

## BASICLINE PROGRAM

Standard components for pneumatics



## EISELE IS QUALITY MADE IN GERMANY

Over 30 patents, more than 8,000 standard articles, and 2,000 customized solutions impressively underline our top quality performance. Whether the solution is configured from standard components or individually customized: all EISELE products boast convincing quality, long lifetimes and sophisticated technology.

Our company is loyal to its philosophy and its roots. Germany is the place where we find our highly qualified employees – the workforce responsible for our company's output. With a manufacturing depth of almost 100%, and stock being kept 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.

PREMIUM QUALITY   
MADE IN GERMANY

From EISELE connection components you may expect:

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



Cover picture © Audi AG

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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 tube
- 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 tube 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 tubes
- Hard tubes can also be easily assembled
- No problem with frequent assembly/disassembly
- Made of black, deoxidized aluminum
- For tubes 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 tubes in pneumatic installations.

- Made of stainless steel, aluminum or nickel-plated brass
- For tubes 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 tubes.

- 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 tubes made of PE, PA, PU, PUR or PTFE



## Additional information

### Materials

Eisele manufactures and supplies in accordance to the directives 2011/65 / EU (RoHS) and China RoHS. Possible exceptions are marked on our documents (order confirmation, delivery note, invoice).

DIN	ASTM/AISI	Materials according to EN	International
1.4301	AISI 304	X5CrNi18-10	0Cr18Ni9 (China) SUS 304 (Japan) STS 304 (Korea) 08Ch18N10 (GUS)
1.4404	AISI 316L	X2CrNiMo17-12-2	00Cr17Ni14Mo2 (China) STS 316L (Korea) SUS 316L (Japan)
1.4571	AISI 316Ti	X6CrNiMoTi17-12-2	0Cr18Ni12MoTi (China) 10Ch17N13M2T (GUS) STS 316Ti (Korea) SUS 316Ti (Japan)
AlCu6BiPb	-	EN AW-2011	-
AlMgSiSnBi	-	EN AW-6023	-
AlMgSi1	-	EN AW-6082	-
CuZn36Pb2As	UNS C35330	CW602N	-
CuZn39Pb3	UNS C37700	CW614N	-

### Relative pressure

In the catalogue bar is used as the unit for the working pressure range.

1 bar = 14,5 psi = 10<sup>5</sup> Pa  
0,07 bar = 1 psi

bar	psi
-0,95	-14,00
-0,80	-11,50
0,00	0,00
0,50	7,00
1,00	14,50
10,00	145,00
15,00	217,00
24,00	348,00
100,00	1450,00

### Temperatur

In the catalogue °C is used as the unit for the working temperature range.

1 °C = 1,8 °F  
0,55 °C = 1 °F

°C	°F
-20	-4
-10	14
0	32
60	140
80	176
120	248
200	392

### Dimension

All information about lengths and diameters in the catalog are given in millimeters (mm). Based on the following data a conversion can be done

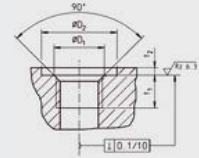
1 mm = 0,04 inch (Zoll)  
25,4 mm = 1 inch (Zoll)

**For further information and assistance, don't hesitate to contact us.**

Reservation: The validity of these general information cannot be guaranteed.

## Connection thread, cylindrical - torque for fittings with chambered O-ring

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)	min. (Nm)	max. (Nm)	recommended (Nm)	
M3	3	3,6	6	0,5	0,3	0,36	0,3	Metric thread M: DIN 13 / ISO 965
M5	4,5	6	10	0,5	0,8	0,95	0,95	
M6	5	7	12	0,5	1,2	1,5	1,2	
M7	5	8	12	0,5	1,5	2	1,5	
M8x1	5,5	9,2	13	0,5	5	6,5	5,5	
M10x1	5,5	11	15	0,5	5,5	9	7	
G1/8	5,5	11	15,3	0,5	5,5	9	7	Pipe thread G: DIN ISO 228
G1/4	7,5	14,2	19	0,5	7	18	12	
G3/8	7,5	17,5	23	0,5	10	25	15	
G1/2	9,5	22	27	0,5	15	34	20	

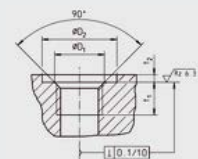


<sup>1)</sup> A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.

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

## Connection thread, cylindrical - torque for fittings with flat seal rings

Thread	Thread depth	Thread counterbore	Counterbore <sup>1)</sup>		Torque max. <sup>2)</sup>		Thread standards
	t1 min. (mm)	ØD1 min. (mm)	ØD2 min. (mm)	t2 max. (mm)	Plastic seal rings (Nm)	Al-, VS-Seal rings (Nm)	
M3	3	-	6	0,5	0,36	-	Metric thread M: DIN 13 / ISO 965
M5	4,5	6	10	0,5	0,95	1,5	
M7	5	8	12	0,5	2	2	
M8x1	5,5	9,2	13	0,5	6,5	6,5	
M10x1	7	11	15	0,5	9	11	
M12x1,5	9,5	13,5	18	0,5	9	14	
M14x1,5	9,5	15,5	20	0,5	11	21	
M18x1,5	10,5	19,5	24	0,5	23	30	
M22x1,5	11,5	23,5	28	0,5	32	45	
G1/8	7,5	11	15,3	0,5	9	11	Pipe thread G: DIN ISO 228
G1/4	11	14,2	19	0,5	18	21	
G3/8	11	17,5	23	0,5	25	28	
G1/2	12	22	27	0,5	34	48	
G3/4	14	-	33	0,5	70	-	
G1	14	-	40	0,5	110	-	

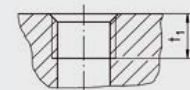


<sup>1)</sup> A counterbore is not necessary. However, the indicated values apply if a counterbore is applied.

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

## Connection thread, conical - torque

Thread	Thread depth t1 min. (mm)	Torque			Thread standard
		min. (Nm)	max. (Nm)	recommendation (Nm)	
NPT1/8, R1/8	7,4	5,5	10	7	Pipe thread ISO 7-1 / EN 10226-1
NPT1/4, R1/4	11	7,5	15	12	
NPT3/8, R3/8	11,4	12,5	20	16	
NPT1/2, R1/2	15	20	30	25	
NPT3/4, R3/4	16,3	30	50	40	



## Tubes

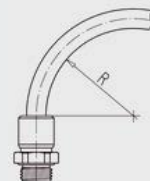
Tube dimension		Polyethylene (PE) Temperature range 14 to 104°F (-10 to +40°C)		Polyamide (PA) Temperature range -76 to 212°F (-60 to +100°C)		Polyurethane (PU) Temperature range -31 to 158°F (-35 to +70°C)		ProWeld (PUR) <sup>1)</sup> Temperature range -31 to 194°F (-35 to +90°C)		Teflon (PTFE) /FEP <sup>2)</sup> Temperature range -31 to 248°F (-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	290 psi (20 bar)	20	435 psi (30 bar)	10	145 psi (10 bar)	10	290 psi (20 bar)	16	362 psi (25 bar)
4,3 (±0,1)	(3)	20	188 psi (13 bar)	20	290 psi (20 bar)	10	145 psi (10 bar)	-	-	35	145 psi (10 bar)
5 (±0,1)	(3)	25	217 psi (15 bar)	25	362 psi (25 bar)	11	145 psi (10 bar)	-	-	25	290 psi (20 bar)
6 (±0,1)	(4)	30	188 psi (13 bar)	30	290 psi (20 bar)	15	145 psi (10 bar)	15	159 psi (11 bar)	35	217 psi (15 bar)
8 (±0,15)	(6)	40	116 psi (8 bar)	40	217 psi (15 bar)	20	130 psi (9 bar)	20	130 psi (9 bar)	65	159 psi (11 bar)
10 (±0,15)	(8)	60	87 psi (6 bar)	60	174 psi (12 bar)	40	116 psi (8 bar)	25	203 psi (14 bar)	100	130 psi (9 bar)
12 (±0,15)	(9)	60	130 psi (9 bar)	85	217 psi (15 bar)	50	145 psi (10 bar)	30	145 psi (10 bar)	100	130 psi (9 bar)
14 (±0,15)	(11)	90	116 psi (8 bar)	80	174 psi (12 bar)	60	109 psi (7,5 bar)	45	130 psi (9 bar)	140	130 psi (9 bar)
16 (±0,15)	(12)	90	87 psi (6 bar)	90	159 psi (11 bar)	45	145 psi (10 bar)	50	130 psi (9 bar)	-	-
20 (±0,2)	(14)	-	-	-	-	-	-	-	116 psi (8 bar)	-	-
1/4" (6,3±0,1)	(4)	-	-	23	290 psi (20 bar)	-	-	10	145 psi (10 bar)	-	-
3/8" (9,5±0,15)	(6)	-	-	32	275 psi (19 bar)	-	-	25	130 psi (9 bar)	-	-
1/2" (12,7±0,15)	(8)	-	-	60	260 psi (19 bar)	-	-	23	130 psi (9 bar)	-	-
5/8" (15,9±0,15)	(11)	-	-	-	-	-	-	-	-	-	-

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

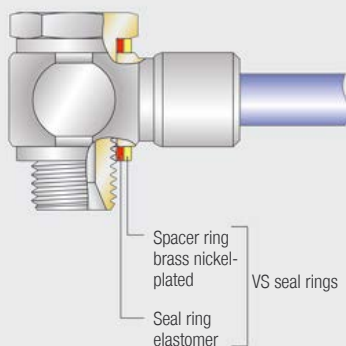
<sup>1)</sup> In the case of Eisele ProWeld tubes a smaller inside diameter results from a partially larger wall thickness.

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

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



## 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.

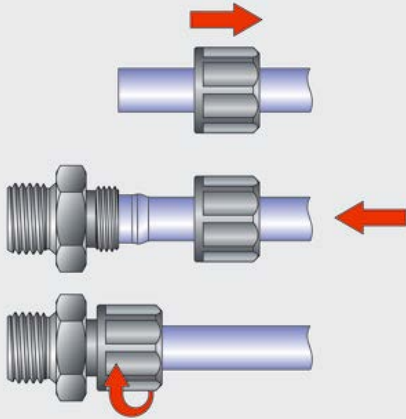
The short versions of Eisele swivel connectors are standardly supplied with VS seal rings.

### Advantages

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



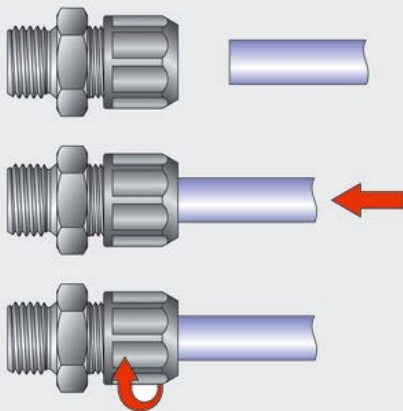
## Handling - Screw joints P10



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

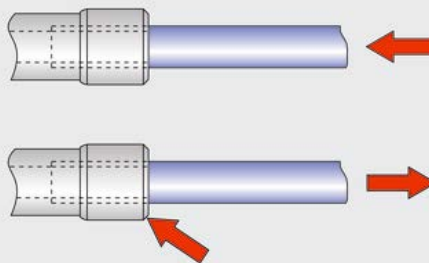
Plastic union nuts may also be tightened with an open-ended wrench. The open-ended wrench skips on the union nut to limit torque.

## Handling - Screw joints P12



1. Push tube 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.

## Handling - Plug connector P14, 14a, 15



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

Disassembly: Push release sleeve, pull out tube

## Handling - Spigots P18

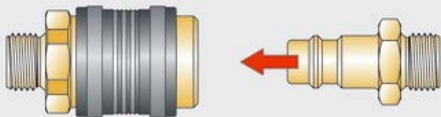


Assembly: Push tube onto the spigot until it hits the limit stop

Disassembly: Pull off tube from spigot



## Handling - Quick-release couplings P20



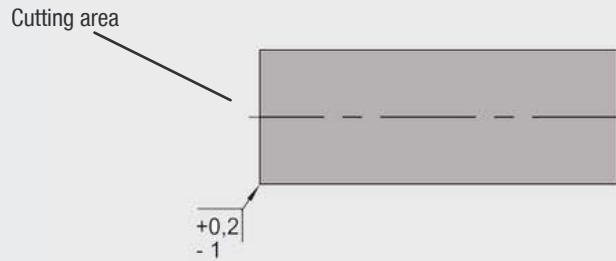
Coupling: Push plug nipple up to the limit stop into the coupling

Decoupling: Hold plug nipple and push back coupling sleeve

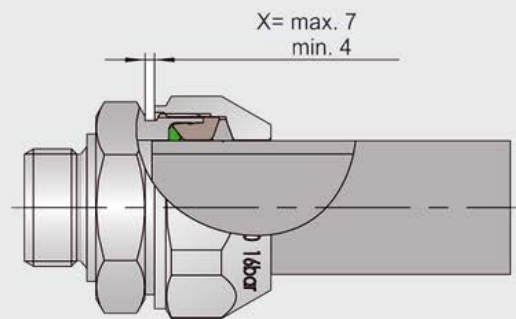


## Handling - ALU PRO 30 of P2000

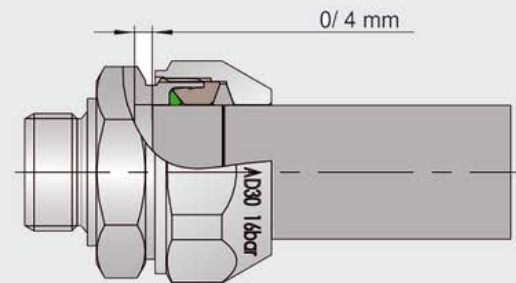
1. Length the tube at a right angle, no loose burrs allowed.



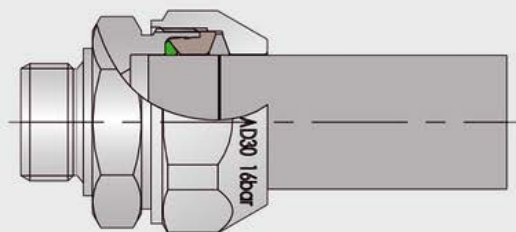
2. Unscrew the union nut until the specified value is reached.



3. Push the pipe inside until it stops. Permissible deviations as specified.



4. Tighten the union nut with 60-65 Nm.



We can provide the illustrated installation instruction MV2000-1 on your request.



## Screw joints with union nut

**Classical connection system**

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

**Wide range of applications**

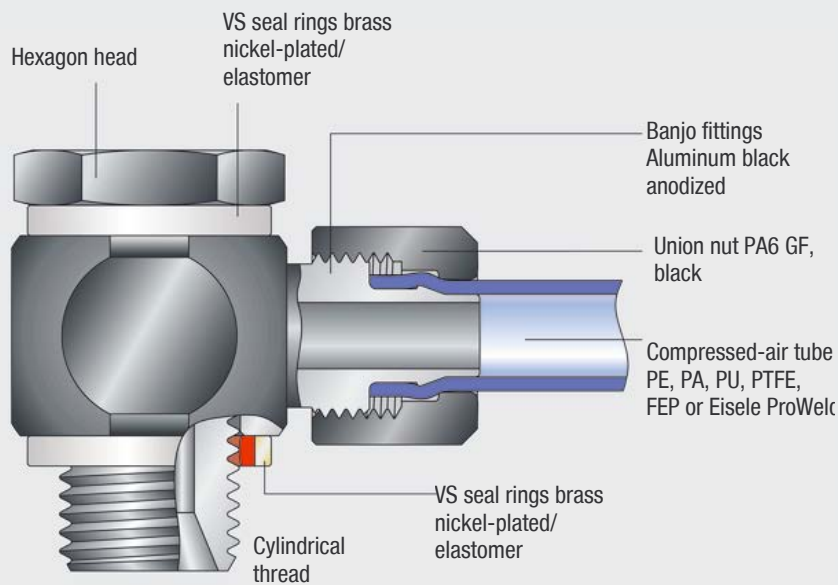
- Suitable for applications with strong vibrations
- Secure connection even with strong tube movement

**Applications with special tubes**

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

The standard program already contains an extensive range of types.

## Functional principle



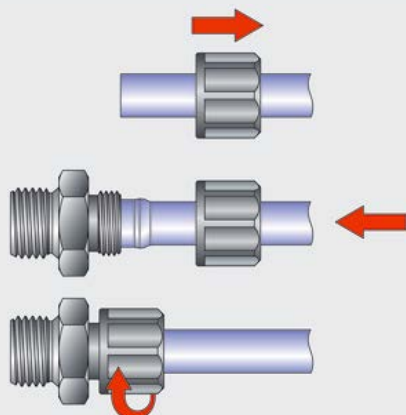
## Range of application

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

## Service conditions

- Temperature range: 5 to 158°F (-15 to +70 °C)
- Working pressure range: -14 to 217 psi (-0.95 to 15 bar)
- Allowable medium: Air
- Quick assembly and disassembly of compressed-air tubes possible with open-ended wrench
- Frequent assembly and disassembly possible
- Low weight
- Robust
- Swivel unions of short design

## Handling



1. Pull union nut over the tube
2. Push tube over tube 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.

## Male stud couplings

starting on page 17



Straight male stud couplings

page 17



Angled male stud couplings

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T-male stud couplings

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L male stud couplings

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## Tube connector

starting on page 30



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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Sealing nut with seal

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Soldering screw joint

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Screw joint for pressure gauge

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## Banjo fittings

starting on page 35

Single banjo fittings

page 35

Double banjo fittings

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## Accessories

starting on page 41

Banjo bolt page 41

Banjo bolt, double page 44

Banjo bolt, triple page 45

Swivel distributor, double page 45

Swivel distributor, triple page 46

Seal rings page 47

## Screw joints for tubes made of PVC with fabric lining

starting on page 52



Straight male stud coupling page 52



Single swivel screw joint page 53

Single banjo fittings page 53

## Screw joints for tubes made of NBR with metal braiding

starting on page 55



Straight male stud coupling page 55



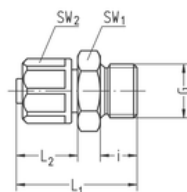
Single swivel screw joint page 55

Single banjo fittings page 55



## Straight male stud coupling

- Whitworth pipe thread
- Material Al black anodized or brass <sup>1)</sup>
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



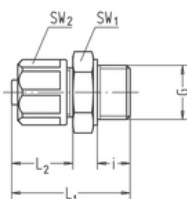
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Part no.	G	for tube	SW1	SW2	i	L1	L2	NW	g/piece Ms	g/piece
28-0243	<sup>2)</sup> G1/8	4,3/3	14	ø8	6,5	21	10	2,2	-	4
28-0203	<sup>2)</sup> G1/8	5/3	14	ø8	6,5	21	10	2,2	-	4
28-0204	G1/8	6/4	14	13	6,5	24	13	3,1	12	5
28-0206	G1/8	8/6	14	15	6,5	25	14	4,8	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

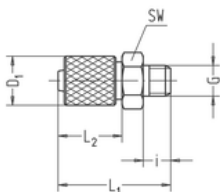
## Straight male stud coupling

- Whitworth pipe thread
- Thread seal without additional seal
- Material PA6 GF, black
- Union nuts PA6 GF, black
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	G	for tube	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

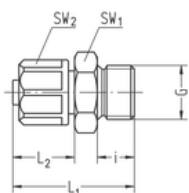
## Straight male stud coupling



- M5 thread
- Material brass black
- Union nut brass black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	SW1	SW2	i	L1	L2	NW	g/piece Ms	g/piece
29-5443	2) M10x1	4,3 / 3	14	ø8	6,5	21	10	2,2	-	5
29-5403	2) 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	3) M22x1,5	15 / 12	27	22	11	36,5	19,5	10,8	-	27

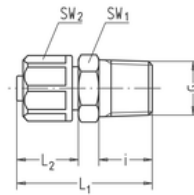
<sup>1)</sup> When ordering please add "MS" to Part No.

<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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

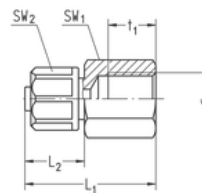


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Part no.	G	for tube	SW1	SW2	i	L1	L2	NW	g/piece
30-0204	1/8-NPT	6 / 4	11	13	10	27	13	3,1	11
30-0206	1/8-NPT	8 / 6	12	15	10	28	14	4,8	13
30-0208	1/8-NPT	10 / 8	14	16	10	30	16	5,5	17
30-0404	1/4-NPT	6 / 4	14	13	13	31	13	3,1	17
30-0406	1/4-NPT	8 / 6	14	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

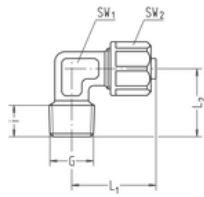
- Whitworth pipe thread
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	G	for tube	SW1	SW2	L1	L2	t1	NW	g/piece
17-0143	<sup>1)</sup> G1/8	4,3 / 3	14	ø8	22	10	8	2,2	6
17-0103	<sup>1)</sup> G1/8	5 / 3	14	ø8	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

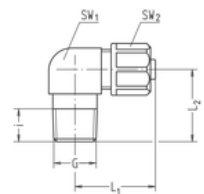
## Elbow screw-in connector



- Whitworth pipe thread conical
- Seal in thread
- Material Ms
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	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

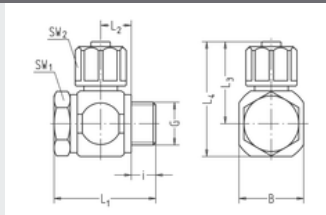


- Whitworth pipe thread conical
- Seal in thread
- Material PA6 GF, black
- Union nuts PA6 GF, black
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



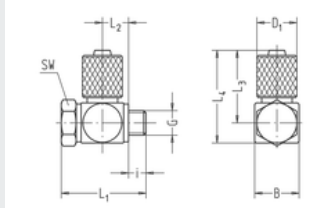
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Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	L4	B	NW	g/piece
34-0243K <sup>2)</sup>	G1/8	4,3 / 3	14	ø8	5,5	28,5	9,5	18,5	26,5	16	2,2	15
34-0203K <sup>2)</sup>	G1/8	5 / 3	14	ø8	5,5	28,5	9,5	18,5	26,5	16	2,2	15
34-0204K	G1/8	6 / 4	14	13	5,5	28,5	9,5	21,5	29,5	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

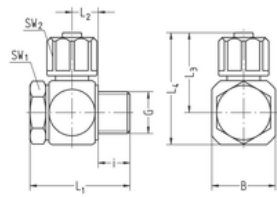
## Single swivel screw joint, short model

- M5 thread
- PVC seal rings
- Banjo fitting and union nut brass black
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	G	for tube	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

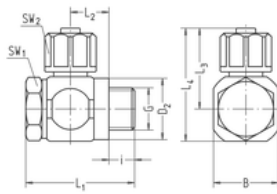
## Single swivel screw joint, short model



- Whitworth pipe thread
- Sealing without seal rings
- Banjo fitting and union nut PA6 GF, black
- Banjo bolt Al black anodized
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	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



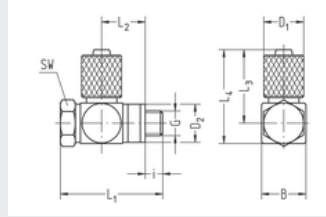
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
34-0243	1) G1/8	4,3 / 3	14	∅8	6	30,5	11,8	18,5	26,5	16	14,9	2,2	14
34-0203	1) G1/8	5 / 3	14	∅8	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

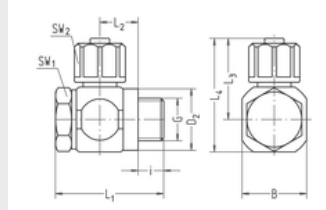


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Part no.	G	for tube	SW1	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
35-5043	M5	4,3 / 3	8	3,5	20,5	8,7	14	18	8,5	8	8	2,2	9
35-5003	M5	5 / 3	8	3,5	20,5	8,7	14	18	8,5	8	8	2,2	9
35-5004	M5	6 / 4	8	3,5	20,5	8,7	14	18	8,5	9	8	2,4	10

## 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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	G	for tube	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

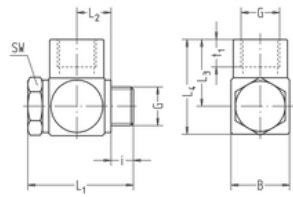
1) Union nut brass black

2) Spacer ring PA6 GF, black

3) Union nut Al black anodized

4) 2 seal rings PVC

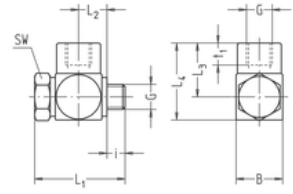
## Single swivel connector, short model



- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

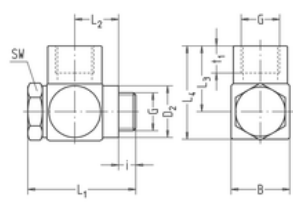
## Single swivel connector, short model



- Metric thread
- PVC seal rings
- Ring connection brass black
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

## Swivel joint



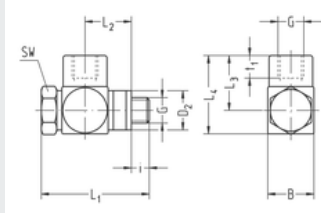
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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



## Swivel joint

- M5 thread
- PVC seal rings
- Ring connection brass black
- Banjo bolt galvanized steel
- Spacer ring Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

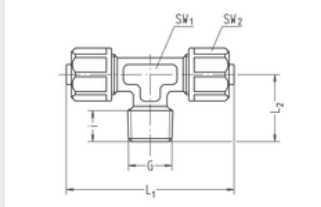


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Part no.	G	SW	i	L1	L2	L3	L4	B	t1	D2	NW	g/piece
135-5049	M5	8	3	20,5	9	10	14,5	9	5	8	2,4	6

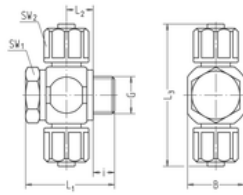
## T-screw-in joint

- Whitworth pipe thread conical
- Seal in thread
- Material brass
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	G	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

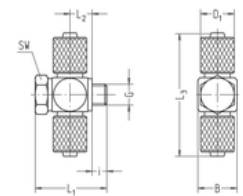
Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	B	NW	g/piece
38-0243K	<sup>2)</sup> G1/8	4,3 / 3	14	∅8	5,5	28,5	9,5	37	16	2,2	17
38-0203K	<sup>2)</sup> G1/8	5 / 3	14	∅8	5,5	28,5	9,5	37	16	2,2	16
38-0204K	G1/8	6 / 4	14	13	5,5	28,5	9,5	43	16	3,1	17
38-0206K	G1/8	8 / 6	14	15	5,5	28,5	9,5	45	16	4,5	19
38-0208K	G1/8	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

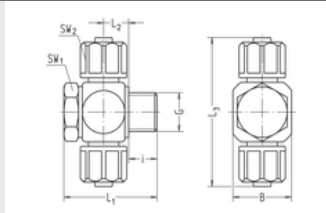


- M5 thread
- PVC seal rings
- Banjo fitting and union nuts brass black
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	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

## 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 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

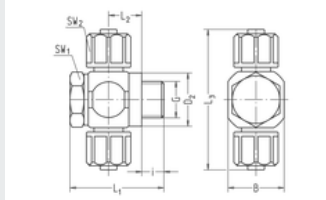


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Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	B	NW	g/piece
38-0204KKST	G1/8	6 / 4	14	13	8	28,5	8,2	50	16	3	11
38-0206KKST	G1/8	8 / 6	14	15	8	28,5	8,2	53	16	4,5	12
38-0404KKST	G1/4	6 / 4	17	13	10	30,5	8,2	52	20	3	15
38-0406KKST	G1/4	8 / 6	17	15	10	30,5	8,2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

## Double swivel screw joint

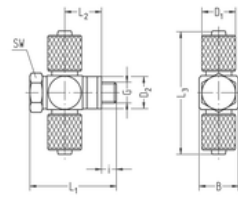
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	B	D2	NW	g/piece
38-0243	<sup>1)</sup> G1/8	4,3 / 3	14	ø8	6	30,5	11,8	37	16	14,9	2,2	16
38-0203	<sup>1)</sup> 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

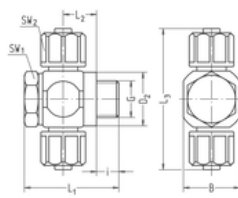
## Double swivel screw joint



- M5 thread
- PVC seal rings
- Banjo fitting and union nuts brass black
- Banjo bolt galvanized steel
- Spacer ring Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	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



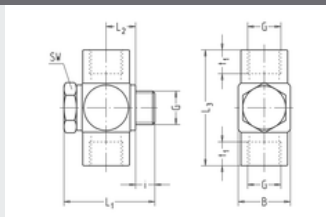
- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

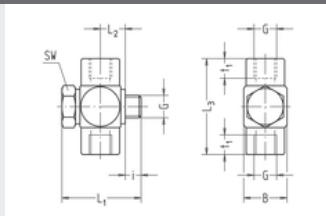


Part no.	G	SW	i	L1	L2	L3	B	t1	NW	g/piece
138-0201K	G1/8	14	5,3	28,5	9,6	29	16	7	4,5	18
138-0403K	G1/4	17	7,5	35	11,7	42	20	10	6,5	31
138-0605K	G3/8	22	7	38,5	13,2	46	24	10	9	44
138-0807K	G1/2	27	9	47	16,2	55	30	12	11,5	81

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## Double swivel joint, short model

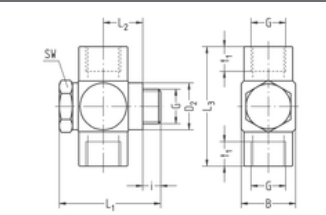
- Metric thread
- PVC seal rings
- Ring connection brass black
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

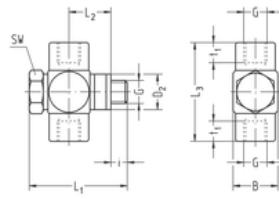
## Double swivel joint

- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

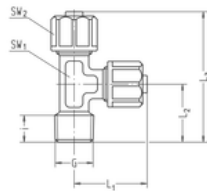
## Double swivel joint



- M5 thread
- PVC seal rings
- Ring connection brass black
- Banjo bolt galvanized steel
- Spacer ring Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

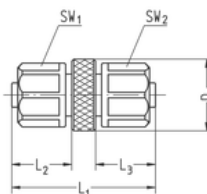
## L screw-in joint



- Whitworth pipe thread conical
- Seal in thread
- Material brass
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G	for tube	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

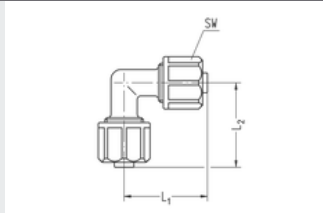


- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	for tube A	for tube 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 connector

- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

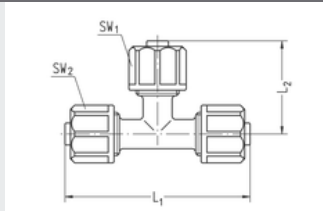


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Part no.	for tube	SW	L1	L2	NW	g/piece
77-0400	6 / 4	13	23	23	3,1	7
77-0600	8 / 6	15	24	24	4,8	8
77-0800	10 / 8	16	26	26	6,6	9

## T-connector

- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

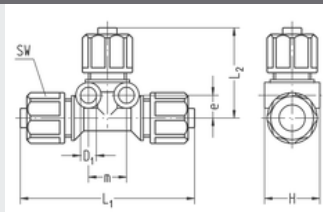


Part no.	for tube A	for tube B	SW1	SW2	L1	L2	NW	g/piece
78-4300	1) 4,3 / 3	4,3 / 3	ø8	ø8	28	19	2,2	14
78-0300	1) 5 / 3	5 / 3	ø8	ø8	28	19	2,2	14
78-0400	6 / 4	6 / 4	13	13	46	23	3,1	10
78-0600	8 / 6	8 / 6	15	15	48	24	4,8	11
78-0604	8 / 6	6 / 4	15	13	48	23	3,1	10
78-0800	10 / 8	10 / 8	16	16	52	26	6,6	14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

1) Material brass black, union nuts brass black

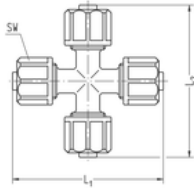
## T-connector

- Material PA6 GF, black
- Union nuts PA6 GF, black
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	for tube	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

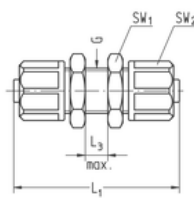
## 4-way screw joint



- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	for tube	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

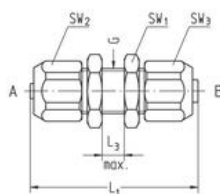


- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	for tube A	for tube 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

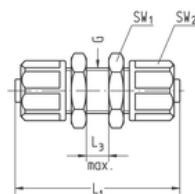
<sup>1)</sup> Material brass black, union nuts brass black

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



## Bulkhead screw joint

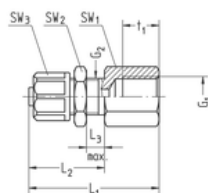
- Material PA6 GF, black
- Jam nuts Al black anodized
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

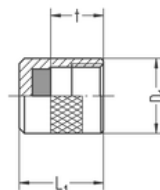


Part no.	G1	for tube	G2	SW1	SW2	SW3	L1	L2	L3 max.	t1	NW	g/piece
107-4903	1) M5	5 / 3	M7x0,5	8	9	ø8	28	21	7	5	2,2	4
107-4943	1) M5	4,3 / 3	M7x0,5	8	9	ø8	28	21	7	5	2,2	4
107-4904	1) M5	6 / 4	M8x0,5	10	10	ø9	28	21	7	5	3,1	6
106-0104	G1/8	6 / 4	M10x1	14	14	13	38	26	7	8	3,1	9
106-0106	G1/8	8 / 6	M12x1	14	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
106-0308	G1/4	10 / 8	M14x1	17	17	16	47	29	7	12	6,6	16
106-0506	G3/8	8 / 6	M12x1	19	17	15	46	27	7	12	4,8	15
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

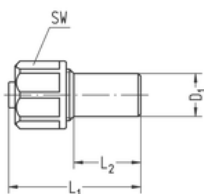
## Sealing nut with seal

- Sealing NBR (Perbunan)
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	for tube	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

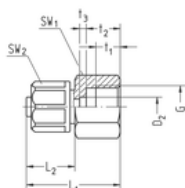


- Material brass
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	for tube	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

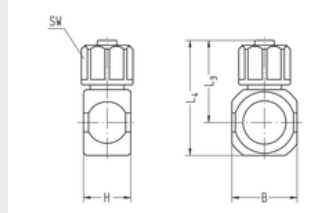


- Whitworth pipe thread and metric thread
- Material Al black anodized
- Union nuts PA6 GF, black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



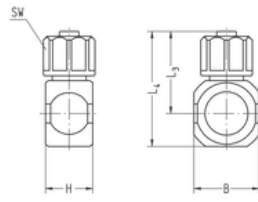
Part no.		for banjo bolt	for tube	SW	H	L3	L4	B	NW	g/piece Ms	g/piece
34-02431	2)	G1/8	4,3 / 3	∅8	14,5	18,5	26,5	16	2,2	-	8
34-02031	2)	G1/8	5 / 3	∅8	14,5	18,5	26,5	16	2,2	-	8
34-02041		G1/8	6 / 4	13	14,5	21,5	29,5	16	3,1	23	8
34-02061		G1/8	8 / 6	15	14,5	22,5	30,5	16	4,8	25	9
34-02081		G1/8	10 / 8	16	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	3)	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	3)	G1/2	12,5 / 10	19	22	34,5	49,5	30	8,3	-	36
34-08121	3)	G1/2	15 / 12	22	22	34,5	49,5	30	10,8	-	38
34-08131	3)	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

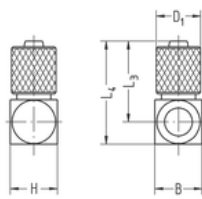
Part no.		for banjo bolt M	for tube	SW	H	L3	L4	B	NW	g/piece Ms	g/piece
34-02431	2)	M10x1	4,3 / 3	ø8	14,5	18,5	26,5	16	2,2	-	8
34-02031	2)	M10x1	5 / 3	ø8	14,5	18,5	26,5	16	2,2	-	8
34-02041		M10x1	6 / 4	13	14,5	21,5	29,5	16	3,1	23	8
34-02061		M10x1	8 / 6	15	14,5	22,5	30,5	16	4,8	25	9
34-02081		M10x1	10 / 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

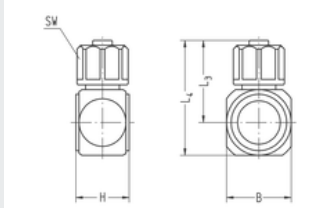


- For banjo bolts with thread M5
- Material brass black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.		for banjo bolt	for tube	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

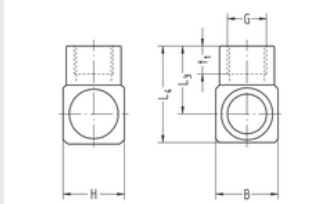
- For banjo bolts with Whitworth pipe thread
- Sealing without additional seal rings
- Material PA6 GF, black
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	for banjo bolt	for tube	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

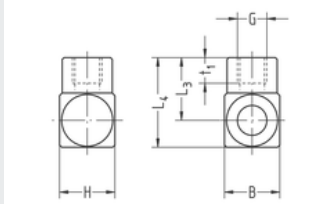
- For banjo bolts with Whitworth pipe thread
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

## Swivel joint

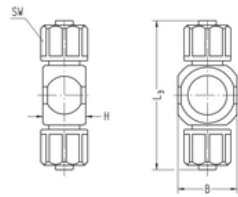
- For banjo bolts with metric thread
- Material brass black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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
135-50493-1NI*			9	10	14,5	9	4,5	1,7	2

\* Material: completely made of nickel-plated brass

## 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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

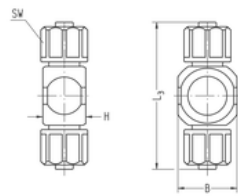
Part no.		for banjo bolt	for tube	SW	H	L3	B	NW	g/piece Ms	g/piece
38-02431	2)	G1/8	4,3 / 3	ø8	14,5	37	16	2,2	-	10
38-02031	2)	G1/8	5 / 3	ø8	14,5	37	16	2,2	-	10
38-02041		G1/8	6 / 4	13	14,5	43	16	3,1	27	10
38-02061		G1/8	8 / 6	15	14,5	45	16	4,8	30	12
38-02081		G1/8	10 / 8	16	14,5	49	16	6,6	33	13
38-04041		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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.		for banjo bolt M	for tube	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

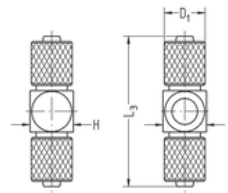
<sup>1)</sup> When ordering please add "MS" to Part No.

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

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

## Double banjo fittings

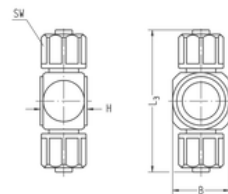
- For banjo bolts with thread M5
- Material brass black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	for banjo bolt	for tube	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

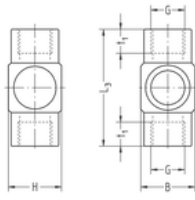
## Double banjo fittings

- For banjo bolts with Whitworth pipe thread
- Sealing without additional seal rings
- Material PA6 GF, black
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	for banjo bolt	for tube	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

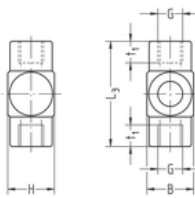
## Double banjo



- For banjo bolts with Whitworth pipe thread
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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



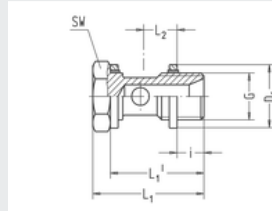
- For banjo bolts with metric thread
- Material brass black
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

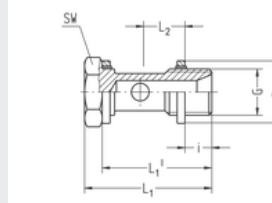
- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-0,95 to 15 bar)
- Fits banjo fitting with H = 14.5



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

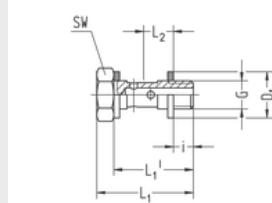
- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-0,95 to 15 bar)
- Fits banjo with H greater 14.5



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

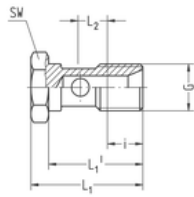
## Banjo bolt, short model

- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

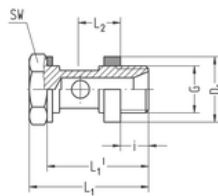
## Banjo bolt, short model



- For 1 banjo fitting
- Whitworth pipe thread
- Material Al black anodized
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (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

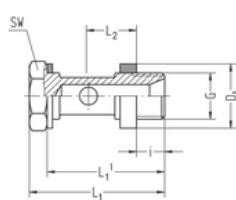
## Banjo bolt



- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

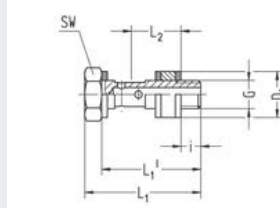


- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0,95 to 15 bar)
- Fits banjo with H greater 14.5

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

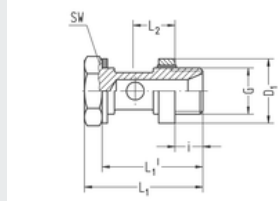
- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Fits banjo fitting with H = 8.5 (and 9)



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

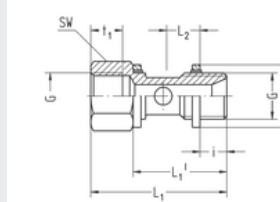
- For 1 banjo fitting
- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Fits banjo with H = 14.5



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

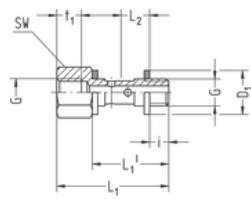
## Banjo bolt with female thread, short model

- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-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

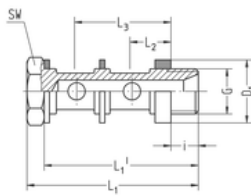
## Banjo bolt with female thread, short model



- Short design for 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

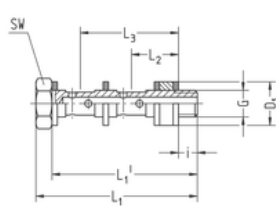
## Double banjo bolt for swivel distributor



- For 2 banjo fittings
- Whitworth pipe thread
- Plastic seal rings
- Material burnished steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 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

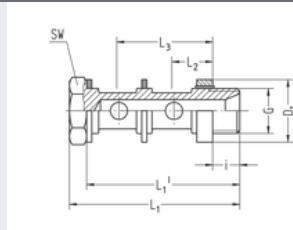


- For 2 banjo fittings
- M5 thread
- PVC seal rings
- Material galvanized steel
- Spacer ring Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)
- Fits banjo fitting with H = 8.5

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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)
- Fits banjo fitting with H = 14.5

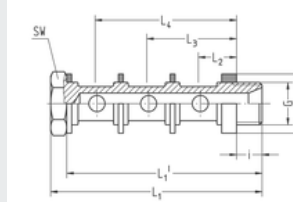


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Part no.	G	SW	i	L1	L1'	L2	L3	D1	NW	g/piece
51-5400	M10x1	14	8	49,5	45,5	11,8	28,3	14,9	6	19
51-5600	M12x1,5	17	10,5	52,5	48	11,8	28,3	17,9	6,8	31
51-5800	M14x1,5	17	10,5	52,5	48	11,8	28,3	19,9	8,5	35

## Triple banjo bolt for swivel distributor

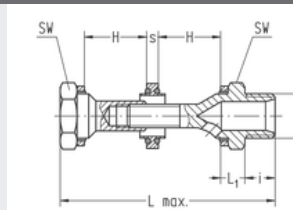
- For 3 banjo fittings
- Whitworth pipe thread
- Plastic seal rings
- Material burnished steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)
- Fits banjo fitting with H = 14.5



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

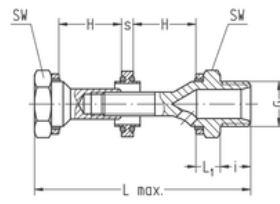
## Double swivel distributor

- For 2 banjo fittings
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

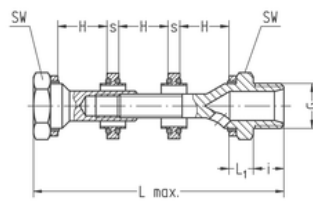
## Double swivel distributor



- For 2 banjo fittings
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

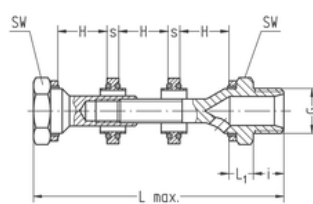
## Triple swivel distributor



- For 3 banjo fittings
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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
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

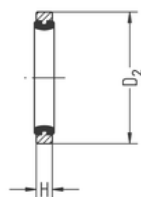


- For 3 banjo fittings
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Fits banjo fitting with H greater than 14.5

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 -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

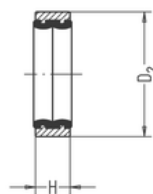


Part no.	for thread	D2	H	g/piece
515-0122	G1/8 and M10x1	14,7	2,2	1,02
515-0322	G1/4	17,7	2,2	1,23
515-0522	G3/8	21,8	2,2	1,56
515-0722	G1/2	26,3	2,2	2,04

Optionally also possible with FKM seal. Please complete "VT" before the article number.

