	4	21
535-5806	M14x1,5	8/6	17	16	8	32,5	11,8	25,5	35,5	20	19,9	6	22
535-5808	M14x1,5	10/8	17	17	8	32,5	11,8	26,5	36,5	20	19,9	6,5	22

1) Spacer ring PA6 GF, black

## Double swivel screw joint, short model

- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



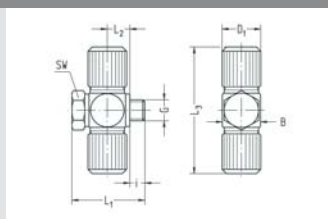
12

Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	B	NW	g/piece
538-0202K	1) G1/8	4/2	14	ø9	5,5	28,5	9,5	37	16	2	18
538-0243K	1) G1/8	4,3/3	14	ø9	5,5	28,5	9,5	37	16	3	18
538-0203K	1) G1/8	5/3	14	ø10	5,5	28,5	9,5	38	16	3	20
538-0204K	G1/8	6/4	14	14	5,5	28,5	9,5	46	16	4	18
538-0206K	G1/8	8/6	14	16	5,5	28,5	9,5	47	16	4,5	19
538-0208K	G1/8	10/8	14	17	5,5	28,5	9,5	49	16	4,5	19
538-0404K	G1/4	6/4	17	14	7,5	30,5	9,5	49	20	4	23
538-0406K	G1/4	8/6	17	16	7,5	30,5	9,5	50	20	6	24
538-0408K	G1/4	10/8	17	17	7,5	30,5	9,5	52	20	6,5	24

<sup>1</sup> Union nuts brass black / brass

## Double swivel screw joint, short model

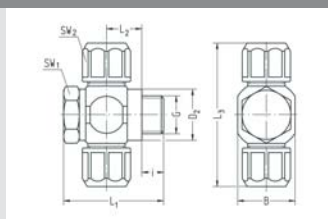
- M5 thread
- PVC seal rings
- Banjo fittings brass black
- Union nuts brass black / brass
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



Part no.	G	for hose	SW	i	L1	L2	L3	D1	B	NW	g/piece
539-5002K	M5	4/2	8	3,5	17	5,2	29	9	8,5	2	12
539-5043K	M5	4,3/3	8	3,5	17	5,2	29	9	8,5	2,4	11
539-5003K	M5	5/3	8	4	19	6	31	10	10	2,4	15
539-5004K	M5	6/4	8	4,5	20,5	6,5	33	11	11	2,4	19

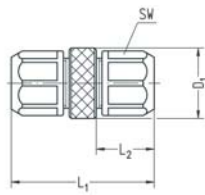
## Double swivel screw joint

- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



Part no.	G	for hose	SW1	SW2	i	L1	L2	L3	B	D2	NW	g/piece
538-0204	G1/8	6/4	14	14	6	30,5	11,8	46	16	14,9	4	17
538-0206	G1/8	8/6	14	16	6	30,5	11,8	47	16	14,9	4,5	17
538-0208	G1/8	10/8	14	17	6	30,5	11,8	49	16	14,9	4,5	18
538-0404	G1/4	6/4	17	14	8	32,5	11,8	49	20	18,9	4	22
538-0406	G1/4	8/6	17	16	8	32,5	11,8	50	20	18,9	6	23
538-0408	G1/4	10/8	17	17	8	32,5	11,8	52	20	18,9	6,5	23

## Double screw joint

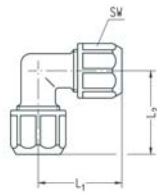


- Material Al black anodized
- Union nuts plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.		for hose	SW	L1	L2	D1	NW	g/piece
533-0202	1)	4/2	ø9	27	10,5	11	2	11
533-4343	1)	4,3/3	ø9	27	10,5	11	3	10
533-0303	1)	5/3	ø10	28	11	12	3	13
533-0404		6/4	14	36	14,5	15	4	8
533-0606		8/6	16	37	15	17	6	10
533-0808		10/8	17	39	16	19	8	11

<sup>1</sup> Material brass black, union nuts brass black / brass

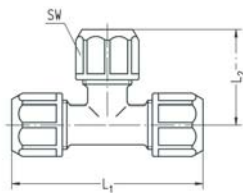
## Elbow screw joints



- Material Al black anodized
- Union nuts plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.		for hose	SW	L1	L2	NW	g/piece
577-0400		6/4	14	25	25	4	8
577-0600		8/6	16	25,5	25,5	6	9
577-0800		10/8	17	26,5	26,5	8	10

## T screw joints



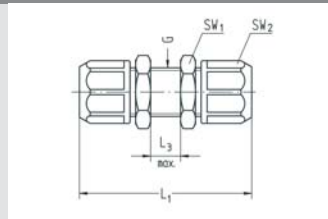
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.		for hose	SW	L1	L2	NW	g/piece
578-0200	1)	4/2	ø9	31	15,5	2	16
578-4300	1)	4,3/3	ø9	31	15,5	3	15
578-0300	1)	5/3	ø10	32	16	3	18
578-0400		6/4	14	50	25	4	10
578-0600		8/6	16	51	25,5	6	13
578-0800		10/8	17	53	26,5	8	14

<sup>1</sup> Material brass black, union nuts brass black / brass

## Bulkhead screw joint

- Material Al black anodized
- Union nuts plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

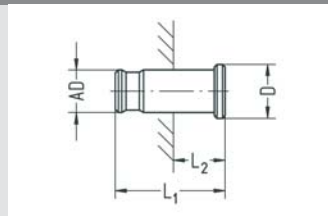


12

Part no.	for hose	G	SW1	SW2	L1	L3 max.	NW	g/piece
580-0404	6/4	M11x1	14	14	45	7	4	10
580-0606	8/6	M13x1	17	16	46	7	6	12
580-0808	10/8	M15x1	19	17	48	7	8	14

## Sealing plug

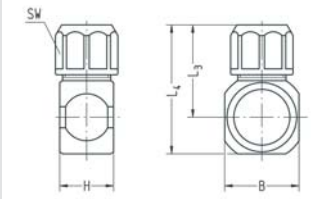
- Material brass nickel-plated
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar
- Fits all screw joints from Program 12 in the respective size



Part no.	plug AD	L1	L2	D	g/piece
523-0400	6	20	5	8	5
523-0600	8	20,5	5	10	9
523-0800	10	21	5	12	14



## Single banjo fittings

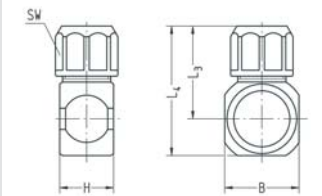


- For banjo bolt with Whitworth pipe thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.		for banjo bolt	for hose	H	L3	L4	B	NW	g/piece
534-02021	1)	G1/8	4/2	14,5	18,5	26,5	16	2	9
534-02431	1)	G1/8	4,3/3	14,5	18,5	26,5	16	3	9
534-02031	1)	G1/8	5/3	14,5	19	27	16	3	9
534-02041		G1/8	6/4	14,5	23	31	16	4	9
534-02061		G1/8	8/6	14,5	23,5	31,5	16	6	9
534-02081		G1/8	10/8	14,5	24,5	32,5	16	6,5	9
534-04041		G1/4	6/4	14,5	24,5	34,5	20	4	11
534-04061		G1/4	8/6	14,5	25	35	20	6	11
534-04081		G1/4	10/8	14,5	26	36	20	8	11
534-06041		G3/8	6/4	14,5	26	37,5	22	4	11
534-06061		G3/8	8/6	14,5	26,5	38	22	6	11
534-06081		G3/8	10/8	14,5	27,5	39	22	8	12
534-08041		G1/2	6/4	14,5	28,5	43	29	4	16
534-08061		G1/2	8/6	14,5	29	43,5	29	6	16
534-08081		G1/2	10/8	14,5	30	44,5	29	8	16

<sup>1</sup> Union nuts brass black / brass

## Single banjo fittings



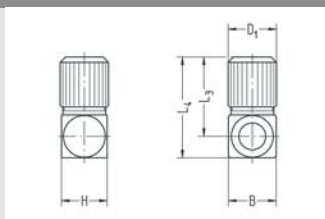
- For banjo bolt with Whitworth pipe thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

Part no.		for banjo bolt M	for hose	H	L3	L4	B	NW	g/piece
534-02021	1)	M10x1	4/2	14,5	18,5	26,5	16	2	9
534-02431	1)	M10x1	4,3/3	14,5	18,5	26,5	16	3	9
534-02031	1)	M10x1	5/3	14,5	19	27	16	3	9
534-02041		M10x1	6/4	14,5	23	31	16	4	9
534-02061		M10x1	8/6	14,5	23,5	31,5	16	6	9
534-02081		M10x1	10/8	14,5	24,5	32,5	16	6,5	9
535-56041		M12x1,5	6/4	14,5	24	34	20	4	12
535-58041		M14x1,5	6/4	14,5	25	35	20	4	10
535-56061		M12x1,5	8/6	14,5	24,5	34,5	20	6	12
535-58061		M14x1,5	8/6	14,5	25,5	35,5	20	6	11
535-56081		M12x1,5	10/8	14,5	25,5	35,5	20	6,5	12
535-58081		M14x1,5	10/8	14,5	26,5	36,5	20	8	11

<sup>1</sup> Union nuts brass black / brass

## Single banjo fittings

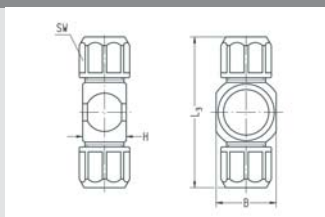
- For banjo bolt with thread M5
- Material brass black
- Union nut brass black / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



Part no.	for banjo bolt	for hose	H	L3	L4	D1	B	NW	g/piece
535-50021	M5	4/2	8,5	14,5	18,5	9	8,5	2	6
535-50431	M5	4,3/3	8,5	14,5	18,5	9	8,5	3	6
535-50031	M5	5/3	10	15,5	20	10	10	3	9
535-50041	M5	6/4	11	16,5	21	11	11	3	11
535-50021-1	M5 (for throttle)	4/2	8,5	14,5	18,5	9	8,5	1,8	6
535-50431-1	M5 (for throttle)	4,3/3	8,5	14,5	18,5	9	8,5	1,8	5
535-50031-1	M5 (for throttle)	5/3	10	15,5	20	10	10	1,8	8
535-50041-1	M5 (for throttle)	6/4	11	16,5	21	11	11	1,8	11

## Double banjo fittings

- For banjo bolt with Whitworth pipe thread
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar

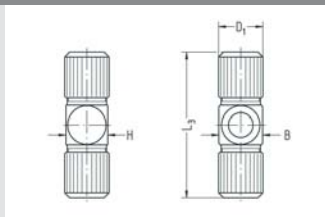


Part no.	for banjo bolt	for hose	SW	H	L3	B	NW	g/piece
538-02021	1) G1/8	4/2	ø9	14,5	37	16	2	11
538-02431	1) G1/8	4,3/3	ø9	14,5	37	16	3	11
538-02031	1) G1/8	5/3	ø10	14,5	38	16	3	13
538-02041	G1/8	6/4	14	14,5	46	16	4	11
538-02061	G1/8	8/6	16	14,5	47	16	6	12
538-02081	G1/8	10/8	17	14,5	49	16	6,5	12
538-04041	G1/4	6/4	14	14,5	49	20	4	13
538-04061	G1/4	8/6	16	14,5	50	20	6	14
538-04081	G1/4	10/8	17	14,5	52	20	8	14

<sup>1</sup> Union nuts brass black / brass

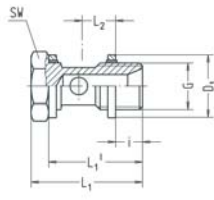
## Double banjo fittings

- For banjo bolt with thread M5
- Material brass black
- Union nuts brass black / brass
- Temperature range -10 to +70 °C
- Working pressure range 0 to 10 bar



Part no.	for banjo bolt	for hose	H	L3	D1	B	NW	g/piece
539-50021	M5	4/2	8,5	29	9	8,5	2	9
539-50431	M5	4,3/3	8,5	29	9	8,5	3	9
539-50031	M5	5/3	10	31	10	10	3	12
539-50041	M5	6/4	11	33	11	11	3	16

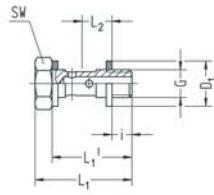
## Banjo bolt, short model



- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5

Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
534-0200K	G1/8	14	5,5	28,5	24,5	9,5	14,7	4,5	7
534-0400K	G1/4	17	7,5	30,5	26,5	9,5	17,7	6,5	10
534-0600K	G3/8	22	7,5	31,5	26,5	9,5	21,8	9	17
534-0800K	G1/2	27	9	33,5	28	9,5	26,3	11,5	25

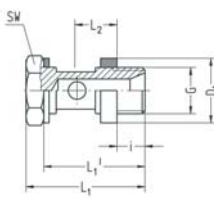
## Banjo bolt, short model



- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	fits banjo with H	SW	i	L1	L1'	L2	D1	NW	g/piece
35-5010K	M5	10	8	4	19	16	6	7,5	2,4	3
35-5000K	M5	8,5 and 9	8	3,5 (3)	17	14	5,2 (5,5)	7,5	2,4	3
635-5000K	M5	11	8	4,5	20,5	17,5	6,5	7,5	2,4	3

## Banjo bolt

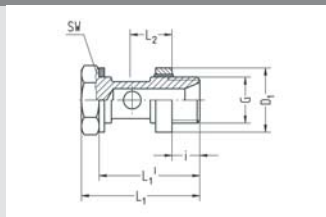


- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5

Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
534-0200	G1/8	14	6	30,5	26,5	11,8	14,9	4,5	6
534-0400	G1/4	17	8	32,5	28,5	11,8	18,9	6,5	10
534-0600	G3/8	22	8	33,5	28,5	11,8	22,9	9	16
534-0800	G1/2	27	10	36	30,5	11,8	26,9	11,5	25

## Banjo bolt

- For 1 banjo fitting
- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Temperature range  
-10 to +70 °C
- Working pressure range  
-0.95 to 15 bar
- Fits banjo  
with H = 14.5

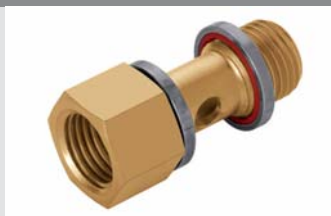
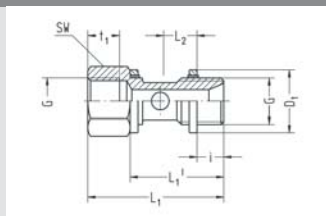


Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
535-5400	M10x1	14	6	30,5	26,5	11,8	14,9	4,5	6
535-5600	M12x1,5	17	8	32,5	28,5	11,8	17,9	5,5	9
535-5800	M14x1,5	17	8	32,5	28,5	11,8	19,9	6,5	11

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## Banjo bolt with female thread, short model

- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5



Part no.	G	SW	i	L1	L1'	L2	D1	t1	NW	g/piece
548-0200K	G1/8	14	5,5	34	24,5	9,5	14,7	6,5	5,2	18
548-0400K	G1/4	17	7,5	38,5	26,5	9,5	17,7	9	7,2	29
548-0600K	G3/8	22	7,5	39,5	26,5	9,5	21,8	9	9,2	48
548-0800K	G1/2	27	9	44	28	9,5	26,3	11	11,8	77

## Union nut with cutting ring

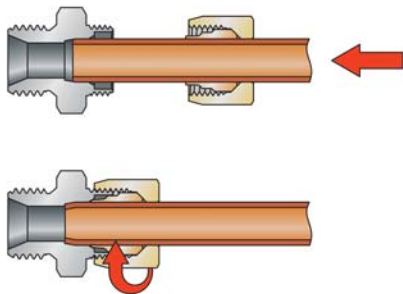


- For screwing of metal tubes
- Replaces regular union nut
- Material brass zinc-plated/brass
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 15 bar

12

Part no.	G	for pipe AD	SW	L1	recommended torque max. (Ncm)	g/piece
534-8104SM	M11x1	6	14	11,5	1000	11
534-8306SM	M13x1	8	15	12	1300	12
534-8508SM	M15x1	10	17	13	1800	15

## Handling



- Remove normal union nut
- Push union nut and cutting ring over pipe, push pipe into screw joint up to the limit stop
- Tighten union nut and during tightening note that pipe remains pushed into the screwed joint up to the limit stop

### Screwing of metal pipes

If the normal union nut for hose outside  $\varnothing$  6, 8 and 10 mm is replaced by a hex union nut with cutting ring, metal pipes, preferably copper pipes, may be screwed together instead of compressed-air hoses.

### Advantages

Within a screw joint system both compressed-air hoses and metal pipes may be screwed together.

### Application

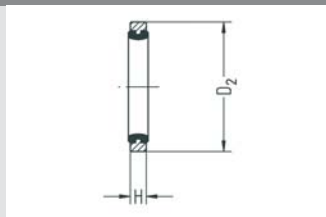
- In case of thermal load
- In case of mechanical stress

### Service conditions

Working pressure range: 0 to 15 bar  
 Allowable medium: Air  
 Temperature range: -20 to +120°C

## VS seal ring

- For Whitworth pipe thread
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Large torque possible
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar

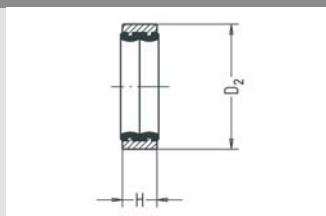


Part no.	for thread	D2	H	g/piece
515-0122	G1/8 and M10x1	14,7	2,2	1,02
515-0322	G1/4	17,7	2,2	1,23
515-0522	G3/8	21,8	2,2	1,56
515-0722	G1/2	26,3	2,2	2,04

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## VS spacer seal ring

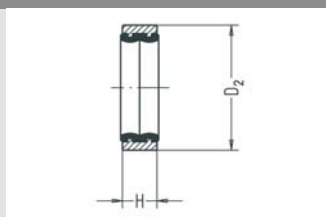
- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar



Part no.	for thread	D2	H	g/piece
515-0150MS	G1/8 and M10x1	14,7	4,5	2,0
515-0350MS	G1/4	17,7	4,5	2,5
515-0550MS	G3/8	21,8	4,5	3,0
515-0750MS	G1/2	26,3	4,5	4,0

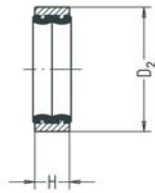
## VS spacer seal ring

- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar



Part no.	for thread	D2	H	g/piece
515-0150AL	G1/8 and M10x1	14,7	4,5	1,0
515-0350AL	G1/4	17,7	4,5	1,5
515-0550AL	G3/8	21,8	4,5	2,0
515-0750AL	G1/2	26,3	4,5	2,0

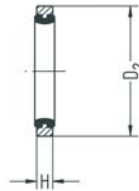
## VS spacer seal ring



- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar

Part no.	for thread	D2	H	g/piece
514-5550AL	M12x1,5	17,9	4,5	1,31
514-5750AL	M14x1,5	19,9	4,5	1,42
514-6150AL	M18x1,5	23,9	4,5	1,67
514-6550AL	M22x1,5	27,9	4,5	1,91

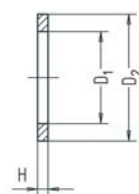
## VS seal ring



- For whitworth pipe thread
- Sealing material FPM, FDA compliant according to 21 CFR 177.2600
- Spacer ring 1.4307
- Large torque possible
- Undetachable
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 30 bar

Part no.	for thread	D2	H	g/piece
915-0122	G1/8 and M10x1	14,7	2,2	1
915-0322	G1/4	17,7	2,2	1

## seal ring

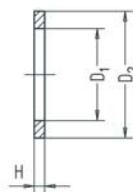


- For Whitworth pipe thread and metric thread
- Material aluminum
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to +15 bar

Part no.	for thread	D1	D2	H	g/piece
14-49AL	M5	5	7,6	1	0,06
14-55AL	M12x1,5	12,2	16	1,5	0,29
14-57AL	M14x1,5	14,1	18,2	1,5	0,39
14-61AL	M18x1,5	18,2	22	1,5	0,42
14-65AL	M22x1,5	22,2	27	1,5	0,64
15-01AL	G1/8 and M10x1	10,2	14	1,5	0,25
15-03AL	G1/4	13,2	18,2	1,5	0,45
15-05AL	G3/8	17,1	22	1,5	0,56
15-07AL	G1/2	21,2	26	1,5	0,60
14-5720AL	M14x1,5	14,1	18,2	2	0,49
14-6120AL	M18x1,5	18,2	22	2	0,50
14-6520AL	M22x1,5	22,2	27	2	0,88
15-0120AL	G1/8 and M10x1	10,2	14	2	0,31
15-0320AL	G1/4	13,2	18,2	2	0,58
15-0520AL	G3/8	17,1	22	2	0,71
15-0720AL	G1/2	21,2	26	2	0,86
15-1120AL	G1	33	39	2	2

## seal ring

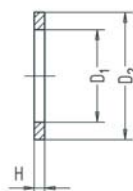
- For Whitworth pipe thread and metric thread
- Material PVC
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to +15 bar



Part no.	for thread	D1	D2	H	g/piece
14-41PVC	M3	3	5	0,8	0,01
14-49PVC	M5	5	7,6	1	0,03
14-55PVC	M12x1,5	12	16	1,5	0,07
14-57PVC	M14x1,5	14,1	18,2	1,5	0,22
14-61PVC	M18x1,5	18	22	1,5	0,1
14-65PVC	M22x1,5	22,2	27	1,5	0,38
15-01PVC	G1/8 and M10x1	10,2	14	1,5	0,14
15-03PVC	G1/4	13,2	18,2	1,5	0,24
15-05PVC	G3/8	17,1	22	1,5	0,31
15-07PVC	G1/2	21,2	26	1,5	0,34
15-0120PVC	G1/8 and M10x1	10,2	14	2	0,20
15-0320PVC	G1/4	13,2	18,2	2	0,35
15-0520PVC	G3/8	17,1	22	2	0,41
15-0720PVC	G1/2	21,2	26	2	0,50
15-0920PVC	G3/4	26,6	33	2	0,82
15-1120PVC	G1	33,4	39	2	0,91

## seal ring

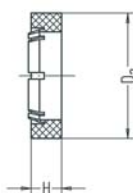
- For metric threads
- Material PA
- Temperature range -10 to +60 °C
- Working pressure range 0 to +15 bar



Part no.	for thread	D1	D2	H	g/piece
14-49PA	M5	5	7,6	1	0,06

## Spacer seal ring

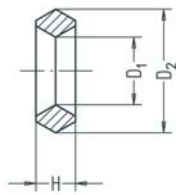
- For Whitworth pipe thread
- Material PA6 GF, black
- Undetachable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	for thread	D2	H	g/piece
534-015010	G1/8 and M10x1	14,9	4,5	0,54
534-035010	G1/4	18,9	4,5	0,81
534-055010	G3/8	22,9	4,5	1,13
534-075010	G1/2	26,9	4,5	1,21



## Seal ring for manometer



- For manometer
- Material aluminum
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to +15 bar

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Part no.	for thread	D1	D2	H	g/piece
13-01AL	G1/8 and M10x1	4,2	8,5	3	0,20
13-03AL	G1/4	6	11	3,5	0,37

## Plug connectors with release sleeve and 1 seal



### Different types of force-fitting available

- Assembly cost savings through the use of force-fitting connectors

### Sophisticated technology for all applications.

- Easy assembly and disassembly through release sleeves, even if used several times
- Full hose through-flow

### Dirt without a chance

- Release sleeve prevents dirt entering
- The release sleeve can be operated easily even if soiled

Also suitable for vacuum applications.

## Range of application

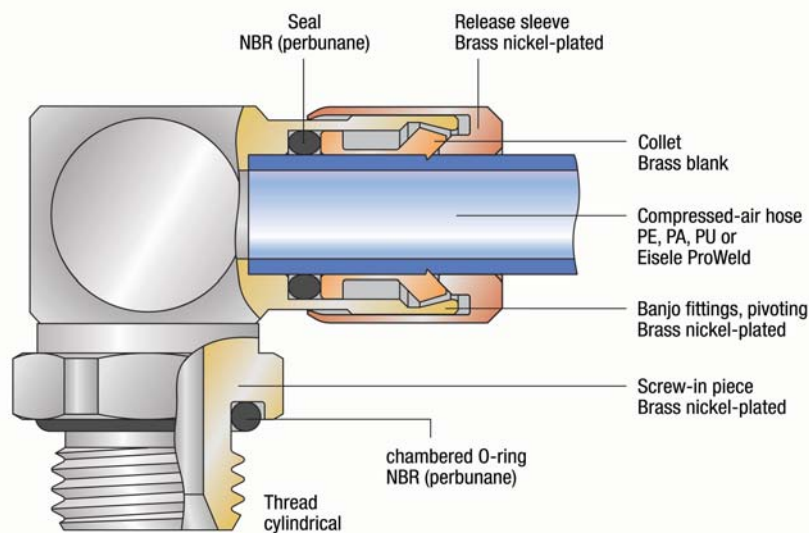
The connection system with the special technology that leaves nothing to be desired. Sophisticated technology for all applications. Very quick and secure assembly and disassembly of compressed-air hoses made of PE (polyethylene), PA (polyamide), PU (polyurethane), and ProWeld (PUR) in pneumatic systems.

## Service conditions

Working pressure range: -0.95 to 16 bar  
 Allowable medium: Air  
 Temperature range: -20 to +80 °C

Data provided depend on hoses used.

## Functional principle



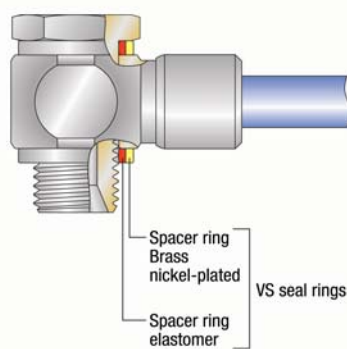
### Advantages

- Very quick assembly and disassembly of compressed-air hoses
- No tools necessary
- Frequent assembly and disassembly possible
- Full hose through-flow
- All male stud couplings sealed with chambered O-ring
- Very small connector sets even if conical threads are not used
- Casing made of brass, nickel-plated
- Suitable for vacuum

### Special technology of the release sleeve

- Collet lies in casing and is protected from release sleeve
- Easy disassembly even when connectors are severely soiled
- Easy to clean

## VS seal rings



We have developed the VS seal ring as a significant improvement as the die cut seal ring often does not meet the customers' requirements. This is a combination of a soft inner elastomeric ring and a harder outer ring of nickel-plated brass.

The function of the inner soft ring is to seal, whereas the outer hard ring takes up the existing torque.

The short versions of Eisele swivel connectors are standardly supplied with VS seal rings.

### Advantages

- Seal effect largely independent of torque
- Immune to excessive tightening
- Holds individual parts together

## Hoses

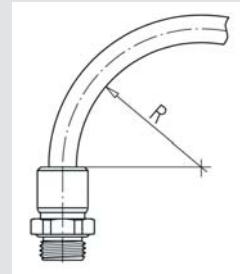
Hose dimension		Polyethylene (PE) Temperature range -10 to +40°C		Polyamide (PA) Temperature range -60 to +100°C		Polyurethane (PU) Temperature range -35 to +70°C		ProWeld (PUR) <sup>1)</sup> Temperature range -35 to +75°C		Teflon (PTFE) /FEP <sup>2)</sup> Temperature range -35 to +120°C	
Outside-Ø	Inside-Ø	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)
4 (±0,1)	2	20	20	20	30	8	10	6,5	20	16	25
4,3 (±0,1)	3	20	13	20	20	10	10	-	-	35	10
5 (±0,1)	3	25	15	25	25	11	10	-	-	25	20
6 (±0,15)	4	30	13	30	20	14	10	12	11	35	15
8 (±0,15)	6	40	8	40	15	20	9	18	9	65	11
10 (±0,15)	8	60	6	60	12	37,5	8	15	14	100	9
12 (±0,15)	9	60	9	85	15	48	10	24	10	100	9
14 (±0,15)	11	90	8	80	12	60	7,5	38	9	140	9
16 (±0,15)	11	90	6	90	11	43	10	44	9	-	-
20 (±0,2)	14	-	-	-	-	-	-	-	8	-	-

The mounted compressed-air hoses are not to be exposed to tensile loading.

<sup>1)</sup> In the case of Eisele ProWeld hoses a smaller inside diameter results from a partially larger wall thickness.

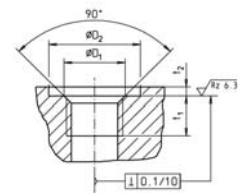
<sup>2)</sup> Important notes for the use of compressed-air hoses made of PTFE (Teflon) and FEP:

- The outside diameter of compressed-air 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 compressed-air hoses at a right angle. Ensure that hoses are not being deformed or damaged during the cutting process
- During assembly, compressed-air hoses must be pressed until the bottom of the plug connectors is felt so as to achieve proper tightness.



## Connection thread

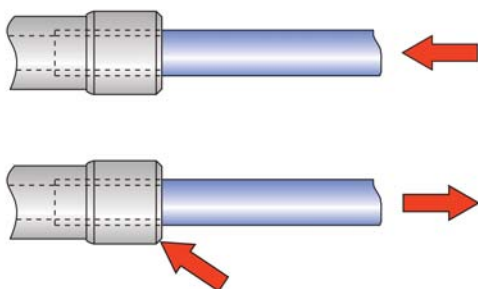
Thread	Thread depth		Thread counterbore		Counterbore <sup>1)</sup>		Torque <sup>2)</sup> max. (Ncm)	Thread standards
	t1 min. (mm)	t2 max. (mm)	ØD1 max. (mm)	ØD2 min. (mm)				
M5	4.5	0.5	6	10	0.5	95	Metric thread M: DIN 13 / ISO 965	
M7	5	0.5	8	12	0.5	200		
G1/8	5.5	1	11	15.3	1	900	Pipe thread G: DIN ISO 228	
G1/4	7.5	1.5	14.2	19	1.5	1800		
G3/8	7.5	2	17.5	23	2	2500		
G1/2	9.5	2.5	22	27	2.5	3400		



<sup>1)</sup> A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.

<sup>2)</sup> Information about torques for hexagon socket on demand (assembly instructions 800 00 / 00-1)

## Handling



Assembly: Push hose into the connector up to the limit stop

Disassembly: Push release sleeve, pull out hose

## Threaded connectors

starting on page 82



Straight threaded connectors

page 82



Angled threaded connectors

page 85

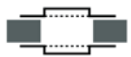


T threaded connectors

page 90

## Plug connector

starting on page 92



Double connectors

page 92



Elbow connectors

page 92



T connectors

page 93



Cross connectors

page 93



Y connectors

page 94



Bulkhead connectors

page 95

## Plug

starting on page 95



Reducing plug

page 95



Elbow plug

page 96



Y plug

page 96



Double plug

page 97



Sealing plug

page 97

## Force-fitting connector starting on page 98



Straight force-fitting connector page 98



Angled force-fitting connector page 99

## Ring connectors starting on page 100

Ring connectors, single page 100

Ring connectors, double page 101

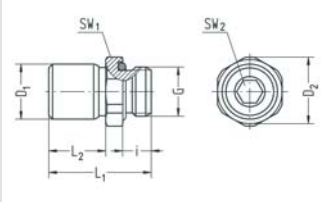
## Accessories starting on page 102

Banjo bolt page 102

Pressure indicator page 103

Code sleeve page 104

## Screw-in connector

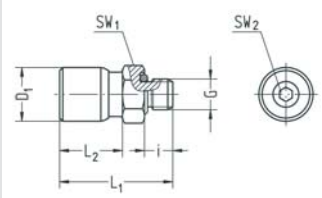


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

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Part no.	G	for hose	SW1	SW2	i	L1	L2	D1	D2	NW	g/piece
628-0218	G1/8	OD3 (3/1,8)	13	2,5	5,5	19	9,5	7,5	14,2	1,8	9
628-0202	G1/8	OD4 (4/2)	13	3	5,5	19,5	10	8,5	14,2	2	9
628-0243	G1/8	OD4,3 (4,3/3)	13	3	5,5	19,5	10	9	14,2	3	9
628-0203	G1/8	OD5 (5/3)	13	4	5,5	21	11,5	10,5	14,2	3	10
628-0204	G1/8	OD6 (6/4)	13	5	5,5	22	12,5	11,5	14,2	4	10
628-0206	G1/8	OD8 (8/6)	14	5	5,5	27	17,5	14,5	15,2	5,1	17
628-0208	G1/8	OD10 (10/8)	15	5	5,5	30,5	19,5	16,5	16,5	5,1	21
628-0402	G1/4	OD4 (4/2)	17	3	7,5	22	10	8,5	18,5	2	17
628-0443	G1/4	OD4,3 (4,3/3)	17	3	7,5	22	10	9	18,5	3	17
628-0403	G1/4	OD5 (5/3)	17	4	7,5	23,5	11,5	10,5	18,5	3	18
628-0404	G1/4	OD6 (6/4)	17	5	7,5	24,5	12,5	11,5	18,5	4	18
628-0406	G1/4	OD8 (8/6)	17	6	7,5	27,5	15,5	14,5	18,5	6	21
628-0408	G1/4	OD10 (10/8)	17	8	7,5	32,5	20,5	16,5	18,5	8	24
628-0409	G1/4	OD12 (12/9)	20	8	7,5	36,5	23,5	20	21,8	8,3	38
628-0411	G1/4	OD14 (14/11)	20	8	7,5	40	26	22	21,8	8,3	42
628-0604	G3/8	OD6 (6/4)	20	5	7,5	25,5	12,5	11,5	21,8	4	29
628-0606	G3/8	OD8 (8/6)	20	6	7,5	28,5	15,5	14,5	21,8	6	32
628-0608	G3/8	OD10 (10/8)	20	8	7,5	30,5	17,5	16,5	21,8	8	32
628-0609	G3/8	OD12 (12/9)	20	9	7,5	32,5	19,5	20	21,8	9	35
628-0611	G3/8	OD14 (14/11)	22	10	7,5	40	24,5	22	23,8	10,3	51
628-0612	G3/8	OD16 (16/12)	24	10	7,5	43	27,5	25	26,2	10,3	60
628-0804	G1/2	OD6 (6/4)	24	5	9,5	28	12,5	11,5	26,2	4	49
628-0806	G1/2	OD8 (8/6)	24	6	9,5	31	15,5	14,5	26,2	6	52
628-0808	G1/2	OD10 (10/8)	24	8	9,5	33	17,5	16,5	26,2	8	52
628-0809	G1/2	OD12 (12/9)	24	9	9,5	35	19,5	20	26,2	9	54
628-0811	G1/2	OD14 (14/11)	24	10	9,5	36,5	21	22	26,2	10,3	55
628-0812	G1/2	OD16 (16/12)	24	12	9,5	43,5	27,5	25	26,2	12	60
628-0815	G1/2	OD20 (20/15)	30	12	9,5	59,6	39,1	30,5	33,5	12,5	130
628-1015	G3/4	OD20 (20/15)	32	14	9,5	59,6	39,1	30,5	34,8	14,5	150

## Screw-in connector

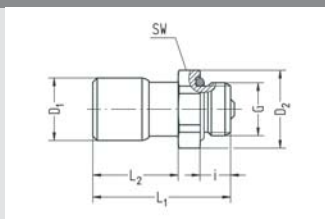


- M5 thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	D1	NW	g/piece
629-5002	M5	OD4 (4/2)	8	2	4,5	19,5	11,5	8,5	2	4
629-5003	M5	OD5 (5/3)	10	2	4,5	21	12	10,5	2	7
629-5004	M5	OD6 (6/4)	10	2	4,5	23	13,5	11,5	2	8
629-5006	M5	OD8 (8/6)	13	2	4,5	26	16	14,5	2	15
629-5043	M5	OD4,3 (4,3/3)	8	2	4,5	19,5	11,5	9	2	4
629-4804	M7	OD6 (6/4)	10	4	5	22,5	15,5	11,4	4	8
629-4806	M7	OD8 (8/6)	13	4	5	26	18,5	14,6	4,2	14

## Screw-in connector with shut-off valve

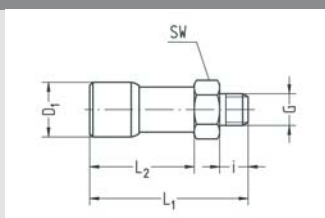
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range 0 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	D1	D2	NW	g/piece
728-0202	G1/8	OD4 (4/2)	13	5,5	22	12,5	8,5	14,2	2	9
728-0204	G1/8	OD6 (6/4)	13	5,5	27	17,5	11,5	14,2	3,8	13
728-0402	G1/4	OD4 (4/2)	17	7,5	22	10	8,5	18,5	2	17
728-0404	G1/4	OD6 (6/4)	17	7,5	27	15	11,5	18,5	3,8	19

## Screw-in connector with shut-off valve

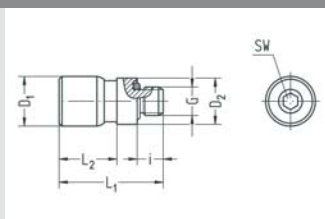
- M5 thread
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range 0 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	D1	NW	g/piece
729-5002	M5	OD4 (4/2)	8	4,5	30,5	11	8,5	2	7
729-5004	M5	OD6 (6/4)	10	4,5	34,5	24	11,5	2,2	12

## Screw-in connector

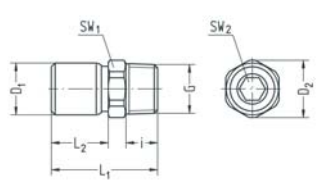
- Thread M5 with hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	D1	D2	NW	g/piece
663-5002	M5	OD4 (4/2)	2,5	4,5	19,5	11,5	8,5	8	2	4
663-5003	M5	OD5 (5/3)	2,5	4,5	21	14	10,5	8	2,5	6
663-5004	M5	OD6 (6/4)	2,5	4,5	23	16	11,5	8	2,5	7
663-5043	M5	OD4,3 (4,3/3)	2,5	4,5	19,5	11,5	9	8	2,5	4
663-4804	M7	OD6 (6/4)	4	5	22,5		11,4	9,9	4	8



## Screw-in connector

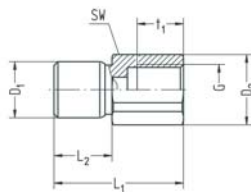


- Whitworth pipe thread conical
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

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Part no.	G	for hose	SW1	SW2	i	L1	L2	D1	D2	NW	g/piece
631-0202	R1/8	OD4 (4/2)	11	3	6	20	10	8,5	12,1	2	8
631-0243	R1/8	OD4,3 (4,3/3)	11	3	6	20	10	9	12,1	3	8
631-0203	R1/8	OD5 (5/3)	11	4	6	21,5	11,5	10,5	12,1	3	9
631-0204	R1/8	OD6 (6/4)	11	4	6	22,5	12,5	11,5	12,1	4	10
631-0206	R1/8	OD8 (8/6)	13	5	6	25,5	15,5	14,5	14,2	5,1	15
631-0402	R1/4	OD4 (4/2)	14	3	8,5	23	10	8,5	15,2	2	16
631-0443	R1/4	OD4,3 (4,3/3)	14	3	8,5	23	10	9	15,2	3	16
631-0403	R1/4	OD5 (5/3)	14	4	8,5	24,5	11,5	10,5	15,2	3	16
631-0404	R1/4	OD6 (6/4)	14	4	8,5	25,5	12,5	11,5	15,2	4	17
631-0406	R1/4	OD8 (8/6)	14	6	8,5	28,5	15,5	14,5	15,2	6	21
631-0408	R1/4	OD10 (10/8)	17	8	8,5	30,5	17,5	16,5	18,3	8	24

## Connector with female thread

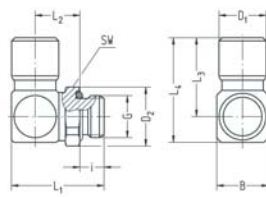


- Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	SW	L1	L2	t1	D1	D2	NW	g/piece
617-0102	G1/8	OD4 (4/2)	14	24	10	8	8,5	15,2	2	17
617-0143	G1/8	OD4,3 (4,3/3)	14	24	10	8	9	15,2	3	17
617-0103	G1/8	OD5 (5/3)	14	25,5	11,5	8	10,5	15,2	3	18
617-0104	G1/8	OD6 (6/4)	14	27	12,5	8	11,5	15,2	4	19
617-0106	G1/8	OD8 (8/6)	14	30	15,5	8	14,5	15,2	6	23
617-0302	G1/4	OD4 (4/2)	17	28,5	10	12	8,5	18,3	2	28
617-0304	G1/4	OD6 (6/4)	17	31	12,5	12	11,5	18,3	4	30
617-0306	G1/4	OD8 (8/6)	17	34	15,5	12	14,5	18,3	6	33
617-0308	G1/4	OD10 (10/8)	17	37	17,5	12	16,5	18,3	8	37
617-0504	G3/8	OD6 (6/4)	22	31	12,5	12	11,5	23,4	4	46
617-0506	G3/8	OD8 (8/6)	22	34	15,5	12	14,5	23,4	6	50
617-0508	G3/8	OD10 (10/8)	22	37	17,5	12	16,5	23,4	8	55
617-0704	G1/2	OD6 (6/4)	27	34	12,5	14	11,5	28,6	4	74
617-0706	G1/2	OD8 (8/6)	27	37	15,5	14	14,5	28,6	6	78
617-0708	G1/2	OD10 (10/8)	27	40	17,5	14	16,5	28,6	8	84

## Elbow screw-in connector swiveling

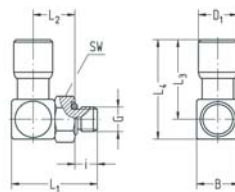
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
686-0202	G1/8	OD4 (4/2)	13	5,5	20,3	10,5	16,5	20,5	8,5	8,5	14,2	2	14
686-0203	G1/8	OD5 (5/3)	13	5,5	21,8	11,2	18	22,5	10	10,5	14,2	3	17
686-0243	G1/8	OD4,3 (4,3/3)	13	5,5	21,8	11,2	16,6	21,1	10	9	14,2	3	15
686-0204	G1/8	OD6 (6/4)	13	5,5	22,8	11,7	20,7	26,7	12	11,5	14,2	4	21
686-0206	G1/8	OD8 (8/6)	14	5,5	26,2	13,4	25	33	16	14,5	15,2	5,5	38
686-0208	G1/8	OD10 (10/8)	17	5,5	28,2	14,4	29	38	18	16,5	18,5	5,5	56
686-0209	G1/8	OD12 (12/9)	20	5,5	31,5	16,5	35,5	46	21	20	21,8	5,5	90
686-0402	G1/4	OD4 (4/2)	17	7,5	22,8	11	16,5	20,5	8,5	8,5	18,5	2	23
686-0403	G1/4	OD5 (5/3)	17	7,5	24,3	11,7	18	22,5	10	10,5	18,5	3	26
686-0443	G1/4	OD4,3 (4,3/3)	17	7,5	24,3	11,7	16,6	21,1	10	9	18,5	3	25
686-0404	G1/4	OD6 (6/4)	17	7,5	25,3	12,2	20,7	26,7	12	11,5	18,5	4	31
686-0406	G1/4	OD8 (8/6)	17	7,5	28,7	13,9	25	33	16	14,5	18,5	6	44
686-0408	G1/4	OD10 (10/8)	17	7,5	30,7	14,9	29	38	18	16,5	18,5	8	56
686-0409	G1/4	OD12 (12/9)	20	7,5	34	17	35,5	46	21	20	21,8	7,8	88
686-0604	G3/8	OD6 (6/4)	20	7,5	26,3	13,2	20,7	26,7	12	11,5	21,8	4	39
686-0606	G3/8	OD8 (8/6)	20	7,5	29,7	14,9	25	33	16	14,5	21,8	6	52
686-0608	G3/8	OD10 (10/8)	20	7,5	31,7	15,9	29	38	18	16,5	21,8	8	64
686-0609	G3/8	OD12 (12/9)	20	7,5	34	17	35,5	46	21	20	21,8	9	87
686-0611	G3/8	OD14 (14/11)	22	7,5	37,5	19	39	51	24	22	23,8	10	117
686-0612	G3/8	OD16 (16/12)	24	7,5	39,8	20,2	44	57	26	25	26,2	11,5	153
686-0804	G1/2	OD6 (6/4)	24	9,5	29,3	14,2	20,7	26,7	12	11,5	26,2	4	49
686-0806	G1/2	OD8 (8/6)	24	9,5	31,7	14,9	25	33	16	14,5	26,2	6	64
686-0808	G1/2	OD10 (10/8)	24	9,5	33,7	15,9	29	38	18	16,5	26,2	8	75
686-0809	G1/2	OD12 (12/9)	24	9,5	36	17	35,5	46	21	20	26,2	9	99
686-0811	G1/2	OD14 (14/11)	24	9,5	39	18,5	39	51	24	22	26,2	11	123
686-0812	G1/2	OD16 (16/12)	24	9,5	41,3	19,2	44	57	26	25	26,2	12	156

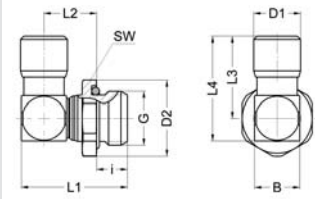
## Elbow screw-in connector swiveling

- M5 thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
687-5002	M5	OD4 (4/2)	8	4,5	17,3	8,5	16,5	20,5	8,5	8,5	2	9
687-5003	M5	OD5 (5/3)	8	4,5	18,8	9,2	18	22,5	10	10,5	2,2	12
687-5043	M5	OD4,3 (4,3/3)	8	4,5	18,8	9,2	16,6	21,1	10	9	2,2	11
687-5004	M5	OD6 (6/4)	8	4,5	19,8	9,7	19,5	24	11	11,5	2,2	15
687-5006	M5	OD8 (8/6)	8	4,5	19,8	9,7	22,8	28	14	14,5	2,2	22

## Elbow screw-in connector swiveling

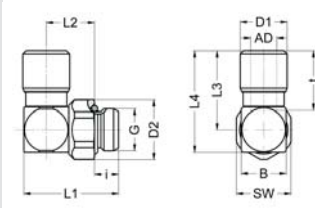


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Optimum through flow
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

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Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
604-0202	G1/8	OD4 (4/2)	13	5,5	22,9	12,9	16,7	21,2	9	8,5	14,2	2,5	15
604-0203	G1/8	OD5 (5/3)	13	5,5	23,9	13,4	18	23	10	10,5	14,2	3	18
604-0204	G1/8	OD6 (6/4)	13	5,5	25,9	14,9	20	25,5	11	11,5	14,2	4,2	19
604-0206	G1/8	OD8 (8/6)	14	5,5	31,4	18,9	24,5	31,5	14	14,5	15,2	5,5	40
604-0402	G1/4	OD4 (4/2)	17	7,5	24,9	12,9	16,5	21	9	8,5	18,5	2,5	21
604-0403	G1/4	OD5 (5/3)	17	7,5	25,9	13,4	18	23	10	10,5	18,5	3,5	25
604-0404	G1/4	OD6 (6/4)	17	7,5	25,9	12,9	20	25,5	11	11,5	18,5	4,2	23
604-0406	G1/4	OD8 (8/6)	17	7,5	31,4	16,9	24,5	31,5	14	14,5	18,5	6,5	41
604-0408	G1/4	OD10 (10/8)	17	7,5	36,3	20,8	28	36	16	16,5	18,5	8,5	54
604-0604	G3/8	OD6 (6/4)	20	7,5	26,9	13,9	20	25,5	11	8,5	21,8	4,2	31
604-0606	G3/8	OD8 (8/6)	20	7,5	29,9	15,4	24,5	31,5	14	14,5	21,8	6,5	46
604-0608	G3/8	OD10 (10/8)	20	7,5	33,3	17,8	28	36	16	16,5	21,8	8,5	56
604-0609	G3/8	OD12 (12/9)	20	7,5	40,3	22,8	34,5	44,5	20	20	21,8	9	94
604-0611	G3/8	OD14 (14/11)	22	7,5	43,5	25	38	49	22	22	23,8	11	112
604-0612	G3/8	OD16 (16/12)	24	7,5	46	26,5	42,5	54,5	24	25	26,2	12,5	123
604-0804	G1/2	OD6 (6/4)	24	9,5	30,4	15,4	20	25,5	11	8,5	26,2	4,2	50
604-0806	G1/2	OD8 (8/6)	24	9,5	33,4	16,9	24,5	31,5	14	14,5	26,2	6,5	65
604-0808	G1/2	OD10 (10/8)	24	9,5	35,8	18,3	28	36	16	16,5	26,2	8,5	74
604-0809	G1/2	OD12 (12/9)	24	9,5	39,9	20,4	34,5	44,5	20	20	26,2	9	106
604-0811	G1/2	OD14 (14/11)	24	9,5	42,5	22	38	49	22	22	26,2	11	122
604-0812	G1/2	OD16 (16/12)	24	9,5	47,5	26	42,5	54,5	24	25	26,2	12,5	132
604-0815	G1/2	OD20 (20/15)	24	9,5	60,8	36,3	56,5	70	30	30,5	26	13,5	256
604-1015	G3/4	OD20 (20/15)	32	9,5	60,8	36,3	57,1	70,6	30	30,5	34,8	18	278

## Elbow screw-in connector lockable

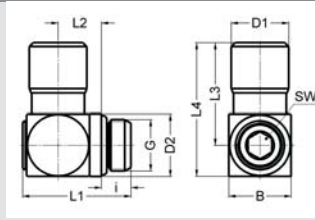


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	t	NW	g/piece
640-0202	G1/8	OD4 (4/2)	13	5,5 - 1	21,5	11 + 1	16,5	21,5	10	8,6	14,2	12,8	3	18
640-0204	G1/8	OD6 (6/4)	13	5,5 - 1	22,5	11,5+1	20	25,5	11	11,4	14,2	15,8	5,3	21
640-0206	G1/8	OD8 (8/6)	13	5,5 - 1	26,5	14+ 1	24,5	31,5	14	14,6	14,2	19	5,5	35
640-0404	G1/4	OD6 (6/4)	17	7,5 - 1,5	27,5	14,5 + 1,5	20	25,5	11	11,4	18,5	15,8	5,3	34
640-0406	G1/4	OD8 (8/6)	17	7,5 - 1,5	29,5	15 + 1,5	24,5	31,5	14	14,6	18,5	19	6,3	45
640-0408	G1/4	OD10 (10/8)	17	7,5 - 1,5	31,5	16 + 1,5	28	36	16	16,6	18,5	21,6	8	53
640-0409	G1/4	OD12 (12/9)	17	7,5 - 1,5	33,5	17 + 1,5	33	42	18	19,9	18,5	26,2	8	71
640-0606	G3/8	OD8 (8/6)	20	7,5 - 1,5	30,5	16 + 1,5	24,5	31,5	14	14,6	21,8	19	6,3	54
640-0608	G3/8	OD10 (10/8)	20	7,5 - 1,5	32,5	17 + 1,5	28	36	16	16,6	21,8	21,6	8,4	63
640-0609	G3/8	OD12 (12/9)	20	7,5 - 1,5	33,5	17 + 1,5	33	42	18	19,9	21,8	26,2	9	79
640-0611	G3/8	OD14 (14/11)	20	7,5 - 1,5	35,5	18 + 1,5	36,5	46,5	20	21,9	21,8	28,8	11	90
640-5002	M5	OD4 (4/2)	8	4,5 - 0,8	18,5	9,5 + 1	16	20,5	9	8,6	--	12,8	2,2	10
640-5004	M5	OD6 (6/4)	8	4,5 - 0,8	19,5	10 + 1	19,5	24,5	10	11,4	--	15,8	2,2	14

## Elbow screw-in connector swiveling

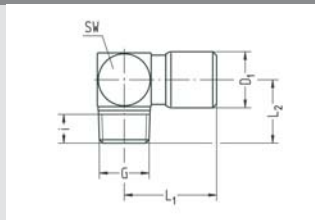
- Whitworth pipe thread with hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
656-0202	G1/8	OD4 (4/2)	4	5,5	22	8,7	17,8	23,7	11,8	8,6	11,9	2	17
656-0204	G1/8	OD6 (6/4)	4	5,5	22	8,7	21,3	27,2	11,8	11,4	11,9	4	20
656-0206	G1/8	OD8 (8/6)	4	5,5	22	8,7	24,2	30,1	13,9	14,6	11,9	4,5	27
656-0208	G1/8	OD10 (10/8)	4	5,5	22	8,7	26,4	32,5	13,9	16,6	11,9	4,4	31
656-0402	G1/4	OD4 (4/2)	6	7,5	27,5	11	19,5	27,4	15,8	8,6	15,9	2	34
656-0404	G1/4	OD6 (6/4)	6	7,5	27,5	11	23	30,9	15,8	11,4	15,9	4	37
656-0406	G1/4	OD8 (8/6)	6	7,5	27,5	11	26	33,9	15,8	14,6	15,9	6	42
656-0408	G1/4	OD10 (10/8)	6	7,5	27,5	11	28	35,9	15,9	16,6	15,9	6,5	46
656-0609	G3/8	OD12 (12/9)	8	7,5	31,8	13,5	35,5	46	19,9	19,9	19,9	9	81

