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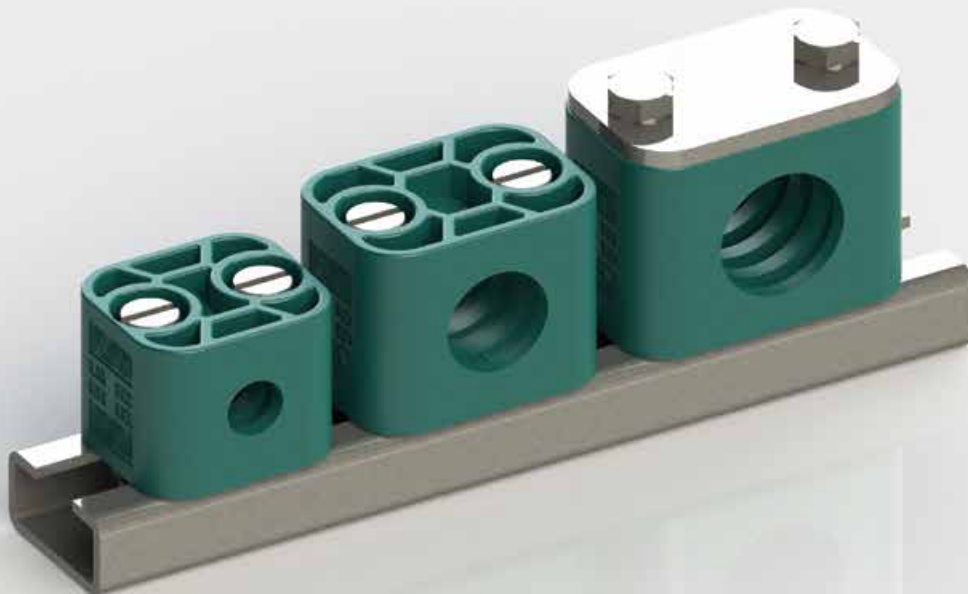
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Securely Fastened – Function Guaranteed



Tube Clamps with a System

Note: See the next to last page for item package quantities.
Products from this brochure are only sold in package quantities.

Tube Clamps pursuant to DIN 3015, Part 1

The lightweight construction clamps can be used in a very wide range of applications in fluid technology. They are used for simple and dependable tube mounting. The noise and vibration reducing features are an important contribution to occupational safety and environmental protection.

A comprehensive selection of accessories for dependable mounting is available to go with the large selection of tube clamps.

We offer tube clamps made of polypropylene, as standard. Other materials, including flame-retardant materials, are available on request. The accessories, such as mounting rails, rail nuts, etc., are available in steel and stainless steel 1.4571.

Innovative design derived from nature – the honeycomb structure

The honeycomb structure provides excellent pressure distribution. This generates high tube holding power.

The two clamp halves are identical. The ribbed clamp interior reduces impacts and vibrations and absorbs forces in the direction of the tube axis. A gap between the halves is used to pretension the tube.

Advantages

- optimised product geometry
- best pressure distribution
- highest possible tube holding power



The rail nuts with loss prevention technology

The large flange of the rubber cap prevents the rail nut from falling into the rail during installation and acts also to absorb impacts and vibrations. This makes the system quick and easy to install and adjust, even in a vertical installation.

Advantages

- 40 % less time for installation
- quick and easy installation
- impact- and vibration-absorbing
- ideal for vertical installation



Application areas



Rail industry



Shipbuilding



Plant engineering

Installation Options

Installation on weld-on plates

Weld the weld-on plates to a base suitable for the load. Here it is important to make sure the clamp is properly aligned.

Fasten the lower half of the clamp to the weld-on plate, insert the tube, set the second half of the clamp in place, and use screws to tighten the clamp. Pay attention to the pretension; clamp halves should not be touching after installation.

Do not weld with plastic clamps in place!



Installation on mounting rails

The mounting rails are delivered in pieces of 1 m in length, other lengths available on request.

Weld the mounting rail, place the rail nuts in the rail and turn until they stop.

Fasten the lower half of the clamp to the rail nuts, insert the tube, set the second half of the clamp in place, and use screws to tighten the clamp. The clamp can be positioned before the screws are tightened. Pay attention to the pretension; clamp halves should not be touching after installation.