## VS spacer seal ring

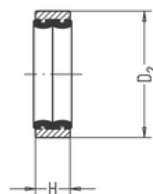
- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



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

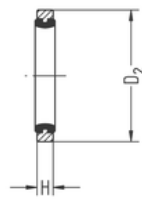
## VS spacer seal ring

- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-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

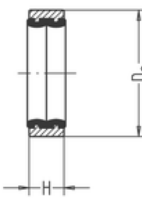
## VS seal ring



- For metric thread
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Large torque possible
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

Part no.	for thread	D2	H	g/piece
514-5522	M12x1,5	17,9	2,2	1,31
514-5722	M14x1,5	19,9	2,2	1,42

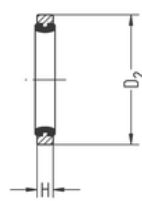
## VS spacer seal ring



- For metric thread
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-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



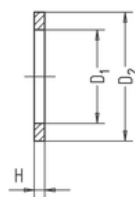
- For whitworth pipe thread, metric threads
- Sealing material FPM, FDA compliant according to 21 CFR 177.2600
- Spacer ring AISI 316L (1.4404)
- Large torque possible
- Undetachable
- Temperature range -4 to 356 °F (-20 to +180 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

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
915-0522	G3/8	21,8	2,2	1,56
915-0722	G1/2	26,3	2,2	2,04



## seal ring

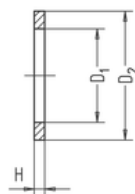
- For Whitworth pipe thread and metric thread
- Material aluminum
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 217 psi (-0,95 to 15 bar)



Part no.	for thread	D1	D2	H	g/piece
14-45AL	M6	6	9	1	0,07
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
15-01AL	G1/8 and M10x1	10,2	14	1,5	0,25
15-0120AL	G1/8 and M10x1	10,2	14	2	0,31
15-03AL	G1/4	13,2	18,2	1,5	0,45
15-0320AL	G1/4	13,2	18,2	2	0,58
15-05AL	G3/8	17,1	22	1,5	0,56
15-0520AL	G3/8	17,1	22	2	0,71
15-07AL	G1/2	21,2	26	1,5	0,60
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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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
15-0120PVC	G1/8 and M10x1	10,2	14	2	0,20
15-03PVC	G1/4	13,2	18,2	1,5	0,24
15-0320PVC	G1/4	13,2	18,2	2	0,35
15-05PVC	G3/8	17,1	22	1,5	0,31
15-0520PVC	G3/8	17,1	22	2	0,41
15-07PVC	G1/2	21,2	26	1,5	0,34
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

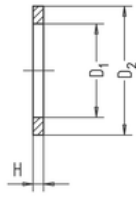
# Screw joints with union nut

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Aluminum black anodized/plastic (brass/plastic)

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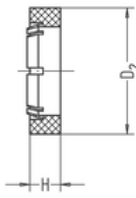
## seal ring



- For metric threads
- Material PA
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 217 psi (0 to 15 bar)

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

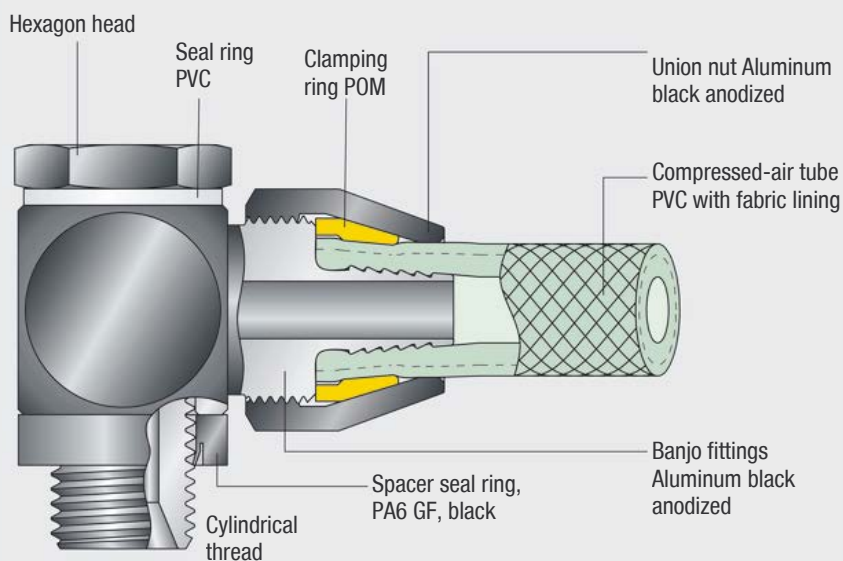
## Spacer seal ring



- For Whitworth pipe thread
- Material PA6 GF, black
- Undetachable
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

## Functional principle



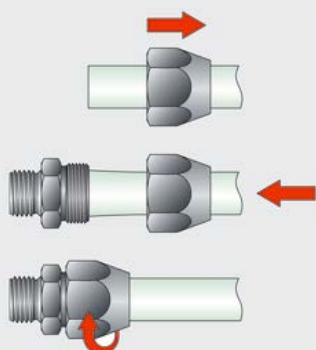
## Range of application

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

## Service conditions

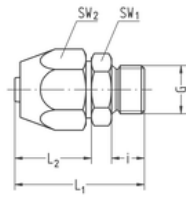
- Temperature range: 14 to 140 °F (-10 to +60 °C)
- Working pressure range: -14 to 145 psi (-0.95 to 10 bar)
- Allowable medium: Air
- Quick assembly of compressed-air tubes
- Frequent assembly and disassembly possible
- No tube clamp necessary
- Low weight
- Robust
- Suitable for vacuum

## Handling



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

## Straight male stud coupling

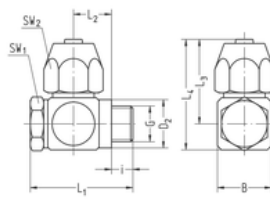


- For compressed-air tubes made of PVC with fabric lining
- Whitworth pipe thread
- Material Al black anodized / POM
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	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
68-1019B	G3/4	26,8 / 19,4	36	41	14	55	33	15	114
68-1219	G1	26 / 19	41	41	16	59	33	15	130
68-1219B	G1	26,8 / 19,4	41	41	16	59	33	15	130
268-1225	G1	34 / 25	41	46	16	58	34	21	132
268-1638	G1 1/2	50 / 38	60	68	20	88,5	56,5	32	502

## Single swivel screw joint

- For compressed-air tubes made of PVC with fabric lining
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized / POM
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 145 psi (-0.95 to 10 bar)

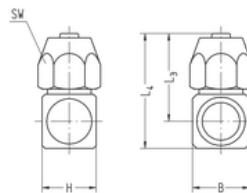


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Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
174-0204	G1/8	10 / 4	14	17	5,5	31	12,3	26,5	34	16	14,9	3,4	20
174-0406	G1/4	12 / 6	17	19	8	37	14	30	39,5	20	18,9	5,2	31
174-0408	G1/4	14 / 8	17	22	8	40	15,5	32,5	42	22	18,9	6,5	40
174-0409	G1/4	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

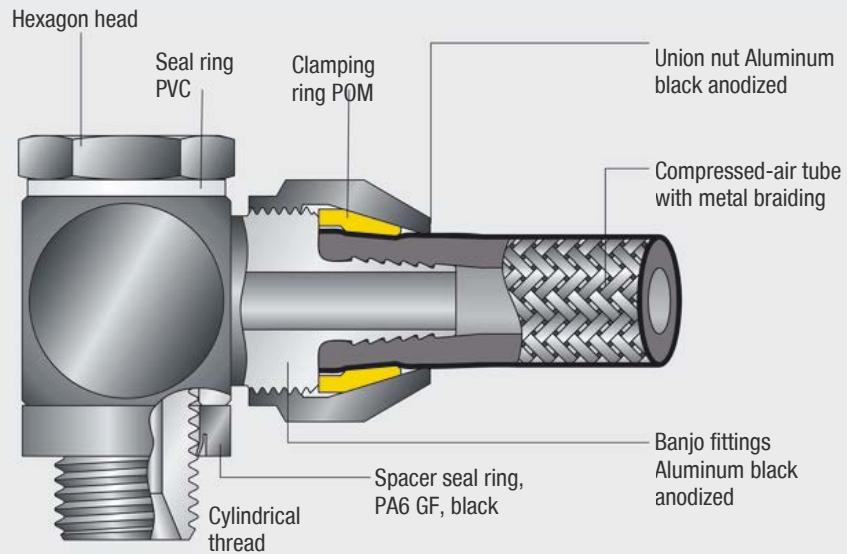
## Single banjo

- For banjo bolt with Whitworth pipe thread
- For compressed-air tubes made of PVC with fabric lining
- Material Al black anodized / POM
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 145 psi (-0.95 to 10 bar)



Part no.	for banjo bolt	for tube	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

## Functional principle



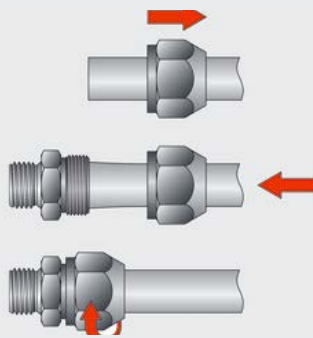
## Range of application

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

## Service conditions

- Temperature range: 14 to 140 °F (-10 to +60 °C)
- Working pressure range: 0 to 145 psi (0 to 10 bar)
- Allowable medium: Air
- Quick assembly of compressed-air tubes
- Frequent assembly and disassembly possible
- No risk of accident from protruding wires of the metal braiding
- No tube clamp necessary
- Low weight
- Robust

## Handling



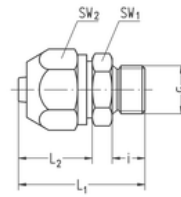
Push union nut over the tube and slightly wet the inside of the tube with oil

Push tube over tube nipple until it hits the limit stop

Tighten union nut up to the collar

## Straight male stud coupling

- For compressed-air tubes made of NBR (Perbunan) with metal braiding
- Whitworth pipe thread
- Material Al black anodized / POM
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

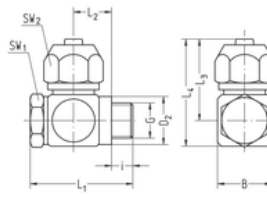


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Part no.	G	for tube	SW1	SW2	i	L1	L2	NW	g/piece
178-0204	G1/8	7 / 4	17	17	6,5	30,5	19	3,4	12
178-0206	G1/8	9 / 6	17	19	6,5	32,5	20,5	4,6	15
178-0404	G1/4	7 / 4	17	17	9	33	19	3,4	12
178-0406	G1/4	9 / 6	17	19	9	35	20,5	5,2	15
178-0409	G1/4	12 / 9	22	22	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

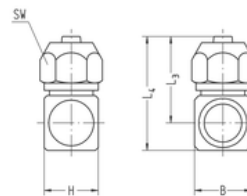
- For compressed-air tubes made of NBR (Perbunan) with metal braiding
- Whitworth pipe thread
- Material Al black anodized / POM
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	G	for tube	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

- For banjo bolt with Whitworth pipe thread
- For compressed-air tubes made of NBR (Perbunan) with metal braiding
- Material Al black anodized / POM
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	for banjo bolt	for tube	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



### Full tube through-flow

- Full flow possible because of larger nominal widths

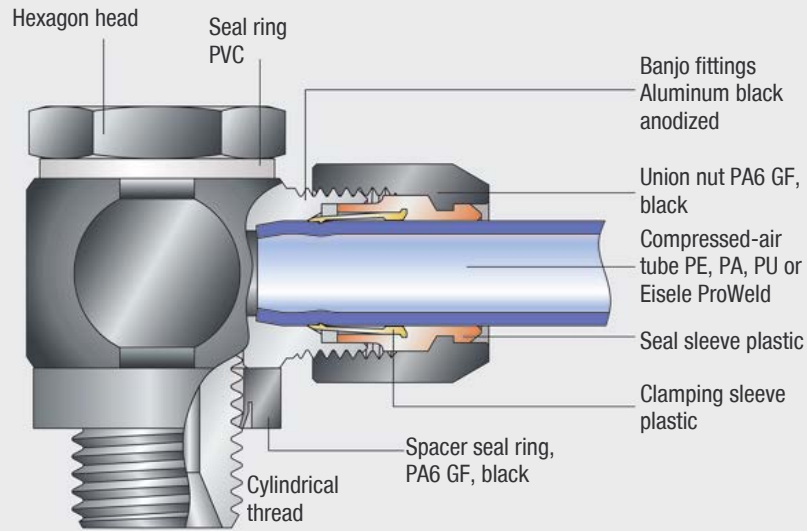
### Easy and secure handling

- 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

## Functional principle



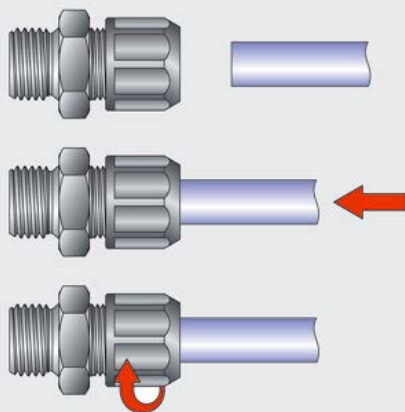
## Range of application

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

## Service conditions

- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 0 to 145 psi (0 to 10 bar)
- Allowable medium: Air
- Quick and simplified assembly of compressed-air tubes
- Easy assembly even of stiff compressed-air tubes
- No tools necessary but tightening of plastic union nuts possible with open-ended wrench
- Frequent assembly and disassembly possible
- Full tube through-flow
- Low weight
- Short design with VS seal rings available

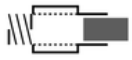
## Handling



1. Push tube 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.

## Threaded connectors

starting on page 60



Straight threaded connectors

page 60



Angled threaded connectors

page 61

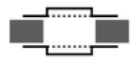


Threaded T-connectors

page 64

## Plug connector

starting on page 65



Double connectors

page 65



Elbow connectors

page 65



T-connectors

page 65

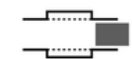


Bulkhead connectors

page 66

## Plug

starting on page 66



Sealing plug

page 66

## Accessories

starting on page 63

Banjo fittings

page 67

Banjo bolt

page 41

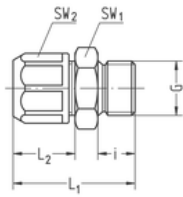
Union nut with cutting ring

page 71

Seal rings

page 72

## Straight male stud coupling

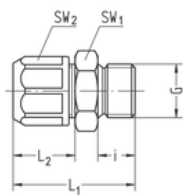


- Whitworth pipe thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	SW1	SW2	i	L1	L2	NW	g/piece
528-0202	1) G1/8	4/2	14	∅9	7	21,5	10,5	2	5
528-0243	1) G1/8	4,3/3	14	∅9	7	21,5	10,5	3	5
528-0203	1) G1/8	5/3	14	∅10	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

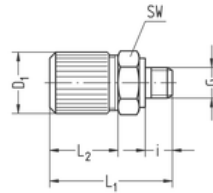


- Metric thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	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

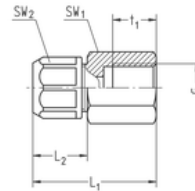
- M5 thread
- Material brass black
- Union nut brass black / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	G	for tube	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

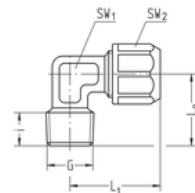
- Whitworth pipe thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	G	for tube	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

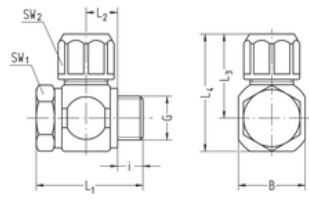
## Elbow screw-in connector

- Whitworth pipe thread conical
- Material brass
- Union nut plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	G	for tube	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

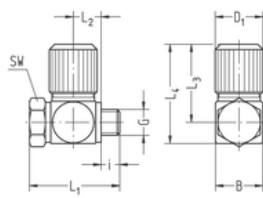


- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Union nut plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	L4	B	NW	g/piece
534-0202K	1) G1/8	4/2	14	∅9	5,5	28,5	9,5	18,5	26,5	16	2	16
534-0243K	1) G1/8	4,3/3	14	∅9	5,5	28,5	9,5	18,5	26,5	16	3	16
534-0203K	1) G1/8	5/3	14	∅10	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

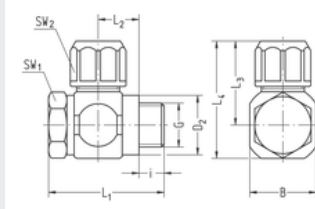


- M5 thread
- PVC seal rings
- Banjo fittings brass black
- Union nut brass black / brass
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

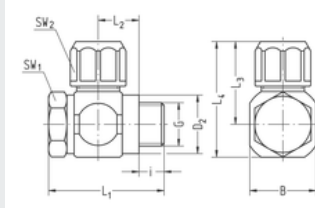


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Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	L4	B	D2	NW	g/piece
534-0204	G1/8	6/4	14	14	6	30,5	11,8	23	31	16	14,9	4	15
534-0206	G1/8	8/6	14	16	6	30,5	11,8	23,5	31,5	16	14,9	4,5	15
534-0208	G1/8	10/8	14	17	6	30,5	11,8	24,5	32,5	16	14,9	4,5	15
534-0404	G1/4	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

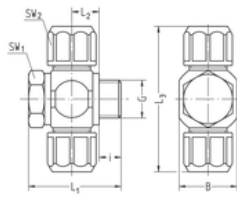
- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Union nut plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.	G	for tube	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	<sup>1)</sup> M10x1	8/6	14	16	6	30,5	11,8	23,5	31,5	16	14,9	4,5	15
535-5408	<sup>1)</sup> 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

<sup>1)</sup> Spacer ring PA6 GF, black

## Double swivel screw joint, short model

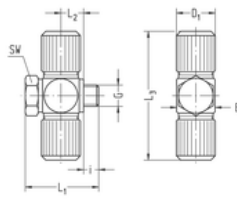


- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	B	NW	g/piece
538-0202K	1) G1/8	4/2	14	∅9	5,5	28,5	9,5	37	16	2	18
538-0243K	1) G1/8	4,3/3	14	∅9	5,5	28,5	9,5	37	16	3	18
538-0203K	1) G1/8	5/3	14	∅10	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

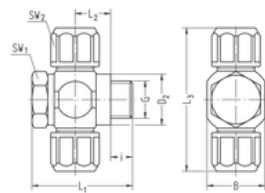
## Double swivel screw joint, short model



- M5 thread
- PVC seal rings
- Banjo fittings brass black
- Union nuts brass black / brass
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	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



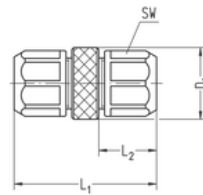
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	for tube	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

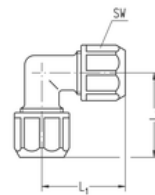


Part no.		for tube	SW	L1	L2	D1	NW	g/piece
533-0202	1)	4/2	∅9	27	10,5	11	2	11
533-4343	1)	4,3/3	∅9	27	10,5	11	3	10
533-0303	1)	5/3	∅10	28	11	12	3	13
533-0404		6/4	14	36	14,5	15	4	8
533-0606		8/6	16	37	15	17	6	10
533-0808		10/8	17	39	16	19	8	11

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

## Elbow connector

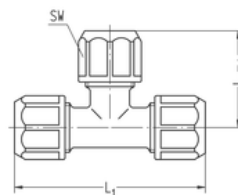
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.		for tube	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-connector

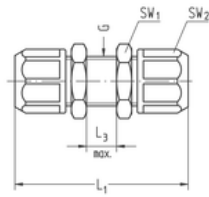
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.		for tube	SW	L1	L2	NW	g/piece
578-0200	1)	4/2	∅9	31	15,5	2	16
578-4300	1)	4,3/3	∅9	31	15,5	3	15
578-0300	1)	5/3	∅10	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

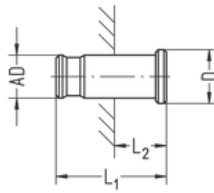
## Bulkhead screw joint



- Material Al black anodized
- Union nuts plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	for tube	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

## Closure plug

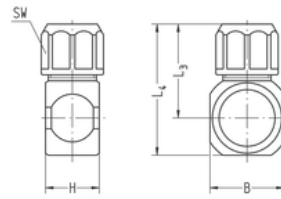


- Material brass nickel-plated
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)
- Fits all screw joints from Program 12 in the respective size

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

- For banjo bolt with Whitworth pipe thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

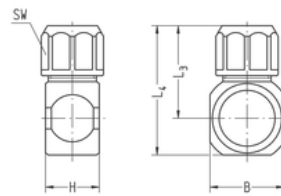


Part no.		for banjo bolt	for tube	H	L3	L4	B	NW	g/piece
534-02021	1)	G1/8	4/2	14,5	18,5	26,5	16	2	9
534-02431	1)	G1/8	4,3/3	14,5	18,5	26,5	16	3	9
534-02031	1)	G1/8	5/3	14,5	19	27	16	3	9
534-02041		G1/8	6/4	14,5	23	31	16	4	9
534-02061		G1/8	8/6	14,5	23,5	31,5	16	6	9
534-02081		G1/8	10/8	14,5	24,5	32,5	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

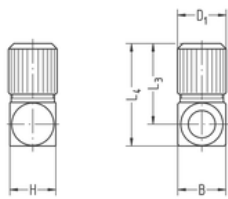
- For banjo bolt with Whitworth pipe thread
- Material Al black anodized
- Union nut plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



Part no.		for banjo bolt M	for tube	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
535-56061		M12x1,5	8/6	14,5	24,5	34,5	20	6	12
535-56081		M12x1,5	10/8	14,5	25,5	35,5	20	6,5	12
535-58041		M14x1,5	6/4	14,5	25	35	20	4	10
535-58061		M14x1,5	8/6	14,5	25,5	35,5	20	6	11
535-58081		M14x1,5	10/8	14,5	26,5	36,5	20	8	11

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

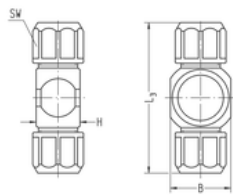
## Single banjo



- For banjo bolt with thread M5
- Material brass black
- Union nut brass black / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	for banjo bolt	for tube	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

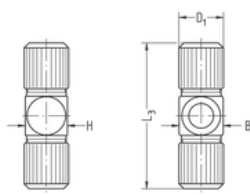


- For banjo bolt with Whitworth pipe thread
- Material Al black anodized
- Union nuts plastic / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	for banjo bolt	for tube	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

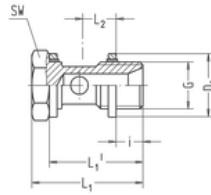


- For banjo bolt with thread M5
- Material brass black
- Union nuts brass black / brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	for banjo bolt	for tube	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

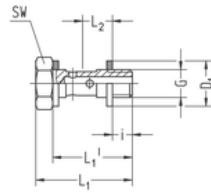
- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-0,95 to 15 bar)
- Fits banjo fitting with H = 14.5



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

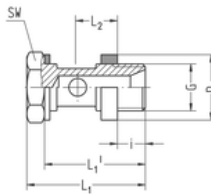
- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

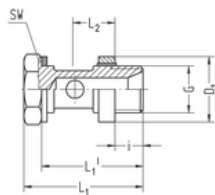
## Banjo bolt

- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

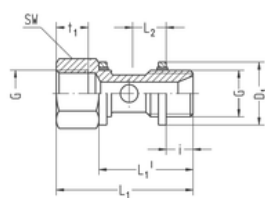
## Banjo bolt



- For 1 banjo fitting
- Metric thread
- PVC seal ring
- Spacer seal ring Al / elastomer
- Material Al black anodized
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

## Banjo bolt with female thread, short model



- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-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

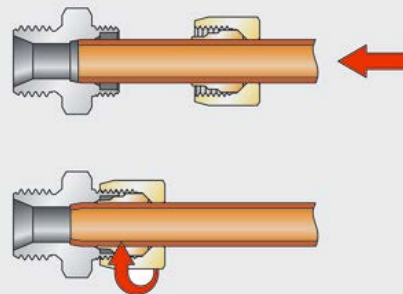
- For screwing of metal tubes
- Replaces regular union nut
- Material brass zinc-plated/brass
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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



## Application

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

## Service conditions

Working pressure range: 0 to 217 psi (0 to 15 bar)  
 Allowable medium: Air  
 Temperature range: -4 to 248 °F (-20 to +120°C)

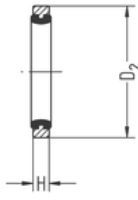
## Screwing of metal pipes

If the normal union nut for tube 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 tubes.

## Advantages

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

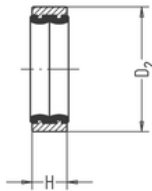
## VS seal ring



- For Whitworth pipe thread
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Large torque possible
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-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

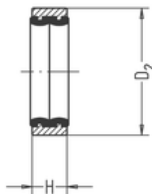
## VS spacer seal ring



- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-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



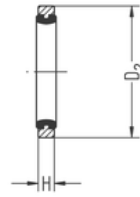
- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

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 seal ring

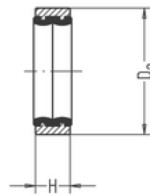
- For metric thread
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Large torque possible
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



Part no.	for thread	D2	H	g/piece
514-5522	M12x1,5	17,9	2,2	1,31
514-5722	M14x1,5	19,9	2,2	1,42

## VS spacer seal ring

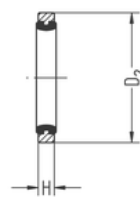
- For metric thread
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



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

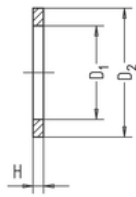
## VS seal ring

- For whitworth pipe thread, metric threads
- Sealing material FPM, FDA compliant according to 21 CFR 177.2600
- Spacer ring AISI 316L (1.4404)
- Large torque possible
- Undetachable
- Temperature range -4 to 356 °F (-20 to +180 °C)
- Working pressure range -14 to 435 psi (-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
915-0522	G3/8	21,8	2,2	1,56
915-0722	G1/2	26,3	2,2	2,04

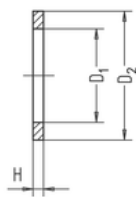
## seal ring



- For Whitworth pipe thread and metric thread
- Material aluminum
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 217 psi (-0,95 to 15 bar)

Part no.	for thread	D1	D2	H	g/piece
14-45AL	M6	6	9	1	0,07
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
15-01AL	G1/8 and M10x1	10,2	14	1,5	0,25
15-0120AL	G1/8 and M10x1	10,2	14	2	0,31
15-03AL	G1/4	13,2	18,2	1,5	0,45
15-0320AL	G1/4	13,2	18,2	2	0,58
15-05AL	G3/8	17,1	22	1,5	0,56
15-0520AL	G3/8	17,1	22	2	0,71
15-07AL	G1/2	21,2	26	1,5	0,60
15-0720AL	G1/2	21,2	26	2	0,86
15-1120AL	G1	33	39	2	2

## seal ring

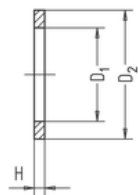


- For Whitworth pipe thread and metric thread
- Material PVC
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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
15-0120PVC	G1/8 and M10x1	10,2	14	2	0,20
15-03PVC	G1/4	13,2	18,2	1,5	0,24
15-0320PVC	G1/4	13,2	18,2	2	0,35
15-05PVC	G3/8	17,1	22	1,5	0,31
15-0520PVC	G3/8	17,1	22	2	0,41
15-07PVC	G1/2	21,2	26	1,5	0,34
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

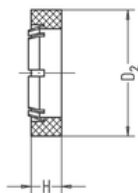
- For metric threads
- Material PA
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 217 psi (0 to 15 bar)



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

## Spacer seal ring

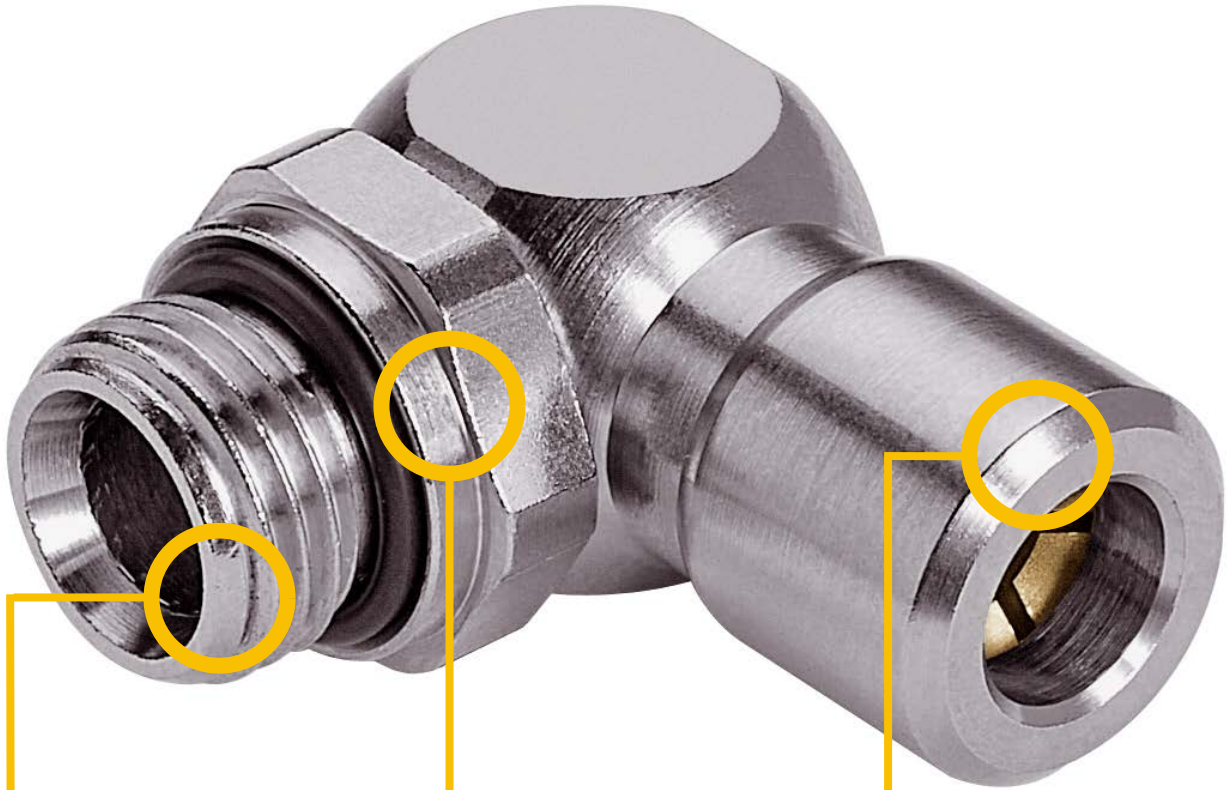
- For Whitworth pipe thread
- Material PA6 GF, black
- Undetachable
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0,95 to 15 bar)



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



## 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.

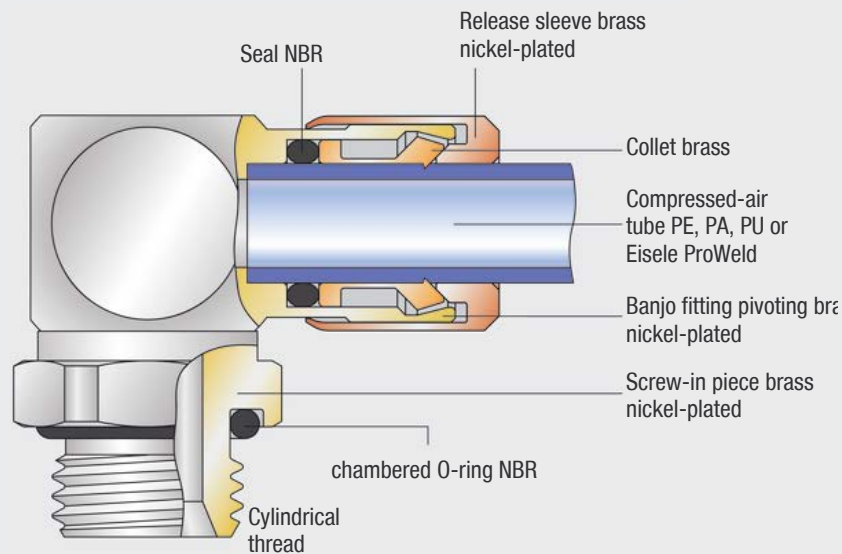
- Easy assembly and disassembly through release sleeves, even if used several times
- Full tube through-flow

### Dirt without a chance

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

Also suitable for vacuum applications.

## Functional principle



The collet guarantees the secure clamp of the plugged in tube. The external release sleeve protects the connector of dirt and makes it possible to release the tube without any tools. Simple assembly and operation.

## Range of application

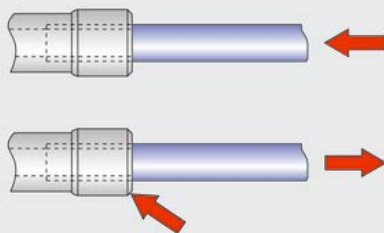
The connection system with special technology that leaves nothing to be desired. Sophisticated technology for all applications. Very quick and secure assembly and disassembly of compressed-air tubes made of PE (polyethylene), PA (polyamide), PU (polyurethane), and ProWeld (PUR) in pneumatic systems.

## Service conditions

- Temperature range: -4 to 140 °F (-20 to +80 °C)
- Working pressure range: -14 to 232 psi (-0.95 to 16 bar)
- Allowable medium: Air
- Very quick assembly and disassembly of compressed-air tubes
- No tools necessary
- Frequent assembly and disassembly possible
- Full tube 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

Data provided depend on used tubes.

## Handling

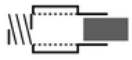






Assembly: Push tube into the connector up to the limit stop

Disassembly: Push release sleeve, pull out tube

## Threaded connectors

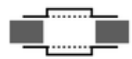
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	Straight threaded connectors	page 81
	Angled threaded connectors	page 87
	Threaded T-connectors	page 98
	Threaded L-connectors	page 102

## Plug connector

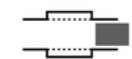
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	Elbow connectors	page 103
	T-connectors	page 103
	Cross connectors	page 104
	Y-connectors	page 104
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## Plug

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	Reducing plug	page 106
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## Force-fitting connector

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Straight force-fitting connector

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Angled force-fitting connector

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## Ring connectors

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Ring connectors, single

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Ring connectors, double

page 112

## Accessories

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Banjo bolt

page 113

Code sleeve

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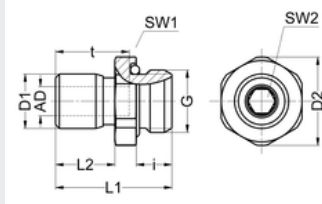
Pressure indicator

page 115



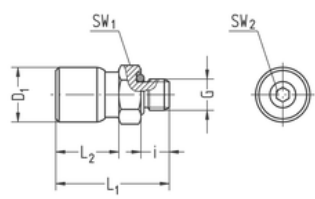
## Screw-in connector

- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G	for tube	SW1	SW2	i	L1	L2	D1	D2	NW	g/piece
628-0201	G1/8	OD2	13	-	5,5	17,5	8	5,9	14,2	1,4	8
628-0218	G1/8	OD3	13	-	5,5	18,5	9	6,8	14,2	1,4	8
628-0202	G1/8	OD4	13	3	5,5	19,5	10	8,5	14,2	2	9
628-0203	G1/8	OD5	13	4	5,5	21	11,5	10,5	14,2	3	10
628-0204	G1/8	OD6	13	5	5,5	22	12,5	11,5	14,2	4	10
628-0263	G1/8	OD1/4" (6,3)	13	5	5,5	22	12,5	11,5	14,2	4	17
628-0206	G1/8	OD8	14	5	5,5	27	17,5	14,5	15,2	5,1	17
628-0243	G1/8	OD4,3	13	3	5,5	19,5	10	9	14,2	3	9
628-0208	G1/8	OD10	15	5	5,5	30,5	19,5	16,5	16,5	5,1	21
628-0402	G1/4	OD4	17	3	7,5	22	10	8,5	18,5	2	17
628-0403	G1/4	OD5	17	4	7,5	23,5	11,5	10,5	18,5	3	18
628-0404	G1/4	OD6	17	5	7,5	24,5	12,5	11,5	18,5	4	18
628-0463	G1/4	OD1/4" (6,3)	17	5	7,5	24,5	12,5	11,5	18,5	4	17
628-0406	G1/4	OD8	17	6	7,5	27,5	15,5	14,5	18,5	6	21
628-0495	G1/4	OD3/8" (9,5)	17	8	7,6	31,5	19,5	16,1	18,5	8	26
628-0408	G1/4	OD10	17	8	7,5	32,5	20,5	16,5	18,5	8	24
628-0409	G1/4	OD12	20	8	7,5	36,5	23,5	20	21,8	8,3	38
628-0411	G1/4	OD14	20	8	7,5	40	26	22	21,8	8,3	42
628-0443	G1/4	OD4,3	17	3	7,5	22	10	9	18,5	3	17
628-0604	G3/8	OD6	20	5	7,5	25,5	12,5	11,5	21,8	4	29
628-0606	G3/8	OD8	20	6	7,5	28,5	15,5	14,5	21,8	6	32
628-0695	G3/8	OD3/8" (9,5)	20	8	7,5	30,5	17,5	16,1	21,8	8	35
628-0608	G3/8	OD10	20	8	7,5	30,5	17,5	16,5	21,8	8	32
628-0609	G3/8	OD12	20	9	7,5	32,5	19,5	20	21,8	9	35
628-0627	G3/8	OD1/2" (12,7)	20	9	7,5	32,5	19,5	20,6	21,8	9	24
628-0611	G3/8	OD14	22	10	7,5	40	24,5	22	23,8	10,3	51
628-0612	G3/8	OD16	24	10	7,5	43	27,5	25	26,2	10,3	60
628-0804	G1/2	OD6	24	5	9,5	28	12,5	11,5	26,2	4	49
628-0806	G1/2	OD8	24	6	9,5	31	15,5	14,5	26,2	6	52
628-0808	G1/2	OD10	24	8	9,5	33	17,5	16,5	26,2	8	52
628-0895	G1/2	OD3/8" (9,5)	24	8	9,5	33	17,5	16,1	26,2	8	55
628-0809	G1/2	OD12	24	9	9,5	35	19,5	20	26,2	9	54
628-0827	G1/2	OD1/2" (12,7)	24	9	9,5	36	20,5	20,6	26,2	9	32
628-0811	G1/2	OD14	24	10	9,5	36,5	21	22	26,2	10,3	55
628-0812	G1/2	OD16	24	12	9,5	43,5	27,5	25	26,2	12	60
628-0815	G1/2	OD20	30	12	9,5	59,6	39,1	30,5	33,5	12,5	133
628-1015	G3/4	OD20	32	14	9,5	60,2	38,7	30,5	34,8	14,5	156
628-1215	G1	OD20	41	17	12,5	59	39,1	30,5	44,7	17,5	232

## Screw-in connector

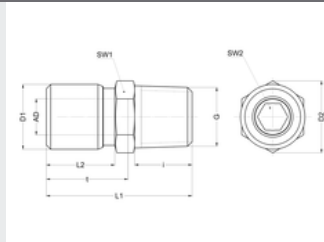


- Metric thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G	for tube	SW1	SW2	i	L1	L2	D1	NW	g/piece
629-5001	M5	OD2	8	-	4,5	16	8	5,9	1,4	3
629-5018	M5	OD3	8	-	4,5	17	9	6,8	1,4	3
629-5002	M5	OD4	8	2	4,5	19,5	11,5	8,5	2	4
629-5043	M5	OD4,3	8	2	4,5	19,5	11,5	9	2	4
629-5003	M5	OD5	10	2	4,5	21	12	10,5	2	7
629-5004	M5	OD6	10	2	4,5	23	13,5	11,5	2	8
629-5063	M5	OD1/4" (6,3)	11	2	4,5	23	13,5	11,8	2	9
629-5006	M5	OD8	13	2	4,5	26	16	14,5	2	15
629-4604	M6	OD6	10	3	5	22,5	12,5	11,4	3,2	8
629-4804	M7	OD6	10	4	5	22,5	15,5	11,4	4	8
629-4863	M7	OD1/4" (6,3)	11	4	5	22,5	15,5	11,8	4	9
629-4806	M7	OD8	13	4	5	26	18,5	14,6	4,2	14
629-6006	M16x1,5	OD8	20	6	7,5	28,5	15,5	14,6	6	32
629-6008	M16x1,5	OD10	20	8	7,5	30,5	17,5	16,6	8	31

## Screw-in connector with NPT-thread

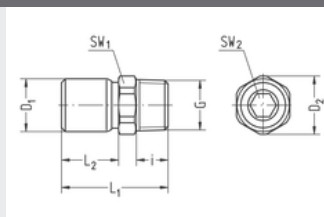
- NPT thread, conical
- Sealing NBR
- Tapered thread
- Material brass nickel-plated
- Optimum through flow
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G	for tube	SW1	SW2	i	L1	L2	D1	D2	t	NW	g/piece
630-0202BG	NPT1/8	OD4	11	3	9	23	10	8,5	12	12,7	3,2	10
630-0204BG	NPT1/8	OD6	11	4	9	25,5	12,5	11,5	12	15,5	4,3	12
630-0263BG	NPT1/8	OD1/4" (6,3)	11	4	9	25,5	12,5	11,8	12	15,5	4,2	12
630-0206BG	NPT1/8	OD8	13	5	9	28,5	15,5	14,5	14,2	18,5	5,4	16
630-0404BG	NPT1/4	OD6	17	4	13	30	12,5	11,5	18,5	15,5	4,2	25
630-0463BG	NPT1/4	OD1/4" (6,3)	17	4	13	31	13,5	11,8	18,5	15,5	4,2	26
630-0406BG	NPT1/4	OD8	17	6	13	33	15,5	14,5	18,5	18,5	6,5	28
630-0495BG	NPT1/4	OD3/8" (9,5)	17	8	13	35	17,5	16,1	18,5	21,3	8	27
630-0408BG	NPT1/4	OD10	17	8	13	35	17,5	16,5	18,5	21,3	8,5	27
630-0409BG	NPT1/4	OD12	19	8	13	38	22,1	19,9	20,7	26	8,5	39
630-0427BG	NPT1/4	OD1/2" (12,7)	19	8	13	41,5	23	20,6	20,7	26,8	8,5	40
630-0663BG	NPT3/8	OD1/4" (6,3)	14	4	13	31	13,5	11,8	15,2	15,5	4,2	37
630-0695BG	NPT3/8	OD3/8" (9,5)	19	8	13	36	17,5	16,1	20,7	21,3	8,3	40
630-0608BG	NPT3/8	OD10	19	8	13	36	17,5	16,5	20,7	21,3	8,5	41
630-0609BG	NPT3/8	OD12	19	10	13	35,5	19,5	19,9	20,7	26	10,3	41
630-0627BG	NPT3/8	OD1/2" (12,7)	19	10	13	39	20	20,6	20,7	26,8	10,3	41
630-0611BG	NPT3/8	OD14	22	10	13	38,5	19,5	21,9	24	28,5	10,3	51
630-0612BG	NPT3/8	OD16	24	10	13	47	26,5	24,9	26,2	32	10,3	65
630-0895BG	NPT1/2	OD3/8" (9,5)	24	8	17	41	17,5	16,1	26,2	21,3	8,3	71
630-0808BG	NPT1/2	OD10	24	8	17	41	17,5	16,5	26,2	21,3	8,5	72
630-0809BG	NPT1/2	OD12	24	10	17	43	19,5	19,9	26,2	26	10,3	72
630-0827BG	NPT1/2	OD1/2" (12,7)	24	10	17	43,5	20	20,6	26,2	26,8	10,3	72
630-0811BG	NPT1/2	OD14	24	10	17	47	23,5	21,9	26,2	28,5	10,3	75
630-0812BG	NPT1/2	OD16	24	12	17	48,5	25	24,9	26,2	32	12,5	76

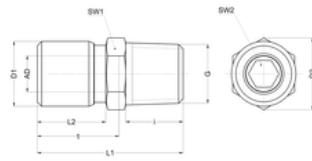
## Screw-in connector with R-thread

- Whitworth pipe thread conical
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



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

## Screw-in connector with R-thread

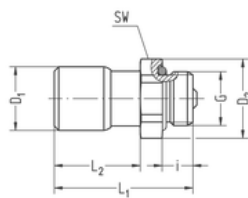


- R thread, conical
- Sealing NBR
- Tapered thread
- Material brass nickel-plated
- Optimum through flow
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

14

Part no.	G	for tube	SW1	SW2	i	L1	L2	D1	D2	t	NW	g/piece
631-0202BG	R1/8	OD4	11	3	7	21	10	8,5	12	12,7	3,2	9
631-0204BG	R1/8	OD6	11	4	7	23,5	12,5	11,5	12	15,5	4,3	11
631-0263BG	R1/8	OD1/4" (6,3)	11	4	7	23,5	12,5	11,8	12	15,5	4,2	10
631-0206BG	R1/8	OD8	13	5	7	26,5	15,5	14,5	14,2	18,5	5,4	16
631-0208BG	R1/8	OD10	15	6	7	30,5	18	16,5	16,5	19,8	6,3	20
631-0402BG	R1/4	OD4	14	3	10	24,5	10	8,5	15,2	12,7	3,2	19
631-0404BG	R1/4	OD6	14	4	10	30	15,6	11,5	15,2	15,5	4,2	20
631-0463BG	R1/4	OD1/4" (6,3)	14	4	10	28	13,5	11,8	15,2	15,5	4,2	19
631-0406BG	R1/4	OD8	14	6	10	32	17,5	14,5	15,2	18,5	6,5	23
631-0495BG	R1/4	OD 3/8" (9,5)	17	8	10	32	17,5	16,1	18,5	21,3	8	24
631-0408BG	R1/4	OD10	17	8	10	38	22,1	16,5	18,5	21,3	8,5	25
631-0409BG	R1/4	OD12	19	8	10	38	22,1	19,9	20,7	26	8,5	38
631-0427BG	R1/4	OD1/2" (12,7)	19	8	10	41	24	20,6	20,7	26,8	8,5	43
631-0606BG	R3/8	OD8	19	6	10	31	15,5	14,5	20,7	18,5	6,5	37
631-0695BG	R3/8	OD 3/8" (9,5)	19	8	10	33	17,5	16,1	20,7	21,3	8,3	36
631-0608BG	R3/8	OD10	19	8	10	32	17,5	16,5	20,7	21,3	8,5	33
631-0609BG	R3/8	OD12	19	10	10	35,5	19,5	19,9	20,7	26	10,3	38
631-0627BG	R3/8	OD 1/2" (12,7)	19	10	10	41	24	20,6	20,7	26,8	10,3	49
631-0611BG	R3/8	OD14	22	10	10	40	24	21,9	24	28,5	10,3	49
631-0612BG	R3/8	OD16	24	10	10	43	26	24,9	26,2	32	10,3	60
631-0895BG	R1/2	OD3/8" (9,5)	24	8	13	39	17,5	16,1	26,2	21,3	8,3	72
631-0808BG	R1/2	OD10	24	8	13	37	17,5	16,5	26,2	21,3	8,5	65
631-0809BG	R1/2	OD12	24	10	13	39	19,5	19,9	26,2	26	10,3	66
631-0827BG	R1/2	OD1/2" (12,7)	24	10	13	41	20,5	20,6	26,2	26,8	10,3	71
631-0811BG	R1/2	OD14	24	10	13	41,5	21	21,9	26,2	28,5	10,3	68
631-0812BG	R1/2	OD16	24	12	13	46,5	26	24,9	26,2	32	12,5	75

## Screw-in connector with shut-off valve

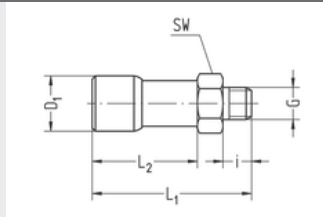


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range 0 to 232 psi (0 to 16 bar)

Part no.	G	for tube	SW	i	L1	L2	D1	D2	NW	g/piece
728-0202	G1/8	OD4	13	5,5	22	12,5	8,5	14,2	2	9
728-0204	G1/8	OD6	13	5,5	27	17,5	11,5	14,2	3,8	13
728-0206	G1/8	OD8	15	5,5	41,5	-	14,6	16,4	5,5	29
728-0208	G1/8	OD10	17	5,5	46,5	-	16,6	18,5	5,5	36
728-0402	G1/4	OD4	17	7,5	22	10	8,5	18,5	2	17
728-0404	G1/4	OD6	17	7,5	27	15	11,5	18,5	3,8	19
728-0606	G3/8	OD8	20	7,5	41,5	-	14,6	21,8	6	42
728-0608	G3/8	OD10	20	7,5	48,5	-	16,8	21,8	8	49
728-0808	G1/2	OD10	24	9,5	47	-	16,6	26,2	8	61

## Screw-in connector with shut-off valve

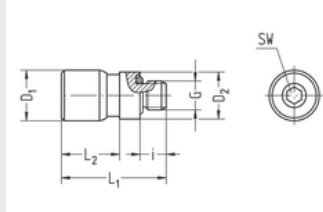
- M5 thread
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range 0 to 232 psi (0 to 16 bar)



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

## Screw-in connector

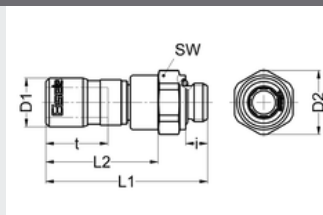
- Metric thread with hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



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

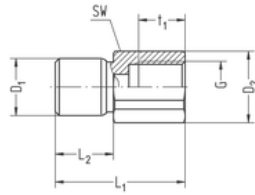
## Straight rotary connector

- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR, FKM
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -13 to 232 psi (-0,9 to 16 bar)
- Speed 800 rpm



Part no.	G	for tube	SW1	i	L1	L2	D1	D2	NW	g/piece
628D-0406	G1/4	OD8	20	7.5	51	38,5	14,5	21,8	6	55
628D-0408	G1/4	OD10	20	7.5	55,5	38,5	16,6	21,8	8	60
628D-0409	G1/4	OD12	20	7.5	61,5	44,5	19,9	21,8	8	75

## Straight screw-in connector with female thread

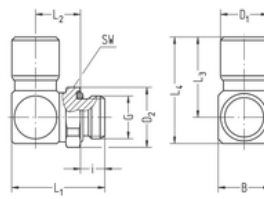


- Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

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

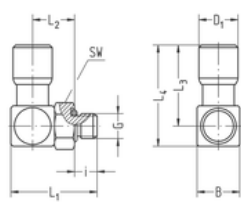
## Elbow screw-in connector, swiveling

- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube



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

## Elbow screw-in connector, swiveling



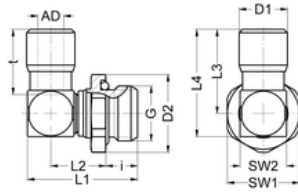
- Metric thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
687-5001	M5	OD2	8	4,5	17,3	8,5	14,6	18,6	8,5	5,9	1,4	7
687-5002	M5	OD4	8	4,5	17,3	8,5	16,5	20,5	8,5	8,5	2	9
687-5043	M5	OD4,3	8	4,5	18,8	9,2	16,6	21,1	10	9	2,2	11
687-5003	M5	OD5	8	4,5	18,8	9,2	18	22,5	10	10,5	2,2	12
687-5004	M5	OD6	8	4,5	19,8	9,7	19,5	24	11	11,5	2,2	15
687-5063	M5	OD1/4" (6,3)	8	4,5	19,8	9,7	19,5	24	11	11,8	2,2	15
687-5006	M5	OD8	8	4,5	19,8	9,7	22,8	28	14	14,5	2,2	22
687-4604	M6	OD6	10	4,5	19,8	9,7	26,7	20,7	12	11,5	3	18
687-4804	M7	OD6	10	5	20,3	9,7	26,7	20,7	12	11,5	4	18
687-4863	M7	OD1/4" (6,3)	10	5	20,3	9,7	26,7	20,7	12	11,8	4	18
687-4806	M7	OD8	10	5	20,3	9,7	30	23,8	14	14,5	4	24
687-4808	M7	OD10	10	5	20,3	9,7	34,7	28,5	14	16,6	4	29



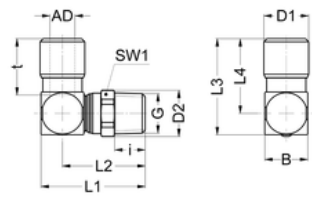
## Elbow screw-in connector, swiveling

- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Optimum through flow
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube



Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
604-0202	G1/8	OD4	13	5,5	22,9	12,9	16,7	21,2	9	8,5	14,2	2,5	15
604-0203	G1/8	OD5	13	5,5	23,9	13,4	18	23	10	10,5	14,2	3	18
604-0204	G1/8	OD6	13	5,5	25,9	14,9	20	25,5	11	11,5	14,2	4,2	19
604-0263	G1/8	OD1/4" (6,3)	13	5,5	26	15	20	25,5	11	11,5	14,2	4,2	22
604-0206	G1/8	OD8	14	5,5	31,4	18,9	24,5	31,5	14	14,5	15,2	5,5	40
604-0402	G1/4	OD4	17	7,5	24,9	12,9	16,5	21	9	8,5	18,5	2,5	21
604-0403	G1/4	OD5	17	7,5	25,9	13,4	18	23	10	10,5	18,5	3,5	25
604-0404	G1/4	OD6	17	7,5	25,9	12,9	20	25,5	11	11,5	18,5	4,2	23
604-0463	G1/4	OD1/4" (6,3)	17	7,5	26	13	25,5	20	11	11,8	18,5	4	26
604-0406	G1/4	OD8	17	7,5	31,4	16,9	24,5	31,5	14	14,5	18,5	6,5	41
604-0495	G1/4	OD3/8" (9,5)	17	7,5	36,3	20,8	36	28	16	16,1	18,5	8,5	54
604-0408	G1/4	OD10	17	7,5	36,3	20,8	28	36	16	16,5	18,5	8,5	54
604-0412	G1/4	OD16	17	7,5	39,3	22,3	39,3	47	19	24,9	18,5	8,5	88
604-0604	G3/8	OD6	20	7,5	26,9	13,9	20	25,5	11	8,5	21,8	4,2	31
604-0606	G3/8	OD8	20	7,5	29,9	15,4	24,5	31,5	14	14,5	21,8	6,5	46
604-0695	G3/8	OD3/8" (9,5)	20	7,5	33,3	17,8	36	28	16	16,1	21,8	8,5	56
604-0608	G3/8	OD10	20	7,5	33,3	17,8	28	36	16	16,5	21,8	8,5	56
604-0609	G3/8	OD12	20	7,5	40,3	22,8	34,5	44,5	20	20	21,8	9	94
604-0627	G3/8	OD1/2" (12,7)	20	7,5	40,3	22,8	45	35	20	20,6	21,8	8,5	96
604-0611	G3/8	OD14	22	7,5	43,5	25	38	49	22	22	23,8	11	112
604-0612	G3/8	OD16	22	7,5	46	26,5	42,5	54,5	24	25	26,2	12,5	123
604-0804	G1/2	OD6	24	9,5	30,4	15,4	20	25,5	11	8,5	26,2	4,2	50
604-0806	G1/2	OD8	24	9,5	33,4	16,9	24,5	31,5	14	14,5	26,2	6,5	65
604-0895	G1/2	OD3/8" (9,5)	24	9,5	35,8	18,3	36	28	16	16,1	26,2	8,5	76
604-0808	G1/2	OD10	24	9,5	35,8	18,3	28	36	16	16,5	26,2	8,5	74
604-0809	G1/2	OD12	24	9,5	39,9	20,4	34,5	44,5	20	20	26,2	9	106
604-0827	G1/2	OD1/2" (12,7)	24	9,5	39,8	20,3	45	35	20	20,6	26,2	9	110
604-0811	G1/2	OD14	24	9,5	42,5	22	38	49	22	22	26,2	11	122
604-0812	G1/2	OD16	24	9,5	47,5	26	42,5	54,5	24	25	26,2	12,5	132
604-0815	G1/2	OD20	24	9,5	60,8	36,3	56,5	70	30	30,5	26	13,5	256
604-1015	G3/4	OD20	32	9,5	60,8	36,3	57,1	70,6	30	30,5	34,8	18	278

## Elbow screw-in connector, swiveling with NPT-thread

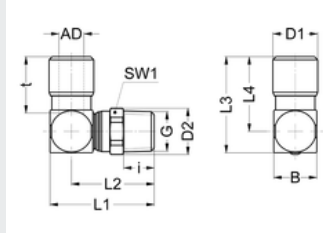


- NPT thread, conical
- Sealing NBR
- Tapered thread
- Material brass nickel-plated
- Optimum through flow
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	t	NW	g/piece
605-0202BG	NPT1/8	OD4	11	9	26,5	22	21,2	16,7	9	8,5	12	12,7	3,2	15
605-0204BG	NPT1/8	OD6	13	9	29,5	24	25,5	20	11	11,5	14,2	15,5	4,3	23
605-0263BG	NPT1/8	OD1/4" (6,3)	13	9	29,5	24	25,5	20	11	11,8	14,2	15,5	4,2	23
605-0206BG	NPT1/8	OD8	14	9	35	28	31,5	24,5	14	14,5	15,2	18,5	5,4	41
605-0404BG	NPT1/4	OD6	14	13	34,5	29	25,5	20	11	11,5	15,2	15,5	4,2	30
605-0463BG	NPT1/4	OD1/4" (6,3)	17	13	34,5	29	25,5	20	11	11,8	18,5	15,5	4,2	31
605-0406BG	NPT1/4	OD8	15	13	37	30	31,5	24,5	14	14,5	16,5	18,5	6,5	44
605-0495BG	NPT1/4	OD3/8" (9,5)	17	13	41,8	33,8	36	28	16	16,1	18,5	21,3	8	56
605-0408BG	NPT1/4	OD10	17	13	41,8	33,8	36	28	8	16,5	18,5	21,3	8,5	57
605-0409BG	NPT1/4	OD12	17	13	45,8	35,8	40,5	32,5	16	19,9	18,5	26	8,5	65
605-0427BG	NPT1/4	OD1/2" (12,7)	20	13	45,8	35,8	45	35	20	20,6	21,2	26,8	8,5	95
605-0695BG	NPT3/8	OD3/8" (9,5)	20	13	38,8	30,8	25,5	20	16	16,1	21,2	21,3	8,3	62
605-0608BG	NPT3/8	OD10	20	13	38,8	30,8	36	28	16	16,5	21,2	21,3	8,5	63
605-0609BG	NPT3/8	OD12	20	13	45,8	35,8	40,5	32,5	20	19,9	21,2	26	10,3	98
605-0627BG	NPT3/8	OD1/2" (12,7)	20	13	45,8	35,8	45	35	20	20,6	21,2	26,8	10,3	99
605-0611BG	NPT3/8	OD14	20	13	49	38	49	38	22	21,9	21,2	28,5	10,3	116
605-0612BG	NPT3/8	OD16	24	13	49,5	37,5	54,3	42,3	24	24,9	26,2	32	10,3	150
605-0895BG	NPT1/2	OD3/8" (9,5)	24	17	45,8	37,8	36	28	8	16,1	26,2	21,3	8,3	106
605-0808BG	NPT1/2	OD10	24	17	45,8	37,8	36	28	16	16,5	26,2	21,3	8,5	78
605-0809BG	NPT1/2	OD12	24	17	51,8	41,8	40,5	32,5	20	19,9	26,2	26	10,3	124
605-0827BG	NPT1/2	OD1/2" (12,7)	24	17	51,8	41,8	44,5	34,5	10	20,6	26,2	26,8	10,3	138
605-0811BG	NPT1/2	OD14	24	17	55	44	49	38	22	21,9	26,2	28,5	10,3	135
605-0812BG	NPT1/2	OD16	24	17	55	43	54,3	42,3	24	24,9	26,2	32	12,5	158

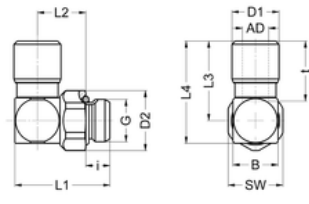
## Elbow screw-in connector, swiveling with R-thread

- R thread, conical
- Sealing NBR
- Tapered thread
- Material brass nickel-plated
- Optimum through flow
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube



Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	t	NW	g/piece
606-0202BG	R1/8	OD4	11	7	24,5	20	21,2	16,7	9	8,5	12	12,7	3,2	15
606-0204BG	R1/8	OD6	13	7	27,5	22	25,5	20	11	11,5	14,2	15,5	4,3	23
606-0263BG	R1/8	OD1/4" (6,3)	13	7	27,5	22	25,5	20	11	11,8	14,2	15,5	4,2	23
606-0206BG	R1/8	OD8	14	7	33	26	31,5	24,5	14	14,5	15,2	18,5	5,4	41
606-0402BG	R1/4	OD4	14	10	28,4	23,9	21,2	16,7	9	8,5	15,2	12,7	3,2	25
606-0404BG	R1/4	OD6	14	10	30,5	25	25,5	20	11	11,5	15,2	15,5	4,2	30
606-0463BG	R1/4	OD1/4" (6,3)	17	10	30,5	25	25,5	20	11	11,8	18,5	15,5	4,2	31
606-0406BG	R1/4	OD8	15	10	34	27	31,5	24,5	14	14,5	16,5	18,5	6,5	44
606-0495BG	R1/4	OD3/8" (9,5)	17	10	38,8	30,8	36	28	16	16,1	18,5	21,3	8	56
606-0408BG	R1/4	OD10	17	10	38,8	30,8	36	28	8	16,5	18,5	21,3	8,5	57
606-0409BG	R1/4	OD12	17	10	38,8	30,8	40,5	32,5	16	19,9	18,5	26	8,5	65
606-0427BG	R1/4	OD1/2" (12,7)	20	10	42,8	32,8	45	35	20	20,6	21,2	26,8	8,5	95
606-0606BG	R3/8	OD8	20	10	32,5	25,5	31,5	24,5	14	14,5	21,2	18,5	6,5	55
606-0695BG	R3/8	OD3/8" (9,5)	20	10	35,8	27,8	25,5	20	16	16,1	21,2	21,3	8,3	62
606-0608BG	R3/8	OD10	20	10	35,8	27,8	36	28	16	16,5	21,2	21,3	8,5	63
606-0609BG	R3/8	OD12	20	10	42,8	32,8	40,5	32,5	20	19,9	21,2	26	10,3	98
606-0627BG	R3/8	OD1/2" (12,7)	20	10	42,5	32,8	45	35	20	20,6	21,2	26,8	10,3	99
606-0611BG	R3/8	OD14	20	10	46	35	49	38	22	21,9	21,2	28,5	10,3	116
606-0612BG	R3/8	OD16	24	10	47,5	35,5	54,3	42,3	24	24,9	26,2	32	10,3	150
606-0808BG	R1/2	OD10	24	13	39,3	31,3	36	28	16	16,5	26,2	21,3	8,5	78
606-0809BG	R1/2	OD12	24	13	46,3	36,3	40,5	32,5	20	19,9	26,2	26	10,3	124
606-0811BG	R1/2	OD14	24	13	46	35	49	38	22	21,9	26,2	28,5	10,3	135
606-0812BG	R1/2	OD16	24	13	51	39	54,3	42,3	24	24,9	26,2	32	12,5	158

## Elbow screw-in connector, lockable

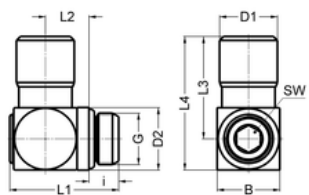


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

14

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	t	NW	g/piece
640-0202	G1/8	OD4	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	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	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	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	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	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	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	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	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	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	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	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	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

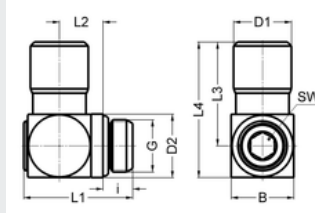


- Whitworth pipe thread with hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
656-0202	G1/8	OD4	4	5,5	22	8,7	17,8	23,7	11,8	8,6	11,9	2	17
656-0204	G1/8	OD6	4	5,5	22	8,7	21,3	27,2	11,8	11,4	11,9	4	20
656-0206	G1/8	OD8	4	5,5	22	8,7	24,2	30,1	13,9	14,6	11,9	4,5	27
656-0208	G1/8	OD10	4	5,5	22	8,7	26,4	32,5	13,9	16,6	11,9	4,4	31
656-0402	G1/4	OD4	6	7,5	27,5	11	19,5	27,4	15,8	8,6	15,9	2	34
656-0404	G1/4	OD6	6	7,5	27,5	11	23	30,9	15,8	11,4	15,9	4	37
656-0406	G1/4	OD8	6	7,5	27,5	11	26	33,9	15,8	14,6	15,9	6	42
656-0408	G1/4	OD10	6	7,5	27,5	11	28	35,9	15,9	16,6	15,9	6,5	46
656-0409	G1/4	OD12	8	7,5	32,1	13,8	35,5	46	15,9	19,9	19,9	8,5	80
656-0609	G3/8	OD12	8	7,5	31,8	13,5	35,5	46	19,9	19,9	19,9	9	81

## Elbow screw-in connector, swiveling

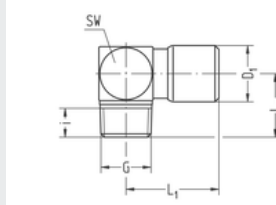
- Metric thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube



Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
657-5004	M5	OD6	3	4,5	21	9	21,3	27,2	11,8	11,4	8	2	15
657-5006	M5	OD8	3	4,5	21	9	23,6	28,6	13,9	14,6	8	2,2	24

## Elbow screw-in connector with R-Gewinde

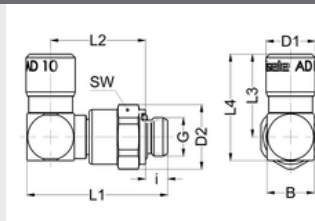
- Whitworth pipe thread conical
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G	for tube	SW	i	L1	L2	D1	NW	g/piece
661-0202	R1/8	OD4	11	6	17	12,5	8,5	2	14
661-0243	R1/8	OD4,3	11	6	17	12,5	9	3	14
661-0203	R1/8	OD5	11	6	18,5	12,5	10,5	3	15
661-0204	R1/8	OD6	11	6	20	12,5	11,5	4	16
661-0206	R1/8	OD8	12	6	23,5	13	14,5	6	23
661-0208	R1/8	OD10	14	6	27	14	16,6	6,5	28
661-0402	R1/4	OD4	14	8,5	18,5	16,5	8,5	2	26
661-0443	R1/4	OD4,3	14	8,5	18,5	16,5	9	3	26
661-0403	R1/4	OD5	14	8,5	20	16,5	10,5	3	28
661-0404	R1/4	OD6	14	8,5	21,5	16,5	11,5	4	29
661-0406	R1/4	OD8	14	8,5	24,5	16,5	14,5	6	33
661-0408	R1/4	OD10	14	8,5	27	16,5	16,6	8	29
661-0608	R3/8	OD10	18	9	29	19,3	16,6	8	63

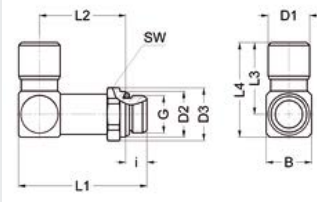
## Elbow rotary connector 90°

- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR, FKM
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -13 to 232 psi (-0,9 to 16 bar)
- Speed 800 rpm



Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
686D-0406	G1/4	OD8	20	7,5	47,5	30	27	35	16	14,6	21,8	6	75
686D-0408	G1/4	OD10	20	7,5	47,5	30	28	36	16	16,6	21,8	8	77

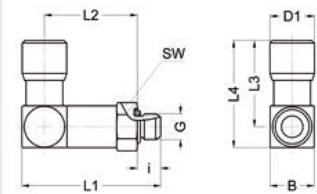
## Screw-in connector, swiveling, long model



- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
682-0202	G1/8	OD4	13	5,5	31	19,5	16,5	20,5	8,5	8,5	14,2	2	16
682-0204	G1/8	OD6	13	5,5	37,5	24,7	20,7	26,7	12	11,5	14,2	4	30
682-0206	G1/8	OD8	14	5,5	43,3	29	25	33	16	14,5	15,2	6	57
682-0208	G1/8	OD10	17	5,5	46,7	32,9	29	38	18	16,6	18,5	5,5	83
682-0402	G1/4	OD4	17	7,5	33,3	19,5	16,5	20,5	8,5	8,5	18,5	2	25
682-0404	G1/4	OD6	17	7,5	40	24,7	20,7	26,7	12	11,5	18,5	4	37
682-0406	G1/4	OD8	17	7,5	45,3	28,5	25	33	16	14,5	18,5	6	58
682-0408	G1/4	OD10	17	7,5	50	32,5	29	38	18	16,5	18,5	8	80
682-0409	G1/4	OD12	20	7,5	55,5	36,5	35,5	46	21	20	21,8	8	136
682-0604	G3/8	OD6	20	7,5	40,5	24,7	20,7	26,7	12	11,5	21,8	4	45
682-0606	G3/8	OD8	20	7,5	46	29	25	33	16	14,5	21,8	6	63
682-0608	G3/8	OD10	20	7,5	50	32	29	38	18	16,5	21,8	8	85
682-0609	G3/8	OD12	20	7,5	55,5	36	35,5	46	21	20	21,8	9	130
682-0804	G1/2	OD6	24	9,5	43	25,7	20,7	26,7	12	11,5	26,2	4	58
682-0806	G1/2	OD8	24	9,5	49	30,5	25	33	16	14,5	26,2	6	83
682-0808	G1/2	OD10	24	9,5	53	33,5	29	38	18	16,5	26,2	8	107
682-0809	G1/2	OD12	24	9,5	58,5	37,5	35,5	46	21	20	26,2	9	129

## Screw-in connector, swiveling, long model

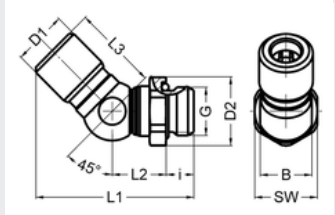


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

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

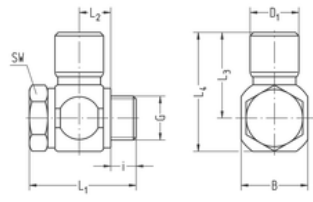
## Elbow screw-in connector 45°, swiveling

- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube



Part no.	G	for tube	SW	i	L1	L2	L3	B	D1	D2	NW	g/piece
698-0202	G1/8	OD4	13	5,5	31,3	11,3	16,5	8,5	8,5	14,2	2,5	14
698-0204	G1/8	OD6	13	5,5	35,3	12,9	19	11	11,5	14,2	4,2	19
698-0206	G1/8	OD8	14	5,5	42,8	16,6	23	14	14,5	15,2	5,5	35
698-0402	G1/4	OD4	17	7,5	33,3	11,4	16,5	8,5	8,5	18,5	2,5	20
698-0404	G1/4	OD6	17	7,5	35,3	10,9	19	11	11,5	18,5	4,2	23
698-0406	G1/4	OD8	17	7,5	42,8	14,6	23	14	14,5	18,5	6,5	36
698-0408	G1/4	OD10	17	7,5	49,7	18,8	26	16	16,5	18,5	8,5	48
698-0604	G3/8	OD6	20	7,5	36,3	11,9	19	11	8,5	21,8	4,2	31
698-0606	G3/8	OD8	20	7,5	41,3	13,1	23	14	14,5	21,8	6,5	41
698-0608	G3/8	OD10	20	7,5	46,7	15,9	26	16	16,5	21,8	8,5	51
698-0609	G3/8	OD12	20	7,5	54,7	18,8	32	20	20	21,8	9	77
698-0611	G3/8	OD14	22	7,5	59,3	20,7	35	22	22	23,8	11	91
698-0806	G1/2	OD8	24	9,5	44,8	14,6	23	14	14,5	26,2	6,5	60
698-0808	G1/2	OD10	24	9,5	49,2	16,3	26	16	16,5	26,2	8,5	69
698-0809	G1/2	OD12	24	9,5	54,3	16,4	32	20	20	26,2	9	89
698-0811	G1/2	OD14	24	9,5	58,3	17,7	35	22	22	26,2	11	101
698-0812	G1/2	OD16	24	9,5	67,6	21,7	41	24	25	26,2	12,5	119

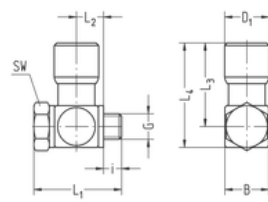
## Single swivel connector, short model



- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR
- Material brass nickel-plated
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
634-0202K	G1/8	OD4	14	5,5	28,5	9,5	18,2	26,2	16	8,5	2	39
634-0203K	G1/8	OD5	14	5,5	28,5	9,5	19,5	27,5	16	10,5	3	39
634-0204K	G1/8	OD6	14	5,5	28,5	9,5	21	29	16	11,5	4	41
634-0206K	G1/8	OD8	14	5,5	28,5	9,5	23	31	16	14,5	4	45
634-0208K	G1/8	OD10	14	5,5	28,5	9,5	27	35	16	16,5	5,2	48
634-0243K	G1/8	OD4,3	14	5,5	28,5	9,5	18,2	26,2	16	9	3	39
634-0402K	G1/4	OD4	17	7,5	30,5	9,5	20	30	20	8,5	2	56
634-0403K	G1/4	OD5	17	7,5	30,5	9,5	21,5	31,5	20	10,5	3	57
634-0404K	G1/4	OD6	17	7,5	30,5	9,5	23	33	20	11,5	4	58
634-0406K	G1/4	OD8	17	7,5	30,5	9,5	26	36	20	14,5	6	63
634-0408K	G1/4	OD10	17	7,5	30,5	9,5	28,5	38,5	20	16,5	7,2	65
634-0443K	G1/4	OD4,3	17	7,5	30,5	9,5	20	30	20	9	3	56
634-0604K	G3/8	OD6	22	7,5	31,5	9,5	25	36	22	11,5	4	75
634-0606K	G3/8	OD8	22	7,5	31,5	9,5	28	39	22	14,5	6	80
634-0608K	G3/8	OD10	22	7,5	31,5	9,5	30,5	41,5	22	16,5	8	82
634-0609K	G3/8	OD12	22	7,5	31,5	10,5	33,5	45	22	19,9	8	102
634-0611K	G3/8	OD14	22	7,5	36	11,8	38	49	22	21,9	9	111
634-0804K	G1/2	OD6	27	9	33,5	9,5	27	41,5	29	11,5	4	118
634-0806K	G1/2	OD8	27	9	33,5	9,5	30	44,5	29	14,5	6	122
634-0808K	G1/2	OD10	27	9	33,5	9,5	33,5	48	29	16,5	8	126
634-0809K	G1/2	OD12	27	9	41	13,3	37,5	51,5	29	19,9	11	169
634-0811K	G1/2	OD14	27	9	41	13,3	41	55	28	21,9	11,8	173

## Single swivel connector, short model



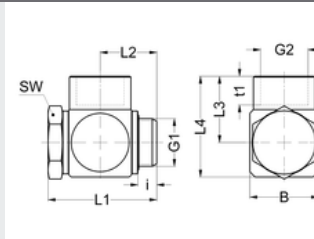
- M5 thread
- PVC seal rings
- Seal in connection NBR
- Ring connection brass nickel-plated
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

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



## Single swivel connector

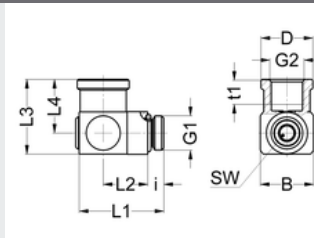
- Whitworth pipe thread
- VS seal rings
- Seal in connection FKM
- Material brass nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	i	L1	L2	L3	L4	B	t1	NW	g/piece
SA1503-0201K	G1/8	G1/8	14	5,3	28,5	14,9	14,5	22	16	7	5	41
SA1503-0403K	G1/4	G1/4	17	7,6	35	19,3	21	30,5	20	10	7,2	79
SA1503-0605K	G3/8	G3/8	22	6,6	38	19,8	23	35	24	10	9,2	121
SA1503-0807K	G1/2	G1/2	27	11,6	49,5	27,8	27,5	42,5	30	12	12	232
SA1503-5453K	M10x1	M10x1	14	5,3	28,5	14,9	14,5	22	16	7	5	41

## Elbow screw-in connector, swiveling

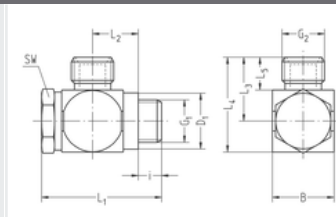
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



Part no.	G1	G2	SW	i	L1	L2	L3	L4	B	t1	NW	g/piece
SA1039	G1/8	G1/8	4	4,5	24,8	12,6	20,9	15	15	6	4	26

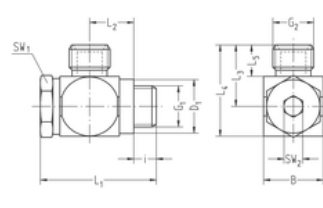
## Single swivel connector

- Whitworth pipe thread
- Banjo fitting with threaded end according to VW standard
- Fits tube spigot with union nut
- VS seal rings
- Material brass nickel-plated
- Temperature range -10 to +70°C
- Working pressure range -0.95 to 15 bar



Part no.	G1	G2	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
SA831	G1/4	G1/4	17	7,2	37	14,1	19,5	29	19	17,9	7,2	66
SA839	G1/4	G3/8	17	7,2	37	14,1	20,5	30	19	17,9	7,2	72
SA858	G3/8	G1/4	22	7,2	38	14,1	22	34	24	21,8	8	101
SA863	G3/8	G3/8	22	7,2	38	14,1	23	35	24	21,8	9,2	104
SA984	G1/2	G1/2	27	9	43,5	16,6	27	41	28	26,9	11,8	160

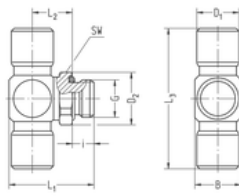
## Single swivel connector with hexagon socket



- Whitworth pipe thread
- Banjo fitting with threaded end according to VW standard
- Fits tube spigot with union nut according to 39V16631
- VS seal rings (metal spacer ring with soft seal)
- With hexagon socket
- Material brass nickel-plated
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G1	G2	SW1	SW2	i	L1	L2	L3	L4	L5	B	D1	NW	g/piece
SA849	G1/8	G1/4	14	5	5,2	30,5	11,8	17,5	25	10	16	14,9	5,2	41

## T-screw-in connector, swiveling

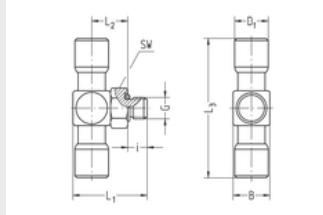


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

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

## T-screw-in connector, swiveling

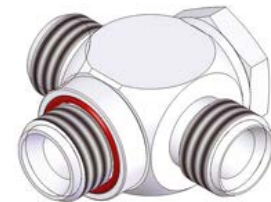
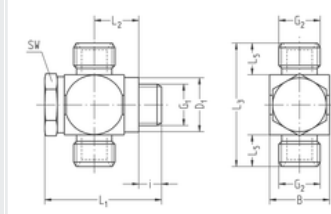
- Metric thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube



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

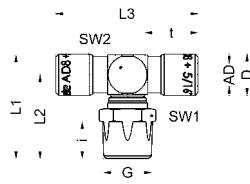
## Double swivel joint

- Whitworth pipe thread
- Banjo fitting with threaded end according to VW standard
- Fits tube spigot with union nut according to 39V16631
- VS seal rings (metal spacer ring with soft seal)
- Material brass nickel-plated
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	i1	L1	L2	L3	L5	B	D1	NW	g/piece
SA996	G1/4	G1/4	17	7,2	37	14	39	10	19	17,9	7,2	81

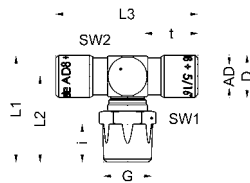
## T-screw-in connector, swiveling with NPT-thread



- NPT thread, conical
- Sealing NBR
- Tapered thread
- Material brass nickel-plated
- Optimum through flow
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	D	t	NW	g/piece
N688-0202BG	NPT1/8	OD4	11	9	9	26,5	22	21,2	8,5	12,7	3,2	15
N688-0204BG	NPT1/8	OD6	13	11	9	29,5	24	25,5	11,5	15,5	4,3	23
N688-0263BG	NPT1/8	OD 1/4" (6,3)	13	11	9	29,5	24	25,5	11,8	15,5	4,2	23
N688-0206BG	NPT1/8	OD8	14	14	9	35	28	31,5	14,5	18,5	5,4	41
N688-0404BG	NPT1/4	OD6	14	11	13	32,5	27	40	11,4	15,5	4,5	30
N688-0463BG	NPT1/4	OD1/4" (6,3)	14	11	13	32,5	27	40	11,8	15,5	4,5	40
N688-0406BG	NPT1/4	OD8	15	14	13	37	30	31,5	14,5	18,5	6,5	44
N688-0495BG	NPT1/4	OD3/8" (9,5)	17	16	13	41,8	33,8	36	16,1	21,3	8	56
N688-0408BG	NPT1/4	OD10	17	8	13	41,8	33,8	36	16,5	21,3	8,5	57
N688-0409BG	NPT1/4	OD12	17	16	13	45,8	35,8	40,5	19,9	26	8,5	65
N688-0427BG	NPT1/4	OD1/2" (12,7)	20	20	13	45,8	35,8	45	20,6	26,8	8,5	95
N688-0606BG	NPT3/8	OD8	17	14	13	36,5	29,5	24,5	14,6	18,5	6,5	66
N688-0695BG	NPT3/8	OD3/8" (9,5)	17	16	13	38,8	30,8	56	16,1	21,3	8,5	75
N688-0608BG	NPT3/8	OD10	17	16	13	38,8	30,8	56	16,6	21,3	8,5	76
N688-0609BG	NPT3/8	OD12	20	20	13	45,8	35,8	40,5	19,9	26	10,3	98
N688-0627BG	NPT3/8	OD1/2" (12,7)	20	20	13	45,8	35,8	45	20,6	26,8	10,3	99
N688-0611BG	NPT3/8	OD14	20	22	13	49	38	49	21,9	28,5	10,3	116
N688-0612BG	NPT3/8	OD16	24	24	13	49,5	37,5	54,3	24,9	32	10,3	150
N688-0895BG	NPT1/2	OD3/8" (9,5)	24	8	17	45,8	37,8	36	16,1	21,3	8,3	106
N688-0808BG	NPT1/2	OD10	24	16	17	45,8	37,8	36	16,5	21,3	8,5	78
N688-0809BG	NPT1/2	OD12	24	20	17	47,3	37,3	69	19,9	26	9	148
N688-0827BG	NPT1/2	OD1/2" (12,7)	22	20	17	47,3	37,3	69	20,6	26,8	9	148
N688-0811BG	NPT1/2	OD14	24	22	17	55	44	49	21,9	28,5	10,3	135
N688-0812BG	NPT1/2	OD16	24	24	17	55	43	54,3	24,9	32	12,5	158

## T-screw-in connector, swiveling with R-thread

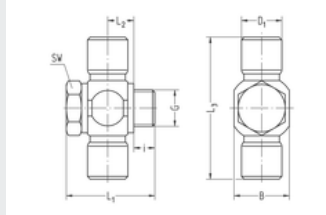


- R thread, conical
- Sealing NBR
- Tapered thread
- Material brass nickel-plated
- Optimum through flow
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW1	SW2	i	L1	L2	L3	D	t	NW	g/piece
R688-0404BG	R1/4	OD6	14	11	13	32	26,5	40	11,4	15,5	4,5	30
R688-0463BG	R1/4	OD1/4" (6,3)	14	11	13	32	26,5	40	11,8	15,5	4,5	40
R688-0606BG	R3/8	OD8	17	14	13	36	29	49,5	14,6	18,5	6,5	66
R688-0695BG	R3/8	OD3/8" (9,5)	17	16	13	39,3	31,3	56	16,1	21,3	8,5	75
R688-0608BG	R3/8	OD10	17	16	13	39,3	31,3	56	16,6	21,3	8,5	76
R688-0809BG	R1/2	OD12	24	20	17	47,3	37,3	69	19,9	26	9	148
R688-0827BG	R1/2	OD1/2" (12,7)	22	20	17	47,3	37,3	69	20,6	26,8	9	148

## Double swivel joint

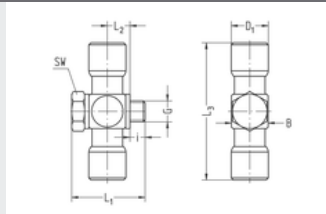
- Whitworth pipe thread
- VS seal rings
- Seals in connectors NBR
- Material brass nickel-plated
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



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

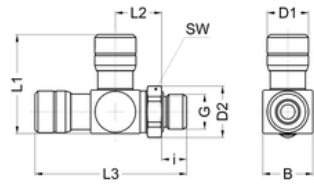
## Double swivel joint

- M5 thread
- PVC seal rings
- Seals in connectors NBR
- Ring connection brass nickel-plated
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



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

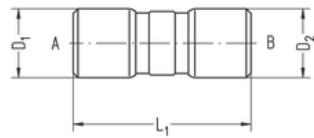
## L-screw-in connector, swiveling



- Whitworth pipe thread
- Chambered O-ring
- Seals NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	B	D1	D2	NW	g/piece
690-0204	G1/8	OD6	13	5,5	27	12,9	42,3	14	11,5	11,9	4	33
690-0206	G1/8	OD8	13	5,5	33	13,9	44,9	16	14,6	11,9	5,5	51
690-0406	G1/4	OD8	17	7,5	33	14,4	47,4	16	14,6	15,9	6,5	59
690-0408	G1/4	OD10	17	7,5	37,5	15,4	51,9	18	16,6	15,9	8	72

## Double connector

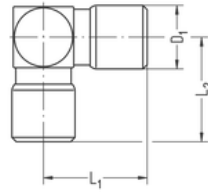


- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	for tube A	for tube B	L1	D1	D2	NW	g/piece
633-0202	OD4	OD4	26,5	8,5	8,5	2	6
633-4343	OD4,3	OD4,3	26,5	9	9	3	7
633-0303	OD5	OD5	29	10,5	10,5	3	10
633-0404	OD6	OD6	32,5	11,5	11,5	4	13
633-6363	OD1/4" (6,3)	OD1/4" (6,3)	32,5	11,8	11,8	4	14
633-0606	OD8	OD8	38,5	14,5	14,5	6	25
633-0808	OD10	OD10	44	16,5	16,5	8	33
633-9595	OD3/8" (9,5)	OD3/8" (9,5)	44	16,1	16,1	8	31
633-0909	OD12	OD12	54	20	20	9	58
633-2727	OD1/2" (12,7)	OD1/2" (12,7)	55	20,6	20,6	9	61
633-1111	OD14	OD14	59	22	22	11	71
633-1212	OD16	OD16	65,5	25	25	12	92
633-1515	OD20	OD20	92,2	30,5	30,5	16,5	188
632-0206	OD4	OD8	33	8,6	14,6	4	18
632-0406	OD6	OD8	35,5	11,5	14,6	4	20
632-0408	OD6	OD10	38,5	11,5	16,6	4	26
632-6395	OD1/4" (6,3)	OD3/8" (9,5)	38	11,8	16,1	4	24
632-6327	OD1/4" (6,3)	OD1/2" (12,7)	43,5	11,8	20,6	4	38
632-0608	OD8	OD10	41,5	14,6	16,6	6	30
632-0609	OD8	OD12	46	14,6	19,9	6,5	41
632-9527	OD3/8" (9,5)	OD1/2" (12,7)	49	16,1	20,6	8	47
632-0809	OD10	OD12	48	16,6	19,9	9	46
632-0811	OD10	OD14	51	16,6	22	8	49
632-0911	OD12	OD14	55,5	19,9	21,9	11	66
632-1112	OD14	OD16	62	22	25	11	87

## Elbow connector

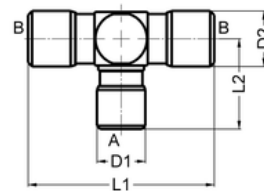
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	for tube A	for tube B	SW	L1	L2	D1	D2	NW	g/piece
677-0200	OD4	OD4		16,7	16	8,5	8,5	2	10
677-0300	OD5	OD5		18	18	10,5	10,5	3	14
677-0400	OD6	OD6		20	20	11,5	11,5	4	19
677-0600	OD8	OD8		24,5	24,5	14,5	14,5	6	37
677-0800	OD10	OD10		28	28	16,5	16,5	8	43
677-0900	OD12	OD12		34,5	34	20	20	9	92
677-1100	OD14	OD14		38	38	22	22	11	112
677-1200	OD16	OD16		42,5	42,5	25	25	12	145
677-1204	OD16	OD6		42,5	28,5	25	11,4	4	123
677-1500	OD20	OD20		70,6	78,6	30,5	30,5	14,5	303
677-2700	OD1/2" (12,7)	OD1/2" (12,7)		34,5	34	20,6	20,6	9	95
677-4300	OD4,3	OD4,3		16,7	16	9	9	3	10
677-6300	OD1/4" (6,3)	OD1/4" (6,3)		20	20	11,8	11,8	4	20
677-9500	OD3/8" (9,5)	OD3/8" (9,5)		28	28	16,1	16,1	8	45

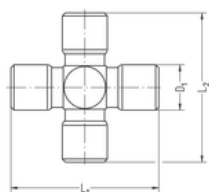
## T-connector

- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	for tube A	for tube B	L1	L2	D1	D2	NW	g/piece
678-0200	OD4	OD4	33,4	16	8,5	8,5	2	12
678-4300	OD4,3	OD4,3	33,4	16	9	9	3	13
678-0300	OD5	OD5	36	18	10,5	10,5	3	18
678-0400	OD6	OD6	40	20	11,5	11,5	4	24
678-6300	OD1/4" (6,3)	OD1/4" (6,3)	40	20	11,8	11,8	4	-
678-0600	OD8	OD8	49	24,5	14,5	14,5	6	47
678-9500	OD 3/8" (9,5)	OD 3/8" (9,5)	56	28	16,1	16,1	8	-
678-0800	OD10	OD10	56	28	16,5	16,5	8	56
678-0900	OD12	OD12	69	34	20	20	9	114
678-2700	OD1/2" (12,7)	OD1/2" (12,7)	69	34	20,6	20,6	9	-
678-1100	OD14	OD14	76	37,5	22	22	11	139
678-1200	OD16	OD16	84,5	42,5	25	25	12	185
678-1500	OD20	OD20	113	78,6	30,5	30,5	14,5	371
678-0206	OD4	OD8	45	18,5	8,5	14,5	2	38
678-0406	OD6	OD8	45	24,5	11,5	14,5	4	43
678-0409	OD6	OD12	61	24,5	11,5	20	4	92
678-0608	OD8	OD10	56	27	14,5	16,5	6	61
678-0609	OD8	OD12	69	29,5	14,5	20	6	104
678-0806	OD10	OD8	50,4	28	16,5	14,5	8	50
678-1108	OD14	OD10	76	37,5	22	16,5	8	111

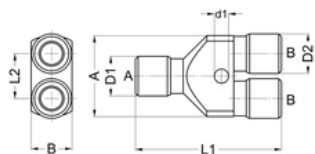
## 4-way connector



- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	for tube	L1	L2	D1	NW	g/piece
679-0200	OD4	33,4	32	8,5	2	15
679-4300	OD4,3	33,4	32	9	3	15
679-0300	OD5	36	36	10,5	3	22
679-0400	OD6	40	40	11,5	4	29
679-6300	OD1/4" (6,3)	40	40	11,8	4	30
679-0600	OD8	49	49	14,5	6	57
679-0800	OD10	56	56	16,5	8	62
679-0900	OD12	69	68	20	9	136
679-1100	OD14	76	75	22	11	164
679-1200	OD16	84,5	85	25	12	222

## Y-connector



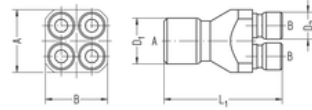
- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	for tube A	for tube B	L1	L2	D1	D2	A	B	d1	NW	g/piece
675-0202	OD4	OD4	35	11	8,5	8,5	20	11	3,2	2	13
675-4302	OD4,3	OD4	35	11	9	8,5	20	11	3,2	2	13
675-4343	OD4,3	OD4,3	35	11	9	9	20	11	3,2	3	14
675-0402	OD6	OD4	37,5	11	11,5	8,5	20	12	3,2	2	17
675-0404	OD6	OD6	44	13,2	11,5	11,5	25	12	4,2	4	24
675-0443	OD6	OD4,3	37,5	11	11,5	9	20	12	3,2	3	17
675-6363	OD1/4" (6,3)	OD1/4" (6,3)	43	13,2	11,4	11,4	25	12	4,2	4	24
675-0604	OD8	OD6	46	13,2	14,5	11,5	25	15	4,2	4	32
675-0606	OD8	OD8	55	16,5	14,5	14,5	30	15	5,2	6	48
675-9595	OD3/8" (9,5)	OD3/8" (9,5)	60,5	17,8	16,1	16,1	35	17	5,2	8	63
675-0806	OD10	OD8	55	16,5	16,5	14,5	30	17	5,2	6	46
675-0808	OD10	OD10	60,5	19	16,5	16,5	35	17	5,2	8	44
675-0909	OD12	OD12	72	21,8	20	20	40	21	5,2	9	106
675-0906	OD12	OD8	59,5	16,5	20	14,5	30	21	5,2	6	68
675-0908	OD12	OD10	64	19	20	16,5	35	21	5,2	8	80
675-2727	OD1/2" (12,7)	OD1/2" (12,7)	72	21,8	20,6	20,6	40	21	5,2	9	106
675-1108	OD14	OD10	65,5	18,4	22	16,5	35	23	5,2	8	83
675-1109	OD14	OD12	73	21,8	22	20	40	23	5,2	9	116
675-1111	OD14	OD14	79	23,8	22	22	45	23	5,2	11	129
675-1212	OD16	OD16	87,8	27	24,9	24,9	52	25,5	5,2	12	185



## Y-connector, double

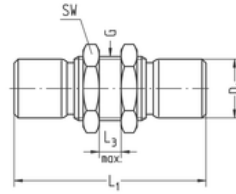
- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	for tube A	for tube B	L1	D1	D2	A	B	NW	g/piece
676-0602	OD8	OD4	44	14,5	8,5	20	20	2	33
676-0643	OD8	OD4,3	44	14,5	9	20	20	3	33
676-0804	OD10	OD6	54,5	16,5	11,5	25	25	4	49
676-0906	OD12	OD8	62,5	20	14,5	30	30	6	23

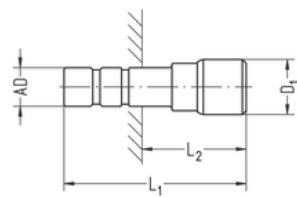
## Bulkhead connector

- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	for tube	G	SW	L1	L3 max.	D1	NW	g/piece
680-0202	OD4	M12x1	14	34	6	8,5	2	20
680-4343	OD4,3	M12x1	14	34	6	9	3	20
680-0303	OD5	M12x1	14	37	6	10,5	3	22
680-0404	OD6	M14x1	17	43	8	11,5	4	37
680-6363	OD1/4" (6,3)	M14x1	17	43	8	11,8	4	37
680-0606	OD8	M16x1	19	49	8	14,5	6	52
680-9595	OD 3/8" (9,5)	M18x1	22	56	10	16,1	8	71
680-0808	OD10	M18x1	22	56	10	16,5	8	70
680-0909	OD12	M22x1	27	63	12	20	9	117
680-2727	OD1/2" (12,7)	M24x1	30	65	12	20,6	9	139
680-1111	OD14	M24x1	30	66	12	22	11	137
680-1212	OD16	M28x1	32	72	12	24,9	13	172
680-1515	OD20	M34x1	41	102	15	30,5	16,5	333

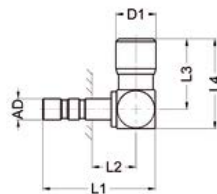
## Reducing plug



- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Fits all connections in the programs 14, 15 and 15A in the respective size

Part no.	plug AD	for tube	L1	L2	D1	NW	g/piece
621-0204	4	OD6	34	21	11,4	2,4	4
621-0402	6	OD4	31	15,5	8,5	2	5
621-0443	6	OD4,3	31	15,5	9	3	5
621-0403	6	OD5	34,5	19	10,5	3	7
621-0463	6	OD1/4" (6.3)	37	21,5	11,8	4	9
621-6304	1/4" (6.3)	OD6	37	21,5	11,4	4	10
621-0602	8	OD4	34	15,5	8,5	2	7
621-0603	8	OD5	35,5	17	10,5	3	9
621-0604	8	OD6	38,5	20	11,5	4	10
621-0643	8	OD4,3	34	15,5	9	3	7
621-9563	3/8" (9,5)	OD1/4" (6,3)	43	21,5	11,8	4,5	13
621-9508	3/8" (9,5)	OD10	49	27,5	16,6	7,5	22
621-0804	10	OD6	40	18,5	11,5	4	13
621-0806	10	OD8	45	24	14,6	6	18
621-0895	10	OD3/8" (9,5)	49	27,5	16,1	8	22
621-0809	10	OD12	55	33	19,9	8	36
621-0811	10	OD14	57,3	-	21,9	8	42
621-0904	12	OD6	47	-	11,4	4,5	20
621-0906	12	OD8	47,5	-	14,6	6,5	22
621-0908	12	OD10	51	-	16,6	8	25
621-0927	12	OD1/2" (12,7)	60	34	20,6	9	45
621-2709	1/2" (12,7)	OD12	59	33	19,9	9,5	44
621-1106	14	OD8	52,5	24	14,6	6,5	33
621-1108	14	OD10	56	23,5	16,6	8	32
621-1109	14	OD12	58	-	19,9	9,5	46
621-1209	16	OD12	60	-	19,9	9,5	57
621-1211	16	OD14	64	32	21,9	12	59
621-1512	20	OD16	76	-	24,9	13,5	93

## Elbow plug

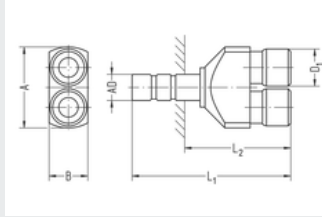


- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Fits all connections in the programs 14, 15 and 15A in the respective size

Part no.	plug AD	for tube	L1	L2	L3	L4	D1	NW	g/piece
641-0202	4	OD4	27,5	10	16,7	21,2	8,5	2	9
641-0404	6	OD6	32	11	20	25,5	11,5	4	17
641-0606	8	OD8	38	12,5	24,5	31,5	14,5	6	31
641-0808	10	OD10	43,5	14	28	36	16,5	7,8	44
641-0909	12	OD12	52,5	16,5	34,5	44,5	20	9	82
641-1111	14	OD14	57,5	18	38	49	22	11	101
641-1212	16	OD16	60	20	44,5	57,5	25	11,5	136

## Y-plug

- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Fits all connections in the programs 14, 15 and 15A in the respective size

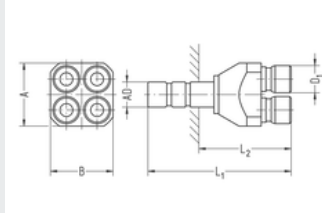


Part no.	plug AD	for tube	L1	L2	D1	A	B	NW	g/piece
619-0202	4	OD4	42	29	8,5	20	10	2,5	12
619-0243	4	OD4,3	42	29	9	20	10	2,5	13
619-0402	6	OD4	44,5	29	8,5	20	10	2	13
619-0404	6	OD6	49,5	34	11,5	25	12	4	22
619-0443	6	OD4,3	44,5	29	9	20	10	3	13
619-0604	8	OD6	52,5	34	11,5	25	12	4	26
619-0606	8	OD8	60	41,5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

14

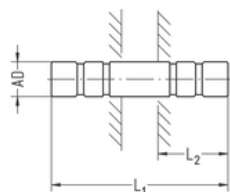
## Y-plug, double

- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Fits all connections in the programs 14, 15 and 15A in the respective size



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

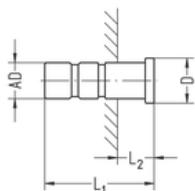
## Double plug



- Material brass nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 232 psi (-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

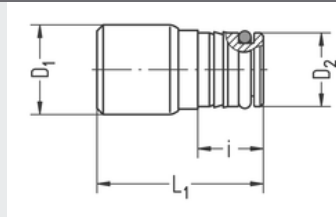


- Material brass nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)
- Fits all connections in the programs 14, 14A, 15 and 15A in the respective size

Part no.	plug AD	L1	L2	D	g/piece
623-1800	3	18,5	7	6	1
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
623-6300	1/4" (6,3)	21,5	6,5	8	6
623-0600	8	24,5	6,5	10	11
623-9500	3/8" (9,5)	28	7,5	11,3	17
623-0800	10	28	7,5	12	19
623-0900	12	33	7	14	32
623-2700	1/2" (12,7)	33	7	14,5	36
623-1100	14	36	7,5	16	47
623-1200	16	38	7,5	17,8	33
623-1500	20	52	-	21,8	69

## Force-fitting connector

- Sealing NBR
- Material brass
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



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

## Mounting hole, Mounting mandrel

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

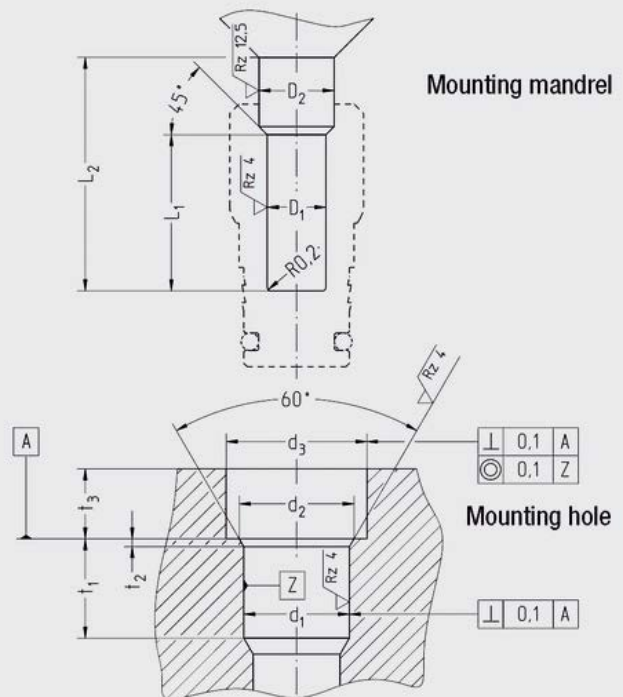
### Assembly instructions

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)

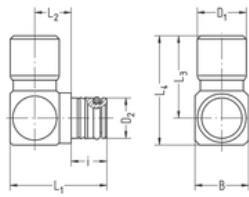
### Note

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



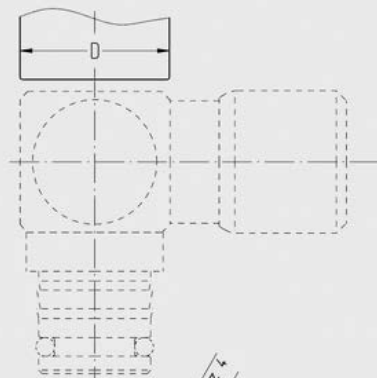
- Sealing NBR
- Material brass
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Not designed for steady motion of the tube

Part no.	for tube	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
607-0002	OD4	7	17,8	6,4	16,5	20,5	8,5	8,5	6	2	8
607-0902	OD4	8,5	20,3	7,4	16,5	20,5	8,5	8,5	9	2	11
607-0004	OD6	8,5	22,8	8,5	20,7	26,7	12	11,5	9	4	19
607-0006	OD8	10,5	28,7	10,8	25	33	16	14,5	12	6	39
607-0008	OD10	12	32,7	12,3	29	38	18	16,5	14	8	53
607-0009	OD12	14,5	38	14	35,5	46	21	20	17	9	88
607-0011	OD14	16	42	15	39	51	24	22	19	11	119
607-0018	OD3	7	17,8	6,4	15	19	8,5	6,8	6	2	7

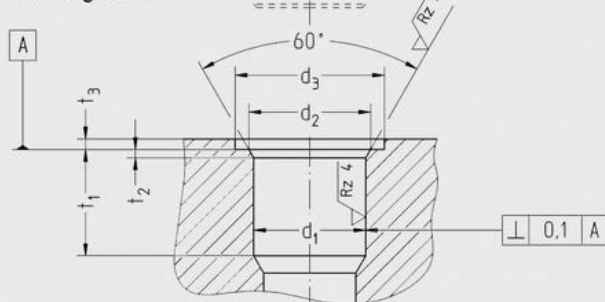
## Mounting hole, extrusion die

Part no.	for tube	D	d1	d2	d3	t1	t2	t3
		+0.5	H8	+0.2	min.	+0.5	+0.2	+0.2
607-0002	OD4	8,5	6	6,5	8	7	0,4	0,3
607-0902	OD4	8,5	9	9,5	12	8,5	0,4	0,3
607-0004	OD6	12	9	9,5	12	8,5	0,4	0,3
607-0006	OD8	16	12	12,5	16	10,5	0,4	0,3
607-0008	OD10	18	14	14,5	18	12	0,4	0,3
607-0009	OD12	21	17	17,6	21	14,5	0,5	0,3
607-0011	OD14	23	19	19,6	23	16	0,5	0,3
607-0018	OD3	8,5	6	6,5	8	7		0,3

Extrusion die



Mounting hole



### 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)

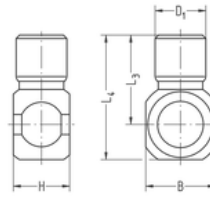
### Note

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

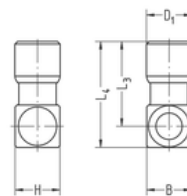
- For banjo bolt with Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	for banjo bolt	for tube	H	L3	L4	B	D1	NW	g/piece
634-02021	G1/8	OD4	14.5	18.2	26.2	16	8.5	2	21
634-02031	G1/8	OD5	14.5	19.5	27.5	16	10.5	3	22
634-02041	G1/8	OD6	14.5	21	29	16	11.5	4	23
634-02061	G1/8	OD8	14.5	24	32	16	14.5	6	28
634-02431	G1/8	OD4,3	14.5	18.2	26.2	16	9	3	21
634-04021	G1/4	OD4	14.5	20	30	20	8.5	2	28
634-04031	G1/4	OD5	14.5	21.5	31.5	20	10.5	3	29
634-04041	G1/4	OD6	14.5	23	33	20	11.5	4	31
634-04061	G1/4	OD8	14.5	26	36	20	14.5	6	35
634-04081	G1/4	OD10	14.5	28.5	38.5	20	16.5	8	37
634-04431	G1/4	OD4,3	14.5	20	30	20	9	3	28
634-06021	G3/8	OD4	14.5	23	33	22	8,5	3	29
634-06041	G3/8	OD6	14.5	25	36	22	11.5	4	29
634-06061	G3/8	OD8	14.5	28	39	22	14.5	6	34
634-06081	G3/8	OD10	14.5	30.5	41.5	22	16.5	8	37
634-08041	G1/2	OD6	14.5	27	41.5	29	11.5	4	47
634-08061	G1/2	OD8	14.5	30	44.5	29	14.5	6	51
634-08081	G1/2	OD10	14.5	33.5	48	29	16.5	8	54

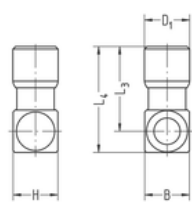
## Single banjo

- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



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

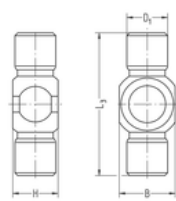
## Single banjo for throttle



- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

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

## Double banjo



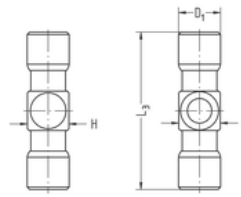
- For banjo bolt with Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

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



## Double banjo

- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

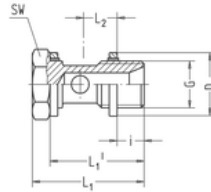


Part no.	for banjo bolt	for tube	H	L3	B	D1	NW	g/piece
639-50021	M5	OD4	8,5	33	8,5	8,5	1,8	8
639-50031	M5	OD5	10	36	10	10,5	1,8	13
639-50041	M5	OD6	11	39	11	11,5	1,8	17
639-50431	M5	OD4,3	8,5	33	8,5	9	1,8	8

14

## Banjo bolt, short model

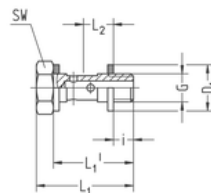
- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Fits banjo fitting with H = 14.5



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
635-5400K	M10x1	14	5,5	28,5	24,5	10,4	14,7	5,2	18

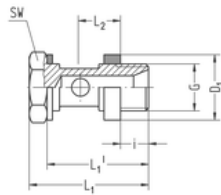
## Banjo bolt, short model

- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

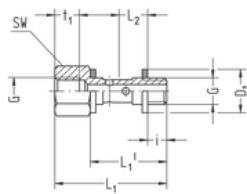
## Banjo bolt



- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material brass nickel-plated
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

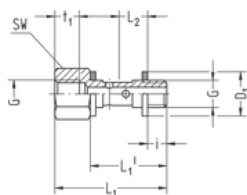
## Banjo bolt, short model



- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-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

## Banjo bolt with female thread, short model



- Short design for 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

## Color coding

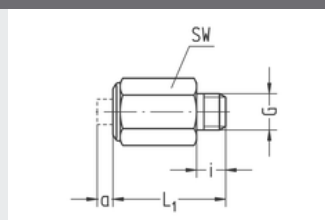
- Material aluminum anodized
- Fits all Eisele plug connectors



Part no.	for tube	Color	g/piece
SA1394-1102	OD4	red	1
SA1394-1104	OD6	red	1
SA1394-1106	OD8	red	1
SA1394-1108	OD10	red	1
SA1394-1109	OD12	red	1
SA1394-1111	OD14	red	1
SA1394-1112	OD16	red	1
SA1394-1202	OD4	green	1
SA1394-1204	OD6	green	1
SA1394-1206	OD8	green	1
SA1394-1208	OD10	green	1
SA1394-1209	OD12	green	1
SA1394-1211	OD14	green	1
SA1394-1212	OD16	green	1
SA1394-1302	OD4	blue	1
SA1394-1304	OD6	blue	1
SA1394-1306	OD8	blue	1
SA1394-1308	OD10	blue	1
SA1394-1309	OD12	blue	1
SA1394-1311	OD14	blue	1
SA1394-1312	OD16	blue	1

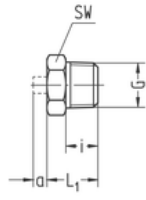
## Pressure gauge

- 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

## Pressure gauge

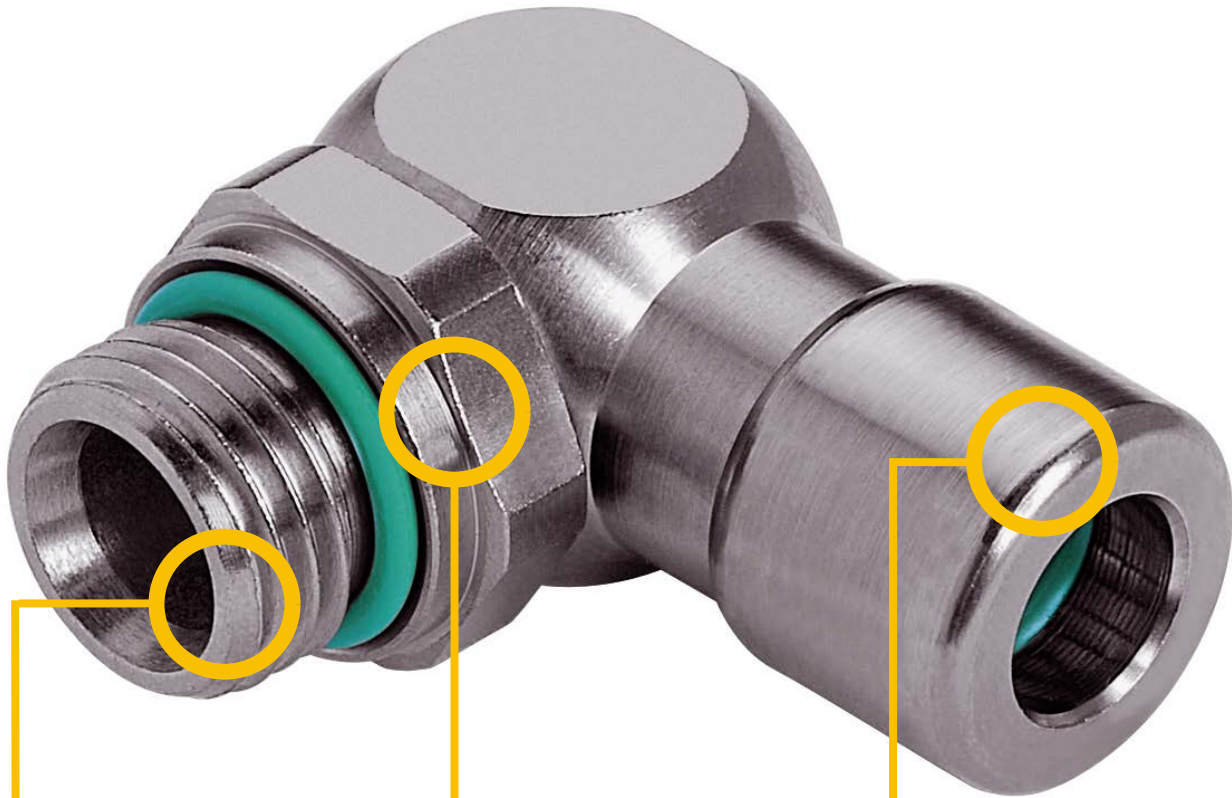


- Whitworth pipe thread conical
- Material brass nickel-plated / plastic
- Allowable medium: Air
- Temperature range -15 to +70 °C
- Working pressure range 2 to 10 bar

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

## Plug connectors with release sleeve and 2 seals

14A



### Minimizing leakage

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

### Extended application possibilities

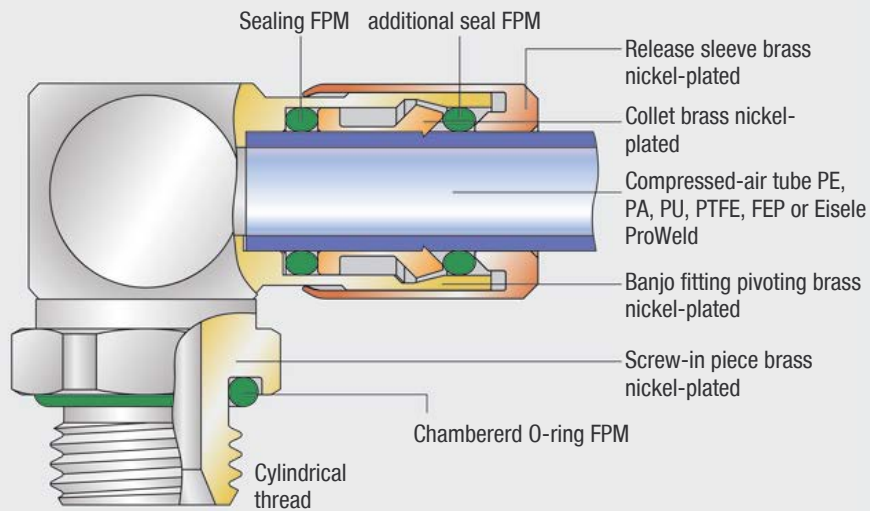
- Suitable for compressed air (up to 348 psi (24 bar)) and certain fluids, also for high pressures, depending on application and tube up to 1450 psi (100 bar)
- Also suitable for vacuum

### 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 tube outside diameter

Also suitable for vacuum applications.