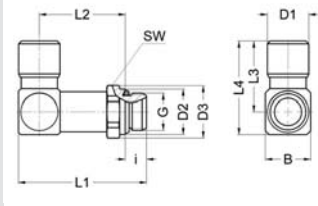
## Elbow screw-in connector

- Whitworth pipe thread conical
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	D1	NW	g/piece
661-0202	R1/8	OD4 (4/2)	11	6	17	12,5	8,5	2	14
661-0243	R1/8	OD4,3 (4,3/3)	11	6	17	12,5	9	3	14
661-0203	R1/8	OD5 (5/3)	11	6	18,5	12,5	10,5	3	15
661-0204	R1/8	OD6 (6/4)	11	6	20	12,5	11,5	4	16
661-0206	R1/8	OD8 (8/6)	12	6	23,5	13	14,5	6	23
661-0208	R1/8	OD10 (10/8)	14	6	27	14	16,5	6,5	28
661-0402	R1/4	OD4 (4/2)	14	8,5	18,5	16,5	8,5	2	26
661-0443	R1/4	OD4,3 (4,3/3)	14	8,5	18,5	16,5	9	3	26
661-0403	R1/4	OD5 (5/3)	14	8,5	20	16,5	10,5	3	28
661-0404	R1/4	OD6 (6/4)	14	8,5	21,5	16,5	11,5	4	29
661-0406	R1/4	OD8 (8/6)	14	8,5	24,5	16,5	14,5	6	33
661-0408	R1/4	OD10 (10/8)	14	8,5	27	16,5	16,5	8	29

## Screw-in connector, swiveling, long model

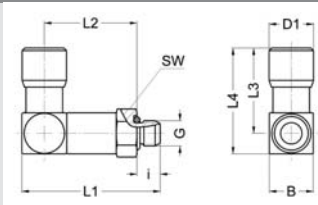


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

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Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
682-0202	G1/8	OD4 (4/2)	13	5,5	31	19,5	16,5	20,5	8,5	8,5	14,2	2	16
682-0204	G1/8	OD6 (6/4)	13	5,5	37,5	24,7	20,7	26,7	12	11,5	14,2	4	30
682-0206	G1/8	OD8 (8/6)	14	5,5	43,3	29	25	33	16	14,5	15,2	6	57
682-0402	G1/4	OD4 (4/2)	17	7,5	33,3	19,5	16,5	20,5	8,5	8,5	18,5	2	25
682-0404	G1/4	OD6 (6/4)	17	7,5	40	24,7	20,7	26,7	12	11,5	18,5	4	37
682-0406	G1/4	OD8 (8/6)	17	7,5	45,3	28,5	25	33	16	14,5	18,5	6	58
682-0408	G1/4	OD10 (10/8)	17	7,5	50	32,5	29	38	18	16,5	18,5	8	80
682-0409	G1/4	OD12 (12/9)	20	7,5	55,5	36,5	35,5	46	21	20	21,8	8	136
682-0604	G3/8	OD6 (6/4)	20	7,5	40,5	24,7	20,7	26,7	12	11,5	21,8	4	45
682-0606	G3/8	OD8 (8/6)	20	7,5	46	29	25	33	16	14,5	21,8	6	63
682-0608	G3/8	OD10 (10/8)	20	7,5	50	32	29	38	18	16,5	21,8	8	85
682-0609	G3/8	OD12 (12/9)	20	7,5	55,5	36	35,5	46	21	20	21,8	9	130
682-0804	G1/2	OD6 (6/4)	24	9,5	43	25,7	20,7	26,7	12	11,5	26,2	4	58
682-0806	G1/2	OD8 (8/6)	24	9,5	49	30,5	25	33	16	14,5	26,2	6	83
682-0808	G1/2	OD10 (10/8)	24	9,5	53	33,5	29	38	18	16,5	26,2	8	107
682-0809	G1/2	OD12 (12/9)	24	9,5	58,5	37,5	35,5	46	21	20	26,2	9	129

## Screw-in connector, swiveling, long model

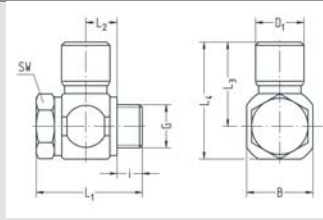


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
683-5002	M5	OD4 (4/2)	8	4,5	27	18	16,5	20,5	8,5	8,5	2	12
683-5004	M5	OD6 (6/4)	8	4,5	32,5	22	19,5	24	11	11,5	2,2	20

## Single swivel connector, short model

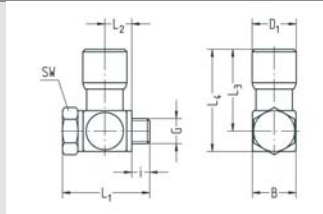
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR
- Material brass nickel-plated
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
634-0202K	G1/8	OD4 (4/2)	14	5,5	28,5	9,5	18,2	26,2	16	8,5	2	39
634-0203K	G1/8	OD5 (5/3)	14	5,5	28,5	9,5	19,5	27,5	16	10,5	3	39
634-0204K	G1/8	OD6 (6/4)	14	5,5	28,5	9,5	21	29	16	11,5	4	41
634-0206K	G1/8	OD8 (8/6)	14	5,5	28,5	9,5	24	32	16	14,5	5,2	45
634-0243K	G1/8	OD4,3 (4,3/3)	14	5,5	28,5	9,5	18,2	26,2	16	9	3	39
634-0402K	G1/4	OD4 (4/2)	17	7,5	30,5	9,5	20	30	20	8,5	2	56
634-0403K	G1/4	OD5 (5/3)	17	7,5	30,5	9,5	21,5	31,5	20	10,5	3	57
634-0404K	G1/4	OD6 (6/4)	17	7,5	30,5	9,5	23	33	20	11,5	4	58
634-0406K	G1/4	OD8 (8/6)	17	7,5	30,5	9,5	26	36	20	14,5	6	63
634-0408K	G1/4	OD10 (10/8)	17	7,5	30,5	9,5	28,5	38,5	20	16,5	7,2	65
634-0443K	G1/4	OD4,3 (4,3/3)	17	7,5	30,5	9,5	20	30	20	9	3	56
634-0604K	G3/8	OD6 (6/4)	22	7,5	31,5	9,5	25	36	22	11,5	4	75
634-0606K	G3/8	OD8 (8/6)	22	7,5	31,5	9,5	28	39	22	14,5	6	80
634-0608K	G3/8	OD10 (10/8)	22	7,5	31,5	9,5	30,5	41,5	22	16,5	8	82
634-0804K	G1/2	OD6 (6/4)	27	9	33,5	9,5	27	41,5	29	11,5	4	118
634-0806K	G1/2	OD8 (8/6)	27	9	33,5	9,5	30	44,5	29	14,5	6	122
634-0808K	G1/2	OD10 (10/8)	27	9	33,5	9,5	33,5	48	29	16,5	8	126

## Single swivel connector, short model

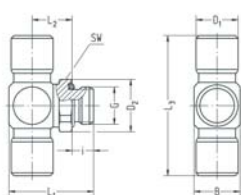
- M5 thread
- PVC seal rings
- Seal in connection NBR
- Ring connection brass nickel-plated
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
635-5002K	M5	OD4 (4/2)	8	3,5	17	5,2	16,5	20,5	8,5	8,5	2	9
635-5043K	M5	OD4,3 (4,3/3)	8	3,5	17	5,2	16,5	20,5	8,5	9	2,4	9
635-5003K	M5	OD5 (5/3)	8	4	19	6	18	22,5	10	10,5	2,4	12
635-5004K	M5	OD6 (6/4)	8	4,5	20,5	6,5	19,5	24	11	11,5	2,4	15



## T screw-in, connector, swiveling

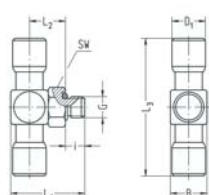


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

14

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	D2	NW	g/piece
688-0202	G1/8	OD4 (4/2)	13	5,5	20,3	10,5	33	8,5	8,5	14,2	2	17
688-0203	G1/8	OD5 (5/3)	13	5,5	21,8	11,2	36	10	10,5	14,2	3	21
688-0243	G1/8	OD4,3 (4,3/3)	13	5,5	21,8	11,2	33	10	9	14,2	3	18
688-0204	G1/8	OD6 (6/4)	13	5,5	22,8	11,7	41,4	12	11,5	14,2	4	26
688-0206	G1/8	OD8 (8/6)	14	5,5	26,2	13,4	50	16	14,5	15,2	5,5	48
688-0208	G1/8	OD10 (10/8)	17	5,5	28,2	14,4	58	18	16,5	18,5	5,5	68
688-0209	G1/8	OD12 (12/9)	20	5,5	31,5	16,5	71	21	20	21,8	5,5	113
688-0402	G1/4	OD4 (4/2)	17	7,5	22,8	11	33	8,5	8,5	18,5	2	26
688-0403	G1/4	OD5 (5/3)	17	7,5	24,3	11,7	36	10	10,5	18,5	3	30
688-0443	G1/4	OD4,3 (4,3/3)	17	7,5	24,3	11,7	33	10	9	18,5	3	27
688-0404	G1/4	OD6 (6/4)	17	7,5	25,3	12,2	41,4	12	11,5	18,5	4	36
688-0406	G1/4	OD8 (8/6)	17	7,5	28,7	13,9	50	16	14,5	18,5	6	53
688-0408	G1/4	OD10 (10/8)	17	7,5	30,7	14,9	58	18	16,5	18,5	8	68
688-0409	G1/4	OD12 (12/9)	20	7,5	34	17	71	21	20	21,8	7,8	112
688-0604	G3/8	OD6 (6/4)	20	7,5	26,3	13,2	41,4	12	11,5	21,8	4	43
688-0606	G3/8	OD8 (8/6)	20	7,5	29,7	14,9	50	16	14,5	21,8	6	62
688-0608	G3/8	OD10 (10/8)	20	7,5	31,7	15,9	58	18	16,5	21,8	8	77
688-0609	G3/8	OD12 (12/9)	20	7,5	34	17	71	21	20	21,8	9	110
688-0611	G3/8	OD14 (14/11)	22	7,5	37,5	19	78	24	22	23,8	11	143
688-0804	G1/2	OD6 (6/4)	24	9,5	29,3	14,2	41,4	12	11,5	26,2	4	55
688-0806	G1/2	OD8 (8/6)	24	9,5	31,7	14,9	50	16	14,5	26,2	6	74
688-0808	G1/2	OD10 (10/8)	24	9,5	33,7	15,9	58	18	16,5	26,2	8	88
688-0809	G1/2	OD12 (12/9)	24	9,5	36	17	71	21	20	26,2	9	123
688-0811	G1/2	OD14 (14/11)	24	9,5	39	18,5	78	24	22	26,2	11	149

## T screw-in, connector, swiveling

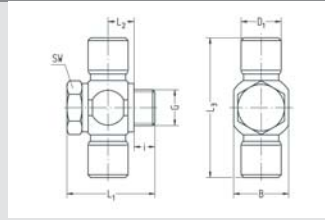


- M5 thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	NW	g/piece
689-5002	M5	OD4 (4/2)	8	4,5	17,3	8,5	33	8,5	8,5	2,2	11
689-5003	M5	OD5 (5/3)	8	4,5	18,8	9,2	36	10	10,5	2,2	16
689-5043	M5	OD4,3 (4,3/3)	8	4,5	18,8	9,2	33	10	9	2,2	13
689-5004	M5	OD6 (6/4)	8	4,5	19,8	9,7	39	11	11,5	2,2	20

## Double swivel joint

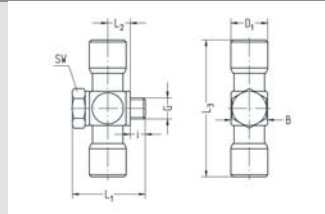
- Whitworth pipe thread
- VS seal rings
- Seals in connectors NBR
- Material brass nickel-plated
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	NW	g/piece
638-0202K	G1/8	OD4 (4/2)	14	5,5	28,5	9,5	36,4	16	8,5	2	40
638-0203K	G1/8	OD5 (5/3)	14	5,5	28,5	9,5	39	16	10,5	3	42
638-0204K	G1/8	OD6 (6/4)	14	5,5	28,5	9,5	42	16	11,5	4	45
638-0206K	G1/8	OD8 (8/6)	14	5,5	28,5	9,5	48	16	14,5	5,2	53
638-0243K	G1/8	OD4,3 (4,3/3)	14	5,5	28,5	9,5	36,4	16	9	3	41
638-0402K	G1/4	OD4 (4/2)	17	7,5	30,5	9,5	40	20	8,5	2	58
638-0403K	G1/4	OD5 (5/3)	17	7,5	30,5	9,5	43	20	10,5	3	60
638-0404K	G1/4	OD6 (6/4)	17	7,5	30,5	9,5	46	20	11,5	4	63
638-0406K	G1/4	OD8 (8/6)	17	7,5	30,5	9,5	52	20	14,5	6	71
638-0408K	G1/4	OD10 (10/8)	17	7,5	30,5	9,5	57	20	16,5	7,2	75
638-0443K	G1/4	OD4,3 (4,3/3)	17	7,5	30,5	9,5	40	20	9	3	58
638-0604K	G3/8	OD6 (6/4)	22	7,5	31,5	9,5	50	22	11,5	4	80
638-0606K	G3/8	OD8 (8/6)	22	7,5	31,5	9,5	56	22	14,5	6	89
638-0608K	G3/8	OD10 (10/8)	22	7,5	31,5	9,5	61	22	16,5	8	94
638-0804K	G1/2	OD6 (6/4)	27	9	33,5	9,5	54	29	11,5	4	122
638-0806K	G1/2	OD8 (8/6)	27	9	33,5	9,5	60	29	14,5	6	130
638-0808K	G1/2	OD10 (10/8)	27	9	33,5	9,5	67	29	16,5	8	136

## Double swivel joint

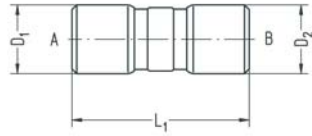
- M5 thread
- PVC seal rings
- Seals in connectors NBR
- Ring connection brass nickel-plated
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	NW	g/piece
639-5002K	M5	OD4 (4/2)	8	3,5	17	5,2	33	8,5	8,5	1,8	11
639-5043K	M5	OD4,3 (4,3/3)	8	3,5	17	5,2	33	8,5	9	1,8	11
639-5003K	M5	OD5 (5/3)	8	4	19	6	36	10	10,5	1,8	16
639-5004K	M5	OD6 (6/4)	8	4,5	20,5	6,5	39	11	11,5	1,8	20



## Double connector

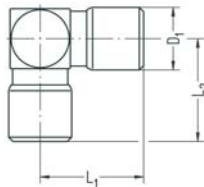


- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

14

Part no.	for hose A	for hose B	L1	D1	D2	NW	g/piece
632-0206	OD4 (4/2)	OD8 (8/6)	33	8,6	14,6	2	18
632-0406	OD6 (6/4)	OD8 (8/6)	35,5	11,5	14,5	4	20
632-0408	OD6 (6/4)	OD10 (10/8)	38,5	11,5	16,5	4	26
632-0608	OD8 (8/6)	OD10 (10/8)	41,5	14,5	16,5	6	30
632-0811	OD10 (10/8)	OD14 (14/11)	51	16,5	22	8	49
632-1112	OD14 (14/11)	OD16 (16/12)	62	22	25	11	87
633-0202	OD4 (4/2)	OD4 (4/2)	26,5	8,5	8,5	2	6
633-0303	OD5 (5/3)	OD5 (5/3)	29	10,5	10,5	3	10
633-0404	OD6 (6/4)	OD6 (6/4)	32,5	11,5	11,5	4	13
633-0606	OD8 (8/6)	OD8 (8/6)	38,5	14,5	14,5	6	25
633-0808	OD10 (10/8)	OD10 (10/8)	44	16,5	16,5	8	33
633-0909	OD12 (12/9)	OD12 (12/9)	54	20	20	9	58
633-1111	OD14 (14/11)	OD14 (14/11)	59	22	22	11	71
633-1212	OD16 (16/12)	OD16 (16/12)	65,5	25	25	12	92
633-1515	OD20 (20/15)	OD20 (20/15)	92,2	30,5	30,5	16,5	188
633-4343	OD4,3 (4,3/3)	OD4,3 (4,3/3)	26,5	9	9	3	7

## Elbow connector

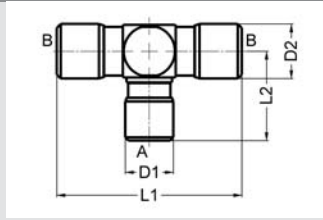


- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

Part no.	for hose	L1	L2	D1	NW	g/piece
677-0200	OD4 (4/2)	16,7	16	8,5	2	10
677-4300	OD4,3 (4,3/3)	16,7	16	9	3	10
677-0300	OD5 (5/3)	18	18	10,5	3	14
677-0400	OD6 (6/4)	20	20	11,5	4	19
677-0600	OD8 (8/6)	24,5	24,5	14,5	6	37
677-0800	OD10 (10/8)	28	28	16,5	8	43
677-0900	OD12 (12/9)	34,5	34	20	9	92
677-1100	OD14 (14/11)	38	38	22	11	112
677-1200	OD16 (16/12)	42,5	42,5	25	12	145
677-1500	OD20 (20/15)	70,6	78,6	30,5	14,5	303

## T connector

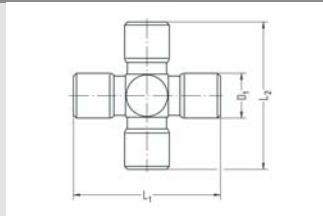
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar



Part no.	for hose A	for hose B	L1	L2	D1	NW	g/piece
678-0200	OD4 (4/2)	OD4 (4/2)	33,4	16	8,5	2	12
678-0206	OD4 (4/2)	OD8 (8/6)	45	18,5	8,5	2	38
678-0300	OD5 (5/3)	OD5 (5/3)	36	18	10,5	3	18
678-0400	OD6 (6/4)	OD6 (6/4)	40	20	11,5	4	24
678-0409	OD6 (6/4)	OD12 (12/9)	61	24,5	11,5	4	92
678-0600	OD8 (8/6)	OD8 (8/6)	49	24,5	14,5	6	47
678-0608	OD8 (8/6)	OD10 (10/8)	56	27	14,5	6	61
678-0609	OD8 (8/6)	OD12 (12/9)	69	29,5	14,5	6	104
678-0800	OD10 (10/8)	OD10 (10/8)	56	28	16,5	8	56
678-0806	OD10 (10/8)	OD8 (8/6)	50,4	28	16,5	8	50
678-0900	OD12 (12/9)	OD12 (12/9)	69	34	20	9	114
678-1100	OD14 (14/11)	OD14 (14/11)	76	37,5	22	11	139
678-1108	OD14 (14/11)	OD10 (10/8)	76	37,5	22	8	111
678-1200	OD16 (16/12)	OD16 (16/12)	84,5	42,5	25	12	185
678-1500	OD20 (20/15)	OD20 (20/15)	113	78,6	30,5	14,5	371
678-4300	OD4,3 (4,3/3)	OD4,3 (4,3/3)	33,4	16	9	3	13

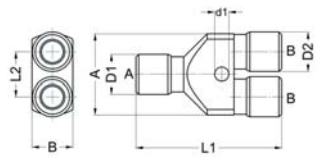
## 4-way connector

- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar



Part no.	for hose	L1	L2	D1	NW	g/piece
679-0200	OD4 (4/2)	33,4	32	8,5	2	15
679-4300	OD4,3 (4,3/3)	33,4	32	9	3	15
679-0300	OD5 (5/3)	36	36	10,5	3	22
679-0400	OD6 (6/4)	40	40	11,5	4	29
679-0600	OD8 (8/6)	49	49	14,5	6	57
679-0800	OD10 (10/8)	56	56	16,5	8	62
679-0900	OD12 (12/9)	69	68	20	9	136
679-1100	OD14 (14/11)	76	75	22	11	164
679-1200	OD16 (16/12)	84,5	85	25	12	222

## Single Y connector

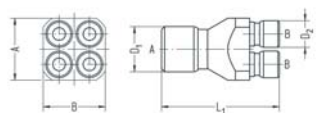


- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

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Part no.	for hose A	for hose B	L1	L2	D1	D2	A	B	d1	NW	g/piece
675-0202	OD4 (4/2)	OD4 (4/2)	35	11	8,5	8,5	20	10	3,2	2	13
675-4302	OD4,3 (4,3/3)	OD4 (4/2)	35	11	9	8,5	20	10	3,2	2	13
675-4343	OD4,3 (4,3/3)	OD4,3 (4,3/3)	35	11	9	9	20	10	3,2	3	14
675-0402	OD6 (6/4)	OD4 (4/2)	37,5	11	11,5	8,5	20	10	3,2	2	17
675-0443	OD6 (6/4)	OD4,3 (4,3/3)	37,5	11	11,5	9	20	10	3,2	3	17
675-0404	OD6 (6/4)	OD6 (6/4)	44	13,2	11,5	11,5	25	10	4,2	4	24
675-0604	OD8 (8/6)	OD6 (6/4)	46	13,2	14,5	11,5	25	12	4,2	4	32
675-0606	OD8 (8/6)	OD8 (8/6)	55	16,5	14,5	14,5	30	12	5,2	6	48
675-0806	OD10 (10/8)	OD8 (8/6)	55	16,5	16,5	14,5	30	17	5,2	6	46
675-0808	OD10 (10/8)	OD10 (10/8)	60,5	19	16,5	16,5	35	17	5,2	8	44
675-0906	OD12 (12/9)	OD8 (8/6)	59,5	16,5	20	14,5	30	21	5,2	6	68
675-0908	OD12 (12/9)	OD10 (10/8)	64	19	20	16,5	35	21	5,2	8	80
675-0909	OD12 (12/9)	OD12 (12/9)	72	21,8	20	20	40	21	5,2	9	106
675-1108	OD14 (14/11)	OD10 (10/8)	65,5	18,4	22	16,5	35	23	5,2	8	83
675-1109	OD14 (14/11)	OD12 (12/9)	73	21,8	22	20	40	23	5,2	9	116
675-1111	OD14 (14/11)	OD14 (14/11)	79	23,8	22	22	45	23	5,2	11	129

## Double Y connector

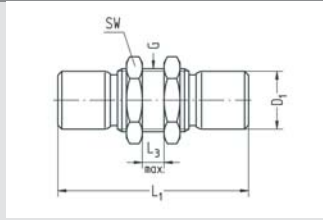


- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

Part no.	for hose A	for hose B	L1	D1	D2	A	B	NW	g/piece
676-0602	OD8 (8/6)	OD4 (4/2)	44	14,5	8,5	20	20	2	33
676-0643	OD8 (8/6)	OD4,3 (4,3/3)	44	14,5	9	20	20	3	33
676-0804	OD10 (10/8)	OD6 (6/4)	54,5	16,5	11,5	25	25	4	49
676-0906	OD11 (11/9)	OD8 (8/6)	62,5	20	14,5	30	30	6	23

## Bulkhead connector

- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

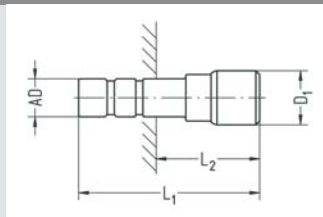


Part no.	for hose	G	SW	L1	L3 max.	D1	NW	g/piece
680-0202	OD4 (4/2)	M12x1	14	34	6	8,5	2	20
680-4343	OD4,3 (4,3/3)	M12x1	14	34	6	9	3	20
680-0303	OD5 (5/3)	M12x1	14	37	6	10,5	3	22
680-0404	OD6 (6/4)	M14x1	17	43	8	11,5	4	37
680-0606	OD8 (8/6)	M16x1	19	49	8	14,5	6	52
680-0808	OD10 (10/8)	M18x1	22	56	10	16,5	8	70
680-0909	OD12 (12/9)	M22x1	27	63	12	20	9	117
680-1111	OD14 (14/11)	M24x1	30	66	12	22	11	137
680-1212	OD16 (16/12)	M28x1	32	72	12	24,9	13	172

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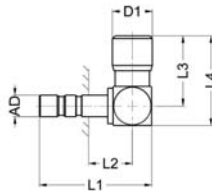
## Reducing plug

- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar
- Fits all connections in the programs 14, 15 and 15A in the respective size



Part no.	plug AD	for hose	L1	L2	D1	NW	g/piece
621-0402	6	OD4 (4/2)	31	15,5	8,5	2	5
621-0443	6	OD4,3 (4,3/3)	31	15,5	9	3	5
621-0403	6	OD5 (5/3)	34,5	19	10,5	3	7
621-0602	8	OD4 (4/2)	34	15,5	8,5	2	7
621-0643	8	OD4,3 (4,3/3)	34	15,5	9	3	7
621-0603	8	OD5 (5/3)	35,5	17	10,5	3	9
621-0604	8	OD6 (6/4)	38,5	20	11,5	4	10
621-0804	10	OD6 (6/4)	40	18,5	11,5	4	13
621-0806	10	OD8 (8/6)	45	24	14,5	6	18
621-1108	14	OD10 (10/8)	52	23,5	16,5	8	32
621-1106	14	OD8 (8/6)	52,5	24	14,6	6,5	33

## Elbow plug

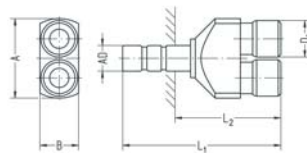


- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar
- Fits all connections in the programs 14, 15 and 15A in the respective size

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Part no.	plug AD	for hose	L1	L2	L3	L4	D1	NW	g/piece
641-0202	4	OD4 (4/2)	27,5	10	16,7	21,2	8,5	2	9
641-0404	6	OD6 (6/4)	32	11	20	25,5	11,5	4	17
641-0606	8	OD8 (8/6)	38	12,5	24,5	31,5	14,5	6	31
641-0808	10	OD10 (10/8)	43,5	14	28	36	16,5	7,8	44
641-0909	12	OD12 (12/9)	52,5	16,5	34,5	44,5	20	9	82
641-1111	14	OD14 (14/11)	57,5	18	38	49	22	11	101

## Y plug

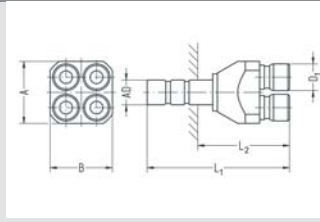


- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar
- Fits all connections in the programs 14, 15 and 15A in the respective size

Part no.	plug AD	for hose	L1	L2	D1	A	B	NW	g/piece
619-0202	4	OD4 (4/2)	42	29	8,5	20	10	2,5	12
619-0243	4	OD4,3 (4,3/3)	42	29	9	20	10	2,5	13
619-0402	6	OD4 (4/2)	44,5	29	8,5	20	10	2	13
619-0404	6	OD6 (6/4)	49,5	34	11,5	25	12	4	22
619-0443	6	OD4,3 (4,3/3)	44,5	29	9	20	10	3	13
619-0604	8	OD6 (6/4)	52,5	34	11,5	25	12	4	26
619-0606	8	OD8 (8/6)	60	41,5	14,5	30	15	6	42
619-0806	10	OD8 (8/6)	62,5	41	14,5	30	17	6	46
619-0808	10	OD10 (10/8)	68	46,5	16,5	35	17	7,8	44
619-0906	12	OD8 (8/6)	68	42	14,5	30	21	6	58
619-0908	12	OD10 (10/8)	72,5	51	16,5	35	21	8	57
619-0909	12	OD12 (12/9)	80,5	54,5	20	42	21	9	101
619-1108	14	OD10 (10/8)	74,5	46	16,5	35	23	8	61
619-1109	14	OD12 (12/9)	82	53,5	20	42	23	9	105
619-1111	14	OD14 (14/11)	88	59,5	22	46	23	11	124

## Double Y plug

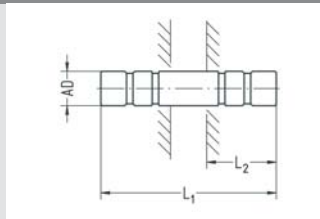
- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar
- Fits all connections in the programs 14, 15 and 15A in the respective size



Part no.	plug AD	for hose	L1	L2	D1	A	B	NW	g/piece
620-0402	6	OD4 (4/2)	47,5	30,5	8,5	20	20	2	27
620-0443	6	OD4,3 (4,3/3)	47,5	30,5	9	20	20	3	27
620-0602	8	OD4 (4/2)	50,5	30,5	8,5	20	20	2	27
620-0643	8	OD4,3 (4,3/3)	50,5	30,5	9	20	20	3	27

## Double plug

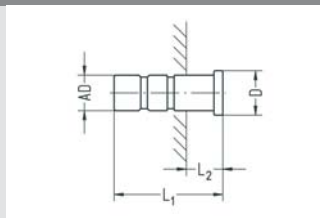
- Material brass nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar
- Fits all connections in the programs 14, 15 and 15A in the respective size



Part no.	plug AD	L1	L2	NW	g/piece
622-0202	4	30	12	2	2
622-4343	4,3	30	12	3	2
622-0303	5	35	13,5	3	3
622-0404	6	36	15	4	4
622-0606	8	41	18	6	7
622-0808	10	47	20,5	8	10
622-0909	12	60	26	10	17
622-1111	14	64	28,5	12	21

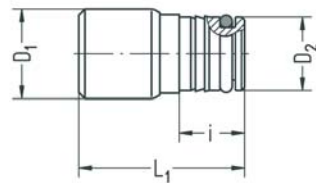
## Closure plug

- Material brass nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar
- Fits all connections in the programs 14, 15 and 15A in the respective size



Part no.	plug AD	L1	L2	D	g/piece
623-0200	4	19	7	5,5	2
623-4300	4,3	19	7	5,5	2
623-0300	5	21	7,5	7	4
623-0400	6	21,5	6,5	8	5
623-0600	8	24,5	6,5	10	11
623-0800	10	28	7,5	12	19
623-0900	12	33	7	14	32
623-1100	14	36	7,5	16	47
623-1200	16	38	7,5	17,8	33

## Force-fitting connector



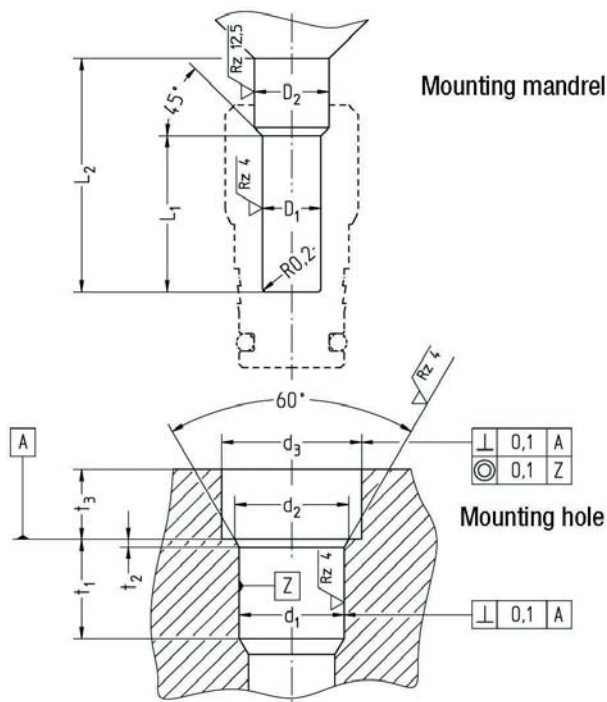
- Sealing NBR
- Material brass
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

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Part no.	for hose	i	L1	D1	D2	NW	g/piece
612-0002	OD4 (4/2)	7	18,5	8,5	6	2	4
612-0902	OD4 (4/2)	8,5	21	8,5	9	2	7
612-0004	OD6 (6/4)	8,5	23	11,5	9	4	8
612-0006	OD8 (8/6)	10,5	27,5	14,5	12	6	16
612-0008	OD10 (10/8)	12	31,5	16,5	14	8	24
612-0009	OD12 (12/9)	14,5	38,5	20	17	9	39
612-0011	OD14 (14/11)	16	41	22	19	11	48

## Mounting hole, Mounting mandrel

Part no.	for hose	D1	D2	L1	L2	d1	d2	d3	t1	t2	t3
		-0,05	-0,05	±0.1	±0.1	H8	+0.2	min.	+0.5	+0.2	max
612-0002	OD4 (4/2)	3,8	4,05	10,5	15	6	6,5	9	7	0,4	5
612-0004	OD6 (6/4)	5,8	6,05	13	18,5	9	9,5	12	8,5	0,4	6,5
612-0006	OD8 (8/6)	7,8	8,05	15	21,5	12	12,5	15,2	10,5	0,4	7,5
612-0008	OD10 (10/8)	9,8	10,05	17,5	24	14	14,5	17,2	12	0,4	8,5
612-0009	OD12 (12/9)	11,8	12,05	22	29	17	17,6	20,6	14,5	0,5	12
612-0011	OD14 (14/11)	13,8	14,05	24,5	31	19	19,6	22,6	16	0,5	12
612-0902	OD4 (4/2)	3,8	4,05	10,5	15	9	9,5	10	8,5	0,4	6



### Assembly instructions

1. Align mandrel and insertion bore (max. allowable misalignment 0.15 mm)
2. Slightly grease O-ring on force-fitting shaft
3. Mount force-fitting connector onto mandrel
4. Impress force-fitting adapter up to limit stop (max. force-fitting speed 50 mm / second)

### Note

Force-fitting connectors may only be impressed with the help of mandrels displayed and dimensioned in the table.

For an effective test of production models that are equipped with force-fitting connectors, the required test air may be applied via special steel plugs. Please ask for the necessary drawing if interested.



## Elbow force-fitting connector, swiveling

- Sealing NBR
- Material brass
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	for hose	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
607-0002	OD4 (4/2)	7	17,8	6,4	16,5	20,5	8,5	8,5	6	2	8
607-0902	OD4 (4/2)	8,5	20,3	7,4	16,5	20,5	8,5	8,5	9	2	11
607-0004	OD6 (6/4)	8,5	22,8	8,5	20,7	26,7	12	11,5	9	4	19
607-0006	OD8 (8/6)	10,5	28,7	10,8	25	33	16	14,5	12	6	39
607-0008	OD10 (10/8)	12	32,7	12,3	29	38	18	16,5	14	8	53
607-0009	OD12 (12/9)	14,5	38	14	35,5	46	21	20	17	9	88
607-0011	OD14 (14/11)	16	42	15	39	51	24	22	19	11	119

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## Mounting hole, extrusion die

Part no.	for hose	D +0.5	d1 H8	d2 +0.2	d3 min.	t1 +0.5	t2 +0.2	t3 +0.2
607-0002	OD4 (4/2)	8,5	6	6,5	8	7	0,4	0,3
607-0902	OD4 (4/2)	8,5	9	9,5	12	8,5	0,4	0,3
607-0004	OD6 (6/4)	12	9	9,5	12	8,5	0,4	0,3
607-0006	OD8 (8/6)	16	12	12,5	16	10,5	0,4	0,3
607-0008	OD10 (10/8)	18	14	14,5	18	12	0,4	0,3
607-0009	OD12 (12/9)	21	17	17,6	21	14,5	0,5	0,3
607-0011	OD14 (14/11)	23	19	19,6	23	16	0,5	0,3

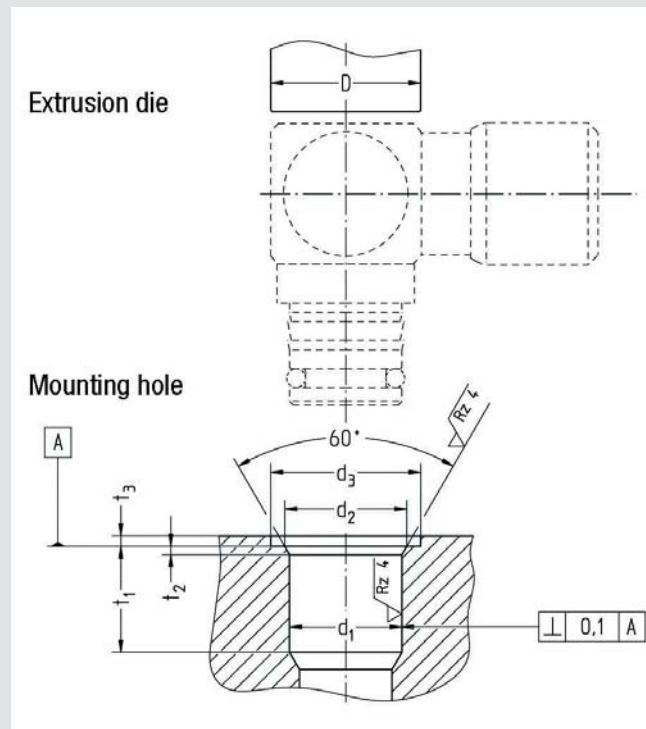
### Assembly instructions

1. Align heading tool and insertion bore  
(max. allowable misalignment 0.3mm)
2. Slightly grease O-ring on force-fitting shaft
3. Impress force-fitting connector into insertion bore beyond O-ring
4. Impress force-fitting adapter up to limit stop  
(max. force-fitting speed 50 mm / second)

### Note

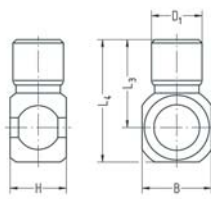
The mandatory heading tool diameter must not be undercut when impressing angled force-fitting connectors!

For an effective test of production models that are equipped with force-fitting connectors, the required test air may be applied via special steel plugs. Please ask for the necessary drawing if interested.





## Single banjo

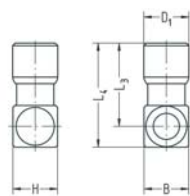


- For banjo bolt with Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

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Part no.	for banjo bolt	for hose	H	L3	L4	B	D1	NW	g/piece
634-02021	G1/8	OD4 (4/2)	14.5	18.2	26.2	16	8.5	2	21
634-02031	G1/8	OD5 (5/3)	14.5	19.5	27.5	16	10.5	3	22
634-02041	G1/8	OD6 (6/4)	14.5	21	29	16	11.5	4	23
634-02061	G1/8	OD8 (8/6)	14.5	24	32	16	14.5	6	28
634-02431	G1/8	OD4,3 (4,3/3)	14.5	18.2	26.2	16	9	3	21
634-04021	G1/4	OD4 (4/2)	14.5	20	30	20	8.5	2	28
634-04031	G1/4	OD5 (5/3)	14.5	21.5	31.5	20	10.5	3	29
634-04041	G1/4	OD6 (6/4)	14.5	23	33	20	11.5	4	31
634-04061	G1/4	OD8 (8/6)	14.5	26	36	20	14.5	6	35
634-04081	G1/4	OD10 (10/8)	14.5	28.5	38.5	20	16.5	8	37
634-04431	G1/4	OD4,3 (4,3/3)	14.5	20	30	20	9	3	28
634-06041	G3/8	OD6 (6/4)	14.5	25	36	22	11.5	4	29
634-06061	G3/8	OD8 (8/6)	14.5	28	39	22	14.5	6	34
634-06081	G3/8	OD10 (10/8)	14.5	30.5	41.5	22	16.5	8	37
634-08041	G1/2	OD6 (6/4)	14.5	27	41.5	29	11.5	4	47
634-08061	G1/2	OD8 (8/6)	14.5	30	44.5	29	14.5	6	51
634-08081	G1/2	OD10 (10/8)	14.5	33.5	48	29	16.5	8	54

## Single banjo

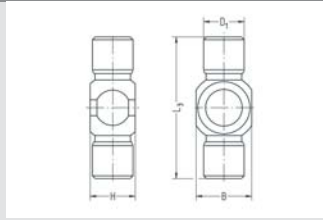


- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

Part no.	for banjo bolt	for hose	H	L3	L4	B	D1	NW	g/piece
635-50021	M5	OD4 (4/2)	8,5	16,5	20,5	8,5	8,5	2	6
635-50031	M5	OD5 (5/3)	10	18	22,5	10	10,5	3	9
635-50041	M5	OD6 (6/4)	11	19,5	24	11	11,5	4	12
635-50431	M5	OD4,3 (4,3/3)	8,5	16,5	20,5	8,5	9	3	6
635-50021-1	M5 (for throttle)	OD4 (4/2)	8,5	16,5	20,5	8,5	8,5	1,8	5
635-50031-1	M5 (for throttle)	OD5 (5/3)	10	18	22,5	10	10,5	1,8	9
635-50041-1	M5 (for throttle)	OD6 (6/4)	11	19,5	24	11	11,5	1,8	11
635-50431-1	M5 (for throttle)	OD4,3 (4,3/3)	8,5	16,5	20,5	8,5	9	1,8	5

## Double swivel joint

- For banjo bolt with Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar

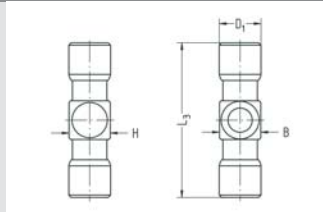


Part no.	for banjo bolt	for hose	H	L3	B	D1	NW	g/piece
638-02021	G1/8	OD4 (4/2)	14,5	36,4	16	8,5	2	23
638-02031	G1/8	OD5 (5/3)	14,5	39	16	10,5	3	25
638-02041	G1/8	OD6 (6/4)	14,5	42	16	11,5	4	29
638-02061	G1/8	OD8 (8/6)	14,5	48	16	14,5	6	36
638-02431	G1/8	OD4,3 (4,3/3)	14,5	36,4	16	9	3	23
638-04021	G1/4	OD4 (4/2)	14,5	40	20	8,5	2	30
638-04031	G1/4	OD5 (5/3)	14,5	43	20	10,5	3	32
638-04041	G1/4	OD6 (6/4)	14,5	46	20	11,5	4	35
638-04061	G1/4	OD8 (8/6)	14,5	52	20	14,5	6	43
638-04081	G1/4	OD10 (10/8)	14,5	57	20	16,5	8	48
638-04431	G1/4	OD4,3 (4,3/3)	14,5	40	20	9	3	32
638-06041	G3/8	OD6 (6/4)	14,5	50	22	11,5	4	34
638-06061	G3/8	OD8 (8/6)	14,5	56	22	14,5	6	43
638-06081	G3/8	OD10 (10/8)	14,5	61	22	16,5	8	49
638-08041	G1/2	OD6 (6/4)	14,5	54	29	11,5	4	51
638-08061	G1/2	OD8 (8/6)	14,5	60	29	14,5	6	59
638-08081	G1/2	OD10 (10/8)	14,5	67	29	16,5	8	65

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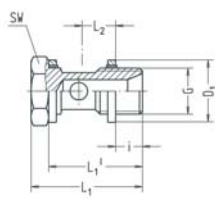
## Double banjo

- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar



Part no.	for banjo bolt	for hose	H	L3	B	D1	NW	g/piece
639-50021	M5	OD4 (4/2)	8,5	33	8,5	8,5	1,8	8
639-50031	M5	OD5 (5/3)	10	36	10	10,5	1,8	13
639-50041	M5	OD6 (6/4)	11	39	11	11,5	1,8	17
639-50431	M5	OD4,3 (4,3/3)	8,5	33	8,5	9	1,8	8

## Banjo bolt, short model

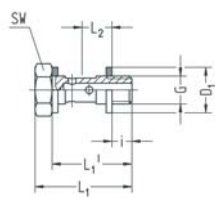


- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5

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Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
634-0200K	G1/8	14	5,5	28,5	24,5	9,5	14,7	5,2	17
634-0400K	G1/4	17	7,5	30,5	26,5	9,5	17,7	7	28
634-0600K	G3/8	22	7,5	31,5	26,5	9,5	21,8	9,2	46
634-0800K	G1/2	27	9	33,5	28	9,5	26,3	11,8	71

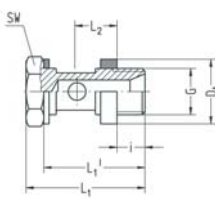
## Banjo bolt, short model



- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	fits banjo with H	SW	i	L1	L1'	L2	D1	NW	g/piece
35-5010K	M5	10	8	4	19	16	6	7,5	2,4	3
35-5000K	M5	8,5 and 9	8	3,5 (3)	17	14	5,2 (5,5)	7,5	2,4	3
635-5000K	M5	11	8	4,5	20,5	17,5	6,5	7,5	2,4	3

## Banjo bolt

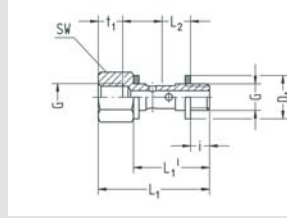


- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material brass nickel-plated
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5

Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
634-0200	G1/8	14	6	30,5	26,5	11,8	14,9	5,2	16
634-0400	G1/4	17	8	32,5	28,5	11,8	18,9	7,2	27
634-0600	G3/8	22	8	33,5	28,5	11,8	22,9	9,2	46
634-0800	G1/2	27	10	36	30,5	11,8	26,9	11,8	74

## Banjo bolt, short model

- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5

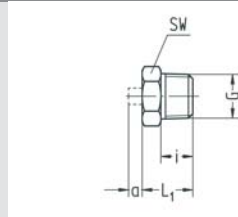


Part no.	G	SW	i	L1	L1'	L2	D1	t1	NW	g/piece
648-0200K	G1/8	14	5,5	34	24,5	9,5	14,7	6,5	5,2	20
648-0400K	G1/4	17	7,5	38,5	26,5	9,5	17,7	9	7,2	33
648-0600K	G3/8	22	7,5	39,5	26,5	9,5	21,8	9	9,2	55
648-0800K	G1/2	27	9	44	28	9,5	26,3	11	11,8	90

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## Pressure gauge

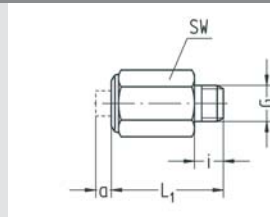
- Whitworth pipe thread conical
- Material brass nickel-plated / plastic
- Allowable medium: Air
- Temperature range -15 to +70 °C
- Working pressure range 2 to 10 bar



Part no.	G	SW	i	L1	A	g/piece
492-0200	R1/8	11	6	11	1,5	5

## Pressure gauge

- M5 thread
- Material brass nickel-plated / plastic
- Allowable medium: Air
- Temperature range -15 to +70 °C
- Working pressure range 2 to 10 bar



Part no.	G	SW	i	L1	A	g/piece
491-5000	M5	8	4,5	17	3,5	4

## Color coding

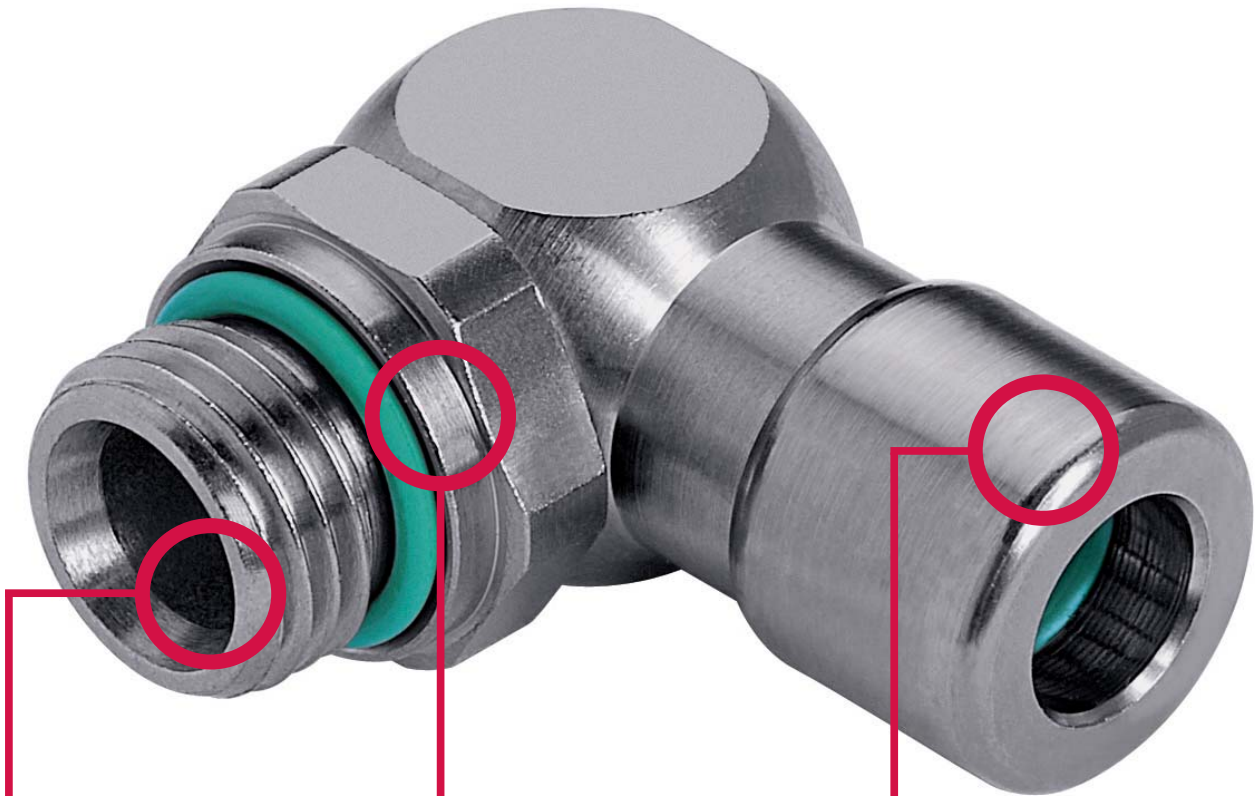


- Material aluminum anodized
- Fits all Eisele plug connectors

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Part no.	for hose	Color	g/piece
SA1394-1102	OD4 (4/2)	red	1
SA1394-1104	OD6 (6/4)	red	1
SA1394-1106	OD8 (8/6)	red	1
SA1394-1108	OD10 (10/8)	red	1
SA1394-1109	OD12 (12/9)	red	1
SA1394-1111	OD14 (14/11)	red	1
SA1394-1112	OD16 (16/12)	red	1
SA1394-1202	OD4 (4/2)	green	1
SA1394-1204	OD6 (6/4)	green	1
SA1394-1206	OD8 (8/6)	green	1
SA1394-1208	OD10 (10/8)	green	1
SA1394-1209	OD12 (12/9)	green	1
SA1394-1211	OD14 (14/11)	green	1
SA1394-1212	OD16 (16/12)	green	1
SA1394-1302	OD4 (4/2)	blue	1
SA1394-1304	OD6 (6/4)	blue	1
SA1394-1306	OD8 (8/6)	blue	1
SA1394-1308	OD10 (10/8)	blue	1
SA1394-1309	OD12 (12/9)	blue	1
SA1394-1311	OD14 (14/11)	blue	1
SA1394-1312	OD16 (16/12)	blue	1

## Plug connectors with release sleeve and 2 seals



### Minimizing leakage

- High seal-tightness of connections e.g. for low-pressure hydraulics, central lubrication

### Extended application possibilities

- Suitable for compressed air (up to 24 bar) and certain fluids, also for high pressures, depending on application and hose up to 100 bar
- Also suitable for vacuum

### Additional seal

- A second FPM seal ring in front of the holding clamp additionally protects from dirt entering
- In the sealing area no scratch marks on the hose outside diameter

Also suitable for vacuum applications.

## Range of application

The connection system with a special technology, with additional seal and a wider pressure range. Very quick assembly and disassembly of compressed-air hoses made of PE (polyethylene), PA (polyamide), PU (polyurethane), ProWeld (PUR) and PTFE (Teflon) / FEP.

## Service conditions

Working pressure range: -0.95 to 24 bar <sup>1)</sup>  
 Allowable medium: Air <sup>2)</sup>  
 Temperature range: -20 to +120 °C

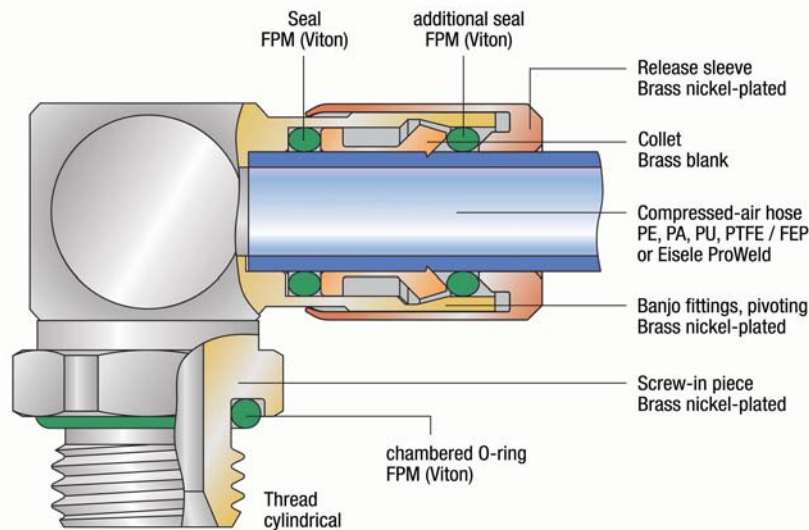
Data provided apply depending on the compressed-air hoses used

- <sup>1)</sup> Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- <sup>2)</sup> May also be used with certain fluids. Please enquire.

If the sealing material FPM is not suitable for your application we kindly ask you to enquire. Our engineers will be happy to consult you in the selection of a suitable sealing material.