Schellenkörper

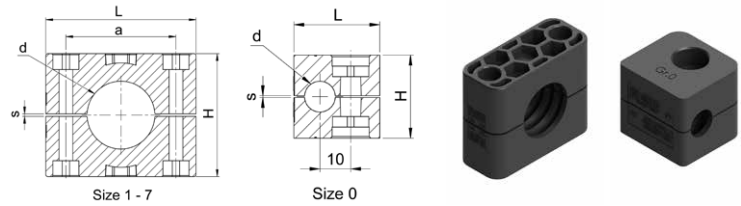
PP, Serie A

Corps de collier

PP, série A

Clamp body

PP, series A

RS RGA-PP

Type -S-d	Mat.-Nr.	L	H	a	s	kg/100
RS RGA-PP-0-6	906.1000.006	28.0	27.0		0.60	0.900
RS RGA-PP-0-12	906.1000.012	28.0	27.0		0.60	0.900
RS RGA-PP-1-6	906.1000.106	34.0	27.0	20.0	0.60	1.400
RS RGA-PP-1-8	906.1000.108	34.0	27.0	20.0	0.60	1.300
RS RGA-PP-1-9.5	906.1000.109	34.0	27.0	20.0	0.60	1.200
RS RGA-PP-1-10	906.1000.110	34.0	27.0	20.0	0.60	2.300
RS RGA-PP-1-12	906.1000.120	34.0	27.0	20.0	0.60	1.300
RS RGA-PP-2-12.7	906.1000.212	42.0	33.0	26.0	0.80	1.700
RS RGA-PP-2-15	906.1000.215	42.0	33.0	26.0	0.80	1.600
RS RGA-PP-2-16	906.1000.216	42.0	33.0	26.0	0.80	1.600
RS RGA-PP-2-18	906.1000.218	42.0	33.0	26.0	0.80	1.500
RS RGA-PP-3-20	906.1000.320	49.0	35.0	33.0	1.00	1.800
RS RGA-PP-3-22	906.1000.322	49.0	35.0	33.0	1.00	1.800
RS RGA-PP-3-25	906.1000.325	49.0	35.0	33.0	1.00	1.900
RS RGA-PP-4-28	906.1000.428	59.0	42.0	40.0	1.20	2.700
RS RGA-PP-4-30	906.1000.430	59.0	42.0	40.0	1.20	2.500
RS RGA-PP-5-33.7	906.1000.533	71.0	58.0	52.0	1.20	4.800
RS RGA-PP-5-35	906.1000.535	71.0	58.0	52.0	1.20	5.000
RS RGA-PP-5-38	906.1000.538	71.0	58.0	52.0	1.20	4.300
RS RGA-PP-5-42	906.1000.542	71.0	58.0	52.0	1.20	4.000
RS RGA-PP-6-48	906.1000.648	86.0	66.0	66.0	1.20	5.600
RS RGA-PP-7-60.3	906.1000.760	121.0	93.6	94.0	1.60	13.700

Lieferung nur in Einheitspackungen; Details siehe Preisliste oder Online Shop.

Livable seulement dans des unités d'emballage; détails voir liste de prix ou Online Shop.

Delivery in packing units only; details see price list or Online Shop.

Anschweisplatte kurz

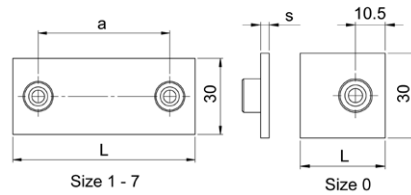
Stahl blank, Serie A

Plaque à souder courte

acier, série A

Weld-on plate short

steel, series A

**RS AKZ1A-SB**

Type-S	Mat.-Nr.	L	a	s	kg/100
RS AKZ1A-SB-0	946.3108.000	30.0		3.00	2.400
RS AKZ1A-SB-1	946.3108.100	36.0	20.0	3.00	3.200
RS AKZ1A-SB-2	946.3108.200	42.0	26.0	3.00	3.600
RS AKZ1A-SB-3	946.3108.300	50.0	33.0	3.00	4.100
RS AKZ1A-SB-4	946.3108.400	59.0	40.0	3.00	4.800
RS AKZ1A-SB-5	946.3108.500	72.0	52.0	3.00	5.400
RS AKZ1A-SB-6	946.3108.600	88.0	66.0	3.00	6.000
RS AKZ1A-SB-7	946.3108.700	122.0	94.0	5.00	14.000

Anschweisplatte kurz

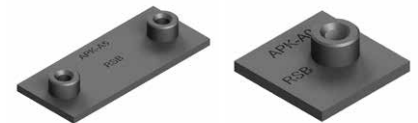
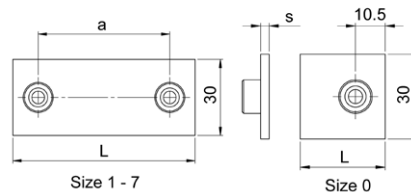
Edelstahl 1.4571, Serie A

Plaque à souder courte

acier inoxydable 1.4571, série A

Weld-on plate short

stainless steel 1.4571, series A

**RS AKZ2A-E1**

Type-S	Mat.-Nr.	L	a	s	kg/100
RS AKZ2A-E1-0	946.5118.000	30.0		3.00	2.200
RS AKZ2A-E1-1	946.5118.100	36.0	20.0	3.00	2.500
RS AKZ2A-E1-2	946.5118.200	42.0	26.0	3.00	2.900
RS AKZ2A-E1-3	946.5118.300	50.0	33.0	3.00	3.500
RS AKZ2A-E1-4	946.5118.400	59.0	40.0	3.00	4.000
RS AKZ2A-E1-5	946.5118.500	72.0	52.0	3.00	4.900
RS AKZ2A-E1-6	946.5118.600	88.0	66.0	3.00	6.300
RS AKZ2A-E1-7	946.5118.700	122.0	94.0	5.00	14.600