## Functional principle



The collet guarantees the secure clamp of the plugged in tube. The external release sleeve protects the connector of dirt and makes it possible to release the tube without any tools. Through the patented 2-sealing system the use of this plug-in technology is also possible in areas in which leakage is not allowed. E.g. micro dispensing technology.

## Range of application

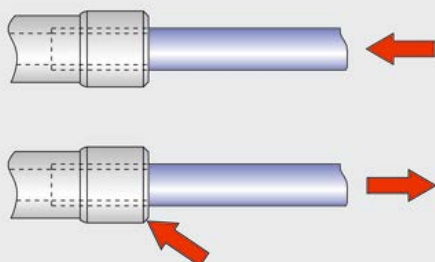
The connection system with a special technology, with additional seal and a wider pressure range. Very quick assembly and disassembly of compressed-air tubes made of PE (polyethylene), PA (polyamide), PU (polyurethane), ProWeld (PUR) and PTFE (Teflon) / FEP.

## Service conditions

- Temperature range: -4 to 248 °F (-20 to +120 °C)
- Working pressure range: -14 to 348 psi (-0.95 to 24 bar)
- Allowable medium: Air
- Very quick assembly and disassembly of compressed-air tubes
- No tools necessary
- Frequent assembly and disassembly possible
- Full tube 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

Data provided apply depending on the compressed-air tubes used.

## Handling

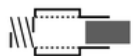


Assembly: Push release sleeve, push tube into the connector up to the limit stop

Disassembly: Push release sleeve, pull out tube

## Threaded connectors

starting on page 120



Straight threaded connectors

page 120



Angled threaded connectors

page 123



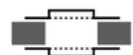
Threaded T-connectors

page 125

## Plug connector

starting on page 126

14A



Double connectors

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Elbow connectors

page 126



T-connectors

page 127



Cross connectors

page 127



Y-connectors

page 127

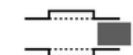


Bulkhead connectors

page 128

## Plug

starting on page 128



Reducing plug

page 128



Elbow plug

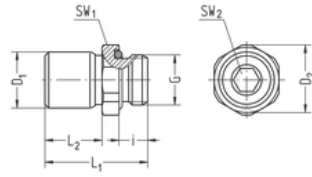
page 129



Y-plug

page 129

## Screw-in connector

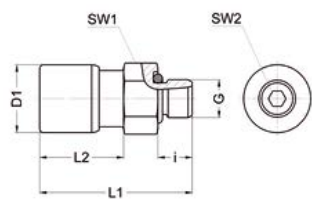


- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

Part no.	G	for tube	SW1	SW2	i	L1	L2	D1	D2	NW	g/piece
VT1428-0202CNI	G1/8	OD4	13	3	5,5	19	9,5	8,8	14,2	2	9
VT1428-0204CNI	G1/8	OD6	13	5	5,5	24,5	15	11,6	14,2	4	12
VT1428-0206CNI	G1/8	OD8	14	5	5,5	29	19	14,8	15,2	5,1	19
VT1428-0402CNI	G1/4	OD4	17	3	7,5	21,5	9,5	8,8	18,5	2	17
VT1428-0404CNI	G1/4	OD6	17	5	7,5	23,5	11,5	11,6	18,5	4	18
VT1428-0406CNI	G1/4	OD8	17	6	7,5	27	15	14,8	18,5	6	22
VT1428-0408CNI	G1/4	OD10	17	8	7,5	34	22	16,8	18,5	8	27
VT1428-0409CNI	G1/4	OD12	20	8	7,5	38,5	23,5	20,1	21,8	9	41
VT1428-0604CNI	G3/8	OD6	20	5	7,5	24,5	11,5	11,6	21,8	4	28
VT1428-0606CNI	G3/8	OD8	20	6	7,5	28	15	14,8	21,8	6	31
VT1428-0608CNI	G3/8	OD10	20	8	7,5	30,5	17,5	16,8	21,8	8	33
VT1428-0609CNI	G3/8	OD12	20	9	7,5	36,5	23,5	20,1	21,8	9	41
VT1428-0804CNI	G1/2	OD6	24	5	9,5	27,5	11,5	11,6	26,2	4	52
VT1428-0806CNI	G1/2	OD8	24	6	9,5	30,5	15	14,8	26,2	6	44
VT1428-0808CNI	G1/2	OD10	24	8	9,5	33	17,5	16,8	26,2	8	53
VT1428-0809CNI	G1/2	OD12	24	9	9,5	36,5	21	20,1	26,2	9	42
VT1428-0812CNI	G1/2	OD16	24	12	9,5	49	32	25,1	26,2	12,5	78

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Screw-in connector



- Metric thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

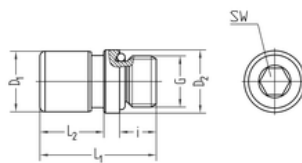
Part no.	G	for tube	SW1	SW2	i	L1	L2	D1	NW	g/piece
VT1429-5002CNI	M5	OD4	8	2	4,5	20	11	8,8	2	5
VT1429-5004CNI	M5	OD6	11	2	4,5	24,5	14,5	11,6	2	10
VT1429-4802CNI	M7	OD4	10	3	5	20	10,5	8,8	2	6
VT1429-4804CNI	M7	OD6	11	3	5	24	14,5	11,6	3	10
VT1429-5202CNI	M8	OD4	11	3	5,5	18,5	9,5	8,8	2	6
VT1429-5204CNI	M8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

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.



## Screw-in connector

- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*



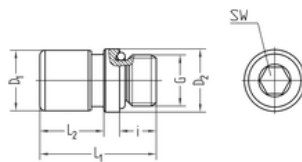
Part no.	G	for tube	SW	i	L1	L2	D1	D2	NW	g/piece
VT1462-0202CNI	G1/8	OD4	3	5,5	19	9,5	8,8	11,9	2	7
VT1462-0204CNI	G1/8	OD6	5	5,5	24,5	14,5	11,6	11,9	4	10
VT1462-0206CNI	G1/8	OD8	5	5,5	28,5	-	14,8	11,9	5,2	16
VT1462-0208CNI	G1/8	OD10	5	5,5	29,5	-	16,8	11,9	5,2	22
VT1462-0402CNI	G1/4	OD4	3	7,5	21,5	9,5	8,8	15,9	2	16
VT1462-0404CNI	G1/4	OD6	5	7,5	23,5	11,5	11,6	15,9	4	16
VT1462-0406CNI	G1/4	OD8	6	7,5	27	14	14,8	15,9	6	20
VT1462-0408CNI	G1/4	OD10	8	7,5	33,5	20	16,8	16,9	8	27
VT1462-0409CNI	G1/4	OD12	8	7,5	39	25,5	20,1	19,9	8,2	41
VT1462-0606CNI	G3/8	OD8	6	7,5	26,5	14	14,8	19,9	6	28
VT1462-0608CNI	G3/8	OD10	8	7,5	30,5	18	16,8	19,9	8	32
VT1462-0609CNI	G3/8	OD12	9	7,5	38,5	25,5	20,1	19,9	9	42
VT1462-0812CNI	G1/2	OD16	12	9,5	48,5	-	25,1	24	12,5	76

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

14A

## Screw-in connector

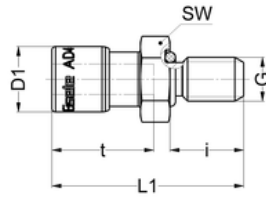
- Metric thread
- With hexagon socket
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*



Part no.	G	for tube	SW	i	L1	L2	D1	D2	NW	g/piece
VT1463-5002CNI	M5	OD4	2,5	4,5	20	12	8,8	7,9	2	5
VT1463-5004CNI	M5	OD6	2,5	4,5	24,5	-	11,6	7,9	2,5	8
VT1463-4602CNI	M6	OD4	3	4,5	20	12	8,8	8,9	2	10
VT1463-4604CNI	M6	OD6	3	4,5	24,5	-	11,6	10	3,2	9
VT1463-4802CNI	M7	OD4	3	5	20,5	10,5	8,8	9,9	2	7
VT1463-4804CNI	M7	OD6	3	5	24	-	11,6	9,9	3,2	9
VT1463-5202CNI	M8x1	OD4	3	5,5	18,5	9,5	8,8	10,9	2	6
VT1463-5204CNI	M8x1	OD6	3	5,5	24,5	14,5	11,6	10,9	3,2	10
VT1463-5402CNI	M10x1	OD4	3	5,5	19	9,5	8,8	11,9	2	8
VT1463-5404CNI	M10x1	OD6	5	5,5	24,5	14,5	11,6	11,9	4	11
VT1463-5406CNI	M10x1	OD8	5	5,5	28,5	-	14,8	11,9	5,2	16

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Screw-in connector

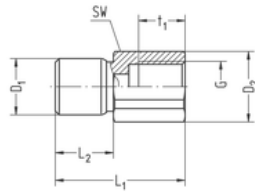


- Metric thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

Part no.	G	for tube	SW	i	L1	D1	t	NW	g/piece
SA1534	M6	OD4	10	10	26	8,8	13,8	2	7

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Straight screw-in connector with female thread



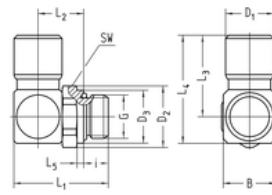
- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

Part no.	G	for tube	SW	L1	L2	t1	D1	D2	NW	g/piece
VT1417-0102CNI	G1/8	OD4	14	25	13	8	8,8	15,2	3	15
VT1417-0104CNI	G1/8	OD6	14	28	16,5	8	11,6	15,2	4,5	18
VT1417-0304CNI	G1/4	OD6	17	33	16,5	12	11,6	18,3	4,5	28
VT1417-0306CNI	G1/4	OD8	17	36	19,5	12	14,8	18,3	6,5	33

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Elbow screw-in connector, swiveling

- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Not designed for steady motion of the tube

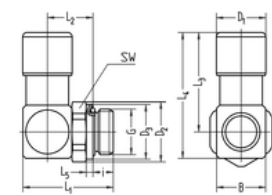


Part no.	G	for tube	SW	i	L1	L2	L3	L4	L5	B	D1	D2	D3	NW	g/piece
VT1486-0202CNI	G1/8	OD4	13	5,5	20,2	10,4	17,5	21,5	1,5	8,5	8,8	14,2	11,9	2	14
VT1486-0204CNI	G1/8	OD6	13	5,5	22,8	11,7	22,5	28,5	1,5	12	11,6	14,2	11,9	4	22
VT1486-0206CNI	G1/8	OD8	14	5,5	26,2	13,4	27	35	1,5	16	14,8	15,2	11,9	5,5	41
VT1486-0208CNI	G1/8	OD10	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	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	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	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	17	7,5	28,7	13,9	27	35	2	16	14,8	18,5	15,9	6	44
VT1486-0408CNI	G1/4	OD10	17	7,5	30,5	14,9	31	40	2	18	16,8	18,5	15,9	8	59
VT1486-0409CNI	G1/4	OD12	20	7,5	34	17	38	48,5	2	21	20,1	21,8	19,9	8	92
VT1486-0604CNI	G3/8	OD6	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	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	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	20	7,5	34	17	38	48,5	2,5	21	20,1	21,8	19,9	9	87
VT1486-0804CNI	G1/2	OD6	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	24	9,5	31,7	14,9	27	35	2	16	14,8	26,2	24	6	66
VT1486-0808CNI	G1/2	OD10	24	9,5	33,7	15,9	31	40	2	18	16,8	26,2	24	8	78
VT1486-0809CNI	G1/2	OD12	24	9,5	36	17	38	48,5	2	21	20,1	26,2	24	9	103
VT1486-0812CNI	G1/2	OD16	24	9,5	41,3	19,7	49	62	2	26	25,1	26,2	24	13	167

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Elbow screw-in connector, swiveling

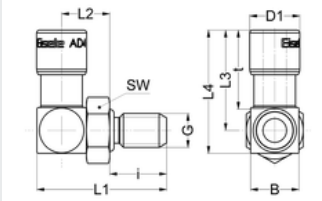
- Metric thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Not designed for steady motion of the tube



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

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Elbow screw-in connector

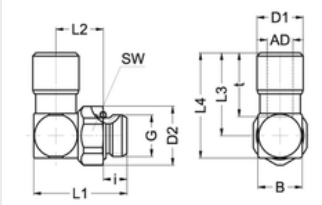


- Metric thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
SA1535	M6	OD4	10	10	22,8	8,5	17,5	21,5	8,5	8,8	2	11

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Elbow-screw-in connector, lockable

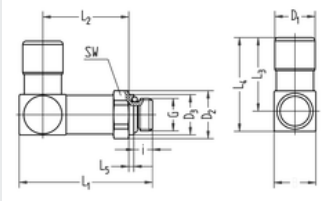


- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)
- Stiff angular shape, can be locked with jam nut

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
VT1440-5002CNI	M5	OD4	8	4,5	18,5	9,5	17,5	22	9	8,8	-	2,2	10

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Elbow screw-in connector, long model



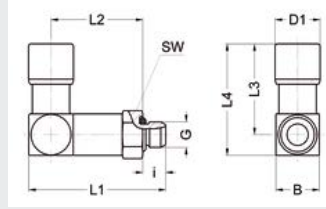
- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	L4	L5	B	D1	D2	D3	NW	g/piece
VT1482-0202CNI	G1/8	OD4	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	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	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	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	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	17	7,5	45,3	30,5	27	35	2	16	14,8	18,5	15,9	6	61
VT1482-0408CNI	G1/4	OD10	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	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	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	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	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	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	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	24	9,5	49,2	32,4	27	35	2	16	14,8	26,2	23,9	6	85
VT1482-0808CNI	G1/2	OD10	24	9,5	53,2	35,4	31	40	2	18	16,8	26,2	23,9	8	110
VT1482-0809CNI	G1/2	OD12	24	9,5	58,5	39,5	38	48,5	2	21	20,1	26,2	23,9	9	133

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Elbow screw-in connector, long model

- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)
- Not designed for steady motion of the tube

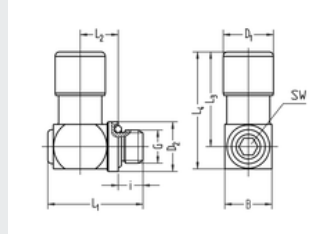


Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
VT1483-5002CNI	M5	OD4	8	4,5	26,8	18	17,5	21,5	8,5	8,8	2	13
VT1483-5004CNI	M5	OD6	8	4,5	32,3	22,2	21,5	26	11	11,6	2,2	21

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Elbow screw-in connector, swiveling

- Metric thread
- With hexagon socket
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Not designed for steady motion of the tube

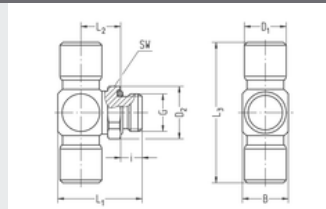


Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
VT1457-4602CNI	M6	OD4	3	4,5	17,3	8	18	22,5	9,9	8,8	9,9	2	10
VT1457-4604CNI	M6	OD6	3	4,5	19,8	8	22,1	27,1	10,9	11,6	10,9	2	17
VT1457-5002CNI	M5	OD4	3	4,5	17,3	7	18	22,5	8,5	8,8	8	2	9
VT1457-5004CNI	M5	OD6	4	5,5	19,8	8	21,6	26,6	10,9	11,6	10,9	2	17
VT1457-4802CNI	M7	OD4	4	5	19,8	8	18,6	23,6	9,9	8,8	9,9	2	11
VT1457-4804CNI	M7	OD6	4	5	19,8	8	22,1	27,1	10,9	11,6	10,9	4	16
VT1457-5202CNI	M8x1	OD4	4	5,5	20,3	8	18,6	23,6	10,9	8,8	10,9	2	13
VT1457-5204CNI	M8x1	OD6	4	5,5	20,3	8	21,6	26,6	10,9	11,6	10,9	4	17

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## T-screw-in connector, swiveling

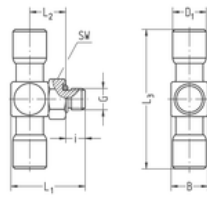
- Whitworth pipe thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Not designed for steady motion of the tube



Part no.	G	for tube	SW	i	L1	L2	L3	B	D1	D2	NW	g/piece
VT1488-0206CNI	G1/8	OD8	14	5,5	26,3	13,4	54	16	14,8	11,9	5,5	52
VT1488-0404CNI	G1/4	OD6	17	7,5	25,3	12,2	45	12	11,6	15,9	4	38
VT1488-0406CNI	G1/4	OD8	17	7,5	28,7	13,9	54	16	14,8	15,9	6	57

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## T-screw-in connector, swiveling

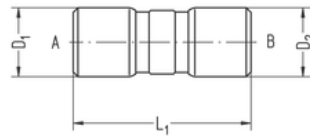


- Metric thread
- Chambered O-ring
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	B	D1	NW	g/piece
VT1489-5002CNI	M5	OD4	8	4,5	17,3	8,5	35	8,5	8,8	2,2	12

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Double connector

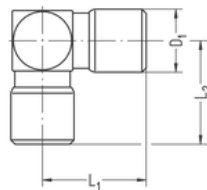


- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

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

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Elbow connector



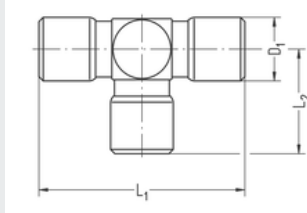
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

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

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## T-connector

- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*



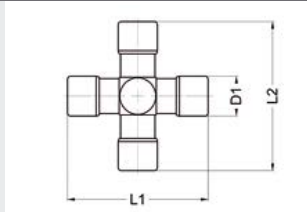
Part no.	for tube	L1	L2	D1	NW	g/piece
VT1478-0200CNI	OD4	36	17,5	8,8	2	13
VT1478-0400CNI	OD6	44	23	11,6	4	27
VT1478-0600CNI	OD8	53	27,5	14,8	6	53
VT1478-0800CNI	OD10	61	32	16,8	8	75
VT1478-0900CNI	OD12	74	36,5	20,1	9	124

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

14A

## 4-way connector

- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

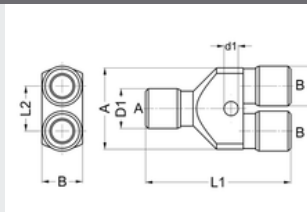


Part no.	for tube	L1	L2	D1	NW	g/piece
VT1479-0200CNI	OD4	36	35	8,8	2	18
VT1479-0400CNI	OD6	46	44	11,6	4	34
VT1479-0600CNI	OD8	55,4	53	14,8	6	66
VT1479-0800CNI	OD10	64	61	16,8	8	92

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Y-connector

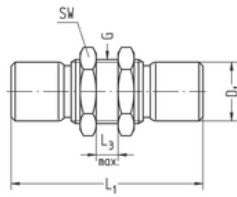
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*



Part no.	for tube A	for tube B	L1	L2	D1	D2	A	B	d1	NW	g/piece
VT1475-0202CNI	OD4	OD4	37	11	8,8	8,8	20	11	3	3	15
VT1475-0404CNI	OD6	OD6	49	13,2	11,6	11,6	25	12	4,2	4	30
VT1475-0606CNI	OD8	OD8	60	16,5	14,8	14,8	31,3	15	5,2	6	57
VT1475-0808CNI	OD10	OD10	66	19	16,5	16,5	35	17	5,2	8	76
VT1475-0909CNI	OD12	OD12	77	21,8	20	20	41,9	21	4,5	9	121

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Bulkhead connector



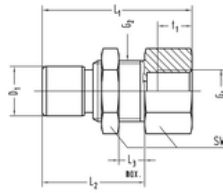
- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

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

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

14A

## Bulkhead connector with female thread

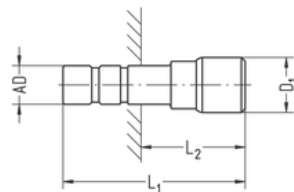


- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*

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

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

## Reducing plug



- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Fits all connections in program 14A in the respective size

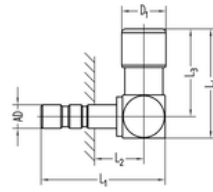
Part no.	plug AD	for tube	L1	L2	D1	NW	g/piece
VT1421-0402CNI	6	OD4	32	15,5	8,8	2	5
VT1421-0602CNI	8	OD4	33,5	15,5	8,8	2	7
VT1421-0604CNI	8	OD6	38	20	11,6	4	12

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.



## Elbow plug

- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Fits all connections in program 14A in the respective size



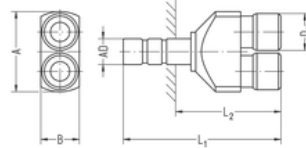
Part no.	plug AD	for tube	L1	L2	L3	L4	D1	NW	g/piece
VT1441-0202CNI	4	OD4	27,5	10	18	22,5	8,8	2	9
VT1441-0404CNI	6	OD6	32	10	22	27,5	11,6	4	18
VT1441-0606CNI	8	OD8	38	12,5	26,5	33,5	14,8	6	33

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.

14A

## Y-plug

- FPM seals
- Material brass chemically nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)\*
- Fits all connections in program 14A in the respective size



Part no.	plug AD	for tube	L1	L2	D1	A	B	NW	g/piece
VT1419-0404CNI	6	OD6	52,5	37	11,6	24,8	12	4	39
VT1419-0606CNI	8	OD8	63,2	42,9	14,8	29,8	15	6	75

\* Depending on the tubes used, pressures up to 1450 psi (100 bar) are possible when working with fluids. Please enquire.



## Plug connectors with release ring



### Ideally compatible

- Appropriate accessories for all connections

### Connectors in all-metal design

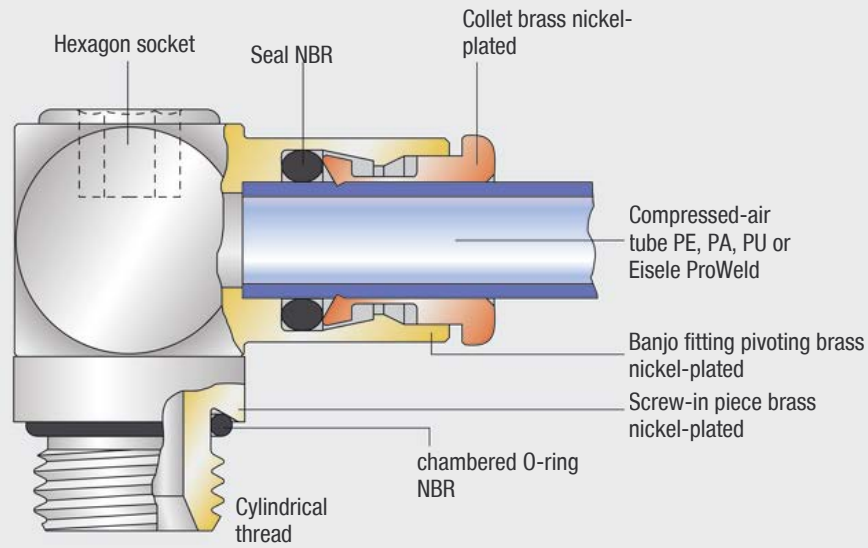
- Pneumatic connectors in different designs
- Technology tried and tested in series production

### Simple handling and assembly

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

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

## Functional principle



## Range of application

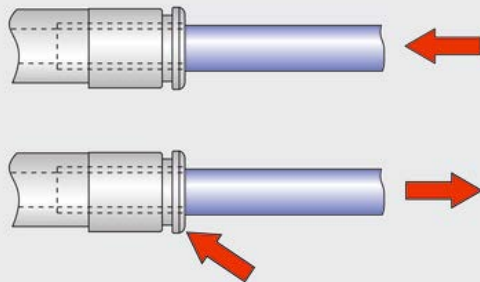
The connection system with simplified technology. Very quick assembly and disassembly of compressed-air tubes made of PE (polyethylene), PA (polyamide), PU (polyurethane), and ProWeld (PUR) in pneumatic systems.

## Service conditions

- Temperature range: -4 to 176 °F (-20 to +80 °C)
- Working pressure range: -14 to 217 psi (-0.95 to 15 bar)
- Allowable medium: Air
- Very quick assembly and disassembly of compressed-air tubes
- No tools necessary
- Frequent assembly and disassembly possible
- Full tube 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

Data provided depend on tubes used.

## Handling



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

Disassembly: Push release sleeve, pull out tube

## Sample order for plug connectors with release sleeve - NBR/FPM

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

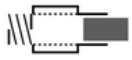
Article No.: 828-0202

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

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

## Threaded connectors

starting on page 135



Straight threaded connectors

page 135



Angled threaded connectors

page 139



Threaded T-connectors

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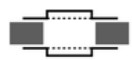


Threaded L-connectors

page 147

## Plug connector

starting on page 147



Double connectors

page 147



Elbow connectors

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T-connectors

page 148



Cross connectors

page 149



Y-connectors

page 149

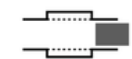


Bulkhead connectors

page 150

## Plug

starting on page 151



Reducing plug

page 151



Elbow plug

page 152



Y-plug

page 152



Double plug

page 152



Sealing plug

page 153

## Ring connectors

starting on page 153

Ring connectors, single

page 153

Ring connectors, double

page 154

## Accessories

starting on page 156

Banjo bolt

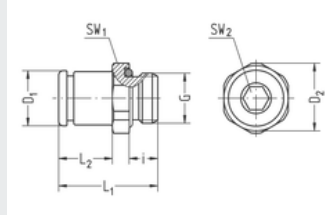
page 156

Code sleeve

Seite 157

## Screw-in connector

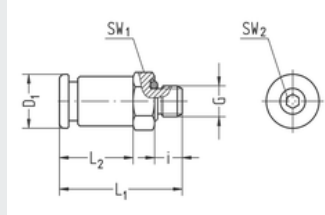
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

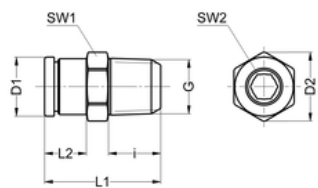
## Screw-in connector

- Thread M3, M5, M7
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

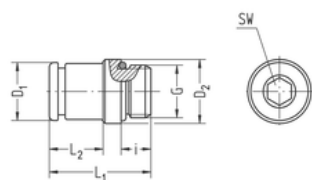
## Screw-in connector with NPT-thread



- NPT thread, conical
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	SW1	SW2	i	L1	L2	D1	D2	NW	g/piece
830-0406	NPT1/4	OD8	14	6	13	29	10,5	14,6	17	6,5	23

## Screw-in connector



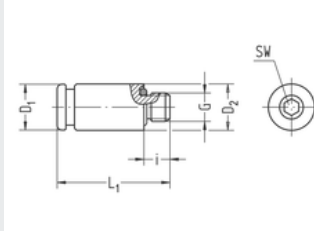
- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	connecting thread countersink Ø max.	SW	i	L1	L2	D1	D2	NW	g/piece
862-0202	G1/8	OD4	10,8	3	5,5	19,5	10	8,6	11,9	2	8
862-0203	G1/8	OD5	10,8	4	5,5	21	11,5	9,9	11,9	3	8
862-0204	G1/8	OD6	10,8	5	5,5	24,5	15	11,4	11,9	4	11
862-0206	G1/8	OD8	10,8	5	5,5	27	17,5	13,9	11,9	5,1	14
862-0208	G1/8	OD10	11,9	5	5,5	30,5	-	16,6	11,9	5,5	14
862-0243	G1/8	OD4,3	10,8	3	5,5	19,5	10	8,9	11,9	3	8
862-0402	G1/4	OD4	14	3	7,5	18	6	8,6	15,9	2	14
862-0403	G1/4	OD5	14	4	7,5	20	8	9,9	15,9	3	15
862-0404	G1/4	OD6	14	5	7,5	24	12	11,4	15,9	4	17
862-0406	G1/4	OD8	14	6	7,5	25,5	13,5	14,6	15,9	6	18
862-0408	G1/4	OD10	14	8	7,5	31	-	15,9	15,9	8	22
862-0443	G1/4	OD4,3	14	3	7,5	18	6	8,9	15,9	3	14
862-0606	G3/8	OD8	17,5	6	7,5	25,5	12,5	14,6	19,9	6	28
862-0608	G3/8	OD10	17,5	8	7,5	28	15	16,6	19,9	8	30
862-0609	G3/8	OD12	17,5	9	7,5	36	-	19,9	19,9	9	44
862-0808	G1/2	OD10	22	8	9,5	26,5	11	16,6	23,9	8	44
862-0809	G1/2	OD12	22	9	9,5	34	18,5	19,9	23,9	9	52



## Screw-in connector

- Metric Thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

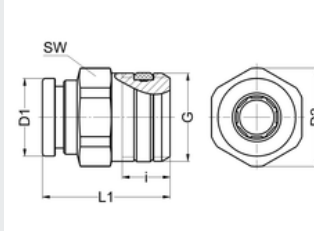


Part no.	G	for tube	SW	i	L1	D1	D2	NW	g/piece
863-5406	M10x1	OD8	5	5,5	26	13,9	11,9	5,2	15
863-4218	M3	OD3	2	3	16,7	5,8	6	1,5	2
863-5002	M5	OD4	2,5	4,5	19,5	7,9	7,9	2	4
863-5003	M5	OD5	2,5	4,5	22	10,4	8	2,5	6
863-5004	M5	OD6	2,5	4,5	24	9,9	8	2,5	6
863-5018	M5	OD3	2,5	4,5	17,7	5,8	7,9	1,8	3
863-5043	M5	OD4.3	2,5	4,5	19,5	7,9	7,9	2,5	4
863-4802	M7	OD4	3	5	20,5	8,6	9,9	2	5
863-4803	M7	OD5	3	5	22	10,4	9,9	3	7
863-4804	M7	OD6	4	5	23,5	9,9	9,9	4	7
863-4806	M7	OD8	4	5	26,5	13,9	9,9	4	13
863-4843	M7	OD4.3	3	5	20	8,9	9,9	3	6

15

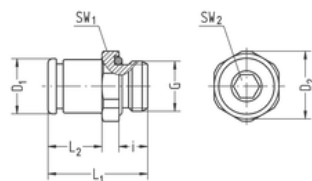
## Screw-in connector

- Connection seals in the thread, no surface preparation required
- Whitworth pipe thread
- Thread sealing ring PTFE
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	G	for tube	SW	i	L1	D1	D2	NW	g/piece
828-0606DR	G3/8	OD8	17	9	24	14,6	18,5	6,5	26
828-0608DR	G3/8	OD10	17	9	28	16,6	18,5	8,5	27
828-0609DR	G3/8	OD12	19	9	35	19,9	20,8	9,5	35
828-0808DR	G1/2	OD10	19	12	27,5	16,6	20,8	8,5	44
828-0809DR	G1/2	OD12	19	12	34,5	19,9	20,8	9,5	49

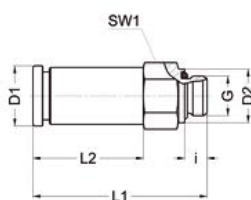
## Screw-in connector made of Aluminum



- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material aluminum natural anodized, brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	SW1	SW2	i	L1	L2	D1	D2	NW	g/piece
828-0206AL	G1/8	OD8	14	5	5,5	27,2	17,7	14,6	15,2	5,1	25
828-0406AL	G1/4	OD8	17	6	7,5	26,2	14,2	14,6	18,5	6	20
828-0409AL	G1/4	OD12	20	8	7,5	37,5	22,5	19,9	21,8	8,3	41

## Straight screw-in connector with check valve

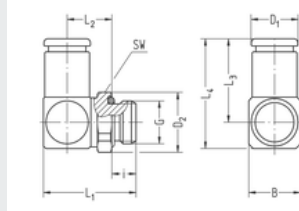


- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

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

## Elbow screw-in connector, swiveling

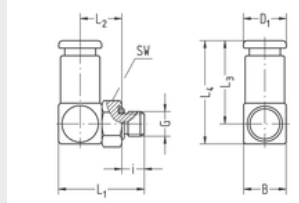
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
886-0202	G1/8	OD4	13	5,5	21,5	11	17,8	22,3	10	8,6	14,2	2	17
886-0203	G1/8	OD5	13	5,5	21,5	11	19,8	24,3	10	9,9	14,2	3	19
886-0204	G1/8	OD6	13	5,5	25,5	13	22,3	28,3	14	11,4	14,2	4	31
886-0206	G1/8	OD8	13	5,5	28	14,5	25,5	33	16	14,6	15,2	5,5	43
886-0208	G1/8	OD10	13	5,5	27,4	13,9	27,5	35	16	16,6	11,9	5,5	48
886-0243	G1/8	OD4.3	13	5,5	21,5	11	17,8	22,3	10	8,9	14,2	3	17
886-0402	G1/4	OD4	17	7,5	24,5	12	17,8	22,3	10	8,6	18,5	2	28
886-0403	G1/4	OD5	17	7,5	24,5	12	19,8	24,3	10	9,9	18,5	3	30
886-0404	G1/4	OD6	17	7,5	28	13,5	22,3	28,3	14	11,4	18,5	4	40
886-0406	G1/4	OD8	17	7,5	30,5	15	25,5	33	16	14,6	18,5	6	52
886-0408	G1/4	OD10	17	7,5	32,5	16	29	37,5	18	16,6	18,5	8	64
886-0409	G1/4	OD12	17	7,5	34,5	17	36	46	20	19,9	18,5	8,5	91
886-0443	G1/4	OD4.3	17	7,5	24,5	12	17,8	22,3	10	8,9	18,5	3	28
886-0604	G3/8	OD6	20	7,5	29	14,5	22,3	28,3	14	11,4	21,8	4	52
886-0606	G3/8	OD8	20	7,5	31,5	16	25,5	33	16	14,6	21,8	6	63
886-0608	G3/8	OD10	20	7,5	33,5	17	29	37,5	18	16,6	21,8	8	75
886-0609	G3/8	OD12	20	7,5	35,5	18	36	46	20	19,9	21,8	9	100
886-0611	G3/8	OD14	22	7,5	39,5	21	38,5	50,5	24	21,9	23,8	10	120
886-0804	G1/2	OD6	24	9,5	32	15,5	22,3	28,3	14	11,4	26,2	4	78
886-0806	G1/2	OD8	24	9,5	35	17,5	25,5	33	16	14,6	26,2	6	88
886-0808	G1/2	OD10	24	9,5	36	17,5	29	37,5	18	16,6	26,2	8	96
886-0809	G1/2	OD12	24	9,5	38	18,5	36	46	20	19,9	26,2	9	122
886-0811	G1/2	OD14	24	9,5	39	18,5	38,5	50,5	24	21,9	26,2	11	127

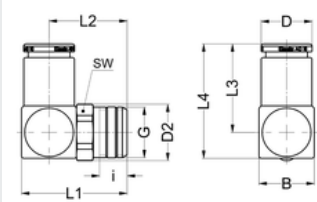
## Elbow screw-in connector, swiveling

- Metric thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
887-4202	M3	OD4	8	3	17	9	17,8	22,3	10	8,6	1,2	11
887-4218	M3	OD3	8	3	17	8	14,3	18,8	10	5,8	1,2	9
887-5002	M5	OD4	8	4,5	18,5	9	17,8	22,3	10	8,6	2	11
887-5003	M5	OD5	8	4,5	18,5	9	19,8	24,3	10	9,9	2,2	13
887-5004	M5	OD6	8	4,5	18,5	9	21,3	25,8	10	11,4	2,2	13
887-5043	M5	OD4.3	8	4,5	18,5	9	17,8	22,3	10	8,9	2,2	11

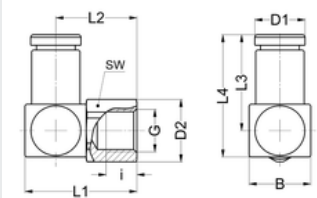
## Elbow screw-in connector, swiveling



- Connection seals in the thread, no surface preparation required
- Whitworth pipe thread
- Thread sealing ring PTFE
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
886-0208DR	G1/8	OD10	17	7,4	33	24	29	37,5	18	14,6	18,5	5,5	61
886-0408DR	G1/4	OD10	17	11	34,5	25,5	29	37,5	18	14,6	18,5	8	64
886-0608DR	G3/8	OD10	17	11,4	34,5	25,5	29	37,5	18	14,6	18,5	8	66
886-0808DR	G1/2	OD10	19	15	40,5	31,5	29	37,5	18	14,6	20,8	8	85

## Elbow connector with female thread, swiveling

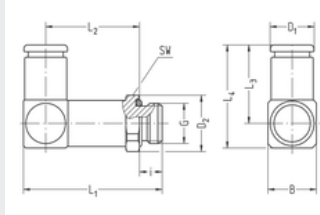


- Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	NW	g/piece
886-0104	G1/8	OD6	13	7	25,4	18,4	21,8	27,8	14	11,4	4	32
886-0106	G1/8	OD8	13	7	25,5	17,5	25,5	33	16	14,6	5,5	43
886-0306	G1/4	OD8	17	10	31	23	25,5	33	16	14,6	6	55
886-0509	G3/8	OD12	20	10	35	25	36	46	20	19,9	9	99
886-0709	G1/2	OD12	24	12	38	28	36	46	20	19,9	9	110

## Elbow screw-in connector, swiveling, long

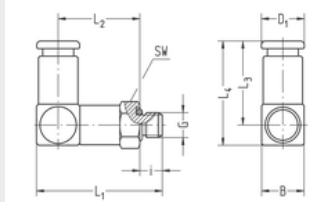
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



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

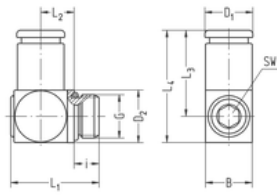
## Elbow screw-in connector, swiveling, long

- Metric thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



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

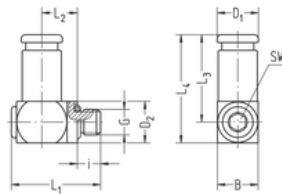
## Elbow screw-in connector with hexagon socket



- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	connecting thread	SW	i	L1	L2	L3	L4	B	D1	D2	NW	g/piece
856-0202	G1/8	OD4	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	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	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	14	6	7,5	27,5	11	20,5	28,4	15,8	8,6	15,9	2	34
856-0404	G1/4	OD6	14	6	7,5	27,5	11	24	31,9	15,8	11,4	15,9	4	38
856-0406	G1/4	OD8	14	6	7,5	27,5	11	26	33,9	15,8	14,6	15,9	6	42
856-0408	G1/4	OD10	14	6	7,5	27,5	11	28,5	36,4	15,9	15,9	15,9	6,5	45

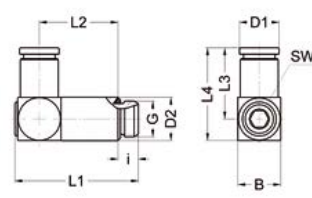
## Elbow screw-in connector with hexagon socket



- Metric thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

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

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

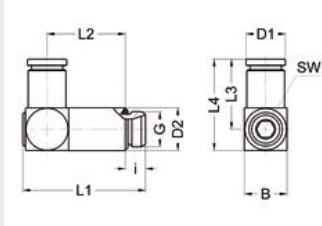


- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	connecting thread	NW	g/piece
852-0202	G1/8	OD4	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	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	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	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	7,5	45,5	29	24	31,9	15,8	11,4	15,9	14	4	61
852-0406	G1/4	OD8	6	7,5	45,5	29	26	33,9	15,8	14,6	15,9	14	6	66
852-0408	G1/4	OD10	6	7,5	45,5	29	28,5	36,4	15,9	15,9	15,9	14	6,5	68

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

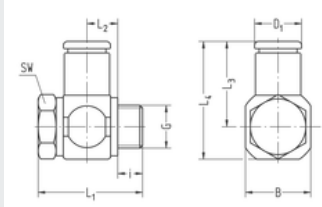
- Metric thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



Part no.	G	for tube	SW	i	L1	L2	L3	L4	B	D1	D2	connecting thread	NW	g/piece
853-4804	M7	OD6	4	5	33,3	21,3	22,3	28,2	11,8	11,4	11,9	10,8	4	22

## Swivel joint

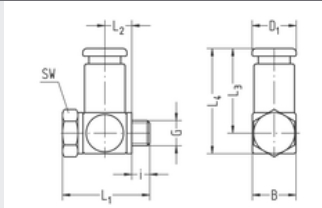
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR
- Material brass nickel-plated
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

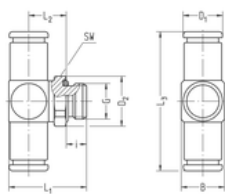
## Swivel joint

- M5 thread
- PVC seal rings
- Seal in connection NBR
- Ring connection brass nickel-plated
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

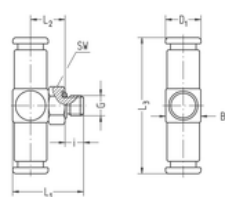
## T-screw-in connector, swiveling



- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

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

## T-screw-in connector, swiveling



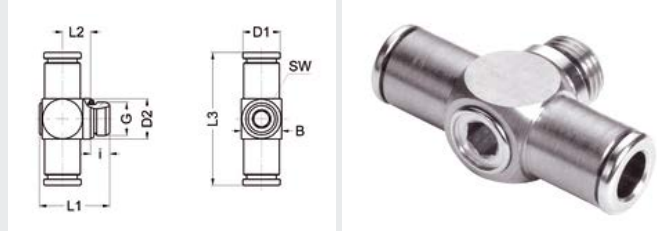
- Metric thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube

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



## T-screw-in connector, swiveling with hexagon socket

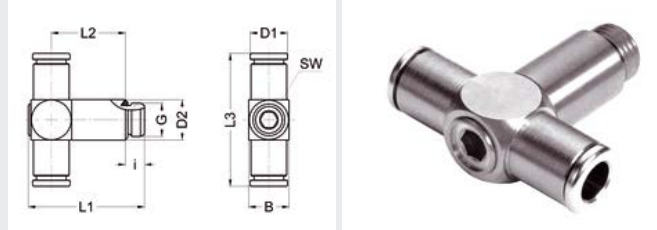
- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



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

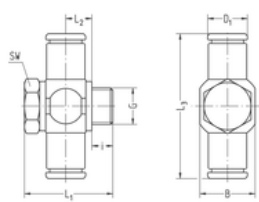
## T-screw-in connector, swiveling with hexagon socket, long

- Whitworth pipe thread
- With hexagon socket
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



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

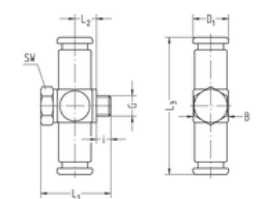
## Double swivel joint



- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR
- Material brass nickel-plated
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

## Double swivel joint

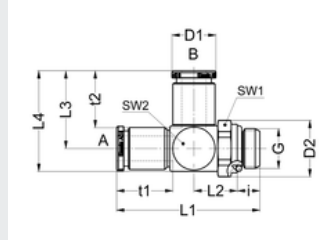


- M5 thread
- PVC seal rings
- Seal in connection NBR
- Ring connection brass nickel-plated
- Banjo bolt galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

## L screw-in connector, swiveling

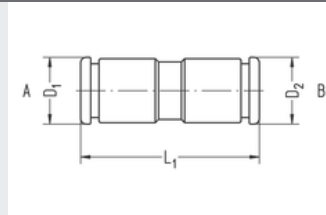
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Not designed for steady motion of the tube



Part no.	G	für Schlauch A	für Schlauch B	i	SW1	L1	L2	L3	L4	D1	D2	t1	t2	NW	g/piece
890-0202	G1/8	OD4	OD4	5,5	13	33,7	10,9	17,3	22,3	8,6	14,2	13,5	13,5	2	20
890-0203	G1/8	OD5	OD5	5,5	13	35,9	10,9	19,3	24,3	10,4	14,2	14,5	14,5	3	23
890-0204	G1/8	OD6	OD6	5,5	13	41,4	12,9	21,8	28,3	11,4	14,2	15,5	15,5	4	36
890-0206	G1/8	OD8	OD8	5,5	13	45,1	13,9	25,5	33	14,6	14,2	18,5	18,5	5,5	51
890-0402	G1/4	OD4	OD4	7,5	17	36,2	11,4	17,3	22,3	8,6	18,5	13,5	13,5	2	30
890-0403	G1/4	OD5	OD5	7,5	17	38,4	11,4	19,3	24,3	10,4	18,5	14,5	14,5	3	33
890-0404	G1/4	OD6	OD6	7,5	17	43,9	13,4	21,8	28,3	11,4	18,5	15,5	15,5	4	45
890-0406	G1/4	OD8	OD8	7,5	17	47,6	14,4	25,5	33	14,6	18,5	18,5	18,5	6	60
890-0408	G1/4	OD10	OD10	7,5	17	51,6	15,4	29	37,5	16,6	18,5	21,3	21,3	8	74
890-0409	G1/4	OD12	OD12	7,5	17	57,9	16,4	36	46	19,9	18,5	26	26	8,5	110
890-0604	G3/8	OD6	OD6	7,5	20	45,4	14,9	21,8	28,3	11,4	21,8			4	57
890-0606	G3/8	OD8	OD8	7,5	20	49,1	15,9	25,5	33	14,6	21,8	18,5	18,5	6	72
890-0608	G3/8	OD10	OD10	7,5	20	53,1	16,9	29	37,5	16,6	21,8	21,3	21,3	8	86
890-0609	G3/8	OD12	OD12	7,5	20	59,4	17,9	36	46	19,9	21,8	26	26	9	121
890-0611	G3/8	OD14	OD14	7,5	22	63,4	19	38,5	50	21,9	23,8	28,5	28,5	10	144
890-0804	G1/2	OD6	OD6	9,5	24	48,9	16,4	21,8	28,3	11,4	26,2			4	83
890-0806	G1/2	OD8	OD8	9,5	24	52,6	17,4	25,5	33	14,6	26,2	18,5	18,5	6	97
890-0808	G1/2	OD10	OD10	9,5	24	56,1	17,4	29	37,5	16,6	26,2	21,3	21,3	8	108
890-0809	G1/2	OD12	OD12	9,5	24	61,9	18,4	36	46	19,9	26,2	26	26	9	142
890-0811	G1/2	OD14	OD14	9,5	24	65,9	18,5	38,5	50	21,9	26,2	28,5	28,5	11	162

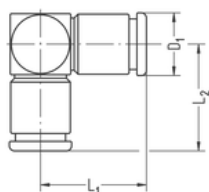
## Double connector

- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

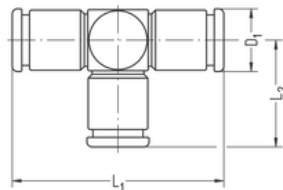
## Elbow connector



- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

## T-connector

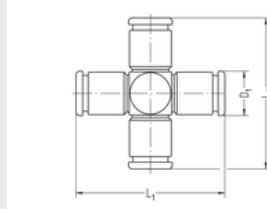


- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

## 4-way connector

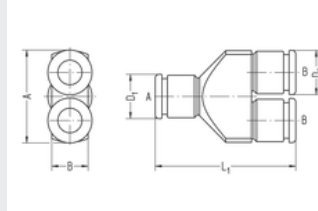
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

## Y-connector

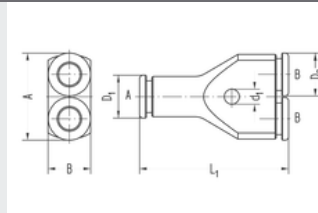
- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

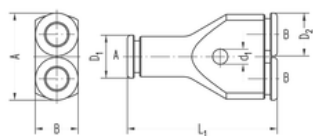
## Y-connector

- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

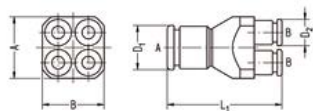
## Y-connector



- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

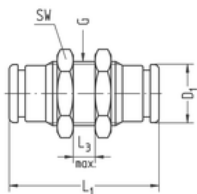
## Y-connector, double



- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

## Bulkhead connector

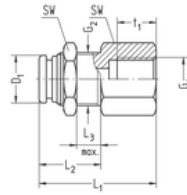


- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

## Bulkhead connector with female thread

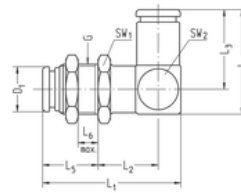
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

## Elbow bulkhead connector, swiveling

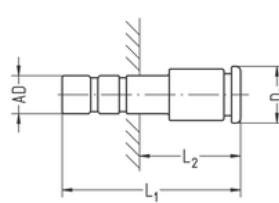
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

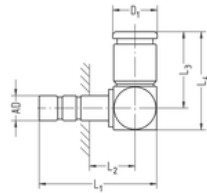
## Reducing plug

- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

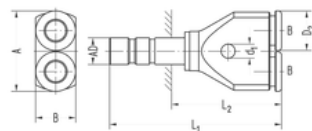
## Elbow plug



- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

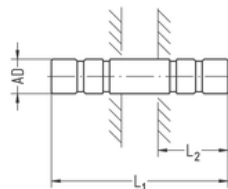
## Y-plug



- Sealing NBR
- Base element Al black anodized
- Connections brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

## Double plug



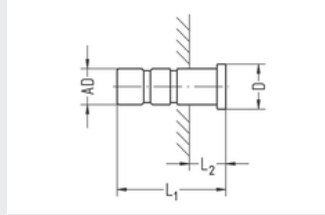
- Material brass nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Fits all connections in the programs 14, 15 and 15A in the respective size

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

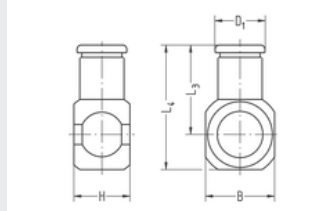
- Material brass nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 348 psi (-0.95 to 24 bar)
- Fits all connections in the programs  
14, 14A, 15 and 15A in the respective size



Part no.	plug AD	L1	L2	D	g/piece
623-1800	3	18,5	7	6	1
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
623-6300	1/4" (6,3)	21,5	6,5	8	6
623-0600	8	24,5	6,5	10	11
623-9500	3/8" (9,5)	28	7,5	11,3	17
623-0800	10	28	7,5	12	19
623-0900	12	33	7	14	32
623-2700	1/2" (12,7)	33	7	14,5	36
623-1100	14	36	7,5	16	47
623-1200	16	38	7,5	17,8	33
623-1500	20	52	-	21,8	69