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## Functional principle



## Advantages

- Very quick assembly and disassembly of compressed-air hoses
- No tools necessary
- Frequent assembly and disassembly possible
- Full hose through-flow
- All male stud couplings sealed with chambered O-ring
- Very small connector sets even if conical threads are not used
- Connector casings made of brass, chemically nickel-plated, for higher surface resistance
- Wider pressure range
- Suitable for vacuum

## Special technology of the release sleeve

- Collet lies in casing and is protected from release sleeve
- Easy disassembly even when connectors are severely soiled
- Designed for easy cleaning

## Special technology with additional seal

- Additional seal located prior to holding clamp
- Scratch marks are not possible on the hose outside diameter
- Additional safety from dirt entering the system



## Hoses

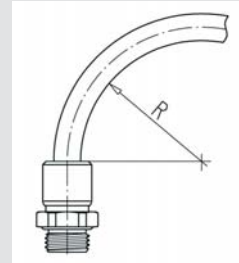
Hose dimension		Polyethylene (PE) Temperature range -10 to +40°C		Polyamide (PA) Temperature range -60 to +100°C		Polyurethane (PU) Temperature range -35 to +70°C		ProWeld (PUR) <sup>1)</sup> Temperature range -35 to +75°C		Teflon (PTFE) /FEP <sup>2)</sup> Temperature range -35 to +120°C	
Outside-Ø	Inside-Ø	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)
4 (±0,1)	2	20	20	20	30	8	10	6,5	20	16	25
4,3 (±0,1)	3	20	13	20	20	10	10	-	-	35	10
5 (±0,1)	3	25	15	25	25	11	10	-	-	25	20
6 (±0,15)	4	30	13	30	20	14	10	12	11	35	15
8 (±0,15)	6	40	8	40	15	20	9	18	9	65	11
10 (±0,15)	8	60	6	60	12	37,5	8	15	14	100	9
12 (±0,15)	9	60	9	85	15	48	10	24	10	100	9
14 (±0,15)	11	90	8	80	12	60	7,5	38	9	140	9
16 (±0,15)	11	90	6	90	11	43	10	44	9	-	-
20 (±0,2)	14	-	-	-	-	-	-	-	8	-	-

The mounted compressed-air hoses are not to be exposed to tensile loading.

<sup>1)</sup> In the case of Eisele ProWeld hoses a smaller inside diameter results from a partially larger wall thickness.

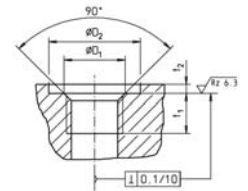
<sup>2)</sup> Important notes for the use of compressed-air hoses made of PTFE (Teflon) and FEP:

- The outside diameter of compressed-air 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 compressed-air hoses at a right angle. Ensure that hoses are not being deformed or damaged during the cutting process
- During assembly, compressed-air hoses must be pressed until the bottom of the plug connectors is felt so as to achieve proper tightness.



## Connection thread

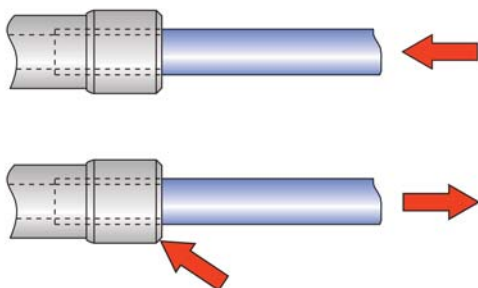
Thread	Thread depth		Thread counterbore		Counterbore <sup>1)</sup>		Torque <sup>2)</sup> max. (Ncm)	Thread standards
	t1 min. (mm)	t2 min. (mm)	ØD1 max. (mm)	ØD2 min. (mm)	t2 max. (mm)			
M5	4.5		6	10	0.5	95	Metric thread M: DIN 13 / ISO 965	
M7	5		8	12	0.5	200		
M8x1	5.5		9.2	13	0.5	650		
M10x1	5.5		11	15	1	900		
G1/8	5.5		11	15.3	1	900	Pipe thread G: DIN ISO 228	
G1/4	7.5		14.2	19	1.5	1800		
G3/8	7.5		17.5	23	2	2500		
G1/2	9.5		22	27	2.5	3400		



<sup>1)</sup> A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.

<sup>2)</sup> Information about torques for hexagon socket on demand (assembly instructions 800 00 / 00-1)

## Handling



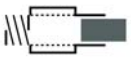
Assembly: Push hose into the connector up to the limit stop

Disassembly: Push release sleeve, pull out hose



## Threaded connectors

starting on page 109



Straight threaded connectors

page 109

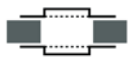


T threaded connectors

page 111

## Plug connector

starting on page 113



Double connectors

page 113



Elbow connectors

page 113



T connectors

page 113



Cross connectors

page 114



Bulkhead connectors

page 114

## Plug

starting on page 115



Reducing plug

page 115

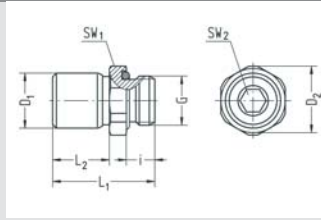


Elbow plug

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## Screw-in connector

- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar



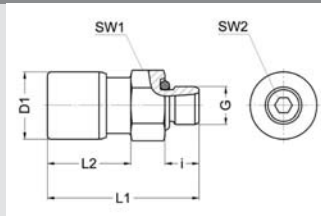
Part no.	G	for hose	SW1	SW2	i	L1	L2	D1	D2	NW	g/piece
VT1428-0202CNI	G1/8	OD4 (4/2)	13	3	5,5	19	9,5	8,8	14,2	2	9
VT1428-0204CNI	G1/8	OD6 (6/4)	13	5	5,5	24,5	15	11,6	14,2	4	12
VT1428-0206CNI	G1/8	OD8 (8/6)	14	5	5,5	29	19	14,8	15,2	5,1	19
VT1428-0402CNI	G1/4	OD4 (4/2)	17	3	7,5	21,5	9,5	8,8	18,5	2	17
VT1428-0404CNI	G1/4	OD6 (6/4)	17	5	7,5	23,5	11,5	11,6	18,5	4	18
VT1428-0406CNI	G1/4	OD8 (8/6)	17	6	7,5	27	15	14,8	18,5	6	22
VT1428-0408CNI	G1/4	OD10 (10/8)	17	8	7,5	34	22	16,8	18,5	8	27
VT1428-0409CNI	G1/4	OD12 (12/9)	20	8	7,5	38,5	23,5	20,1	21,8	9	41
VT1428-0604CNI	G3/8	OD6 (6/4)	20	5	7,5	24,5	11,5	11,6	21,8	4	28
VT1428-0606CNI	G3/8	OD8 (8/6)	20	6	7,5	28	15	14,8	21,8	6	31
VT1428-0608CNI	G3/8	OD10 (10/8)	20	8	7,5	30,5	17,5	16,8	21,8	8	33
VT1428-0609CNI	G3/8	OD12 (12/9)	20	9	7,5	36,5	23,5	20,1	21,8	9	41
VT1428-0804CNI	G1/2	OD6 (6/4)	24	5	9,5	27,5	11,5	11,6	26,2	4	52
VT1428-0806CNI	G1/2	OD8 (8/6)	24	6	9,5	30,5	15	14,8	26,2	6	44
VT1428-0808CNI	G1/2	OD10 (10/8)	24	8	9,5	33	17,5	16,8	26,2	8	53
VT1428-0809CNI	G1/2	OD12 (12/9)	24	9	9,5	36,5	21	20,1	26,2	9	42

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

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## Screw-in connector

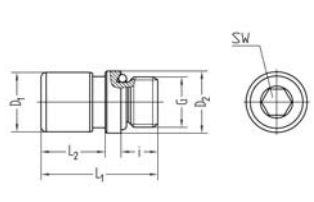
- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar



Part no.	G	for hose	SW1	SW2	i	L1	L2	D1	NW	g/piece
VT1429-5002CNI	M5	OD4 (4/2)	8	2	4,5	20	11	8,8	2	5
VT1429-5004CNI	M5	OD6 (6/4)	11	2	4,5	24,5	14,5	11,6	2	10
VT1429-4802CNI	M7	OD4 (4/2)	10	3	5	20	10,5	8,8	2	6
VT1429-4804CNI	M7	OD6 (6/4)	11	3	5	24	14,5	11,6	3	10
VT1429-5202CNI	M8	OD4 (4/2)	11	3	5,5	18,5	9,5	8,8	2	6
VT1429-5204CNI	M8	OD6 (6/4)	11	3	5,5	24,5	14,5	11,6	3	10

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

## Screw-in connector



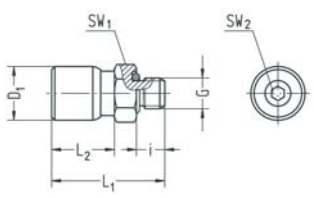
- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar

Part no.	G	for hose	SW	i	L1	L2	D1	D2	NW	g/piece
VT1462-0202CNI	G1/8	OD4 (4/2)	3	5,5	19	9,5	8,8	11,9	2	7
VT1462-0204CNI	G1/8	OD6 (6/4)	5	5,5	24,5	14,5	11,6	11,9	4	10
VT1462-0206CNI	G1/8	OD8 (8/6)	5	5,5	28,5	-	14,8	11,9	5,2	16
VT1462-0402CNI	G1/4	OD4 (4/2)	3	7,5	21,5	9,5	8,8	15,9	2	16
VT1462-0404CNI	G1/4	OD6 (6/4)	5	7,5	23,5	11,5	11,6	15,9	4	16
VT1462-0406CNI	G1/4	OD8 (8/6)	6	7,5	27	14	14,8	15,9	6	20
VT1462-0408CNI	G1/4	OD10 (10/8)	8	7,5	33,5	20	16,8	16,9	8	27
VT1462-0409CNI	G1/4	OD12 (12/9)	8	7,5	39	25,5	20,1	19,9	8,2	41
VT1462-0606CNI	G3/8	OD8 (8/6)	6	7,5	26,5	14	14,8	19,9	6	28
VT1462-0608CNI	G3/8	OD10 (10/8)	8	7,5	30,5	18	16,8	19,9	8	32
VT1462-0609CNI	G3/8	OD12 (12/9)	9	7,5	38,5	25,5	20,1	19,9	9	42

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.

- On request, this type of plug connector is also available in brass, chemically galvanized.

## Screw-in connector



- Metric thread
- With hexagon socket
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar

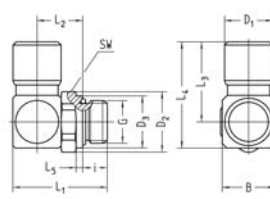
Part no.	G	for hose	SW	i	L1	L2	D1	D2	NW	g/piece
VT1463-5002CNI	M5	OD4 (4/2)	2,5	4,5	20	12	8,8	7,9	2	5
VT1463-5004CNI	M5	OD6 (6/4)	2,5	4,5	24,5	-	11,6	7,9	2,5	8
VT1463-4602CNI	M6	OD4 (4/2)	3	4,5	20	12	8,8	8,9	2	10
VT1463-4802CNI	M7	OD4 (4/2)	3	5	20,5	10,5	8,8	9,9	2	7
VT1463-4804CNI	M7	OD6 (6/4)	3	5	24	-	11,6	9,9	3,2	9
VT1463-5202CNI	M8x1	OD4 (4/2)	3	5,5	18,5	9,5	8,8	10,9	2	6
VT1463-5204CNI	M8x1	OD6 (6/4)	3	5,5	24,5	14,5	11,6	10,9	3,2	10
VT1463-5402CNI	M10x1	OD4 (4/2)	3	5,5	19	9,5	8,8	11,9	2	8
VT1463-5404CNI	M10x1	OD6 (6/4)	5	5,5	24,5	14,5	11,6	11,9	4	11
VT1463-5406CNI	M10x1	OD8 (8/6)	5	5,5	28,5	-	14,8	11,9	5,2	16

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.

- On request, this type of plug connector is also available in brass, chemically galvanized.

## Elbow screw-in connector swiveling

- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar



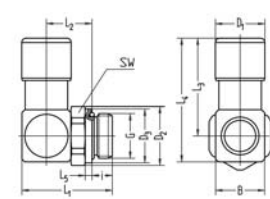
Part no.	G	for hose	SW	i	L1	L2	L3	L4	L5	B	D1	D2	D3	NW	g/piece
VT1486-0202CNI	G1/8	OD4 (4/2)	13	5,5	20,2	10,4	17,5	21,5	1,5	8,5	8,8	14,2	11,9	2	14
VT1486-0204CNI	G1/8	OD6 (6/4)	13	5,5	22,8	11,7	22,5	28,5	1,5	12	11,6	14,2	11,9	4	22
VT1486-0206CNI	G1/8	OD8 (8/6)	14	5,5	26,2	13,4	27	35	1,5	16	14,8	15,2	11,9	5,5	41
VT1486-0208CNI	G1/8	OD10 (10/8)	17	5,5	28,2	14,4	31	40	1,5	18	16,8	18,5	11,9	5,5	59
VT1486-0209CNI	G1/8	OD12 (12/9)	20	5,5	31,5	16,5	38	48,5	1,5	21	20,1	21,8	11,9	5,5	94
VT1486-0402CNI	G1/4	OD4 (4/2)	17	7,5	24,2	12,4	17,5	21,5	2	8,5	8,8	18,5	15,9	2	22
VT1486-0404CNI	G1/4	OD6 (6/4)	17	7,5	25,3	12,2	22,5	28,5	2	12	11,6	18,5	15,9	4	30
VT1486-0406CNI	G1/4	OD8 (8/6)	17	7,5	28,7	13,9	27	35	2	16	14,8	18,5	15,9	6	44
VT1486-0408CNI	G1/4	OD10 (10/8)	17	7,5	30,5	14,9	31	40	2	18	16,8	18,5	15,9	8	59
VT1486-0409CNI	G1/4	OD12 (12/9)	20	7,5	34	17	38	48,5	2	21	20,1	21,8	19,9	8	92
VT1486-0604CNI	G3/8	OD6 (6/4)	20	7,5	26,3	13,2	22,5	28,5	2,5	12	11,6	21,8	19,9	4	39
VT1486-0606CNI	G3/8	OD8 (8/6)	20	7,5	29,7	14,8	27	35	2,5	16	14,8	21,8	19,9	6	44
VT1486-0608CNI	G3/8	OD10 (10/8)	20	7,5	30,5	15,9	31	40	2,5	18	16,8	21,8	19,9	8	67
VT1486-0609CNI	G3/8	OD12 (12/9)	20	7,5	34	17	38	48,5	2,5	21	20,1	21,8	19,9	9	87
VT1486-0804CNI	G1/2	OD6 (6/4)	24	9,5	29,3	14,2	22,5	28,5	2	12	11,6	26,2	24	4	51
VT1486-0806CNI	G1/2	OD8 (8/6)	24	9,5	31,7	14,9	27	35	2	16	14,8	26,2	24	6	66
VT1486-0808CNI	G1/2	OD10 (10/8)	24	9,5	33,7	15,9	31	40	2	18	16,8	26,2	24	8	78
VT1486-0809CNI	G1/2	OD12 (12/9)	24	9,5	36	17	38	48,5	2	21	20,1	26,2	24	9	103

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

14A

## Elbow screw-in connector swiveling

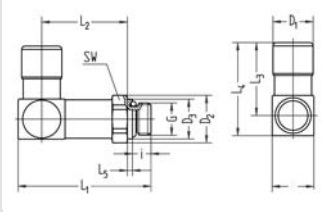
- Metric thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	D3	NW	g/piece
VT1487-5002CNI	M5	OD4 (4/2)	8	4,5	17,2	8,4	17,5	21,5	8,5	8,8	-	-	2	9
VT1487-5004CNI	M5	OD6 (6/4)	8	4,5	19,7	9,7	21,3	26	11	11,6	-	-	2,2	16
VT1487-4602CNI	M6	OD4 (4/2)	10	5	17,8	8,5	17,5	21,5	8,5	8,8	-	-	2	10
VT1487-4802CNI	M7	OD4 (4/2)	10	5	17,7	8,4	17,5	21,5	8,5	8,8	-	-	2	11
VT1487-4804CNI	M7	OD6 (6/4)	10	5	20,3	9,7	22,5	28,5	12	11,6	-	-	4	19
VT1487-5202CNI	M8x1	OD4 (4/2)	11	5,5	20,2	11,4	17,5	21,5	8,5	8,8	12,1	10,9	2	19
VT1487-5204CNI	M8x1	OD6 (6/4)	11	5,5	22,2	11,4	22,5	28,5	12	11,6	12,1	10,9	4	21
VT1487-5402CNI	M10x1	OD4 (4/2)	13	5,5	20,2	11,4	17,5	21,5	8,5	8,8	14,2	11,9	2	14
VT1487-5404CNI	M10x1	OD6 (6/4)	13	5,5	22,8	11,7	22,5	28,5	12	11,6	14,2	11,9	3,5	22
VT1487-5406CNI	M10x1	OD8 (8/6)	14	5,5	26,2	13,4	27	35	16	14,8	15,2	11,9	5	40

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

## Elbow screw-in connector, long model



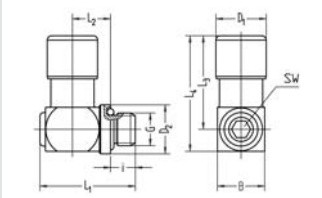
- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	L5	B	D1	D2	D3	NW	g/piece
VT1482-0202CNI	G1/8	OD4 (4/2)	13	5,5	31	21	17,5	21,5	1,5	8,5	8,8	14,2	11,9	2	16
VT1482-0204CNI	G1/8	OD6 (6/4)	13	5,5	37,5	26,3	22,5	28,5	1,5	12	11,6	14,2	11,9	4	31
VT1482-0206CNI	G1/8	OD8 (8/6)	14	5,5	43,3	30,5	27	35	1,5	16	14,8	15,2	11,9	6	60
VT1482-0402CNI	G1/4	OD4 (4/2)	17	7,5	33	21,5	17,5	21,5	2	8,5	8,8	18,5	15,9	2	26
VT1482-0404CNI	G1/4	OD6 (6/4)	17	7,5	40	26,8	22,5	28,5	2	12	11,6	18,5	15,9	4	39
VT1482-0406CNI	G1/4	OD8 (8/6)	17	7,5	45,3	30,5	27	35	2	16	14,8	18,5	15,9	6	61
VT1482-0408CNI	G1/4	OD10 (10/8)	17	7,5	50,2	34,4	31	40	2	18	16,8	18,5	15,9	7,8	83
VT1482-0409CNI	G1/4	OD12 (12/9)	20	7,5	55,5	38,5	38	48,5	2	21	21,1	21,8	15,9	8	140
VT1482-0604CNI	G3/8	OD6 (6/4)	20	7,5	40,3	29,7	22,5	28,5	2,5	12	11,6	21,8	19,9	4	46
VT1482-0606CNI	G3/8	OD8 (8/6)	20	7,5	46,2	31,4	27	35	2,5	16	14,8	21,8	19,9	6	65
VT1482-0608CNI	G3/8	OD10 (10/8)	20	7,5	50,2	34,4	31	40	2,5	18	16,8	21,8	19,9	8	88
VT1482-0609CNI	G3/8	OD12 (12/9)	20	7,5	55,5	38,5	38	48,5	2,5	21	20,1	21,8	19,9	9	134
VT1482-0804CNI	G1/2	OD6 (6/4)	24	9,5	42,8	27,7	22,5	28,5	2	12	11,6	26,2	23,9	4	58
VT1482-0806CNI	G1/2	OD8 (8/6)	24	9,5	49,2	32,4	27	35	2	16	14,8	26,2	23,9	6	85
VT1482-0808CNI	G1/2	OD10 (10/8)	24	9,5	53,2	35,4	31	40	2	18	16,8	26,2	23,9	8	110
VT1482-0809CNI	G1/2	OD12 (12/9)	24	9,5	58,5	39,5	38	48,5	2	21	20,1	26,2	23,9	9	133

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

14A

## Elbow screw-in connector swiveling



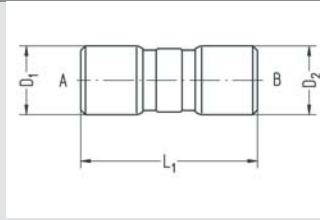
- Metric thread
- With hexagon socket
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
VT1457-5002CNI	M5	OD4 (4/2)	3	4,5	17,3	7	18	22,5	8,5	8,8	8	2	9
VT1457-5004CNI	M5	OD6 (6/4)	4	5,5	19,8	8	21,6	26,6	10,9	11,6	10,9	4	17
VT1457-4802CNI	M7	OD4 (4/2)	4	5	19,8	8	18,6	23,6	9,9	8,8	9,9	2	11
VT1457-4804CNI	M7	OD6 (6/4)	4	5	19,8	8	22,1	27,1	10,9	11,6	10,9	4	16
VT1457-5202CNI	M8x1	OD4 (4/2)	4	5,5	20,3	8	18,6	23,6	10,9	8,8	10,9	2	13
VT1457-5204CNI	M8x1	OD6 (6/4)	4	5,5	20,3	8	21,6	26,6	10,9	11,6	10,9	4	17

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

## Double connector

- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar



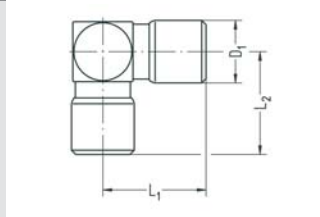
Part no.	for hose A	for hose B	L1	D1	D2	NW	g/piece
VT1433-0202CNI	OD4 (4/2)	OD4 (4/2)	29	8,8	8,8	2	9
VT1433-0404CNI	OD6 (6/4)	OD6 (6/4)	35	11,6	11,6	4	15
VT1433-0606CNI	OD8 (8/6)	OD8 (8/6)	41,5	14,8	14,8	6	29
VT1433-0808CNI	OD10 (10/8)	OD10 (10/8)	48	16,8	16,8	8	40
VT1433-0909CNI	OD12 (12/9)	OD12 (12/9)	58	20,1	20,1	9	67

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

14A

## Elbow connector

- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar

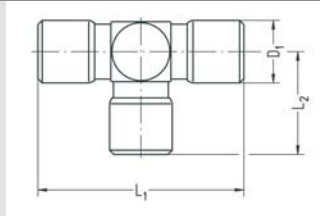


Part no.	for hose	L1	L2	D1	NW	g/piece
VT1477-0200CNI	OD4 (4/2)	18	17,5	8,8	2	10
VT1477-0400CNI	OD6 (6/4)	22	23	11,6	4	20
VT1477-0600CNI	OD8 (8/6)	26,5	27,5	14,8	6	42
VT1477-0800CNI	OD10 (10/8)	30,5	32	16,8	8	59
VT1477-0900CNI	OD12 (12/9)	36,5	37	20,1	9	98

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

## T connector

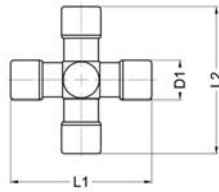
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar



Part no.	for hose	L1	L2	D1	NW	g/piece
VT1478-0200CNI	OD4 (4/2)	36	17,5	8,8	2	13
VT1478-0400CNI	OD6 (6/4)	44	23	11,6	4	27
VT1478-0600CNI	OD8 (8/6)	53	27,5	14,8	6	53
VT1478-0800CNI	OD10 (10/8)	61	32	16,8	8	75
VT1478-0900CNI	OD12 (12/9)	74	36,5	20,1	9	124

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

## 4-way connector

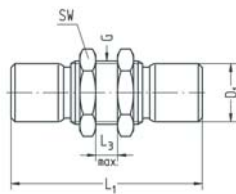


- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar

Part no.	for hose	L1	L2	D1	NW	g/piece
VT1479-0200CNI	OD4 (4/2)	36	35	8,8	2	18
VT1479-0400CNI	OD6 (6/4)	46	44	11,6	4	34
VT1479-0600CNI	OD8 (8/6)	55,4	53	14,8	6	66
VT1479-0800CNI	OD10 (10/8)	64	61	16,8	8	92

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

## Bulkhead connector

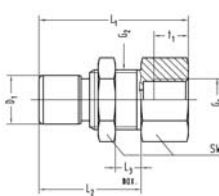


- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar

Part no.	for hose	G	L1	L3 max.	D1	NW	g/piece
VT1480-0202CNI	OD4 (4/2)	M12x1	33	6	8,8	2	20
VT1480-0404CNI	OD6 (6/4)	M14x1	42	8	11,6	4	36
VT1480-0606CNI	OD8 (8/6)	M16x1	48	8	14,8	6	51
VT1480-0808CNI	OD10 (10/8)	M18x1	57	10	16,8	8	78
VT1480-0909CNI	OD12 (12/9)	M22x1	61	12	20,1	9	119

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

## Bulkhead connector with female thread



- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar

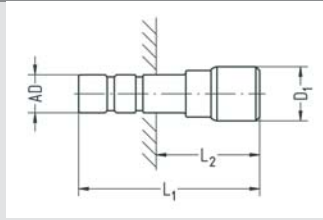
Part no.	G1	for hose	G2	SW	L1	L2	L3 max.	D1	t1	NW	g/piece
VT1402-0102CNI	G1/8	OD4 (4/2)	M12x1	14	29	18,5	6	8,8	8	2	20
VT1402-0104CNI	G1/8	OD6 (6/4)	M14x1	17	30,5	21,5	6	11,6	8	4	33
VT1402-0106CNI	G1/8	OD8 (8/6)	M16x1	19	33,5	23,5	6	14,8	8	6	47
VT1402-0302CNI	G1/4	OD4 (4/2)	M12x1	14	33	18,5	6	8,8	10	2	30
VT1402-0304CNI	G1/4	OD6 (6/4)	M14x1	17	36	21,5	6	11,6	10	4	34
VT1402-0306CNI	G1/4	OD8 (8/6)	M16x1	19	35,5	23,5	6	14,8	10	6	42
VT1402-0308CNI	G1/4	OD10 (10/8)	M18x1	22	39,5	32,5	10	16,8	10	8	62
VT1402-0309CNI	G1/4	OD12 (12/9)	M22x1	27	44,5	34,5	12	20,1	10	9	113

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.



## Reducing plug

- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar
- Fits all connections in program 14A in the respective size



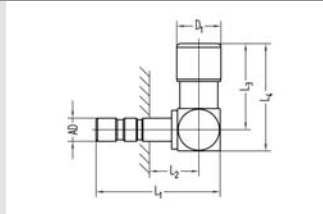
Part no.	plug AD	for hose	L1	L2	D1	NW	g/piece
VT1421-0402CNI	6	OD4 (4/2)	32	15,5	8,8	2	5
VT1421-0602CNI	8	OD4 (4/2)	33,5	15,5	8,8	2	7
VT1421-0604CNI	8	OD6 (6/4)	38	20	11,6	4	12

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.

14A

## Elbow plug

- FPM seals
- Material brass chemically nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar
- Fits all connections in program 14A in the respective size



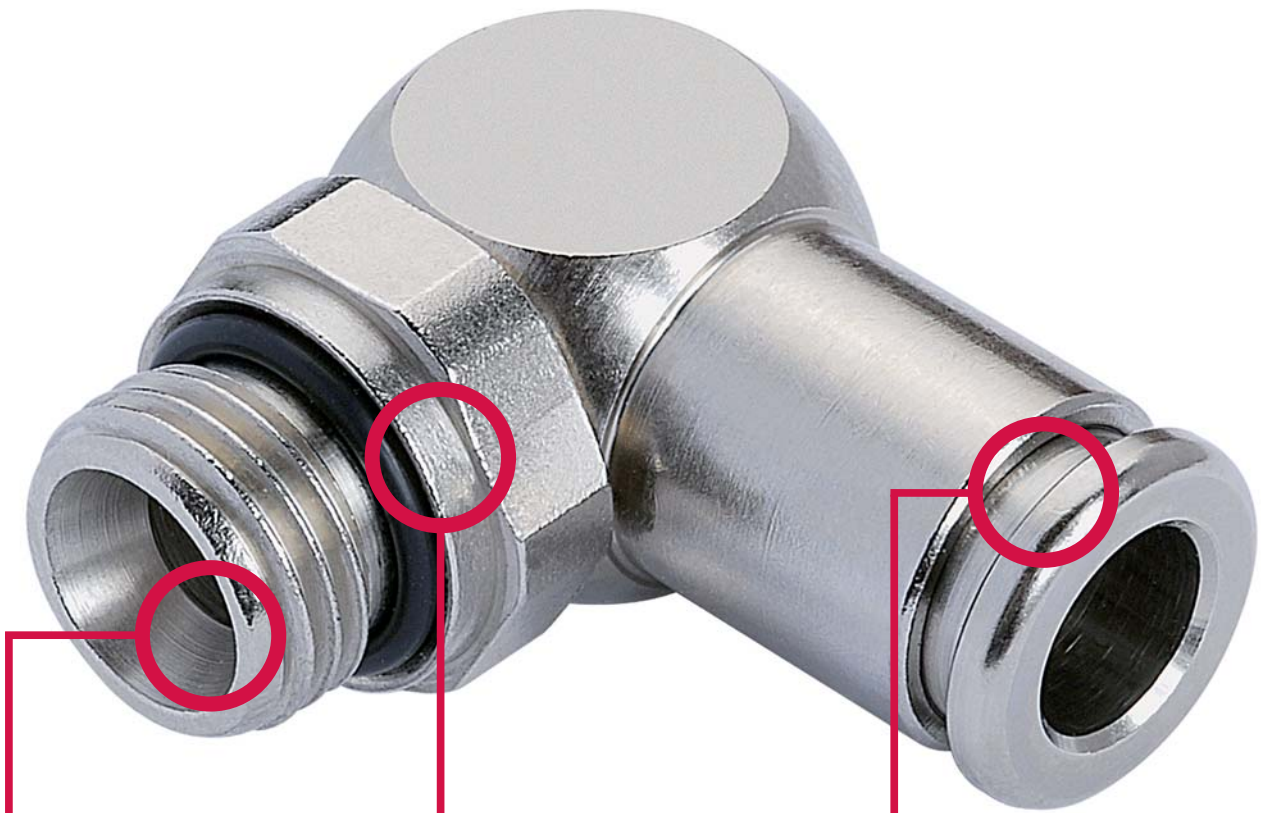
Part no.	plug AD	for hose	L1	L2	L3	L4	D1	NW	g/piece
VT1441-0202CNI	4	OD4 (4/2)	27,5	10	18	22,5	8,8	2	9
VT1441-0404CNI	6	OD6 (6/4)	32	10	22	27,5	11,6	4	18
VT1441-0606CNI	8	OD8 (8/6)	38	12,5	26,5	33,5	14,8	6	33

- Depending on the hoses used, pressures up to 100 bar are possible when working with fluids. Please enquire.
- On request, this type of plug connector is also available in brass, chemically galvanized.





## Plug connectors with release ring



### Ideally compatible

- Appropriate accessories for all connections

### Connectors in all-metal design

- Pneumatic connectors in different designs
- Technology tried and tested in series production

### Simple handling and assembly

- No damage to hose during assembly because of defined depth of penetration
- The optimized collet allows to easily disconnect the hose from the connector without accessories

Design with alternative material e.g. FPM is also possible.

## Range of application

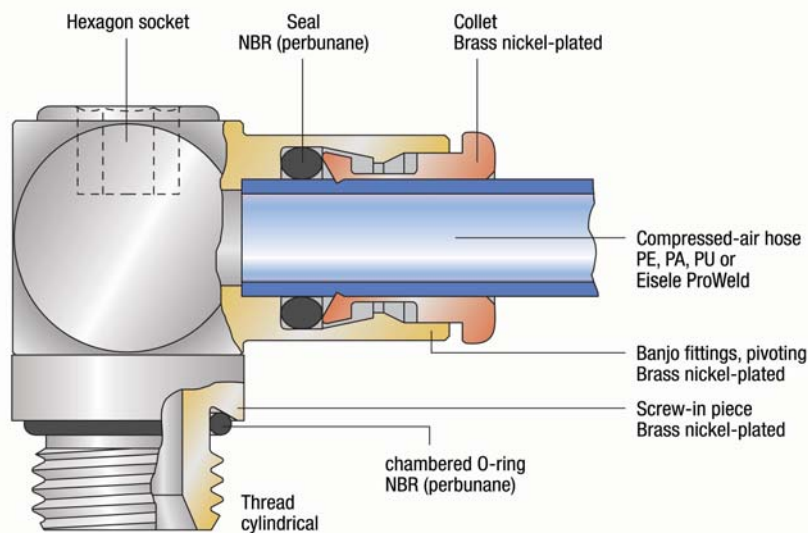
The connection system with simplified technology. Very quick assembly and disassembly of compressed-air hoses made of PE (polyethylene), PA (polyamide), PU (polyurethane), and ProWeld (PUR) in pneumatic systems.

## Service conditions

Working pressure range: -0.95 to 15 bar  
 Allowable medium: Air  
 Temperature range: -20 to +80 °C

Data provided depend on hoses used.

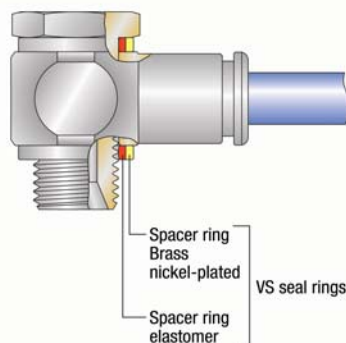
## Functional principle



### Advantages

- Very quick assembly and disassembly of compressed-air hoses
- No tools necessary
- Frequent assembly and disassembly possible
- Full hose through-flow
- All male stud couplings with chambered O-ring sealed
- Very small connector sets even if conical threads are not used.
- Casing and collet made of brass, nickel-plated
- Swivel union with VS seal rings
- Suitable for vacuum

## VS seal rings



We have developed the VS seal ring as a significant improvement as the die cut seal ring often does not meet the customers' requirements. This is a combination of a soft inner elastomeric ring and a harder outer ring of nickel-plated brass. The function of the inner soft ring is to seal, whereas the outer hard ring takes up the existing torque.

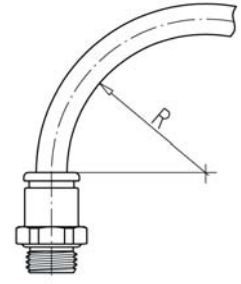
Eisele pivoting connections of this connection system are standardly supplied with VS seal rings.

### Advantages

- Seal effect largely independent of torque
- Immune to excessive tightening
- Holds individual parts together

## Hoses

Hose dimension Outside Ø / Inside Ø	Polyethylene (PE) Temperature range -10 to +40°C		Polyamide (PA) Temperature range -60 to +100°C		Polyurethane (PU) Temperature range -35 to +70°C		ProWeld (PUR) <sup>1)</sup> Temperature range -35 to +75°C	
	R min.	P max. (bar)	R min.	P max. (bar)	R min.	P max. (bar)	R min.	P max. (bar)
4/2	20	20	20	30	8	10	6,5	20
4,3/3	20	13	20	20	10	10	-	-
5/3	25	15	25	25	11	10	-	-
6/4	30	13	30	20	14	10	12	11
8/6	40	8	40	15	20	9	18	9
10/8	60	6	60	12	37,5	8	15	14
12/9	60	9	85	15	48	10	24	10
14/11	90	8	80	12	60	7,5	38	9
16/11	90	6	90	11	43	10	44	9
20/14	-	-	-	-	-	-	-	8



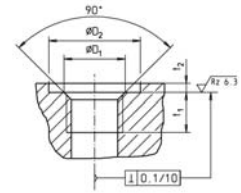
The mounted compressed-air hoses are not to be exposed to tensile loading.

<sup>1)</sup> In the case of Eisele ProWeld hoses a smaller inside diameter results from a partially larger wall thickness.

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## Connection thread

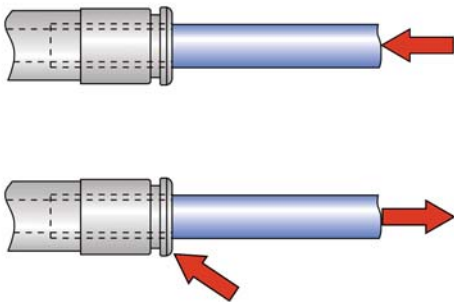
Thread	Thread depth	Thread counterbore	Counterbore <sup>1)</sup>		Torque <sup>2)</sup>	Thread standards
	t1 min. (mm)	ØD1 max. (mm)	ØD2 min. (mm)	t2 max. (mm)	max. (Ncm)	
M3	3	3.6	6	0.5	36	Metric thread M: DIN 13 / ISO 965
M5	4.5	6	10	0.5	95	
M7	5	8	12	0.5	200	
G1/8	5.5	11	15.3	1	900	Pipe thread G: DIN ISO 228
G1/4	7.5	14.2	19	1.5	1800	
G3/8	7.5	17.5	23	2	2500	
G1/2	9.5	22	27	2.5	3400	



<sup>1)</sup> A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.

<sup>2)</sup> Information about torques for hexagon socket on demand (assembly instructions 800 00 / 00-1)

## Handling



Assembly: Push hose into the connector up to the limit stop

Disassembly: Push release sleeve, pull out hose

## Sample order for plug connectors with release sleeve

Straight installation connection thread G1/8 for hose 4/2; seals NBR (Perbunan)

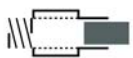
Article No.: 828-0202

Straight installation connection thread G1/8 for hose 4/2; seals FPM (Viton)

Article No.: **VT 828-0202 T**

## Threaded connectors

starting on page 122



Straight threaded connectors

page 122



Angled threaded connectors

page 124

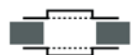


T threaded connectors

page 128

## Plug connector

starting on page 131



Double connectors

page 131



Elbow connectors

page 131



T connectors

page 132



Cross connectors

page 132



Y connectors

page 133



Bulkhead connectors

page 134

## Plug

starting on page 135



Reducing plug

page 135



Elbow plug

page 135



Y plug

page 135



Double plug

page 136



Sealing plug

page 136

## Ring connectors

starting on page 137

Ring connectors, single

page 137

Ring connectors, double

page 138

## Accessories

starting on page 139

Banjo bolt

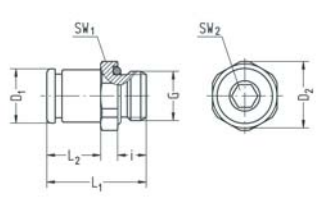
page 139

Code sleeve

page 139

15

## Screw-in connector

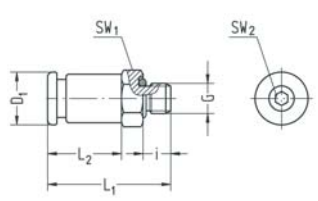


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

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Part no.	G	for hose	SW1	SW2	i	L1	L2	D1	D2	NW	g/piece
828-0202	G1/8	OD4 (4/2)	13	3	5,5	20	10,5	8,6	14,2	2	9
828-0203	G1/8	OD5 (5/3)	13	4	5,5	21,5	12	9,9	14,2	3	10
828-0204	G1/8	OD6 (6/4)	13	5	5,5	23	13,5	11,4	14,2	4	11
828-0206	G1/8	OD8 (8/6)	14	5	5,5	27,2	17,7	14,6	15,2	5,1	25
828-0243	G1/8	OD4,3 (4,3/3)	13	3	5,5	20	10,5	8,9	14,2	3	9
828-0402	G1/4	OD4 (4/2)	17	3	7,5	20,5	8,5	8,6	18,5	2	16
828-0403	G1/4	OD5 (5/3)	17	4	7,5	23	11	9,9	18,5	3	17
828-0404	G1/4	OD6 (6/4)	17	5	7,5	24	12	11,4	18,5	4	18
828-0406	G1/4	OD8 (8/6)	17	6	7,5	26,2	14,2	14,6	18,5	6	20
828-0408	G1/4	OD10 (10/8)	17	8	7,5	32	20	16,6	18,5	8	26
828-0409	G1/4	OD12 (12/9)	20	8	7,5	37,5	22,5	19,9	21,8	8,3	41
828-0443	G1/4	OD4,3 (4,3/3)	17	3	7,5	20,5	8,5	8,9	18,5	3	16
828-0604	G3/8	OD6 (6/4)	20	5	7,5	24,5	11,5	11,4	21,8	4	28
828-0606	G3/8	OD8 (8/6)	20	6	7,5	26,2	13,2	14,6	21,8	6	29
828-0608	G3/8	OD10 (10/8)	20	8	7,5	29	16	16,6	21,8	8	32
828-0609	G3/8	OD12 (12/9)	20	9	7,5	32,5	19,5	19,9	21,8	9	35
828-0611	G3/8	OD14 (14/11)	22	10	7,5	39,5	24	21,9	23,8	10,3	53
828-0804	G1/2	OD6 (6/4)	24	5	9,5	25,5	10	11,4	26,2	4	48
828-0806	G1/2	OD8 (8/6)	24	6	9,5	27,7	12,2	14,6	26,2	6	48
828-0808	G1/2	OD10 (10/8)	24	8	9,5	29,5	14	16,6	26,2	8	49
828-0809	G1/2	OD12 (12/9)	24	9	9,5	35	19,5	19,9	26,2	9	55
828-0811	G1/2	OD14 (14/11)	24	10	9,5	36	20,5	21,9	26,2	10,3	55

## Screw-in connector

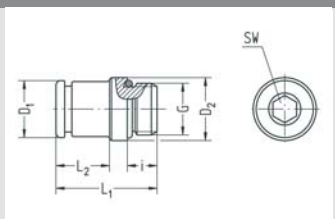


- Thread M3, M5, M7
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW1	SW2	i	L1	L2	D1	NW	g/piece
829-4202	M3	OD4 (4/2)	8	-	3	19,5	12,5	8,6	1,2	4
829-5043	M5	OD4,3 (4,3/3)	8	2	4,5	20,5	12,5	8,9	2	4
829-5002	M5	OD4 (4/2)	8	2	4,5	20,5	12,5	8,6	2	5
829-5003	M5	OD5 (5/3)	10	2	4,5	22,5	13	9,9	2	7
829-5004	M5	OD6 (6/4)	10	2	4,5	24,5	15	9,9	2	7
829-4804	M7	OD6 (6/4)	10	4	5	23,5	14,5	9,9	4	7

## Screw-in connector

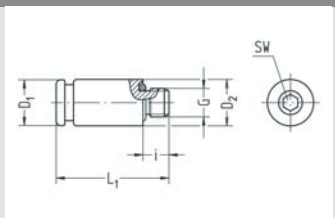
- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	connecting thread countersink Ø max.	SW	i	L1	L2	D1	D2	NW	g/piece
862-0202	G1/8	OD4 (4/2)	10,8	3	5,5	19,5	10	8,6	11,9	2	8
862-0203	G1/8	OD5 (5/3)	10,8	4	5,5	21	11,5	9,9	11,9	3	8
862-0204	G1/8	OD6 (6/4)	10,8	5	5,5	24,5	15	11,4	11,9	4	11
862-0206	G1/8	OD8 (8/6)	10,8	5	5,5	27	17,5	13,9	11,9	5,1	14
862-0243	G1/8	OD4,3 (4,3/3)	10,8	3	5,5	19,5	10	8,9	11,9	3	8
862-0402	G1/4	OD4 (4/2)	14	3	7,5	18	6	8,6	15,9	2	14
862-0403	G1/4	OD5 (5/3)	14	4	7,5	20	8	9,9	15,9	3	15
862-0404	G1/4	OD6 (6/4)	14	5	7,5	24	12	11,4	15,9	4	17
862-0406	G1/4	OD8 (8/6)	14	6	7,5	25,5	13,5	14,6	15,9	6	18
862-0408	G1/4	OD10 (10/8)	14	8	7,5	31	-	15,9	15,9	8	22
862-0443	G1/4	OD4,3 (4,3/3)	14	3	7,5	18	6	8,9	15,9	3	14
862-0606	G3/8	OD8 (8/6)	17,5	6	7,5	25,5	12,5	14,6	19,9	6	28
862-0608	G3/8	OD10 (10/8)	17,5	8	7,5	28	15	16,6	19,9	8	30
862-0609	G3/8	OD12 (12/9)	17,5	9	7,5	36	-	19,9	19,9	9	44
862-0808	G1/2	OD10 (10/8)	22	8	9,5	26,5	11	16,6	23,9	8	44
862-0809	G1/2	OD12 (12/9)	22	9	9,5	34	18,5	19,9	23,9	9	52

## Screw-in connector

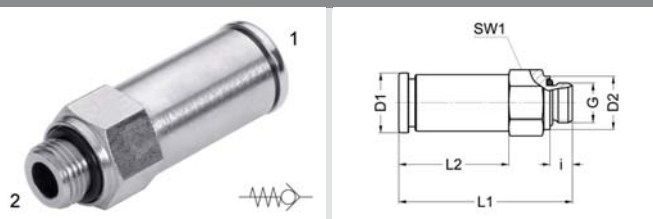
- Thread M5, M7
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW	i	L1	D1	D2	NW	g/piece
863-5002	M5	OD4 (4/2)	2,5	4,5	19,5	7,9	7,9	2	4
863-5003	M5	OD5 (5/3)	2,5	4,5	22	9,9	8	2,5	6
863-5004	M5	OD6 (6/4)	2,5	4,5	24	9,9	8	2,5	6
863-5043	M5	OD4,3 (4,3/3)	2,5	4,5	19,5	7,9	7,9	2,5	4
863-4802	M7	OD4 (4/2)	3	5	20,5	8,6	9,9	2	5
863-4803	M7	OD5 (5/3)	3	5	22	9,9	9,9	3	7
863-4804	M7	OD6 (6/4)	4	5	23,5	9,9	9,9	4	7
863-4806	M7	OD8 (8/6)	4	5	26,5	13,9	9,9	4	13
863-4843	M7	OD4,3 (4,3/3)	3	5	20	8,9	9,9	3	6



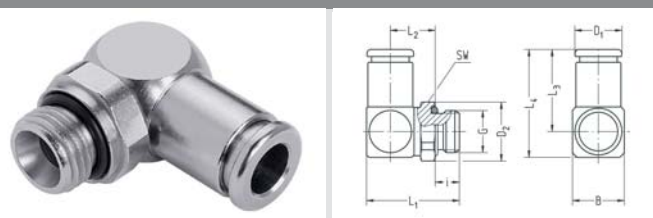
## Straight screw-in connector with check valve



- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	D1	NI/min 1->2	NW	g/piece
894-0206	G1/8	OD8 (8/6)	14	5,5	42,6	27	14,6	690	5	30

## Elbow screw-in connector swiveling

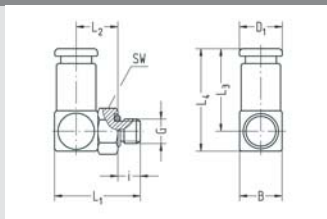


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
886-0202	G1/8	OD4 (4/2)	13	5,5	21,5	11	17,8	22,3	10	8,6	14,2	2	17
886-0203	G1/8	OD5 (5/3)	13	5,5	21,5	11	19,8	24,3	10	9,9	14,2	3	19
886-0204	G1/8	OD6 (6/4)	13	5,5	25,5	13	22,3	28,3	14	11,4	14,2	4	31
886-0206	G1/8	OD8 (8/6)	13	5,5	28	14,5	25,5	33	16	14,6	15,2	5,5	43
886-0243	G1/8	OD4,3 (4,3/3)	13	5,5	21,5	11	17,8	22,3	10	8,9	14,2	3	17
886-0402	G1/4	OD4 (4/2)	17	7,5	24,5	12	17,8	22,3	10	8,6	18,5	2	28
886-0403	G1/4	OD5 (5/3)	17	7,5	24,5	12	19,8	24,3	10	9,9	18,5	3	30
886-0404	G1/4	OD6 (6/4)	17	7,5	28	13,5	22,3	28,3	14	11,4	18,5	4	40
886-0406	G1/4	OD8 (8/6)	17	7,5	30,5	15	25,5	33	16	14,6	18,5	6	52
886-0408	G1/4	OD10 (10/8)	17	7,5	32,5	16	29	37,5	18	16,6	18,5	8	64
886-0409	G1/4	OD12 (12/9)	17	7,5	34,5	17	36	46	20	19,9	18,5	8,5	91
886-0443	G1/4	OD4,3 (4,3/3)	17	7,5	24,5	12	17,8	22,3	10	8,9	18,5	3	28
886-0604	G3/8	OD6 (6/4)	20	7,5	29	14,5	22,3	28,3	14	11,4	21,8	4	52
886-0606	G3/8	OD8 (8/6)	20	7,5	31,5	16	25,5	33	16	14,6	21,8	6	63
886-0608	G3/8	OD10 (10/8)	20	7,5	33,5	17	29	37,5	18	16,6	21,8	8	75
886-0609	G3/8	OD12 (12/9)	20	7,5	35,5	18	36	46	20	19,9	21,8	9	100
886-0611	G3/8	OD14 (14/11)	22	7,5	39,5	21	38,5	50,5	24	21,9	23,8	10	120
886-0804	G1/2	OD6 (6/4)	24	9,5	32	15,5	22,3	28,3	14	11,4	26,2	4	78
886-0806	G1/2	OD8 (8/6)	24	9,5	35	17,5	25,5	33	16	14,6	26,2	6	88
886-0808	G1/2	OD10 (10/8)	24	9,5	36	17,5	29	37,5	18	16,6	26,2	8	96
886-0809	G1/2	OD12 (12/9)	24	9,5	38	18,5	36	46	20	19,9	26,2	9	122
886-0811	G1/2	OD14 (14/11)	24	9,5	39	18,5	38,5	50,5	24	21,9	26,2	11	127

## Elbow screw-in connector swiveling

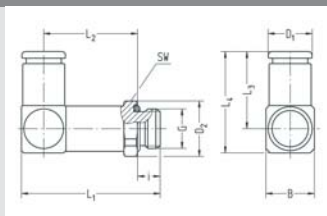
- Thread M3, M5
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
887-4202	M3	OD4 (4/2)	8	3	17	9	17,8	22,3	10	8,6	1,2	11
887-5002	M5	OD4 (4/2)	8	4,5	18,5	9	17,8	22,3	10	8,6	2	11
887-5003	M5	OD5 (5/3)	8	4,5	18,5	9	19,8	24,3	10	9,9	2,2	13
887-5004	M5	OD6 (6/4)	8	4,5	18,5	9	21,3	25,8	10	11,4	2,2	13
887-5043	M5	OD4,3 (4,3/3)	8	4,5	18,5	9	17,8	22,3	10	8,9	2,2	11

## Elbow screw-in connector, long

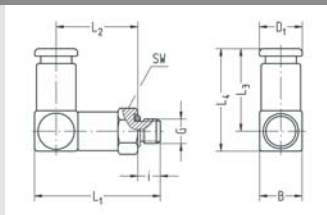
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
882-0202	G1/8	OD4 (4/2)	13	5,5	33,5	23	17,8	22,3	10	8,6	14,2	2	22
882-0204	G1/8	OD6 (6/4)	13	5,5	39,5	27	22,3	28,3	14	11,4	14,2	4	41
882-0206	G1/8	OD8 (8/6)	14	5,5	44,5	31	25,5	33	16	14,6	15,2	5,5	58
882-0402	G1/4	OD4 (4/2)	17	7,5	36,5	24	17,8	22,3	10	8,6	18,5	2	33
882-0404	G1/4	OD6 (6/4)	17	7,5	42	27,5	22,3	28,3	14	11,4	18,5	4	51
882-0406	G1/4	OD8 (8/6)	17	7,5	47	31,5	25,5	33	16	14,6	18,5	6	69
882-0408	G1/4	OD10 (10/8)	17	7,5	51	34,5	29	37,5	18	16,6	18,5	8	88
882-0409	G1/4	OD12 (12/9)	17	7,5	56	38,5	36	46	20	19,9	18,5	8,5	123
882-0604	G3/8	OD6 (6/4)	20	7,5	43	28,5	22,3	28,3	14	11,4	21,8	4	63
882-0606	G3/8	OD8 (8/6)	20	7,5	47,5	32	25,5	33	16	14,6	21,8	6	79
882-0608	G3/8	OD10 (10/8)	20	7,5	51,5	35	29	37,5	18	16,6	21,8	8	98
882-0609	G3/8	OD12 (12/9)	20	7,5	56,5	39	36	46	20	19,9	21,8	9	134
882-0804	G1/2	OD6 (6/4)	24	9,5	45,5	29	22,3	28,3	14	11,4	26,2	4	85
882-0806	G1/2	OD8 (8/6)	24	9,5	50,5	33	25,5	33	16	14,6	26,2	6	102
882-0808	G1/2	OD10 (10/8)	24	9,5	54,5	36	29	37,5	18	16,6	26,2	8	129
882-0809	G1/2	OD12 (12/9)	24	9,5	59,5	40	36	46	20	19,9	26,2	9	157

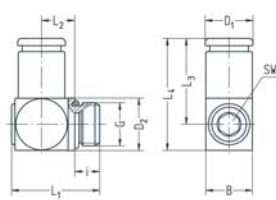
## Elbow screw-in connector, long

- M5 thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
883-5002	M5	OD4 (4/2)	8	4,5	29,5	20	17,8	22,3	10	8,6	2	16
883-5004	M5	OD6 (6/4)	8	4,5	29,5	20	21,3	25,8	10	11,4	2,2	17

## Elbow screw-in connector with hexagon socket

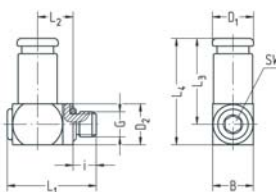


- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	connecting thread	countersink Ø max.	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
856-0202	G1/8	OD4 (4/2)		10,8	4	5,5	22	8,7	18,8	24,7	11,8	8,6	11,9	2	17
856-0204	G1/8	OD6 (6/4)		10,8	4	5,5	22	8,7	22,3	28,2	11,8	11,4	11,9	4	21
856-0206	G1/8	OD8 (8/6)		10,8	4	5,5	22	8,7	24,2	30,1	13,9	13,9	11,9	4,5	27
856-0402	G1/4	OD4 (4/2)		14	6	7,5	27,5	11	20,5	28,4	15,8	8,6	15,9	2	34
856-0404	G1/4	OD6 (6/4)		14	6	7,5	27,5	11	24	31,9	15,8	11,4	15,9	4	38
856-0406	G1/4	OD8 (8/6)		14	6	7,5	27,5	11	26	33,9	15,8	14,6	15,9	6	42
856-0408	G1/4	OD10 (10/8)		14	6	7,5	27,5	11	28,5	36,4	15,9	15,9	15,9	6,5	45

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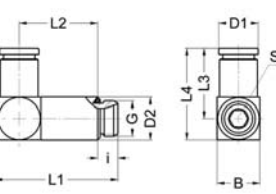
## Elbow screw-in connector with hexagon socket



- Metric thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to +15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
857-4202	M3	OD4 (4/2)	2	2,9	13,4	6,6	16,7	19,7	8	7,9	6	1,2	6
857-5002	M5	OD4 (4/2)	3	4,5	17,3	6,9	17,3	21,3	7,9	7,9	8	2	8
857-5004	M5	OD6 (6/4)	3	4,5	19,8	8,4	22	27	9,9	9,9	8	2,2	15
857-4802	M7	OD4 (4/2)	4	5	19,8	7,9	18,5	23,5	9,9	8,6	9,9	2	12
857-4804	M7	OD6 (6/4)	4	5	19,8	7,9	22	27	9,9	9,9	9,9	4	14

## Elbow screw-in connector with hexagon socket, long

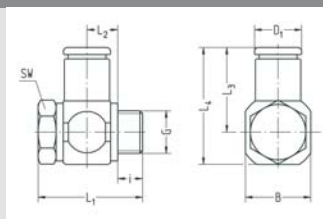


- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	connecting thread	countersink Ø max.	NW	g/piece
852-0202	G1/8	OD4 (4/2)	4	5,5	37,5	24,3	18,8	24,7	11,8	8,6	11,9		10,8	2	29
852-0204	G1/8	OD6 (6/4)	4	5,5	37,5	24,3	22,3	28,2	11,8	11,4	11,9		10,8	4	33
852-0206	G1/8	OD8 (8/6)	4	5,5	37,5	24,3	24,2	30,1	13,9	13,9	11,9		10,8	4,5	38
852-0402	G1/4	OD4 (4/2)	6	7,5	45,5	29	20,5	28,4	15,8	8,6	15,9		14	2	58
852-0404	G1/4	OD6 (6/4)	6	7,5	45,5	29	24	31,9	15,8	11,4	15,9		14	4	61
852-0406	G1/4	OD8 (8/6)	6	7,5	45,5	29	26	33,9	15,8	14,6	15,9		14	6	66
852-0408	G1/4	OD10 (10/8)	6	7,5	45,5	29	28,5	36,4	15,9	15,9	15,9		14	6,5	68

## Single swivel joint

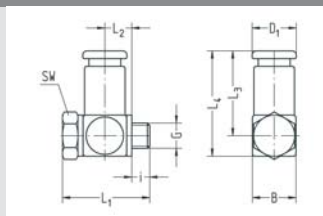
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR
- Material brass nickel-plated
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
834-0202K	G1/8	OD4 (4/2)	14	5,5	28,5	9,5	19	27	16	8,6	2	38
834-0203K	G1/8	OD5 (5/3)	14	5,5	28,5	9,5	21	29	16	9,9	3	40
834-0204K	G1/8	OD6 (6/4)	14	5,5	28,5	9,5	22,5	30,5	16	11,4	4	42
834-0206K	G1/8	OD8 (8/6)	14	5,5	28,5	9,5	24,5	32,5	16	14,6	5,2	45
834-0208K	G1/8	OD10 (10/8)	14	5,5	28,5	9,5	27	35	17	16,6	5,2	51
834-0243K	G1/8	OD4,3 (4,3/3)	14	5,5	28,5	9,5	19	27	16	8,9	3	39
834-0402K	G1/4	OD4 (4/2)	17	7,5	30,5	9,5	21	31	20	8,6	2	56
834-0403K	G1/4	OD5 (5/3)	17	7,5	30,5	9,5	23	33	20	9,9	3	58
834-0404K	G1/4	OD6 (6/4)	17	7,5	30,5	9,5	24,5	34,5	20	11,4	4	60
834-0406K	G1/4	OD8 (8/6)	17	7,5	30,5	9,5	26,5	36,5	20	14,6	6	62
834-0408K	G1/4	OD10 (10/8)	17	7,5	30,5	9,5	29	39	20	16,6	7	67
834-0409K	G1/4	OD12 (12/9)	17	7,6	37	12,7	33,2	43,5	20	19,9		95
834-0443K	G1/4	OD4,3 (4,3/3)	17	7,5	30,5	9,5	21	31	20	8,9	3	56
834-0606K	G3/8	OD8 (8/6)	22	7,5	31,5	9,5	28	39	22	14,6	6	79
834-0608K	G3/8	OD10 (10/8)	22	7,5	31,5	9,5	30,5	41,5	22	16,6	8	84
834-0609K	G3/8	OD12 (12/9)	22	7,6	38	12,7	35,3	47	24	19,9		124

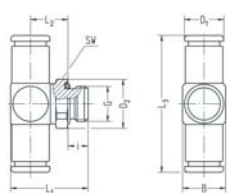
## Single swivel joint

- M5 thread
- PVC seal rings
- Seal in connection NBR
- Ring connection brass nickel-plated
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
835-5002K	M5	OD4 (4/2)	8	3,5	17	5,2	17	21	8,5	8,6	2	9
835-5003K	M5	OD5 (5/3)	8	4	19	6	19	23,5	10	9,9	2,4	12
835-5004K	M5	OD6 (6/4)	8	4,5	20,5	6,5	20,5	25	11	11,4	2,4	16
835-5043K	M5	OD4,3 (4,3/3)	8	3,5	17	5,2	17	21	8,5	8,9	2,4	9

## T screw-in, connector, swiveling

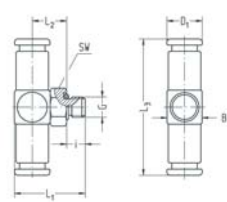


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	D2	NW	g/piece
888-0202	G1/8	OD4 (4/2)	13	5,5	21,5	11	35,6	10	8,6	14,2	2	20
888-0203	G1/8	OD5 (5/3)	13	5,5	21,5	11	39,6	10	9,9	14,2	3	20
888-0204	G1/8	OD6 (6/4)	13	5,5	25,5	13	44,6	14	11,9	14,2	4	37
888-0206	G1/8	OD8 (8/6)	13	5,5	28	14,5	51	16	14,4	14,2	5,5	53
888-0243	G1/8	OD4,3 (4,3/3)	13	5,5	21,5	11	35,6	10	8,9	14,2	3	17
888-0402	G1/4	OD4 (4/2)	17	7,5	24,5	12	35,6	10	8,6	18,5	2	31
888-0403	G1/4	OD5 (5/3)	17	7,5	24,5	12	39,6	10	9,9	18,5	3	25
888-0404	G1/4	OD6 (6/4)	17	7,5	28	13,5	44,6	14	11,9	18,5	4	46
888-0406	G1/4	OD8 (8/6)	17	7,5	30,5	15	51	16	14,4	18,5	6	62
888-0408	G1/4	OD10 (10/8)	17	7,5	32,5	16	58	18	16,7	18,5	8	79
888-0409	G1/4	OD12 (12/9)	17	7,5	34,5	17	72	20	19,9	18,5	8,5	117
888-0443	G1/4	OD4,3 (4,3/3)	17	7,5	24,5	12	35,6	10	8,9	18,5	3	22
888-0604	G3/8	OD6 (6/4)	20	7,5	29,5	15	44,6	14	11,4	21,8	4	59
888-0606	G3/8	OD8 (8/6)	20	7,5	31,5	16	51	16	14,6	21,8	6	73
888-0608	G3/8	OD10 (10/8)	20	7,5	33,5	17	58	18	16,6	21,8	8	91
888-0609	G3/8	OD12 (12/9)	20	7,5	35,5	18	72	20	19,9	21,8	9	128
888-0804	G1/2	OD6 (6/4)	24	9,5	33	16,5	44,6	14	11,4	26,2	4	85
888-0806	G1/2	OD8 (8/6)	24	9,5	35	17,5	51	16	14,6	26,2	6	102
888-0808	G1/2	OD10 (10/8)	24	9,5	36	17,5	58	18	16,6	26,2	8	112
888-0809	G1/2	OD12 (12/9)	24	9,5	38	18,5	72	20	19,9	26,2	9	149

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## T screw-in, connector, swiveling

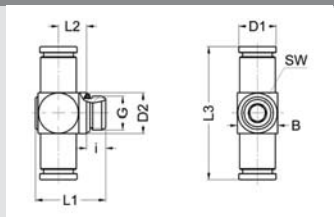


- M5 thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	NW	g/piece
889-5002	M5	OD4 (4/2)	8	4,5	18,5	9	35,6	10	8,6	2	14
889-5004	M5	OD6 (6/4)	8	4,5	18,5	9	42,6	10	11,4	2,2	18

## Pivoting T screw-in connector with hexagon socket

- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

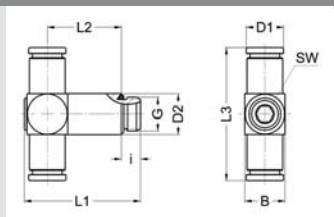


Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	D2	connecting thread countersink Ø max.	NW	g/piece
858-0202	G1/8	OD4 (4/2)	4	5,5	22	8,7	37,6	11,8	8,6	11,9	10,8	2	21
858-0204	G1/8	OD6 (6/4)	4	5,5	22	8,7	44,6	11,8	11,4	11,9	10,8	4	28
858-0206	G1/8	OD8 (8/6)	4	5,5	22	8,7	48,4	13,9	13,9	11,9	10,8	4,5	37
858-0402	G1/4	OD4 (4/2)	6	7,5	27,5	11	41	15,8	8,6	15,9	14	2	37
858-0404	G1/4	OD6 (6/4)	6	7,5	27,5	11	48	15,8	11,4	15,9	14	4	44
858-0406	G1/4	OD8 (8/6)	6	7,5	27,5	11	52	15,8	14,6	15,9	14	6	53
858-0408	G1/4	OD10 (10/8)	6	7,5	27,5	11	57	15,9	15,9	15,9	14	6,5	59

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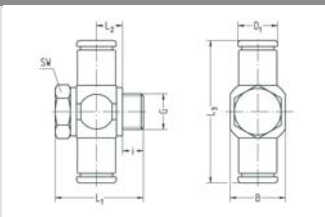
## Pivoting T screw-in connector with hexagon socket, long

- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	D2	connecting thread countersink Ø max.	NW	g/piece
854-0202	G1/8	OD4 (4/2)	4	5,5	37,5	24,3	37,6	11,8	8,6	11,9	10,8	2	32
854-0204	G1/8	OD6 (6/4)	4	5,5	37,5	24,3	44,6	11,8	11,4	11,9	10,8	4	39
854-0206	G1/8	OD8 (8/6)	4	5,5	37,5	24,3	48,4	13,9	13,9	11,9	10,8	4,5	48
854-0402	G1/4	OD4 (4/2)	6	7,5	45,5	29	41	15,8	8,6	15,9	14	2	61
854-0404	G1/4	OD6 (6/4)	6	7,5	45,5	29	48	15,8	11,4	15,9	14	4	68
854-0406	G1/4	OD8 (8/6)	6	7,5	45,5	29	52	15,8	14,6	15,9	14	6	77
854-0408	G1/4	OD10 (10/8)	6	7,5	45,5	29	57	15,9	15,9	15,9	14	6,5	83

## Double swivel joint

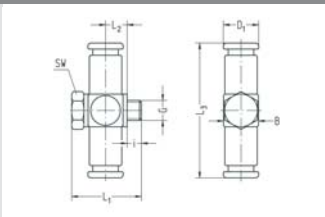


- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR
- Material brass nickel-plated
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	NW	g/piece
838-0202K	G1/8	OD4 (4/2)	14	5,5	28,5	9,5	38	16	8,6	2	40
838-0203K	G1/8	OD5 (5/3)	14	5,5	28,5	9,5	42	16	9,9	3	43
838-0204K	G1/8	OD6 (6/4)	14	5,5	28,5	9,5	45	16	11,4	4	47
838-0206K	G1/8	OD8 (8/6)	14	5,5	28,5	9,5	49	16	14,6	5,2	53
838-0243K	G1/8	OD4,3 (4,3/3)	14	5,5	28,5	9,5	38	16	8,9	3	41
838-0402K	G1/4	OD4 (4/2)	17	7,5	30,5	9,5	42	20	8,6	2	58
838-0403K	G1/4	OD5 (5/3)	17	7,5	30,5	9,5	46	20	9,9	3	61
838-0404K	G1/4	OD6 (6/4)	17	7,5	30,5	9,5	49	20	11,4	4	65
838-0406K	G1/4	OD8 (8/6)	17	7,5	30,5	9,5	53	20	14,6	6	71
838-0408K	G1/4	OD10 (10/8)	17	7,5	30,5	9,5	58	20	16,6	7	80
838-0443K	G1/4	OD4,3 (4,3/3)	17	7,5	30,5	9,5	42	20	8,9	3	58

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## Double swivel joint



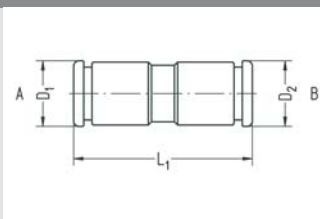
- M5 thread
- PVC seal rings
- Seal in connection NBR
- Ring connection brass nickel-plated
- Banjo bolt galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	NW	g/piece
839-5002K	M5	OD4 (4/2)	8	3,5	17	5,2	34	8,5	8,6	2	12
839-5003K	M5	OD5 (5/3)	8	4	19	6	38	10	9,9	2,4	17
839-5004K	M5	OD6 (6/4)	8	4,5	20,5	6,5	41	11	11,4	2,4	21
839-5043K	M5	OD4,3 (4,3/3)	8	3,5	17	5,2	34	8,5	8,9	2,4	11



## Double connector

- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

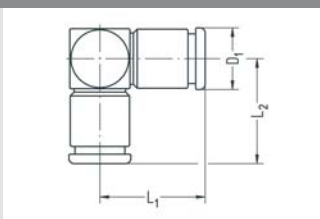


Part no.	for hose A	for hose B	L1	D1	D2	NW	g/piece
833-0202	OD4 (4/2)	OD4 (4/2)	28	8,6	8,6	2	6
833-4343	OD4,3 (4,3/3)	OD4,3 (4,3/3)	28	8,9	8,9	3	6
832-0204	OD4 (4/2)	OD6 (6/4)	31,5	8,6	11,4	2	10
833-0303	OD5 (5/3)	OD5 (5/3)	32	9,9	9,9	3	9
832-0304	OD5 (5/3)	OD6 (6/4)	33,5	10,4	11,4	3	12
833-0404	OD6 (6/4)	OD6 (6/4)	35,5	11,4	11,4	4	13
832-0406	OD6 (6/4)	OD8 (8/6)	37	11,4	14,6	4	18
833-0606	OD8 (8/6)	OD8 (8/6)	39	14,6	14,6	6	22
832-0408	OD6 (6/4)	OD10 (10/8)	39,5	11,4	16,6	4	22
832-0608	OD8 (8/6)	OD10 (10/8)	42,3	14,6	16,6	6	26
833-0808	OD10 (10/8)	OD10 (10/8)	43,5	16,6	16,6	8	30
832-0809	OD10 (10/8)	OD12 (12/9)	48,5	16,6	19,9	8	45
833-0909	OD12 (12/9)	OD12 (12/9)	54	19,9	19,9	9	58
832-0911	OD12 (12/9)	OD14 (14/11)	56	19,9	21,9	9	63
833-1111	OD14 (14/11)	OD14 (14/11)	58	21,9	21,9	11	69

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## Elbow connector

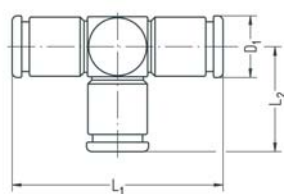
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	for hose	L1	L2	D1	NW	g/piece
877-0200	OD4 (4/2)	17,5	16,8	8,6	2	10
877-4300	OD4,3 (4,3/3)	17,5	16,8	8,9	3	10
877-0300	OD5 (5/3)	19,9	19,5	9,9	3	15
877-0400	OD6 (6/4)	21,5	21,5	11,4	4	20
877-0600	OD8 (8/6)	24,5	24,7	14,6	6	35
877-0800	OD10 (10/8)	27,7	27,7	16,6	8	48
877-0900	OD12 (12/9)	34,5	34	19,9	9	94
877-1100	OD14 (14/11)	37,5	37	21,9	11	117



## T connector

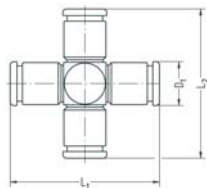


- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	for hose	L1	L2	D1	NW	g/piece
878-0200	OD4 (4/2)	35	16,8	8,6	2	13
878-4300	OD4,3 (4,3/3)	35	16,8	8,9	3	13
878-0300	OD5 (5/3)	39	19,5	9,9	3	19
878-0400	OD6 (6/4)	43	21,5	11,4	4	25
878-0600	OD8 (8/6)	49	24,7	14,6	6	44
878-0800	OD10 (10/8)	55,4	27,7	16,6	8	59
878-0900	OD12 (12/9)	69	34	19,9	9	117
878-1100	OD14 (14/11)	75	37	21,9	11	144

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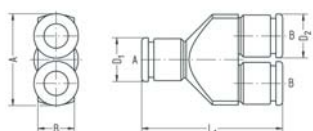
## 4-way connector



- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	for hose	L1	L2	D1	NW	g/piece
879-0200	OD4 (4/2)	35	33,5	8,6	2	17
879-4300	OD4,3 (4,3/3)	35	33,6	8,9	3	17
879-0300	OD5 (5/3)	39	39	9,9	3	24
879-0400	OD6 (6/4)	43	43	11,4	4	32
879-0600	OD8 (8/6)	49	49,4	14,6	6	55
879-0800	OD10 (10/8)	55,4	55,4	16,6	8	72
879-0900	OD12 (12/9)	69	68	19,9	9	142
879-1100	OD14 (14/11)	74	75	21,9	11	175

## Y connector

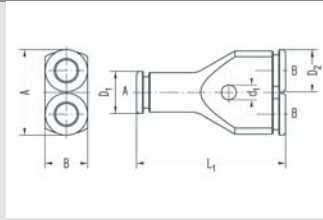


- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	for hose A	for hose B	L1	D1	D2	A	B	NW	g/piece
875-0909	OD12 (12/9)	OD12 (12/9)	72	19,9	19,9	40	21	9	116
875-1109	OD14 (14/11)	OD12 (12/9)	72,5	21,9	19,9	41,7	23	9	122

## Y connector

- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

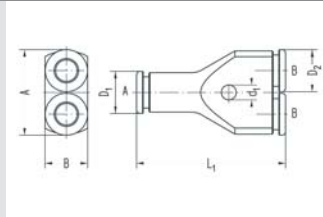


Part no.	for hose A	for hose B	L1	D1	D2	A	B	d1	NW	g/piece
875-0202	OD4 (4/2)	OD4 (4/2)	33	8,6	8,6	17,6	9	3,2	2	7
875-0402	OD6 (6/4)	OD4 (4/2)	37	9,9	8,6	17,6	10	3,2	2	9
875-0404	OD6 (6/4)	OD6 (6/4)	42	11,4	11,4	24,2	12	4,2	4	17
875-0604	OD8 (8/6)	OD6 (6/4)	45,5	13,9	11,4	24,2	14	4,2	4	22
875-0606	OD8 (8/6)	OD8 (8/6)	47	13,9	13,9	28,1	14	4,2	6	25
875-0806	OD10 (10/8)	OD8 (8/6)	47,5	15,9	13,9	28,1	16	4,2	6	30
875-0808	OD10 (10/8)	OD10 (10/8)	54	15,9	15,9	33,8	16	4,2	8	57
875-0906	OD12 (12/9)	OD8 (8/6)	53	19,9	13,9	28,1	20	4,2	6	42
875-0908	OD12 (12/9)	OD10 (10/8)	57,5	19,9	16,6	33,8	20	4,2	8	52
875-1108	OD14 (14/11)	OD10 (10/8)	59,5	21,9	16,6	33,8	22	4,2	8	57

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## Y connector

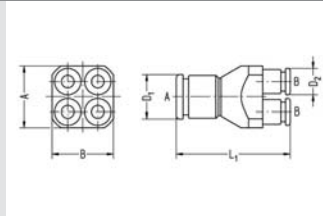
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	for hose A	for hose B	L1	D1	D2	A	B	d1	NW	g/piece
874-0202	OD4 (4/2)	OD4 (4/2)	33	8,6	8,6	17,6	9	3,2	2	16
874-0404	OD6 (6/4)	OD6 (6/4)	42	11,4	11,4	24,2	12	4,2	4	39
874-0604	OD8 (8/6)	OD6 (6/4)	45,5	13,9	11,4	23,5	14	4,2	4	49
874-0606	OD8 (8/6)	OD8 (8/6)	47	13,9	13,9	28,1	14	4,2	6	53

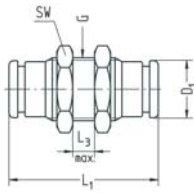
## Double Y connector

- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	for hose A	for hose B	L1	D1	D2	A	B	NW	g/piece
876-0402	OD6 (6/4)	OD4 (4/2)	42,3	11,9	8,6	20	20	2	29

## Bulkhead connector

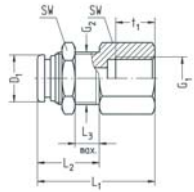


- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	for hose	G	SW	L1	L3 max.	D1	NW	g/piece
880-0202	OD4 (4/2)	M12x1	14	28	6	8,6	2	17
880-0303	OD5 (5/3)	M12x1	14	32	9	9,9	3	19
880-4343	OD4,3 (4,3/3)	M12x1	14	28	6	8,9	3	17
880-0404	OD6 (6/4)	M14x1	17	35	8	11,4	4	31
880-0606	OD8 (8/6)	M16x1	19	39	8	14,6	6	40
880-0808	OD10 (10/8)	M18x1	22	43,5	10	16,6	8	57
880-0909	OD12 (12/9)	M22x1	27	54	12	19,9	9	100
880-1111	OD14 (14/11)	M24x1	30	58	12	21,9	11	122

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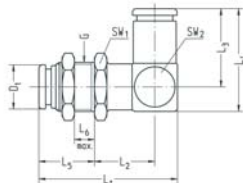
## Bulkhead connector with female thread



- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	G1	for hose	G2	SW	L1	L2	L3 max.	D1	t1	NW	g/piece
802-0102	G1/8	OD4 (4/2)	M12x1	14	25	13,5	6	8,6	8	2	20
802-0104	G1/8	OD6 (6/4)	M14x1	17	28,8	17,5	8	11,4	8	4	35
802-0106	G1/8	OD8 (8/6)	M16x1	19	30,5	17,5	8	14,6	8	6	48
802-0304	G1/4	OD6 (6/4)	M14x1	17	34	17,5	8	11,4	12	4	38
802-0306	G1/4	OD8 (8/6)	M16x1	19	34,5	17,5	8	14,6	12	6	50

## Elbow bulkhead connector, swiveling

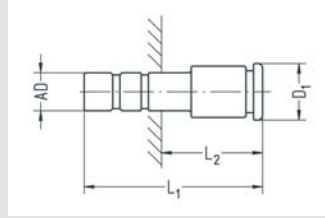


- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	for hose	G	SW1	SW2	L1	L2	L3	L4	L5	L6 max.	D1	NW	g/St.
814-0202	OD4 (4/2)	M12x1	14	10	34	16	17,8	22,3	13	6	8,6	2	27
814-0404	OD6 (6/4)	M14x1	17	14	42	18	22,3	28,3	17	8	11,4	4	54
814-0606	OD8 (8/6)	M16x1	19	16	45,5	20	25,5	33	17,5	8	14,6	6	73
814-0808	OD10 (10/8)	M18x1	22	18	51	21	29	37,5	21	10	16,6	8	103

## Reducing plug

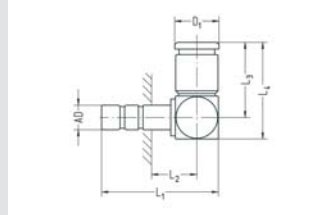
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	plug AD	for hose	L1	L2	D1	NW			g/piece
821-0204	4	OD6 (6/4)	35,5	22	11,4	2			9
821-0206	4	OD8 (8/6)	37	23,5	14,6	2			13
821-0402	6	OD4 (4/2)	32,5	15,5	8,6	2			6
821-0406	6	OD8 (8/6)	39	22	14,6	4			14
821-0602	8	OD4 (4/2)	28	9,3	9,8	2			6
821-0604	8	OD6 (6/4)	38	16,3	11,4	4			10
821-0806	10	OD8 (8/6)	43	22	14,6	6			16
821-0906	12	OD8 (8/6)	47,5	21,5	14,6	6			23
821-0908	12	OD10 (10/8)	53,5	27,5	16,6	8			30
821-1108	14	OD10 (10/8)	53	25	16,6	8			31
821-1109	14	OD12 (12/9)	61	33	19,9	9			48

## Elbow plug

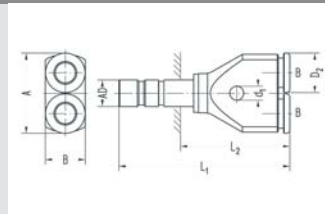
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	plug AD	for hose	L1	L2	L3	L4	D1	NW			g/piece
841-0202	4	OD4 (4/2)	27,5	10	17,5	22	8,6	2			9
841-0404	6	OD6 (6/4)	32	10	21,5	27	11,4	4			17
841-0606	8	OD8 (8/6)	38	12,3	24,5	31,5	14,6	6			30
841-0808	10	OD10 (10/8)	43,5	14,5	27,7	35,7	16,6	7,8			43
841-0909	12	OD12 (12/9)	52,5	26,5	34,5	44,5	19,9	9			84
841-1111	14	OD14 (14/11)	57,5	29,5	37,5	48,5	21,9	11			104

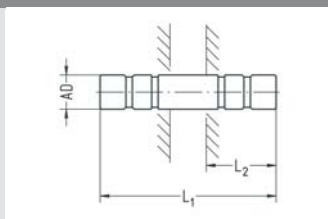
## Y plug

- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	plug AD	for hose	L1	L2	D1	D2	A	B	d1	NW			g/piece
819-0202	4	OD4 (4/2)	40	27	3,2	8,6	17,6	9	3,2	2			8
819-0243	4	OD4,3 (4,3/3)	40	27	3,2	8,9	17,9	9	3,2	2,5			8
819-0402	6	OD4 (4/2)	42,5	26	3,2	8,6	17,6	9	3,2	2			9
819-0443	6	OD4,3 (4,3/3)	42,5	26	3,2	8,9	17,9	9	3,2	3			9
819-0404	6	OD6 (6/4)	49	32,5	4,2	11,4	24,2	12	4,2	4			18
819-0604	8	OD6 (6/4)	52	33,3	4,2	11,4	24,2	12	4,2	4			19

## Double plug

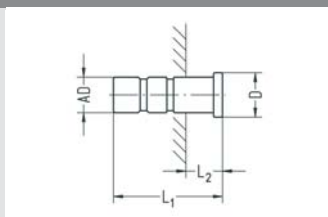


- Material brass nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar
- Fits all connections in the programs 14, 15 and 15A in the respective size

Part no.	plug AD	L1	L2	NW	g/piece
622-0202	4	30	12	2	2
622-4343	4,3	30	12	3	2
622-0303	5	35	13,5	3	3
622-0404	6	36	15	4	4
622-0606	8	41	18	6	7
622-0808	10	47	20,5	8	10
622-0909	12	60	26	10	17
622-1111	14	64	28,5	12	21

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## Closure plug

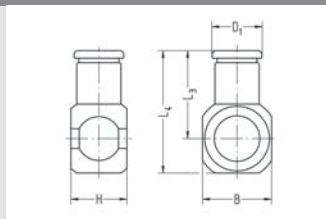


- Material brass nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar
- Fits all connections in the programs 14, 15 and 15A in the respective size

Part no.	plug AD	L1	L2	D	g/piece
623-0200	4	19	7	5,5	2
623-4300	4,3	19	7	5,5	2
623-0300	5	21	7,5	7	4
623-0400	6	21,5	6,5	8	5
623-0600	8	24,5	6,5	10	11
623-0800	10	28	7,5	12	19
623-0900	12	33	7	14	32
623-1100	14	36	7,5	16	47
623-1200	16	38	7,5	17,8	33

## Ring connection

- For banjo bolt with Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

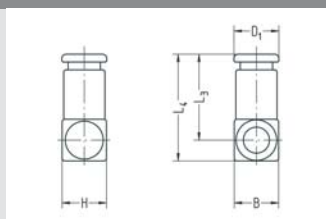


Part no.	for banjo bolt	for hose	H	L3	L4	B	D1	NW	g/piece
834-02021	G1/8	OD4 (4/2)	14,5	19	27	16	8,6	2	21
834-02031	G1/8	OD5 (5/3)	14,5	21	29	16	9,9	3	23
834-02041	G1/8	OD6 (6/4)	14,5	22,5	30,5	16	11,4	4	25
834-02061	G1/8	OD8 (8/6)	14,5	24,5	32,5	16	14,6	6	27
834-02431	G1/8	OD4,3 (4,3/3)	14,5	19	27	16	8,9	3	21
834-04021	G1/4	OD4 (4/2)	14,5	21	31	20	8,6	2	28
834-04031	G1/4	OD5 (5/3)	14,5	23	33	20	9,9	3	30
834-04041	G1/4	OD6 (6/4)	14,5	24,5	34,5	20	11,4	4	32
834-04061	G1/4	OD8 (8/6)	14,5	26,5	36,5	20	14,6	6	35
834-04081	G1/4	OD10 (10/8)	14,5	29	39	20	16,6	8	39
834-04431	G1/4	OD4,3 (4,3/3)	14,5	21	31	20	8,9	3	29
834-06061	G3/8	OD8 (8/6)	14,5	28	39	22	14,6	6	34
834-06081	G3/8	OD10 (10/8)	14,5	30,5	41,5	22	16,6	8	39

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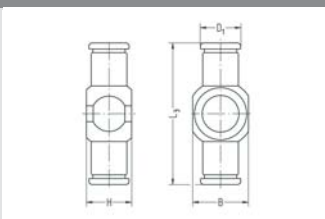
## Ring connection

- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar



Part no.	for banjo bolt	for hose	H	L3	L4	B	D1	NW	g/piece
835-50021	M5	OD4 (4/2)	8,5	17	21	8,5	8,6	2	6
835-50031	M5	OD5 (5/3)	10	19	23,5	10	9,9	3	10
835-50041	M5	OD6 (6/4)	11	20,5	25	11	11,4	3	12
835-50431	M5	OD4,3 (4,3/3)	8,5	17	21	8,5	8,9	3	6
835-50021-1	M5 (for throttle)	OD4 (4/2)	8,5	17	21	8,5	8,6	1,8	5
835-50031-1	M5 (for throttle)	OD5 (5/3)	10	19	23,5	10	9,9	1,8	9
835-50041-1	M5 (for throttle)	OD6 (6/4)	11	20,5	25	11	11,4	1,8	12
835-50431-1	M5 (for throttle)	OD4,3 (4,3/3)	8,5	17	21	8,5	8,9	1,8	5

## Double banjo

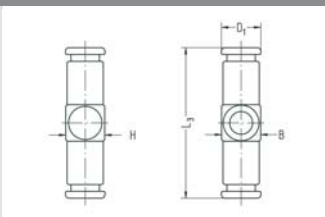


- For banjo bolt with Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	for banjo bolt	for hose	H	L3	B	D1	NW	g/piece
838-02021	G1/8	OD4 (4/2)	14,5	38	16	8,6	2	23
838-02031	G1/8	OD5 (5/3)	14,5	42	16	9,9	3	26
838-02041	G1/8	OD6 (6/4)	14,5	45	16	11,4	4	30
838-02061	G1/8	OD8 (8/6)	14,5	49	16	14,6	6	36
838-02431	G1/8	OD4,3 (4,3/3)	14,5	38	16	8,9	3	23
838-04021	G1/4	OD4 (4/2)	14,5	42	20	8,6	2	30
838-04031	G1/4	OD5 (5/3)	14,5	46	20	9,9	3	33
838-04041	G1/4	OD6 (6/4)	14,5	49	20	11,4	4	37
838-04061	G1/4	OD8 (8/6)	14,5	53	20	14,6	6	43
838-04081	G1/4	OD10 (10/8)	14,5	58	20	16,6	8	52
838-04431	G1/4	OD4,3 (4,3/3)	14,5	42	20	8,9	3	31

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## Double banjo

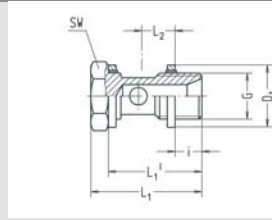


- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 15 bar

Part no.	for banjo bolt	for hose	H	L3	B	D1	NW	g/piece
839-50021	M5	OD4 (4/2)	8,5	34	8,5	8,6	2	9
839-50031	M5	OD5 (5/3)	10	38	10	9,9	3	14
839-50041	M5	OD6 (6/4)	11	41	11	11,4	3	18
839-50431	M5	OD4,3 (4,3/3)	8,5	34	8,5	8,9	3	8

## Banjo bolt, short model

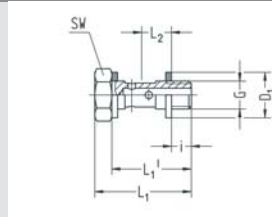
- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5



Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
634-0200K	G1/8	14	5,5	28,5	24,5	9,5	14,7	5,2	17
634-0400K	G1/4	17	7,5	30,5	26,5	9,5	17,7	7	28
634-0600K	G3/8	22	7,5	31,5	26,5	9,5	21,8	9,2	46
634-0800K	G1/2	27	9	33,5	28	9,5	26,3	11,8	71

## Banjo bolt, short model

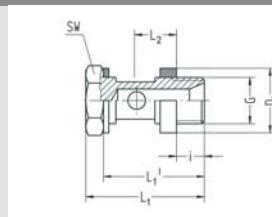
- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	fits banjo with H	SW	i	L1	L1'	L2	D1	NW	g/piece
35-5010K	M5	10	8	4	19	16	6	7,5	2,4	3
35-5000K	M5	8,5 and 9	8	3,5 (3)	17	14	5,2 (5,5)	7,5	2,4	3
635-5000K	M5	11	8	4,5	20,5	17,5	6,5	7,5	2,4	3

## Banjo bolt

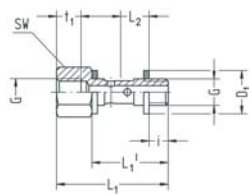
- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material brass nickel-plated
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5



Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
634-0200	G1/8	14	6	30,5	26,5	11,8	14,9	5,2	16
634-0400	G1/4	17	8	32,5	28,5	11,8	18,9	7,2	27
634-0600	G3/8	22	8	33,5	28,5	11,8	22,9	9,2	46
634-0800	G1/2	27	10	36	30,5	11,8	26,9	11,8	74



## Banjo bolt, short model



- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5

Part no.	G	SW	i	L1	L1'	L2	D1	t1	NW	g/piece
648-0200K	G1/8	14	5,5	34	24,5	9,5	14,7	6,5	5,2	20
648-0400K	G1/4	17	7,5	38,5	26,5	9,5	17,7	9	7,2	33
648-0600K	G3/8	22	7,5	39,5	26,5	9,5	21,8	9	9,2	55
648-0800K	G1/2	27	9	44	28	9,5	26,3	11	11,8	90

## Color coding

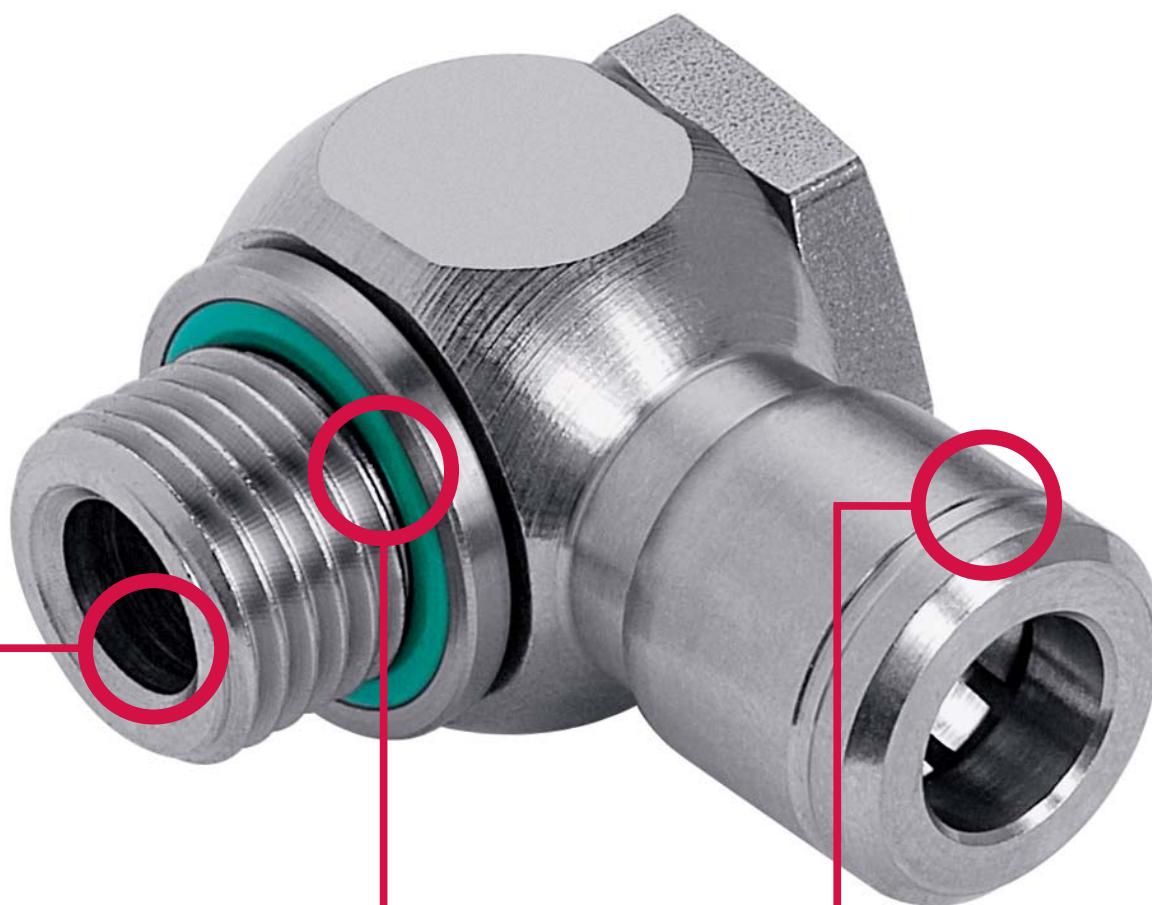
- Material aluminum anodized
- Fits all Eisele plug connectors



Part no.	for hose	Color	g/piece
SA1394-1102	OD4 (4/2)	red	1
SA1394-1104	OD6 (6/4)	red	1
SA1394-1106	OD8 (8/6)	red	1
SA1394-1108	OD10 (10/8)	red	1
SA1394-1109	OD12 (12/9)	red	1
SA1394-1111	OD14 (14/11)	red	1
SA1394-1112	OD16 (16/12)	red	1
SA1394-1202	OD4 (4/2)	green	1
SA1394-1204	OD6 (6/4)	green	1
SA1394-1206	OD8 (8/6)	green	1
SA1394-1208	OD10 (10/8)	green	1
SA1394-1209	OD12 (12/9)	green	1
SA1394-1211	OD14 (14/11)	green	1
SA1394-1212	OD16 (16/12)	green	1
SA1394-1302	OD4 (4/2)	blue	1
SA1394-1304	OD6 (6/4)	blue	1
SA1394-1306	OD8 (8/6)	blue	1
SA1394-1308	OD10 (10/8)	blue	1
SA1394-1309	OD12 (12/9)	blue	1
SA1394-1311	OD14 (14/11)	blue	1
SA1394-1312	OD16 (16/12)	blue	1



## Plug connectors made of stainless steel



### Media-resistant materials

- For applications in the food industry
- High material quality. Use of stainless and acid-proof stainless steel 1.4301 / 1.4307

### Efficient handling

- Quick and secure assembly and disassembly of hoses.
- Handling does not require tools

### With patented release sleeve

- The collet is located and well protected from the release sleeve in the casing
- Even when the connectors have been exposed to heavy soiling, dirt cannot enter the system
- Easy cleaning of connectors possible

An additional FPM O-ring seal is available for placement in front of the holding clamp for high pressure environments. Additional information on this point on request.

## Range of application

The connection system with special technology for use in the food industry and for use with aggressive media. Very quick assembly and disassembly of compressed-air hoses made of PE (polyethylene), PA (polyamide), PU (polyurethane), ProWeld (PUR) and PTFE (Teflon) / FEP.

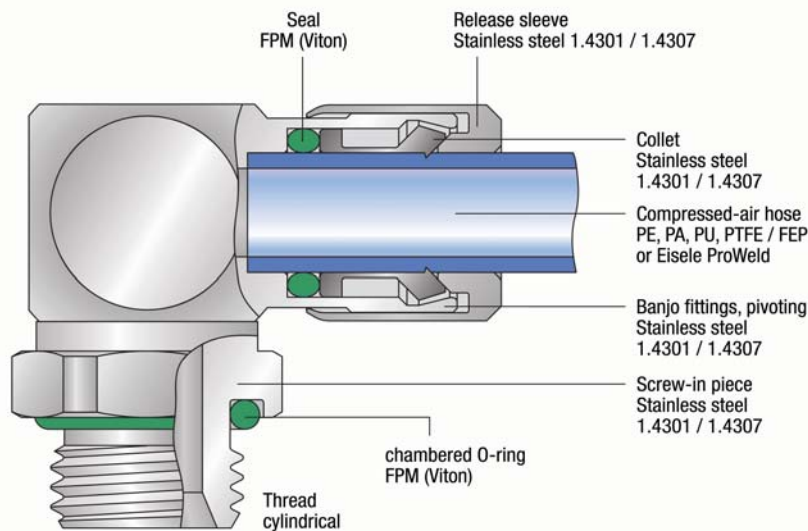
## Service conditions

Working pressure range: -0.95 to 16 bar  
 Allowable medium: Air and other media <sup>1)</sup>  
 Temperature range: -20 to +120 °C

Data provided depend on hoses used.

<sup>1)</sup> Plug connectors of this type may not only be used for compressed-air, but, after consultation, for other gaseous media too. Please enquire if the sealing material FPM is not suitable for your application. Our engineers will be happy to consult you in the selection of a suitable sealing material.

## Functional principle



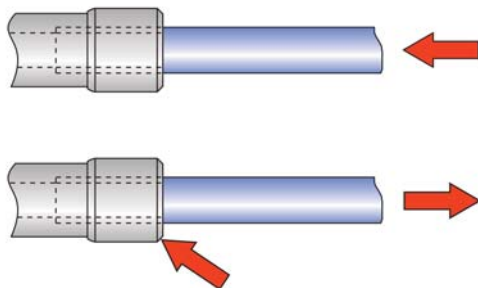
## Advantages

- Very quick assembly and disassembly of compressed-air hoses
- No tools necessary
- Frequent assembly and disassembly possible
- Full hose through-flow
- All male stud couplings with chambered O-ring sealed
- Very small connector sets
- Material stainless steel 1.4301 / 1.4307
- Suitable for vacuum

## Special technology of the release sleeve

- Collet lies in casing and is protected from release sleeve
- Easy disassembly even when connectors are severely soiled
- Easy to clean

## Handling



Assembly: Push hose into the connector up to the limit stop

Disassembly: Fully push back release sleeve, pull out hose

## Hoses

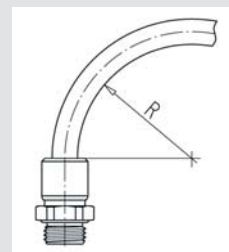
Hose dimension		Polyethylene (PE) Temperature range -10 to +40°C		Polyamide (PA) Temperature range -60 to +100°C		Polyurethane (PU) Temperature range -35 to +70°C		ProWeld (PUR) <sup>1)</sup> Temperature range -35 to +75°C		Teflon (PTFE) /FEP <sup>2)</sup> Temperature range -35 to +120°C	
Outside-Ø	Inside-Ø	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)	R min.	p max. (bar)
4 (±0,1)	2	20	20	20	30	8	10	6,5	20	16	25
4,3 (±0,1)	3	20	13	20	20	10	10	-	-	35	10
5 (±0,1)	3	25	15	25	25	11	10	-	-	25	20
6 (±0,15)	4	30	13	30	20	14	10	12	11	35	15
8 (±0,15)	6	40	8	40	15	20	9	18	9	65	11
10 (±0,15)	8	60	6	60	12	37,5	8	15	14	100	9
12 (±0,15)	9	60	9	85	15	48	10	24	10	100	9
14 (±0,15)	11	90	8	80	12	60	7,5	38	9	140	9
16 (±0,15)	11	90	6	90	11	43	10	44	9	-	-
20 (±0,2)	14	-	-	-	-	-	-	-	8	-	-

The mounted compressed-air hoses are not to be exposed to tensile loading.

<sup>1)</sup> In the case of Eisele ProWeld hoses a smaller inside diameter results from a partially larger wall thickness.

<sup>2)</sup> Important notes for the use of compressed-air hoses made of PTFE (Teflon) and FEP:

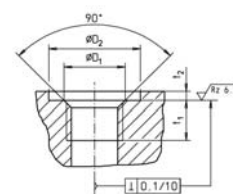
- The outside diameter of compressed-air hoses must be free of grooves and other damages (e.g. damage from installation tools).
- Prior to assembly, use the Eisele hose cutter Art. No. 99605-0014 or Art. No. 99606-0022 to cut compressed-air hoses at a right angle. Ensure that hoses are not being deformed or damaged during the cutting process
- During assembly, compressed-air hoses must be pressed until the bottom of the plug connectors is felt so as to achieve proper tightness.



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## Connection thread

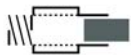
Thread	Thread depth	Thread counterbore ØD1 max. (mm)	Counterbore <sup>1)</sup>		Torque <sup>2)</sup> max. (Ncm)	Thread standards
	t1 min. (mm)		ØD2 min. (mm)	t2 max. (mm)		
M5	4.5	6	10	0.5	95	Metric thread M: DIN 13 / ISO 965
G1/8	7	11	15.3	1	900	Pipe thread G: DIN ISO 228
G1/4	9	14.2	19	1.5	1800	
G3/8	9	17.5	23	2	2500	
G1/2	11	22	27	2.5	3400	



<sup>1)</sup> A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.