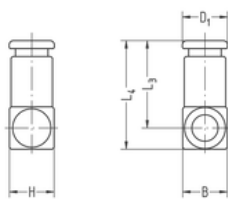
## Ring connection

- For banjo bolt with Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

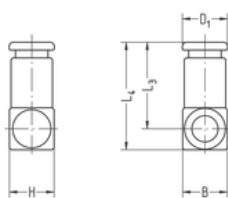
## Single banjo



- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

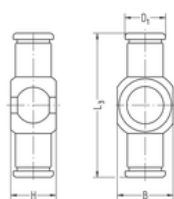
## Single banjo for throttle



- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

## Double banjo

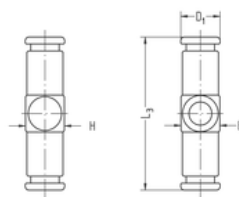


- For banjo bolt with Whitworth pipe thread
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

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

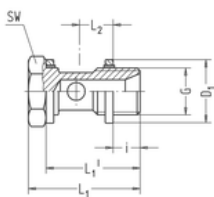
## Double banjo

- For banjo bolt with thread M5
- Sealing NBR
- Material brass nickel-plated
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

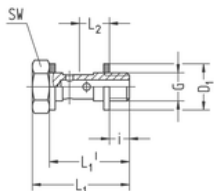
## Banjo bolt, short model



- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-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
635-5400K	M10x1	14	5,5	28,5	24,5	10,4	14,7	5,2	18

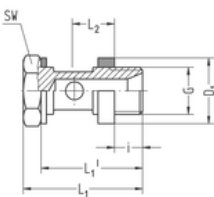
## Banjo bolt, short model



- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

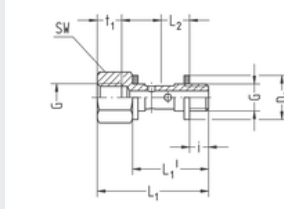


- For 1 banjo fitting
- Whitworth pipe thread
- Plastic seal rings
- Material brass nickel-plated
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)
- Fits banjo fitting with H = 14.5

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 -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-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

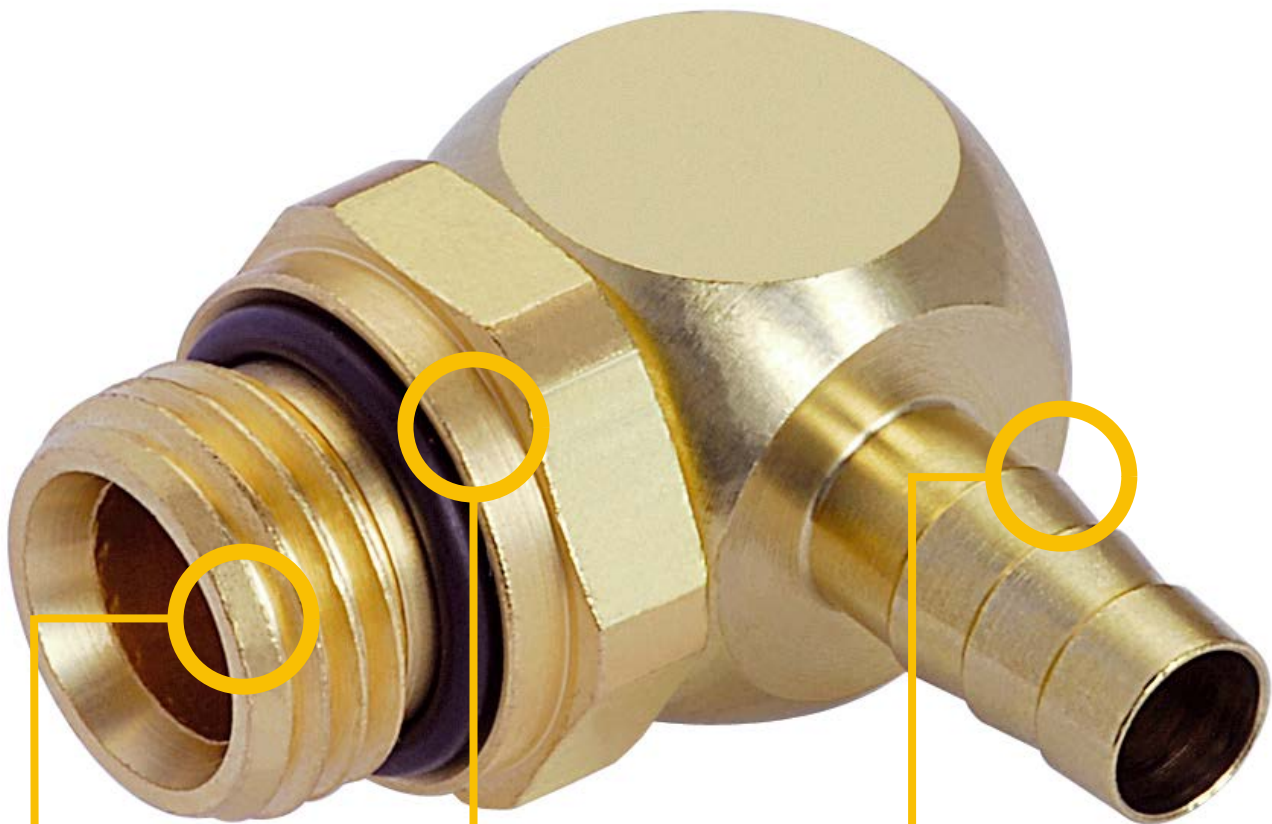
- Material aluminum anodized
- Fits all Eisele plug connectors



Part no.	for tube	Color	g/piece
SA1394-1102	OD4	red	1
SA1394-1104	OD6	red	1
SA1394-1106	OD8	red	1
SA1394-1108	OD10	red	1
SA1394-1109	OD12	red	1
SA1394-1111	OD14	red	1
SA1394-1112	OD16	red	1
SA1394-1202	OD4	green	1
SA1394-1204	OD6	green	1
SA1394-1206	OD8	green	1
SA1394-1208	OD10	green	1
SA1394-1209	OD12	green	1
SA1394-1211	OD14	green	1
SA1394-1212	OD16	green	1
SA1394-1302	OD4	blue	1
SA1394-1304	OD6	blue	1
SA1394-1306	OD8	blue	1
SA1394-1308	OD10	blue	1
SA1394-1309	OD12	blue	1
SA1394-1311	OD14	blue	1
SA1394-1312	OD16	blue	1



## Spigots for PU compressed-air tubes

**Low space requirements**

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

**Efficient connection solution**

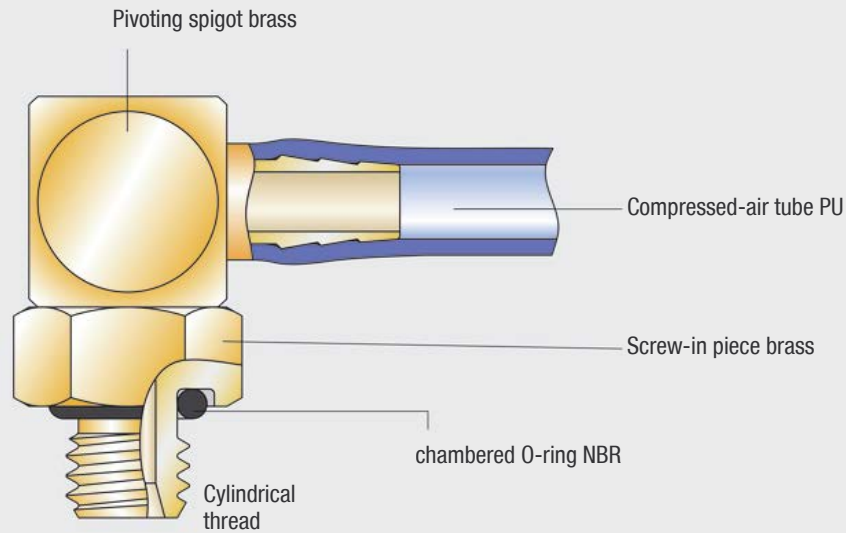
- Tube holds without additional tube clamp

**Simple assembly and disassembly**

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

Suitable for vacuum applications.

## Functional principle



## Range of application

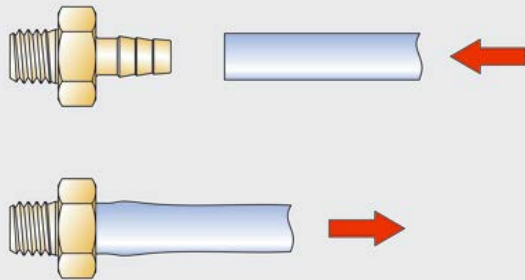
The connection system for an amazingly simple assembly. Quick, cheap assembly of compressed-air tubes from PU (polyurethane).

## Service conditions

- Temperature range: -4 to 140 °F (-20 to +60 °C)
- Working pressure range: -14 to 87 psi (-0.95 to 6 bar)
- Allowable medium: Air
- Quick assembly of compressed-air tubes
- No tools necessary
- Repeated assembly and disassembly possible
- Tube holds without additional tube clamp
- Disassembly of the plugged-in tube end possible without destruction
- Swivel union with VS seal rings
- Suitable for vacuum

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

## Handling



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

Disassembly: Pull off tube from spigot



## Screw-in spigot starting on page 162



Straight screw-in spigot page 162



Elbow screw-in spigot, pivoting page 162



T-screw-in spigot, pivoting page 164

## Spigots starting on page 166



Double spigot page 166



Elbow spigot page 166



T-spigot page 166



Cross spigot page 167



Y-spigot page 167



Bulkhead spigot page 167

## Ring spigots starting on page 168

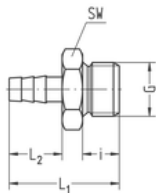
Ring spigots, single page 168

Ring spigots, double page 169

## Accessories starting on page 44

Banjo bolt page 170

## Straight screw-in spigot

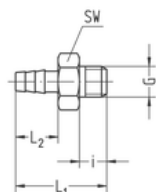


- Whitworth pipe thread
- Tube connection removable
- Material Al black anodized
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	G	for tube	SW	i	L1	L2	NW	g/piece
328-0202	1) 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

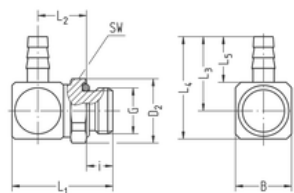
## Straight screw-in spigot



- Thread M3, M5
- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	G	for tube	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

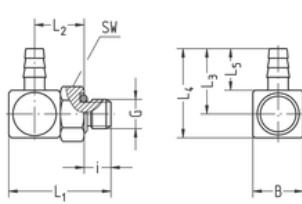


- Whitworth pipe thread
- Tube connection removable
- Chambered O-ring
- Sealing NBR (Perbunan)
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	G	for tube	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

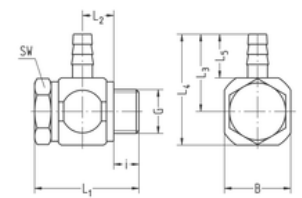
- Thread M3, M5
- Tube connection removable
- Chambered O-ring
- 14-41 PVC seal ring for thread M3, order separately
- Sealing NBR
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	G	for tube	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

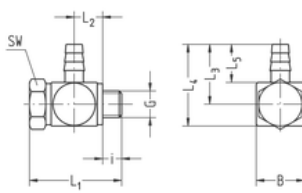
- Whitworth pipe thread
- Tube connection removable
- VS seal rings
- Material Al black anodized
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	G	for tube	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

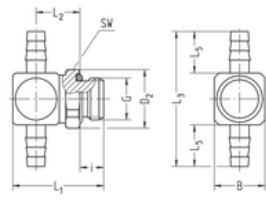
## Single swivel spigot, short model

- Thread M3, M5
- Tube connection removable
- PVC seal rings
- Ring nozzle brass
- Banjo bolt galvanized steel
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	G	for tube	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

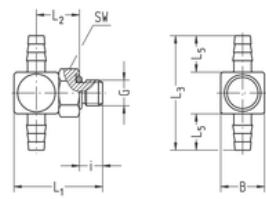
## T-screw-in spigot, pivoting



- Whitworth pipe thread
- Tube connection removable
- Chambered O-ring
- Sealing NBR (Perbunan)
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	G	for tube	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

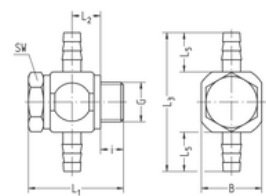
## T-screw-in spigot, pivoting



- Thread M3, M5
- Tube connection removable
- Chambered O-ring
- 14-41 PVC seal ring for thread M3, order separately
- Sealing NBR
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	G	for tube	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

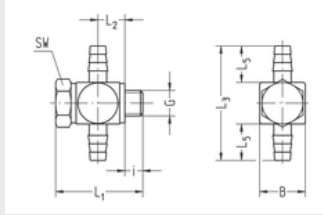


- Whitworth pipe thread
- Tube connection removable
- VS seal rings
- Material Al black anodized
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	G	for tube	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

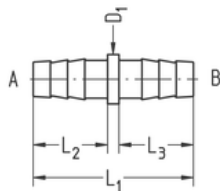
## Double swivel spigot, short model

- Thread M3, M5
- Tube connection removable
- PVC seal rings
- Ring nozzle brass
- Banjo bolt galvanized steel
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	G	for tube	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

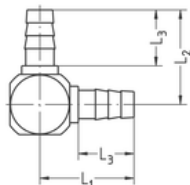
## Double spigot



- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	for tube A	for tube 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

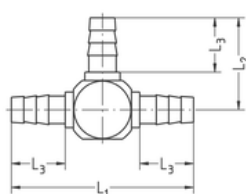
## Elbow spigot



- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	for tube	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

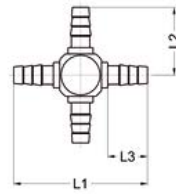


- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	for tube	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

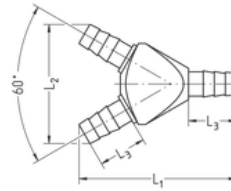
- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	for tube	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

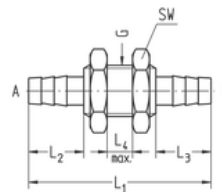
- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	for tube	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

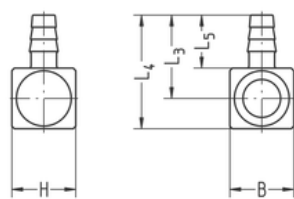
## Bulkhead spigot

- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	for tube A	for tube 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

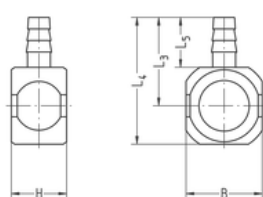
## Single ring nozzle



- For banjo bolt with thread M3, M5
- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	for banjo bolt	for tube	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



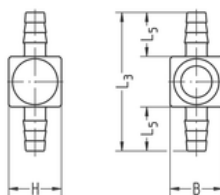
- For banjo bolts with Whitworth pipe thread
- Tube connection removable
- Material Al black anodized
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)

Part no.	for banjo bolt	for tube	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

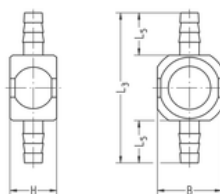
- For banjo bolt with thread M3, M5
- Tube connection removable
- Material brass
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	for banjo bolt	for tube	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

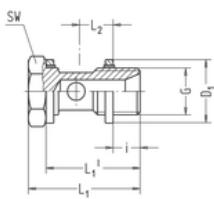
## Double ring nozzle

- For banjo bolts with Whitworth pipe thread
- Tube connection removable
- Material Al black anodized
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure range -14 to 87 psi (-0.95 to 6 bar)



Part no.	for banjo bolt	for tube	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

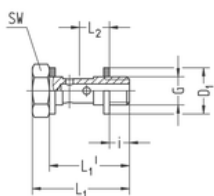
## Banjo bolt, short model



- For 1 banjo fitting
- Whitworth pipe thread
- VS seal rings
- Material Al black anodized
- Temperature range -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-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

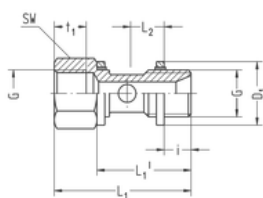
## Banjo bolt, short model



- For 1 banjo fitting
- M5 thread
- PVC seal rings
- Material galvanized steel
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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 -4 to 158 °F (-20 to +70 °C)
- Working pressure range -14 to 217 psi (-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: 7 to 217 psi (0,5 to 15 bar)
- Allowable medium: Air
- Temperature range: 5 to 158 °F (-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



## Plug nipple with check valve

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

### Service conditions

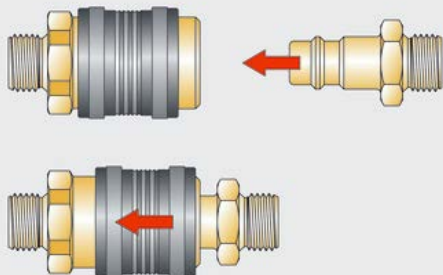
- Working pressure range: 7 to 217 psi (0,5 to 15 bar)
- Allowable medium: Air
- Temperature range: 5 to 158 °F (-15 to +70 °C)

### Advantages

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



## Handling

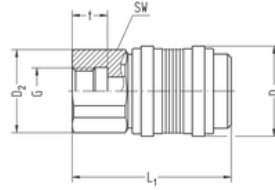


Coupling: Push plug nipple up to the limit stop into the coupling

Decoupling: Hold plug nipple and push back coupling sleeve

## 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 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)



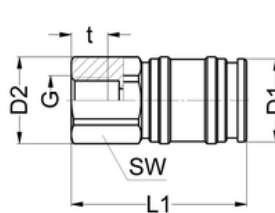
Part no.	G	SW	t	L1	D1	D2	NW	Material sliding sleeve	g/piece
91-4902	M5	9	5,5	25,5	10	10	2,5	brass	10
91-0104	G1/8	17	10	38,5	19	18,8	5	brass	52
91-0304	G1/4	17	10	38,5	19	18,8	5	brass	47
91-0106	G1/8	22	8	45	25,5	23,5	7	plastic	88
91-0306	G1/4	22	10	45	25,5	23,5	7	plastic	83
91-0506	G3/8	22	10	45	25,5	23,5	7	plastic	76
91-0706	G1/2	24	12	47	25,5	25,5	7	plastic	79
91-0510	<sup>1)</sup> G3/8	27	10	62	30	29	10	brass	210
91-0710	<sup>1)</sup> G1/2	27	12	64	30	29	10	brass	205
91-0910	<sup>1)</sup> G3/4	30	14	66	30	32	10	brass	211

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

<sup>2)</sup> When ordering please add "ST" to Part No.

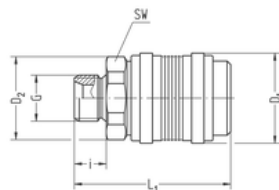
## Quick-release coupling with female thread for shutoff on both sides

- With female thread
- Whitworth pipe thread, thread M5
- Sealing NBR
- Material coupling body brass
- Allowable medium: Air
- Temperature range 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits to plug nipple with shut-off on both sides



Part no.	G	SW	t	L1	D1	D2	NW	Material sliding sleeve	g/piece
91A-0105	G1/8	17	8	38,5	18	18,8	5	brass	55
91A-0305	G1/4	17	10	38,5	18	18,8	5	brass	55

## Quick-release coupling with male thread



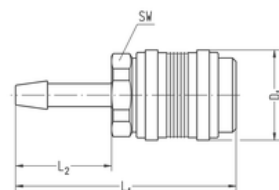
- With male thread
- Whitworth pipe thread, thread M5
- Sealing NBR (Perbunan)
- Material coupling body brass
- Material sliding sleeve see table
- Allowable medium: Air
- Temperature range 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

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	brass	9
92-0202	G1/8	13	6,5	27	10	14,2	2,5	brass	13
92-0204	G1/8	17	6,5	35,5	19	18,8	5	brass	40
92-0404	G1/4	17	9	38	19	18,8	5	brass	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	<sup>1)</sup> G3/8	27	9	61	30	29	10	brass	184
92-0810	<sup>1)</sup> G1/2	27	12	64	30	29	10	brass	193
92-1010	<sup>1)</sup> G3/4	30	14	66	30	32	10	brass	216

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

<sup>2)</sup> When ordering please add "ST" to Part No.

## Quick-release coupling with tube spigot



- With tube spigot
- Sealing NBR (Perbunan)
- Material coupling body brass
- Material sliding sleeve see table
- Allowable medium: Air
- Temperature range 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

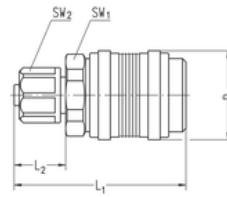
Part no.	for tube inside Ø	SW	L1	L2	D1	NW	Material sliding sleeve	g/piece
93-0302	3	9	36,5	16	10	2,5	brass	9
93-0402	4	9	36,5	16	10	2,5	brass	10
93-0404	4	17	47	18	19	5	brass	40
93-0604	6	17	47	18	19	5	brass	41
93-0904	9	17	47	18	19	5	brass	42
93-0406	4	22	56	21	25,5	7	plastic	62
93-0606	6	22	56	21	25,5	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	<sup>1)</sup> 9	27	79	27	30	10	brass	182
93-1110	<sup>1)</sup> 11	27	79	27	30	10	brass	186
93-1310	<sup>1)</sup> 13	27	79	27	30	10	brass	191
93-1610	<sup>1)</sup> 16	27	79	27	30	10	brass	191
93-1910	<sup>1)</sup> 19	27	79	27	30	10	brass	216

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

<sup>2)</sup> When ordering please add "ST" to Part No.

## Quick-release coupling with screw joint

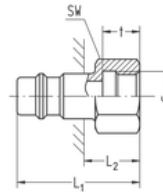
- With screw joint
- Sealing NBR (Perbunan)
- Material coupling body brass
- Material sliding sleeve see table
- Allowable medium: Air
- Temperature range 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)



Part no.	for tube	SW1	SW2	L1	L2	D1	NW	Material sliding sleeve	g/piece
98-4302	4,3/3	9	∅8	30,5	10	10	2,5	brass	11
98-0302	5/3	9	∅8	30,5	10	10	2,5	brass	11
98-0402	6/4	9	∅9	30,5	10	10	2,5	brass	11
98-0404	6/4	17	13	42	13	19	5	brass	43
98-0604	8/6	17	15	43	14	19	5	brass	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 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling

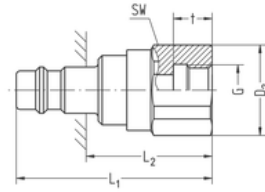


Part no.	G	for quick-release coupling NW	SW	t	L1	L2	g/piece
94-4902	M5	2,5	8	5,5	18,5	11	4
94-0104	G1/8	5	14	8	28	15	16
94-0304	G1/4	5	17	10	28	15	19
94-0106	G1/8	7	14	8	30	12	17
94-0306	G1/4	7	17	10	33	15	22
94-0506	G3/8	7	19	10	33	15	22
94-0706	G1/2	7	24	12	36	18	37
94-0510	G3/8	10	19	10	36	17	28
94-0710	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.

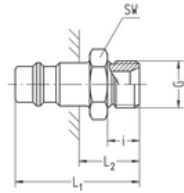
## Plug nipple with male thread check valve



- With female thread
- Whitworth pipe thread
- Sealing NBR (Perbunan)
- Material brass
- Allowable medium: Air
- Temperature range 5 to 158 °F (-15 to +70 °C)
- Working pressure range 7 to 145 psi (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



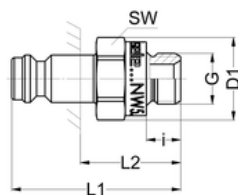
- With male thread
- Whitworth pipe thread, thread M5
- Material brass / brass nickel-plated / tempered steel and galvanized (for strongly intermittent extraction of air)
- Temperature range 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling

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 for shutoff on both sides



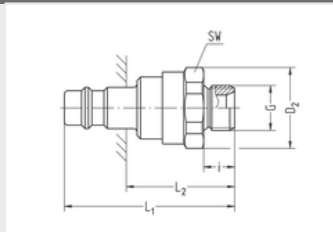
- With male thread
- Whitworth pipe thread, thread M5
- Material brass
- Allowable medium: air
- Temperature range 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits to quick-release coupling with shut-off on both sides

Part no.	G	for quick-release coupling NW	SW	i	L1	L2	D1	g/piece
95A-0205	G1/8	5	14	6,5	32	18,7	14	15
95A-0405	G1/4	5	17	9	34,5	21,2	16,8	25



## Plug nipple with male thread check valve

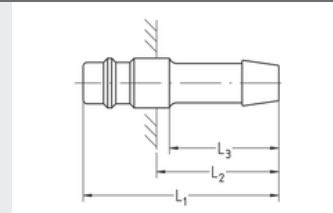
- With male thread
- Whitworth pipe thread
- Sealing NBR (Perbunan)
- Material brass
- Allowable medium: Air
- Temperature range 5 to 158 °F (-15 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling



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
195-0610	G3/8	10	27	9	62,5	43,5	29	98
195-0806	G1/2	7	24	12	52,5	34,5	25,5	78
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 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling

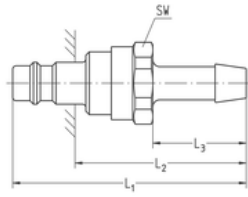


Part no.	for tube inside Ø	for quick-release coupling NW	L1	L2	L3	g/piece
96-0302	3	2,5	27,5	21	16	2
96-0402	4	2,5	27,5	21	16	3
96-0404	4	5	34	21	18	7
96-0604	6	5	34	21	18	8
96-0406	4	7	48	30	27	14
96-0606	6	7	48	30	27	14
96-0906	9	7	48	30	27	16
96-1106	11	7	49	31	27	26
96-1306	13	7	49	31	27	24
96-0910	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.

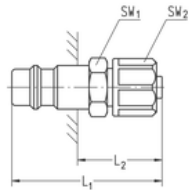
## Plug spigot with check valve



- Sealing NBR (Perbunan)
- Material brass
- Allowable medium: Air
- Temperature range 5 to 158 °F (-15 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling

Part no.	for tube 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

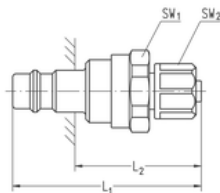


- With screw joint
- Material brass / brass nickel-plated
- Temperature range 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling

Part no.	for tube	for quick-release coupling NW	SW1	SW2	L1	L2	g/piece
97-4302	4,3/3	2,5	7	∅8	23,5	16	5
97-0302	5/3	2,5	7	∅8	23,5	16	5
97-0402	6/4	2,5	8	∅9	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

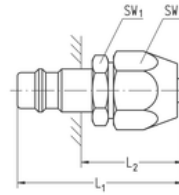


- With screw joint
- Sealing NBR (Perbunan)
- Material brass
- Allowable medium: Air
- Temperature range 5 to 158 °F (-15 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling

Part no.	for tube	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

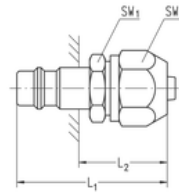
- With screw joints for compressed-air tube made of PVC with fabric lining
- Material brass
- Union nut Al black anodized / plastic
- Temperature range 5 to 158 °F (-15 to +70°C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling



Part no.	for tube	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 tube

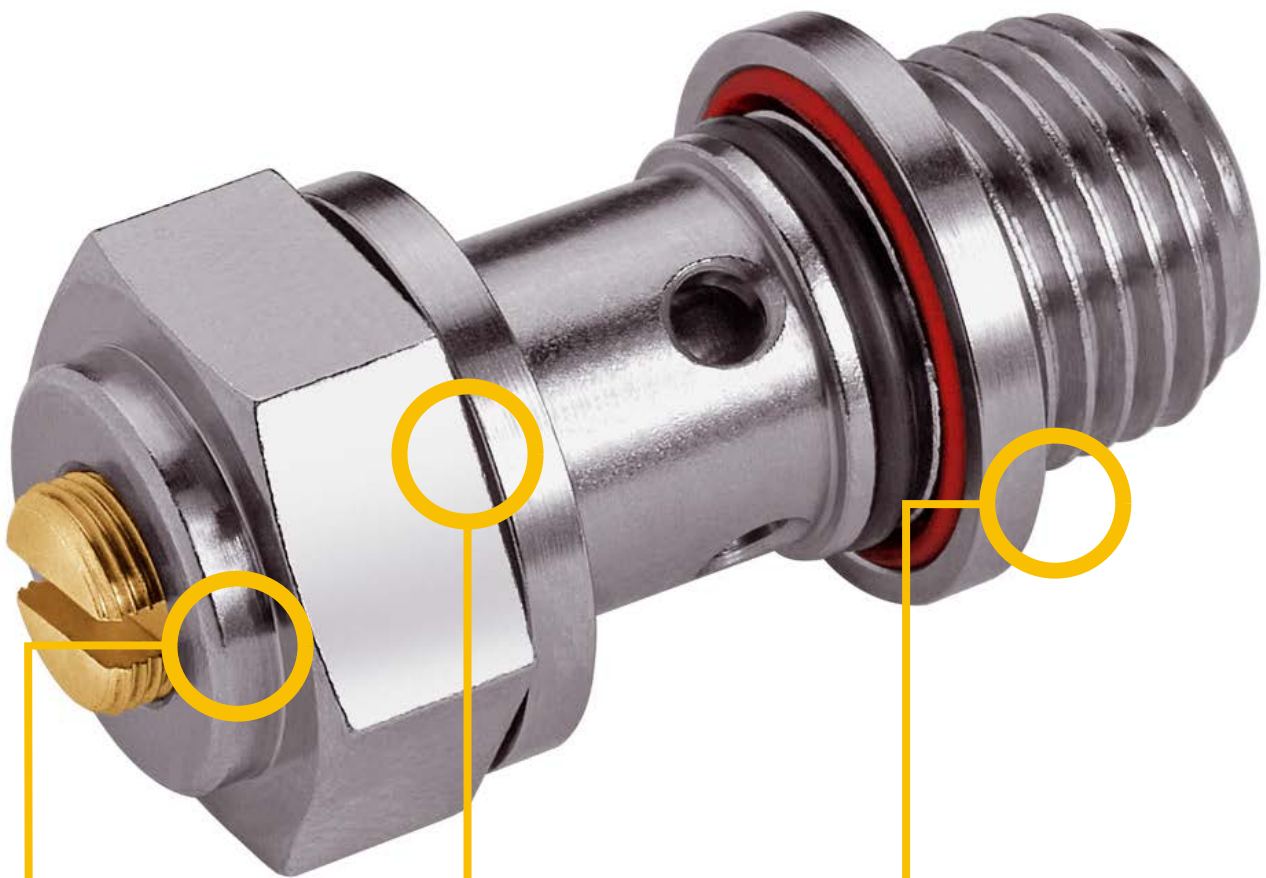
- With screw joints for compressed-air tube made of NBR (Perbunan) with metal braiding
- Material brass
- Union nut Al black anodized / plastic
- Temperature range 5 to 158 °F (-15 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits quick-release coupling



Part no.	for tube	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)

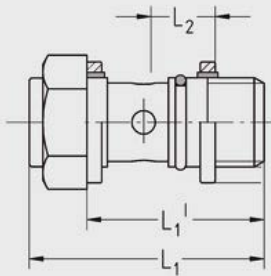


Banjo bolt with throttlecheck valve  
(Inlet-side throttle)

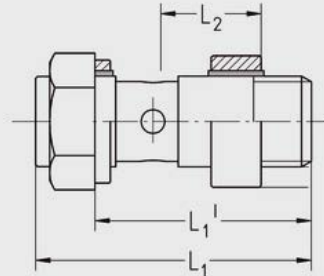


Banjo bolts with throttle function

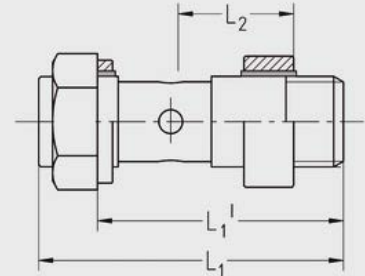
### Designs:



short design



long design



long design for high banjos

### Adjusting screws:



with slot



with jam nut



with knurl

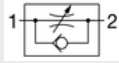
## Banjo bolts with throttle function

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 200

Functional screw joints for Series 15

page 207

Functional screw joints for Series 17

page 211

Functional screw joints for Series 18

page 212

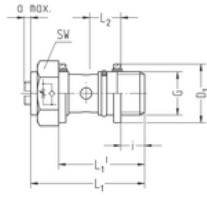
## Pilot operated check valve

starting on page 214

Pilot operated check valve

page 214

## Banjo bolt with throttlecheck valve

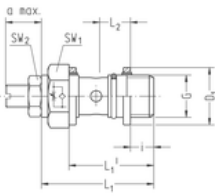


- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits banjo 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/St.
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

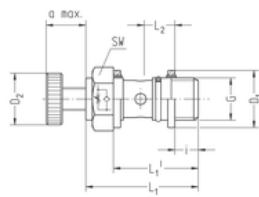


- Short design (exhaust-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits 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 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits banjo with H= 14.5 and KST 16.5

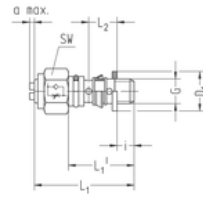
Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
234-0200KV2	G1/8	200	150	14	6	32,5	25	9,5	10,5	14,7	13	3	25
234-0400KV2	G1/4	400	300	17	8	35,5	27	9,5	12	17,7	16	4,5	44

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

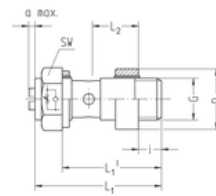


Part no.	G	fits banjo with H	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/St.
235-5000K	M5	8,5 - 9	40	30	8	3,5	20	13	5,2	1	7,5	1,2	4
235-5010K	M5	10 - 11	40	30	8	4	22	15	6	1	7,5	1,2	4

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)
- Fits banjo with H= 14.5 and KST 16.5

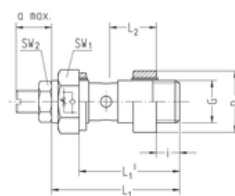


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
234-0200	G1/8	200	150	14	6	37,5	30	14,5	2	14,9	3	25
234-0400	G1/4	400	300	17	8	40,5	32	14,5	2	18,9	4,5	44
235-5400	M10x1	200	150	14	6	37,5	30	14,5	2	14,9	3	25
235-5600	M12x1,5	200	150	17	8	37,5	32	14,5	2	17,9	3	37
235-5800	M14x1,5	400	300	17	8	40,5	32	14,5	2	19,9	4,5	48

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

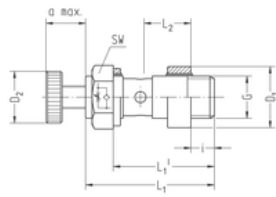
- Long design (exhaust-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Banjo bolt with throttlecheck valve

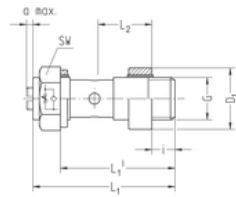


- Long design (exhaust-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 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 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (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

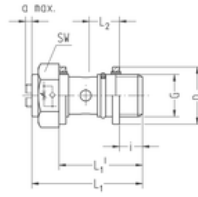
### Part no. G fits banjo

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 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)
- Fits banjo with H= 14.5 and KST 16.5

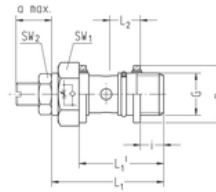


Part no.	G	NI/min		SW	i	L1	L1'	L2	a max.	D1	NW	g/St.
		1->2	2->1									
236-0200K	G1/8	150	200	14	6	32,5	25	9,5	2	14,7	3	20
236-0400K	G1/4	300	400	17	8	35,5	27	9,5	2	17,7	4,5	35

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)
- Fits banjo with H= 14.5 and KST 16.5

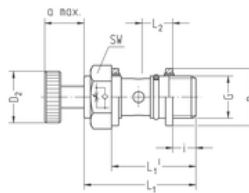


Part no.	G	NI/min		SW1	SW2	i	L1	L1'	L2	a max.	D1	NW	g/piece
		1->2	2->1										
236-0200KV1	G1/8	150	200	14	9	6	32,5	25	9,5	9,5	14,7	3	23
236-0400KV1	G1/4	300	400	17	11	8	35,5	27	9,5	11	17,7	4,5	35

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve

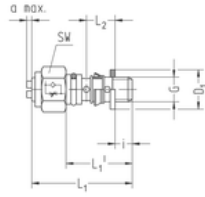
- Short design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)
- Fits banjo with H= 14.5 and KST 16.5



Part no.	G	NI/min		SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
		1->2	2->1										
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve

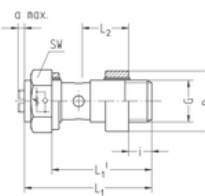


- Short design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve

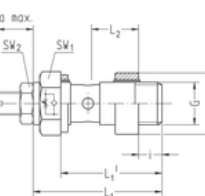


- Long design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttlecheck valve



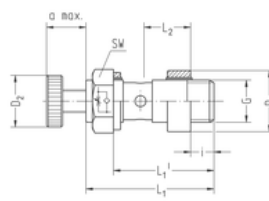
- Long design (inlet-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 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 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits banjo with H= 14.5 and KST 16.5

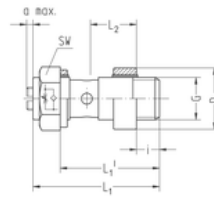


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	D2	NW	g/piece
236-0200V2	G1/8	150	200	14	6	37,5	30	14,5	10,5	14,9	13	3	30
236-0400V2	G1/4	300	400	17	8	40,5	32	14,5	12	18,9	16	4,5	54
237-5400V2	M10x1	150	200	14	6	37,5	30	14,5	10,5	14,9	13	3	30
237-5600V2	M12x1,5	150	200	17	8	37,5	32	14,5	10,5	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 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits high banjo fittings with height H

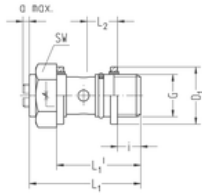


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	H	a max.	D1	NW	g/piece
236-0215	G1/8	150	200	14	5,5	37,5	30	14,7	15 (15,5)	2	14,9	3	25
236-0419	G1/4	300	400	17	8	45	36,5	16,7	19	2	18,9	4,5	46
236-0422	G1/4	300	400	17	8	48	39,5	18,2	22	2	18,9	4,5	49

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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Banjo bolt with throttle valve

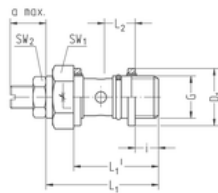


- Short design (without check valve)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits banjo 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/St.
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust

## Banjo bolt with throttle valve

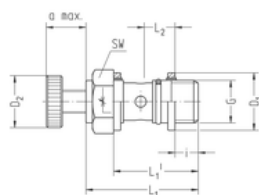


- Short design (without check valve)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits banjo 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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust

## Banjo bolt with throttle valve



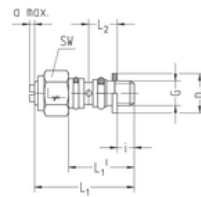
- Short design (without check valve)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)
- Fits banjo 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 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

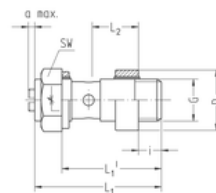


Part no.	G	fits banjo with H	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/St.
241-5000K	M5	8,5 - 9	30	40	8	3,5	20	13	5,2	1	7,5	1,2	4
241-5010K	M5	10 - 11	30	40	8	4	22	15	6	1	7,5	1,2	4

- Nominal flow rate measured when throttle is open at 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)
- Fits banjo with H= 14.5 and KST 16.5

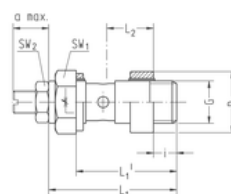


Part no.	G	NI/min 1->2	NI/min 2->1	SW	i	L1	L1'	L2	a max.	D1	NW	g/piece
240-0200	G1/8	200	200	14	6	37,5	30	14,5	2	14,9	3	25
240-0400	G1/4	400	400	17	8	40,5	32	14,5	2	18,9	4,5	43
241-5400	M10x1	200	200	14	6	37,5	30	14,5	2	14,9	3	25
241-5600	M12x1,5	200	200	17	8	37,5	32	14,5	2	17,9	3	37
241-5800	M14x1,5	400	400	17	8	40,5	32	14,5	2	19,9	4,5	48

- Nominal flow rate measured when throttle is open at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust

## Banjo bolt with throttle valve

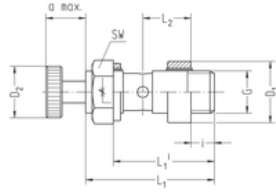
- Long design (without check valve)
- Adjusting screw with jam nut
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust

## Banjo bolt with throttle valve

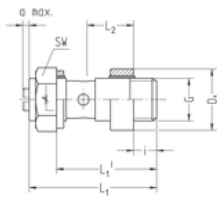


- Long design (without check valve)
- Adjusting screw with knurl
- Whitworth pipe thread and metric thread
- VS seal rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 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 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (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

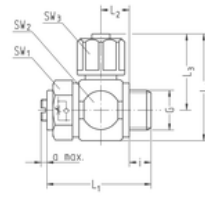
240-0215	G1/8	134-02013, 138-02013, 174-02041, 182-02041
240-0419	G1/4	34-04091, 134-04033, 138-04033, 174-04061, 182-04061
240-0422	G1/4	174-04081, 174-04091, 182-04091

- Nominal flow rate measured when throttle is open at 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

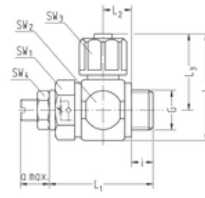


Part no.	G	for tube	NI/min		SW1	SW2	SW3	i	L1	L2	L3	L4	a max.	NW	g/St.
			1->2	2->1											
234-0204K34	G1/8	6 / 4	200	150	14	16	13	6	32,5	9,5	21,5	29,5	2	3	29
234-0206K34	G1/8	8 / 6	200	150	14	16	15	6	32,5	9,5	22,5	30,5	2	3	29
234-0404K34	G1/4	6 / 4	400	300	17	20	13	8	35,5	9,5	23	33	2	3,1	45
234-0406K34	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 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

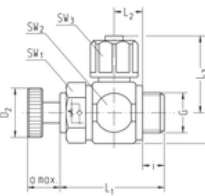


Part no.	G	for tube	NI/min		SW1	SW2	SW3	SW4	i	L1	L2	L3	L4	a max.	NW	g/St.
			1->2	2->1												
234-0204K341	G1/8	6 / 4	200	150	14	16	13	9	6	32,5	9,5	21,5	29,5	9,5	3	31
234-0206K341	G1/8	8 / 6	200	150	14	16	15	9	6	32,5	9,5	22,5	30,5	9,5	3	31
234-0404K341	G1/4	6 / 4	400	300	17	20	13	11	8	35,5	9,5	23	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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

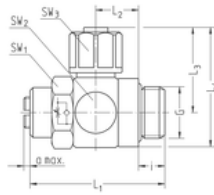
- Short design (exhaust-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)



Part no.	G	for tube	NI/min		SW1	SW2	SW3	i	L1	L2	L3	L4	D2	a max.	NW	g/St.
			1->2	2->1												
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

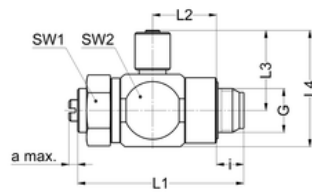


- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min		SW1	SW2	SW3	i	L1	L2	L3	L4	a max.	NW	g/St.
			1->2	2->1											
234-020434	G1/8	6 / 4	200	150	14	16	13	6	37,5	14,3	21,5	29,5	2	3	40
234-040634	G1/4	8 / 6	400	300	17	20	15	8	40,5	14,3	24	34	2	4,5	55
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve



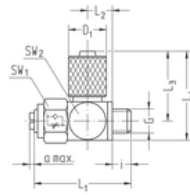
- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min		SW1	SW2	i	L1	L2	L3	L4	a max.	g/St.
			1->2	2->1									
235-540334	M10x1	5/3	200	150	14	16	6,5	37,6	14,5	18,25	26,5	2	36
235-540434	M10x1	6/4	200	150	14	16	6,5	37,6	14,5	21,25	29,5	2	37
235-540634	M10x1	8/6	200	150	14	16	6,5	37,6	14,5	22,3	30,5	2	37
235-540834	M10x1	10/8	200	150	14	16	6,5	37,6	14,5	24,15	32,5	2	38
235-544334	M10x1	4,3/3	200	150	14	16	6,5	37,6	14,5	18,25	26,5	2	36
235-560435	M12x1,5	6/4	200	150	17	20	8,5	37,5	14,5	23	33	2	53
235-560635	M12x1,5	8/6	200	150	17	20	8,5	37,5	14,5	24	34	2	53
235-560835	M12x1,5	10/8	200	150	17	20	8,5	37,5	14,5	26	36	2	53
235-580435	M14x1,5	6/4	400	300	17	20	8,5	40,5	14,5	23	33	2	61
235-580635	M14x1,5	8/6	400	300	17	20	8,5	40,5	14,5	24	34	2	61
235-580835	M14x1,5	10/8	400	300	17	20	8,5	40,5	14,5	26	36	2	61

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

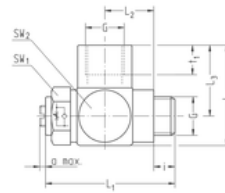


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
235-5003K35	M5	OD5	40	30	8	8,5	3,5	20	5,2	14	18	8	1	1,2	9
235-5004K35	M5	OD6	40	30	8	8,5	3,5	20	5,2	14	18	9	1	1,2	10
235-5043K35	M5	OD4,3	40	30	8	8,5	3,5	20	5,2	14	18	8	1	1,2	9

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

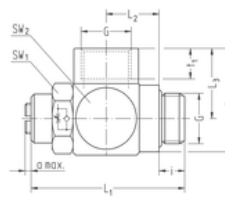


Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	t1	a max.	NW	g/St.
234-0201134	G1/8	200	150	14	16	5,8	37,5	14,7	14,5	22	7	2	3	32
234-0403134	G1/4	400	300	17	20	8	45	16,7	21	30,5	10	2	4,5	59

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust
- NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

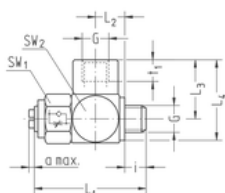
- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Material: brass nickel-plated, Al black anodized
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 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/St.
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust
- NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

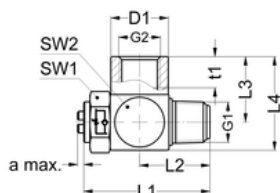


- Short design (exhaust-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	t1	a max.	NW	g/St.
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve and R-thread

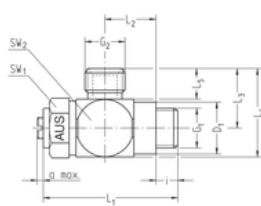


- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread, conical
- Tapered thread
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated, Al anodized
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -4 to 176 °F (-20 to +80 °C)
- Working pressure range: 7 to 232 psi (0.5 to 16 bar)

Part no.	G1	G2	NI/min 1->2	NI/min 2->1	SW1	SW2	L1	L2	L3	L4	t1	a max.	NW	g/St.
R234-0201KBG134	R1/8	G1/8	200	150	13	16	32,6	18,2	14,5	22	7	2	4,5	26
R234-0403KBG134	R1/4	G1/4	400	300	17	20	40,7	22,7	21	30	10	2	4,5	55
R234-0605KBG134	R3/8	G3/8	900	600	20	24	45	24,5	23	35	10	2	4,5	84
R234-0807KBG134	R1/2	G1/2	1500	1100	24	30	57,3	31,3	27,5	41,5	12,5	2,5	4,5	152

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve (Exhaust-side throttle)



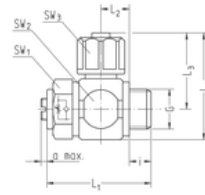
- Whitworth pipe thread
- Banjo fitting with threaded end according to VW standard
- Fits tube spigot with union nut
- VS seal rings / chambered O-rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: -14 to 217 psi (-0.95 to 15 bar)

Part no.	G1	G2	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
SA856	G1/8	G1/4	200	150	14	16	6	37,5	14,5	17,5	25	10	2	3	48
SA816	G1/4	G1/4	400	300	17	19	8	45	16,7	19,5	29	10	2	4,5	83
SA997	G1/4	G3/8	400	300	17	19	8	45	16,7	20,5	30	11	2	4,5	88
SA857	G3/8	G1/4	850	600	20	24	8,5	48,5	16,5	22	34	10	2	6,5	117
SA927	G3/8	G3/8	900	600	20	24	8,5	48,5	16,5	23	35	11	2	6,5	121
SA1287	G1/2	G1/2	1500	1100	24	28	10	60	21	27	41	13	2,5	9	152

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

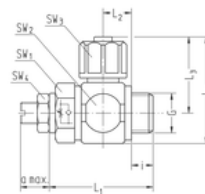


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	i	L1	L2	L3	L4	a max.	NW	g/St.
236-0204K34	G1/8	6 / 4	150	200	14	16	13	6	32,5	9,5	21,5	29,5	2	3	29
236-0206K34	G1/8	8 / 6	150	200	14	16	15	6	32,5	9,5	22,5	30,5	2	3	29
236-0404K34	G1/4	6 / 4	300	400	17	20	13	8	35,5	9,5	23	33	2	3,1	45
236-0406K34	G1/4	8 / 6	300	400	17	20	15	8	35,5	9,5	24	34	2	4,5	46

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

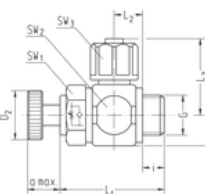


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	SW4	i	L1	L2	L3	L4	a max.	NW	g/St.
236-0204K341	G1/8	6 / 4	150	200	14	16	13	9	6	32,5	9,5	21,5	29,5	9,5	3	31
236-0206K341	G1/8	8 / 6	150	200	14	16	15	9	6	32,5	9,5	22,5	30,5	9,5	3	32
236-0404K341	G1/4	6 / 4	300	400	17	20	13	11	8	35,5	9,5	23	33	11	3,1	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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

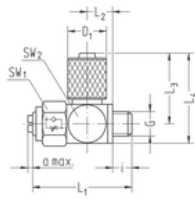
- Short design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)



Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	SW3	i	L1	L2	L3	L4	D2	a max.	NW	g/St.
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

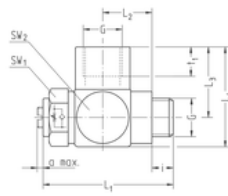


- Short design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal rings
- Material: brass nickel-plated, brass black
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
237-5003K35	M5	OD5	30	40	8	8,5	3,5	20	5,2	14	18	8	1	1,2	9
237-5004K35	M5	OD6	30	40	8	8,5	3,5	20	5,2	14	18	9	1	1,2	10
237-5043K35	M5	OD4,3	30	40	8	8,5	3,5	20	5,2	14	18	8	1	1,2	9

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

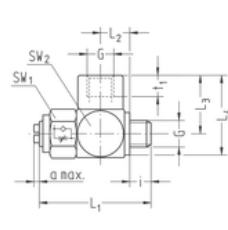


- Long design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 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/St.
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve



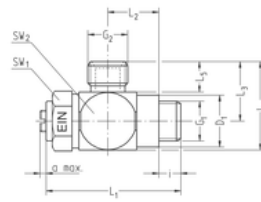
- Long design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

Part no.	G	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	t1	a max.	NW	g/St.
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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve (Inlet-side throttle)

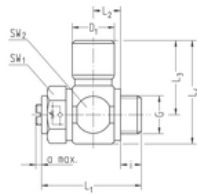
- Whitworth pipe thread
- Banjo fitting with threaded end according to VW standard
- Fits tube spigot with union nut according to 39V16631
- VS seal rings / chambered O-rings
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
SA837	G1/4	G1/4	300	400	17	19	8	45	16,7	19,5	29	10	2	4,5	82

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve



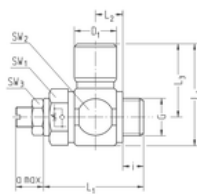
- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)

- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min		SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
			1->2	2->1											
234-0202K634	G1/8	OD4	200	150	14	16	6	32	9,5	18,2	26,2	8,5	2	2	40
234-0204K634	G1/8	OD6	200	150	14	16	6	32	9,5	21	29	11,5	2	3	43
234-0206K634	G1/8	OD8	200	150	14	16	6	32	9,5	24	32	14,5	2	3	47
234-0208K634	G1/8	OD10	200	150	14	16	6	32	9,5	27	35	16,5	2	3	49
234-0263K634	G1/8	OD 1/4" (6,35)	200	150	14	16	6	32	9,5	21	29	11,5	2	3	45
234-0402K634	G1/4	OD4	400	300	17	20	8	35,5	9,5	20	30	8,5	2	2	62
234-0404K634	G1/4	OD6	400	300	17	20	8	35,5	9,5	23	33	11,5	2	4	64
234-0406K634	G1/4	OD8	400	300	17	20	8	35,5	9,5	26	36	14,5	2	4,5	68
234-0408K634	G1/4	OD10	400	300	17	20	8	35,5	9,5	28,5	38,5	16,5	2	4,5	70
234-0463K634	G1/4	OD 1/4" (6,35)	400	300	17	20	8	35,5	9,5	23	33	11,5	2	4	67

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

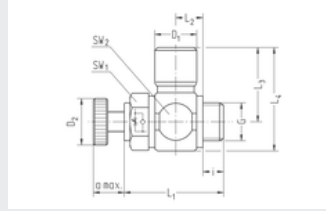
Part no.	G	for tube	NI/min		SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
			1->2	2->1											
234-0202K6341	G1/8	OD4	200	150	14	16	6	32	9,5	18,2	26,2	8,5	9,5	2	43
234-0204K6341	G1/8	OD6	200	150	14	16	6	32	9,5	21	29	11,5	9,5	3	45
234-0206K6341	G1/8	OD8	200	150	14	16	6	32	9,5	24	32	14,5	9,5	3	49
234-0402K6341	G1/4	OD4	400	300	17	20	8	35,5	9,5	20	30	8,5	11	2	66
234-0404K6341	G1/4	OD6	400	300	17	20	8	35,5	9,5	23	33	11,5	11	4	68
234-0406K6341	G1/4	OD8	400	300	17	20	8	35,5	9,5	26	36	14,5	11	4,5	73

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

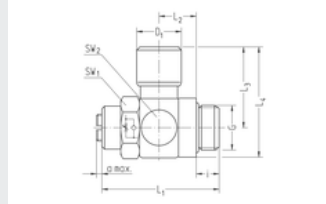


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
234-0202K6342	G1/8	OD4	200	150	14	16	6	32	9,5	18,2	26,2	8,5	10,5	2	45
234-0204K6342	G1/8	OD6	200	150	14	16	6	32	9,5	21	29	11,5	10,5	3	48
234-0206K6342	G1/8	OD8	200	150	14	16	6	32	9,5	24	32,5	14,5	10,5	3	52
234-0402K6342	G1/4	OD4	400	300	17	20	8	35,5	9,5	20	30	8,5	12	2	71
234-0404K6342	G1/4	OD6	400	300	17	20	8	35,5	9,5	23	33	11,5	12	4	73
234-0406K6342	G1/4	OD8	400	300	17	20	8	35,5	9,5	26	36	14,5	12	4,5	78

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

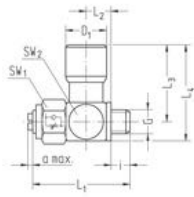
- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)



Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
234-0204634	G1/8	OD6	200	150	14	16	6	37,5	14,5	21	29	11,5	2	3	60
234-0206634	G1/8	OD8	200	150	14	16	6	37,5	14,5	24	32	14,5	2	3	62
234-0406634	G1/4	OD8	400	300	17	20	8	40,5	14,5	26	36	14,5	2	4,5	78
234-0408634	G1/4	OD10	400	300	17	20	8	40,5	14,5	28,8	38,5	16,5	2	4,5	80
234-0409634	G1/4	OD12	400	300	17	20	8	40,5	14,5	35,5	46,5	19,9	2	4,5	83
234-0495634	G1/4	OD3/8" (9,5)	400	300	17	20	8	35,5	9,5	28,5	38,5	16,5	2	4,5	83
234-0604634	G3/8	OD6	-	-	20	22	8,6	48,6	16,5	25	36	11,5	2	6,7	90
234-0606634	G3/8	OD8	900	600	20	22	8,5	45	14,3	28	39	14,5	2	6	99
234-0608634	G3/8	OD10	900	600	20	22	8,5	45	14,3	30,5	41,5	16,5	2	6,5	104
234-0609634	G3/8	OD12	-	-	20	22	8,6	48,6	16,5	35,5	46,5	19,9	2	6,7	130
234-0627634	G3/8	OD1/2" (12,7)	900	600	20	22	8,6	48,6	16,5	36	47	19,9	2	6,7	131
234-0695634	G3/8	OD3/8" (9,5)	900	600	20	22	8,5	45	14,3	30,5	41,5	16,5	2	6,5	104
234-0806634	G1/2	OD8	1500	1100	24	29	10	54	17,3	30	44,5	14,5	2,5	6	165
234-0808634	G1/2	OD10	1500	1100	24	29	10	54	17,3	33,5	48	16,5	2,5	8	170
234-0809634	G1/2	OD12	-	-	24	28	10	57	21	37,5	51,5	19,9	2,5	9	154
234-0811634	G1/2	OD14	-	-	24	28	9,9	57,4	21	41	55	21,9	2,5	9,2	158
234-0827634	G1/2	OD1/2" (12,7)	1500	1100	24	28	10	57	21	38	52	19,9	2,5	9	208
234-0895634	G1/2	OD3/8" (9,5)	1500	1100	24	29	10	54	17,3	33,5	48	16,5	2,5	8	172

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve



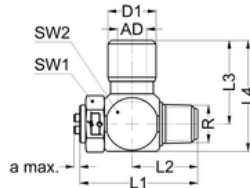
- Short design (exhaust-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Seal in connection NBR (Perbunan)

- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min		SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
			1->2	2->1											
235-4202K635	M3	OD4	40	30	8	8,5	3,5	20	5,3	16,5	20,5	8,6	1	1,2	9
235-5002K635	M5	OD4	40	30	8	8,5	3,5	20	5,2	16,5	20,5	8,5	1	1,5	9
235-5003K635	M5	OD5	40	30	8	10	4	22	6	18	22,5	10,5	1	1,5	13
235-5004K635	M5	OD6	40	30	8	11	3	22	6,5	19,5	24	11,5	1	1,5	15
235-5006K635	M5	OD8	40	30	8	8,5	4	27	8,5	22,8	28,5	14,6	1	1,8	28
235-5043K635	M5	OD4,3	40	30	8	8,5	3,5	20	5,2	16,5	20,5	9	1	1,5	9

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve and NPT-thread



- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread, conical
- Tapered thread
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated

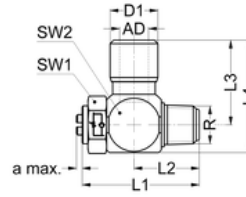
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range 7 to 232 psi (0.5 to 16 bar)

Part no.	G	for tube	NI/min		SW1	SW2	L1	L2	L3	L4	D1	a max.	NW	g/St.
			1->2	2->1										
N234-0404KBG634	NPT1/4	OD6	400	300	17	18	40,7	23,7	23,5	33	11,4	2	4,5	72
N234-0463KBG634	NPT1/4	OD 1/4" (6,35)	400	300	17	18	40,7	23,7	23,5	33	11,8	2	4,5	72
N234-0495KBG634	NPT1/4	OD3/8"	400	300	17	18	40,7	23,7	29,5	39	16,1	2	4,5	79
N234-0606KBG634	NPT3/8	OD8	900	600	20	22	45	24	29	40,5	14,6	2	6,5	105
N234-0695KBG634	NPT3/8	OD3/8" (9,5)	900	600	20	22	45	24	31	42	16,1	2	6,5	106
N234-0608KBG634	NPT3/8	OD10	900	600	20	22	45	24	31	41,5	16,6	2	6,5	106
N234-0809KBG634	NPT1/2	OD12	1500	1100	24	26	53,8	29,8	38	51	19,9	2,5	9	176
N234-0827KBG634	NPT1/2	OD1/2" (12,7)	1500	1100	24	26	53,8	29,8	38,5	51,5	20,6	2,5	9	178

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve and R-thread

- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread, conical
- Tapered thread
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range 7 to 232 psi (0.5 to 16 bar)

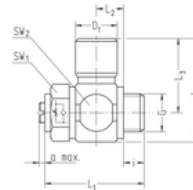


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	L1	L2	L3	L4	D1	a max.	NW	g/St.
R234-0208KKG634	R1/8	OD10	200	150	13	16	32,5	18,3	27	34	16,6	2	4,5	45
R234-0408KKG634	R1/4	OD10	400	300	17	18	40,5	22,5	29	38,5	16,6	2	4,5	78
R234-0608KKG634	R3/8	OD10	900	600	20	22	45	23	31	41,5	16,6	2	4,5	105
R234-0808KKG634	R1/2	OD10	1500	1100	24	26	53,8	28,3	33	46	16,6	2,5	4,5	166

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

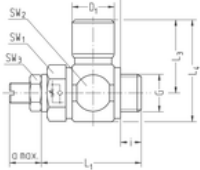
- Short design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)



Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
236-0202K634	G1/8	OD4	150	200	14	16	6	32	9,5	18,2	26,2	8,5	2	2	41
236-0204K634	G1/8	OD6	150	200	14	16	6	32	9,5	21	29	11,5	2	3	43
236-0206K634	G1/8	OD8	150	200	14	16	6	32	9,5	24	32	14,5	2	3	47
236-0208K634	G1/8	OD10	150	200	14	16	6	32	9,5	27	35	16,5	2	3	49
236-0402K634	G1/4	OD4	300	400	17	20	8	35,5	9,5	20	30	8,5	2	2	62
236-0404K634	G1/4	OD6	300	400	17	20	8	35,5	9,5	23	33	11,5	2	4	64
236-0406K634	G1/4	OD8	300	400	17	20	8	35,5	9,5	26	36	14,5	2	4,5	68
236-0408K634	G1/4	OD10	300	400	17	20	8	35,5	9,5	28,5	38,5	16,5	2	4,5	70

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

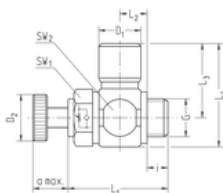


- Short design (inlet-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
236-0202K6341	G1/8	OD4	150	200	14	16	6	32	9,5	18,2	26,2	8,5	9,5	2	43
236-0204K6341	G1/8	OD6	150	200	14	16	6	32	9,5	21	29	11,5	9,5	3	45
236-0206K6341	G1/8	OD8	150	200	14	16	6	32	9,5	24	32	14,5	9,5	3	49
236-0402K6341	G1/4	OD4	300	400	17	20	8	35,5	9,5	20	30	8,5	11	2	66
236-0404K6341	G1/4	OD6	300	400	17	20	8	35,5	9,5	23	33	11,5	11	4	68
236-0406K6341	G1/4	OD8	300	400	17	20	8	35,5	9,5	26	36	14,5	11	4,5	73

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

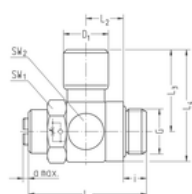


- Short design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
236-0202K6342	G1/8	OD4	150	200	14	16	6	32	9,5	18,2	26,2	8,5	10,5	2	45
236-0204K6342	G1/8	OD6	150	200	14	16	6	32	9,5	21	29	11,5	10,5	3	48
236-0206K6342	G1/8	OD8	150	200	14	16	6	32	9,5	24	32	14,5	10,5	3	52
236-0402K6342	G1/4	OD4	300	400	17	20	8	35,5	9,5	20	30	8,5	12	2	71
236-0404K6342	G1/4	OD6	300	400	17	20	8	35,5	9,5	23	33	11,5	12	4	73
236-0406K6342	G1/4	OD8	300	400	17	20	8	35,5	9,5	26	36	14,5	12	4,5	78

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve



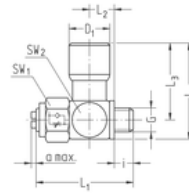
- Long design (inlet-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
236-0406634	G1/4	OD8	300	400	17	20	8	40,5	14,5	26	36	14,5	2	4,5	78
236-0408634	G1/4	OD10	300	400	17	20	8	40,5	14,5	28,8	38,5	16,5	2	4,5	80

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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
- M5 thread
- PVC seal ring
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

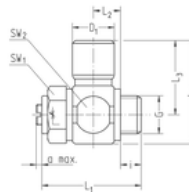


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
237-5002K635	M5	OD4	30	40	8,5	8,5	3,5	20	5,2	16,5	20,5	8,5	1	1,5	9
237-5003K635	M5	OD5	30	40	10	10	4	22	6	18	22,5	10,5	1	1,5	13
237-5004K635	M5	OD6	30	40	11	11	3	22	6,5	19,5	24	11,5	1	1,5	15
237-5043K635	M5	OD4,3	30	40	8,5	8,5	3,5	20	5,2	16,5	20,5	9	1	1,5	9

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle valve

- Short design (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

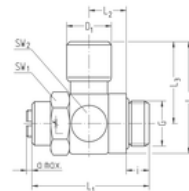


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
240-0204K634	G1/8	OD6	200	150	14	16	6	32	9,5	21	29	11,5	2	3	43
240-0206K634	G1/8	OD8	200	150	14	16	6	32	9,5	24	32	14,5	2	3	47
240-0208K634	G1/8	OD10	200	150	14	16	6	32	9,5	27	35	16,5	2	3	49
240-0404K634	G1/4	OD6	400	300	17	20	8	35,5	9,5	23	33	11,5	2	4	64
240-0406K634	G1/4	OD8	400	300	17	20	8	35,5	9,5	26	36	14,5	2	4,5	68
240-0408K634	G1/4	OD10	400	300	17	20	8	35,5	9,5	28,5	38,5	16,5	2	4,5	70

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle valve

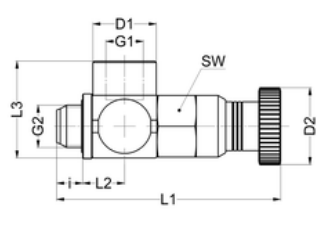
- Long design (throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Seal in connection NBR (Perbunan)
- Material: brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)



Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
240-0606634	G3/8	OD8	900	600	20	22	8,5	45	14,3	28	39	14,5	2	6	99
240-0811634	G1/2	OD14	-	-	24	28	9,9	57,4	21	41	55	21,9	2,5	9,2	158

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle and click function



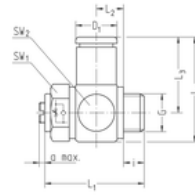
- Short design (throttle)
  - Adjusting screw with knurl
  - Fine adjustment with a noticeable click
  - Whitworth pipe thread
  - Seal in connection FPM
  - Material: brass nickel-plated
- Type: Cone-type throttle
  - Allowable medium: Air, Oil
  - Temperature range -4 to 176 °F (-20 to +80 °C)
  - Working pressure range -14 to 232 psi (-0,95 to 16 bar)

Part no.	G1	G2	SW	i	L1	L2	L3	D1	D2	NW	g/St.
SA1794-0201K	G 1/8	G 1/8	14	6,1	51.25	9,6	22	14,5	17,5	2	67

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NV/min 2->1 = 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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

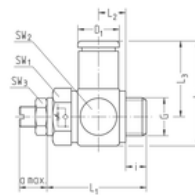


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
234-0202K834	G1/8	OD4	200	150	14	16	6	32,5	9,5	19	27	8,6	2	2	40
234-0204K834	G1/8	OD6	200	150	14	16	6	32,5	9,5	22,5	30,5	11,4	2	3	43
234-0206K834	G1/8	OD8	200	150	14	16	6	32,5	9,5	24,5	32,5	14,6	2	3	47
234-0208K834	G1/8	OD10	200	150	14	17	6	32,5	9,5	27	35	16,6	2	3	53
234-0402K834	G1/4	OD4	400	300	17	20	8	35,5	9,5	21	31	8,6	2	2	63
234-0404K834	G1/4	OD6	400	300	17	20	8	35,5	9,5	24,5	34,5	11,4	2	4	66
234-0406K834	G1/4	OD8	400	300	17	20	8	35,5	9,5	26,5	36,5	14,6	2	4,5	69
234-0408K834	G1/4	OD10	400	300	17	20	8	35,5	9,5	29	39	16,6	2	4,5	72

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

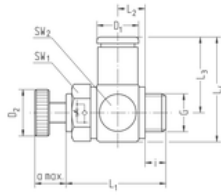
- Short design (exhaust-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)



Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
234-0202K8341	G1/8	OD4	200	150	14	16	6	32,5	9,5	19	27	8,6	9,5	2	43
234-0204K8341	G1/8	OD6	200	150	14	16	6	32,5	9,5	22,5	30,5	11,4	9,5	3	46
234-0206K8341	G1/8	OD8	200	150	14	16	6	32,5	9,5	24,5	32,5	14,6	9,5	3	49
234-0402K8341	G1/4	OD4	400	300	17	20	8	35,5	9,5	21	31	8,6	11	2	66
234-0404K8341	G1/4	OD6	400	300	17	20	8	35,5	9,5	24,5	34,5	11,4	11	4	69
234-0406K8341	G1/4	OD8	400	300	17	20	8	35,5	9,5	26,5	36,5	14,6	11	4,5	72

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

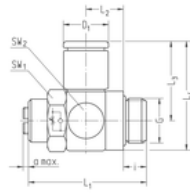


- Short design (exhaust-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
234-0202K8342	G1/8	OD4	200	150	14	16	6	32,5	9,5	19	27	8,6	10,5	2	45
234-0204K8342	G1/8	OD6	200	150	14	16	6	32,5	9,5	22,5	30,5	11,4	10,5	3	48
234-0206K8342	G1/8	OD8	200	150	14	16	6	32,5	9,5	24,5	32,5	14,6	10,5	3	51
234-0402K8342	G1/4	OD4	400	300	17	20	8	35,5	9,5	21	31	8,6	12	2	71
234-0404K8342	G1/4	OD6	400	300	17	20	8	35,5	9,5	24,5	34,5	11,4	12	4	74
234-0406K8342	G1/4	OD8	400	300	17	20	8	35,5	9,5	26,5	36,5	14,6	12	4,5	77

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve

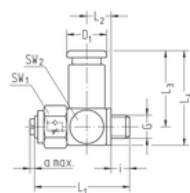


- Long design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth pipe thread
- Chambered O-rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
234-0606834	G3/8	OD8	900	600	20	22	8,5	45	14,3	28	39	14,6	2	6	98
234-0608834	G3/8	OD10	900	600	20	22	8,5	45	14,3	30,5	41,5	16,6	2	6,5	102
234-0806834	G1/2	OD8	1500	1100	24	29	10	54	17,3	28	39	14,6	2,5	6	155
234-0808834	G1/2	OD10	1500	1100	24	29	10	54	17,3	30,5	41,5	16,6	2,5	6,5	160

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

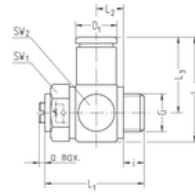
Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/piece
235-5002K835	M5	OD4	40	30	8	8,5	3,5	20	5,2	17	21	8,6	1	1,2	9
235-5003K835	M5	OD5	40	30	8	10	4	22	6	19	23,5	9,9	1	1,2	12
235-5004K835	M5	OD6	40	30	8	11	3	22	6,5	20,5	25	11,9	1	1,2	16
235-5043K835	M5	OD4,3	40	30	8	8,5	3,5	20	5,2	17	21	8,9	1	1,2	9

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

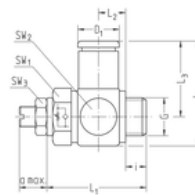


Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
236-0202K834	G1/8	OD4	150	200	14	16	6	32,5	9,5	19	27	8,6	2	2	41
236-0204K834	G1/8	OD6	150	200	14	16	6	32,5	9,5	22,5	30,5	11,4	2	3	44
236-0206K834	G1/8	OD8	150	200	14	16	6	32,5	9,5	24,5	32,5	14,6	2	3	47
236-0208K834	G1/8	OD10	150	200	14	17	6	32,5	9,5	27	35	16,6	2	3	53
236-0402K834	G1/4	OD4	300	400	17	20	8	35,5	9,5	21	31	8,6	2	2	62
236-0404K834	G1/4	OD6	300	400	17	20	8	35,5	9,5	24,5	34,5	11,4	2	4	65
236-0406K834	G1/4	OD8	300	400	17	20	8	35,5	9,5	26,5	36,5	14,6	2	4,5	68
236-0408K834	G1/4	OD10	300	400	17	20	8	35,5	9,5	29	39	16,6	2	4,5	72

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

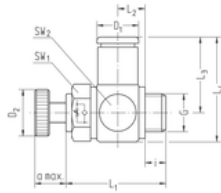
- Short design (inlet-side throttle)
- Adjusting screw with jam nut
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)



Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
236-0202K8341	G1/8	OD4	150	200	14	16	6	32,5	9,5	19	27	8,6	9,5	2	43
236-0204K8341	G1/8	OD6	150	200	14	16	6	32,5	9,5	22,5	30,5	11,4	9,5	3	46
236-0206K8341	G1/8	OD8	150	200	14	16	6	32,5	9,5	24,5	32,5	14,6	9,5	3	49
236-0402K8341	G1/4	OD4	300	400	17	20	8	35,5	9,5	21	31	8,6	11	2	66
236-0404K8341	G1/4	OD6	300	400	17	20	8	35,5	9,5	24,5	34,5	11,4	11	4	69
236-0406K8341	G1/4	OD8	300	400	17	20	8	35,5	9,5	26,5	36,5	14,6	11	4,5	72

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

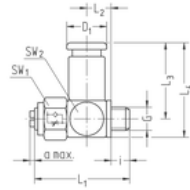


- Short design (inlet-side throttle)
- Adjusting screw with knurl
- Whitworth pipe thread
- VS seal rings
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
236-0202K8342	G1/8	OD4	150	200	14	16	6	32,5	9,5	19	27	8,6	10,5	2	45
236-0204K8342	G1/8	OD6	150	200	14	16	6	32,5	9,5	22,5	30,5	11,4	10,5	3	48
236-0206K8342	G1/8	OD8	150	200	14	16	6	32,5	9,5	24,5	32,5	14,6	10,5	3	51
236-0402K8342	G1/4	OD4	300	400	17	20	8	35,5	9,5	21	31	8,6	12	2	71
236-0404K8342	G1/4	OD6	300	400	17	20	8	35,5	9,5	24,5	34,5	11,4	12	4	74
236-0406K8342	G1/4	OD8	300	400	17	20	8	35,5	9,5	26,5	36,5	14,6	12	4,5	77

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve



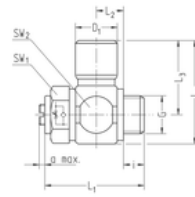
- Short design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- PVC seal ring
- Seal in connection NBR (Perbunan)
- Material brass nickel-plated
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
237-5002K835	M5	OD4	30	40	8	8,5	3,5	20	5,2	17	21	8,6	1	1,2	9
237-5003K835	M5	OD5	30	40	8	10	4	22	6	19	23,5	9,9	1	1,2	12
237-5004K835	M5	OD6	30	40	8	11	3	22	6,5	20,5	25	11,4	1	1,2	16
237-5043K835	M5	OD4,3	30	40	8	8,5	3,5	20	5,2	17	21	8,9	1	1,2	9

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel connector with throttle check valve

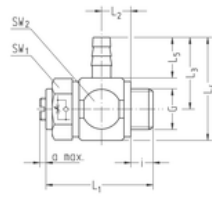
- Short design (exhaust-side throttle)
- Slotted adjusting screw
- Whitworth-pipe thread
- VS seal rings (FPM)
- Seal in connection FPM
- Material: AISI 304/304L (1.4301/ 1.4307)
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: -4 to 176 °F (-20 to +80 °C)
- Working pressure range: 7 to 145 psi (0,5 to 10 bar)



Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	a max.	NW	g/St.
VT234-0202K934	G1/8	OD4	200	150	14	16	6	32	9,5	18,2	26,2	8,5	2	2	40
VT234-0204K934	G1/8	OD6	200	150	14	16	6	32	9,5	21	29	11,5	2	3	43
VT234-0206K934	G1/8	OD8	200	150	14	16	6	32	9,5	24	32	14,5	2	3	47
VT234-0208K934	G1/8	OD10	200	150	14	16	6	32	9,5	27	35	16,5	2	3	49
VT234-0402K934	G1/4	OD4	400	300	17	20	8	35,5	9,5	20	30	8,5	2	2	62
VT234-0404K934	G1/4	OD6	400	300	17	20	8	35,5	9,5	23	33	11,5	2	4	64
VT234-0406K934	G1/4	OD8	400	300	17	20	8	35,5	9,5	26	36	14,5	2	4,5	68
VT234-0408K934	G1/4	OD10	400	300	17	20	8	35,5	9,5	28,5	38,5	16,5	2	4,5	70

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel spigot with throttle check valve

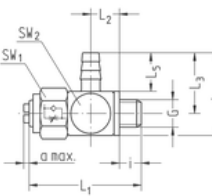


- Short design (exhaust-side throttle)
  - Slotted adjusting screw
  - Whitworth pipe thread
  - Tube connection removable
  - VS seal rings
  - Materials: brass nickel-plated,
- brass, Al black anodized
  - Type: Cone-type throttle
  - Allowable medium: Air
  - Temperature range 14 to 140 °F (-10 to +60 °C)
  - Working pressure range 7 to 87 psi (0.5 to 6 bar)

Part no.	G	for tube	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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel spigot with throttle check valve

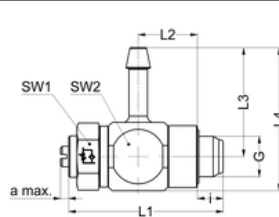


- Short design (exhaust-side throttle)
  - Slotted adjusting screw
  - M5 thread
  - Tube connection removable
  - PVC seal ring
  - Materials: brass nickel-plated,
- brass
  - Type: Cone-type throttle
  - Allowable medium: Air
  - Temperature range 14 to 140 °F (-10 to +60 °C)
  - Working pressure range 7 to 87 psi (0.5 to 6 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
235-5002K335	M5	OD4	40	30	8	8,5	3,5	20	5,2	9,5	13,5	5,5	1	1,5	7
235-5004K335	M5	OD6	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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 2->1 = when throttle is closed

## Single swivel connector with throttle check valve



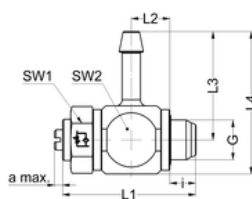
- Long design (exhaust-side throttle)
  - Slotted adjusting screw
  - Whitworth pipe thread
  - Chambered O-rings
  - Material: brass nickel-plated, Al black anodized, KST
  - Type: Cone-type throttle
- Allowable medium: Air
  - Temperature range 14 to 158 °F (-10 to +70 °C)
  - Working pressure range 7 to 145 psi (0.5 to 10 bar)

Part no.	G	for tube	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
234-020474	G1/8	ID4	200	150	14	16	6,5	37,7	14,5	26,3	34,5		2	3	42
234-020674	G1/8	ID6	200	150	14	16	6,5	37,7	14,5	26,3	34,5		2	3,2	43
234-040474	G1/4	ID4	400	300	17	20	8,5	40,7	14,5	28	38		2	4,7	65
234-040674	G1/4	ID6	400	300	17	20	8,5	40,7	14,5	28	38		2	4,7	65
234-080674	G1/2	ID6	1500	1100	24	29	10	54	17,3	32,3	46,5		2,5	4,7	165

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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
- Whitworth pipe thread
- VS seal rings
- Material: brass nickel-plated, Al black anodized, KST
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 7 to 145 psi (0.5 to 10 bar)

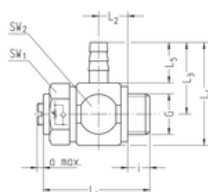


Part no.	G	for tube	NI/min		SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
			1->2	2->1											
234-0204K74	G1/8	6/4	200	150	14	16	6,5	32,5	9,5	26,3	34,5		2	3	42
234-0206K74	G1/8	8/6	200	150	14	16	6,5	32,5	9,5	26,3	34,5		2	3,2	43
234-0404K74	G1/4	6/4	400	300	17	20	8,5	35,7	9,5	28	38		2	4,7	65
234-0406K74	G1/4	8/6	400	300	17	20	8,5	35,7	9,5	28	38		2	4,7	65

- Nominal flow rate measured at 87 psi (6 bar) and 14,5 psi (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
- Tube connection removable
- VS seal rings
- Materials: brass nickel-plated, brass, Al black anodized
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 140 °F (-10 to +60 °C)
- Working pressure range: 7 to 87 psi (0.5 to 6 bar)

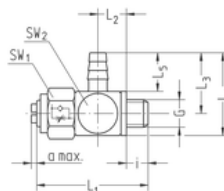


Part no.	G	for tube	NI/min		SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
			1->2	2->1											
236-0204K334	G1/8	6 / 4	150	200	14	16	6	32	9,5	17,5	25,5	9,5	2	3	27
236-0206K334	G1/8	8 / 6	150	200	14	16	6	32	9,5	21	29	13	2	3	27
236-0404K334	G1/4	6 / 4	300	400	17	20	8	35,5	9,5	19,5	29,5	9,5	2	3,3	43
236-0406K334	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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Single swivel spigot with throttle check valve

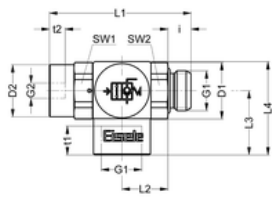
- Short design (inlet-side throttle)
- Slotted adjusting screw
- M5 thread
- Tube connection removable
- PVC seal ring
- Materials: brass nickel-plated, brass
- Type: Cone-type throttle
- Allowable medium: Air
- Temperature range: 14 to 140 °F (-10 to +60 °C)
- Working pressure range: 7 to 87 psi (0.5 to 6 bar)



Part no.	G	for tube	NI/min		SW1	SW2	i	L1	L2	L3	L4	L5	a max.	NW	g/piece
			1->2	2->1											
237-5002K335	M5	OD4	30	40	8	8,5	3,5	20	5,2	9,5	13,5	5,5	1	1,5	7
237-5004K335	M5	OD6	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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust  
 - NI/min 1->2 = when throttle is closed

## Pilot operated check valve



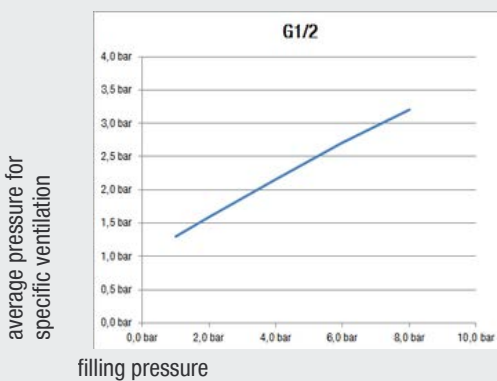
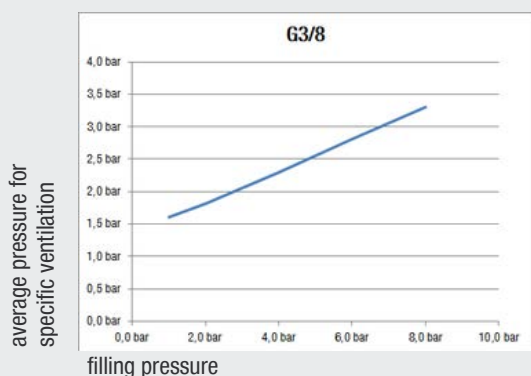
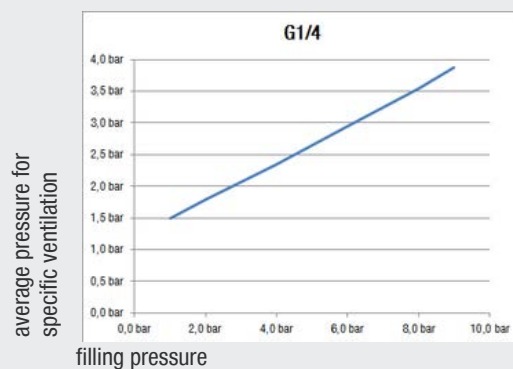
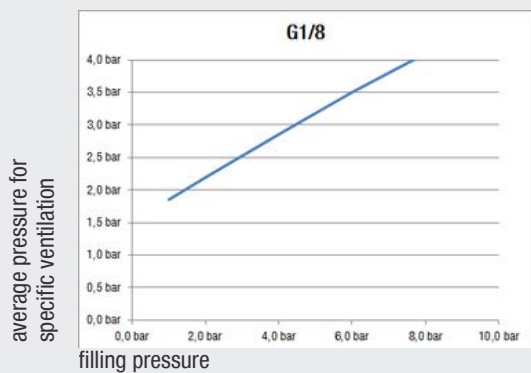
- Whitworth pipe thread
- Thread G2 for manual override
- Chambered O-ring
- Sealing: NBR
- Material: brass nickel plated, Al black anodized
- Allowable medium: air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 14,5 to 145 psi (1 to 10 bar)
- Banjo color: black, red\*

Part no.	G1	G2	NI/min 1->2	NI/min 2->1	SW1	SW2	i	L1	L2	L3	L4	D1	D2	t1	t2	g/St.
158-0201134	G1/8	M5	44	78	13	13	5,5	39,5	13,1	17	24,5	14,2	13	7	4,8	47
158-0403134	G1/4	M5	145	145	17	17	7,5	46	15	21	30,5	18,5	17	10	5	59
158-0605134	G3/8	G1/8	1000	1000	22	22	7,5	55,2	19,1	24	36	22	21,9	10	6	111
158-0807134	G1/2	G1/8	1500	1500	27	27	9,5	61,7	22,4	28,5	43	27	26,8	12,5	6	184

- Nominal flow rate measured when throttle is open at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust

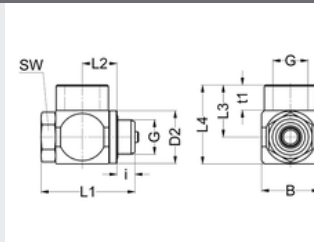
\* Please add „ROT“ at the back of the article number. E.g.: 158-0201134ROT

### control pressure characteristic:



## Single swivel joint with manual override

- Whitworth pipe thread
- Fitting with manual override suitable for pilot operated check valve
- Chambered O-ring, standard sealing ring
- Sealing: NBR/ plastic
- Material: brass nickel-plated
- Allowable medium: air
- Temperature range: 14 to 158 °F (-10 to +70 °C)
- Working pressure range: 14,5 to 145 psi (1 to 10 bar)



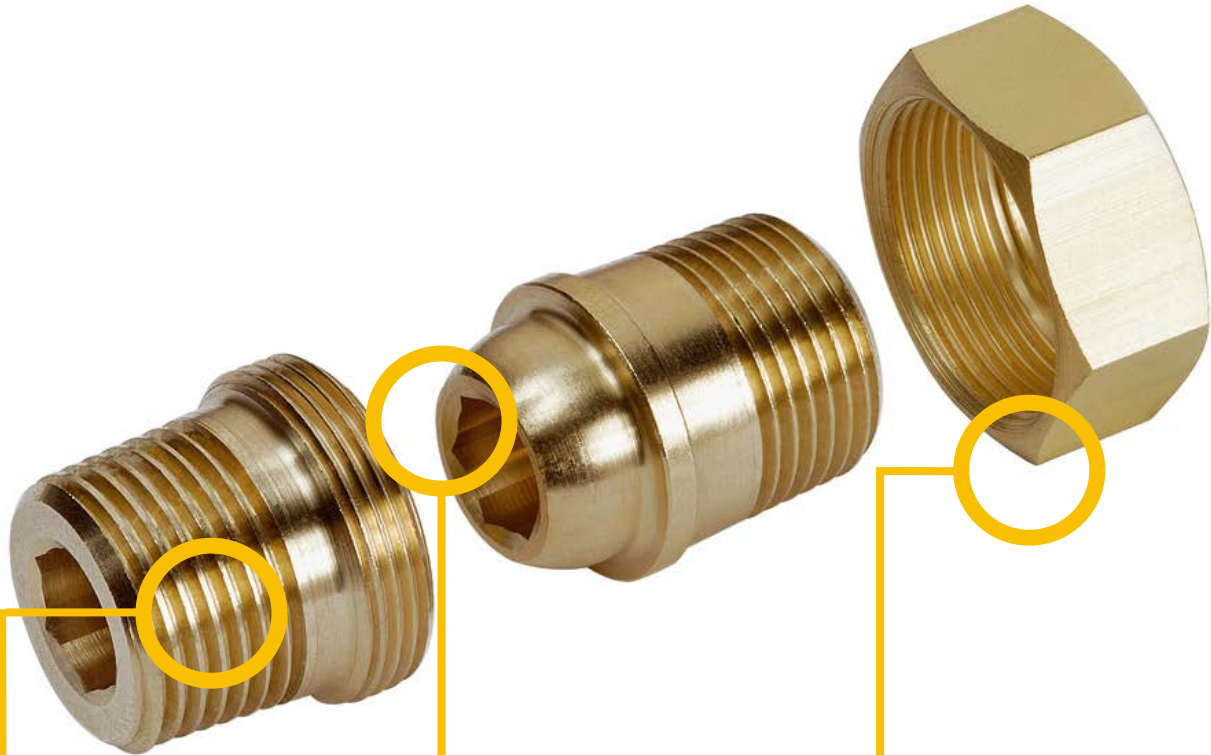
Part no.	G	SW	i	L1	L2	L3	L4	B	t1	D2	g/piece
159-5049K135*		8	3	20	5,5	10	14,5	9	5	7,6	10
159-0201K134	G1/8	12	5	26	9,6	14,5	22	16	7	14,7	22

\* Material: completely made of nickel-plated brass





## Accessories



### Broad range of accessories

- Wide range of different tube spigots, reducers, pipe couplings and connectors
- Accessories for widely used companion dimensions and all possible applications

### The EISELE modular system

- Accessories are compatible with all EISELE connectors
- Particularly suitable for connecting components with chambered O-ring

### Alternative materials

- Also available in steel or stainless steel designs, additional materials on request

Accessory spigots with tube 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: -14 to 217 psi (-0.95 to 15 bar)
- Allowable medium: Air
- Temperature range: 14 to 158 psi (-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 -4 to 212 °F (-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)

For information about the various connection threads, we refer to page 7 & 8.

## Brass spigots starting on page 220

Straight tube spigot page 220

Pivot spigots page 223

Tube connecting spigots page 224

## Brass screw joints starting on page 225

Double nipple page 225

Bulkhead nipple page 231

Taper nipple page 232

Sleeves page 236

Screw plugs page 237

Elbow pieces page 239

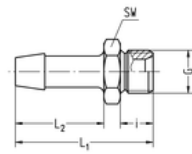
T-pieces page 240

## Accessories page 47

Seal rings Seite 242

Tube clamps page 246

## Screw-in tube spigot



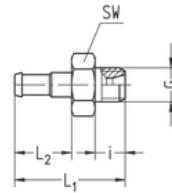
- Whitworth pipe thread
- M5 thread
- With inner cone according to DIN EN 560
- Tube connection removable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Matching tube clamps Type 10 and 11
- Material: brass or brass nickel-plated <sup>1)</sup>

Part no.	G	for tube 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
44-0412	G1/4	12	17	10	42	27	7,5	39
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.

## Tube spigot, not removable

- Tube connection cannot be removed
- No tube clamp necessary
- For PA and PU compressed-air tubes
- Whitworth pipe thread, thread M5
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0,95 to 16 bar)
- Material: brass or brass nickel-plated <sup>1)</sup>

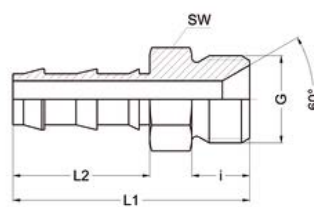


Part no.	G	for tube	SW	i	L1	L2	NW	g/piece
314-5003	M5	5/3 (4,3/3)	8	4,5	16,5	8,5	2,3	2
314-0204	G1/8	6/4	14	7	21,5	10,5	3,3	8
314-5004	M5	6/4	8	4,5	18,5	10,5	2,3	2

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

## Tube spigot

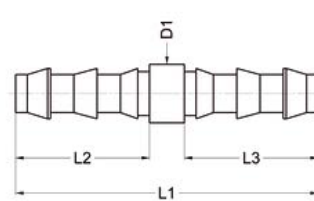
- Spigot according to VW standard 39D1441
- Whitworth pipe thread
- Fits tubes according to 39D1256
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G	for tube	SW	i	L1	L2	Mat. No.	g/piece
SA1318-0610	G3/8	DN10	17	11	45	26	7520	37
SA1318-0813	G1/2	DN13	22	12	54,5	32,5	7522	72

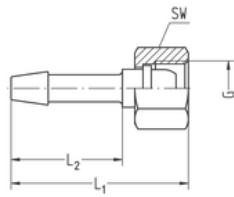
## Tube connecting spigot

- Spigot according to VW standard 39D1401
- Fits tubes according to 39D1256
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	for tube	L1	L2	L3	D1	Mat. No.	g/piece
SA1319-06	DN6	52	23	23	10	7346	10
SA1319-10	DN10	61	27	27	14	7347	24
SA1319-13	DN13	70	31	31	18	7348	35
SA1319-20	DN20	82	37	37	26	7350	76

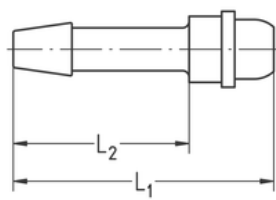
## Tube spigot with union nut



- Whitworth pipe thread
- Ball type nipple according to DIN EN 560
- Tube connection removable
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Matching tube clamps Type 10 und 11
- Material: brass

Part no.	G	for tube 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
37-01092	G1/8 left-hand thread	9	12	34	25	4	14
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

## Tube spigot with spherical nipple

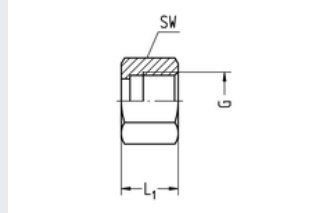


- Whitworth pipe thread
- Fits union nuts Type 36
- Tube connection removable
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Matching tube clamps Type 10 und 11
- Material: brass

Part no.	fits union nut with G	for tube 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 tube spigot

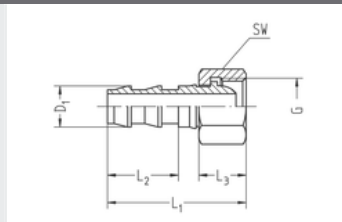
- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Fits tube spigot Type 40
- Material: brass



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

## Tube spigot with union nut

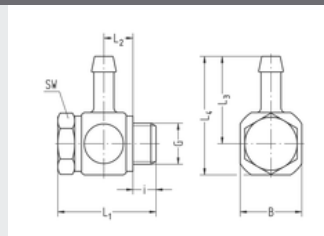
- Spigot according to VW standard 39V16631
- Whitworth pipe thread
- Fits tubes according to 39D1256
- Material brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G	for tube	SW	L1	L2	D1	NW	Mat. No.	g/piece
SA1454-0306	G1/4	DN6	17	36	14,2	8,8	5	8937	26
SA1454-0510	G3/8	DN10	19	41	14,2	11,8	7,5	8938	33
SA1454-0713	G1/2	DN13	27	47,5	16,2	15,4	11	8939	72
SA1454-0916	G3/4	DN16	32	51	16,2	18,8	14	8940	98
SA1454-1120	G1	DN20	41	59	18,2	22,3	17	8941	180
SA1454-1325	G1 1/4	DN25	50	63	20,2	28,8	22	8943	298

## Single swivel spigot, short model

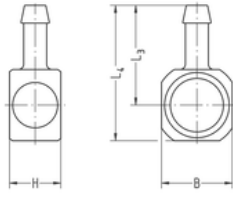
- Whitworth pipe thread
- Tube connection removable
- VS seal rings
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Proper tube clamps type 10 and 11
- Material ring nozzle: brass or brass nickel-plated <sup>1)</sup>
- Material banjo bolt: brass nickel-plated



Part no.	G	for tube 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

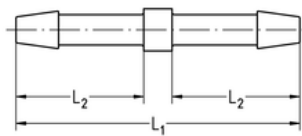


- For banjo bolt with Whitworth pipe thread
- Tube connection removable
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Matching tube clamps Type 10 and 11
- Material: brass or brass nickel-plated <sup>1)</sup>

Part no.	fits banjo bolt with G	for tube 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.

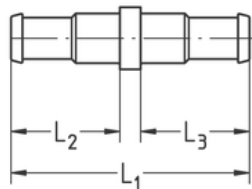
## Tube connecting spigot



- Tube connection removable
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar
- Proper tube clamps type 10 and 11
- Material: brass

Part no.	for tube inside Ø1	for tube 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

## Tube connecting spigot, not removable



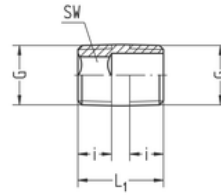
- Tube connection cannot be removed
- No tube clamp necessary
- For PA and PU compressed-air tubes
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass

Part no.	for tube A	for tube 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

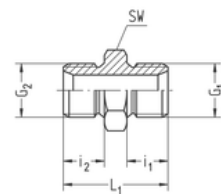
- Whitworth pipe thread conical
- With hexagon socket
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass



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

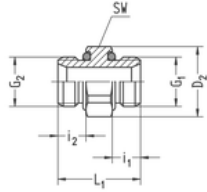
- Whitworth pipe thread, thread M3, M5
- With inner cone according to DIN EN 560
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass or brass nickel-plated<sup>1)</sup>



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	50	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

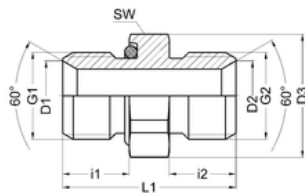


- Whitworth pipe thread
- With inner cone according to DIN EN 560
- Sealing NBR (Perbunan) or FPM <sup>1)</sup>
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass nickel-plated

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
43-0250GNI	G1/8	M5	13	14,2	5,5	4	15,5	2,2	8
42-0404GNI	G1/4	G1/4	17	18,5	7,5	7,5	22	7,5	17
43-0402GNI	G1/4	G1/8	17	18,5	7,5	5,5	20	5	16
42-0606GNI	G3/8	G3/8	20	21,8	7,5	7,5	22,5	10	26
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
42-0808GNI	G1/2	G1/2	24	26,2	9,5	9,5	27,5	12,5	48
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
42-1010GNI	G3/4	G3/4	32	37	10,5	10,5	34	18	99
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
42-1212GNI	G1	G1	41	47,4	12,5	12,5	40	22	189
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 with onesided chambered O-ring

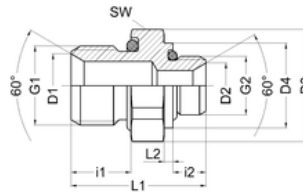


- According to VW standard
- Whitworth pipe thread
- Male stud coupling with chambered O-ring
- Threaded end according to VW standard:
- Fits tube spigot with union nut according to 39V16631
- Material brass blank, NBR
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G1	G2	SW	L1	i1	i2	D1	D2	D3	NW	g/piece
SA923-0404	G1/4	G1/4	17	26	10	10	10,5	10,5	19	8	18
SA923-0606	G3/8	G3/8	20	28	11	11	13	13	22,5	10	30
SA923-0806	G1/2	G3/8	24	31	12	11	17,3	13	27	10	51
SA923-0808	G1/2	G1/2	24	32	12	12	17,3	17,3	27	13	50

## Double nipple with chambered O-rings

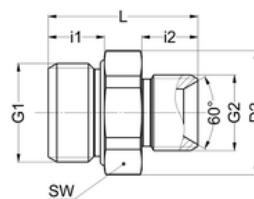
- According to VW standard
- Whitworth pipe thread
- O-rings chambered on both sides
- Threaded end according to VW standard:
- Fits tube spigot with union nut according to 39V16631
- Material brass blank, NBR
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	L1	i1	i2	D1	D2	D3	D4	NW	g/piece
SA1029-0402	G1/4	G1/8	17	22,5	10	5,5	10,5	7,5	19	19	5	13
SA1029-0404	G1/4	G1/4	17	26	10	10	10,5	10,5	19	19	8	18
SA1029-0604	G3/8	G1/4	20	28,5	11	10	13	10,5	22,5	22,5	8	30
SA1029-0606	G3/8	G3/8	20	28	11	11	13	13	22,5	22,5	10	30
SA1029-0806	G1/2	G3/8	24	31,5	12	11	17,3	13	27	27	10	53
SA1029-0808	G1/2	G1/2	24	32	12	12	17,3	17,3	27	27	13	51
SA1029-1008	G3/4	G1/2	32	39	14	12	22	17,3	36	36	13	100
SA1029-1208	G1	G1/2	41	41	14	12	28	17,3	46	46	13	155
SA1029-1210	G1	G3/4	41	41	14	14	28	22	46	46	18	159

## Double nipple, cylindrical-metrical

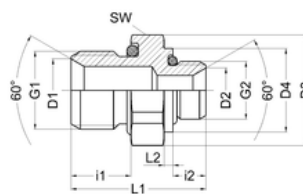
- Whitworth pipe thread
- Male stud coupling with chambered O-ring
- Threaded end according to VW standard:
- Sealing FPM
- Material brass blank, dezincification resistant
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	L	i1	i2	D2	NW	g/piece
SA1820-0460	G1/4	M16x1,5	17	24	7,5	12	18,5	8,5	21
SA1820-0860	G1/2	M16x1,5	24	32	12	12	26,2	10	55
SA1820-0866	G1/2	M22x1,5	24	32	12	12	26,2	13,2	62
SA1820-086630	G1/2	M22x1,5	24	30	10	12	26,2	13,2	59

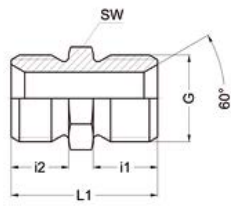
## Double nipple with chambered O-rings

- According to VW standard
- Whitworth pipe thread
- O-rings chambered on both sides
- Threaded end according to VW standard:
- Fits tube spigot with union nut according to 39V16631
- Material stainless steel (1.4305), NBR
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	L1	L2	i1	i2	D1	D2	D3	D4	NW	g/piece
SA1065	G1/4	M5	17	20	1	9	4,5	10,5	2,5	8	8	2,5	11

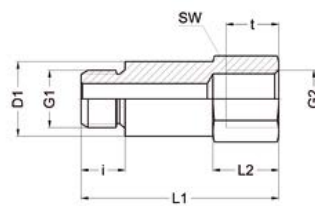
## Double nipple



- According to VW standard 39D1403
- Whitworth pipe thread
- Threaded end according to VW standard:
- Fits tube spigot with union nut 39V16631
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G	SW	i1	i2	L1	Mat. No.	g/piece
SA1315-0404	G1/4	14	10	8	26	7561	17
SA1315-0606	G3/8	17	11	9	28	7563	30
SA1315-0808	G1/2	22	12	10	32	7565	51
SA1315-1010	G3/4	27	14	11	36	7567	82
SA1315-1212	G1	36	14	11	39	7569	132

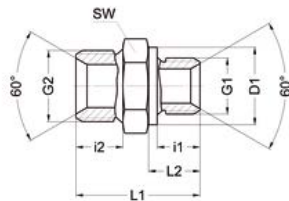
## Extension-sleeve



- According to VW standard
- Whitworth pipe thread
- Material: brass
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G1	G2	SW	i	L1	L2	t	D1	Mat. No.	g/piece
SA1308	G1/4	G1/4	17	10	45	15	12	17	7506	58

## Double nipple

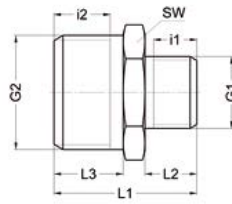


- According to VW standard 39D1402
- Whitworth pipe thread, metric thread
- Threaded end according to VW standard:
- Fits tube spigot with union nut according to 39V16631
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G1	G2	SW	i1	i2	L1	L2	D1	Mat. No.	g/piece
SA1312-0454	M10x1	G1/4	14	8	10	25	10	14	7560	16
SA1312-0604	G1/4	G3/8	19	10	11	29	12	18	7562	33
SA1312-0806	G3/8	G1/2	22	11	12	31	13,5	22	7564	49
SA1312-1008	G1/2	G3/4	27	14	14	36	16,5	26	7566	79
SA1312-1210	G3/4	G1	36	14	16	39	16,5	32	7568	129
SA1312-1412	G1	G1 1/4	46	16	18	43	18,5	39	7570	219

## Reducing plug

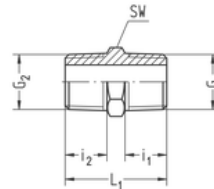
- According to VW standard
- Whitworth pipe thread,
- Threaded end according to VW standard:
- Fits tube spigot with union nut according to 39V16631
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	i1	i2	L1	L2	L3	Mat. No.	g/piece
SA1311-0802	G1/8	G1/2	22	7,5	11	27	9	14	7614	40
SA1311-0804	G1/4	G1/2	22	10	11	30	12	14	7615	42
SA1311-1006	G3/8	G3/4	27	10	13	33	12	16	7617	73
SA1311-1208	G1/2	G1	36	11	13,5	37	14	17	7616	129

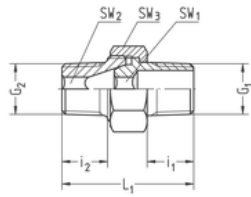
## Double nipple

- Whitworth pipe thread conical
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-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
65-0402	R1/4	R1/8	14	10	7	21	5,5	13
64-0606	R3/8	R3/8	17	10	10	24,5	11	23
65-0604	R3/8	R1/4	17	10	10	24,5	8	21
64-0808	R1/2	R1/2	22	13	13	31,5	14	47
65-0806	R1/2	R3/8	22	13	10	28,5	11	40
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

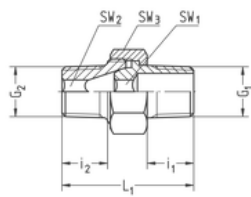
## Double nipple, removable



- Whitworth pipe thread conical
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-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

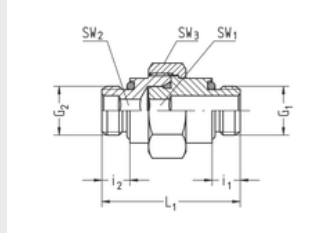


- Whitworth pipe thread conical
- Torque for union nut see table
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass
- Material union nut: steel galvanized

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
63-1010V5	R3/4	R3/4	14	14	36	18	18	52,5	14,3	6000	207
63-1212V5	R1	R1	19	19	46	22	22	63,5	19,4	8000	386

### Double nipple, removable

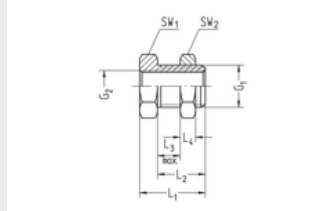
- With chambered O-rings
- Constant distance dimension
- Whitworth pipe thread
- Sealing NBR
- Torque for union nut see table
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass nickel-plated



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
76-0402NI	G1/8	G1/4	6	6	22	5,5	7,5	35	6	1500	53
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	56	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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass or brass nickel-plated <sup>1)</sup>

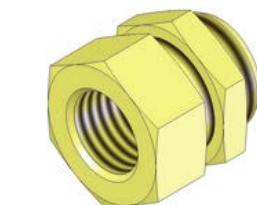
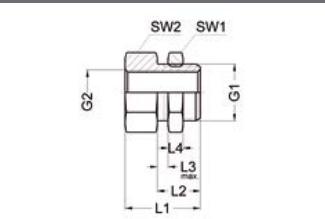


Part no.	G1	G2	SW1	SW2	L1	L2	L3 max.	L4	g/piece
71-0249	G1/8	M5	14	14	15	11,5	8	3,5	12
71-0401	G1/4	M5/8	17	17	18	14	10	4	16
71-0603	G3/8	G1/4	19	22	22	17	12	5	27
71-0803	G1/2	G1/4	24	27	27	21	15	6	64
71-0805	G1/2	G3/8	24	27	27	21	15	6	49

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

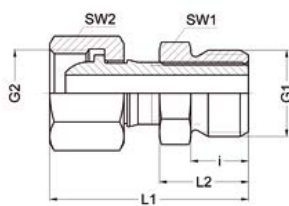
### Sleeve with nut

- According to VW standard 39D1442
- Whitworth pipe thread
- Fits threaded socket according to 39D1403 or 39D1440
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW1	SW2	L1	L2	L3 max.	Mat. No.	g/piece
SA1314-1005	G3/4	G3/8	32	32	35	20	5	7524	176
SA1314-1007	G3/4	G1/2	32	32	35	20	5	7525	144

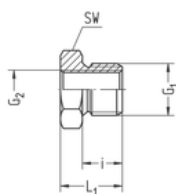
## Threaded bushing with union nut



- According to VW standard 39D1440
- Whitworth pipe thread
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G1	G2	SW1	SW2	i	L1	L2	Mat. No.	g/piece
SA1320-0606	G3/8	G3/8	17	19	11	35	17	7521	56
SA1320-0808	G1/2	G1/2	22	27	12	42	20	7523	120

## Thread adapter



- Whitworth pipe thread, thread M3, M5
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass or brass nickel-plated <sup>1)</sup>

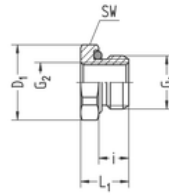
Part no.	G1	G2	SW	i	L1	g/piece
70-0249	G1/8	M5	14	6.5	10	7
70-0401	G1/4	G1/8	17	10	14	10
70-0449	G1/4	M5	17	10	14	16
70-0601	G3/8	G1/8	19	10	15	21
70-0603	G3/8	G1/4	19	10	15	14
70-0803	G1/2	G1/4	24	12	18	36
70-0805	G1/2	G3/8	24	12	18	25
70-1005	G3/4	G3/8	32	14	21	73
70-1007	G3/4	G1/2	32	14	21	53
70-1203	G1	G1/4	41	16	24	187
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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass nickel-plated

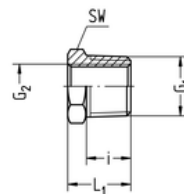


Part no.	G1	G2	SW	D1	i	L1	g/piece
70-0249GNI	G1/8	M5	13	14,2	5,5	9,5	6
70-0401GNI	G1/4	G1/8	17	18,5	7,5	12	8
70-0449GNI	G1/4	M5	17	18,5	7,5	12	13
70-0601GNI	G3/8	G1/8	20	21,8	7,5	13	19
70-0603GNI	G3/8	G1/4	20	21,8	7,5	13	13
70-0801GNI	G1/2	G1/8	24	26,2	9,5	15,5	31
70-0803GNI	G1/2	G1/4	24	26,2	9,5	15,5	31
70-0805GNI	G1/2	G3/8	24	26,2	9,5	15,5	20
70-1003GNI	G3/4	G1/4	32	34,9	10,5	21	101
70-1005GNI	G3/4	G3/8	32	34,9	10,5	21	80
70-1007GNI	G3/4	G1/2	32	34,9	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.