## Threaded connectors

starting on page 147



Straight threaded connectors

page 147



Angled threaded connectors

page 149

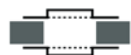


T threaded connectors

page 150

## Plug connector

starting on page 151



Reducing plug

page 151



Elbow plug

page 152



T connectors

page 152



Cross connectors

page 152



Bulkhead connectors

page 153

## Plug

starting on page 154



Reducing plug

page 154



Elbow plug

page 154



Sealing plug

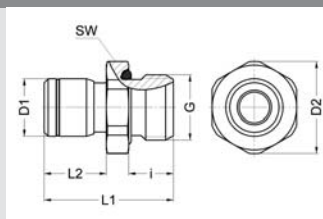
page 154

## Accessories

starting on page 155

## Screw-in connector

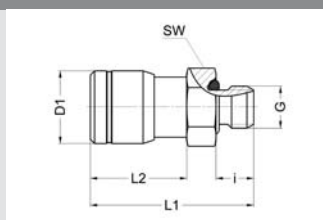
- Whitworth pipe thread
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	D1	D2	NW	g/piece
928-0202	G1/8	OD4 (4/2)	13	7	21	10	8,6	14,2	2	9
928-0204	G1/8	OD6 (6/4)	13	7	23,5	12,5	11,5	14,2	4	10
928-0206	G1/8	OD8 (8/6)	14	7	28,5	17,5	14,5	15,2	6	15
928-0402	G1/4	OD4 (4/2)	17	9	23,5	10	8,6	18,5	2	18
928-0404	G1/4	OD6 (6/4)	17	9	26	12,5	11,5	18,5	4	19
928-0406	G1/4	OD8 (8/6)	17	9	29	15,5	14,5	18,5	6	21
928-0408	G1/4	OD10 (10/8)	17	9	33,5	20	16,5	18,5	8	23
928-0409	G1/4	OD12 (12/9)	19	9	37,5	22	20	20,7	8	36
928-0604	G3/8	OD6 (6/4)	22	9	27	12,5	11,5	23,8	4	33
928-0606	G3/8	OD8 (8/6)	22	9	30	15,5	14,5	23,8	6	35
928-0608	G3/8	OD10 (10/8)	22	9	32	17,5	16,5	23,8	8	34
928-0609	G3/8	OD12 (12/9)	22	9	34	19,5	20	23,8	9	37
928-0611	G3/8	OD14 (14/11)	22	9	41	26,5	22	23,8	11	44
928-0804	G1/2	OD6 (6/4)	24	11	29,5	12,5	11,5	26,2	4	51
928-0806	G1/2	OD8 (8/6)	24	11	32,5	15,5	14,5	26,2	6	54
928-0808	G1/2	OD10 (10/8)	24	11	34,5	17,5	16,5	26,2	8	52
928-0809	G1/2	OD12 (12/9)	24	11	36,5	19,5	20	26,2	9	54
928-0811	G1/2	OD14 (14/11)	24	11	38	21	22	26,2	11	52
928-0815	G1/2	OD20 (20/15)	30	11	61,2	39,2	30,5	33,5	12,5	130
928-1015	G3/4	OD20 (20/15)	32	12	61,2	38,2	30,5	34,8	16,5	145

## Screw-in connector

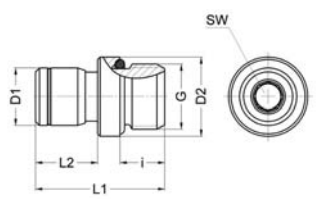
- Thread M3, M5
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	D1	NW	g/piece
929-4202	M3	OD4 (4/2)	8	3	18,5	11,5	8,6	1,2	4
929-5002	M5	OD4 (4/2)	8	4,5	19,5	11,5	8,6	2	4
929-5004	M5	OD6 (6/4)	10	4,5	23	14	11,5	2,5	7



## Screw-in connector

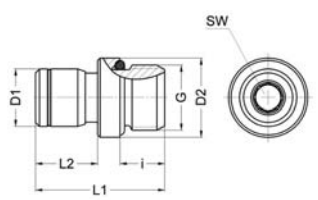


- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	i	L1	L2	D1	D2	NW	g/piece
962-0202	G1/8	OD4 (4/2)	7	21	10	8,6	11,9	2	8
962-0204	G1/8	OD6 (6/4)	7	23,5	12,5	11,5	11,9	4	9
962-0206	G1/8	OD8 (8/6)	7	28,5	-	14,5	-	5,1	15
962-0402	G1/4	OD4 (4/2)	9	23,5	10	8,6	15,9	2	16
962-0404	G1/4	OD6 (6/4)	9	26	12,5	11,5	15,9	4	17
962-0406	G1/4	OD8 (8/6)	9	29	15,5	14,5	15,9	6	20
962-0408	G1/4	OD10 (10/8)	9	33,5	20	16,5	15,9	8	21
962-0606	G3/8	OD8 (8/6)	9	30	15,5	14,5	19,9	6	31
962-0608	G3/8	OD10 (10/8)	9	32	17,5	16,5	19,9	8	30
962-0609	G3/8	OD12 (12/9)	9	34	19,5	20	19,9	9	32

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## Screw-in connector

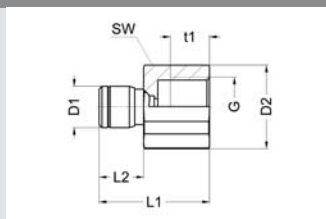


- Thread M3, M5
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	i	L1	L2	D1	D2	NW	g/piece
963-5002	M5	OD4 (4/2)	4,5	19	11	8,8	8	2	4
963-5004	M5	OD6 (6/4)	4,5	23,5	14	11,6	8	2,5	6

## Straight screw-in connector with female thread

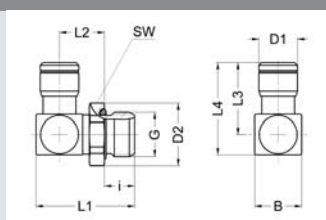
- Whitworth pipe thread
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	L1	L2	t1	D1	D2	NW	g/piece
917-0102	G1/8	OD4 (4/2)	14	24	10	7	8,6	15,2	2	15
917-0104	G1/8	OD6 (6/4)	14	27	12,5	7	11,5	15,2	4	18
917-0106	G1/8	OD8 (8/6)	14	30	15,5	7	14,5	15,2	6	21
917-0304	G1/4	OD6 (6/4)	17	31	12,5	11	11,5	18,3	4	27
917-0306	G1/4	OD8 (8/6)	17	34	15,5	11	14,5	18,3	6	31
917-0308	G1/4	OD10 (10/8)	17	37	17,5	11	16,5	18,3	8	34
917-0504	G3/8	OD6 (6/4)	22	31	12,5	11	11,5	23,4	4	43
917-0506	G3/8	OD8 (8/6)	22	34	15,5	11	14,5	23,4	6	46
917-0508	G3/8	OD10 (10/8)	22	37	17,5	11	16,5	23,4	8	50
917-0704	G1/2	OD6 (6/4)	27	34	12,5	13	11,5	28,6	4	68
917-0706	G1/2	OD8 (8/6)	27	37	15,5	13	14,5	28,6	6	72
917-0708	G1/2	OD10 (10/8)	27	40	17,5	13	16,5	28,6	8	77

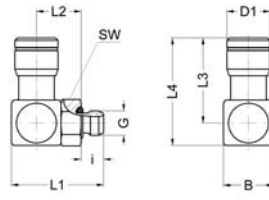
## Elbow screw-in connector, swiveling

- Whitworth pipe thread
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
986-0202	G1/8	OD4 (4/2)	13	7	23	11	17	21,5	10	8,6	14,2	2	16
986-0204	G1/8	OD6 (6/4)	13	7	27	13	21,3	27,3	14	11,5	14,2	4	28
986-0206	G1/8	OD8 (8/6)	13	7	29,5	14,5	25,5	33	16	14,5	14,2	5,5	40
986-0402	G1/4	OD4 (4/2)	17	9	26	12	17	21,5	10	8,6	18,5	2	23
986-0404	G1/4	OD6 (6/4)	17	9	29,5	13,5	21,3	27,3	14	11,5	18,5	4	36
986-0406	G1/4	OD8 (8/6)	17	9	32	15	25,5	33	16	14,5	18,5	6	48
986-0408	G1/4	OD10 (10/8)	17	9	34	16	29,5	38	18	16,5	18,5	8	57
986-0409	G1/4	OD12 (12/9)	17	9	36,5	17,5	35,5	45,5	20	20	18,5	9	80
986-0606	G3/8	OD8 (8/6)	22	9	32,5	15,5	25,5	33	16	14,5	23,8	6	58
986-0608	G3/8	OD10 (10/8)	22	9	34,5	16,5	29,5	38	18	16,5	23,8	8	69
986-0609	G3/8	OD12 (12/9)	22	9	37	18	35,5	45,5	20	20	23,8	9	92
986-0806	G1/2	OD8 (8/6)	24	11	35,5	16,5	25,5	33	16	14,5	26,2	6	73
986-0808	G1/2	OD10 (10/8)	24	11	37,5	17,5	29,5	38	18	16,5	26,2	8	84
986-0809	G1/2	OD12 (12/9)	24	11	40	19	35,5	45,5	20	20	26,2	9	108

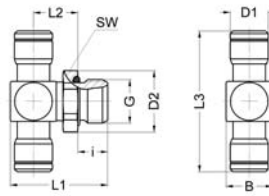
## Elbow screw-in connector, swiveling



- Thread M3, M5
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
987-4202	M3	OD4 (4/2)	8	3	17	9	17	21,5	10	8,6	1,2	10
987-5002	M5	OD4 (4/2)	8	4,5	18,5	9	17	21,5	10	8,6	2	10
987-5004	M5	OD6 (6/4)	8	4,5	20,5	10	20	24,5	12	11,5	2,5	15

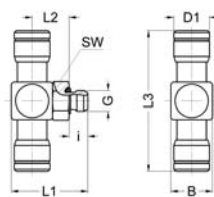
## T screw-in connector, swiveling



- Whitworth pipe thread
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	D2	NW	g/piece
988-0202	G1/8	OD4 (4/2)	13	7	23	11	34	10	8,6	14,2	2	18
988-0204	G1/8	OD6 (6/4)	13	7	27	13	42,6	14	11,5	14,2	4	33
988-0206	G1/8	OD8 (8/6)	13	7	29,5	14,5	51	16	14,5	14,2	5,5	49
988-0402	G1/4	OD4 (4/2)	17	9	26	12	34	10	8,6	18,5	2	26
988-0404	G1/4	OD6 (6/4)	17	9	29,5	13,5	42,6	14	11,5	18,5	4	41
988-0406	G1/4	OD8 (8/6)	17	9	32	15	51	16	14,5	18,5	6	56
988-0408	G1/4	OD10 (10/8)	17	9	34	16	59	18	16,5	18,5	8	59
988-0409	G1/4	OD12 (12/9)	17	9	36,5	17,5	71	20	20	18,5	9	100
988-0606	G3/8	OD8 (8/6)	22	9	32,5	15,5	51	16	14,5	23,8	6	67
988-0608	G3/8	OD10 (10/8)	22	9	34,5	16,5	59	18	16,5	23,8	8	80
988-0609	G3/8	OD12 (12/9)	22	9	37	18	71	20	20	23,8	9	112
988-0806	G1/2	OD8 (8/6)	24	11	35,5	16,5	51	16	14,5	26,2	6	82
988-0808	G1/2	OD10 (10/8)	24	11	37,5	17,5	59	18	16,5	26,2	8	96
988-0809	G1/2	OD12 (12/9)	24	11	40	19	71	20	20	26,2	9	128

## T screw-in connector, swiveling

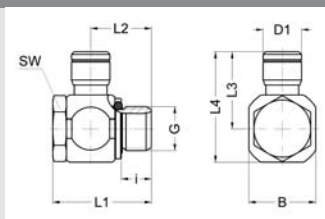


- M5 thread
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	for hose	SW	i	L1	L2	L3	B	D1	NW	g/piece
989-5002	M5	OD4 (4/2)	8	4,5	18,5	9	34	10	8,6	2	12
989-5004	M5	OD6 (6/4)	8	4,5	20,5	10	40	12	11,5	2,5	21

## Single swivel connector, short model

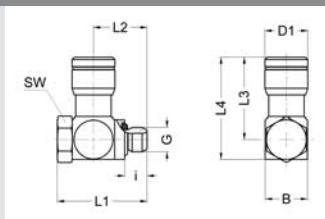
- Whitworth pipe thread
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
934-0202K	G1/8	OD4 (4/2)	13	7	27	8,5	18,2	26,2	16	8,6	2	32
934-0204K	G1/8	OD6 (6/4)	13	7	27	8,5	21	29	16	11,5	4	34
934-0206K	G1/8	OD8 (8/6)	13	7	27	8,5	24	32	16	14,5	5,2	37
934-0402K	G1/4	OD4 (4/2)	17	9	29,5	9	20	30	20	8,6	2	48
934-0404K	G1/4	OD6 (6/4)	17	9	29,5	9	23	33	20	11,5	4	51
934-0406K	G1/4	OD8 (8/6)	17	9	29,5	9	26	36	20	14,5	6	54
934-0408K	G1/4	OD10 (10/8)	17	9	29,5	9	28,5	38,5	20	16,5	7,2	56

## Single swivel connector, short model

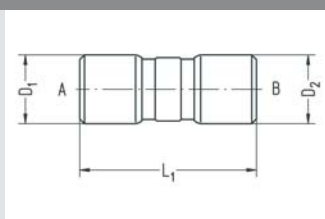
- M5 thread
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
935-5002K	M5	OD4 (4/2)	8	4,5	18	6,2	16,5	20,5	8,5	8,6	2	8
935-5004K	M5	OD6 (6/4)	8	4,5	19,5	7	19,5	24	11	11,5	2,4	13

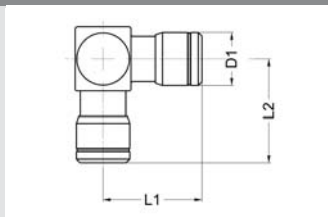
## Double connector

- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	for hose A	for hose B	L1	D1	D2	NW	g/piece
932-0204	OD4 (4/2)	OD6 (6/4)	30,5	8,6	11,5	2	10
932-0406	OD6 (6/4)	OD8 (8/6)	35,5	11,5	14,5	4	19
932-0408	OD6 (6/4)	OD10 (10/8)	38,5	11,5	16,5	4	23
932-0608	OD8 (8/6)	OD10 (10/8)	42,5	14,5	16,5	6	28
932-0609	OD8 (8/6)	OD12 (12/9)	47,5	14,5	20	6	42
932-0809	OD10 (10/8)	OD12 (12/9)	50	16,5	20	8	45
933-0202	OD4 (4/2)	OD4 (4/2)	27	8,6	8,6	2	6
933-0404	OD6 (6/4)	OD6 (6/4)	33	11,5	11,5	4	12
933-0606	OD8 (8/6)	OD8 (8/6)	39	14,5	14,5	6	22
933-0808	OD10 (10/8)	OD10 (10/8)	44,5	16,5	16,5	8	30
933-0909	OD12 (12/9)	OD12 (12/9)	54,5	20	20	9	53

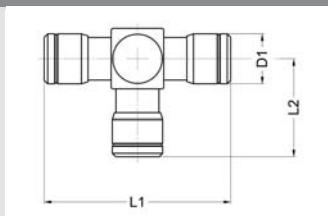
## Elbow connector



- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	for hose	L1	L2	D1	NW	g/piece
977-0200	OD4 (4/2)	17	17,5	8,5	2	11
977-0400	OD6 (6/4)	21,3	22,5	11,5	4	26
977-0600	OD8 (8/6)	25,5	26	14,5	6	42
977-0800	OD10 (10/8)	29,5	30,5	16,5	8	57
977-0900	OD12 (12/9)	35,5	36	20	9	89

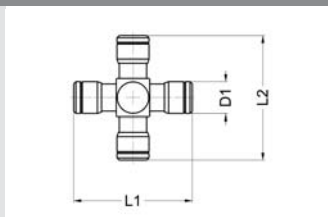
## T connector



- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	for hose	L1	L2	D1	NW	g/piece
978-0200	OD4 (4/2)	34	17,5	8,6	2	13
978-0400	OD6 (6/4)	42,6	22,5	11,5	4	31
978-0600	OD8 (8/6)	51	26	14,5	6	50
978-0800	OD10 (10/8)	59	30,5	16,5	8	68
978-0900	OD12 (12/9)	71	36	20	9	110

## 4-way connector

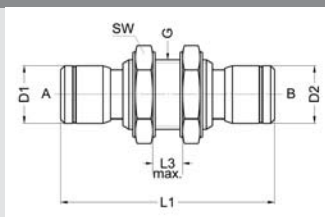


- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	for hose	L1	L2	D1	NW	g/piece
979-0400	OD6 (6/4)	42,6	44,8	11,5	4	35

## Bulkhead connector

- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

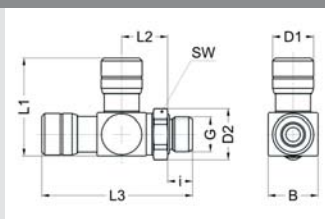


Part no.	for hose A	for hose B	G	SW	L1	L3 max.	D1	D2	NW	g/piece
980-0202	OD4 (OD4 (4/2))	OD4 (4/2)	M12x1	14	34	6	8,6	8,6	2	19
980-0404	OD6 (6/4)	OD6 (6/4)	M14x1	17	43	8	11,5	11,5	4	35
980-0606	OD8 (8/6)	OD8 (8/6)	M16x1	19	49	8	14,5	14,5	6	47
980-0808	OD10 (10/8)	OD10 (10/8)	M18x1	22	56	10	16,5	16,5	8	65
980-0909	OD12 (12/9)	OD12 (12/9)	M22x1	27	63	12	20	20	9	109
980-1111	OD14 (14/11)	OD14 (14/11)	M24x1	30	66	12	22	22	11	127
981-0204	OD4 (OD4 (4/2))	OD6 (6/4)	M14x1	17	40,5	8	8,6	11,5	2	26
981-0406	OD6 (6/4)	OD8 (8/6)	M16x1	19	46	8	11,5	14,5	4	35
981-0608	OD8 (8/6)	OD10 (10/8)	M18x1	22	54	10	14,5	16,5	6	51
981-0809	OD10 (10/8)	OD12 (12/9)	M22x1	27	61	12	16,5	20	8	84

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## L screw-in connector, pivoting

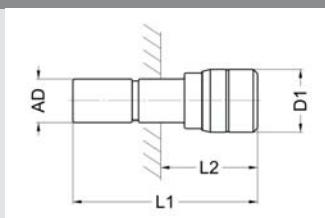
- Whitworth pipe thread
- Chambered O-ring
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	for hose	SW	i	L1	L2	L3	D1	D2	B	NW	g/piece
990-0204	G1/8	OD6 (6/4)	13	7	27	12,9	42,3	11,5	14,2	14	4	33

## Reducing plug

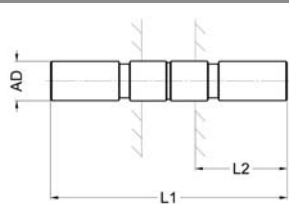
- Seal s FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar
- Fits all Eisele plug connectors



Part no.	plug AD	for hose	L1	L2	D1	NW	g/piece
921-0204	4	OD6 (6/4)	34	11,5	11,5	2,5	7
921-0402	6	OD4 (4/2)	31,5	8,6	8,6	3	5
921-0602	8	OD4 (4/2)	34,5	8,6	8,6	3	7
921-0604	8	OD6 (6/4)	39	11,5	11,5	4,5	10
921-0804	10	OD6 (6/4)	40	11,5	11,5	4,5	12
921-0806	10	OD8 (8/6)	43	14,5	14,5	6,5	15
921-0906	12	OD8 (8/6)	48	14,5	14,5	6,5	20
921-0908	12	OD10 (10/8)	51	16,5	16,5	8,5	23

EISELE BASICLINE

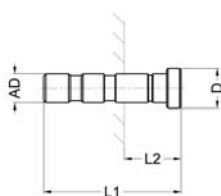
## Double plug



- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	plug AD	L1	L2	NW	g/piece
922-0202	4	30	12,2	2	1
922-0404	6	36	15	4	4
922-0606	8	41	17,2	6	7
922-0808	10	47	19	8	10
922-0909	12	60	24	9	23
922-1111	14	64	28,5	11	59

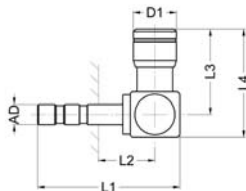
## Sealing plug



- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	plug AD	L1	L2	D	g/piece
923-0200	4	19	6,8	5,5	2
923-0400	6	21,5	6,5	8	5
923-0600	8	24,5	7,2	10	10
923-0800	10	28	9	12	17
923-0900	12	33	9	14	30
923-1100	14	36	7,5	16	44

## Elbow plug



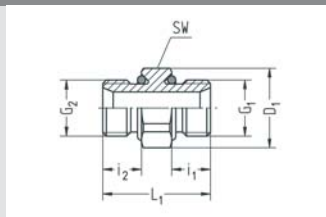
- Seals FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	plug AD	for hose	L1	L2	L3	L4	D1	NW	g/piece
941-0202	4	OD4 (4/2)	28,5	16	17	21,5	8,6	2	9



## Double nipple

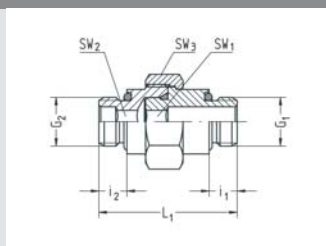
- Whitworth pipe thread, thread M5
- With inner cone according to DIN EN 560
- Chambered O-rings FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G1	G2	SW	D1	i1	i2	L1	NW	g/piece
1141-5050	M5	M5	8	-	4,5	4,5	13,5	2,5	2
1142-0202	G1/8	G1/8	13	14,2	7	7	20	5,5	9
1142-0404	G1/4	G1/4	17	18,5	9	9	25	7,5	20
1142-0606	G3/8	G3/8	22	23,8	9	9	26	10	34
1142-0808	G1/2	G1/2	24	26,2	11	11	30,5	12,5	53
1143-0250	G1/8	M5	13	14,2	7	4,5	17,5	2,5	8
1143-0402	G1/4	G1/8	17	18,5	9	7	23	5,5	19
1143-0604	G3/8	G1/4	22	23,8	9	9	26	7,5	33
1143-0806	G1/2	G3/8	24	26,2	11	9	28,5	10	48

## Double nipple removable

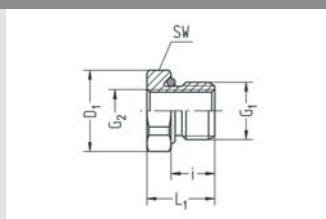
- With chambered O-rings
- Constant distance dimension
- Whitworth pipe thread
- Sealing FPM
- Torque for union nut see table
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar
- Material: 1.4301/ 1.4307



Part no.	G1	G2	SW1	SW2	SW3	i1	i2	L1	NW	M max. (Ncm)	g/piece
1176-0202	G1/8	G1/8	5	5	19	5,5	5,5	30	5,1	700	31
1176-0404	G1/4	G1/4	6	6	22	7,5	7,5	37	6,1	1500	55
1176-0606	G3/8	G3/8	8	8	27	7,5	7,5	39,5	8,2	2200	95
1176-0808	G1/2	G1/2	12	12	30	9,5	9,5	46	12,3	4000	117
1176-1010	G3/4	G3/4	14	14	41	10,5	10,5	59	14,3	6000	382
1176-1212	G1	G1	19	19	50	12,5	12,5	69	19,4	8000	530

## Thread adapter

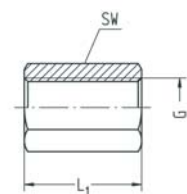
- Whitworth pipe thread, thread M5
- Chambered O-ring FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar



Part no.	G1	G2	SW	D1	i	L1	g/piece
1170-0249	G1/8	M5	13	14,2	7	11	7
1170-0401	G1/4	G1/8	17	18,5	9	13,5	10
1170-0449	G1/4	M5	17	18,5	9	13,5	15
1170-0601	G3/8	G1/8	22	23,8	9	14,5	24
1170-0603	G3/8	G1/4	22	23,8	9	14,5	19
1170-0803	G1/2	G1/4	24	26,2	11	17	35
1170-0805	G1/2	G3/8	24	26,2	11	17	25



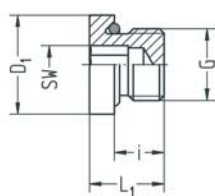
## Sleeve



- Whitworth pipe thread, thread M5
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	SW	L1	g/piece
1159-0100	G1/8	14	17	15
1159-0300	G1/4	17	21	24
1159-0500	G3/8	22	21	39
1159-0700	G1/2	27	25	88
1160-4900	M5	8	9,5	3

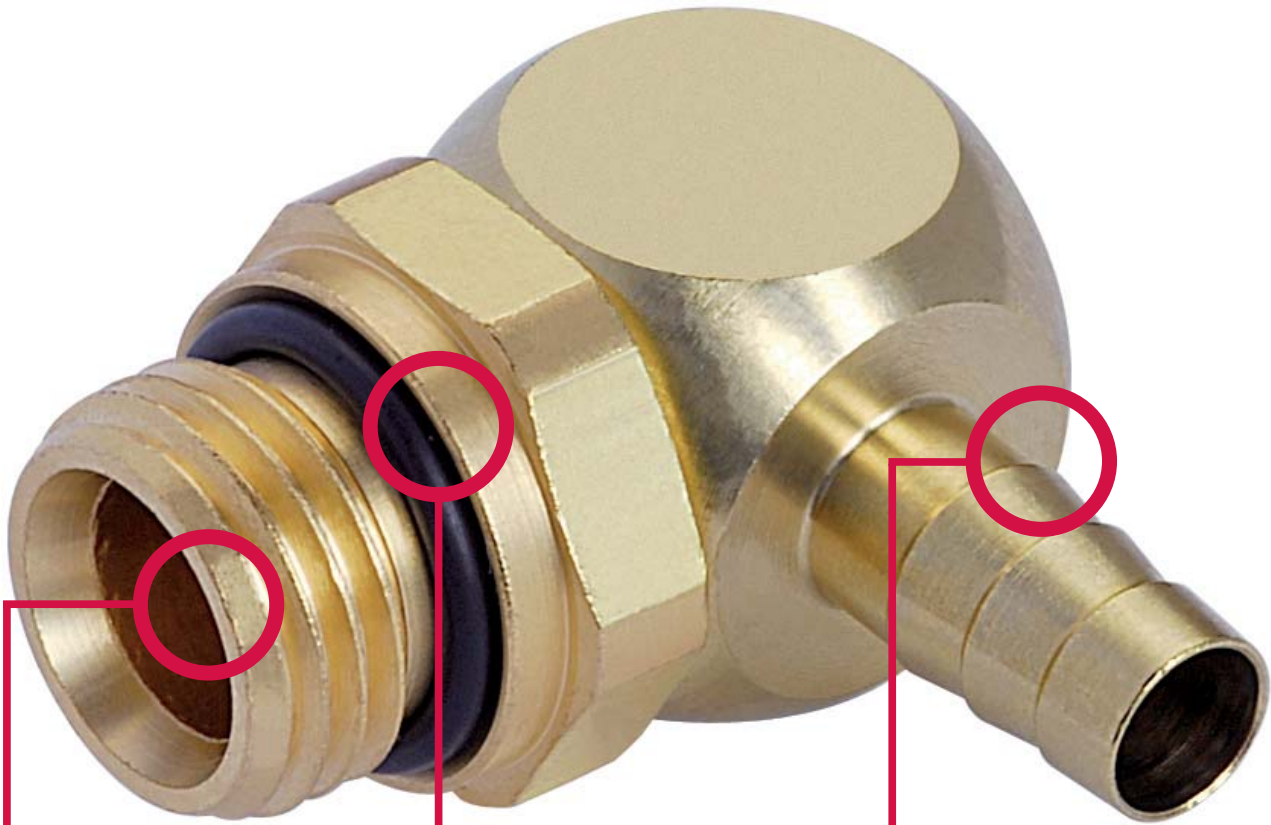
## Closure screw



- Whitworth pipe thread, thread M5
- With hexagon socket
- Chambered O-ring FPM
- Material stainless steel 1.4301/1.4307
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	SW	i	L1	D1	g/piece
1123-0200	G1/8	5	7	11	14	7
1123-0400	G1/4	6	9	13,5	18	14
1123-0600	G3/8	8	9	14	22	22
1123-0800	G1/2	10	11	16	26	38
1123-1000	G3/4	10	12	18	32	74
1124-5000	M5	2,5	4,5	7	8	1

## Spigots for PU compressed-air hoses



#### Low space requirements

- Space-saving construction; thus tight mounting of systems possible

#### Efficient connection solution

- Hose holds without additional hose clamp

#### Simple assembly and disassembly

- Spigots can be mounted and removed without tools
- Disassembly without destruction of the plugged-in hose end possible

Suitable for vacuum applications.

## Range of application

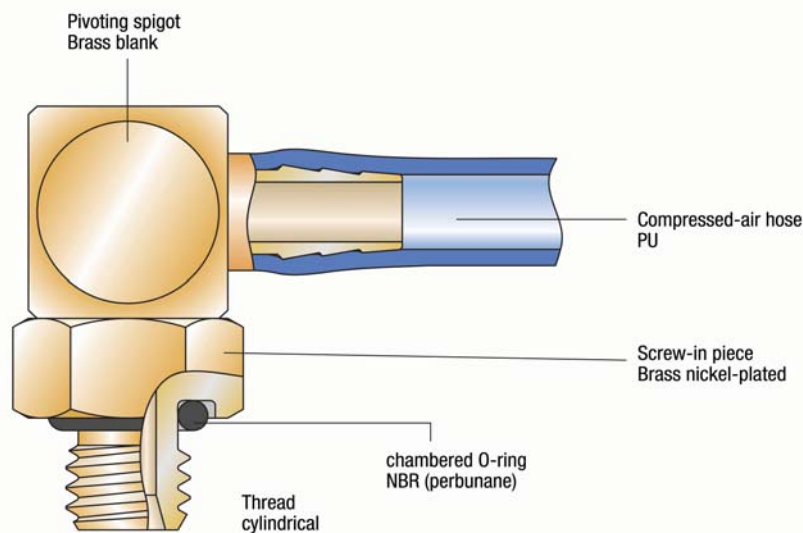
The connection system for an amazingly simple assembly. Quick, cheap assembly of compressed-air hoses from PU (polyurethane).

## Service conditions

Working pressure range: -0.95 to 6 bar  
 Allowable medium: Air  
 Temperature range: -20 to +60 °C

Data provided apply when compressed-air hoses made of PU are used.

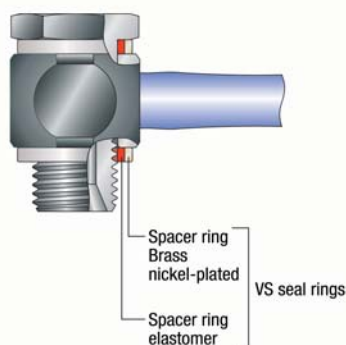
## Functional principle



### Advantages

- Quick assembly of compressed-air hoses
- No tools necessary
- Repeated assembly and disassembly possible
- Hose holds without additional hose clamp
- Disassembly of the plugged-in hose end possible without destruction
- Swivel union with VS seal rings
- Suitable for vacuum

## VS seal rings



We have developed the VS seal ring as a significant improvement as the die cut seal ring often does not meet the customers' requirements. This is a combination of a soft inner elastomeric ring and a harder outer ring of nickel-plated brass. The function of the inner soft ring is to seal, whereas the outer hard ring takes up the existing torque.

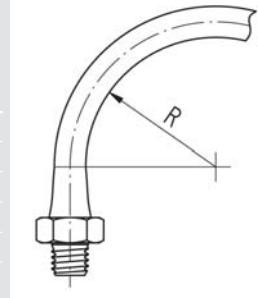
Eisele pivoting connections of this connection system are standardly supplied with VS seal rings.

### Advantages

- Seal effect largely independent of torque
- Immune to excessive tightening
- Holds individual parts together

## Hoses

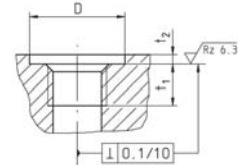
Hose dimension Outside Ø / Inside Ø	Polyurethane (PU) Temperature range -35 to +60°C	
	R min.	P max. (bar)
4/2,3	15	8
4,3/3	15	7
5/3	20	8
6/4	30	8
8/6	45	7



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

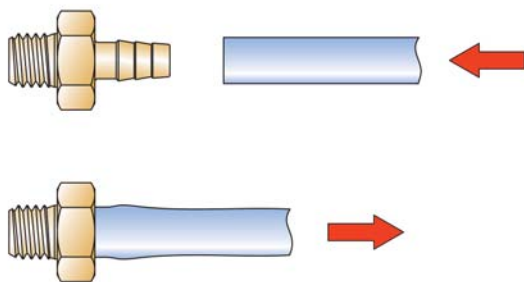
## Connection thread

Thread	Thread depth t1 min. (mm)	Counterbore <sup>1)</sup>		Torque max.		Thread standards
		ØD min. (mm)	t2 max. (mm)	PVC seal rings (Ncm)	Al, VS seal rings (Ncm)	
M3	3	6	0.5	36	-	Metric thread M: DIN 13 / ISO 965
M5	4.5	10	0.5	95	150	
G1/8	5.5	15	1	900	1100	Pipe thread G: DIN ISO 228
G1/4	7.5	19	1.5	1800	2100	



<sup>1)</sup> A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.




## Handling



Assembly: Push hose onto the spigot until it hits the limit stop

Disassembly: Pull off hose from spigot

## Screw-in spigot starting on page 161

	Straight screw-in spigot	page 161
	Elbow screw-in spigot, pivoting	page 161
	T screw-in spigot, pivoting	page 163

## Spigots starting on page 165

	Double spigot	page 165
	Elbow spigot	page 165
	T spigot	page 165
	Cross spigot	page 166
	Y spigot	page 166
	Bulkhead spigot	page 166

## Ring spigots starting on page 167

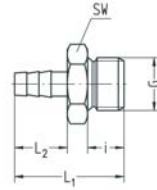
	Ring spigots, single	page 167
	Ring spigots, double	page 168

## Accessories starting on page 40

	Banjo bolt	page 40
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## Straight screw-in spigot

- Whitworth pipe thread
- Hose connection removable
- Material Al black anodized
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar

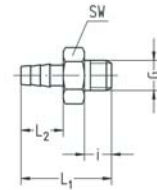


Part no.	G	for hose	SW	i	L1	L2	NW	g/piece
328-0202	<sup>1)</sup> G1/8	ID2,3 (4/2,3)	14	7	17	5,5	1,8	3
328-0203	G1/8	ID3 (5/3 - 4,3/3)	14	7	18,5	7	2,4	3
328-0204	G1/8	ID4 (6/4)	14	7	21	9,5	3,3	3
328-0206	G1/8	ID6 (8/6)	14	7	24,5	13	5,3	3
328-0403	G1/4	ID3 (5/3 - 4,3/3)	17	9	21	7	2,4	6
328-0404	G1/4	ID4 (6/4)	17	9	23,5	9,5	3,3	5
328-0406	G1/4	ID6 (8/6)	17	9	27	13	5,3	5

<sup>1</sup> Material brass

## Straight screw-in spigot

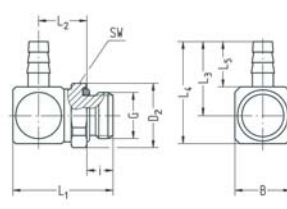
- Thread M3, M5
- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	G	for hose	SW	i	L1	L2	NW	g/piece
329-4202	M3	ID2,3 (4/2,3)	5	3,3	10,8	5,5	1,5	1
329-4203	M3	ID3 (5/3 - 4,3/3)	5	3,3	12,3	7	1,5	1
329-5002	M5	ID2,3 (4/2,3)	8	4,5	13,5	5,5	1,8	2
329-5003	M5	ID3 (5/3 - 4,3/3)	8	4,5	15	7	2,4	2
329-5004	M5	ID4 (6/4)	8	4,5	17,5	9,5	2,4	3

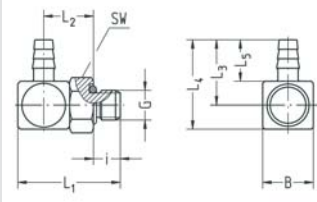
## Elbow screw-in spigot, pivoting

- Whitworth pipe thread
- Hose connection removable
- Chambered O-ring
- Sealing NBR (Perbunan)
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L4	L5	B	D2	NW	g/piece
386-0203	G1/8	ID3 (5/3 - 4,3/3)	13	5,5	20	10,5	11	15	7	8,5	14,2	2,2	10
386-0204	G1/8	ID4 (6/4)	13	5,5	21,5	11,2	14	18,5	9,5	10	14,2	3	12
386-0206	G1/8	ID6 (8/6)	14	5,5	26	13,4	21	29	13	16	15,2	5,3	29
386-0403	G1/4	ID3 (5/3 - 4,3/3)	17	7,5	22,5	11	11	15	7	8,5	18,5	2,2	15
386-0404	G1/4	ID4 (6/4)	17	7,5	24	11,7	14	18,5	9,5	10	18,5	3	17
386-0406	G1/4	ID6 (8/6)	17	7,5	28,5	13,9	21	29	13	16	18,5	5,3	32

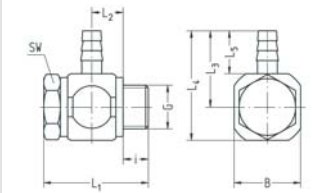
## Elbow screw-in spigot, pivoting



- Thread M3, M5
- Hose connection removable
- Chambered O-ring
- 14-41 PVC seal ring for thread M3, order separately
- Sealing NBR
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	L5	B	NW	g/piece
387-4202	M3	ID2,3 (4/2,3)	5	3,3	11,8	5,5	8,2	11	5,5	5,5	1,5	2
387-4203	M3	ID3 (5/3 - 4,3/3)	5	3,3	11,8	5,5	9,7	12,5	7	5,5	1,5	2
387-5002	M5	ID2,3 (4/2,3)	8	4,5	14,5	7,1	8,2	11	5,5	5,5	1,5	3
387-5003	M5	ID3 (5/3 - 4,3/3)	8	4,5	17,5	8,5	11	15	7	8,5	2,2	6
387-5004	M5	ID4 (6/4)	8	4,5	17,5	8,5	13,5	17,5	9,5	8,5	2,2	6

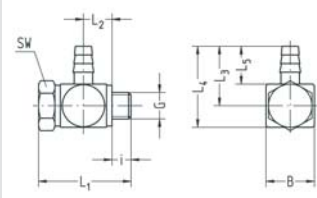
## Single swivel spigot, short model



- Whitworth pipe thread
- Hose connection removable
- VS seal rings
- Material Al black anodized
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	L5	B	NW	g/piece
334-0203K	G1/8	ID3 (5/3 - 4,3/3)	14	5,5	28,5	9,5	15	23	7	16	2,4	13
334-0204K	G1/8	ID4 (6/4)	14	5,5	28,5	9,5	17,5	25,5	9,5	16	3,3	13
334-0206K	G1/8	ID6 (8/6)	14	5,5	28,5	9,5	21	29	13	16	4,5	13
334-0403K	G1/4	ID3 (5/3 - 4,3/3)	17	7,5	30,5	9,5	17	27	7	20	2,4	19
334-0404K	G1/4	ID4 (6/4)	17	7,5	30,5	9,5	19,5	29,5	9,5	20	3,3	19
334-0406K	G1/4	ID6 (8/6)	17	7,5	30,5	9,5	23	33	13	20	5,3	19

## Single swivel spigot, short model



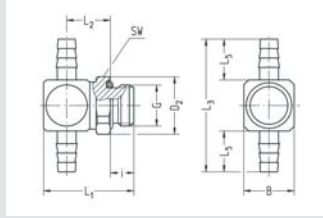
- Thread M3, M5
- Hose connection removable
- PVC seal rings
- Ring nozzle brass
- Banjo bolt galvanized steel
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L4	L5	B	NW	g/piece
335-4202K	M3	ID2,3 (4/2,3)	5	2,5	11,6	3,5	8,2	11	5,5	5,5	1,5	2
335-4203K	M3	ID3 (5/3 - 4,3/3)	5	2,5	11,6	3,5	9,7	12,5	7	5,5	1,5	2
335-5002K	M5	ID2,3 (4/2,3)	8	3,5	17	5,2	9,5	13,5	5,5	8,5	1,8	6
335-5003K	M5	ID3 (5/3 - 4,3/3)	8	3,5	17	5,2	11	15	7	8,5	2,2	6
335-5004K	M5	ID4 (6/4)	8	3,5	17	5,2	13,5	17,5	9,5	8,5	2,4	6



## T screw-in spigot, pivoting

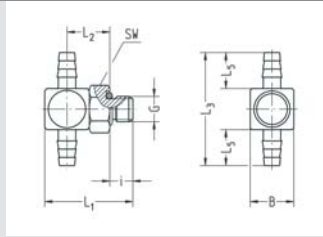
- Whitworth pipe thread
- Hose connection removable
- Chambered O-ring
- Sealing NBR (Perbunan)
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L5	B	D2	NW	g/piece
388-0203	G1/8	ID3 (5/3 - 4,3/3)	13	5,5	20	10,5	22	7	8,5	14,2	2,2	10
388-0204	G1/8	ID4 (6/4)	13	5,5	21,5	11,2	28	9,5	10	14,2	3	12
388-0206	G1/8	ID6 (8/6)	14	5,5	26	13,4	42	13	16	15,2	5,3	29
388-0403	G1/4	ID3 (5/3 - 4,3/3)	17	7,5	22,5	11	22	7	8,5	18,5	2,2	15
388-0404	G1/4	ID4 (6/4)	17	7,5	24	11,7	28	9,5	10	18,5	3	17
388-0406	G1/4	ID6 (8/6)	17	7,5	28,5	13,9	42	13	16	18,5	5,3	32

## T screw-in spigot, pivoting

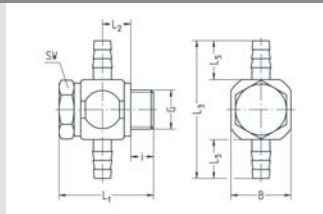
- Thread M3, M5
- Hose connection removable
- Chambered O-ring
- 14-41 PVC seal ring for thread M3, order separately
- Sealing NBR
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L5	B	NW	g/piece
389-4202	M3	ID2,3 (4/2,3)	5	3,3	11,8	5,5	16,5	5,5	5,5	1,5	2
389-4203	M3	ID3 (5/3 - 4,3/3)	5	3,3	11,8	5,5	19,5	7	5,5	1,5	2
389-5002	M5	ID2,3 (4/2,3)	8	4,5	14,5	7,1	16,5	5,5	8,5	1,5	3
389-5003	M5	ID3 (5/3 - 4,3/3)	8	4,5	17,5	8,5	22	7	8,5	2,2	6
389-5004	M5	ID4 (6/4)	8	4,5	17,5	8,5	27	9,5	8,5	2,2	6

## Double swivel spigot, short model

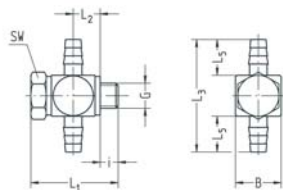
- Whitworth pipe thread
- Hose connection removable
- VS seal rings
- Material Al black anodized
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	G	for hose	SW	i	L1	L2	L3	L5	B	NW	g/piece
338-0203K	G1/8	ID3 (5/3 - 4,3/3)	14	5,5	28,5	9,5	30	7	16	2,4	13
338-0204K	G1/8	ID4 (6/4)	14	5,5	28,5	9,5	35	9,5	16	3,3	13
338-0206K	G1/8	ID6 (8/6)	14	5,5	28,5	9,5	42	13	16	4,5	14
338-0403K	G1/4	ID3 (5/3 - 4,3/3)	17	7,5	30,5	9,5	34	7	20	2,4	19
338-0404K	G1/4	ID4 (6/4)	17	7,5	30,5	9,5	39	9,5	20	3,3	19
338-0406K	G1/4	ID6 (8/6)	17	7,5	30,5	9,5	46	13	20	5,3	19



## Double swivel spigot, short model

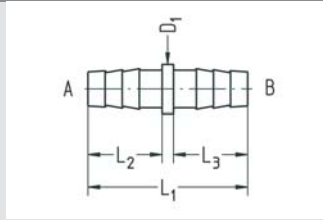


- Thread M3, M5
- Hose connection removable
- PVC seal rings
- Ring nozzle brass
- Banjo bolt galvanized steel
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	G	for hose	SW	i	L1	L2	L3	L5	B	NW	g/piece
339-4202K	M3	ID2,3 (4/2,3)	5	2,5	11,6	3,5	16,5	5,5	5,5	1,5	2
339-4203K	M3	ID3 (5/3 - 4,3/3)	5	2,5	11,6	3,5	19,5	7	5,5	1,5	2
339-5002K	M5	ID2,3 (4/2,3)	8	3,5	17	5,2	19	5,5	8,5	1,8	6
339-5003K	M5	ID3 (5/3 - 4,3/3)	8	3,5	17	5,2	22	7	8,5	2,2	6
339-5004K	M5	ID4 (6/4)	8	3,5	17	5,2	27	9,5	8,5	2,4	6

## Double spigot

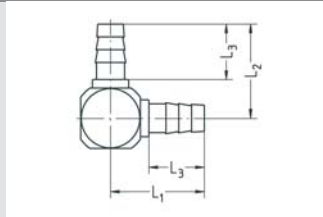
- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	for hose A	for hose B	L1	L2	L3	D1	NW	g/piece
333-0202	ID2,3 (4/2,3)	ID2,3 (4/2,3)	13	5,5	5,5	4	1,8	1
332-0203	ID2,3 (4/2,3)	ID3 (5/3 - 4,3/3)	14,5	5,5	7	5	1,8	1
333-0303	ID3 (5/3 - 4,3/3)	ID3 (5/3 - 4,3/3)	16	7	7	5	2,4	1
332-0304	ID3 (5/3 - 4,3/3)	ID4 (6/4)	18,5	7	9,5	6	2,4	1
333-0404	ID4 (6/4)	ID4 (6/4)	21	9,5	9,5	6	3,3	1
332-0406	ID4 (6/4)	ID6 (8/6)	25	10	13	8,5	3,3	2
333-0606	ID6 (8/6)	ID6 (8/6)	28	13	13	8,5	5,3	3

## Elbow spigot

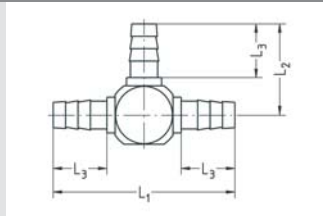
- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	for hose	L1	L2	L3	NW	g/piece
377-0200	ID2,3 (4/2,3)	9,5	9,5	5,5	1,8	2
377-0300	ID3 (5/3 - 4,3/3)	12,2	12,2	7	2,4	3
377-0400	ID4 (6/4)	16	16	9,5	3,3	6
377-0600	ID6 (8/6)	22	22	13	5,3	14

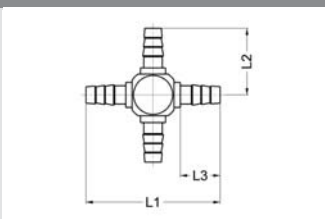
## T spigot

- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	for hose	L1	L2	L3	NW	g/piece
378-0200	ID2,3 (4/2,3)	19	9,5	5,5	1,8	2
378-0300	ID3 (5/3 - 4,3/3)	24,4	12,2	7	2,4	4
378-0400	ID4 (6/4)	32	16	9,5	3,3	7
378-0600	ID6 (8/6)	44	22	13	5,3	15

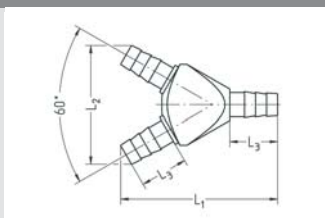
## Cross spigot



- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	for hose	L1	L2	L3	NW	g/piece
379-0200	ID2,3 (4/2,3)	19	19	5,5	1,8	2
379-0300	ID3 (5/3 - 4,3/3)	24,4	24,4	7	2,4	4
379-0400	ID4 (6/4)	32	32	9,5	3,3	8
379-0600	ID6 (8/6)	44	44	13	5,3	17

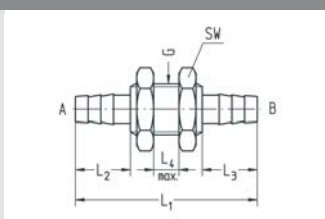
## Y spigot



- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	for hose	L1	L2	L3	NW	g/piece
375-0202	ID2,3 (4/2,3)	18,5	14	5,5	1,8	2
375-0303	ID3 (5/3 - 4,3/3)	24,5	18	7	2,4	4
375-0404	ID4 (6/4)	32	23,5	9,5	3,3	8
375-0606	ID6 (8/6)	42,5	32	13	5,3	18

## Bulkhead spigot

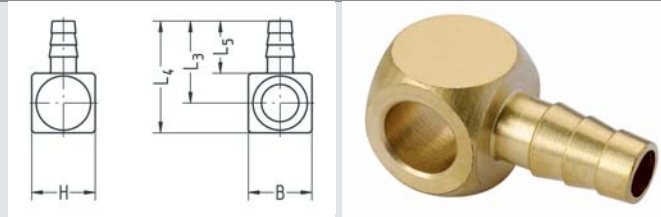


- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	for hose A	for hose B	G	SW	L1	L2	L3	L4 max.	NW	g/piece
380-0202	ID2,3 (4/2,3)	ID2,3 (4/2,3)	M5	7	23	5,5	5,5	7	1,8	2
381-0203	ID2,3 (4/2,3)	ID3 (5/3 - 4,3/3)	M7x0,5	9	27,5	5,5	7	7	1,8	6
380-0303	ID3 (5/3 - 4,3/3)	ID3 (5/3 - 4,3/3)	M7x0,5	9	29	7	7	7	2,4	6
381-0304	ID3 (5/3 - 4,3/3)	ID4 (6/4)	M10x1	14	32,5	7	9,5	7	2,4	15
380-0404	ID4 (6/4)	ID4 (6/4)	M10x1	14	35	9,5	9,5	7	3,3	15
381-0406	ID4 (6/4)	ID6 (8/6)	M12x1	17	38,5	9,5	13	7	3,3	15
380-0606	ID6 (8/6)	ID6 (8/6)	M12x1	17	42	13	13	7	5,3	15

## Single ring nozzle

- For banjo bolt with thread M3, M5
- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	for banjo bolt	for hose	H	L3	L4	L5	B	NW	g/piece
335-42023	M3	ID2,3 (4/2,3)	5,5	8,2	11	5,5	5,5	1,5	1
335-42033	M3	ID3 (5/3 - 4,3/3)	5,5	9,7	12,5	7	5,5	2,4	1
335-50023	M5	ID2,3 (4/2,3)	8,5	9,5	13,5	5,5	8,5	1,8	3
335-50033	M5	ID3 (5/3 - 4,3/3)	8,5	11	15	7	8,5	2,2	3
335-50043	M5	ID4 (6/4)	8,5	13,5	17,5	9,5	8,5	3	4
335-50023-1	M5 (for throttle)	ID2,3 (4/2,3)	8,5	9,5	13,5	5,5	8,5	1,8	3
335-50033-1	M5 (for throttle)	ID3 (5/3 - 4,3/3)	8,5	11	15	7	8,5	2,2	3
335-50043-1	M5 (for throttle)	ID4 (6/4)	8,5	13,5	17,5	9,5	8,5	3	3

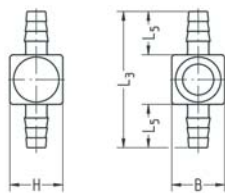
## Single ring nozzle

- For banjo bolts with Whitworth pipe thread
- Hose connection removable
- Material Al black anodized
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar



Part no.	for banjo bolt	for hose	H	L3	L4	L5	B	NW	g/piece
334-02033	G1/8	ID3 (5/3 - 4,3/3)	14,5	15	23	7	16	2,4	6
334-02043	G1/8	ID4 (6/4)	14,5	17,5	25,5	9,5	16	3,3	6
334-02063	G1/8	ID6 (8/6)	14,5	21	29	13	16	5,3	6
334-04033	G1/4	ID3 (5/3 - 4,3/3)	14,5	17	27	7	20	2,4	9
334-04043	G1/4	ID4 (6/4)	14,5	19,5	29,5	9,5	20	3,3	9
334-04063	G1/4	ID6 (8/6)	14,5	23	33	13	20	5,3	9

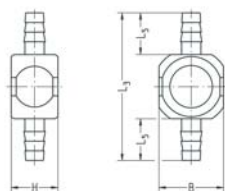
## Double ring nozzle



- For banjo bolt with thread M3, M5
- Hose connection removable
- Material brass
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	for banjo bolt	for hose	H	L3	L5	B	NW	g/piece
339-42023	M3	ID2,3 (4/2,3)	5,5	16,5	5,5	5,5	1,5	1
339-42033	M3	ID3 (5/3 - 4,3/3)	5,5	19,5	7	5,5	2,4	1
339-50023	M5	ID2,3 (4/2,3)	8,5	19	5,5	8,5	1,8	3
339-50033	M5	ID3 (5/3 - 4,3/3)	8,5	22	7	8,5	2,2	3
339-50043	M5	ID4 (6/4)	8,5	27	9,5	8,5	3	4

## Double ring nozzle

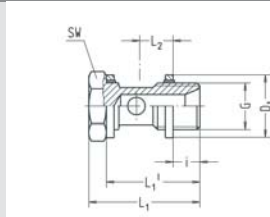


- For banjo bolts with Whitworth pipe thread
- Hose connection removable
- Material Al black anodized
- Temperature range -20 to +60 °C
- Working pressure range -0.95 to 6 bar

Part no.	for banjo bolt	for hose	H	L3	L5	B	NW	g/piece
338-02033	G1/8	ID3 (5/3 - 4,3/3)	14,5	30	7	16	2,4	6
338-02043	G1/8	ID4 (6/4)	14,5	35	9,5	16	3,3	6
338-02063	G1/8	ID6 (8/6)	14,5	42	13	16	5,3	7
338-04033	G1/4	ID3 (5/3 - 4,3/3)	14,5	34	7	20	2,4	9
338-04043	G1/4	ID4 (6/4)	14,5	39	9,5	20	3,3	9
338-04063	G1/4	ID6 (8/6)	14,5	46	13	20	5,3	9

## Banjo bolt, short model

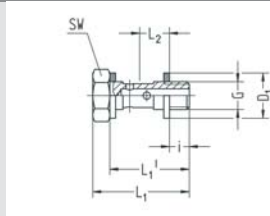
- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5



Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
534-0200K	G1/8	14	5,5	28,5	24,5	9,5	14,7	4,5	7
534-0400K	G1/4	17	7,5	30,5	26,5	9,5	17,7	6,5	10

## Banjo bolt, short model

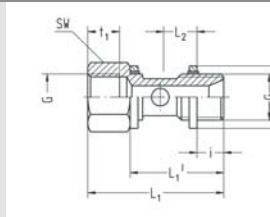
- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	fits banjo with H	SW	i	L1	L1'	L2	D1	NW	g/piece
35-4200K	M3	5,5	5	2,5	11,6	9,6	3,5	5	1,5	1
35-5000K	M5	8,5 and 9	8	3,5 (3)	17	14	5,2 (5,5)	7,5	2,4	3

## Banjo bolt with female thread, short model

- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 15 bar
- Fits banjo fitting with H = 14.5

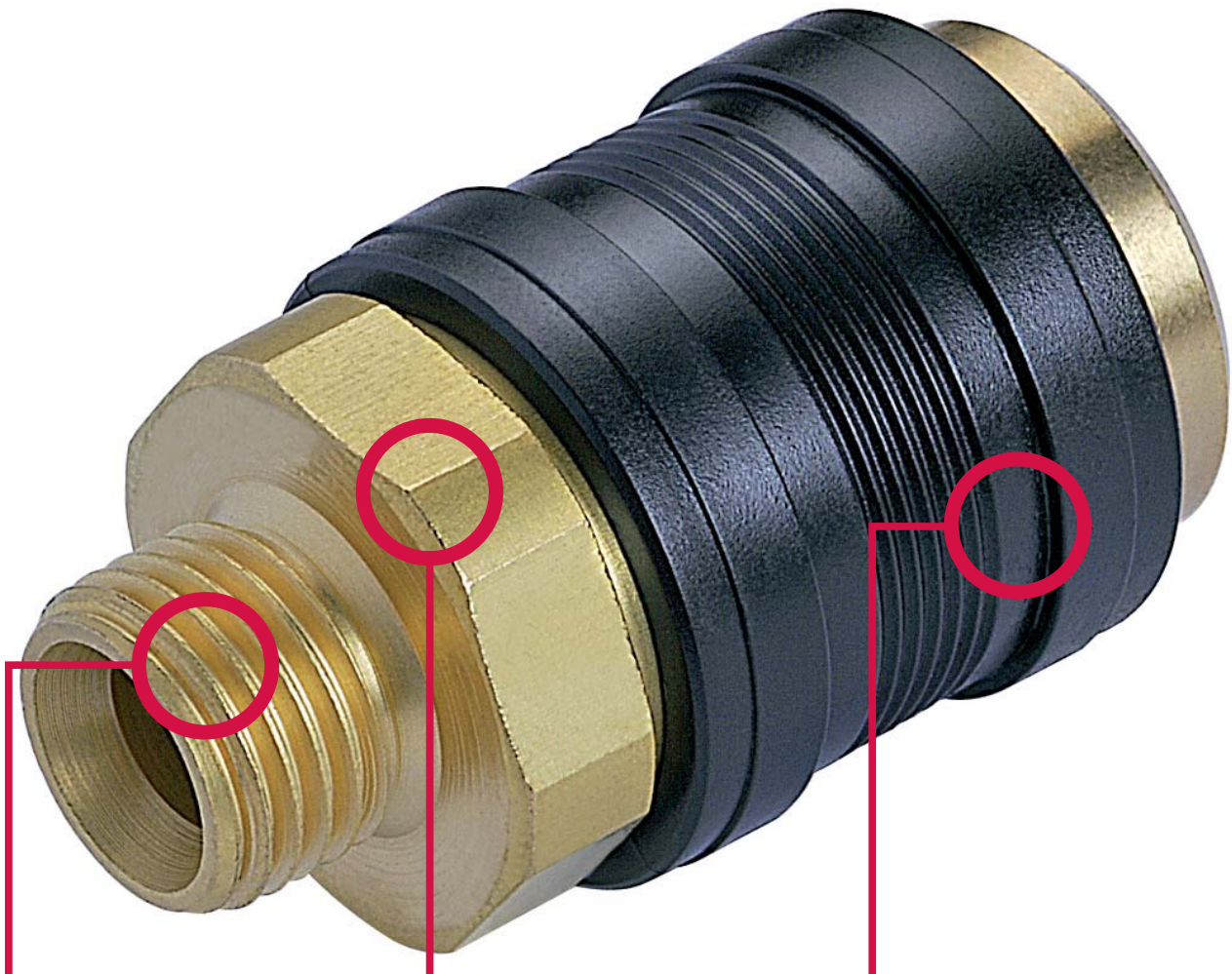


Part no.	G	SW	i	L1	L1'	L2	D1	NW	g/piece
548-0200K	G1/8	14	5,5	34	24,5	9,5	14,7	5,2	18
548-0400K	G1/4	17	7,5	38,5	26,5	9,5	17,7	7,2	29





## Quick-release couplings



### Simplified handling

- Quick connection and disconnection of compressed-air lines under pressure without pressure loss
- Coupling and decoupling possible by hand, no need for tools

### Safe coupling solutions

- Plug nipples with check valves prevent accidents through exhausting air

### High flexibility

- Small overall dimensions at large through-flow
- Plug nipple can be turned in coupling

Special designs and comprehensive accessories such as spigots and plug nipples are available too.



## Quick-release couplings

Established and essential in compressed-air technology.

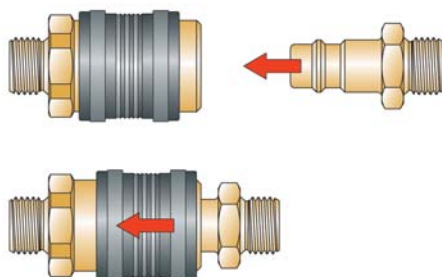
### Service conditions

- Working pressure range: 0,5 to 15 bar
- Allowable medium: Air
- Temperature range: -15 to +70 °C

### Advantages

- Quick connection and disconnection of compressed-air lines under pressure
- No loss of pressure during coupling and decoupling
- Small overall dimensions at large through-flow
- Easy handling as coupling can be managed with one hand
- Plug nipple can be turned in coupling

## Handling



Coupling: Push plug nipple up to the limit stop into the coupling

Decoupling: Hold plug nipple and push back coupling sleeve

## Plug nipple with check valve

Plug nipples with check valve prevent air leaking from plug nipples after decoupling.

### Service conditions

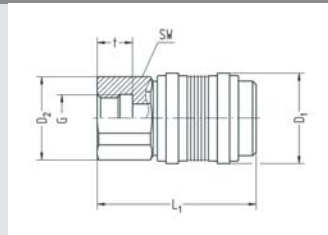
- Working pressure range: 0,5 to 15 bar
- Allowable medium: Air
- Temperature range: -15 to +70 °C

### Advantages

- Check valve is only opened when coupling
- Check valve closes when decoupling
- No risk of accident through exhausting air

## Quick-release coupling with female thread

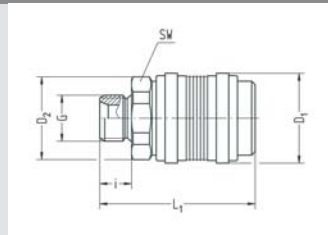
- With female thread
- Whitworth pipe thread, thread M5
- Sealing NBR (Perbunan)
- Material coupling body brass
- Material sliding sleeve see table
- Allowable medium: Air
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar



Part no.	G	SW	t	L1	D1	D2	NW	Material sliding sleeve	g/piece
91-4902	M5	9	5,5	25,5	10	10	2,5	Ms	10
91-0104	G1/8	17	10	38,5	19	18,8	5	Ms	52
91-0304	G1/4	17	10	38,5	19	18,8	5	Ms	47
91-0106	G1/8	22	8	45	25,5	23,5	7	plastic	88
91-0306	G1/4	22	10	45	25,5	23,5	7	plastic	83
91-0506	G3/8	22	10	45	25,5	23,5	7	plastic	76
91-0706	G1/2	24	12	47	25,5	25,5	7	plastic	79
91-0510	1) G3/8	27	10	62	30	29	10	Ms	210
91-0710	1) G1/2	27	12	64	30	29	10	Ms	205
91-0910	1) G3/4	30	14	66	30	32	10	Ms	211

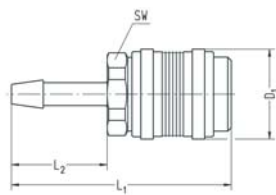
## Quick-release coupling with male thread

- With male thread
- Whitworth pipe thread, thread M5
- Sealing NBR (Perbunan)
- Material coupling body brass
- Material sliding sleeve see table
- Allowable medium: Air
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar



Part no.	G	SW	i	L1	D1	D2	NW	Material sliding sleeve	g/piece
92-5002	M5	9	4,5	25	10	10	2,5	Ms	9
92-0202	G1/8	13	6,5	27	10	14,2	2,5	Ms	13
92-0204	G1/8	17	6,5	35,5	19	18,8	5	Ms	40
92-0404	G1/4	17	9	38	19	18,8	5	Ms	44
92-0206	G1/8	22	6,5	42,5	25,5	23,5	7	plastic	64
92-0406	G1/4	22	9	44	25,5	23,5	7	plastic	65
92-0606	G3/8	22	9	44	25,5	23,5	7	plastic	69
92-0806	G1/2	24	12	47	25,5	25,5	7	plastic	84
92-0610	1) G3/8	27	9	61	30	29	10	Ms	184
92-0810	1) G1/2	27	12	64	30	29	10	Ms	193
92-1010	1) G3/4	30	14	66	30	32	10	Ms	216

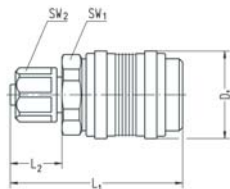
## Quick-release coupling with hose spigot



- With hose spigot
- Sealing NBR (Perbunan)
- Material coupling body brass
- Material sliding sleeve see table
- Allowable medium: Air
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar

Part no.	for hose inside Ø	SW	L1	L2	D1	NW	Material sliding sleeve	g/piece
93-0302	3	9	36,5	16	10	2,5	Ms	9
93-0402	4	9	36,5	16	10	2,5	Ms	10
93-0404	4	17	47	18	19	5	Ms	40
93-0604	6	17	47	18	19	5	Ms	41
93-0904	9	17	47	18	19	5	Ms	42
93-0406	4	22	56	21	25,5	7	plastic	62
93-0606	6	22	56	21	25,5	7	plastic	63
93-0906	9	22	56	21	25,5	7	plastic	65
93-1106	11	22	62	27	25,5	7	plastic	78
93-1306	13	22	62	27	25,5	7	plastic	81
93-0910 1)	9	27	79	27	30	10	Ms	182
93-1110 1)	11	27	79	27	30	10	Ms	186
93-1310 1)	13	27	79	27	30	10	Ms	191
93-1610 1)	16	27	79	27	30	10	Ms	191
93-1910 1)	19	27	79	27	30	10	Ms	216

## Quick-release coupling with screw joint

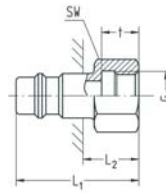


- With screw joint
- Sealing NBR (Perbunan)
- Material coupling body brass
- Material sliding sleeve see table
- Allowable medium: Air
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar

Part no.	for hose	SW1	SW2	L1	L2	D1	NW	Material sliding sleeve	g/piece
98-4302	4,3/3	9	Ø8	30,5	10	10	2,5	Ms	11
98-0302	5/3	9	Ø8	30,5	10	10	2,5	Ms	11
98-0402	6/4	9	Ø9	30,5	10	10	2,5	Ms	11
98-0404	6/4	17	13	42	13	19	5	Ms	43
98-0604	8/6	17	15	43	14	19	5	Ms	45
98-0606	8/6	22	15	49	14	25,5	7	plastic	67
98-0806	10/8	22	16	51	16	25,5	7	plastic	68

## Plug nipple with female thread

- With female thread
- Whitworth pipe thread, thread M5
- Material brass / brass nickel-plated / tempered steel and galvanized (for strongly intermittent extraction of air)
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling



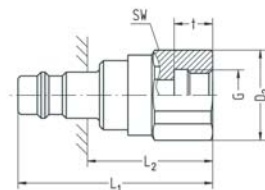
Part no.	G	for quick-release coupling NW	SW	t	L1	L2	g/piece
94-4902	M5	2,5	8	5,5	18,5	11	4
94-0104	G1/8	5	14	8	28	15	16
94-0304	G1/4	5	17	10	28	15	19
94-0106	G1/8	7	14	8	30	12	17
94-0306	G1/4	7	17	10	33	15	22
94-0506	G3/8	7	19	10	33	15	22
94-0706	G1/2	7	24	12	36	18	37
94-0510	G3/8	10	19	10	36	17	28
94-0710	G1/2	10	24	12	38	19	40
94-0910	G3/4	10	30	14	40	21	57

<sup>1)</sup> When ordering please add "NI" to Part No.

<sup>2)</sup> When ordering please add "ST" to Part No.

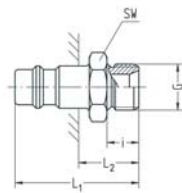
## Plug nipple with male thread check valve

- With female thread
- Whitworth pipe thread
- Sealing NBR (Perbunan)
- Material brass
- Allowable medium: Air
- Temperature range -15 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling



Part no.	G	for quick-release coupling NW	SW	t	L1	L2	D2	g/piece
194-0106	G1/8	7	22	8	50,5	32,5	23,5	82
194-0306	G1/4	7	22	10	50,5	32,5	23,5	77
194-0506	G3/8	7	22	10	50,5	32,5	23,5	71
194-0706	G1/2	7	24	12	52,5	34,5	25,5	72
194-0510	G3/8	10	27	10	63,5	44,5	29	124
194-0710	G1/2	10	27	12	65,5	46,5	29	119
194-0910	G3/4	10	30	14	67,5	48,5	32	124

## Plug nipple with male thread



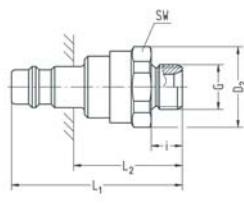
- With male thread
- Whitworth pipe thread, thread M5
- Material brass / brass nickel-plated / tempered steel and galvanized (for strongly intermittent extraction of air)
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling

Part no.	G	for quick-release coupling NW	SW	i	L1	L2	g/piece
95-5002	M5	2,5	8	4,5	18	10,5	3
95-0202	G1/8	2,5	13	6,5	20	12,5	7
95-0204	G1/8	5	14	6,5	26,5	13,5	12
95-0404	G1/4	5	17	9	29	16	19
95-0206	G1/8	7	14	6,5	33	15	22
95-0406	G1/4	7	17	9	35	17	23
95-0606	G3/8	7	19	9	35	17	29
95-0806	G1/2	7	24	12	39	21	52
95-0610	G3/8	10	19	9	37	18	30
95-0810	G1/2	10	24	12	41	22	52
95-1010	G3/4	10	30	14	44	25	87

<sup>1)</sup> When ordering please add "NI" to Part No.

<sup>2)</sup> When ordering please add "ST" to Part No.

## Plug nipple with male thread check valve

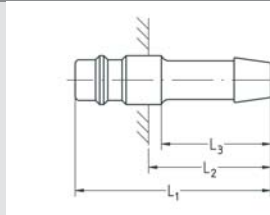


- With male thread
- Whitworth pipe thread
- Sealing NBR (Perbunan)
- Material brass
- Allowable medium: Air
- Temperature range -15 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling

Part no.	G	for quick-release coupling NW	SW	i	L1	L2	D2	g/piece
195-0206	G1/8	7	22	6,5	48	30	23,5	57
195-0406	G1/4	7	22	9	49,5	31,5	23,5	58
195-0606	G3/8	7	22	9	49,5	31,5	23,5	62
195-0806	G1/2	7	24	12	52,5	34,5	25,5	78
195-0610	G3/8	10	27	9	62,5	43,5	29	98
195-0810	G1/2	10	27	12	65,5	46,5	29	106
195-1010	G3/4	10	30	14	67,5	48,5	32	132

## Plug spigot

- Material brass / brass nickel-plated / tempered steel and galvanized (for strongly intermittent extraction of air)
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling



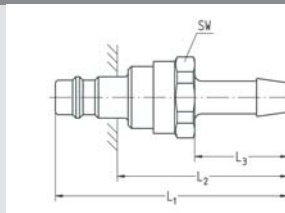
Part no.	for hose inside Ø	for quick-release coupling NW	L1	L2	L3	g/piece
96-0302	3	2,5	27,5	21	16	2
96-0402	4	2,5	27,5	21	16	3
96-0404	4	5	34	21	18	7
96-0604	6	5	34	21	18	8
96-0406	4	7	48	30	27	14
96-0606	6	7	48	30	27	14
96-0906	9	7	48	30	27	16
96-1106	11	7	49	31	27	26
96-1306	13	7	49	31	27	24
96-0910	9	10	50	31	27	22
96-1110	11	10	50	31	27	24
96-1310	13	10	53	34	27	32
96-1610	16	10	53	34	27	37
96-1910	19	10	53	34	27	66

<sup>1)</sup> When ordering please add "NI" to Part No.

<sup>2)</sup> When ordering please add "ST" to Part No.

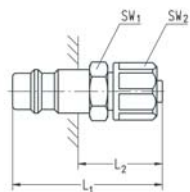
## Plug spigot with check valve

- Sealing NBR (Perbunan)
- Material brass
- Allowable medium: Air
- Temperature range -15 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling



Part no.	for hose inside Ø	for quick-release coupling NW	SW	L1	L2	L3	g/piece
196-0406	4	7	22	61,5	43,5	21	56
196-0606	6	7	22	61,5	43,5	21	58
196-0906	9	7	22	61,5	43,5	21	58
196-1306	13	7	22	67,5	49,5	27	74
196-0910	9	10	27	80,5	61,5	27	99
196-1110	11	10	27	80,5	61,5	27	102
196-1310	13	10	27	80,5	61,5	27	105
196-1610	16	10	27	80,5	61,5	27	106
196-1910	19	10	27	80,5	61,5	27	131

## Plug nipple with screw joint

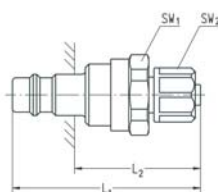


- With screw joint
- Material brass / brass nickel-plated
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling

Part no.	for hose	for quick-release coupling NW	SW1	SW2	L1	L2	g/piece
97-4302	4,3/3	2,5	7	ø8	23,5	16	5
97-0302	5/3	2,5	7	ø8	23,5	16	5
97-0402	6/4	2,5	8	ø9	23,5	16	6
97-0404	6/4	5	12	13	33	20	12
97-0604	8/6	5	12	15	34	21	15
97-0406	6/4	7	14	13	39	21	18
97-0606	8/6	7	14	15	40	22	20
97-0806	10/8	7	14	16	42	24	22

<sup>1)</sup> When ordering please add "NI" to Part No.

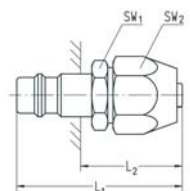
## Plug nipple with screw joint check valve



- With screw joint
- Sealing NBR (Perbunan)
- Material brass
- Allowable medium: Air
- Temperature range -15 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling

Part no.	for hose	for quick-release coupling NW	SW1	SW2	L1	L2	g/piece
197-0606	8/6	7	22	15	54,5	36,5	60
197-0806	10/8	7	22	16	56,5	38,5	61

## Plug nipple with screw joint for PVC fabric tube

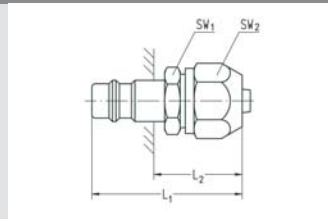


- With screw joints for compressed-air hose made of PVC with fabric lining
- Material brass
- Union nut Al black anodized / plastic
- Temperature range -15 to +70°C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling

Part no.	for hose	for quick-release coupling NW	SW1	SW2	L1	L2	g/piece
99-0406	10/4	7	17	17	44,5	26,5	30
99-0606	12/6	7	17	19	46	28	35
99-0806	14/8	7	22	22	49,5	31,5	56
99-0906	15/9	7	22	24	50	32	63
99-1006	16/10	7	22	24	50	32	63

## Plug nipple with screw joint for NBR compressed-air hose

- With screw joints for compressed-air hose made of NBR (Perbunan) with metal braiding
- Material brass
- Union nut Al black anodized / plastic
- Temperature range -15 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits quick-release coupling

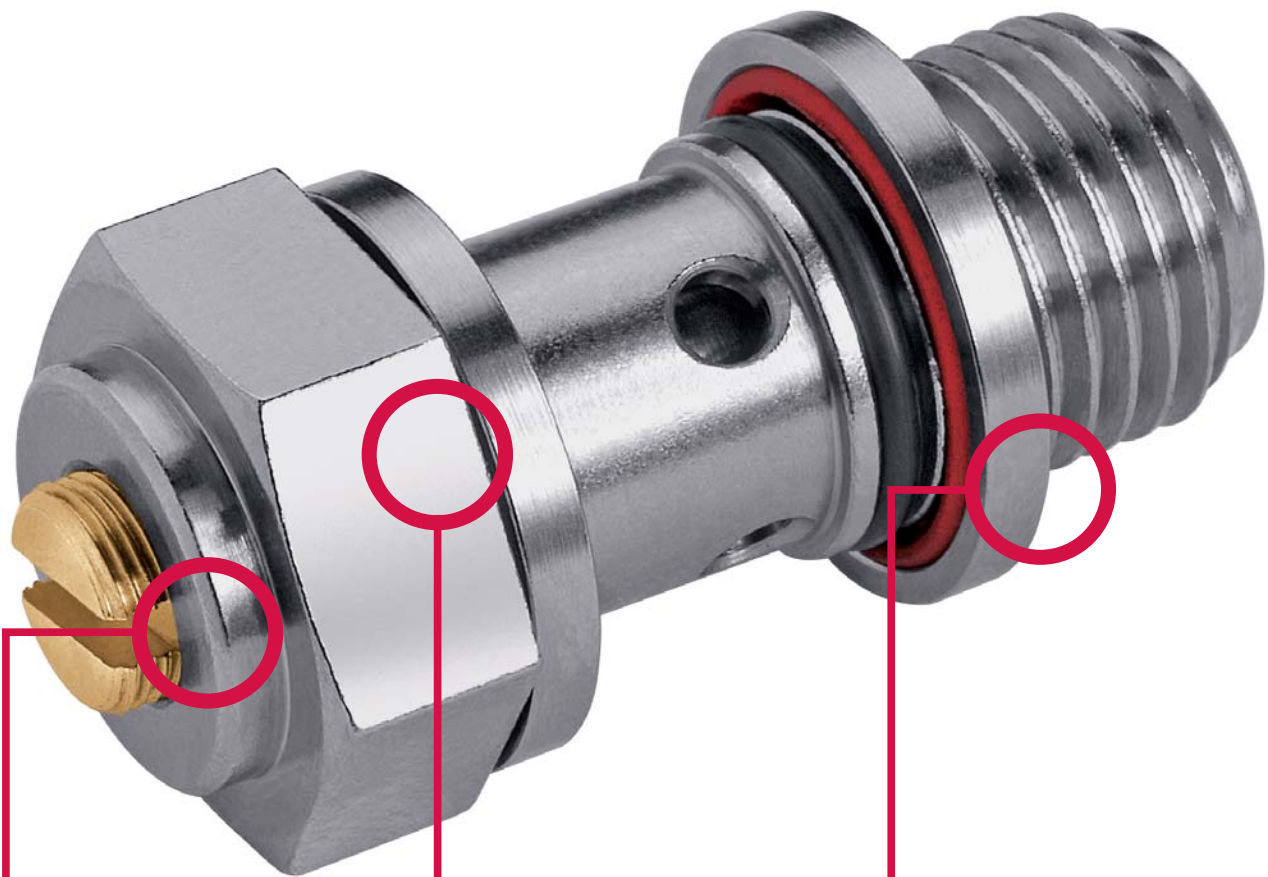


Part no.	for hose	for quick-release coupling NW	SW1	SW2	L1	L2	g/piece
103-0606	9/6	7	17	19	46	28	35
103-0906	12/9	7	22	22	49,5	31,5	55





## Functional screw joints



### Banjo bolts in all-metal design

- Banjo bolt with various throttle functions
- Various designs available

### Optimum flexibility

- Fine setting options, fine adjustments
- Available with adjustment slot, jam nut or knurl

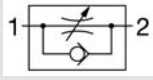
### The EISELE modular system

- All banjo bolts can be combined with all EISELE connection components

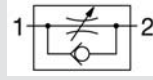
Available in different designs, also for space-saving installation.

## Overview

### Functions:



Banjo bolt with throttlecheck valve  
(Exhaust-side throttle)

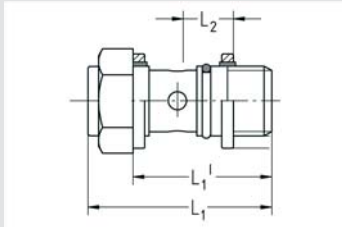


Banjo bolt with throttlecheck valve (Inlet-side throttle)

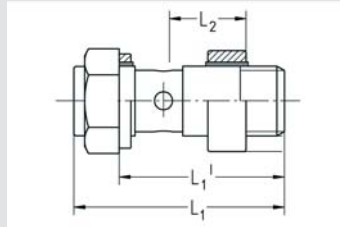


Banjo bolts with throttle function

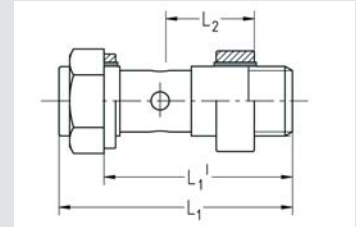
### Designs:



short design



long design



long design for high banjos

### Adjusting screws:



with slot



with jam nut



with knurl

## Banjo bolts with throttle function

starting on page 184



Banjo bolts with exhaust-side throttle

page 184



Banjo bolts with inlet-side throttle

page 187



Banjo bolts (without check valve)

page 190

## Swivel union with throttle function

starting on page 193



Functional screw joints for Series 10

page 193

Functional screw joints for Series 14

page 198

Functional screw joints for Series 15

page 203

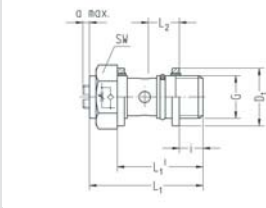
Funktionsverschraubungen zu Programm 17

page 207

Functional screw joints for Series 18

page 208

## Banjo bolt with throttlecheck valve

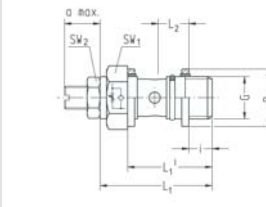


- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
234-0200K	G1/8	200	150	14	6	32,5	25	9,5	2	14,7	3	20
234-0400K	G1/4	400	300	17	8	35,5	27	9,5	2	17,7	4,5	34

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

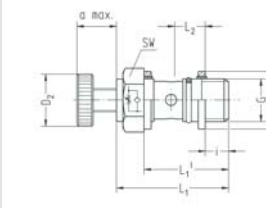


- Short design (exhaust-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L1'	L2	a max.	D1	NW	g/piece
234-0200KV1	G1/8	200	150	14	9	6	32,5	25	9,5	9,5	14,7	3	22
234-0400KV1	G1/4	400	300	17	11	8	35,5	27	9,5	11	17,7	4,5	39

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve



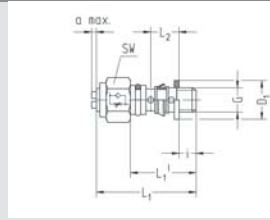
- Short design (exhaust-side throttle)
- Adjusting screw with Knurl
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
234-0200KV2	G1/8	200	150	14	6	32,5	25	9,5	10,5	14,7	13	3	25
234-0400KV2	G1/4	400	300	17	8	35,5	27	9,5	12	17,7	16	4,5	44

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

- Short design (exhaust-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

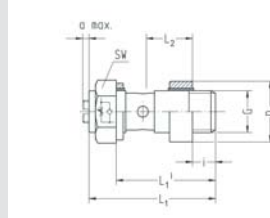


Part no.	G	fits banjo with H	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
235-5000K	M5	8,5 - 9	40	30	8	3,5	20	13	5,2	1	7,5	1,2	4
235-5010K	M5	10 - 11	40	30	8	4	22	15	6	1	7,5	1,2	4

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

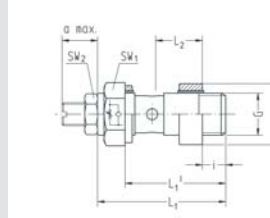


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
234-0200	G1/8	200	150	14	6	37,5	30	14,5	2	14,9	3	25
234-0400	G1/4	400	300	17	8	40,5	32	14,5	2	18,9	4,5	44
235-5400	M10x1	200	150	14	6	37,5	30	14,5	2	14,9	3	25
235-5600	M12x1,5	200	150	17	8	37,5	32	14,5	2	17,9	3	37
235-5800	M14x1,5	400	300	17	8	40,5	32	14,5	2	19,9	4,5	48

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

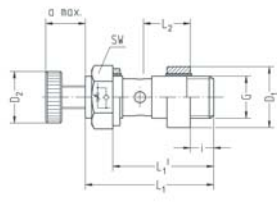
- Long design (exhaust-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5



Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L1'	L2	a max.	D1	NW	g/piece
234-0200V1	G1/8	200	150	14	9	6	37,5	30	14,5	9,5	14,9	3	27
234-0400V1	G1/4	400	300	17	11	8	40,5	32	14,5	11	18,9	4,5	48
235-5400V1	M10x1	200	150	14	9	6	37,5	30	14,5	9,5	14,9	3	27
235-5600V1	M12x1,5	200	150	17	9	8	37,5	32	14,5	9,5	17,9	3	39
235-5800V1	M14x1,5	400	300	17	11	8	40,5	32	14,5	11	19,9	4,5	52

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

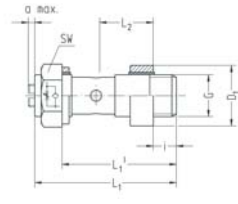


- Long design (exhaust-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
234-0200V2	G1/8	200	150	14	6	37,5	30	14,5	10,5	14,9	13	3	30
234-0400V2	G1/4	400	300	17	8	40,5	32	14,5	12	18,9	16	4,5	53
235-5400V2	M10x1	200	150	14	6	37,5	30	14,5	10,5	14,9	13	3	30
235-5600V2	M12x1,5	200	150	17	8	37,5	32	14,5	10,5	17,9	13	3	42
235-5800V2	M14x1,5	400	300	17	8	40,5	32	14,5	12	19,9	16	4,5	57

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttle check valve



- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits high banjo fittings with height H

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	H	a max.	D1	NW	g/piece
234-0215	G1/8	200	150	14	5,5	37,5	30	14,7	15 (15,5)	2	14,9	3	25
234-0419	G1/4	400	300	17	8	45	36,5	16,7	19	2	18,9	4,5	46
234-0422	G1/4	400	300	17	8	48	39,5	18,2	22	2	18,9	4,5	49

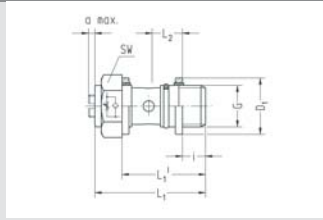
**Part no.**      **G**      **fits banjo**

234-0215	G1/8	134-02013, 138-02013, 174-02041, 182-02041
234-0419	G1/4	34-04091, 134-04033, 138-04033, 174-04061, 182-04061
234-0422	G1/4	174-04081, 174-04091, 182-04091

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

- Short design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

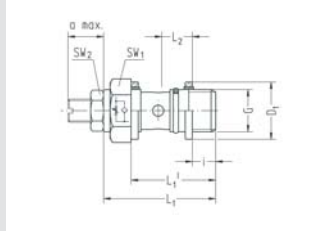


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
236-0200K	G1/8	150	200	14	6	32,5	25	9,5	2	14,7	3	20
236-0400K	G1/4	300	400	17	8	35,5	27	9,5	2	17,7	4,5	35

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve

- Short design (inlet-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

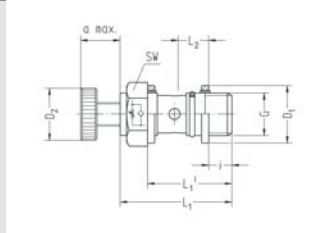


Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L1'	L2	a max.	D1	NW	g/piece
236-0200KV1	G1/8	150	200	14	9	6	32,5	25	9,5	9,5	14,7	3	23
236-0400KV1	G1/4	300	400	17	11	8	35,5	27	9,5	11	17,7	4,5	35

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve

- Short design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

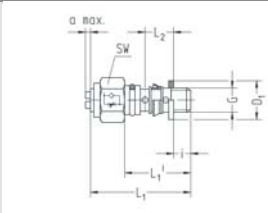


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
236-0200KV2	G1/8	150	200	14	6	32,5	25	9,5	10,5	14,7	13	3	25
236-0400KV2	G1/4	300	400	17	8	35,5	27	9,5	12	17,7	16	4,5	44

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed



## Banjo bolt with throttlecheck valve

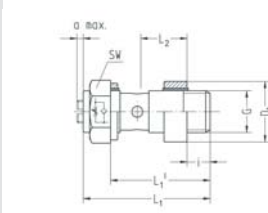


- Short design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	fits banjo with H	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
237-5000K	M5	8,5 - 9	30	40	8	3,5	20	13	5,2	1	7,5	1,2	4
237-5010K	M5	10 - 11	30	40	8	4	22	15	6	1	7,5	1,2	4

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve

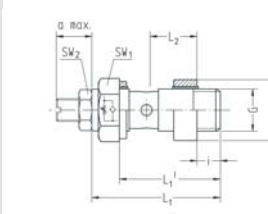


- Long design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
236-0200	G1/8	150	200	14	6	37,5	30	14,5	2	14,9	3	25
236-0400	G1/4	300	400	17	8	40,5	32	14,5	2	18,9	4,5	44
237-5400	M10x1	150	200	14	6	37,5	30	14,5	2	14,9	3	25
237-5600	M12x1,5	150	200	17	8	37,5	32	14,5	2	17,9	3	37
237-5800	M14x1,5	300	400	17	8	40,5	32	14,5	2	19,9	4,5	48

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve



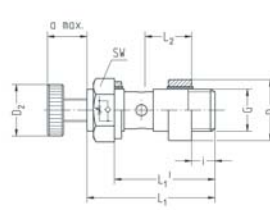
- Long design (inlet-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L1'	L2	a max.	D1	NW	g/piece
236-0200V1	G1/8	150	200	14	9	6	37,5	30	14,5	9,5	14,9	3	27
236-0400V1	G1/4	300	400	17	11	8	40,5	32	14,5	11	18,9	4,5	49
237-5400V1	M10x1	150	200	14	9	6	37,5	30	14,5	9,5	14,9	3	27
237-5600V1	M12x1,5	150	200	17	9	8	37,5	32	14,5	9,5	17,9	3	39
237-5800V1	M14x1,5	300	400	17	11	8	40,5	32	14,5	11	19,9	4,5	53

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve

- Long design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

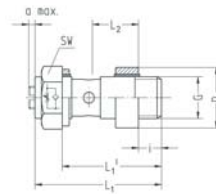


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
236-0200V2	G1/8	150	200	14	6	37,5	30	14,5	10,5	14,9	13	3	30
236-0400V2	G1/4	300	400	17	8	40,5	32	14,5	12	18,9	16	4,5	54
237-5400V2	M10x1	150	200	14	6	37,5	30	14,5	10,5	14,9	13	3	30
237-5600V2	M12x1,5	150	200	17	8	37,5	32	14,5	10,5	17,9	13	3	42
237-5800V2	M14x1,5	300	400	17	8	40,5	32	14,5	12	19,9	16	4,5	58

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttle check valve

- Long design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits high banjo fittings with height H



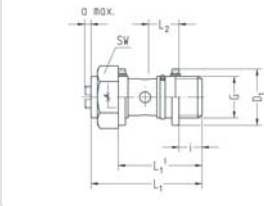
Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	H	a max.	D1	NW	g/piece
236-0215	G1/8	150	200	14	5,5	37,5	30	14,7	15 (15,5)	2	14,9	3	25
236-0419	G1/4	300	400	17	8	45	36,5	16,7	19	2	18,9	4,5	46
236-0422	G1/4	300	400	17	8	48	39,5	18,2	22	2	18,9	4,5	49

### Part no. G fits banjo

236-0215	G1/8	134-02013, 138-02013, 174-02041, 182-02041
236-0419	G1/4	34-04091, 134-04033, 138-04033, 174-04061, 182-04061
236-0422	G1/4	174-04081, 174-04091, 182-04091

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttle valve



- Short design (without check valve)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
240-0200K	G1/8	200	200	14	6	32,5	25	9,5	2	14,7	3	19
240-0400K	G1/4	400	400	17	8	35,5	27	9,5	2	17,7	4,5	36

- Nominal flow rate measured when throttle is open at 6 bar and 1 bar pressure drop between inlet and exhaust

## Banjo bolt with throttle valve

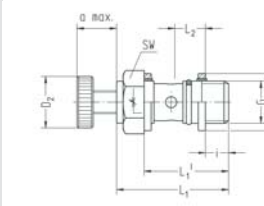


- Short design (without check valve)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L1'	L2	a max.	D1	NW	g/piece
240-0200KV1	G1/8	200	200	14	9	6	32,5	25	9,5	9,5	14,7	3	21
240-0400KV1	G1/4	400	400	17	11	8	35,5	27	9,5	11	17,7	4,5	41

- Nominal flow rate measured when throttle is open at 6 bar and 1 bar pressure drop between inlet and exhaust

## Banjo bolt with throttle valve



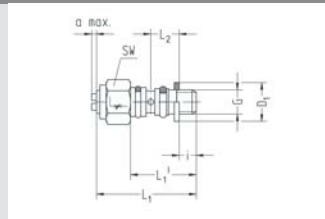
- Short design (without check valve)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
240-0200KV2	G1/8	200	200	14	6	32,5	25	9,5	10,5	14,7	13	3	30
240-0400KV2	G1/4	400	400	17	8	35,5	27	9,5	12	17,7	16	4,5	53

- Nominal flow rate measured when throttle is open at 6 bar and 1 bar pressure drop between inlet and exhaust

## Banjo bolt with throttle valve

- Short design (without check valve)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

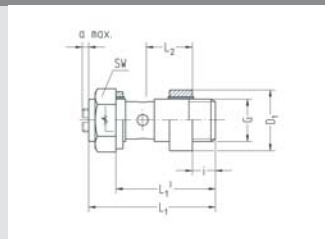


Part no.	G	fits banjo with H	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
241-5000K	M5	8,5 - 9	30	40	8	3,5	20	13	5,2	1	7,5	1,2	4
241-5010K	M5	10 - 11	30	40	8	4	22	15	6	1	7,5	1,2	4

- Nominal flow rate measured when throttle is open at 6 bar and 1 bar pressure drop between inlet and exhaust

## Banjo bolt with throttle valve

- Long design (without check valve)
- Slotted adjusting screw
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

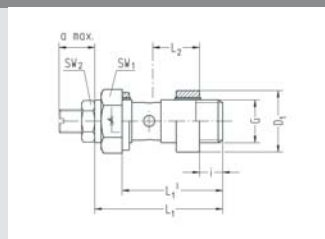


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
240-0200	G1/8	200	200	14	6	37,5	30	14,5	2	14,9	3	25
240-0400	G1/4	400	400	17	8	40,5	32	14,5	2	18,9	4,5	43
241-5400	M10x1	200	200	14	6	37,5	30	14,5	2	14,9	3	25
241-5600	M12x1,5	200	200	17	8	37,5	32	14,5	2	17,9	3	37
241-5800	M14x1,5	400	400	17	8	40,5	32	14,5	2	19,9	4,5	48

- Nominal flow rate measured when throttle is open at 6 bar and 1 bar pressure drop between inlet and exhaust

## Banjo bolt with throttle valve

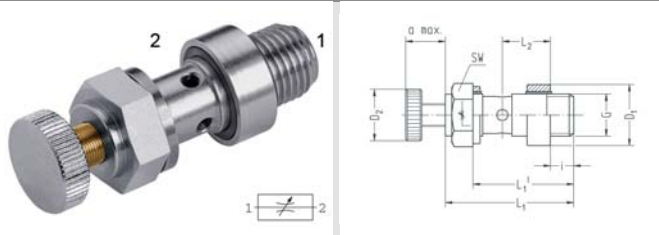
- Long design (without check valve)
- Adjusting screw with jam nut
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5



Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L1'	L2	a max.	D1	NW	g/piece
240-0200V1	G1/8	200	200	14	9	6	37,5	30	14,5	9,5	14,9	3	27
240-0400V1	G1/4	400	400	17	11	8	40,5	32	14,5	11	18,9	4,5	48
241-5400V1	M10x1	200	200	14	9	6	37,5	30	14,5	9,5	14,9	3	27
241-5600V1	M12x1,5	200	200	17	9	8	37,5	32	14,5	9,5	17,9	3	39
241-5800V1	M14x1,5	400	400	17	11	8	40,5	32	14,5	11	19,9	4,5	53

- Nominal flow rate measured when throttle is open at 6 bar and 1 bar pressure drop between inlet and exhaust

## Banjo bolt with throttle valve

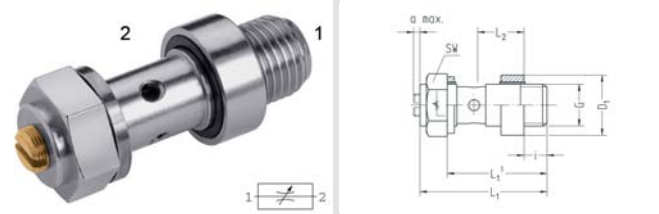


- Long design (without check valve)
- Adjusting screw with knurl
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits banjo with H= 14.5 and KST 16.5

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
240-0200V2	G1/8	200	200	14	6	37,5	30	14,5	10,5	14,9	13	3	30
240-0400V2	G1/4	400	400	17	8	40,5	32	14,5	12	18,9	16	4,5	53
241-5400V2	M10x1	200	200	14	6	37,5	30	14,5	10,5	14,9	13	3	30
241-5600V2	M12x1,5	200	200	17	8	37,5	32	14,5	10,5	17,9	13	3	42
241-5800V2	M14x1,5	400	400	17	8	40,5	32	14,5	12	19,9	16	4,5	58

- Nominal flow rate measured when throttle is open at 6 bar and 1 bar pressure drop between inlet and exhaust

## Banjo bolt with throttle valve for high banjos



- Long design (without check valve)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar
- Fits high banjo fittings with height H

Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	H	a max.	D1	NW	g/piece
240-0215	G1/8	200	200	14	5,5	37,5	30	14,7	15 (15,5)	2	14,9	3	25
240-0419	G1/4	400	400	17	8	45	36,5	16,7	19	2	18,9	4,5	46
240-0422	G1/4	400	400	17	8	48	39,5	18,2	22	2	18,9	4,5	47

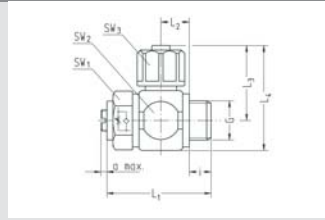
### Part no. G fits banjo

240-0215	G1/8	134-02013, 138-02013, 174-02041, 182-02041
240-0419	G1/4	34-04091, 134-04033, 138-04033, 174-04061, 182-04061
240-0422	G1/4	174-04081, 174-04091, 182-04091

- Nominal flow rate measured when throttle is open at 6 bar and 1 bar pressure drop between inlet and exhaust

## Single swivel connector with throttle check valve

- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -10 to +70 °C
- Working pressure range: 0.5 to 10 bar

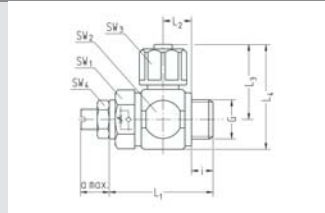


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	i	L1	L2	L3	L4	a max.	NW	g/piece
234-0204K34	G1/8	6 / 4	200	150	14	16	13	6	32,5	9,5	21,5	29,5	2	3	29
234-0206K34	G1/8	8 / 6	200	150	14	16	15	6	32,5	9,5	22,5	30,5	2	3	29
234-0404K34	G1/4	6 / 4	400	300	17	20	13	8	35,5	9,5	23	33	2	3,1	45
234-0406K34	G1/4	8 / 6	400	300	17	20	15	8	35,5	9,5	24	34	2	4,5	46

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

- Short design (exhaust-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -10 to +70 °C
- Working pressure range: 0.5 to 10 bar

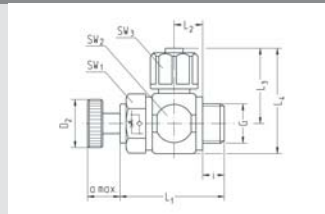


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	SW4	i	L1	L2	L3	L4	a max.	NW	g/piece
234-0204K341	G1/8	6 / 4	200	150	14	16	13	9	6	32,5	9,5	21,5	29,5	9,5	3	31
234-0206K341	G1/8	8 / 6	200	150	14	16	15	9	6	32,5	9,5	22,5	30,5	9,5	3	31
234-0404K341	G1/4	6 / 4	400	300	17	20	13	11	8	35,5	9,5	23	33	11	3,1	50
234-0406K341	G1/4	8 / 6	400	300	17	20	15	11	8	35,5	9,5	24	34	11	4,5	50

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

- Short design (exhaust-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -10 to +70 °C
- Working pressure range: 0.5 to 10 bar

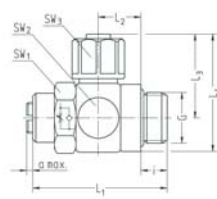


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	i	L1	L2	L3	L4	D2	a max.	NW	g/piece
234-0204K342	G1/8	6 / 4	200	150	14	16	13	6	32,5	9,5	21,5	29,5	13	10,5	3	34
234-0206K342	G1/8	8 / 6	200	150	14	16	15	6	32,5	9,5	22,5	30,5	13	10,5	3	34
234-0404K342	G1/4	6 / 4	400	300	17	20	13	8	35,5	9,5	23	33	16	12	3,1	55
234-0406K342	G1/4	8 / 6	400	300	17	20	15	8	35,5	9,5	24	34	16	12	4,5	55

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed



## Single swivel connector with throttle check valve



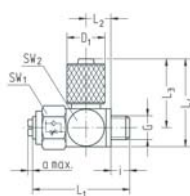
- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Material: brass nickel-plated, Al black anodized, KST

- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	i	L1	L2	L3	L4	a max.	NW	g/piece
234-060634	G3/8	8 / 6	900	600	20	22	15	8,5	45	14,3	25,5	36,5	2	4,8	76
234-060834	G3/8	10 / 8	900	600	20	22	16	8,5	45	14,3	27,5	38,5	2	6,5	77
234-080634	G1/2	8 / 6	1500	1100	24	29	15	10	54	17,3	28	42,5	2,5	4,8	114
234-080834	G1/2	10 / 8	1500	1100	24	29	16	10	54	17,3	30	44,5	2,5	6,6	115

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve



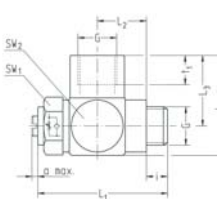
- Short design (exhaust-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material: brass nickel-plated, brass black

- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
235-5003K35	M5	5 / 3	40	30	8	8,5	3,5	20	5,2	14	18	8	1	1,2	9
235-5004K35	M5	6 / 4	40	30	8	8,5	3,5	20	5,2	14	18	9	1	1,2	10
235-5043K35	M5	4,3 / 3	40	30	8	8,5	3,5	20	5,2	14	18	8	1	1,2	9

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve



- Plane design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized

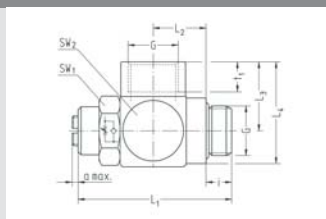
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	t1	a max.	NW	g/piece
234-0201134	G1/8	200	150	14	16	5,8	37,5	14,7	14,5	22	7	2	3	32
234-0403134	G1/4	400	300	17	20	8	45	16,7	21	30,5	10	2	4,5	59

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Material: brass nickel-plated, Al black anodized
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

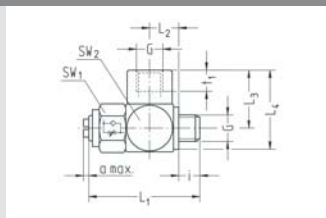


Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	t1	a max.	NW	g/piece
234-0605134	G3/8	900	600	20	24	8,5	48,5	18	23	35	10	2	6,5	90
234-0807134	G1/2	1500	1100	24	30	10	57,5	24	27,5	42,5	12	2,5	9	164

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

- Short design (exhaust-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material: brass nickel-plated, brass black
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

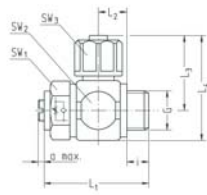


Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	t1	a max.	NW	g/piece
235-5049K135	M5	40	30	8	9	3	20	5,5	10	14,5	4,5	1	1,2	6

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed



## Single swivel connector with throttle check valve

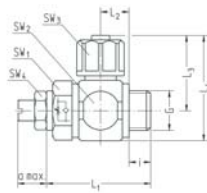


- Short design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	i	L1	L2	L3	L4	a max.	NW	g/piece
236-0204K34	G1/8	6 / 4	150	200	14	16	13	6	32,5	9,5	21,5	29,5	2	3	29
236-0206K34	G1/8	8 / 6	150	200	14	16	15	6	32,5	9,5	22,5	30,5	2	3	29
236-0404K34	G1/4	6 / 4	300	400	17	20	13	8	35,5	9,5	23	33	2	3,1	45
236-0406K34	G1/4	8 / 6	300	400	17	20	15	8	35,5	9,5	24	34	2	4,5	46

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

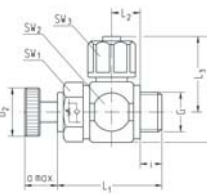


- Short design (inlet-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	SW4	i	L1	L2	L3	L4	a max.	NW	g/piece
236-0204K341	G1/8	6 / 4	150	200	14	16	13	9	6	32,5	9,5	21,5	29,5	9,5	3	31
236-0206K341	G1/8	8 / 6	150	200	14	16	15	9	6	32,5	9,5	22,5	30,5	9,5	3	32
236-0404K341	G1/4	6 / 4	300	400	17	20	13	11	8	35,5	9,5	23	33	11	3,1	50
236-0406K341	G1/4	8 / 6	300	400	17	20	15	11	8	35,5	9,5	24	34	11	4,5	51

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve



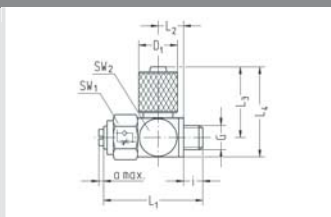
- Short design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	i	L1	L2	L3	L4	D2	a max.	NW	g/piece
236-0204K342	G1/8	6 / 4	150	200	14	16	13	6	32,5	9,5	21,5	29,5	13	10,5	3	34
236-0206K342	G1/8	8 / 6	150	200	14	16	15	6	32,5	9,5	22,5	30,5	13	10,5	3	34
236-0404K342	G1/4	6 / 4	300	400	17	20	13	8	35,5	9,5	23	33	16	12	3,1	55
236-0406K342	G1/4	8 / 6	300	400	17	20	15	8	35,5	9,5	24	34	16	12	4,5	56

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

- Short design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal rings
- Material: brass nickel-plated, brass black
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -10 to +70 °C
- Working pressure range: 0.5 to 10 bar

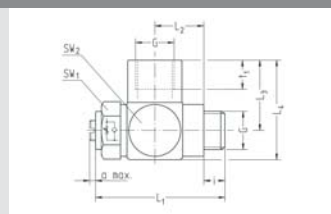


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
237-5003K35	M5	5 / 3	30	40	8	8,5	3,5	20	5,2	14	18	8	1	1,2	9
237-5004K35	M5	6 / 4	30	40	8	8,5	3,5	20	5,2	14	18	9	1	1,2	10
237-5043K35	M5	4,3 / 3	30	40	8	8,5	3,5	20	5,2	14	18	8	1	1,2	9

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust
- NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

- Long design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -10 to +70 °C
- Working pressure range: 0.5 to 10 bar

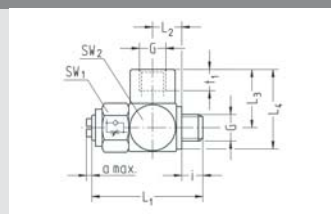


Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	t1	a max.	NW	g/piece
236-0201134	G1/8	150	200	14	16	5,8	37,5	14,7	14,5	22	7	2	3	32
236-0403134	G1/4	300	400	17	20	8	45	16,7	21	30,5	10	2	4,5	59

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust
- NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

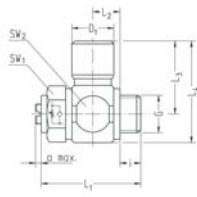
- Long design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material: brass nickel-plated, brass black
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -10 to +70 °C
- Working pressure range: 0.5 to 10 bar



Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	t1	a max.	NW	g/piece
237-5049K135	M5	30	40	8	9	3	20	5,5	10	14,5	4,5	1	1,2	6

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust
- NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve



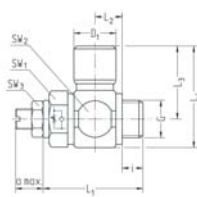
- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)

- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
234-0202K634	G1/8	4 / 2	200	150	14	16	6	32	9,5	18,2	26,2	8,5	2	2	40
234-0204K634	G1/8	6 / 4	200	150	14	16	6	32	9,5	21	29	11,5	2	3	43
234-0206K634	G1/8	8 / 6	200	150	14	16	6	32	9,5	24	32	14,5	2	3	47
234-0208K634	G1/8	10 / 8	200	150	14	16	6	32	9,5	27	35	16,5	2	3	49
234-0402K634	G1/4	4 / 2	400	300	17	20	8	35,5	9,5	20	30	8,5	2	2	62
234-0404K634	G1/4	6 / 4	400	300	17	20	8	35,5	9,5	23	33	11,5	2	4	64
234-0406K634	G1/4	8 / 6	400	300	17	20	8	35,5	9,5	26	36	14,5	2	4,5	68
234-0408K634	G1/4	10 / 8	400	300	17	20	8	35,5	9,5	28,5	38,5	16,5	2	4,5	70

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve



- Short design (exhaust-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)

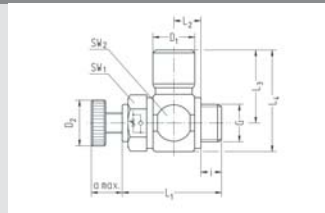
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
234-0202K6341	G1/8	4 / 2	200	150	14	16	6	32	9,5	18,2	26,2	8,5	9,5	2	43
234-0204K6341	G1/8	6 / 4	200	150	14	16	6	32	9,5	21	29	11,5	9,5	3	45
234-0206K6341	G1/8	8 / 6	200	150	14	16	6	32	9,5	24	32	14,5	9,5	3	49
234-0402K6341	G1/4	4 / 2	400	300	17	20	8	35,5	9,5	20	30	8,5	11	2	66
234-0404K6341	G1/4	6 / 4	400	300	17	20	8	35,5	9,5	23	33	11,5	11	4	68
234-0406K6341	G1/4	8 / 6	400	300	17	20	8	35,5	9,5	26	36	14,5	11	4,5	73

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

- Short design (exhaust-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

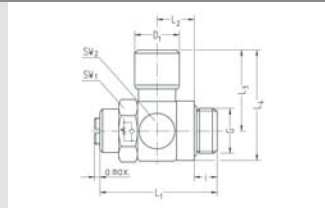


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
234-0202K6342	G1/8	4 / 2	200	150	14	16	6	32	9,5	18,2	26,2	8,5	10,5	2	45
234-0204K6342	G1/8	6 / 4	200	150	14	16	6	32	9,5	21	29	11,5	10,5	3	48
234-0206K6342	G1/8	8 / 6	200	150	14	16	6	32	9,5	24	32,5	14,5	10,5	3	52
234-0402K6342	G1/4	4 / 2	400	300	17	20	8	35,5	9,5	20	30	8,5	12	2	71
234-0404K6342	G1/4	6 / 4	400	300	17	20	8	35,5	9,5	23	33	11,5	12	4	73
234-0406K6342	G1/4	8 / 6	400	300	17	20	8	35,5	9,5	26	36	14,5	12	4,5	78

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

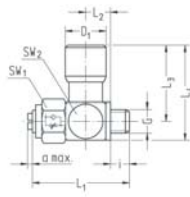
- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar



Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
234-0206634	G1/8	8 / 6	200	150	14	16	6	37,5	14,5	24	32	14,5	2	3	62
234-0406634	G1/4	8 / 6	400	300	17	20	8	40,5	14,5	26	36	14,5	2	4,5	78
234-0408634	G1/4	10 / 8	400	300	17	20	8	40,5	14,5	28,8	38,5	16,5	2	4,5	80
234-0604634	G3/8	6 / 4	-	-	20	22	8,6	48,6	16,5	25	36	11,5	2	6,7	90
234-0606634	G3/8	8 / 6	900	600	20	22	8,5	45	14,3	28	39	14,5	2	6	99
234-0608634	G3/8	10 / 8	900	600	20	22	8,5	45	14,3	30,5	41,5	16,5	2	6,5	104
234-0609634	G3/8	12 / 9	-	-	22		8,6	48,6	16,5	35,5	46,5	19,9	2	6,7	130
234-0806634	G1/2	8 / 6	1500	1100	24	29	10	54	17,3	30	44,5	14,5	2,5	6	165
234-0808634	G1/2	10 / 8	1500	1100	24	29	10	54	17,3	33,5	48	16,5	2,5	8	170
234-0809634	G1/2	12 / 9	-	-	28		10	57	21	37,5	51,5	19,9	2,5	9	154
234-0811634	G1/2	14 / 11	-	-	28		9,9	57,4	21	41	55	21,9	2,5	9,2	158