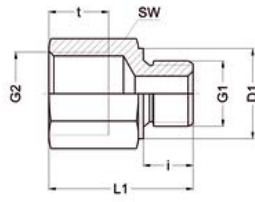
## Thread adapter

- Whitworth pipe thread conical
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-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

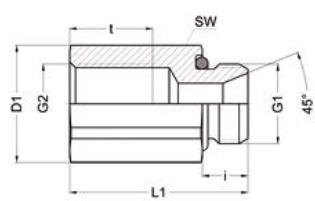


- Whitworth pipe thread, thread M3, M5
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass or brass nickel-plated <sup>1)</sup>

Part no.	G1	G2	SW	i	L1	t	D1	NW	g/piece
66-0201	G1/8	G1/8	14	8	23	10	-	5	17
67-0203	G1/8	G1/4	17	8	26	12	14	5	23
66-0401	G1/4	G1/8	17	10	28	10	-	7	35
66-0403	G1/4	G1/4	17	10	28	12	-	7	27
67-0405	G1/4	G3/8	19	10	29	12	18	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
67-0607	G3/8	G1/2	24	10	32	14	22	10	47
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

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

## Thread adapter with chambered O-ring

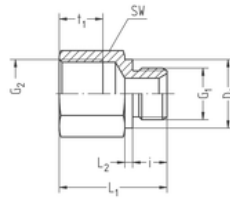


- Whitworth pipe thread, thread M5
- Sealing NBR Perbunan or FPM <sup>1)</sup>
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass nickel-plated

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
67-0203GNI	G1/8	G1/4	17	5,5	21,5	10	-	5	22

## Thread adapter

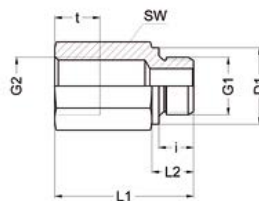
- According to VW standard
- Whitworth pipe thread exterior
- Metric thread inside
- Material brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	i	L1	L2	t1	D1	NW	Mat. No.	g/piece
SA826	G3/8	M22x1,5	24	11	34,5	2,5	14	22	10		45

## Thread adapter

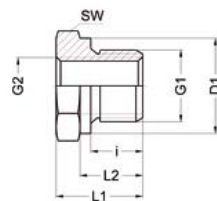
- According to VW standard
- Whitworth pipe thread
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	i	L1	L2	t	D1	Mat. No.	g/piece
SA1313-0605	G3/8	G3/8	22	10	40	12	12	22	7531	75
SA1313-0807	G1/2	G1/2	26	12	50	14	14	26	7532	123

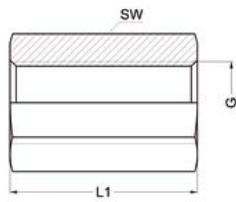
## Thread adapter

- According to VW standard 39D1406
- Whitworth pipe thread, metric thread
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	i	L1	L2	D1	Mat. No.	g/piece
SA1305-0249	G1/8	M5	14	8	15	10	14	7365	13
SA1305-0401	G1/4	G1/8	18	10	18	12	18	7366	20
SA1305-0603	G3/8	G1/4	22	12	20	14,5	22	7367	31
SA1305-0803	G1/2	G1/4	27	14	23	17	26	7618	64
SA1305-0805	G1/2	G3/8	27	14	23	17	26	7368	50
SA1305-1007	G3/4	G1/2	36	16	25	19	32	7369	88
SA1305-1207	G1	G1/2	41	18	27	21	39	7619	165
SA1305-1209	G1	G3/4	41	18	27	21	39	7370	124

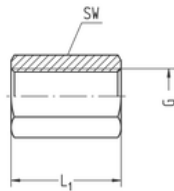
## Sleeve



- According to VW standard
- Whitworth pipe thread
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G	SW	L1	Mat. No.	g/piece
SA1307-01	G1/8	14	22	7305	21
SA1307-11	G1	41	40,5	7608	251

## Sleeve



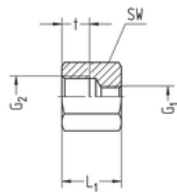
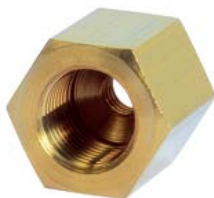
- Whitworth pipe thread, thread M3, M5
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass or brass nickel-plated <sup>1)</sup> or AL black anodized <sup>2)</sup>

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



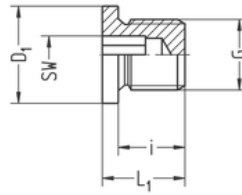
- Whitworth pipe thread, metric thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material brass or brass nickel-plated <sup>1)</sup>

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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material brass or brass nickel-plated <sup>1)</sup>

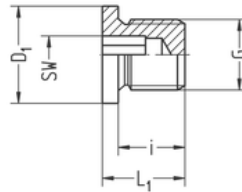


Part no.	G	SW	i	L1	D1	g/piece
23-02	G1/8	5	8	11	14	7
23-04	G1/4	6	12	15	18	15
23-06	G3/8	8	12	15	22	23
23-08	G1/2	10	14	18	25	41
23-10	G3/4	12	16	20	32	83
23-12	G1	17	16	21	39	131
23-14	G1 1/4	22	16	21	49	207
23-16	G1 1/2	24	16	21	55	274

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

## Closure screw

- With hexagon socket
- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: steel galvanized

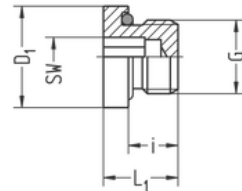


Part no.	G	SW	i	L1	D1	g/piece
23-02ST	G1/8	5	8	11	14	7
23-04ST	G1/4	6	12	15	18	15

30

## Closure screw with chambered O-ring

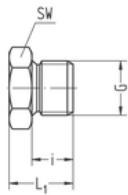
- With hexagon socket
- Whitworth pipe thread, thread M5, M7
- Sealing NBR (Perbunan) or FPM<sup>1)</sup>
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass nickel-plated



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.

## Closure screw

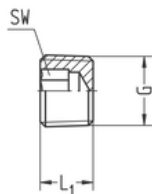


- Whitworth pipe thread, thread M3, M5
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass or brass nickel-plated <sup>1)</sup>

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.

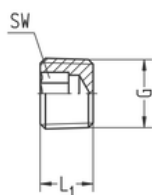
## Closure screw



- With hexagon socket
- Whitworth pipe thread conical
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-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



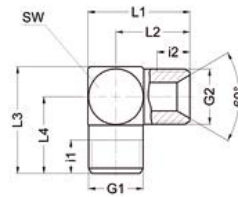
- With hexagon socket
- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass or brass nickel-plated <sup>1)</sup>

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°

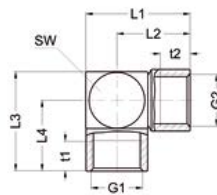
- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass



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°

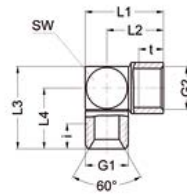
- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass



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

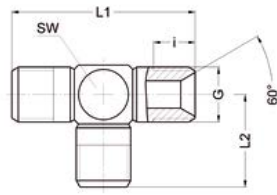
## Elbow piece, 90°

- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-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

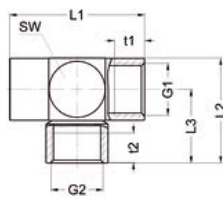
## T-piece



- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-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

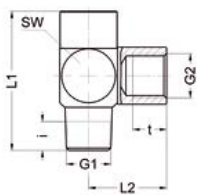
## T-piece



- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-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



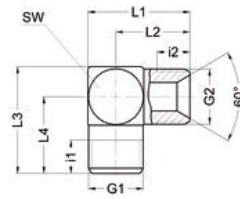
- Whitworth pipe thread
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)
- Material: brass

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



## Elbow piece

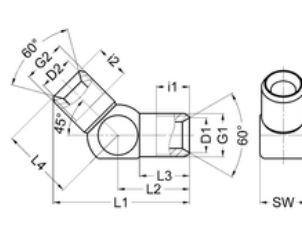
- According to VW standard 39D1405
- Whitworth pipe thread, metric thread
- Threaded ends according to VW standard
- Fits tube spigot with union nut according to 39V16631
- Material brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	i1	i2	L1	L2	NW	g/piece
SA1452-0400	G1/4	G1/4	15	10	10	30	22	8	41
SA1452-0454	G1/4	M10x1	15	10	8	30	22	6,7	39
SA1452-0600	G3/8	G3/8	17	10	10	32	23	8,5	66
SA1452-0604	G3/8	G1/4	17	10	10	32	30	8	59
SA1452-0800	G1/2	G1/2	21	12	12	40	29,5	12	117
SA1452-0806	G1/2	G3/8	21	12	10	40	29,5	8,5	104
SA1452-1000	G3/4	G3/4	27	14	14	51	37,5	15,5	243
SA1452-1008	G3/4	G1/2	27	14	12	51	37,5	12	224
SA1452-1200	G1	G1	34	14	14	58,5	42	23	357

## Elbow piece, 45°

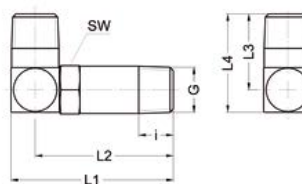
- According to VW standard 39D1404
- Whitworth pipe thread, metric thread
- Threaded ends according to VW standard
- Fits tube spigot with union nut according to 39V16631
- Material brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G1	G2	SW	L1	L2	L3	i1	i2	D1	D2	NW	Mat. No.	g/piece
SA1259-0404	G1/4	G1/4	14	39	20,5	14	10	10	10,5	10,5	8	7572	36
SA1259-0454	G1/4	M10x1	14	39,7	21,5	15	10	10	10,5	8	6,2	7546	33
SA1259-0604	G3/8	G1/4	17	43	23	14	10	10	13	10,5	8	7547	60
SA1259-0606	G3/8	G3/8	17	44,3	23	14	10	10	13	13	10	7573	67
SA1259-0806	G1/2	G3/8	21	54,8	29	19	19	16	17,3	13	10	7548	104
SA1259-0808	G1/2	G1/2	21	56,1	29	19	12	12	16,5	16,5	13	7574	117
SA1259-1008	G3/4	G1/2	27	64,6	34	24	14	12	22	17,3	13		180
SA1259-1010	G3/4	G3/4	27	66,6	34	24	12	12	22	22	15,5	7575	198

## Elbow elongated

- According to VW standard
- Whitworth pipe thread conical
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)



Part no.	G	SW	i	L1	L2	L3	L4	Mat. No.	g/piece
SA1316-0400	R1/4	14	10	47	40	22	28,5	7530	55

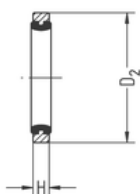
## Closure-cap



- According to VW standard
- Whitworth pipe thread
- Material: brass blank
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	G	SW	L1	t	Mat. No.	g/piece
SA1309-07	G1/2	27	12	7,5	7612	40
SA1309-11	G1	41	15	9	7613	104

## VS seal ring

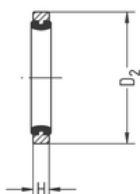


- For Whitworth pipe thread
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Large torque possible
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

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

Optionally also possible with FKM seal. Please complete "VT" before the article number.

## VS seal ring

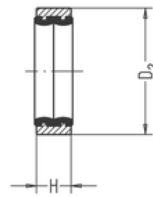


- For metric thread
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Large torque possible
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

Part no.	for thread	D2	H	g/piece
514-5522	M12x1,5	17,9	2,2	1,31
514-5722	M14x1,5	19,9	2,2	1,42

## VS spacer seal ring

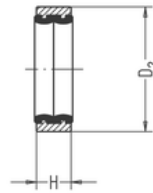
- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring brass nickel-plated
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



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

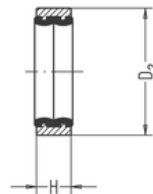
- For Whitworth pipe thread and M10x1
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



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

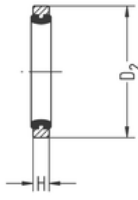
## VS spacer seal ring

- For metric thread
- Spacer ring elastomer
- Spacer ring Al color natural anodized
- Undetachable
- Temperature range -40 to 248 °F (-40 to +120 °C)
- Working pressure range -14 to 435 psi (-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

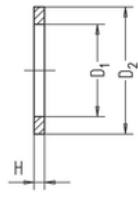
## VS seal ring



- For Whitworth pipe thread, metric threads
- Sealing material FPM, FDA compliant according to 21 CFR 177.2600
- Spacer ring AISI 316L (1.4404)
- Large torque possible
- Undetachable
- Temperature range -4 to 356 °F (-20 to +180 °C)
- Working pressure range -14 to 435 psi (-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
915-0522	G3/8	21,8	2,2	1,56
915-0722	G1/2	26,3	2,2	2,04

## seal ring

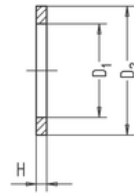


- For Whitworth pipe thread and metric thread
- Material aluminum
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 217 psi (-0,95 to 15 bar)

Part no.	for thread	D1	D2	H	g/piece
14-49AL	M5	5	7,6	1	0,06
14-45AL	M6	6	9	1	0,07
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

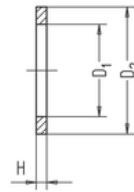
- For Whitworth pipe thread and metric thread
- Material PVC
- Temperature range 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

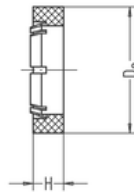
- For metric threads
- Material PA
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 217 psi (0 to 15 bar)



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 14 to 158 °F (-10 to +70 °C)
- Working pressure range -14 to 217 psi (-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

## Tube clamp



- For compressed-air tube
- Tube connection removable by disconnecting tube clamps
- Material AISI 304
- Fits tube spigots of type 37, 40, 44, 47 and 74

Part no.	for tube 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

## Tube clamp



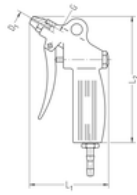
- For compressed-air tube
- Tube connection removable by unscrewing tube clamp
- Material AISI 304
- Fits tube spigots of type 37, 40, 44, 47 and 74

Part no.	for tube 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



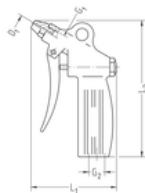
## Blow gun for compressed air



- With tube spigot
- Material aluminum anodized
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	Tube 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

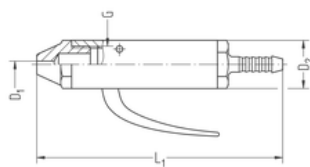
## Blow gun for compressed air



- Without tube spigot
- Material aluminum anodized
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (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



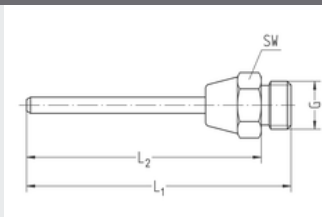
- With tube spigot
- Material aluminum
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)

Part no.	G	Tube 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

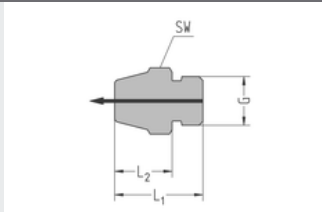
- Material galvanized steel
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



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

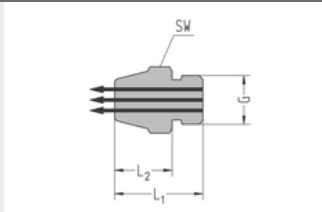
- Standard version
- Material galvanized steel
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



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

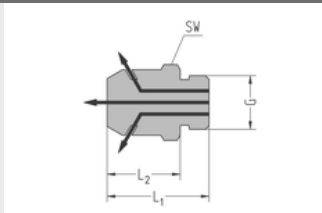
- Muffling of noises
- Material galvanized steel / sintered bronze
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



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 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)



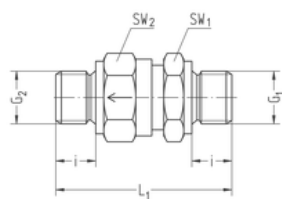
Part no.	G	SW	L1	L2		g/piece
227-0620	G3/8	19	29	22	for blow valve	45
227-5620	M12x1,25	17	27	19	for blow gun	31



Check valves, shut-off valves, silencer



## Non-return valve



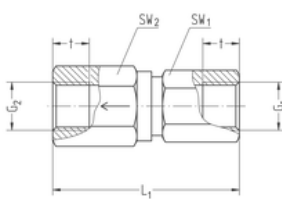
- Input: Whitworth pipe thread exterior
- Output: Whitworth pipe thread exterior
- Sealing NBR (Perbunan)<sup>1)</sup>
- Material brass
- Type: Poppet valve, NBR (Perbunan)<sup>1)</sup> seals on metal
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and outlet

<sup>1)</sup> FPM available at additional price

## Non-return valve



- Input: Whitworth pipe thread interior
- 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 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

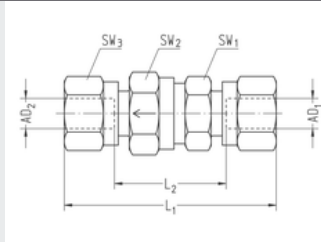
Part no.	G1	G2	Nominal flow-rate NI/min	SW1	SW2	L1	t	NW	g/piece
148-0104	G1/8	G1/8	230	14	14	39	8	4	69
148-0306	G1/4	G1/4	750	17	17	45,5	10	6	80
148-0308	G1/4	G1/4	1050	17	17	51	10	8	164
148-0510	G3/8	G3/8	1650	22	22	59,5	10	10	279
148-0712	G1/2	G1/2	2200	27	27	66	14	12	284
148-0716	G1/2	G1/2	3900	27	27	71	14	16	439
148-0920	G3/4	G3/4	6200	32	32	77,5	16	20	624

Nominal flow-rate measured at 87 psi (6 bar) and 14,5 psi (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 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



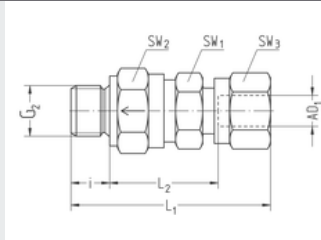
Part no.	AD1	AD2	Nominal flow-rate NI/min	SW1	SW2	SW3	L1	L2	NW	g/piece
146-0604	6	6	230	14	14	14	54	24	4	63
146-0806	8	8	750	17	17	17	55	25	6	87
146-1008	10	10	1050	17	22	19	64	34	8	143
146-1210	12	12	1650	22	27	22	73,5	43,5	10	225
146-1512	15	15	2200	27	27	27	72	41	12	275
146-1816	18	18	3900	27	32	32	77	44	14	
146-2220	22	22	6200	32	41	63	86,5	53,5	18	

Nominal flow-rate measured at 87 psi (6 bar) and 14,5 psi (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 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

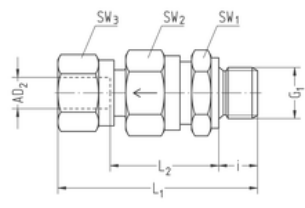


Part no.	AD1	G2	Nominal flow-rate NI/min	SW1	SW2	SW3	L1	L2	i	NW	g/piece
142-0602	6	G1/8	230	14	14	14	42,5	21	6,5	4	49
142-0804	8	G1/4	750	17	17	17	46	22	9	6	70
142-1004	10	G1/4	1050	17	22	19	55	31	9	8	118
142-1206	12	G3/8	1650	22	27	22	63	39	9	10	189
142-1508	15	G1/2	2200	27	27	27	63,5	37	11	12	227
142-1808	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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and outlet

<sup>1)</sup> FPM available at additional price

## Non-return valve



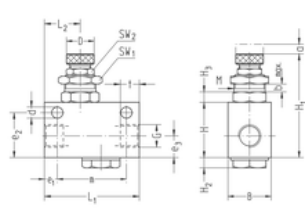
- Input: Whitworth pipe thread exterior
- Output: Screw pipe connection
- Sealing NBR (Perbunan)<sup>1)</sup>
- Material brass
- Type: Poppet valve, NBR (Perbunan)<sup>1)</sup> seals on metal
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and outlet

<sup>1)</sup> FPM available at additional price

## Throttle check valve



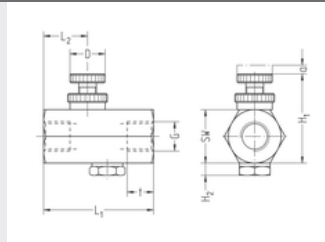
- Whitworth pipe thread
- Sealing NBR (Perbunan)
- Materials: Al black anodized, brass blank
- Type: cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 6 to 145 psi (0.4 to 10 bar)

Part no.	G	Nominal flow-rate NI / min 1 => 2	Nominal flow-rate NI / min 2 => 1	NW	g/piece
110-0102	G1/8	150	150	2,8	51
110-0304	G1/4	450	450	6	165
110-0506	G3/8	480	480	6	173

Part no.	SW1	SW2	L1	L2	t	B	H	H1	H2	H3	m	e1	e2	e3	D	d	a	b	Thread M
110-0102	14	9	32	13,5	7	16	22	47	3	4	24	4	18	8,5	10,5	4,3	5	5	M12x1
110-0304	22	14	55	20,5	11	25	32	59	6	6	40	7,5	26	12,5	16	6,5	6	6	M18x1
110-0506	22	14	55	20,5	11	25	32	59	6	6	40	7,5	26	12,5	16	6,5	6	6	M18x1

### Throttle check valve

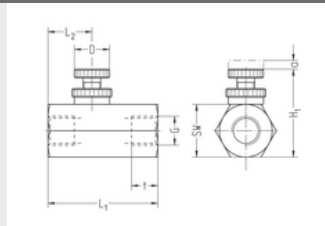
- Whitworth pipe thread, thread M5
- Sealing NBR (Perbunan)
- Materials: Al black anodized, brass blank
- Type: cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 6 to 145 psi (0.4 to 10 bar)



Part no.	G	Nominal flow-rate NI / min 1 => 2	Nominal flow-rate NI / min 2 => 1	NW	SW	L1	L2	t	H1	H2	D	a	g/piece
116-4950	M5	50	50	2	12	23	9	4,5	21,5	3,5	8	2,5	12
116-0102	G1/8	250	250	4	17	35	13,5	8	29	3	12	3,5	32
116-0304	G1/4	380	380	5	24	50	20	12	40	5,5	16	5,5	87
116-0506	G3/8	400	400	5	24	50	20	12	40	5,5	16	5,5	81
116-0708	G1/2	1000	1000	8	32	65	25,5	14	50	6	20	7,5	191

### Throttle valve

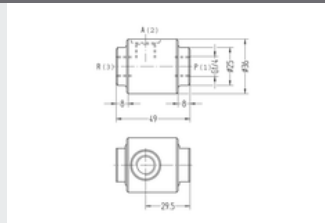
- Whitworth pipe thread, thread M5
- Sealing NBR (Perbunan)
- Materials: Al black anodized, brass blank
- Type: cone-type throttle
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 6 to 145 psi (0.4 to 10 bar)



Part no.	G	Nominal flow-rate NI/min	NW	SW	L1	L2	t	H1	D	a	g/piece
117-4950	M5	50	2	12	23	9	4,5	21,5	8	2,5	11
117-0102	G1/8	250	4	17	35	13,5	8	29	12	3,5	30
117-0304	G1/4	380	5	24	50	20	12	40	16	5,5	80
117-0506	G3/8	400	5	24	50	20	12	40	16	5,5	74
117-0708	G1/2	1000	8	32	65	25,5	14	50	20	7,5	180

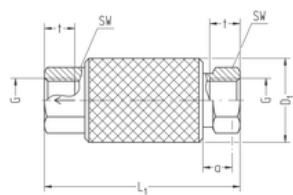
### Quick exhaust valve

- Whitworth pipe thread
- Sealing NBR (Perbunan)
- Material Al black anodized
- Type: Poppet valve
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range 7 to 145 psi (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

## Hand valve 3/2 ways

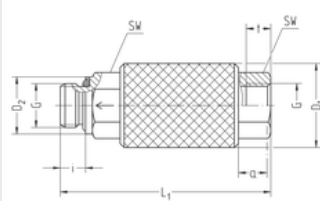


- With sliding sleeve
- Whitworth pipe thread, M5 thread
- Sealing NBR (Perbunan)
- Material brass, Al black anodized
- Type: Gate valve
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 145 psi (-0.95 to 10 bar)

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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust

## Hand valve 3/2 ways

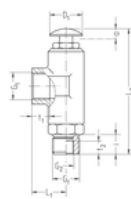


- With sliding sleeve
- Whitworth pipe thread
- Chambered O-ring
- Sealing NBR (Perbunan)
- Material brass, Al black anodized
- Type: Gate valve
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

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 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust

## 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 14 to 140 °F (-10 to +60 °C)
- Working pressure range 0 to 217 psi (0 to 15 bar)

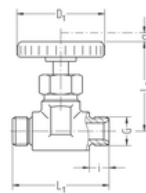
Part no.	G1	G2	i	t1	t2	L1	L2	a	D1	NW	g/piece
310-0506	G3/8	G1/8	12	11	8	21	76,5	3,5	20	6	178

Nominal flow-rate measured at 87 psi (6 bar) and 14,5 psi (1 bar) pressure drop between inlet and exhaust



### Shut-off valve

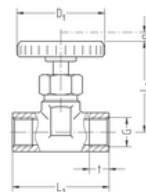
- Whitworth pipe thread external
- Sealing NBR (Perbunan)
- Material brass
- Material handwheel see table
- Type: Poppet valve, metal-to-metal seal
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

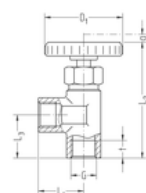
- Whitworth pipe thread interior
- Sealing NBR (Perbunan)
- Material brass
- Material handwheel see table
- Type: Poppet valve, metal-to-metal seal
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



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

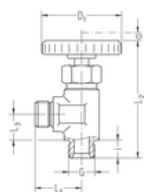
### Corner shut-off valve

- 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 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)



Part no.	G	t	L1	L2	L3	a	D1	NW	Material handwheel	g/piece
260-0202	G1/8		18	48	10	4,5	23	4	brass	59
260-0404	G1/4		23	59	13	6	38	5	plastic	99

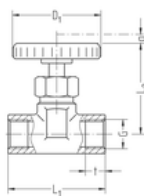
## Corner shut-off valve



- 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 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-0.95 to 15 bar)

Part no.	G	i	L1	L2	L3	a	D1	NW	Material handwheel	g/piece
260-0101	G1/8		18	48	18	4,5	23	4	brass	62
260-0303	G1/4		23	59	22	6	38	5	plastic	101
260-0505	G3/8		27	68,5	26	7	50	7	plastic	170
260-0707	G1/2		30	80	29	7	50	8	plastic	287

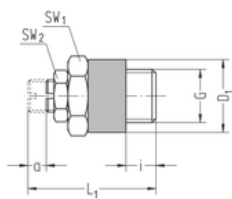
## Shut-off valve with micro adjustment



- Whitworth pipe thread interior
- Sealing NBR (Perbunan)
- Material brass
- Material handwheel plastic
- Type: Poppet valve, metal-to-metal seal
- Allowable medium: Air
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Working pressure range -14 to 217 psi (-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

## Exhaust-side throttle with muffler

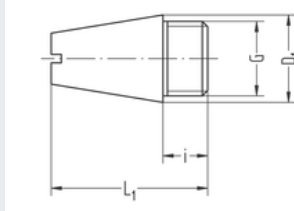


- Whitworth pipe thread, thread M5
- Material see table
- Type: Cone-type throttle
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range 0 to 217 psi (0 to 15 bar)
- Packaging unit 10 pieces

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

## Silencer

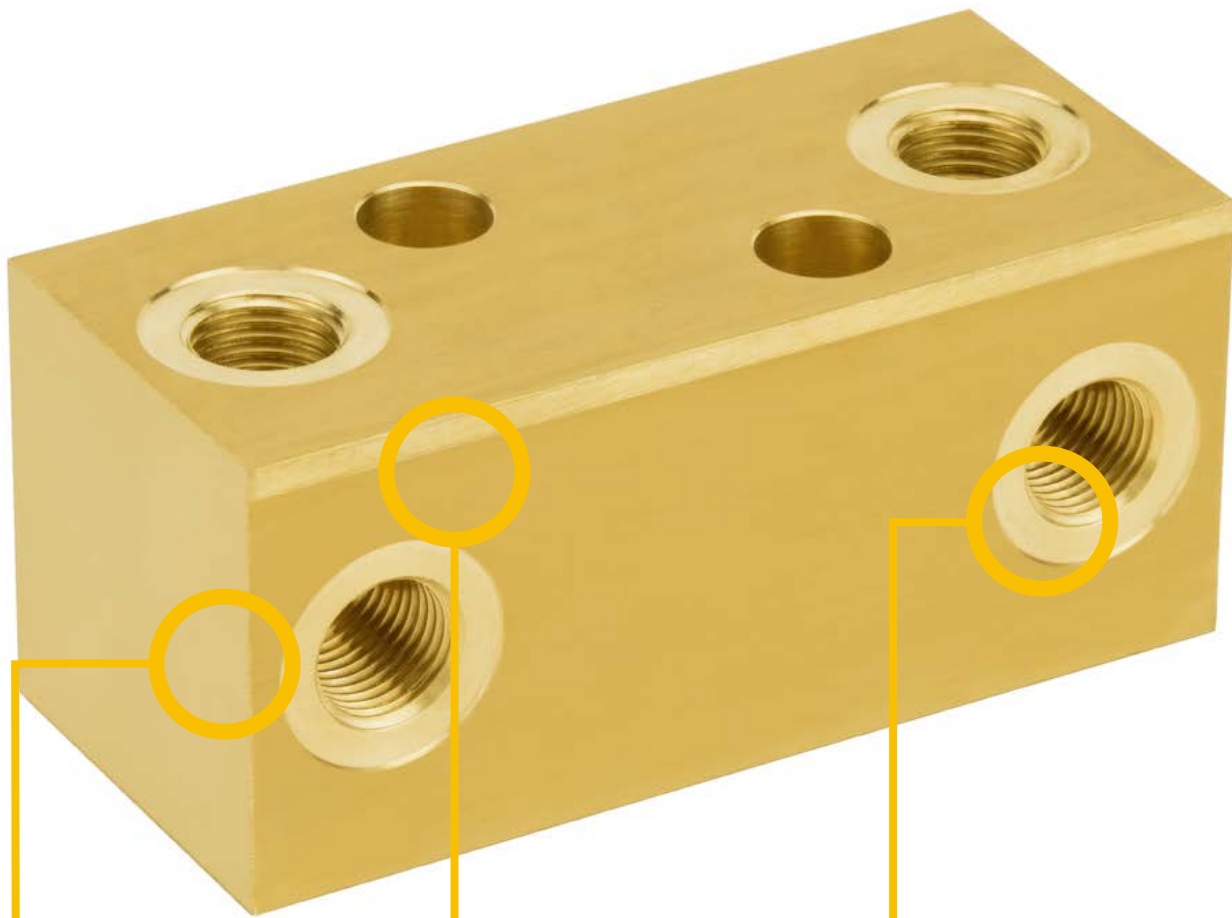
- Whitworth pipe thread, thread M5
- Material sintered bronze
- Temperature range -4 to 176 °F (-20 to +80 °C)
- Working pressure range 0 to 145 psi (0 to 10 bar)
- Packaging unit 10 pieces



Part no.	G	Nominal flow-rate NI/min	i	L1	D1	g/piece
165-0200	G1/8	500	5,5	21	11	7
165-0400	G1/4	1050	8,5	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	124
165-1200 <sup>2)</sup>	G1	8200	15	75	35	216
165-5000	M5	300	4	21	8,6	5



## Manifold

**Wide range  
of material**

- Manifolds and connectors made of different materials such as brass, stainless steel, aluminum

**Assembled  
manifolds**

- Maximum cost savings by purchasing equipped manifolds

**Lots of possible  
combinations**

- Non equipped manifolds can be combined with almost all of the Eisele connectors
- Manifolds are suitable for connectors with chambered O-ring

1900

On request, manifolds are available in alternative materials or in combination with alternative connectors.

## Eisele Manifolds

Eisele manifolds complement the various connection systems in the construction of pneumatic controls.

### Service Conditions

- Working pressure: -14 to 232 psi (-0,95 to 16 bar)
- Allowable Medium: air
- Temperature range: 14 to 158 °F (-10 to +70 °C)  
(The values indicated are using PVC sealing rings)

Depending on the material and the connectors, a working pressure up to 100 bar and a temperature range of -4 to 248 °F (-20 to +120 °C) is possible. Other media are possible, if the materials are stable.

Torque:

- Using cylindrical threads in combination with copper sealing rings (not supplied by Eisele) and not exceeding the maximum recommended tightening torque for cylindrical thread (see table)
- In the case of conical threads using PTFE (Teflon) sealing tape or glue and not exceeding the maximum recommended tightening torque for tapered threads (see table)

For information about the various connection threads, we refer to page 7 & 8.

**Manifold** starting on page 264

Made of aluminum page 264

Made of brass page 268

Made of stainless steel page 270

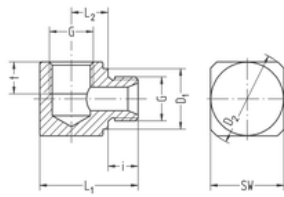
**Manifold, equipped** starting on page 271

Straight manifold page 271

Multiple Y connector page 272

Other manifolds page 272

## Elbow screw-in connector



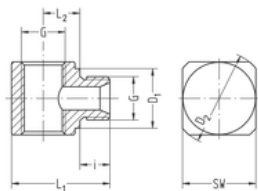
- Whitworth pipe thread and metric thread
- Material Al black anodized / brass blank <sup>1)</sup>
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

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



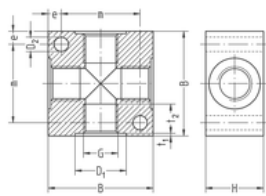
- Whitworth pipe thread and thread M5
- Material Al black anodized / brass <sup>1)</sup>
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

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

## Manifold block



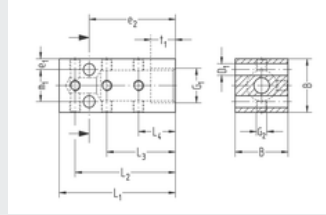
- Whitworth pipe thread and metric thread
- Material Al black anodized
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

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



## Manifold

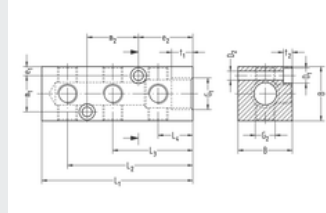
- With 9 exits
- Material Al black anodized
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



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

## Manifold

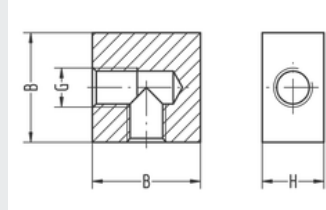
- With 9 exits
- Material Al black anodized
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



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 -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

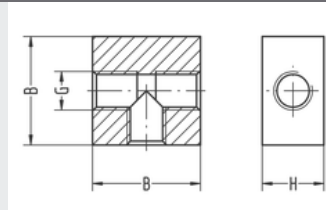


Part no.	G	B	H	g/piece
100-49	M5	14	8	3

1900

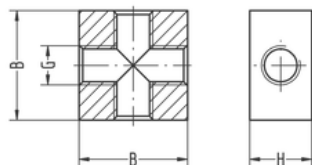
## T-piece

- Material Al black anodized
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



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

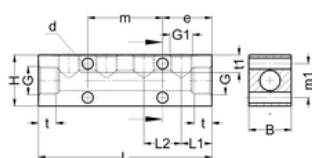
## 4-way piece



- Material Al black anodized
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

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

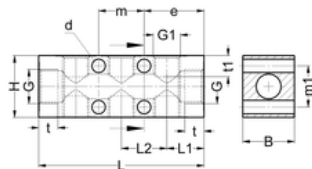
## Manifold, 2 inlets, 1-side



- Whitworth pipe thread, metric thread
- With 3/4/6 outlets
- Material Al anodized
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure -14 to 435 psi (-0,95 to 30 bar)

Part no.	G	G1	B	H	L	L1	L2	d	t	t1	e	m	m1	g/piece
1910-040149	G1/8	4x M5	16	16	62	13	12	2x 4,3	8,5	5	20	22	-	36
1910-030301	G1/4	3x G1/8	20	25	76	16	22	4x 6,5	10	8,5	27	22	17	78
1910-100301	G1/4	10x G1/8	20	25	230	16	22	4x 6,5	10	8,5	27	176	17	255
1910-030503	G3/8	3x G1/4	25	30	80	18	22	4x 6,5	10	10	29	22	20	119
1910-040503	G3/8	4x G1/4	25	30	102	18	22	4x 6,5	10	10	29	44	20	156
1910-060503	G3/8	6x G1/4	25	30	146	18	22	4x 6,5	10	10	51	44	20	227
1910-030705	G1/2	3x G3/8	35	35	104	26	26	4x 6,5	12	10	39	26	25	264
1910-040705	G1/2	4x G3/8	35	35	130	26	26	4x 6,5	12	10	39	52	25	335
1910-060705	G1/2	6x G3/8	35	35	182	26	26	4x 6,5	12	10	65	52	25	477

## Manifold, 2 inlets, 2-sides

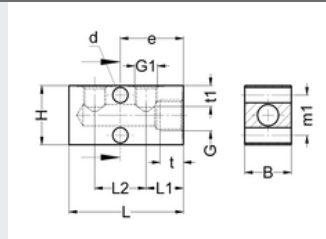


- Whitworth pipe thread, metric thread
- With 4/6/8/12 outlets
- Material Al anodized
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure -14 to 435 psi (-0,95 to 30 bar)

Part no.	G	G1	B	H	L	L1	L2	d	t	t1	e	m	m1	g/piece
1920-060301	G1/4	6x G1/8	20	25	76	16	22	4x 6,5	10	8,5	27	22	17	73
1920-040503	G3/8	4x G1/4	25	30	58	18	22	2x 6,5	10	10	29	/	20	82
1920-060503	G3/8	6x G1/4	25	30	80	18	22	4x 6,5	10	10	29	22	20	110
1920-120503	G3/8	12x G1/4	25	30	146	18	22	4x 6,5	10	10	51	44	20	208
1920-060705	G1/2	6x G3/8	35	35	104	26	26	4x 6,5	12	10	39	26	25	248
1920-080705	G1/2	8x G3/8	35	35	130	26	26	4x 6,5	12	10	39	52	25	313
1920-120705	G1/2	12x G3/8	35	35	182	26	26	4x 6,5	12	10	65	52	25	442

## Manifold, 1 inlet, 1-side

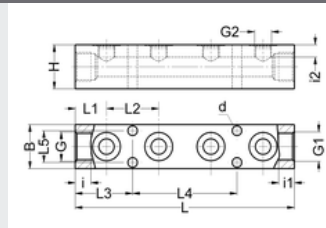
- Whitworth pipe thread
- Material Al anodized
- Temperature range -4 to 212°F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



Part no.	G	G1	B	H	L	L1	L2	d	t	t1	e	m	m1	g/piece
1930-020301	G1/4	2x G1/8	20	25	49	16	22	2x 6,5	10	10	27	-	17	52
1930-060705	G1/2	6x G3/8	35	35	171	26	26	4x 6,5	12	12	54	52	54	434

## Manifold

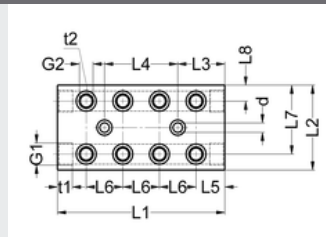
- Whitworth pipe thread
- Material Al anodized
- Temperature range -4 to 212°F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



Part no.	G	G1	G2	i	i1	i2	L	L1	L2	L3	L4	L5	d	B	H	NW	g/piece
SA1697-0405011	G3/8	G3/8	4x G1/8	9	9	8,5	126	18	30	33	60	18	5,5	25	25	6,5	170

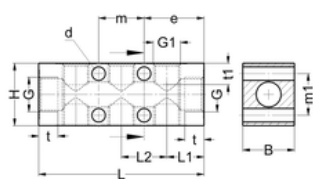
## Manifold block

- Whitworth pipe thread
- Material Al anodized
- Temperature range -4 to 212°F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



Part no.	G1	G2	L1	L2	L3	L4	L5	L6	L7	L8	d	t1	t2	g/piece
SA832/1	G1/2	G1/4	160	80	45	70	27,5	35	15	65	9	14,2	12,5	1094

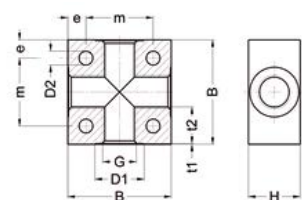
## Manifold, 2 inlets, 2-sides



- Whitworth pipe thread
- Material brass blank
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

Part no.	G	G1	B	H	L	L1	L2	d	t	t1	e	m	m1	g/piece
1920-060705MS	G1/2	6x G3/8	35	35	104	26	26	4x 6,5	12	10	39	26	25	248

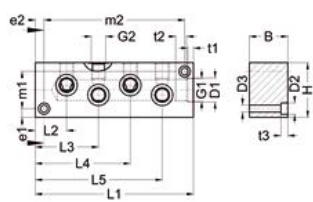
## Manifold block



- According to VW standard 39D1480/39V16652
- 4x Whitworth pipe thread
- Material brass blank
- Temperature range -4 to 212°F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

Part no.	G	D1	D2	e	H	m	B	t1	t2	g/piece
SA1302-03	G1/4	19,5	5,3	7	20	26	40	0,3	14	451
SA1302-07	G1/2	27,5	5,3	8	32	34	50	0,3	17	451

## Manifold block

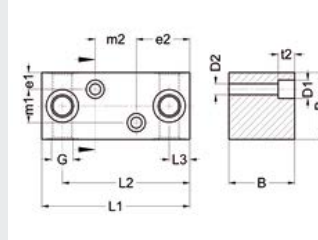


- According to VW standard 39V16651
- Outlet: 8 x Whitworth pipe thread G1/4
- Input: Whitworth pipe thread G1/2
- Material brass blank
- Temperature range -4 to 212°F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

Part no.	G1	G2	D1	D2	e1	e2	L1	L2	L3	L4	L5	H	m1	m2	B	t1	t2	t3	g/piece
SA1303-0307	G1/2	G1/4	22	10,4	8	8	144	28,5	57,5	86,5	115,5	50	34	128	30	5	15	6,2	1714

## Manifold block

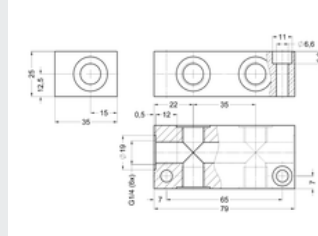
- According to VW standard 39D1392
- Outlet: 4x Whitworth pipe thread
- Input: 2 x Whitworth pipe thread
- Material brass blank
- Temperature range -4 to 212°F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



Part no.	G	D1	D2	e1	e2	m1	m2	L1	L2	L3	B	t2	g/piece
SA1304-03	G1/4	11	6,6	10	32,5	20	25	90	77,5	12,5	40	10	1090
SA1304-05	G3/8	14	9	10	37,5	25	25	100	87,5	12,5	45	10	1470
SA1304-07	G1/2	14	9	10	42,5	30	25	110	92,5	17,5	50	10	1941

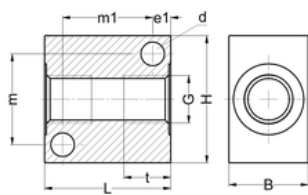
## Manifold block 6-connections

- According to VW standard
- 6 x Whitworth pipe thread G1/4
- Material brass
- Temperature range -4 to 212°F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



Part no.	g/piece
SA829	433

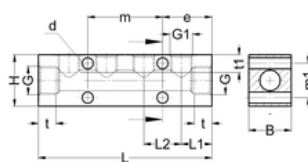
## Manifold block



- Whitworth pipe thread
- Material 1.4305
- Temperature range -4 to 248°F (-20 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

Part no.	G	B	H	L	d	t	e1	m	m1	g/piece
SA1675-03	G1/4	22	35	35	2x 6,5	12,5	5	25	25	167

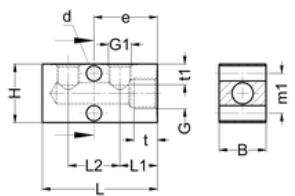
## Manifold, 2 inlets, 1-side



- Whitworth pipe thread, metric thread
- With 3/4/6 outlets
- Material 1.4301/ 1.4307
- Temperature range -4 to 248 °F (-20 to+120 °C)
- Working pressure -14 to 435 psi (-0,95 to 30 bar)

Part no.	G	G1	B	H	L	L1	L2	d	t	t1	e	m	m1	g/piece
1917-040149	G1/8	4x M5	16	16	62	13	12	2x 4,3	8,5	5	20	22	-	101
1917-030301	G1/4	3x G1/8	20	25	76	16	22	4x 6,5	10	8,5	27	22	17	218
1917-030503	G3/8	3x G1/4	25	30	80	18	22	4x 6,5	10	10	29	22	20	333
1917-040503	G3/8	4x G1/4	25	30	102	18	22	4x 6,5	10	10	29	44	20	437
1917-060503	G3/8	6x G1/4	25	30	146	18	22	4x 6,5	10	10	51	44	20	636
1917-030705	G1/2	3x G3/8	35	35	104	26	26	4x 6,5	12	10	39	26	25	739
1917-040705	G1/2	4x G3/8	35	35	130	26	26	4x 6,5	12	10	39	52	25	938
1917-060705	G1/2	6x G3/8	35	35	182	26	26	4x 6,5	12	10	65	52	25	1336

## Manifold, 1 inlet, 1-side

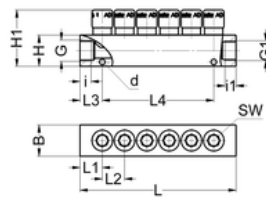


- Whitworth pipe thread
- Material AISI 304/304L (1.4301/1.4307)
- Temperature range -4 to 248°F (-20 to +120 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

Part no.	G	G1	B	H	L	L1	L2	d	t	t1	e	m1	g/piece
1937-020301	G1/4	2x G1/8	20	25	49	16	22	2x 6,5	10	10	27	17	52

### Manifold, equipped

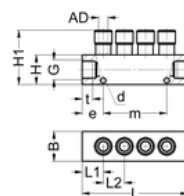
- Whitworth pipe thread
- Sealing NBR
- Equipped with connectors
- Manifold Al anodized
- Connectors brass/ brass nickel-plated
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	G1	for tube	SW	i	i1	L	L1	L2	L3	L4	d	B	H	H1	g/piece
SA1615-040506	G3/8	G3/8	4x OD8	6	9	9	90	18	18	18	54	4,5	25	25	42,5	160
SA1615-040508	G3/8	G3/8	4x OD10	8	9	9	90	18	18	18	54	4,5	25	25	44,5	172
SA1615-060506	G3/8	G3/8	6x OD8	6	9	9	126	18	18	18	90	4,5	25	25	42,5	230
SA1615-060508	G3/8	G3/8	6x OD10	8	9	9	126	18	18	18	90	4,5	25	25	44,5	249

### Manifold equipped, connectors with 2 seals

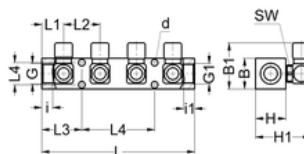
- Whitworth pipe thread
- Sealing FPM
- Equipped with connectors (2 seal version)
- Manifold Al anodized
- Connectors brass/ brass nickel-plated
- Temperature range -20 to +120 °C
- Working pressure range -0.95 to 24 bar