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve



- Short design (exhaust-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Seal in connection NBR (Perbunan)

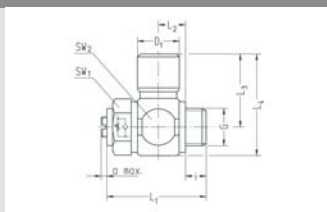
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
235-4202K635	M3	4 / 2	40	30	8	8,5	3,5	20	5,3	16,5	20,5	8,6	1	1,2	9
235-5002K635	M5	4 / 2	40	30	8	8,5	3,5	20	5,2	16,5	20,5	8,5	1	1,5	9
235-5003K635	M5	5 / 3	40	30	8	10	4	22	6	18	22,5	10,5	1	1,5	13
235-5004K635	M5	6 / 4	40	30	8	11	3	22	6,5	19,5	24	11,5	1	1,5	15
235-5043K635	M5	4,3 / 3	40	30	8	8,5	3,5	20	5,2	16,5	20,5	9	1	1,5	9

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

- Short design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

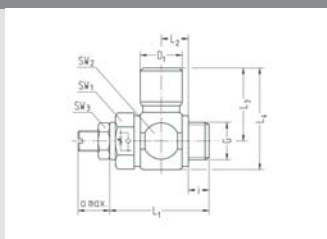


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
236-0202K634	G1/8	4 / 2	150	200	14	16	6	32	9,5	18,2	26,2	8,5	2	2	41
236-0204K634	G1/8	6 / 4	150	200	14	16	6	32	9,5	21	29	11,5	2	3	43
236-0206K634	G1/8	8 / 6	150	200	14	16	6	32	9,5	24	32	14,5	2	3	47
236-0208K634	G1/8	10 / 8	150	200	14	16	6	32	9,5	27	35	16,5	2	3	49
236-0402K634	G1/4	4 / 2	300	400	17	20	8	35,5	9,5	20	30	8,5	2	2	62
236-0404K634	G1/4	6 / 4	300	400	17	20	8	35,5	9,5	23	33	11,5	2	4	64
236-0406K634	G1/4	8 / 6	300	400	17	20	8	35,5	9,5	26	36	14,5	2	4,5	68
236-0408K634	G1/4	10 / 8	300	400	17	20	8	35,5	9,5	28,5	38,5	16,5	2	4,5	70

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

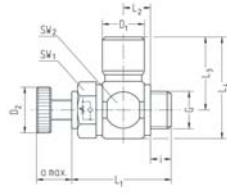
- Short design (inlet-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar



Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
236-0202K6341	G1/8	4 / 2	150	200	14	16	6	32	9,5	18,2	26,2	8,5	9,5	2	43
236-0204K6341	G1/8	6 / 4	150	200	14	16	6	32	9,5	21	29	11,5	9,5	3	45
236-0206K6341	G1/8	8 / 6	150	200	14	16	6	32	9,5	24	32	14,5	9,5	3	49
236-0402K6341	G1/4	4 / 2	300	400	17	20	8	35,5	9,5	20	30	8,5	11	2	66
236-0404K6341	G1/4	6 / 4	300	400	17	20	8	35,5	9,5	23	33	11,5	11	4	68
236-0406K6341	G1/4	8 / 6	300	400	17	20	8	35,5	9,5	26	36	14,5	11	4,5	73

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

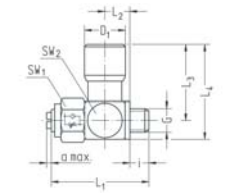


- Short design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
236-0202K6342	G1/8	4 / 2	150	200	14	16	6	32	9,5	18,2	26,2	8,5	10,5	2	45
236-0204K6342	G1/8	6 / 4	150	200	14	16	6	32	9,5	21	29	11,5	10,5	3	48
236-0206K6342	G1/8	8 / 6	150	200	14	16	6	32	9,5	24	32	14,5	10,5	3	52
236-0402K6342	G1/4	4 / 2	300	400	17	20	8	35,5	9,5	20	30	8,5	12	2	71
236-0404K6342	G1/4	6 / 4	300	400	17	20	8	35,5	9,5	23	33	11,5	12	4	73
236-0406K6342	G1/4	8 / 6	300	400	17	20	8	35,5	9,5	26	36	14,5	12	4,5	78

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve



- Short design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

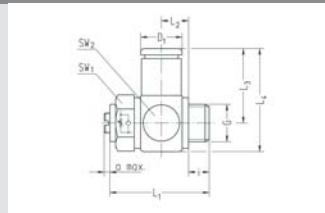
Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
237-5002K635	M5	4 / 2	30	40	8,5	8,5	3,5	20	5,2	16,5	20,5	8,5	1	1,5	9
237-5003K635	M5	5 / 3	30	40	10	10	4	22	6	18	22,5	10,5	1	1,5	13
237-5004K635	M5	6 / 4	30	40	11	11	3	22	6,5	19,5	24	11,5	1	1,5	15
237-5043K635	M5	4,3 / 3	30	40	8,5	8,5	3,5	20	5,2	16,5	20,5	9	1	1,5	9

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed



## Single swivel connector with throttle check valve

- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

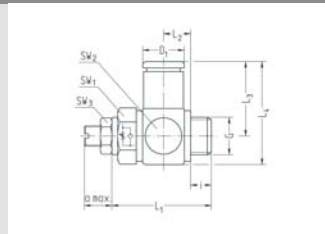


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
234-0202K834	G1/8	4 / 2	200	150	14	16	6	32,5	9,5	19	27	8,6	2	2	40
234-0204K834	G1/8	6 / 4	200	150	14	16	6	32,5	9,5	22,5	30,5	11,4	2	3	43
234-0206K834	G1/8	8 / 6	200	150	14	16	6	32,5	9,5	24,5	32,5	14,6	2	3	47
234-0208K834	G1/8	10 / 8	200	150	14	17	6	32,5	9,5	27	35	16,6	2	3	53
234-0402K834	G1/4	4 / 2	400	300	17	20	8	35,5	9,5	21	31	8,6	2	2	63
234-0404K834	G1/4	6 / 4	400	300	17	20	8	35,5	9,5	24,5	34,5	11,4	2	4	66
234-0406K834	G1/4	8 / 6	400	300	17	20	8	35,5	9,5	26,5	36,5	14,6	2	4,5	69
234-0408K834	G1/4	10 / 8	400	300	17	20	8	35,5	9,5	29	39	16,6	2	4,5	72

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

- Short design (exhaust-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

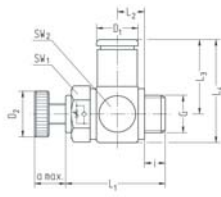


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
234-0202K8341	G1/8	4 / 2	200	150	14	16	6	32,5	9,5	19	27	8,6	9,5	2	43
234-0204K8341	G1/8	6 / 4	200	150	14	16	6	32,5	9,5	22,5	30,5	11,4	9,5	3	46
234-0206K8341	G1/8	8 / 6	200	150	14	16	6	32,5	9,5	24,5	32,5	14,6	9,5	3	49
234-0402K8341	G1/4	4 / 2	400	300	17	20	8	35,5	9,5	21	31	8,6	11	2	66
234-0404K8341	G1/4	6 / 4	400	300	17	20	8	35,5	9,5	24,5	34,5	11,4	11	4	69
234-0406K8341	G1/4	8 / 6	400	300	17	20	8	35,5	9,5	26,5	36,5	14,6	11	4,5	72

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed



## Single swivel connector with throttle check valve

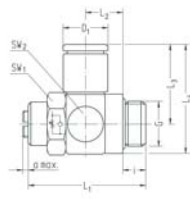


- Short design (exhaust-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
234-0202K8342	G1/8	4 / 2	200	150	14	16	6	32,5	9,5	19	27	8,6	10,5	2	45
234-0204K8342	G1/8	6 / 4	200	150	14	16	6	32,5	9,5	22,5	30,5	11,4	10,5	3	48
234-0206K8342	G1/8	8 / 6	200	150	14	16	6	32,5	9,5	24,5	32,5	14,6	10,5	3	51
234-0402K8342	G1/4	4 / 2	400	300	17	20	8	35,5	9,5	21	31	8,6	12	2	71
234-0404K8342	G1/4	6 / 4	400	300	17	20	8	35,5	9,5	24,5	34,5	11,4	12	4	74
234-0406K8342	G1/4	8 / 6	400	300	17	20	8	35,5	9,5	26,5	36,5	14,6	12	4,5	77

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

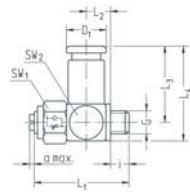


- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
234-0606834	G3/8	8 / 6	900	600	20	22	8,5	45	14,3	28	39	14,6	2	6	98
234-0608834	G3/8	10 / 8	900	600	20	22	8,5	45	14,3	30,5	41,5	16,6	2	6,5	102

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve



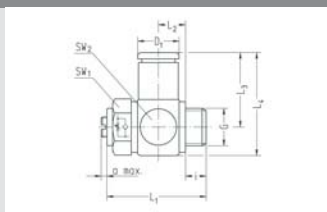
- Short design (exhaust-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
235-5002K835	M5	4 / 2	40	30	8	8,5	3,5	20	5,2	17	21	8,6	1	1,2	9
235-5043K835	M5	4,3 / 3	40	30	8	8,5	3,5	20	5,2	17	21	8,9	1	1,2	9
235-5003K835	M5	5 / 3	40	30	8	10	4	22	6	19	23,5	9,9	1	1,2	12
235-5004K835	M5	6 / 4	40	30	8	11	3	22	6,5	20,5	25	11,9	1	1,2	16

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

- Short design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

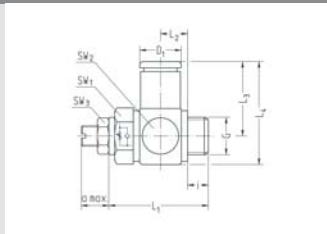


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
236-0202K834	G1/8	4 / 2	150	200	14	16	6	32,5	9,5	19	27	8,6	2	2	41
236-0204K834	G1/8	6 / 4	150	200	14	16	6	32,5	9,5	22,5	30,5	11,4	2	3	44
236-0206K834	G1/8	8 / 6	150	200	14	16	6	32,5	9,5	24,5	32,5	14,6	2	3	47
236-0208K834	G1/8	10 / 8	150	200	14	17	6	32,5	9,5	27	35	16,6	2	3	53
236-0402K834	G1/4	4 / 2	300	400	17	20	8	35,5	9,5	21	31	8,6	2	2	62
236-0404K834	G1/4	6 / 4	300	400	17	20	8	35,5	9,5	24,5	34,5	11,4	2	4	65
236-0406K834	G1/4	8 / 6	300	400	17	20	8	35,5	9,5	26,5	36,5	14,6	2	4,5	68
236-0408K834	G1/4	10 / 8	300	400	17	20	8	35,5	9,5	29	39	16,6	2	4,5	72

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

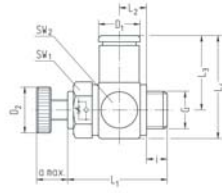
- Short design (inlet-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar



Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
236-0202K8341	G1/8	4 / 2	150	200	14	16	6	32,5	9,5	19	27	8,6	9,5	2	43
236-0204K8341	G1/8	6 / 4	150	200	14	16	6	32,5	9,5	22,5	30,5	11,4	9,5	3	46
236-0206K8341	G1/8	8 / 6	150	200	14	16	6	32,5	9,5	24,5	32,5	14,6	9,5	3	49
236-0402K8341	G1/4	4 / 2	300	400	17	20	8	35,5	9,5	21	31	8,6	11	2	66
236-0404K8341	G1/4	6 / 4	300	400	17	20	8	35,5	9,5	24,5	34,5	11,4	11	4	69
236-0406K8341	G1/4	8 / 6	300	400	17	20	8	35,5	9,5	26,5	36,5	14,6	11	4,5	72

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

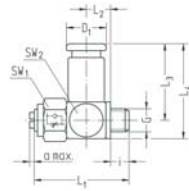


- Short design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
236-0202K8342	G1/8	4 / 2	150	200	14	16	6	32,5	9,5	19	27	8,6	10,5	2	45
236-0204K8342	G1/8	6 / 4	150	200	14	16	6	32,5	9,5	22,5	30,5	11,4	10,5	3	48
236-0206K8342	G1/8	8 / 6	150	200	14	16	6	32,5	9,5	24,5	32,5	14,6	10,5	3	51
236-0402K8342	G1/4	4 / 2	300	400	17	20	8	35,5	9,5	21	31	8,6	12	2	71
236-0404K8342	G1/4	6 / 4	300	400	17	20	8	35,5	9,5	24,5	34,5	11,4	12	4	74
236-0406K8342	G1/4	8 / 6	300	400	17	20	8	35,5	9,5	26,5	36,5	14,6	12	4,5	77

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve



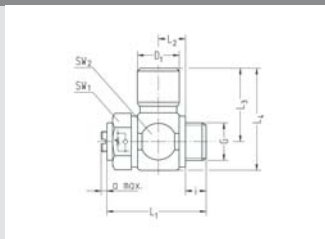
- Short design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -10 to +70 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
237-5002K835	M5	4 / 2	30	40	8	8,5	3,5	20	5,2	17	21	8,6	1	1,2	9
237-5043K835	M5	4,3 / 3	30	40	8	8,5	3,5	20	5,2	17	21	8,9	1	1,2	9
237-5003K835	M5	5 / 3	30	40	8	10	4	22	6	19	23,5	9,9	1	1,2	12
237-5004K835	M5	6 / 4	30	40	8	11	3	22	6,5	20,5	25	11,4	1	1,2	16

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

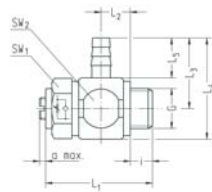
- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth-pipe thread
- VS seal rings (FPM)
- Seal in connection FPM
- Material: 1.4301/ 1.4307
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -20 to +120 °C
- Working pressure range: 0,5 to 10 bar



Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
VT234-0202K934	G1/8	OD4 (4/2)	200	150	14	16	6	32	9,5	18,2	26,2	8,5	2	2	40
VT234-0204K934	G1/8	OD6 (6/4)	200	150	14	16	6	32	9,5	21	29	11,5	2	3	43
VT234-0206K934	G1/8	OD8 (8/6)	200	150	14	16	6	32	9,5	24	32	14,5	2	3	47
VT234-0208K934	G1/8	OD10 (10/8)	200	150	14	16	6	32	9,5	27	35	16,5	2	3	49
VT234-0402K934	G1/4	OD4 (4/2)	400	300	17	20	8	35,5	9,5	20	30	8,5	2	2	62
VT234-0404K934	G1/4	OD6 (6/4)	400	300	17	20	8	35,5	9,5	23	33	11,5	2	4	64
VT234-0406K934	G1/4	OD8 (8/6)	400	300	17	20	8	35,5	9,5	26	36	14,5	2	4,5	68
VT234-0408K934	G1/4	OD10 (10/8)	400	300	17	20	8	35,5	9,5	28,5	38,5	16,5	2	4,5	70

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel spigot with throttle check valve

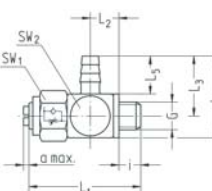


- Short design
- (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Hose connection removable
- VS seal rings
- Materials: brass nickel-plated,
- brass, Al black anodized
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range
- 10 to +60 °C
- Working pressure range
- 0.5 to 6 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
234-0204K334	G1/8	6 / 4	200	150	14	16	6	32	9,5	17,5	25,5	9,5	2	3	27
234-0206K334	G1/8	8 / 6	200	150	14	16	6	32	9,5	21	29	13	2	3	27
234-0404K334	G1/4	6 / 4	400	300	17	20	8	35,5	9,5	19,5	29,5	9,5	2	3,3	43
234-0406K334	G1/4	8 / 6	400	300	17	20	8	35,5	9,5	23	33	13	2	4,5	43

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel spigot with throttle check valve



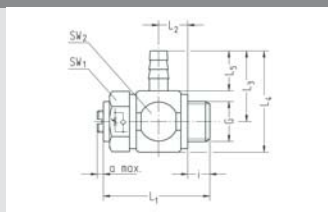
- Short design
- (exhaust-side throttle)
- Slotted adjusting screw
- M5 thread
- Hose connection removable
- PVC seal ring
- Materials: brass nickel-plated,
- brass
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range
- 10 to +60 °C
- Working pressure range
- 0.5 to 6 bar

Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
235-5002K335	M5	4 / 2,3	40	30	8	8,5	3,5	20	5,2	9,5	13,5	5,5	1	1,5	7
235-5004K335	M5	6 / 4	40	30	8	8,5	3,5	20	5,2	13,5	17,5	9,5	1	1,5	8

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel spigot with throttle check valve

- Short design (inlet-side throttle)
  - Slotted adjusting screw
  - Whitworth pipe thread
  - Hose connection removable
  - VS seal rings
  - Materials: brass nickel-plated,
- brass, Al black anodized
  - Type: Cone-type throttle
  - Allowable medium: Air
  - Temperature range -10 to +60 °C
  - Working pressure range 0.5 to 6 bar

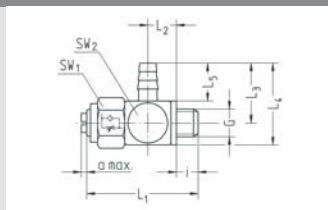


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
236-0204K334	G1/8	6 / 4	150	200	14	16	6	32	9,5	17,5	25,5	9,5	2	3	27
236-0206K334	G1/8	8 / 6	150	200	14	16	6	32	9,5	21	29	13	2	3	27
236-0404K334	G1/4	6 / 4	300	400	17	20	8	35,5	9,5	19,5	29,5	9,5	2	3,3	43
236-0406K334	G1/4	8 / 6	300	400	17	20	8	35,5	9,5	23	33	13	2	4,5	43

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust
- NI/min 1->2 = when throttle is closed

## Single swivel spigot with throttle check valve

- Short design (inlet-side throttle)
  - Slotted adjusting screw
  - M5 thread
  - Hose connection removable
  - PVC seal ring
  - Materials: brass nickel-plated,
- brass
  - Type: Cone-type throttle
  - Allowable medium: Air
  - Temperature range -10 to +60 °C
  - Working pressure range 0.5 to 6 bar

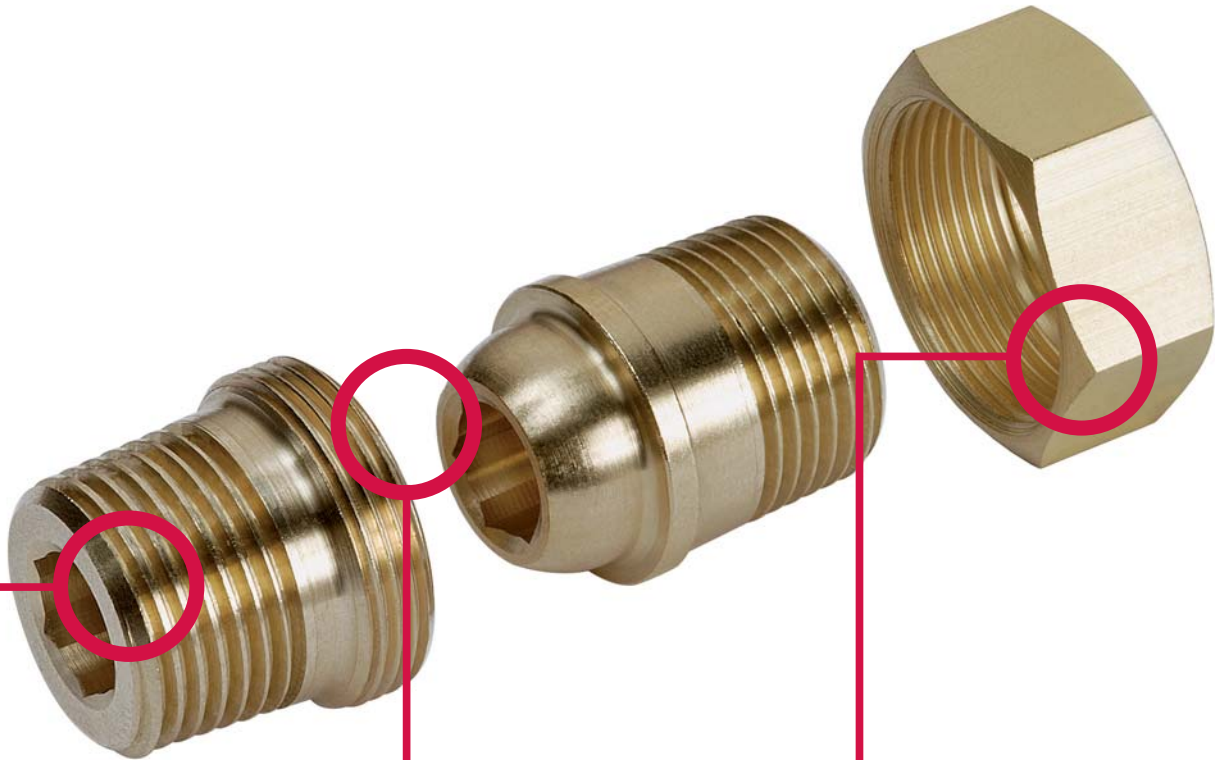


Part no.	G	for hose	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
237-5002K335	M5	4 / 2,3	30	40	8	8,5	3,5	20	5,2	9,5	13,5	5,5	1	1,5	7
237-5004K335	M5	6 / 4	30	40	8	8,5	3,5	20	5,2	13,5	17,5	9,5	1	1,5	8

- Nominal flow rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust
- NI/min 1->2 = when throttle is closed



## Accessories



### Broad range of accessories

- Wide range of different hose spigots, reducers, pipe couplings and connectors
- Accessories for widely used companion dimensions and all possible applications

### The EISELE modular system

- All accessories are compatible with all EISELE connectors
- Particularly suitable for connecting components with chamfered O-ring

### Alternative materials

- Also available in steel or stainless steel designs, additional materials on request

Accessory spigots with hose clamps may also be used for a higher pressure range.



## Eisele Accessories

Eisele accessories complement various connection systems when developing compressed air controls.

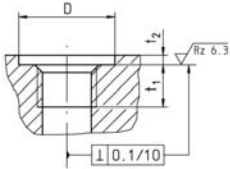
## Service conditions

- Working pressure range: -0.95 to 15 bar
- Allowable medium: Air
- Temperature range: -10 to +70 °C  
(Values mentioned apply when PVC seal rings are used)

In special cases it is possible to extend the working pressure range up to 50 bar and the temperature range to -20 to +100 °C:

- In cylindrical threads when using copper seal rings (not part of the product range) and by maintaining the recommended max. torque for cylindrical threads (see table)
- in conical threads when using PTFE (Teflon) sealing tape or glue and by maintaining the recommended max. torque for conical threads (see table)

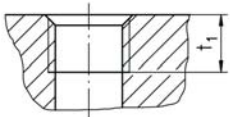
## Connection thread, cylindrical



Thread	hex	Thread depth		Counterbore <sup>1)</sup>		Recommended torque <sup>2)</sup>		Thread standards
		t1 min. (mm)	ØD min. (mm)	t2 max. (mm)	Kst seal rings Max. (Ncm)	VS seal rings Max. (Ncm)		
M3	5	3	6	0.5	36	-	Metric thread M: DIN 13 / ISO 965	
M5	8	4.5	10	0.5	95	150		
G1/8	14	7.5	15	1	900	1100	Pipe thread G: DIN ISO 228	
G1/4	17	10.5	19	1.5	1800	2100		
G3/8	19	11	23	1.5	1500	1900		
G3/8	22	11	23	1.5	2500	2800		
G1/2	24	13	27	1.5	2500	3800		
G1/2	27	13	27	2	3400	4800		
G3/4	32	14	33	2	7000	-		
G1	41	14	40	2	11000	-		

<sup>1)</sup> A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.

## Connection thread, conical



Thread	Thread depth t1 min. (mm)	Recommended torque max. (Ncm)	Thread standards
R1/8	7.4	700	Pipe thread ISO 7-1 / EN 10226-1
R1/4	11	1500	
R3/8	11.4	2200	
R1/2	15	4000	
R3/4	16.3	6000	

## Brass spigots starting on page 214

Straight hose spigot page 214

Pivot spigots page 216

Hose connecting spigots page 217

## Brass screw joints starting on page 218

Double nipple page 218

Bulkhead nipple page 221

Taper nipple page 221

Sleeves page 224

Screw plugs page 224

Elbow pieces page 227

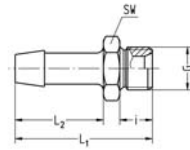
T pieces page 228

## Accessories starting on page 229

Seal rings page 229

Hose clamps page 233

## Screw-in hose spigot

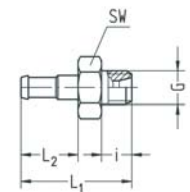


- Whitworth pipe thread
- M5 thread
- With inner cone according to DIN EN 560
- Hose connection removable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Matching hose clamps Type 10 und 11
- Material: brass or brass nickel-plated <sup>1)</sup>

Part no.	G	for hose inside Ø	SW	i	L1	L2	NW	g/piece
44-0204	G1/8	4	14	8	34	21	3,5	12
44-0206	G1/8	6	14	8	34	21	4,5	12
44-0209	G1/8	9	14	8	34	21	4,5	17
44-0404	G1/4	4	17	10	42	27	3,5	21
44-0406	G1/4	6	17	10	42	27	4,5	21
44-0408	G1/4	8	17	10	42	27	6,5	23
44-0409	G1/4	9	17	10	42	27	7,5	21
44-0411	G1/4	11	17	10	42	27	7,5	34
44-0413	G1/4	13	17	10	42	27	7,5	31
44-0604	G3/8	4	19	10	43	27	3,5	31
44-0606	G3/8	6	19	10	43	27	4,5	29
44-0608	G3/8	8	19	10	43	27	6,5	32
44-0609	G3/8	9	19	10	43	27	7,5	29
44-0611	G3/8	11	19	10	43	27	10	33
44-0613	G3/8	13	19	10	43	27	10	37
44-06062	G3/8 left-hand thread	6	19	10	43	27	4,5	29
44-06092	G3/8 left-hand thread	9	19	10	43	27	7,5	28
44-0806	G1/2	6	24	12	45	27	4,5	50
44-0808	G1/2	8	24	12	45	27	6,5	53
44-0809	G1/2	9	24	12	45	27	7,5	50
44-0811	G1/2	11	24	12	45	27	10	54
44-0813	G1/2	13	24	12	45	27	11	52
44-0814	G1/2	14	24	12	58	36	11,5	76
44-0818	G1/2	18	24	12	58	36	13,5	90
44-0819	G1/2	19	24	12	58	36	14,5	85
44-1013	G3/4	13	32	16	60	36	10,5	117
44-1019	G3/4	19	32	16	60	36	16	113
44-1222	G1	22	41	16	62	36	20	187
44-5002	M5	2	8	4,5	16	8	2	2
44-5003	M5	3	8	4,5	18	10	2,2	2

<sup>1)</sup> When ordering please add "NI" to Part No.

## Hose spigot, not removable



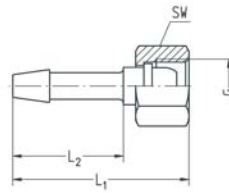
- Hose connection cannot be removed
- No hose clamp necessary
- For PA and PU compressed-air hoses
- Whitworth pipe thread, thread M5
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass or brass nickel-plated <sup>1)</sup>

Part no.	G	for hose	SW	i	L1	L2	NW	g/piece
314-5003	M5	5/3 (4,3/3)	8	4,5	16,5	8,5	2,3	2
314-5004	M5	6/4	8	4,5	18,5	10,5	2,3	2
314-0204	G1/8	6/4	14	7	21,5	10,5	3,3	8

<sup>1)</sup> When ordering please add "NI" to Part No.

## Hose spigot with union nut

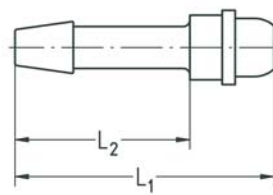
- Whitworth pipe thread
- Ball type nipple according to DIN EN 560
- Hose connection removable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Matching hose clamps Type 10 und 11
- Material: brass



Part no.	G	for hose inside Ø	SW	L1	L2	NW	g/piece
37-0104	G1/8	4	12	33,5	21	2,8	10
37-0106	G1/8	6	12	33,5	21	3,5	11
37-0304	G1/4	4	17	43	27	3,5	26
37-0306	G1/4	6	17	43	27	4,5	26
37-0308	G1/4	8	17	43	27	5	33
37-0309	G1/4	9	17	43	27	5	30
37-03042	G1/4 left-hand thread	4	17	43	27	3,5	26
37-03062	G1/4 left-hand thread	6	17	43	27	4,5	26
37-0504	G3/8	4	19	44	27	3,5	32
37-0506	G3/8	6	19	44	27	4,5	32
37-0508	G3/8	8	19	44	27	6,5	35
37-0509	G3/8	9	19	44	27	7,5	30
37-0511	G3/8	11	19	44	27	7,5	40
37-0513	G3/8	13	19	54	34	6,5	45
37-05042	G3/8 left-hand thread	4	19	44	27	3,5	33
37-05062	G3/8 left-hand thread	6	19	44	27	4,5	32
37-05092	G3/8 left-hand thread	9	19	44	27	7,5	30
37-0706	G1/2	6	24	48	27	4,5	58
37-0709	G1/2	9	24	48	27	7,5	55
37-0711	G1/2	11	24	48	27	10	60
37-0713	G1/2	13	24	48	27	10	59

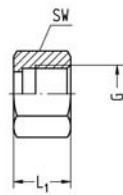
## Hose spigot with spherical nipple

- Whitworth pipe thread
- Fits union nuts Type 36
- Hose connection removable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Matching hose clamps Type 10 und 11
- Material: brass



Part no.	fits union nut with G	for hose inside Ø	L1	L2	NW	g/piece
40-0104	G1/8	4	31,5	21	2,8	4
40-0106	G1/8	6	31,5	21	3,5	5
40-0304	G1/4	4	40	27	3,5	10
40-0306	G1/4	6	40	27	4,5	10
40-0309	G1/4	9	40	27	5	14
40-0504	G3/8	4	42	27	3,5	18
40-0506	G3/8	6	42	27	4,5	17
40-0508	G3/8	8	42	27	6,5	18
40-0509	G3/8	9	42	27	7,5	16
40-0511	G3/8	11	42	27	7,5	22
40-0706	G1/2	6	44	27	4,5	27
40-0709	G1/2	9	44	27	7,5	25
40-0711	G1/2	11	44	27	10	25
40-0713	G1/2	13	44	27	10	28

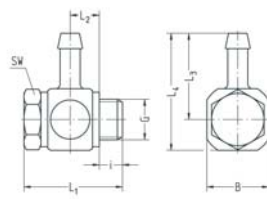
## Union nut for hose spigot



- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Fits hose spigot Type 40
- Material: brass

Part no.	G	SW	L1	g/piece
36-0100	G1/8	12	11	6
36-0300	G1/4	17	14	16
36-03002	G1/4 left-hand thread	17	14	16
36-0500	G3/8	19	14	15
36-05002	G3/8 left-hand thread	19	14	15
36-0700	G1/2	24	17	31

## Single swivel spigot, short model

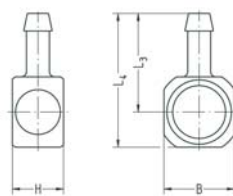


- Whitworth pipe thread
- Hose connection removable
- VS seal rings
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Proper hose clamps type 10 and 11
- Material ring nozzle: brass or brass nickel-plated <sup>1)</sup>
- Material banjo bolt: brass nickel-plated

Part no.	G	for hose inside Ø	SW	i	L1	L2	L3	L4	B	NW	g/piece
74-0204K	G1/8	4	14	5,5	28,5	9,5	26,3	34,5	16	3	36
74-0206K	G1/8	6	14	5,5	28,5	9,5	26,3	34,5	16	5	37
74-0406K	G1/4	6	17	7,5	30,5	9,5	28	38	20	5	53
74-0409K	G1/4	9	17	7,5	30,5	9,5	28	38	20	7	54
74-0606K	G3/8	6	22	7,5	31,5	9,5	29,3	40,5	22	5	69
74-0609K	G3/8	9	22	7,5	31,5	9,5	29,3	40,5	22	7,5	70

<sup>1)</sup> When ordering please add "NI" to Part No.

## Single banjo



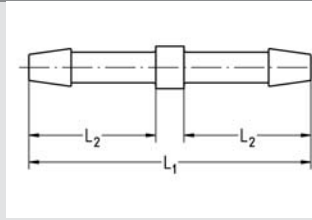
- For banjo bolt with Whitworth pipe thread
- Hose connection removable
- Temperature range -10 to +70°C
- Working pressure range -0.95 to 16 bar
- Matching hose clamps Type 10 and 11
- Material: brass or brass nickel-plated <sup>1)</sup>

Part no.	fits banjo bolt with G	for hose inside Ø	H	L3	L4	B	NW	g/piece
74-02043	G1/8	4	14,5	26,3	34,5	16	3	20
74-02063	G1/8	6	14,5	26,3	34,5	16	5	21
74-04063	G1/4	6	14,5	28	38	20	5	27
74-04093	G1/4	9	14,5	28	38	20	7,5	28
74-06063	G3/8	6	14,5	29,3	40,5	22	5	26
74-06093	G3/8	9	14,5	29,3	40,5	22	7,5	27

<sup>1)</sup> When ordering please add "NI" to Part No.

## Hose connecting spigot

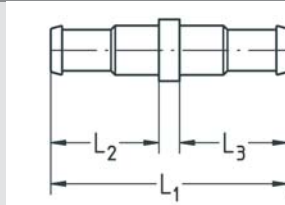
- Hose connection removable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Proper hose clamps type 10 and 11
- Material: brass



Part no.	for hose inside Ø1	for hose inside Ø2	L1	L2	NW	g/piece
47-0004	4	4	48	21	3,5	7
47-0006	6	6	60	27	4,5	10
47-0009	9	9	60	27	7,5	15
47-0011	11	11	60	27	10	23
47-0013	13	13	60	27	11	24
47-0406	4	6	54	21	3,5	10
47-0609	6	9	60	27	4,5	15
47-0911	9	11	60	27	7,5	22
47-1113	11	13	60	27	10	27

## Hose connecting spigot, not removable

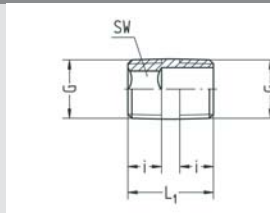
- Hose connection cannot be removed
- No hose clamp necessary
- For PA and PU compressed-air hoses
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass



Part no.	for hose A	for hose B	L1	L2	L3	NW	g/piece
317-0303	5/3 (4,3/3)	5/3 (4,3/3)	19	8,5	8,5	2,4	1
317-0304	5/3 (4,3/3)	6/4	21	8,5	10,5	2,4	1
317-0404	6/4	6/4	23	10,5	10,5	3,3	2
317-0406	6/4	8/6	26,5	10,5	13,5	3,3	3

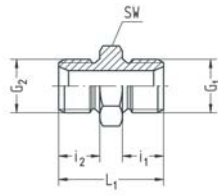
## Double nipple with hexagon socket

- Whitworth pipe thread conical
- With hexagon socket
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass



Part no.	G	SW	i	L1	NW	g/piece
72-0202	R1/8	6	4	11	6,5	3
72-0404	R1/4	8	6	16	8,5	7
72-0606	R3/8	10	6	16	11	12

## Double nipple



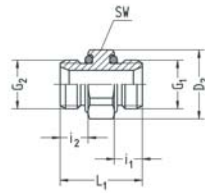
- Whitworth pipe thread, thread M3, M5
- With inner cone according to DIN EN 560
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass or brass nickel-plated <sup>1)</sup>

Part no.	G1	G2	SW	i1	i2	L1	NW	g/piece
41-4242	M3	M3	5	3,3	3,3	8,6	1,5	1
41-5050	M5	M5	8	4,5	4,5	13	2,5	2
42-0202	G1/8	G1/8	14	6,5	6,5	18	4,5	11
43-0250	G1/8	M5	14	6,5	4,5	15	2,5	8
42-0404	G1/4	G1/4	17	10	10	25	7,5	20
43-0402	G1/4	G1/8	17	10	6,5	21,5	4,5	19
42-04042	G1/4 left-hand thread	G1/4 left-hand thread	17	10	10	25	7,5	19
42-0606	G3/8	G3/8	19	10	10	26	10	29
43-0602	G3/8	G1/8	19	10	8	24	4,5	24
43-0604	G3/8	G1/4	19	10	10	26	7,5	29
42-06062	G3/8 left-hand thread	G3/8 left-hand thread	19	10	10	26	10	28
42-0808	G1/2	G1/2	24	12	12	30	12	53
43-0804	G1/2	G1/4	24	12	10	28	7,5	53
43-0806	G1/2	G3/8	24	12	10	28	10	49
42-1010	G3/4	G3/4	32	14	14	36	15	112
43-1008	G3/4	G1/2	32	14	12	34	12	103
42-1212	G1	G1	41	16	16	42	20	202
43-1208	G1	G1/2	41	16	12	38	12	188
43-1210	G1	G3/4	41	16	14	40	17	188
42-1414	G1 1/4	G1 1/4	46	16	16	42	30	251
43-1412	G1 1/4	G1	50	16	16	44	20	370

<sup>1)</sup> When ordering please add "NI" to Part No.

## Double nipple with chambered O-ring

- Whitworth pipe thread
- With inner cone according to DIN EN 560
- Sealing NBR (Perbunan) or FPM <sup>1)</sup>
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass nickel-plated

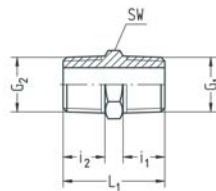


Part no.	G1	G2	SW	D2	i1	i2	L1	NW	g/piece
42-0202GNI	G1/8	G1/8	13	14,2	5,5	5,5	17	5	9
42-0404GNI	G1/4	G1/4	17	18,5	7,5	7,5	22	7,5	17
42-0606GNI	G3/8	G3/8	20	21,8	7,5	7,5	22,5	10	26
42-0808GNI	G1/2	G1/2	24	26,2	9,5	9,5	27,5	12,5	48
42-1010GNI	G3/4	G3/4	32	37	10,5	10,5	34	18	99
42-1212GNI	G1	G1	41	47,4	12,5	12,5	40	22	189
43-0250GNI	G1/8	M5	13	14,2	5,5	4	15,5	2,2	8
43-0402GNI	G1/4	G1/8	17	18,5	7,5	5,5	20	5	16
43-0602GNI	G3/8	G1/8	20	21,8	7,5	5,5	20,5	5	20
43-0604GNI	G3/8	G1/4	20	21,8	7,5	7,5	22,5	7,5	23
43-0802GNI	G1/2	G1/8	24	26,2	9,5	5,5	23,5	5	41
43-0804GNI	G1/2	G1/4	24	26,2	9,5	7,5	25	7,5	38
43-0806GNI	G1/2	G3/8	24	26,2	9,5	7,5	25,5	10	40
43-1004GNI	G3/4	G1/4	32	-	10,5	7,5	30,5	7,5	88
43-1008GNI	G3/4	G1/2	32	37	10,5	9,5	33	12,5	92
43-1208GNI	G1	G1/2	41	47,4	12,5	9,5	37	12,5	167
43-1210GNI	G1	G3/4	41	47,4	12,5	10,5	38	18	130

<sup>1)</sup> When ordering please add "VT" before the Part No.

## Double nipple

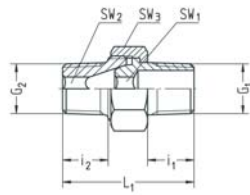
- Whitworth pipe thread conical
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass



Part no.	G1	G2	SW	i1	i2	L1	NW	g/piece
64-0202	R1/8	R1/8	11	7	7	17,5	5,5	7
64-0404	R1/4	R1/4	14	10	10	24	8	16
64-0606	R3/8	R3/8	17	10	10	24,5	11	23
64-0808	R1/2	R1/2	22	13	13	31,5	14	47
64-1010	R3/4	R3/4	30	14	14	35	18	89
64-1212	R1	R1	36	17	17	42	22	170
64-1414	R1 1/4	R1 1/4	46	17,5	17,5	43	28	281
65-0402	R1/4	R1/8	14	10	7	21	5,5	13
65-0604	R3/8	R1/4	17	10	10	24,5	8	21
65-0806	R1/2	R3/8	22	13	10	28,5	11	40



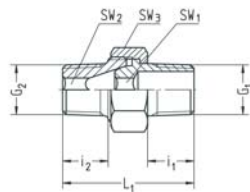
## Double nipple removable



- Whitworth pipe thread conical
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass

Part no.	G1	G2	SW1	SW2	SW3	i1	i2	L1	NW	M max. (Ncm)	g/piece
63-0202	R1/8	R1/8	5	5	15	9,2	9	27	5,1	700	18
63-0402	R1/8	R1/4	5	5	15	9,2	12	30	5,1	700	24
63-0404	R1/4	R1/4	6	6	19	12	12	33,5	6,1	1500	36
63-0604	R1/4	R3/8	6	6	19	12	13	35	6,1	1500	44
63-0606	R3/8	R3/8	8	8	22	13	13	36,5	8,2	2200	56
63-0806	R3/8	R1/2	8	8	22	13	16	39,5	8,2	2200	75
63-0808	R1/2	R1/2	12	12	27	16	16	44	12,3	4000	88
63-1010	R3/4	R3/4	14	14	36	18	18	52,5	14,3	6000	207
63-1212	R1	R1	19	19	46	22	22	63,5	19,4	8000	386

## Double nipple removable

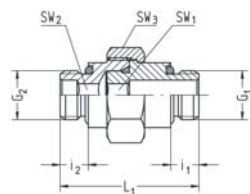


- Whitworth pipe thread conical
- Torque for union nut see table
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass
- Material union nut: steel galvanized

Part no.	G1	G2	SW1	SW2	SW3	i1	i2	L1	NW	M max. (Ncm)	g/piece
63-0202V5	R1/8	R1/8	5	5	15	9,2	9	27	5,1	700	18
63-0404V5	R1/4	R1/4	6	6	19	12	12	33,5	6,1	1500	36
63-0606V5	R3/8	R3/8	8	8	22	13	13	36,5	8,2	2200	56
63-0808V5	R1/2	R1/2	12	12	27	16	16	44	12,7	4000	88

30

## Double nipple removable

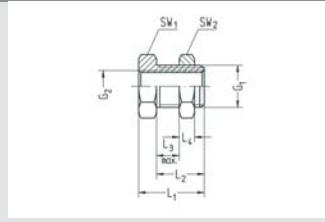


- With chambered O-rings
- Constant distance dimension
- Whitworth pipe thread
- Sealing NBR
- Torque for union nut see table
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass nickel-plated

Part no.	G1	G2	SW1	SW2	SW3	i1	i2	L1	NW	M max. (Ncm)	g/piece
76-0202NI	G1/8	G1/8	5	5	19	5,5	5,5	30	5,1	700	31
76-0404NI	G1/4	G1/4	6	6	22	7,5	7,5	37	6,1	1500	55
76-0606NI	G3/8	G3/8	8	8	27	7,5	7,5	39,5	8,2	2200	95
76-0808NI	G1/2	G1/2	12	12	30	9,5	9,5	46	12,3	4000	117
76-1010NI	G3/4	G3/4	14	14	41	10,5	10,5	59	14,3	6000	382
76-1212NI	G1	G1	19	19	50	12,5	12,5	69	19,4	8000	530

## Bulkhead nipple

- With jam nut
- Whitworth pipe thread, thread M5
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass or brass nickel-plated <sup>1)</sup>

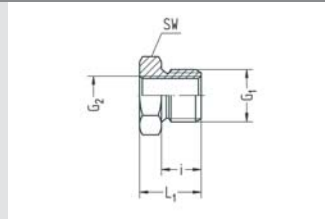


Part no.	G1	G2	SW1	SW2	L1	L2	L3 max.	L4	g/piece
71-0249	G1/8	M5	14	14	15	11,5	8	3,5	12
71-0401	G1/4	G1/8	17	17	18	14	10	4	16
71-0603	G3/8	G1/4	19	22	22	17	12	5	27
71-0803	G1/2	G1/4	24	27	27	21	15	6	64
71-0805	G1/2	G3/8	24	27	27	21	15	6	49

<sup>1)</sup> When ordering please add "NI" to Part No.

## Thread adapter

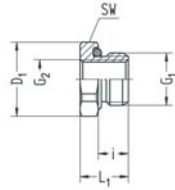
- Whitworth pipe thread, thread M3, M5
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass or brass nickel-plated <sup>1)</sup>



Part no.	G1	G2	SW	i	L1	g/piece
70-0249	G1/8	M5	14	6,5	10	7
70-0401	G1/4	G1/8	17	10	14	10
70-0449	G1/4	M5	17	10	14	16
70-0601	G3/8	G1/8	19	10	15	21
70-0603	G3/8	G1/4	19	10	15	14
70-0803	G1/2	G1/4	24	12	18	36
70-0805	G1/2	G3/8	24	12	18	25
70-1005	G3/4	G3/8	32	14	21	73
70-1007	G3/4	G1/2	32	14	21	53
70-1207	G1	G1/2	41	16	24	138
70-1209	G1	G3/4	41	16	24	98
70-5041	M5	M3	8	4,5	7,5	2

<sup>1)</sup> When ordering please add "NI" to Part No.

## Thread adapter with chambered O-ring

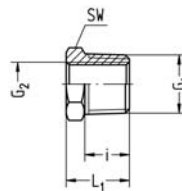


- Whitworth pipe thread, thread M5
- Sealing NBR Perbunan or FPM <sup>1)</sup>
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass nickel-plated

Part no.	G1	G2	SW	D1	i	L1	g/piece
70-0249GNI	G1/8	M5	13	14,2	5,5	9,5	6
70-0401GNI	G1/4	G1/8	17	18,5	7,5	12	8
70-0449GNI	G1/4	M5	17	18,5	7,5	12	13
70-0601GNI	G3/8	G1/8	20	21,8	7,5	13	19
70-0603GNI	G3/8	G1/4	20	21,8	7,5	13	13
70-0803GNI	G1/2	G1/4	24	26,2	9,5	15,5	31
70-0805GNI	G1/2	G3/8	24	26,2	9,5	15,5	20
70-1005GNI	G3/4	G3/8	32	37	10,5	21	80
70-1007GNI	G3/4	G1/2	32	37	10,5	21	59
70-1207GNI	G1	G1/2	41	47,4	12,5	25	150
70-1209GNI	G1	G3/4	41	47,4	12,5	25	115

<sup>1)</sup> When ordering please add "VT" before the Part No.

## Thread adapter

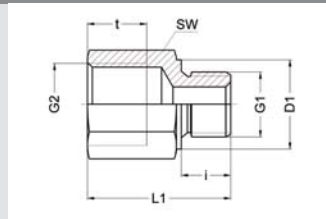


- Whitworth pipe thread conical
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass

Part no.	G1	G2	SW	i	L1	g/piece
73-0401	R1/4	G1/8	14	10	14	8
73-0601	R3/8	G1/8	17	10	14,5	18
73-0603	R3/8	G1/4	17	10	14,5	11
73-0801	R1/2	G1/8	22	13	18,5	43
73-0803	R1/2	G1/4	22	13	18,5	34
73-0805	R1/2	G3/8	22	13	18,5	22
73-1003	R3/4	G1/4	30	14	21	83
73-1005	R3/4	G3/8	30	14	21	69
73-1007	R3/4	G1/2	30	14	21	49
73-1205	R1	G3/8	36	17	25	148
73-1207	R1	G1/2	36	17	25	124
73-1209	R1	G3/4	36	17	25	82
73-1407	R1 1/4	G1/2	46	17,5	25,5	246
73-1409	R1 1/4	G3/4	46	17,5	25,5	201
73-1411	R1 1/4	G1	46	17,5	25,5	141

## Thread adapter

- Whitworth pipe thread, thread M3, M5
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass or brass nickel-plated <sup>1)</sup>

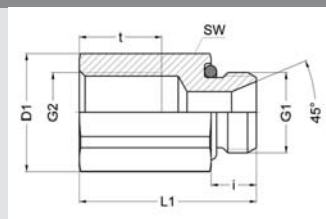


Part no.	G1	G2	SW	i	L1	t	D1	NW	g/piece
66-0201	G1/8	G1/8	14	8	23	10	-	5	17
66-0401	G1/4	G1/8	17	10	28	10	-	7	35
66-0403	G1/4	G1/4	17	10	28	12	-	7	27
66-0603	G3/8	G1/4	19	10	29	12	-	10	41
66-0605	G3/8	G3/8	19	10	29	12	-	10	31
66-0805	G1/2	G3/8	24	12	34	12	-	12	78
66-0807	G1/2	G1/2	24	12	34	14	-	12	58
66-1007	G3/4	G1/2	32	14	40	14	-	16	177
66-1009	G3/4	G3/4	32	14	40	16	-	16	143
66-4241	M3	M3	5	3,3	8,8	3	-	1,5	1
66-5049	M5	M5	8	4,5	12,5	4,5	-	2,5	3
67-0203	G1/8	G1/4	17	8	26	12	14	5	23
67-0405	G1/4	G3/8	19	10	29	12	18	7	27
67-0607	G3/8	G1/2	24	10	32	14	22	10	47

<sup>1)</sup> When ordering please add "NI" to Part No.

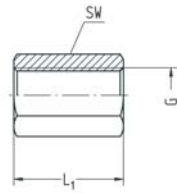
## Thread adapter with chambered O-ring

- Whitworth pipe thread, thread M5
- Sealing NBR Perbunan or FPM <sup>1)</sup>
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass nickel-plated



Part no.	G1	G2	SW	i	L1	t	D1	NW	g/piece
66-0201GNI	G1/8	G1/8	13	5,5	21,5	10	14,2	5	14
66-0403GNI	G1/4	G1/4	17	7,5	27	12	18,5	7,5	29
66-0605GNI	G3/8	G3/8	20	7,5	27,5	12	21,8	10	37
66-0807GNI	G1/2	G1/2	24	9,5	32,5	14	26,2	12,5	60
66-5049GNI	M5	M5	8	4	12,5	4,5	-	2,2	3

## Sleeve



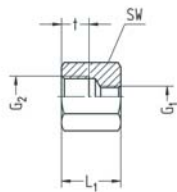
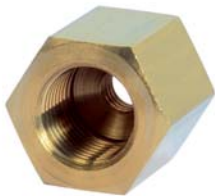
- Whitworth pipe thread, thread M3, M5
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass or brass nickel-plated <sup>1)</sup> or AL black anodized <sup>2)</sup>

Part no.	G	SW	L1	g/piece
59-01	G1/8	14	18	15
59-03	G1/4	17	26	28
59-05	G3/8	22	26	47
59-07	G1/2	27	30	79
59-09	G3/4	32	28	106
59-11	G1	41	33	203
60-41	M3	5	6	1
60-49	M5	8	9	3

<sup>1)</sup> When ordering please add "NI" to Part No.

<sup>2)</sup> When ordering please add "AL" to Part No.

## Sleeve

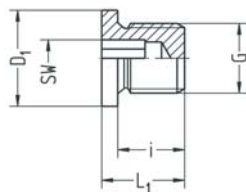


- Whitworth pipe thread, metric thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material brass or brass nickel-plated <sup>1)</sup>

Part no.	G1	G2	SW	L1	t	g/piece
56-4953	M5	M10x1	14	14	6,5	14
57-4901	M5	G1/8	14	14	6,5	14

<sup>1)</sup> When ordering please add "NI" to Part No.

## Closure screw



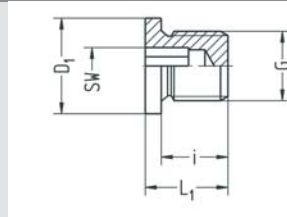
- With hexagon socket
- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material brass or brass nickel-plated <sup>1)</sup>

Part no.	G	SW	i	L1	D1	g/piece
23-02	G1/8	5	8	11	14	7
23-04	G1/4	6	12	15	18	15
23-06	G3/8	8	12	15	22	23
23-08	G1/2	10	14	18	25	41
23-10	G3/4	12	16	20	32	83
23-12	G1	17	16	21	39	131
23-14	G1 1/4	22	16	21	49	207
23-16	G1 1/2	24	16	21	55	274

<sup>1)</sup> When ordering please add "NI" to Part No.