Part no.	G	for tube	L	L1	L2	d	B	H	H1	t	e	m	g/piece
SA1692-040506	G3/8	4x OD8	90	18	18	2x 4,5	25	25	45	9	18	54	171

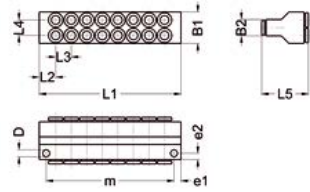
### Manifold, equipped, 90°

- Whitworth pipe thread
- Sealing NBR
- Equipped with connectors
- Manifold Al anodized
- Connectors brass/ brass nickel-plated
- Temperature range -10 to +70 °C
- Working pressure range -0.95 to 16 bar



Part no.	G	G1	for tube	SW	i	i1	L	L1	L2	L3	L4	d	B	B1	H	H1	NW	g/piece
SA1697-040506	G3/8	G3/8	4x OD8	14	9	9	126	18	30	33	60	5,5	25	37,5	25	45,2	6,5	323

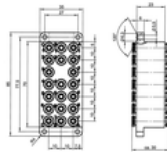
## Multiple-Y-connector air



- Plug connectors Program 15
- FPM seals
- Material brass nickel-plated
- Temperature range -4 to 248 °F (-20 to +120 °C)
- Working pressure range -14 to 232 psi (-0.95 to 16 bar)

Part no.	Design	for tube	L1	L2	L3	L4	L5	D	m	e1	e2	B1	B2	NW	g/piece
VT1900-0802	8-fold	OD4	89	13	9	9	32	5,5	78	5,5	5	20	10	2,5	325
VT1900-0804	8-fold	OD6	112	13	12,3	12,3	37	5,5	101	5,5	5	25	13	4	588
VT1900-0806	8-fold	OD8	135	15	15	15	47	5,5	124	5,5	5	30	18	6	1077
VT1900-1402	14-fold	OD4	143	13	9	9	32	5,5	132	5,5	5	20	10	2,5	523
VT1900-1404	14-fold	OD6	186	13,1	12,3	12,3	37	5,5	175	5,5	5	25	13	4	974
VT1900-1406	14-fold	OD8	225	15	15	15	47	5,5	214	5,5	5	30	18	6	1784
VT1900-2002	20-fold	OD4	197	13	9	9	32	5,5	186	5,5	5	20	10	2,5	721
VT1900-2004	20-fold	OD6	259,7	13	12,3	12,3	37	5,5	248,7	5,5	5	25	13	4	1359
VT1900-2006	20-fold	OD8	315	15	15	15	47	5,5	304	5,5	5	30	18	6	2491

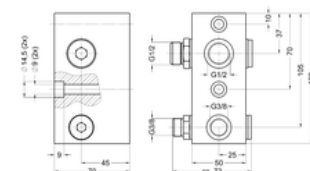
## Manifold



- 40 connections for outer diameter of the tube 4
- Material: Al natural anodized, brass nickel plated
- Sealings NBR (Perbunan)
- Temperature range: -4 to 176 °F (-20 to +80 °C)
- Working pressure: -14 to 232 psi (-0.95 to 16 bar)
- Nominal width 3
- Weight: 185 g

Part no.	g/piece
SA1468	

## Manifold block 6-connections



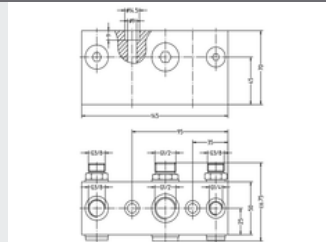
- According to VW standard
- Whitworth pipe thread
- Manifold block Al blank
- Screw-in parts brass blank
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)

Part no.	g/piece
SA1031	1060



### Manifold block 9-connections

- According to VW standard
- Whitworth pipe thread
- Manifold block Al blank
- Screw-in parts brass blank
- Temperature range -4 to 212 °F (-20 to +100 °C)
- Working pressure range -14 to 435 psi (-0.95 to 30 bar)



**Part no.**

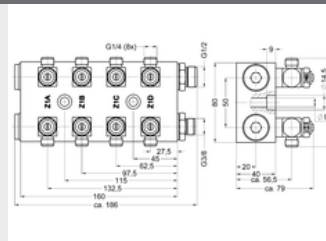
**g/piece**

SA834

1485

### Manifold

- According to VW standard
- Whitworth pipe thread
- Equipped with 8 inlet-side throttles
- Manifold block Al blank
- Screw-in parts brass nickel-plated or brass blank
- Temperature range -10 to +70°C
- Working pressure range -0.95 to 16 bar



**Part no.**

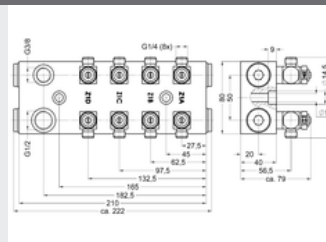
**g/piece**

SA832

1985

### Manifold

- According to VW standard 39D1497
- Whitworth pipe thread
- Equipped with 8 inlet-side throttles
- 8 swivel unions SA831 enclosed
- Manifold block Al blank
- Screw-in parts brass nickel-plated or brass blank
- Temperature range -10 to +70°C
- Working pressure range -0.95 to 16 bar



**Part no.**

**g/piece**

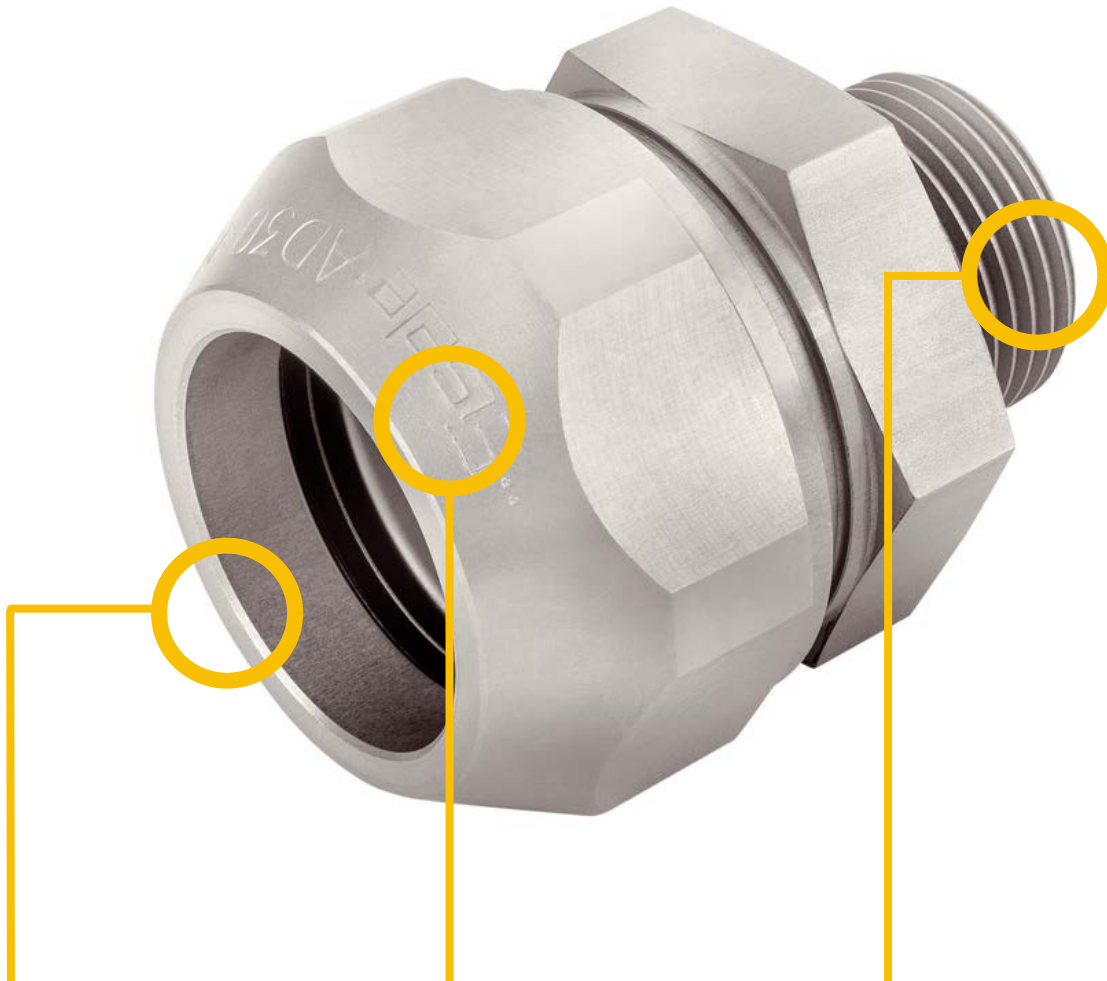
SA836

2320

1900



## ALU PRO 30



#### Modern connection system

- Time-proven, robust connection technology
- No machining of pipe ends is necessary
- Innovative seal system

#### Diverse areas of application

- Suitable for applications with strong vibrations
- Compressed air supply in systems

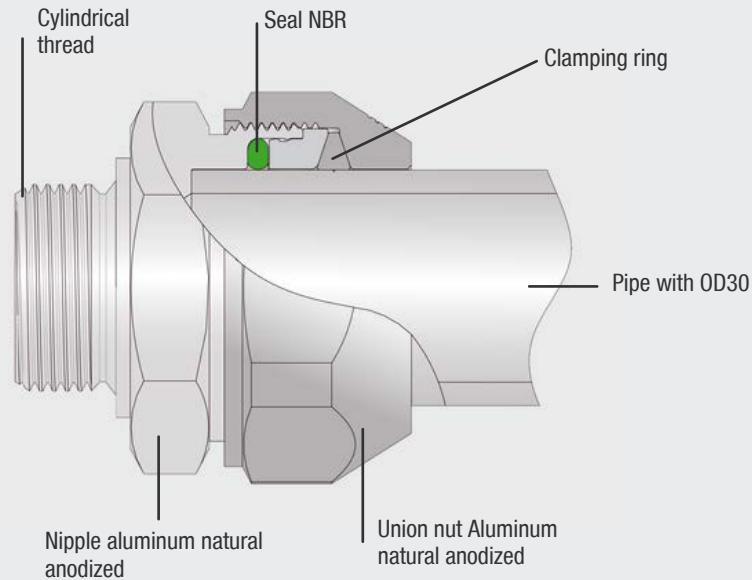
#### Retrofitting? No problem at all!

- Manifolds can easily be installed from the side – without moving or disconnecting the pipes.

2000

The standard program already contains an extensive range of types.

## Functional principle



## Range of application

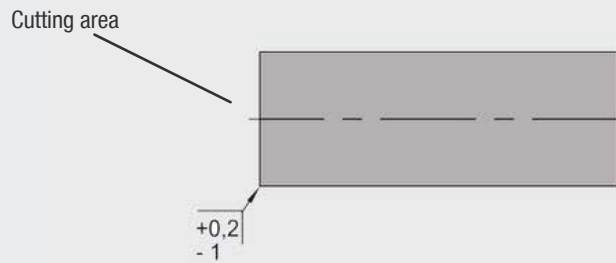
- Machine and plant engineering  
Compressed air supply for all applications: from a simple work table to a complex automated solution
- Installation technology  
Supply line from compressed air generator to the consumption point

## Service conditions

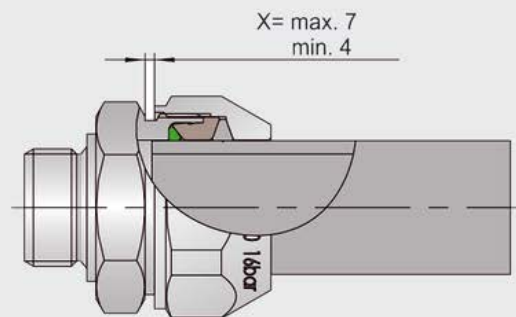
- Temperature range: -4 to 140 °F (-20 to +60 °C)
- Working pressure range: -14 to 232 psi (-0.95 to 16 bar)
- For aluminum pipe: Ø30 mm
- Permissible medium: compressed air,  
other media on request
- No machining of pipe ends is necessary
- Fast and easy installation
- Can easily be retrofitted
- Robust metal construction
- Innovative seal system
- High-quality design matches aluminum construction

## Handling

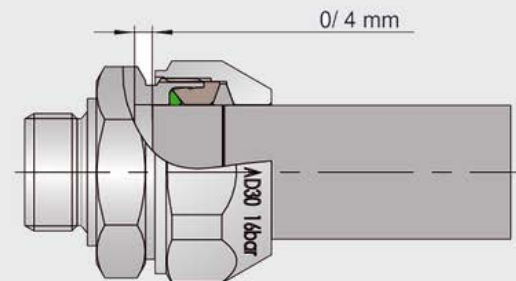
1. Length the tube at a right angle, no loose burrs allowed.



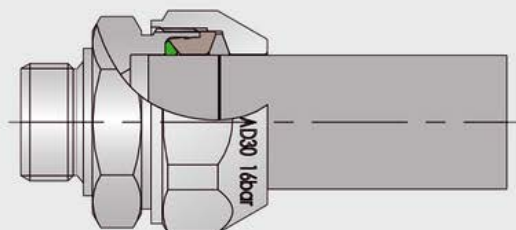
2. Unscrew the union nut until the specified value is reached.



3. Push the pipe inside until it stops. Permissible deviations as specified.



4. Tighten the union nut with 60-65 Nm.



We can provide the illustrated installation instruction MV2000-1 on your request.

## Screw joints

starting on page 279



Straight male stud couplings

page 279



Double screw joints

page 279



Elbow screw joints

page 279



T-screw joints

page 280

Manifold

page 280

Closure piece

page 281

## Screw joints for retrofitting

starting on page 283



Straight male stud couplings

page 283

Manifold

page 283

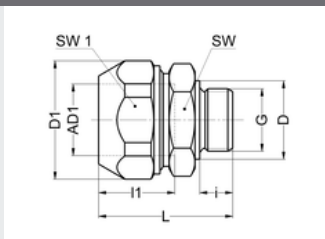


T-Verteiler

page 283

### Straight male stud coupling

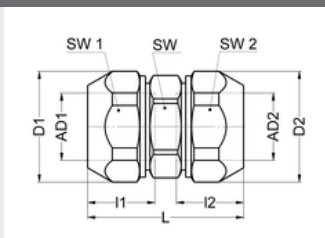
- For pipe with outside- $\varnothing$  30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm



Part no.	G	AD1	SW	SW1	i	L	I1	D	D1	NW	g/piece
2028-1030	G3/4	30	41	46	14	57	32	33	50	20	117
2028-1230	G1	30	41	46	16	58	32	39	50	25	119

### Double screw joint

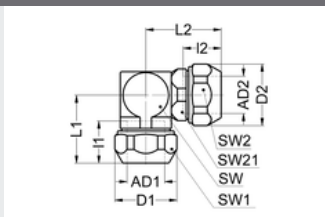
- For pipe with outside- $\varnothing$  30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm



Part no.	AD1	AD2	SW	SW1	SW2	L	I1	I2	D1	D2	NW	g/piece
2033-3030	30	30	41	46	46	73	32	32	50	50	26	181

### Elbow connector

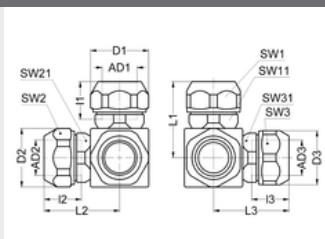
- For pipe with outside- $\varnothing$  30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm



Part no.	AD1	AD2	SW	SW1	SW2	SW21	L1	L2	I1	I2	D1	D2	NW	g/piece
2077-303000	30	30	46	46	36	46	62	56	32	32	50	50	26	285

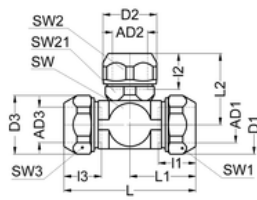
### Elbow piece

- For pipe with outside- $\varnothing$  30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm



Part no.	AD1	AD2	AD3	SW1	SW11	SW2	SW21	SW3	SW31	L1	L2	L3	I1	I2	I3	D1	D2	D3	NW	g/piece
2071-303030	30	30	30	46	36	46	36	46	36	66	66	66	32	32	32	50	50	50	26	504

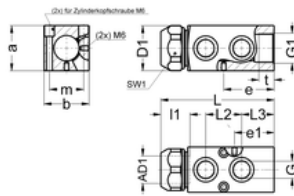
## T-connector



- For pipe with outside-Ø 30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm

Part no.	AD1	AD2	AD3	SW	SW1	SW2	SW21	SW3	L	L1	L2	I1	I2	I3	D1	D2	D3	NW	g/piece
2078-303030	30	30	32	41	46	46	36	46	113	57	62	32	32	32	50	50	50	26	371

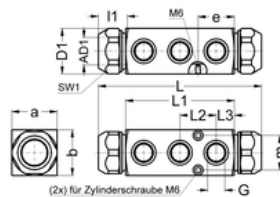
## Manifold 2x2-fold



- For pipe with outside-Ø 30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm

Part no.	G	G1	AD1	SW1	L	L2	L3	I1	D1	a	b	e	e1	m	m1	t	NW	g/piece
2004-220730	4x G1/2	G1	30	46	125	40	36	32	50	50	50	56	44	38		17	19	518

## Manifold 2x3-fold



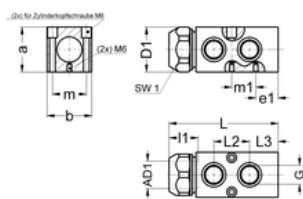
- For pipe with outside-Ø 30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm

Part no.	G	AD1	SW1	L	L1	L2	L3	I1	D1	a	b	e	m	NW	g/piece
2002-120730	2x G1/2	30	46	139	80	40	20	32	50	50	50	40	38	19	520
2002-130730	3x G1/2	30	46	179	120	40	20	32	50	50	50	40	38	19	714
2002-220730	4x G1/2	30	46	139	80	40	20	32	50	50	50	40	38	19	501
2002-230730	6x G1/2	30	46	179	120	40	20	32	50	50	50	40	38	19	685



### Closure manifold 2x2-fold

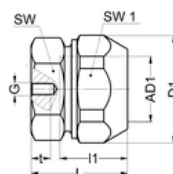
- For pipe with outside-Ø 30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm



Part no.	G	AD1	SW1	L	L2	L3	I1	D1	a	b	e	e1	m	m1	NW	g/piece
2003-220730	4x G1/2	30	46	121	40	32	32	50	50	50	500	25	38	25	19	500

### Closure piece

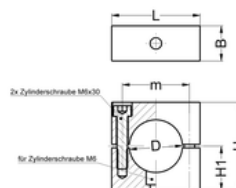
- For pipe with outside-Ø 30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm



Part no.	G	AD1	SW	SW1	t	L	I1	D1	g/piece
2020-4530	M6	30	41	46	9	45	32	50	134
2020-5130	M8	30	41	46	11	47	32	50	143

### Clamp

- Clamp for pipe with outside-Ø 30
- Mounting with M6 screw possible
- Clamp can be screwed to the distribution 2002 -, 2003 -, 2004 - and 2012 - ...
- Material Al anodized
- Galvanized steel screws

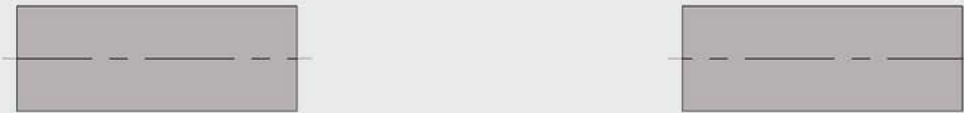


Part no.	D	L	B	H	H1	m	g/piece
2090-3025	30	50	20	50	25		86
2090-3035	30	50	20	60	35		111

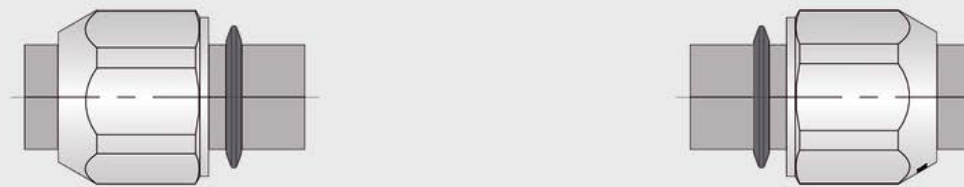
## Handling for retrofitting

Even for existing pipe-systems with a  $\varnothing$  30 pipe Eisele offers a solution. By cutting out a defined piece of pipe, new connections can be installed by using the system PRO ALU 30.

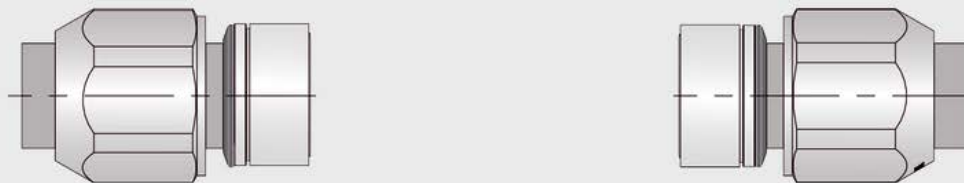
1. Cut the pipe according to manifold length at right angles (see separate drawing).



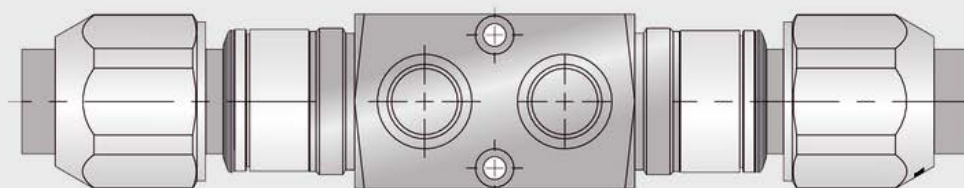
2. Push the Union nut + clamping ring on both sides of the pipe.



3. Put the flange completely on both sides of pipe.



4. Insert manifold (take care of the seal rings).



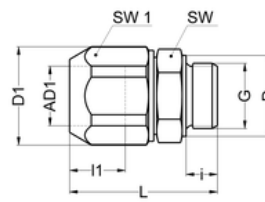
5. Fix the manifold - tighten the nut with 60-65 Nm.



We can provide the illustrated installation instruction MV2000-2 on your request.

### Screw-in connector

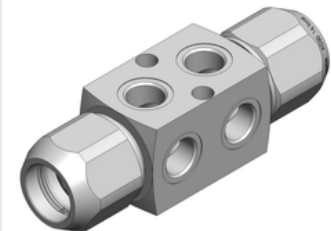
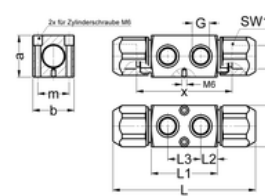
- For pipe with outside- $\varnothing$  30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm
- Mounting instructions according to drawing - MV2000-2



Part no.	G	AD1	SW	SW1	i	L	I1	D	D1	NW	g/piece
2025-1230	G1	30	41	46	16	77	32	50	41	25	181

### Manifold 2x2-fold, for lateral assembly

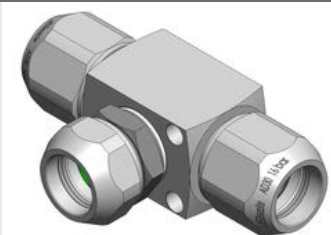
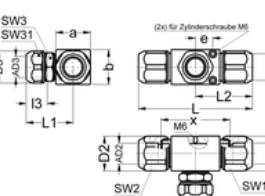
- For pipe with outside- $\varnothing$  30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm
- Mounting instructions according to drawing - MV2000-2



Part no.	G	AD1	x	SW1	L	L1	L2	L3	D1	a	b	m	NW	g/piece
2012-220730	4x G1/2	30	106	46	173	80	20	40	50	50	50	38	19	600

### Manifold for lateral assembly

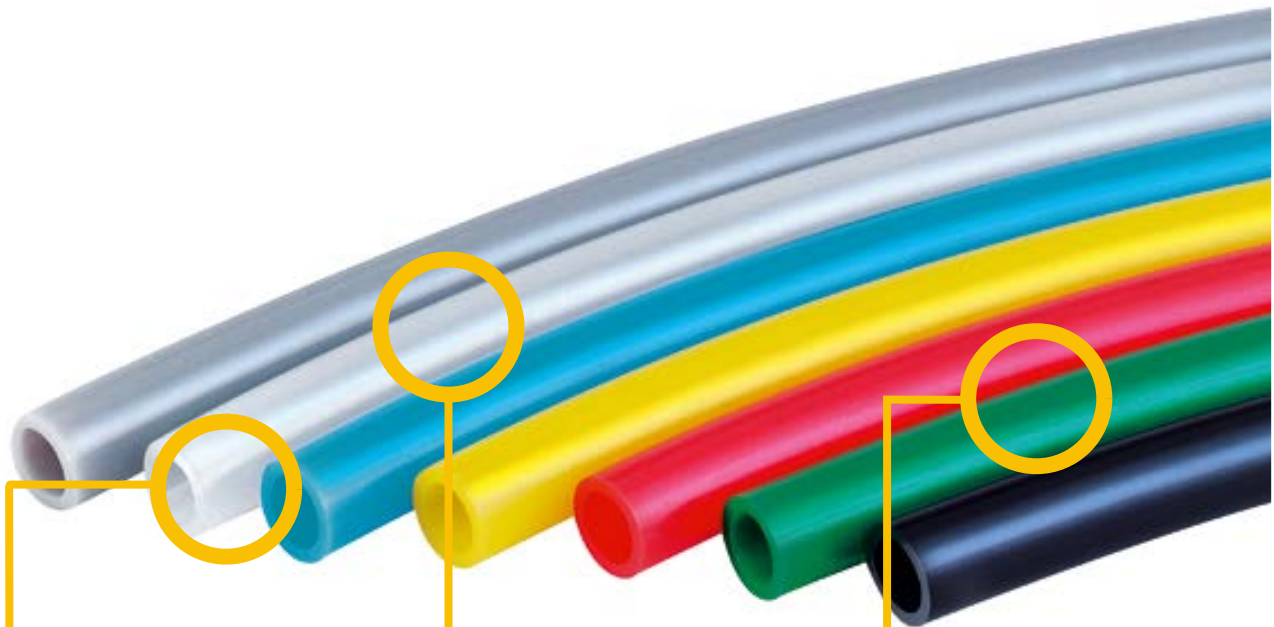
- For pipe with outside- $\varnothing$  30
- Whitworth pipe thread
- Sealing NBR
- Material Al anodized, AISI 420 (1.4021)
- Temperature range -4 to 140 °F (-20 to +60 °C)
- Working pressure -14 to 232 psi (-0,95 to 16 bar)
- Torque min. 60 Nm to max. 65 Nm
- Mounting instructions according to drawing - MV2000-2



Part no.	AD1	AD2	AD3	x	SW1	SW2	SW3	L	L1	L2	I3	I3	D1	D2	D3	D3	a	b	e	m	NW	g/piece
2017-303030	30	30	30	100	46	46	46	163	94	81,5	32	32	50	50	50	50	50	50	25	38	25	710



## Plastic tubes

**Versatile  
range of tubes**

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

**Color and code  
versions possible**

- Tubes can be delivered in many common colors, e.g. to indicate different fluids
- Labeling of tubes for coding is also possible

**Package solutions of  
connectors and tubes**

- Secure combinations of EISELE connectors and their matching tubes
- Very suitable for applications due to limited tolerances and a high demand for no leakage

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

## Tube types

Kind of calibration:

- Tubes for push-in fittings - external calibration, OD produced with narrow tolerances. Typical structure: single-layered, not reinforced with fabric lining.
- Tubes for spigots – internal calibration. Partly reinforced.

Kind of flexibility:

- Furthermore, a distinction is made between tubes which are resistant and nonresistant to buckling. Polyurethane tubes (e.g. PU, HYDRO Eisele, Eisele ProWeld) or PVC tubes are permanently flexible and relatively impervious to buckling! All other tubes have a clearly visible deformation (e.g. whitening) after buckling; replacement should be done.

## Resistance

Type of tube	Damage by weak acids/bases or water	Stress crack by polar solvents	Microbial/fungal damage	Physical radiation damage
Polyurethane (PU)	-	0	-	+*
Eisele Hydro/ProWeld	+	0	++	+
Polyamide (PA)	0/+	+	+	0
PFA	++	++	++	(UV) +

++ Excluded damage  
 + Damage rarely  
 0 Damage occasionally  
 - Damage often

\*PU bilged stronger than Eisele Hydro

## Temperatures

Temperature - Material



302 °F (150°C) - PFA, PTFE (Teflon) at zero pressure up to 500 °F (260°C)  
 248 °F (120°C) - FEP  
 212 °F (100°C) - PA  
 194 °F (90°C) - PU-Ether-based (Eisele ProWeld)  
 158 °F (70°C) - PU-Ester-based (PU), NBR  
 140 °F (60°C) - PE, PVC, PU-Ether-based (Eisele Hydro)  
 104 °F (40°C) - PE

## Working pressure

The operating pressure is obtained by dividing the burst pressure by a safety factor. Safety factors are 2 to 4 (in pneumatics: typically 2.5 to 3)

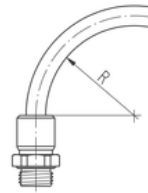
Example:

- 435 psi (30 bar) burst pressure at 20 ° C results in an operating pressure of
- 145 psi (10 bar) with a safety factor of 3,
- 217 psi (15 bar) with a safety factor of 2

Eisele usually provides the burst pressure. Every customer can choose their own safety factor.

## Plastic tube 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 14 to 104°F (-10 to +40 °C)
- Free of plasticizer and halogen

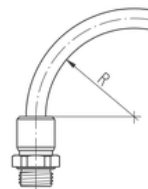


Part no.*	Outside Ø / Inside Ø	Maximum allowable working pressure at 73°F (23°C) (reference value)	min. allowable bend radius	g/m
99004-0402	4 / 2	290 psi (20 bar)	20	9
99004-4303	4,3 / 3	188 psi (13 bar)	20	7
99004-0503	5 / 3	217 psi (15 bar)	25	12
99004-0604	6 / 4	188 psi (13 bar)	30	15
99004-0806	8 / 6	116 psi (8 bar)	40	20
99004-1008	10 / 8	87 psi (6 bar)	60	26
99004-1209	12 / 9	130 psi (9 bar)	60	46
99004-1210	12 / 10	72 psi (5 bar)	85	32
99004-1411	14 / 11	116 psi (8 bar)	90	54
99004-1512	15 / 12	101 psi (7 bar)	90	59
99004-1613	16 / 13	87 psi (6 bar)	90	63

\* Please add the desired tube color directly behind the part no.: 99XXX-XXXXCOLOUR – e.g. 99004-0402RED

## Plastic tube PA

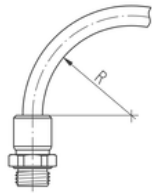
- Made of polyamide (PA)
- Color black (red, blue, green, yellow, natural, brown, orange and grey: specify when placing order; subject to extra charge)
- External calibration; for use with Eisele plug connectors
- Temperature range -76 to 212 °F (-60 to +100 °C)
- Operating pressure = burst pressure: safety (common factor 2 to 3)
- Suitable for vacuum
- Free of PWIS and halogen
- Suitable for fuel
- For automotive industry according to DIN 73378
- Drag chain compliant



Artikel-Nr.*	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99005-0402	4 / 2	2103 psi (145 bar)	1189 psi (82 bar)	20	10
99005-4303	4,3 / 3	1102 psi (76 bar)	623 psi (43 bar)	20	8
99005-0503	5 / 3	1624 psi (112 bar)	928 psi (64 bar)	25	13
99005-0604	6 / 4	1290 psi (89 bar)	739 psi (51 bar)	30	16
99005-0805	8 / 5	1348 psi (93 bar)		40	32
99005-0806	8 / 6	1348 psi (93 bar)	521 psi (36 bar)	40	23
99005-0906	9 / 6	1290 psi (89 bar)	739 psi (51 bar)	45	36
99005-1008	10 / 8	710 psi (49 bar)	406 psi (28 bar)	60	29
99005-1209	12 / 9	913 psi (63 bar)	521 psi (36 bar)	60	51
99005-1210	12 / 10	565 psi (39 bar)	319 psi (22 bar)	85	36
99005-1411	14 / 11	768 psi (53 bar)	435 psi (30 bar)	80	61
99005-1512	15 / 12	710 psi (49 bar)	406 psi (28 bar)	90	66
99005-1613	16 / 13	667 psi (46 bar)	377 psi (26 bar)	90	70
99005-1814	18 / 14	739 psi (51 bar)	420 psi (29 bar)	100	104
99005-2016	20 / 16	710 psi (49 bar)	406 psi (28 bar)	120	117

\* Please add the desired tube color directly behind the part no.: 99XXX-XXXXCOLOUR – e.g. 99005-0402RED

## Plastic tube PU

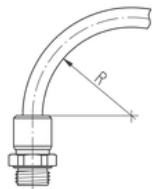


- Made of polyester-polyurethane (PU)
- Color black (red, blue, green, yellow, natural, brown, orange and grey: specify when placing order; subject to extra charge)
- External calibration; for use with Eisele plug connectors
- Temperature range -31 to 158 °F (-35 to +70 °C)
- Operating pressure = burst pressure: safety (common factor 2 to 3)
- Free of plasticizers, PWIS, copper and PTFE
- Impervious to buckling and drag chain compliant
- Suitable for vacuum

Artikel-Nr.*	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99003-0402	4 / 2,3	652 psi (45 bar)	348 psi (24 bar)	10	12
99003-0425	4 / 2,5	565 psi (39 bar)	333 psi (23 bar)	13	12
99003-4303	4,3 / 2,9	522 psi (36 bar)	319 psi (22 bar)	14	12
99003-0503	5 / 3,1	652 psi (45 bar)	348 psi (24 bar)	12	16
99003-0604	6 / 3,9	522 psi (36 bar)	333 psi (23 bar)	20	22
99003-0806	8 / 5,7	464 psi (32 bar)	290 psi (20 bar)	35	31
99003-1008	10 / 7,5	406 psi (28 bar)	232 psi (16 bar)	50	40
99003-1208	12 / 8	609 psi (42 bar)	377 psi (26 bar)	50	78
99003-1209	12 / 9	420 psi (29 bar)	246 psi (17 bar)	55	62
99003-1411	14 / 11	333 psi (23 bar)	217 psi (15 bar)	70	75
99003-1611	16 / 11	464 psi (32 bar)	304 psi (21 bar)	70	132

\* Please add the desired tube color directly behind the part no.: 99XXX-XXXXCOLOUR – e.g. 99003-0402RED

## Plastic tube Eisele Hydro



- Made of polyether-polyurethane (PU-H)
- Color imbued: black, blue, red
- External calibration; for use with Eisele plug connectors
- Temperature range -31 to 140 °F (-35 to +60 °C)
- Operating pressure = burst pressure: Safety (common factor 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

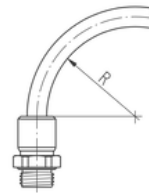
Artikel-Nr.*	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99150-0425	4 / 2,5	478 psi (33 bar)	232 psi (16 bar)	8	9
99150-0604	6 / 4	464 psi (32 bar)	217 psi (15 bar)	10	18
99150-0806	8 / 6	391 psi (27bar)	188 psi (13 bar)	21	29
99150-1007	10 / 7	406 psi (28 bar)	188 psi (13 bar)	28	47
99150-1208	12 / 8	464 psi (32 bar)	232 psi (16 bar)	33	73
99150-1410	14 / 10	393 psi (27,1 bar)	190 psi (13,2 bar)	33	73
99150-1611	16 / 11	435 psi (30 bar)	203 psi (14 bar)	38	123
99150-2014	20 / 14	417 psi (28,8 bar)	203 psi (14 bar)	-	ca. 187

\* Please add the desired tube color directly behind the part no.: 99XXX-XXXXCOLOUR – e.g. 99150-0425RED



## Plastic tube Eisele Hydro, translucent

- Made of polyether-polyurethane (PU-H)
- Color transparent: natural, red, blue
- External calibration; for use with Eisele plug connectors
- Temperature range -31 to 140 °F (-35 to +60 °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

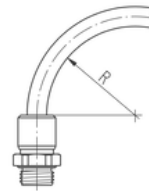


Artikel-Nr.*	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99151-0425	4 / 2,5	478 psi (33 bar)	232 psi (16 bar)	8	9
99151-0604	6 / 4	464 psi (32 bar)	217 psi (15 bar)	10	18
99151-0806	8 / 6	391 psi (27bar)	188 psi (13 bar)	21	29
99151-1007	10 / 7	406 psi (28 bar)	188 psi (13 bar)	28	47
99151-1208	12 / 8	464 psi (32 bar)	232 psi (16 bar)	33	73
99151-1410	14 / 10	393 psi (27,1 bar)	190 psi (13,2 bar)	33	73
99151-1611	16 / 11	435 psi (30 bar)	203 psi (14 bar)	38	123
99151-2014	20 / 14	417 psi (28,8 bar)	203 psi (14 bar)	-	ca. 187

\* Please add the desired tube color directly behind the part no.: 99XXX-XXXXCOLOUR – e.g. 99151-0425RED

## Plastic tube Eisele ProWeld

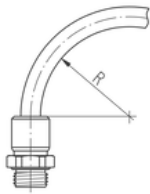
- Made of polyether-polyurethane
- Color black (red, blue, green, white)
- External calibration; for use with Eisele plug connectors
- Operating temperature -31 to 194 °F (-35 to +90 °C)
- Operating pressure = burst pressure: safety (common factor 3)
- Suitable for compressed air, water
- Free of plasticizers, 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



Artikel-Nr.*	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99118-0201	2 / 1	ca. 507 psi (35 bar)	-	-	-
99118-0302	3 / 2	652 psi (45 bar)	-	-	-
99118-0402	4 / 2	1348 psi (93 bar)	580 psi (40 bar)	8	12
99118-4303	4,3/3	551 psi (38 bar)	232 psi (16 bar)	-	-
99118-0603	6 / 3	1348 psi (93 bar)	580 psi (40 bar)	10	27,5
99118-0604	6 / 4	580 psi (40 bar)	319 psi (22 bar)	14	22
99118-0804	8 / 4	913 psi (63 bar)	536 psi (37 bar)	10	48
99118-0855	8 / 5,5	493 psi (34 bar)	260 psi (18 bar)	21	33
99118-1006	10 / 6	710 psi (49 bar)	406 psi (28 bar)	20	65
99118-1208	12 / 8	493 psi (34 bar)	304 psi (21 bar)	33	81
99118-1410	14 / 10	478 psi (33 bar)	260 psi (18 bar)	41	98
99118-1611	16 / 11	536 psi (37 bar)	275 psi (19 bar)	47	137
99118-2014	20 / 14	ca. 507 psi (35 bar)	ca. 232 psi (16 bar)	70	ca. 200

\* Please add the desired tube color directly behind the part no.: 99XXX-XXXXCOLOUR – e.g. 99118-0402RED

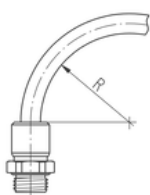
## Plastic tube PTFE



- Made of polytetrafluoroethylene (PTFE, Teflon)
- Color natural
- External calibration; for use with Eisele plug connectors
- Temperature range -310 to 500 °F (-190 to +260 °C)
- Operating pressure = burst pressure: safety (common factor 2 to 3)
- Free of plasticizers, PWIS and copper
- Resistant to UV and solvents
- FDA compliant according to 21 CFR 177.2600
- Flame-retardant according to UL94 V0 to V2

Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 122°F (50°C)	min. allowable bend radius	g/m
99001-0335	3 / 0,35	290 psi (20 bar)	250 psi (17,5 bar)	35	-
99001-0305	3 / 0,5	-	-	-	-
99001-0307	3 / 0,7	-	-	-	-
99001-0310	3 / 1	-	-	-	-
99001-0315	3 / 1,5	217 psi (15 bar)	188 psi (13 bar)	25	-
99001-0402	4 / 2	1160 psi (80 bar)	1000 psi (69 bar)	16	20
99001-4303	4,3 / 3	522 psi (36 bar)	449 psi (31 bar)	35	16
99001-0503	5 / 3	870 psi (60 bar)	754 psi (52 bar)	25	27
99001-0604	6 / 4	696 psi (48 bar)	594 psi (41 bar)	35	34
99001-0805	8 / 5	812 psi (56 bar)	696 psi (48 bar)	-	-
99001-0806	8 / 6	522 psi (36 bar)	449 psi (31 bar)	65	47
99001-0906	9 / 6	696 psi (48 bar)	594 psi (41 bar)	55	76
99001-1008	10 / 8	406 psi (28 bar)	348 psi (24 bar)	100	61
99001-1209	12 / 9	580 psi (40 bar)	493 psi (34 bar)	100	106
99001-1210	12 / 10	304 psi (21 bar)	261 psi (18 bar)	100	-
99001-1411	14 / 11	406 psi (28 bar)	348 psi (24 bar)	140	127
99001-1613	16 / 13	348 psi (24 bar)	304 psi (21 bar)	175	152

## Plastic tube FEP

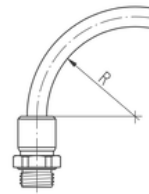


- Made of fluorinated ethylene-propylene copolymer (FEP)
- Color natural, transparent
- External calibration; for use with Eisele plug connectors
- Temperature range -31 to 248 °F (-35 to +120 °C)
- Operating pressure = burst pressure: Safety (common factor 2 to 3)
- Very flexible
- Free of plasticizer and copper
- Flame-retardant according to UL94 V0 to V2
- Resistant to UV, hydrolysis and microbes
- Stabilized against thermal degradation and light
- FDA compliant according to 21 CFR 177.2600
- Suitable for vacuum

Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99501-0402	4 / 2	1218 psi (84 bar)	1015 psi (70 bar)	25	21
99501-0503	5 / 3	870 psi (60 bar)	754 psi (52 bar)	35	28
99501-0604	6 / 4	725 psi (50 bar)	580 psi (40 bar)	40	35
99501-0806	8 / 6	522 psi (36 bar)	420 psi (29 bar)	65	49
99501-0906	9 / 6	-	-	55	79
99501-1008	10 / 8	406 psi (28 bar)	319 psi (22 bar)	100	63
99501-1209	12 / 9	-	-	100	110

## Plastic tube PFA

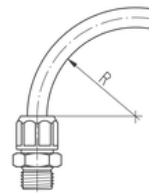
- Made of Perfluoro Alkoxyalkane (PFA)
- Color natural
- External calibration; for use with Eisele plug connectors
- Temperature range -4 to 302 °F (-20 to +150 °C)
- Operating pressure = burst pressure: Safety (common factor 2 to 3)
- Free of plasticizer and PWIS
- Resistant to UV, hydrolysis, microbes and solvents
- Stable against thermal degradation
- Resistant to weld spatter
- FDA compliant according to 21 CFR 177.2600
- Suitable for vacuum



Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99221-0425	4 / 2,5	884 psi (61 bar)	725 psi (50 bar)	25	12
99221-0403	4 / 3	464 psi (32 bar)	493 psi (34 bar)	35	12
99221-0604	6 / 4	783 psi (54 bar)	638 psi (44 bar)	40	34
99221-0806	8 / 6	464 psi (32 bar)	493 psi (34 bar)	70	49
99221-0906	9 / 6	783 psi (54 bar)	638 psi (44 bar)	65	49
99221-1007	10 / 7	710 psi (49 bar)	580 psi (40 bar)	75	87
99221-1209	12 / 9	464 psi (32 bar)	493 psi (34 bar)	100	125
99221-1210	12 / 10	391 psi (27bar)	319 psi (22 bar)	150	-
99221-1412	14 / 12	333 psi (23 bar)	246 psi (17 bar)	-	-
99221-1614	16 / 14	290 psi (20 bar)	217 psi (15 bar)	-	-

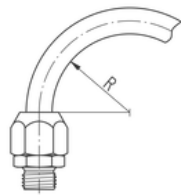
## Plastic tube PVC fiber-reinforced

- Made of polyvinylchloride (PVC), fiber-reinforced
- Color blue, other colors on request
- Usable for screw joints of program 10
- Operating pressure = burst pressure: Safety (common factor 3)
- Temperature range 14 to 140 °F (-10 to +60 °C)



Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99006-0604	6,2 / 4	2030 psi (140 bar)	1421 psi (98 bar)	50	20
99006-0806	8,2 / 6	1769 psi (122 bar)	1218 psi (84 bar)	60	33
99006-1008	10 / 8	1769 psi (122 bar)	1218 psi (84 bar)	65	41
99006-1109	11,6 / 9	1522 psi (105 bar)	1116 psi (77 bar)	70	52
99006-1210	12,5 / 10	1421 psi (98 bar)	1015 psi (70 bar)	80	52
99006-1512	15 / 12,5	1421 psi (98 bar)	1015 psi (70 bar)	100	69
99006-1713	17,6 / 13	1421 psi (98 bar)	1015 psi (70 bar)	100	140

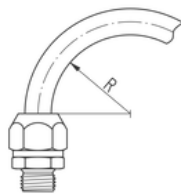
## Compressed-air tube PVC fabric lining



- Made of polyvinylchloride (PVC) with fabric lining
- Color green-transparent
- Usable for screw joints and spigots
- Operating pressure = burst pressure: Safety (common factor 3)
- Temperature range 14 to 140 °F(-10 to +60 °C)

Part no.	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	Minimum burst pressure at 140°F (60°C)	min. allowable bend radius	g/m
99007-1004	10 / 4	1334 psi (92 bar)	812 psi (56 bar)	15	77
99007-1206	12 / 6	1160 psi (80 bar)	696 psi (48 bar)	25	99
99007-1408	14 / 8	1044 psi (72 bar)	638 psi (44 bar)	30	114
99007-1509	15 / 9	928 psi (64 bar)	580 psi (40 bar)	35	133
99007-1610	16 / 10	812 psi (56 bar)	521 psi (36 bar)	40	147
99007-2112	21 / 12	812 psi (56 bar)	521 psi (36 bar)	70	275
99007-2013	20 / 13	696 psi (48 bar)	406 psi (28 bar)	55	207
99007-2619	26,8 / 19,4	580 psi (40 bar)	348 psi (24 bar)	130	-
99007-260190	26 / 19	580 psi (40 bar)	348 psi (24 bar)	130	-

## Plastic tube NBR with metal braiding

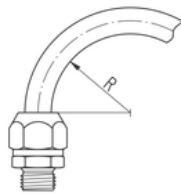


- Made of Perbunan (NBR) with metal braiding
- Color silver
- Usable for screw joints
- Temperature range -4 to 212°F (-20 to +100 °C)
- Usable with oil, fuel, water and compressed air

Artikel-Nr.*	Outside Ø* / Inside Ø	Maximum allowable working pressure at 73°F (23°C) (reference value)	min. allowable bend radius	g/m
99009-0704	7 / 4	174 psi (12 bar)	70	82
99009-0906	9 / 6	174 psi (12 bar)	80	117
99009-1209	12 / 9	174 psi (12 bar)	90	173

\* Outer diameter without metal braiding. The Metal Braiding adds about 1mm.

## Plastic tube Perbunan (NBR) with metal braiding



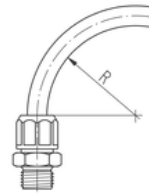
- Made of Perbunan (NBR) with metal braiding
- Color silver
- Usable for screw joints
- Temperature range -4 to 176°F (-20 to +80 °C)
- Braiding material AISI 304 (1.4301)

Artikel-Nr.*	Outside Ø / Inside Ø	Minimum burst pressure at 68°F (20°C)	min. allowable bend radius	g/m
99009-0905VA	9,3 / 4,5	870 psi (60 bar)	25	98
99009-1106VA	10,8 / 6	870 psi (60 bar)	45	132
99009-1409VA	13,6 / 9	725 psi (50 bar)	40	193
99009-2518VA	25,2 / 17,5	725 psi (50 bar)	100	494

\* Outer diameter without metal braiding. The Metal Braiding adds about 1mm.

## Double compressed-air tube PU

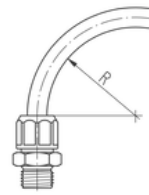
- Made of polyurethane (PU)
- Color black / blue
- External calibration; for use with Eisele plug connectors
- Temperature range -31 to 140°F (-35 to +60 °C)
- Suitable for vacuum



Part no.	Outside Ø / Inside Ø	Maximum allowable working pressure at 73°F (23°C) (reference value)	min. allowable bend radius	g/m
99002-0402	4 / 2	304 psi (21 bar)	10	23
99002-0425	4 / 2,5	174 psi (12 bar)	10	19
99002-0604	6 / 4	203 psi (14 bar)	30	43
99002-0806	8 / 6	174 psi (12 bar)	45	60
99002-1008	10 / 8	145 psi (10 bar)	60	78
99002-4303	4,3 / 3	174 psi (12 bar)	15	19

## Spring coil PU

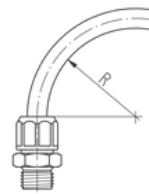
- Made of polyurethane (PU)
- Color blue, other colors on request
- External calibration; for use with Eisele plug connectors
- Temperature range 5 to 131 °F (-15 to +55 °C)
- With axial outlet
- Free of plasticizer, PWIS and halogen
- Suitable for vacuum



Part no.*	Outside Ø / Inside Ø	Maximum allowable working pressure at 73°F (23°C) (reference value)	min. allowable bend radius	Effective operating length	Coil diameter, inside	g/piece
99503-402504	6 / 4	116 psi (8 bar)	30	2500	40	86,0
99503-405004	6 / 4	116 psi (8 bar)	30	5000	40	172,0
99503-502506	8 / 6	101 psi (7 bar)	45	2500	50	121,0
99503-505006	8 / 6	101 psi (7 bar)	45	5000	50	242,0

## Spring coil PA

- Made of polyamide (PA)
- Color blue, other colors on request
- External calibration; for use with Eisele plug connectors
- Temperature range -4 to 158 °F (-20 to +70 °C)
- With axial outlet
- Suitable for vacuum



Part no.*	Outside Ø / Inside Ø	Maximum allowable working pressure at 73°F (23°C) (reference value)	min. allowable bend radius	Effective operating length	Coil diameter, inside	g/piece
99505-602504	6 / 4	217 psi (15 bar)	40	2500	60	81,0
99505-605004	6 / 4	217 psi (15 bar)	40	5000	60	162,0
99505-802506	8 / 6	174 psi (12 bar)	55	2500	80	114,0
99505-805006	8 / 6	174 psi (12 bar)	55	5000	80	227,0
99505-905009	12 / 9	145 psi (10 bar)	55	5000	90	510,0

## Tube bundling spiral



- Material polyethylene (PE)
- Color natural
- Temperature range 14 to 104 °F (-10 to +40 °C)

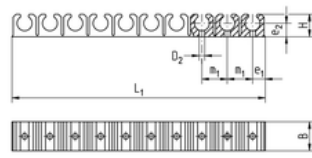
**Part no.**

**g/m**

99008-1209

50,1

## 10-layer seal retaining strip



- With grooved pins
- Material PA6 GF, black
- Temperature range 14 to 140 °F (-10 to +60 °C)
- Packaging unit 10 piece

Part no.	for tube	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	11
99012-0806	8 / 6	15,5	12	135	3	6,8	7,5	13,5	17
99012-1008	10 / 8	17	15	180	3,2	9	9	18	18
99012-1109	11,6 / 9	17,5	16,5	194	3,4	10,5	10	19,4	19

## Tube cutter



- For compressed-air tubes with outer- $\varnothing$  14 mm
- Material plastic black / steel
- Packaging unit 1 piece

**Part no.**

**g/piece**

99605-0014	Tube cutter for outer diameter up to 14	30
99605-00149	Spare blade for outer diameter up to 14	1

## Tube cutter

- For compressed-air tubes with outer- $\varnothing$  22 mm
- Material zinc die-casting / steel
- Packaging unit 1 piece

**Part no.****g/piece**

99606-0022	Tube 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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## MANY SOLUTIONS FROM ONE MODULAR SYSTEM:

### EISELE BASICLINE

#### Standard components for pneumatics

EISELE **BASICLINE** gives our customers a wide choice of our stock of approximately 5,000 standardized connection components. We can therefore deliver at very short notice a complete range of screw joints, plug connectors, matching tubes and a wide spectrum of accessories. Many of these EISELE products are authorized for use by major automotive manufacturers like Audi, Daimler or Volkswagen.

### EISELE INOXLIN

#### 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.



## 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 tubes, 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.





Flow optimised coolant connections

## LIQUIDLINE

Around 4000 connection components for pneumatics and vacuum

## INOXLINE



Connectors for use in applications with high hygienic requirements

## CLEANLINE

Multiple couplings and multiple media connections for pneumatics, fluids and electronics

## MULTILINE



# Eisele

Eisele Pneumatics GmbH & Co. KG  
Hermann-Hess-Str. 14-16  
71332 Waiblingen | Germany

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

info@eisele.eu  
www.eisele.eu

## QUALITY CONNECTION COMPONENTS

FOR COMPRESSED AIR, VACUUM, GASES,  
LIQUIDS, ELECTRICS AND ELECTRONICS