## Closure screw

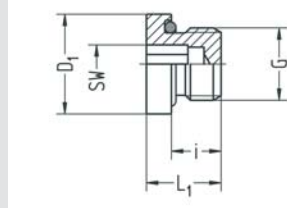
- With hexagon socket
- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: steel galvanized



Part no.	G	SW	i	L1	D1	g/piece
23-02ST	G1/8	5	8	11	14	7
23-04ST	G1/4	6	12	15	18	15

## Closure screw with chambered O-ring

- With hexagon socket
- Whitworth pipe thread, thread M5, M7
- Sealing NBR (Perbunan) or FPM<sup>1)</sup>
- Temperature range -20 to +80 °C
- Working pressure range -0.95 to 16 bar
- Material: brass nickel-plated



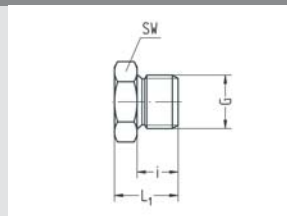
Part no.	G	SW	i	L1	D1	g/piece
24-5000GNI	M5	2,5	4,5	7	7,9	1
24-4800GNI	M7	4	5	8	9,9	2
23-0200GNI	G1/8	5	5,5	9	13,9	6
23-0400GNI	G1/4	6	7,5	12	17,9	13
23-0600GNI	G3/8	8	7,5	12	21,9	20
23-0800GNI	G1/2	10	9,5	14	24,9	32
23-1000GNI	G3/4	12	10,5	16,5	31,9	70
23-1200GNI	G1	17	12,5	19	39,8	117

<sup>1)</sup> When ordering please add "VT" before the Part No.

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## Closure screw

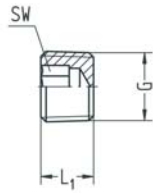
- Whitworth pipe thread, thread M3, M5
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass or brass nickel-plated<sup>1)</sup>



Part no.	G	SW	i	L1	g/piece
20-02	G1/8	12	6	10	6
20-04	G1/4	17	8	13	18
20-06	G3/8	19	8	14	22
20-08	G1/2	24	10	16	40
21-42	M3	5	3,3	5,3	1
21-50	M5	8	4,5	7,5	2

<sup>1)</sup> When ordering please add "NI" to Part No.

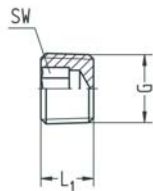
## Closure screw



- With hexagon socket
- Whitworth pipe thread conical
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass

Part no.	G	SW	L1	g/piece
18-02	R1/8	5	5	2
18-04	R1/4	7	7,5	5

## Closure screw



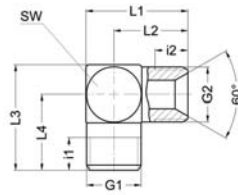
- With hexagon socket
- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass or brass nickel-plated <sup>1)</sup>

Part no.	G	SW	L1	g/piece
19-02	G1/8	5	6	2
19-04	G1/4	6	9	5
19-06	G3/8	8	10	13
19-08	G1/2	10	12	24
19-10	G3/4	12	14	47

<sup>1)</sup> When ordering please add "NI" to Part No.

## Elbow piece, 90°

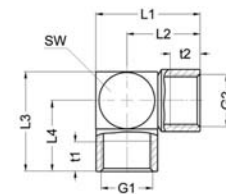
- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass



Part no.	G1	G2	SW	i1	i2	L1	L2	NW	g/piece
410-0200	G1/8	G1/8	11	8	8	22	16,5	5,5	16
410-0400	G1/4	G1/4	14	10	10	29	22	6,5	40
410-0454	G1/4	M10x1	14	10	8	29	22	6	35
410-0600	G3/8	G3/8	17	10	10	31	22,5	8,5	66
410-0800	G1/2	G1/2	21	12	12	40	29,5	12	117
410-0806	G1/2	G3/8	21	12	10	40	29,5	10	104
410-1000	G3/4	G3/4	27	14	14	51	37,5	15,5	243
410-1008	G3/4	G1/2	27	14	12	51	37,5	13	226
410-1200	G1	G1	34	14	14	60	43	23	357

## Elbow piece, 90°

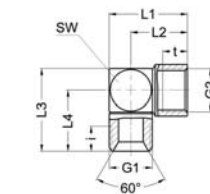
- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass



Part no.	G1	G2	SW	L1	L2	L3	L4	t1	t2	NW	g/piece
412-0700	G1/2	G1/2	24	40,9	28,5	42	29,5	12	12	12	136
412-1100	G1	G1	38	55,4	36,5	59	40	14	14	23	357

## Elbow piece, 90°

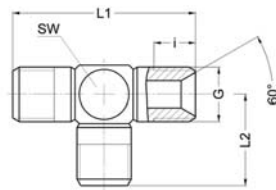
- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass



Part no.	G1	G2	SW	i	L1	L2	L3	L4	t	NW	g/piece
414-0807	G1/2	G1/2	21	12	40	29,5	38	27,5	12	12	113
414-1211	G1	G1	34	14	55	38	58,5	42	14	23	337



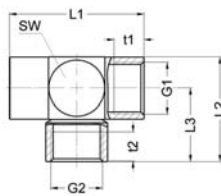
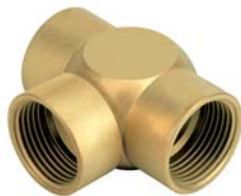
## T piece



- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass

Part no.	G	SW	i	L1	L2	NW	g/piece
400-0400	G1/4	14	10	44	22	6,5	51
400-0600	G3/8	17	10	46	22,5	8,5	82
400-0800	G1/2	21	12	59	29,5	12	148

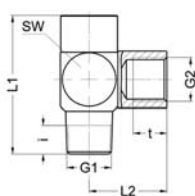
## T piece



- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass

Part no.	G1	G2	SW	L1	L2	t1	t2	NW	g/piece
402-0100	G1/8	G1/8	14	33	25	7	7	5,5	38
402-0300	G1/4	G1/4	17	38	31,5	10	10	6,5	63
402-0500	G3/8	G3/8	22	51	37	10	10	8,5	121
402-0700	G1/2	G1/2	25	54	42	12	12	12	153
402-1100	G1	G1	38	73	59	14	14	23	412
402-1107	G1	G1/2	38	73	54	14	12	19	370

## L screw-in joint

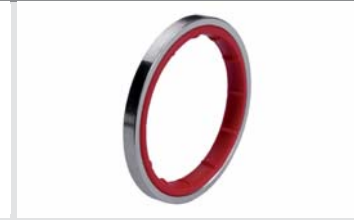
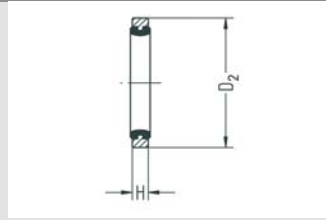


- Whitworth pipe thread
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Material: brass

Part no.	G1	G2	SW	i	L1	L2	t	NW	g/piece
407-0403	R1/4	G1/4	17	10	41	23	10	6,5	63

## VS seal ring

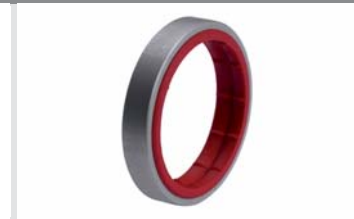
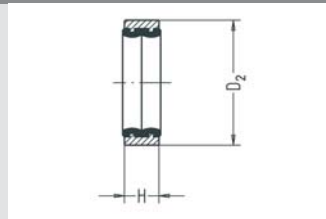
- For Whitworth pipe thread
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Large torque possible
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar



Part no.	for thread	D2	H	g/piece
515-0122	G1/8 and M10x1	14,7	2,2	1,02
515-0322	G1/4	17,7	2,2	1,23
515-0522	G3/8	21,8	2,2	1,56
515-0722	G1/2	26,3	2,2	2,04

## VS spacer seal ring

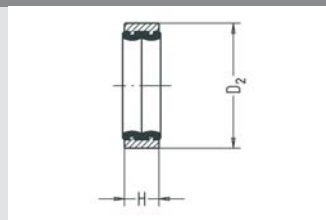
- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar



Part no.	for thread	D2	H	g/piece
515-0150MS	G1/8 and M10x1	14,7	4,5	2,0
515-0350MS	G1/4	17,7	4,5	2,5
515-0550MS	G3/8	21,8	4,5	3,0
515-0750MS	G1/2	26,3	4,5	4,0

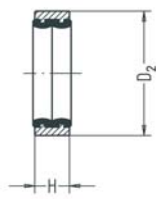
## VS spacer seal ring

- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar



Part no.	for thread	D2	H	g/piece
515-0150AL	G1/8 and M10x1	14,7	4,5	1,0
515-0350AL	G1/4	17,7	4,5	1,5
515-0550AL	G3/8	21,8	4,5	2,0
515-0750AL	G1/2	26,3	4,5	2,0

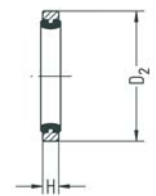
## VS spacer seal ring



- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -20 to +70 °C
- Working pressure range -0.95 to 30 bar

Part no.	for thread	D2	H	g/piece
514-5550AL	M12x1,5	17,9	4,5	1,31
514-5750AL	M14x1,5	19,9	4,5	1,42
514-6150AL	M18x1,5	23,9	4,5	1,67
514-6550AL	M22x1,5	27,9	4,5	1,91

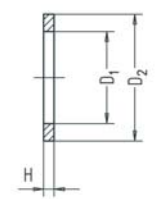
## VS seal ring



- For whitworth pipe thread
- Sealing material FPM, FDA compliant according to 21 CFR 177.2600
- Spacer ring 1.4307
- Large torque possible
- Undetachable
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 30 bar

Part no.	for thread	D2	H	g/piece
915-0122	G1/8 and M10x1	14,7	2,2	1
915-0322	G1/4	17,7	2,2	1

## seal ring

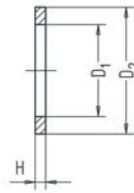


- For Whitworth pipe thread and metric thread
- Material aluminum
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to +15 bar

Part no.	for thread	D1	D2	H	g/piece
14-49AL	M5	5	7,6	1	0,06
14-55AL	M12x1,5	12,2	16	1,5	0,29
14-57AL	M14x1,5	14,1	18,2	1,5	0,39
14-5720AL	M14x1,5	14,1	18,2	2	0,49
14-61AL	M18x1,5	18,2	22	1,5	0,42
14-6120AL	M18x1,5	18,2	22	2	0,50
14-65AL	M22x1,5	22,2	27	1,5	0,64
14-6520AL	M22x1,5	22,2	27	2	0,88
15-07AL	G1/2	21,2	26	1,5	0,60
15-0720AL	G1/2	21,2	26	2	0,86
15-03AL	G1/4	13,2	18,2	1,5	0,45
15-0320AL	G1/4	13,2	18,2	2	0,58
15-01AL	G1/8 and M10x1	10,2	14	1,5	0,25
15-0120AL	G1/8 and M10x1	10,2	14	2	0,31
15-05AL	G3/8	17,1	22	1,5	0,56
15-0520AL	G3/8	17,1	22	2	0,71
15-1120AL	G1	33	39	2	2

## seal ring

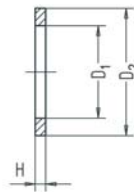
- For Whitworth pipe thread and metric thread
- Material PVC
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to +15 bar



Part no.	for thread	D1	D2	H	g/piece
14-41PVC	M3	3	5	0,8	0,01
14-49PVC	M5	5	7,6	1	0,03
14-55PVC	M12x1,5	12	16	1,5	0,07
14-57PVC	M14x1,5	14,1	18,2	1,5	0,22
14-61PVC	M18x1,5	18	22	1,5	0,1
14-65PVC	M22x1,5	22,2	27	1,5	0,38
15-07PVC	G1/2	21,2	26	1,5	0,34
15-0720PVC	G1/2	21,2	26	2	0,50
15-03PVC	G1/4	13,2	18,2	1,5	0,24
15-0320PVC	G1/4	13,2	18,2	2	0,35
15-01PVC	G1/8 and M10x1	10,2	14	1,5	0,14
15-0120PVC	G1/8 and M10x1	10,2	14	2	0,20
15-05PVC	G3/8	17,1	22	1,5	0,31
15-0520PVC	G3/8	17,1	22	2	0,41
15-1120PVC	G1	33,4	39	2	0,91
15-0920PVC	G3/4	26,6	33	2	0,82

## seal ring

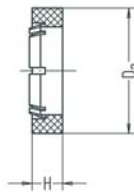
- For metric threads
- Material PA
- Temperature range -10 to +60 °C
- Working pressure range 0 to +15 bar



Part no.	for thread	D1	D2	H	g/piece
14-49PA	M5	5	7,6	1	0,06

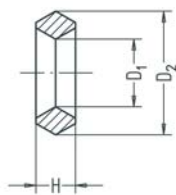
## Spacer seal ring

- For Whitworth pipe thread
- Material PA6 GF, black
- Undetachable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 15 bar



Part no.	for thread	D2	H	g/piece
534-015010	G1/8 and M10x1	14,9	4,5	0,54
534-035010	G1/4	18,9	4,5	0,81
534-055010	G3/8	22,9	4,5	1,13
534-075010	G1/2	26,9	4,5	1,21

## Seal ring for manometer



- For manometer
- Material aluminum
- Temperature range -20 to +100 °C
- Working pressure range -0.95 to +15 bar

Part no.	for thread	D1	D2	H	g/piece
13-01AL	G1/8 and M10x1	4,2	8,5	3	0,20
13-03AL	G1/4	6	11	3,5	0,37

## Hose clamp

- For compressed-air hose
- Hose connection removable by disconnecting hose clamps
- Material galvanized steel
- Fits hose spigots of type 37, 40, 44, 47 and 74



Part no.	for hose with outside diameter	Clamping width	g/piece
10-0911	9 - 11	7	2
10-1113	11 - 13	7	3
10-1315	13 - 15	7	4
10-1417	14 - 17	8	5
10-1820	18 - 20	8	5
10-2023	20 - 23	8	8

## Hose clamp

- For compressed-air hose
- Hose connection removable by unscrewing hose clamp
- Material galvanized steel
- Fits hose spigots of type 37, 40, 44, 47 and 74



Part no.	for hose with outside diameter	Clamping width	g/piece
11-0812	8 - 12	9	10
11-1016	10 - 16	9	11
11-1220	12 - 20	12	17
11-1625	16 - 25	12	18



Blow guns, compressed-air valves, nozzles





## Blow gun for compressed air



- With hose spigot
- Material aluminum anodized
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar

Part no.	G	Hose ID	L1	L2	D1	g/piece
205-06	M12x1,25	6	92	140	1,5	247
205-09	M12x1,25	9	92	140	1,5	247

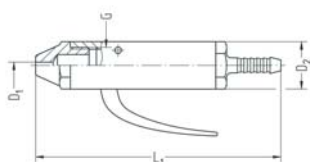
## Blow gun for compressed air



- Without hose spigot
- Material aluminum anodized
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar

Part no.	G1	G2	L1	L2	D1	g/piece
205-00	M12x1,25	G1/4	92	140	1,5	240

## Blow valve for compressed air

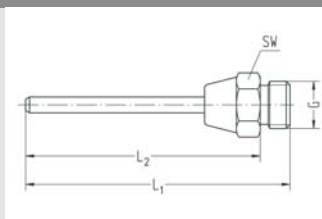


- With hose spigot
- Material aluminum
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar

Part no.	G	Hose ID	L1	D1	D2	g/piece
200-06	G3/8	6	113	2	22	105
200-09	G3/8	9	113	2	22	104
200-13	G3/8	13	113	2	22	109

## Extension

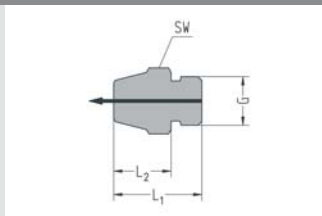
- Material galvanized steel
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	G	SW	L1	L2		g/piece
228-0615	G3/8	19	160	153	for blow valve	33
228-5615	M12x1,25	14	157	149	for blow gun	25

## Nozzle

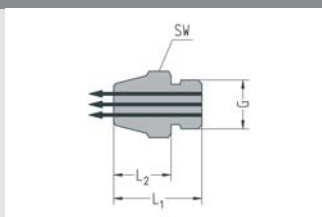
- Standard version
- Material galvanized steel
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	G	SW	L1	L2		g/piece
225-0620	G3/8	19	23	17	for blow valve	23
225-5620	M12x1,25	14	20	13	for blow gun	14

## Nozzle

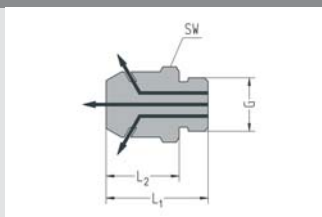
- Muffling of noises
- Material galvanized steel / sintered bronze
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



Part no.	G	SW	L1	L2		g/piece
226-0620	G3/8	17	21	14	for blow valve	23
226-5620	M12x1,25	14	19,5	12	for blow gun	13

## Nozzle

- With safety air shielding
- Material galvanized steel
- Temperature range -10 to +60 °C
- Working pressure range 0 to 10 bar



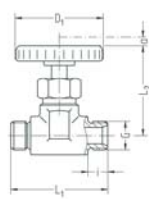
Part no.	G	SW	L1	L2		g/piece
227-0620	G3/8	19	29	22	for blow valve	45
227-5620	M12x1,25	17	27	19	for blow gun	31



Shut-off valves, check valves, silencer



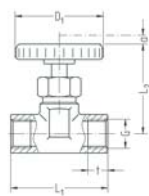
## Shut-off valve



- Whitworth pipe thread external
- Sealing NBR (Perbunan)
- Material brass
- Material handwheel see table
- Type: Poppet valve, metal-to-metal seal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	i	L1	L2	a	D1	NW	Material handwheel	g/piece
250-0202	G1/8	8	36	33	3	23	4	brass	59
250-0404	G1/4	9	44	40	4,5	38	5	plastic	100
250-0606	G3/8	10	52	48	5	50	7	plastic	162
250-0808	G1/2	12	58	51	8	50	8	plastic	300

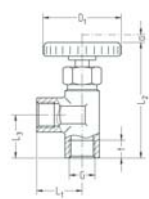
## Shut-off valve



- Whitworth pipe thread interior
- Sealing NBR (Perbunan)
- Material brass
- Material handwheel see table
- Type: Poppet valve, metal-to-metal seal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	t	L1	L2	a	D1	NW	Material handwheel	g/piece
250-0101	G1/8	8,5	36	33	3	23	4	brass	63
250-0303	G1/4	11	44	40	4,5	38	5	plastic	100
250-0505	G3/8	12	52	48	5	50	7	plastic	168
250-0707	G1/2	13	58	51	8	50	8	plastic	280

## Corner shut-off valve

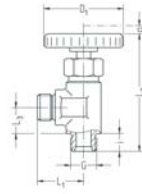


- Whitworth pipe thread interior
- Sealing NBR (Perbunan)
- Material brass
- Material handwheel see table
- Type: Poppet valve, metal-to-metal seal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 15 bar

Part no.	G	t	L1	L2	L3	a	D1	NW	Material handwheel	g/piece
260-0101	G1/8	8,5	18	48	18	4,5	23	4	brass	62
260-0303	G1/4	11	23	59	22	6	38	5	plastic	101
260-0505	G3/8	12	27	68,5	26	7	50	7	plastic	170
260-0707	G1/2	13	30	80	29	7	50	8	plastic	287

## Corner shut-off valve

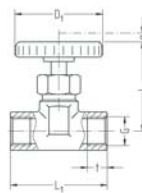
- Whitworth pipe thread external
- Sealing NBR (Perbunan)
- Material brass
- Material handwheel see table
- Type: Poppet valve, metal-to-metal seal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	i	L1	L2	L3	a	D1	NW	Material handwheel	g/piece
260-0202	G1/8	8	18	48	10	4,5	23	4	brass	59
260-0404	G1/4	9	23	59	13	6	38	5	plastic	99

## Shut-off valve with micro adjustment

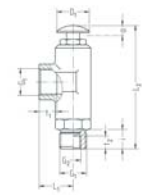
- Whitworth pipe thread interior
- Sealing NBR (Perbunan)
- Material brass
- Material handwheel plastic
- Type: Poppet valve, metal-to-metal seal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 15 bar



Part no.	G	t	L1	L2	a	D1	NW	g/piece
252-0303	G1/4	9	39	41	8	38	5	92
252-0505	G3/8	9	44	48	8	50	6	151
252-0707	G1/2	11	53	56	10	50	6	266

## Hand valve 2/2 ways

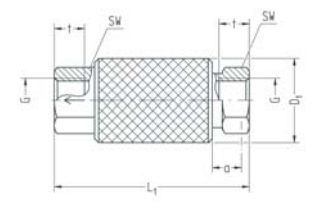
- With push button
- Whitworth pipe thread
- Sealing NBR (Perbunan)
- Material brass
- Type: Poppet valve, NBR (Perbunan) seals on metal
- Allowable medium: Air
- Nominal flow-rate: 750 NI/min.
- Operating force at 6 bar: 50 N
- Temperature range -10 to +60 °C
- Working pressure range 0 to 15 bar



Part no.	G1	G2	i	t1	t2	L1	L2	a	D1	NW	g/piece
310-0506	G3/8	G1/8	12	11	8	21	76,5	3,5	20	6	178

Nominal flow-rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust

## Hand valve 3/2 ways

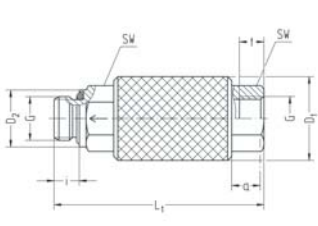


- With sliding sleeve
- Whitworth pipe thread, M5 thread
- Sealing NBR (Perbunan)
- Material brass, Al black anodized
- Type: Gate valve
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 10 bar

Part no.	G	Nominal flow-rate NI/min	SW	t	L1	a	D1	NW	g/piece
140-0102	G1/8	380	14	8	54	9	22	4	58
140-0304	G1/4	1000	17	9	59,5	10	25	6,5	79
140-0506	G3/8	1300	22	9	66,5	11	32	8,5	145
140-0708	G1/2	1900	27	12	83	14	38	12	258
140-0910	G3/4	4100	32	14	103	18	46	18	450
140-1112	G1	6200	41	16	120	20	52	22	740
140-4950	M5	130	9	5	41	7	15	3,3	22

Nominal flow-rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust

## Hand valve 3/2 ways



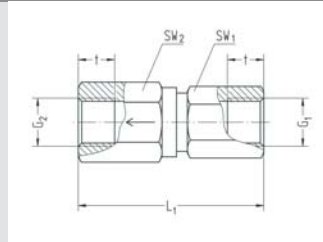
- With sliding sleeve
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR (Perbunan)
- Material brass, Al black anodized
- Type: Gate valve
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range -0.95 to 16 bar

Part no.	G	Nominal flow-rate NI/min	SW	L1	i	t	a	D1	D2	NW	g/piece
141-0102	G1/8	380	14	60	5,5	10	9	22	14	4	70
141-0304	G1/4	1000	17	68	7,5	12	10	25	18,5	6,5	90
141-0506	G3/8	1300	22	75	7,5	12	11	32	22	8,5	170
141-0708	G1/2	1900	27	90,5	9,5	12	14	38	25	12	300
141-0910	G3/4	4100	32	116,5	10,5	14	18	46	32	18	560
141-1112	G1	6200	41	135	12,5	16	20	52	39,8	22	740

Nominal flow-rate measured at 6 bar and 1 bar pressure drop between inlet and exhaust

## Non-return valve

- Input: Whitworth pipe thread interior
- Output: Whitworth pipe thread interior
- Sealing NBR (Perbunan)<sup>1)</sup>
- Material brass
- Type: Poppet valve, NBR (Perbunan)<sup>1)</sup> seals on metal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0.5 to 15 bar



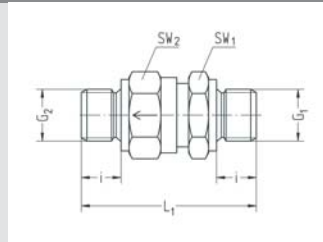
Part no.	G1	G2	Nominal flow-rate NI/min	SW1	SW2	L1	t	NW	g/piece
148-0104			230	14	14	39	8	4	69
148-0306			750	17	17	45,5	10	6	80
148-0308			1050	17	17	51	10	8	164
148-0510			1650	22	22	59,5	10	10	279
148-0712			2200	27	27	66	14	12	284
148-0716			3900	27	27	71	14	16	439
148-0920			6200	32	32	77,5	16	20	624

Nominal flow-rate measured at 6 bar and 1 bar pressure drop between inlet and outlet

<sup>1)</sup> FPM available at additional price

## Non-return valve

- Input: Whitworth pipe thread exterior
- Output: Whitworth pipe thread exterior
- Sealing NBR (Perbunan)<sup>1)</sup>
- Material brass
- Type: Poppet valve, NBR (Perbunan)<sup>1)</sup> seals on metal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0.5 to 15 bar



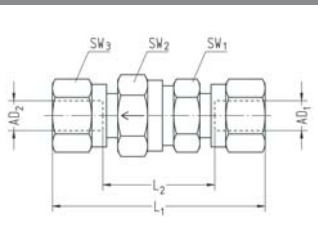
Part no.	G1	G2	Nominal flow-rate NI/min	SW1	SW2	L1	i	NW	g/piece
147-0204	G1/8	G1/8	230	14	14	31,5	6,5	4	35
147-0406	G1/4	G1/4	750	17	17	37	9	6	58
147-0408	G1/4	G1/4	1050	17	22	46	9	8	91
147-0610	G3/8	G3/8	1650	22	27	52	9	10	156
147-0812	G1/2	G1/2	2200	27	27	53	11	12	181
147-0816	G1/2	G1/2	3900	27	32	58,5	11	16	233
147-1020	G3/4	G3/4	6200	32	41	68,5	14	20	359

Nominal flow-rate measured at 6 bar and 1 bar pressure drop between inlet and outlet

<sup>1)</sup> FPM available at additional price



## Non-return valve



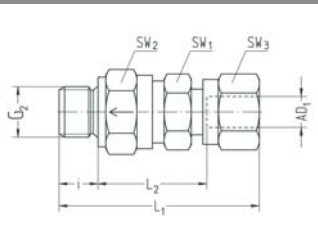
- Input: Screw pipe connection
- Output: Screw pipe connection
- Sealing NBR (Perbunan)<sup>1)</sup>
- Material brass
- Type: Poppet valve, NBR (Perbunan)<sup>1)</sup> seals on metal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0.5 to 15 bar

Part no.	AD1	AD2	Nominal flow-rate NI/min	SW1	SW2	SW3	L1	L2	NW	g/piece
146-0604	6	6	230	14	14	14	54	24	4	63
146-0806	8	8	750	17	17	17	55	25	6	87
146-1008	10	10	1050	17	22	19	64	34	8	143
146-1210	12	12	1650	22	27	22	73,5	43,5	10	225
146-1512	15	15	2200	27	27	27	72	41	12	275
146-1816	18	18	3900	27	32	32	77	44	14	
146-2220	22	22	6200	32	41	63	86,5	53,5	18	

Nominal flow-rate measured at 6 bar and 1 bar pressure drop between inlet and outlet

<sup>1)</sup> FPM available at additional price

## Non-return valve



- Input: Screw pipe connection
- Output: Whitworth pipe thread exterior
- Sealing NBR (Perbunan)<sup>1)</sup>
- Material brass
- Type: Poppet valve, NBR (Perbunan)<sup>1)</sup> seals on metal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0.5 to 15 bar

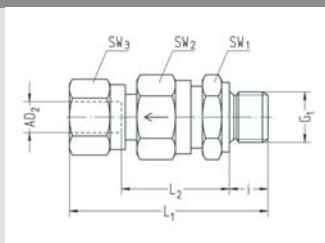
Part no.	AD1	G2	Nominal flow-rate NI/min	SW1	SW2	SW3	L1	L2	i	NW	g/piece
142-0602	6	G1/8	230	14	14	14	42,5	21	6,5	4	49
142-0804	8	G1/4	750	17	17	17	46	22	9	6	70
142-1004	10	G1/4	1050	17	22	19	55	31	9	8	118
142-1206	12	G3/8	1650	22	27	22	63	39	9	10	189
142-1508	15	G1/2	2200	27	27	27	63,5	37	11	12	227
142-1808	18	G1/2	3900	27	32	32	67,5	40	11	14	
142-2210	22	G3/4	6200	32	41	36	77,5	47	14	18	

Nominal flow-rate measured at 6 bar and 1 bar pressure drop between inlet and outlet

<sup>1)</sup> FPM available at additional price

## Non-return valve

- Input: Whitworth pipe thread exterior
- Output: Screw pipe connection
- Sealing NBR (Perbunan)<sup>1)</sup>
- Material brass
- Type: Poppet valve, NBR (Perbunan)<sup>1)</sup> seals on metal
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0.5 to 15 bar



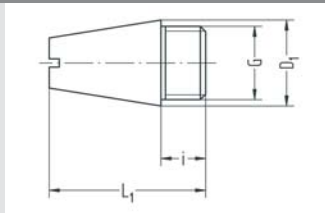
Part no.	G1	AD2	Nominal flow-rate NI/min	SW1	SW2	SW3	L1	L2	i	NW	g/piece
144-0206	G1/8	6	230	14	14	14	43	21,5	6,5	4	49
144-0408	G1/4	8	750	17	17	17	46	22	9	6	75
144-0410	G1/4	10	1050	17	22	19	55	31	9	8	118
144-0612	G3/8	12	1650	22	27	22	62,5	38,5	9	10	192
144-0815	G1/2	15	2200	27	27	27	61,5	35	11	12	230
144-0818	G1/2	18	3900	27	32	32	68	40,5	11	14	
144-1022	G3/4	22	6200	32	41	36	77,5	47	14	18	

Nominal flow-rate measured at 6 bar and 1 bar pressure drop between inlet and outlet

<sup>1)</sup> FPM available at additional price

## Silencer

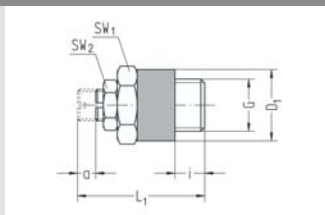
- Whitworth pipe thread, thread M5
- Material sintered bronze
- Temperature range -20 to +80 °C
- Working pressure range 0 to 10 bar
- Packaging unit 10 pieces



Part no.	G	Nominal flow-rate NI/min	i	L1	D1	g/piece
165-0200	G1/8	500	6	21	11	7
165-0400	G1/4	1050	8	27	14	15
165-0600	G3/8	2000	11	36	18	30
165-0800	G1/2	4200	11	44	24	66
165-1000	<sup>2)</sup> G3/4	6000	12	65	29,5	124
165-1200	<sup>2)</sup> G1	8200	15	76	36	216
165-5000	M5	300	5	20	8,5	5

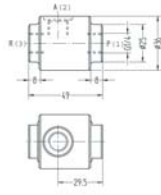
## Exhaust-side throttle with muffler

- Whitworth pipe thread, thread M5
- Material see table
- Type: Cone-type throttle
- Temperature range -20 to +80 °C
- Working pressure range 0 to 15 bar
- Packaging unit 10 pieces



Part no.	G	Nominal flow-rate NI/min	SW1	SW2	L1	i	a	D1	NW	Material	g/piece
112-0200	G1/8	410	14	9	24	5	4	14	4	Brass / Sintered bronze	15
112-0400	G1/4	1100	17	11	32	7,5	6	18	6	Brass / Sintered bronze	30
112-0600	G3/8	1900	22	14	37,5	7,5	8	22	8,5	Brass / Sintered bronze	57
112-0800	G1/2	3300	27	17	45	9,5	10	27	11,5	Brass / Sintered bronze	98
112-5000	M5	100	8	-	21	3,5	1	9	1,5	Brass nickel-plated / Sinter-Niro	4

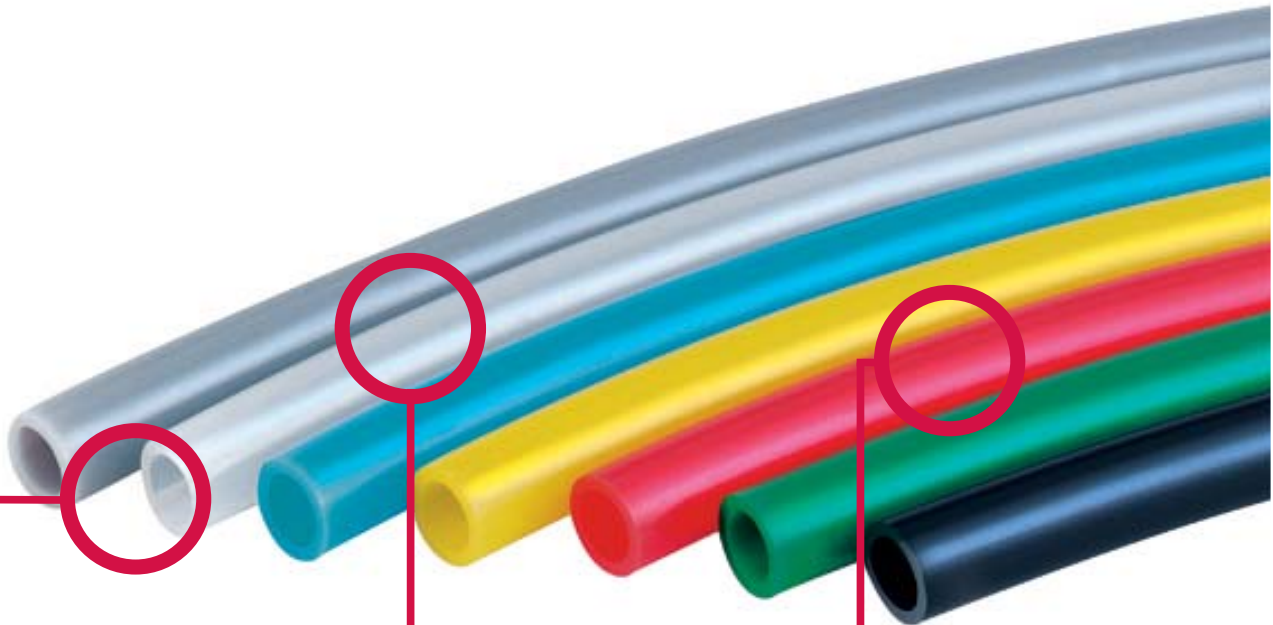
## Quick exhaust valve



- Whitworth pipe thread
- Sealing NBR (Perbunan)
- Material Al black anodized
- Type: Poppet valve
- Allowable medium: Air
- Temperature range -10 to +60 °C
- Working pressure range 0.5 to 10 bar

Part no.	G	Nominal flow-rate NI / min 1 => 2	Nominal flow-rate NI / min 2 => 3	NW	g/piece
162-0304	G1/4	550	1400	6	81

## 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

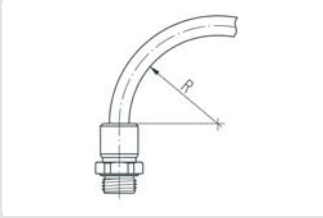
- Hoses can be delivered in many common colors, e.g. to indicate different fluids
- Labeling of hoses for coding possible too

### 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.

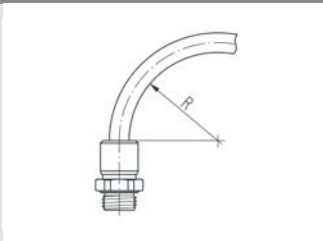
## Compressed-air hose PE



- 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

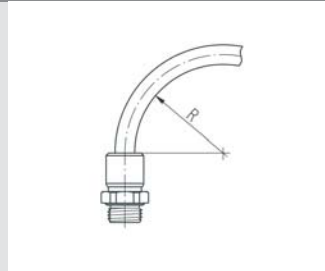


- Made of polyamide (PA)
- Color black (red, blue, green, yellow, natural, brown, orange and grey: specify when placing order; subject to extra charge)
- External calibration; for use with Eisele plug connectors
- Temperature range -60 to +100 °C
- Operating pressure = burst pressure: safety (common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

## Compressed-air hose PU

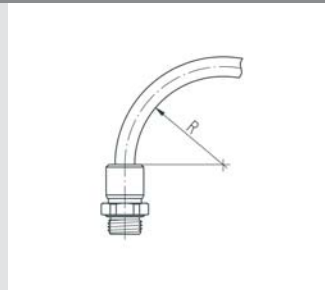
- Made of polyester-polyurethane (PU)
- Color black (red, blue, green, yellow, natural, brown, orange and grey: specify when placing order; subject to extra charge)
- External calibration; for use with Eisele plug connectors
- Temperature range -35 to +70 °C
- Operating pressure = burst pressure: safety (common factor 2 to 3)
- Free of plasticizers, PWIS, copper and PTFE
- Impervious to buckling and drag chain compliant
- Suitable for vacuum



Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 20°C	Minimum burst pressure at 60°C	min. allowable bend radius	g/m
99003-0302	3 / 2,1	42 bar	22 bar	9	4,0
99003-0402	4 / 2,3	45 bar	24 bar	8	10
99003-0425	4 / 2,6	39 bar	23 bar	8	9,0
99003-4303	4,3 / 2,9	36 bar	22 bar	10	11
99003-0503	5 / 3,1	45 bar	24 bar	11	15,0
99003-0604	6 / 3,9	36 bar	23 bar	14	20,0
99003-0806	8 / 5,7	32 bar	20 bar	20	30,0
99003-1008	10 / 7,5	28 bar	16 bar	37,5	44,0
99003-1208	12 / 8	42 bar	26 bar	23	79,0
99003-1209	12 / 9	29 bar	17 bar	48	63
99003-1410	14 / 10	33 bar	20 bar	46	95,0
99003-1411	14 / 11	23 bar	15 bar	60	90,0
99003-1611	16 / 11	32 bar	21 bar	43	132,0

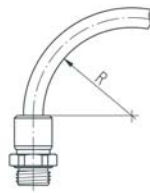
## Plastic hose PU-H

- Made of polyether-polyurethane (PU-H)
- Color imbued: black, blue
- External calibration; for use with Eisele plug connectors
- Temperature range -35 to +70 °C
- Operating pressure = burst pressure: Safety (common factor 2 to 3)
- Free of halogen, plasticizers, PWIS, copper and PTFE
- Impervious to buckling and drag chain compliant
- Resistant to UV, hydrolysis and microbes
- FDA compliant according to 21 CFR 177.2600
- Suitable for vacuum



Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 20°C	Minimum burst pressure at 60°C	min. allowable bend radius	g/m
99150-0425	4 / 2,5	34 bar	18 bar	6	8,5
99150-0604	6 / 4	33 bar	18 bar	10	18,3
99150-0806	8 / 6	30 bar	18 bar	20	28,7
99150-1007	10 / 7	30 bar	18 bar	25	46,5
99150-1208	12 / 8	33 bar	18 bar	23	72,9
99150-1611	16 / 11	31 bar	18 bar	38	123,0
99150-2014	20 / 14	ca. 30 bar	ca. 15 bar	-	ca. 187

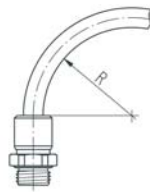
## Plastic hose PU-H translucent



- Made of polyether-polyurethane (PU-H)
- Color translucent: natural, red, blue
- External calibration; for use with Eisele plug connectors
- Temperature range -35 to +70 °C
- Operating pressure = burst pressure: Safety (common factor 2 to 3)
- Free of halogen, plasticizers, PWIS, copper and PTFE
- Impervious to buckling and drag chain compliant
- Resistant to hydrolysis and microbes
- FDA compliant according to 21 CFR 177.2600
- Suitable for vacuum

Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 20°C	Minimum burst pressure at 60°C	min. allowable bend radius	g/m
99151-0425	4 / 2,5	34 bar	18 bar	6	8,5
99151-0604	6 / 4	33 bar	18 bar	10	18,3
99151-0806	8 / 6	30 bar	18 bar	20	28,7
99151-1007	10 / 7	30 bar	18 bar	25	46,5
99151-1208	12 / 8	33 bar	18 bar	23	72,9
99151-1611	16 / 11	31 bar	18 bar	38	123,0
99151-2014	20 / 14	ca. 30 bar	ca. 15 bar	-	ca. 187

## Compressed-air hose PTFE

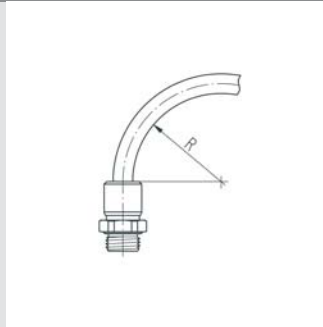


- Made of polytetrafluoroethylene (PTFE, Teflon)
- Color natural
- External calibration; for use with Eisele plug connectors
- Temperature range -190 to +260 °C
- Operating pressure = burst pressure: safety (common factor 2 to 3)
- Free of plasticizers, PWIS, copper and PTFE
- Resistant to UV and solvents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

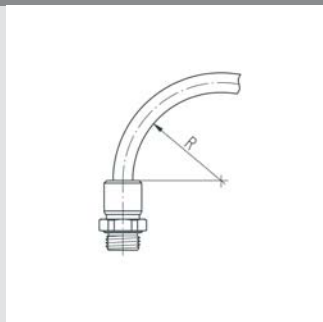
- Made of fluorinated ethylene-propylene copolymer (FEP)
- Color crystal clear
- External calibration; for use with Eisele plug connectors
- Temperature range -35 to +120 °C
- Operating pressure = burst pressure: Safety (common factor 2 to 3)
- Very flexible
- Free of plasticizer, copper and PTFE
- Flame-retardant 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

## Plastic hose PFA

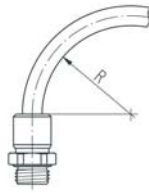
- Made of Perfluoro Alkoxyalkane (PFA)
- Color natural
- External calibration; for use with Eisele plug connectors
- Temperature range -20 to +150 °C (at zero pressure -70 to +260°C)
- Operating pressure = burst pressure: Safety (common factor 2 to 3)
- Free of plasticizer and PWIS
- Resistant to UV, 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	-	-	-	-



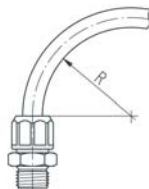
## Eisele ProWeld hose



- Made of polyether-polyurethane
- Color black (red, blue, green, yellow, white)
- External calibration; for use with Eisele plug connectors
- Operating temperature -35 to +75 °C
- Operating pressure = burst pressure: safety (common factor 2 to 3)
- Suitable for compressed air, water
- Free of plasticizers, PWIS, halogen, copper and PTFE
- Impervious to buckling and drag chain compliant
- Resistant to UV, hydrolysis and microbes
- Flame-retardant according to UL94 V0 to V2
- Suitable for employment in welding
- Suitable for vacuum

Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 20°C	Minimum burst pressure at 60°C	min. allowable bend radius	g/m
99118-0302	3 / 2	-	-	-	-
99118-0402	4 / 2	57 bar	40 bar	6,5	12,2
99118-0603	6 / 3	57 bar	40 bar	8,5	27,5
99118-0604	6 / 4	40 bar	22 bar	12	22
99118-0804	8 / 4	63 bar	37 bar	8	48,3
99118-0855	8 / 5,5	34 bar	18 bar	18	32,5
99118-1006	10 / 6	49 bar	28 bar	15	64,5
99118-1208	12 / 8	34 bar	21 bar	24	80,8
99118-1410	14 / 10	33 bar	18 bar	38	97,8
99118-1611	16 / 11	37 bar	19 bar	44	136,9
99118-2014	20 / 14	ca. 35 bar	ca. 16 bar	-	-

## Compressed-air hose PVC fiber-reinforced

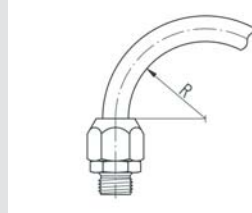


- Made of polyvinylchloride (PVC), fiber-reinforced
- Color blue, other colors on request
- Usable for screw joints of program 10
- Temperature range -20 to +50 °C

Part no.	Outside Ø / Inside Ø	Maximum allowable working pressure at 23 °C (reference value)	min. allowable bend radius	g/m
99006-0604	6,2 / 4	10 bar	50	19,5
99006-0806	8,2 / 6	10 bar	60	32,7
99006-1008	10 / 8	10 bar	65	40,5
99006-1109	11,6 / 9	10 bar	70	51,8
99006-1210	12,5 / 10	10 bar	80	51,9
99006-1512	15 / 12,5	10 bar	100	69,3
99006-1713	17,6 / 13	10 bar	100	140,1

## Compressed-air hose PVC fabric lining

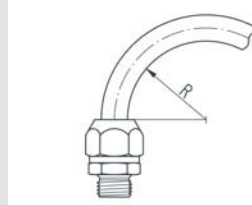
- Made of polyvinylchloride (PVC) with fabric lining
- Color green-transparent
- Usable for screw joints and spigots
- Temperature range -20 to +50 °C



Part no.	Outside Ø / Inside Ø	Maximum allowable working pressure at 23 °C (reference value)	min. allowable bend radius	g/m
99007-1004	10 / 4	12 bar	20	76,9
99007-1206	12 / 6	12 bar	25	98,7
99007-1408	14 / 8	12 bar	30	114,1
99007-1509	15 / 9	12 bar	35	132,8
99007-1610	16 / 10	10 bar	40	146,6
99007-2013	20 / 13	10 bar	70	207,3
99007-2112	21 / 12	10 bar	55	274,8
99007-2619	26,8 / 19,4	-	-	-

## Compressed-air hose

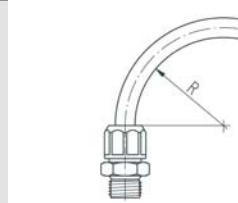
- Made of Perbunan (NBR) with metal braiding
- Color silver
- Usable for screw joints
- Temperature range -20 to +80 °C



Part no.	Outside Ø / Inside Ø	Maximum allowable working pressure at 23 °C (reference value)	min. allowable bend radius	g/m
99009-0704	7 / 4	12 bar	70	82,0
99009-0906	9 / 6	12 bar	80	117,4
99009-1209	12 / 9	12 bar	90	173,0
99009-1711	17 / 11	-	-	-

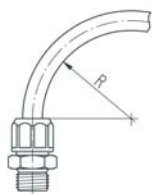
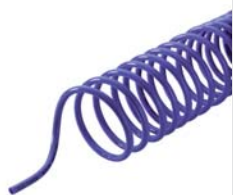
## Double compressed-air hose

- Made of polyurethane (PU)
- Color black / blue
- External calibration; for use with Eisele plug connectors
- Temperature range -35 to +60 °C
- Suitable for vacuum



Part no.	Outside Ø / Inside Ø	Maximum allowable working pressure at 23 °C (reference value)	min. allowable bend radius	g/m
99002-0425	4 / 2,5	12 bar	10	19,0
99002-0604	6 / 4	14 bar	30	42,8
99002-0806	8 / 6	12 bar	45	60,4
99002-1008	10 / 8	10 bar	60	78,0
99002-4303	4,3 / 3	12 bar	15	19,4

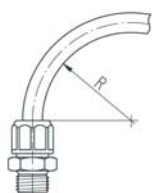
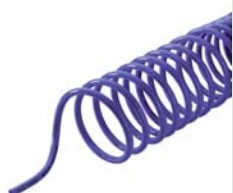
## Spring coil PU



- Made of polyurethane (PU)
- Color blue, other colors on request
- External calibration; for use with Eisele plug connectors
- Temperature range -15 to +55 °C
- With axial outlet
- Free of plasticizer, PWIS and halogen
- Suitable for vacuum

Part no.	Outside Ø / Inside Ø	Allowable pressure	min. allowable bend radius	Effective operating length	Inside coil Ø	g/piece
99503-402504	6 / 4	8 bar	30	2500	40	280
99503-405004	6 / 4	8 bar	30	5000	40	560
99503-502506	8 / 6	7 bar	45	2500	50	390
99503-505006	8 / 6	7 bar	45	5000	50	780

## Spring coil PA



- Made of polyamide (PA)
- Color blue, other colors on request
- External calibration; for use with Eisele plug connectors
- Temperature range -20 to +70 °C
- With axial outlet
- Suitable for vacuum

Part no.	Outside Ø / Inside Ø	Allowable pressure	min. allowable bend radius	Effective operating length	Inside coil Ø	g/piece
99505-602504	6 / 4	15 bar	40	2500	60	280
99505-605004	6 / 4	15 bar	40	5000	60	560
99505-802506	8 / 6	12 bar	55	2500	80	390
99505-805006	8 / 6	12 bar	55	5000	80	780

## Hose bundling

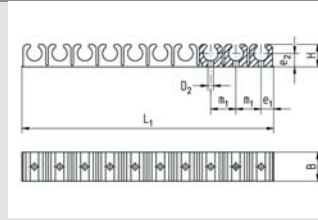


- Material polyethylene (PE)
- Color natural
- Temperature range -10 to +40 °C

Part no.	g/m
99008-1209	50,1

## 10-layer seal retaining strip

- With grooved pins
- Material PA6 GF, black
- Temperature range -10 to +60 °C
- Packaging unit 10 piece



Part no.	for hose	B	H	L1	D2	e1	e2	m1	g/piece
99012-0503	5 / 3	13,5	9	96	2,5	4,3	6	9,7	11
99012-0604	6 / 4	13,5	9	105	3	5,2	5,5	10,5	1
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## Hose cutter

- For compressed-air hoses with outer- $\varnothing$  14
- Material plastic black / steel
- Packaging unit 1 piece



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

## Hose cutter

- For compressed-air hoses with outer- $\varnothing$  22
- 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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## § 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.

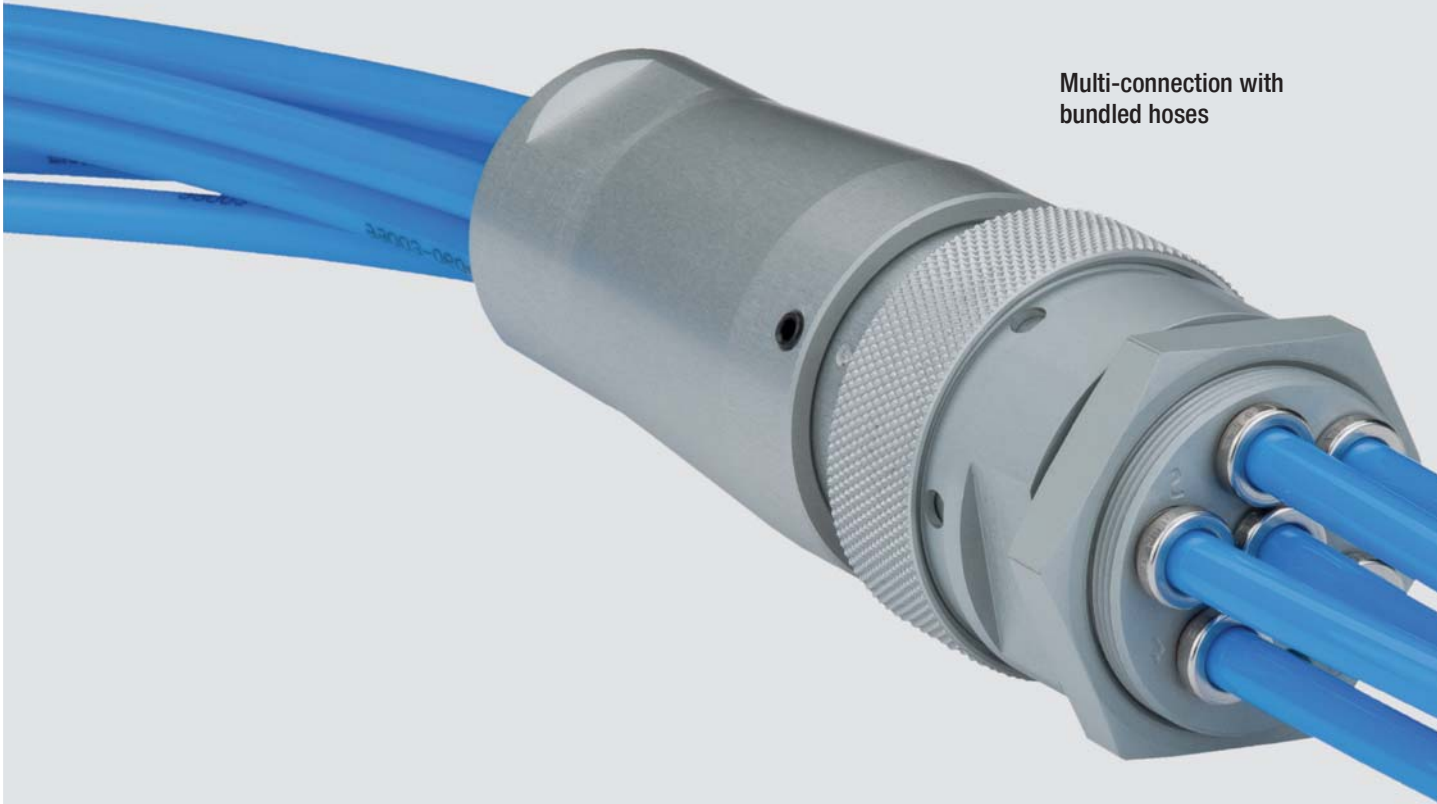
(3) Should a provision of these conditions of sale be or become invalid or impracticable, this shall not affect the validity of the remaining conditions of sale. Eisele and the Customer undertake, in such a case, to replace the invalid or impractical provision with a valid or practicable provision that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

\* \* \*

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- 4 The connection technology for **paint spraying systems** needs dead-space-free tubing systems, and components capable of fast and residue-free cleaning.
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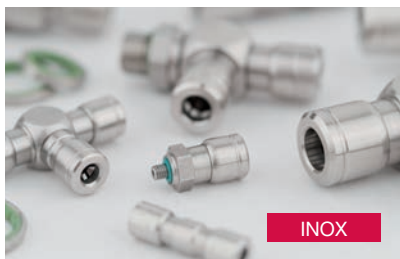
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