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Deckplatte

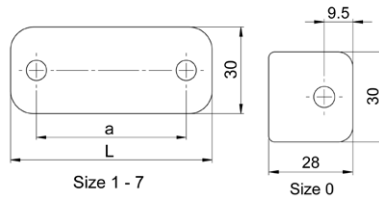
Stahl verzinkt, Serie A

Plaque de couverture

acier zingué, série A

Cover plate

zinc-plated steel, series A

RS DPA-VZ

Type-S	Mat.-Nr.	L	a	kg/100
RS DPA-VZ-0	946.4130.000	28.0		1.700
RS DPA-VZ-1	946.4130.100	34.0	20.0	2.100
RS DPA-VZ-2	946.4130.200	40.0	26.0	2.500
RS DPA-VZ-3	946.4130.300	48.0	33.0	3.100
RS DPA-VZ-4	946.4130.400	57.0	40.0	3.700
RS DPA-VZ-5	946.4130.500	70.0	52.0	4.600
RS DPA-VZ-6	946.4130.600	86.0	66.0	5.700
RS DPA-VZ-7	946.4130.700	120.0	94.0	14.000

Deckplatte

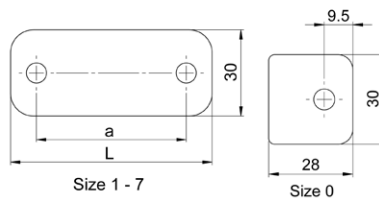
Edelstahl 1.4571, Serie A

Plaque de couverture

acier inoxydable 1.4571, série A

Cover plate

stainless steel 1.4571, series A

RS DPA-E1

Type-S	Mat.-Nr.	L	a	kg/100
RS DPA-E1-0	946.5130.000	28.0		1.900
RS DPA-E1-1	946.5130.100	34.0	20.0	2.000
RS DPA-E1-2	946.5130.200	40.0	26.0	2.400
RS DPA-E1-3	946.5130.300	48.0	33.0	3.100
RS DPA-E1-4	946.5130.400	57.0	40.0	3.600
RS DPA-E1-5	946.5130.500	70.0	52.0	4.000
RS DPA-E1-6	946.5130.600	86.0	66.0	5.800
RS DPA-E1-7	946.5130.700	120.0	94.0	13.400

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Sechskantschraube

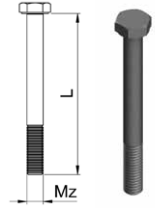
Stahl verzinkt, Serie A

Vis à tête hexagonale

acier zingué, série A

Hexagon screw

zinc-plated steel, series A

RS SSA-VZ

Type -S	Mat.-Nr.	Mz	L	kg/100
RS SSA-VZ-0/1	946.4210.000	M6	30.0	0.800
RS SSA-VZ-2	946.4210.200	M6	35.0	0.900
RS SSA-VZ-3	946.4210.300	M6	40.0	1.000
RS SSA-VZ-4	946.4210.400	M6	45.0	1.200
RS SSA-VZ-5	946.4210.500	M6	60.0	1.400
RS SSA-VZ-6	946.4210.600	M6	70.0	1.800
RS SSA-VZ-7	946.4210.700	M6	100.0	1.900

Sechskantschraube

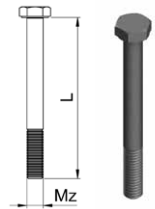
Edelstahl 1.4571, Serie A

Vis à tête hexagonale

acier inoxydable 1.4571, série A

Hexagon screw

stainless steel 1.4571, series A

RS SSA-E1

Type -S	Mat.-Nr.	Mz	L	kg/100
RS SSA-E1-0/1	946.5210.000	M6	30.0	0.800
RS SSA-E1-2	946.5210.200	M6	35.0	0.900
RS SSA-E1-3	946.5210.300	M6	40.0	1.000
RS SSA-E1-4	946.5210.400	M6	45.0	1.200
RS SSA-E1-5	946.5210.500	M6	60.0	1.500
RS SSA-E1-6	946.5210.600	M6	70.0	1.800
RS SSA-E1-7	946.5210.700	M6	100.0	2.000

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Tragschiene

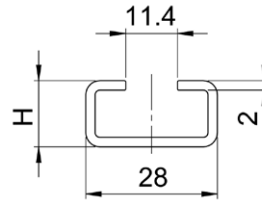
Stahl blank, Serie A

Rail de support

acier, série A

Mounting rail

steel, series A

RS TS-SB

Type	Mat.-Nr.	Länge/Length	H	kg/m
RS TS11A-SB-1m	946.4140.111	1 m	11.0	0.866

Tragschiene

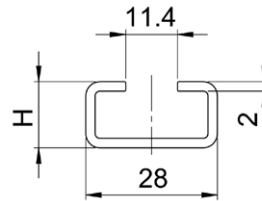
Edelstahl 1.4571, Serie A

Rail de support

acier inoxydable 1.4571, série A

Mounting rail

stainless steel 1.4571, series A

RSTSE1

Type	Mat.-Nr.	Länge/Length	H	kg/m
RS TS11A-E1-1m	946.5140.111	1 m	11.0	0.862

Tragschienenmutter

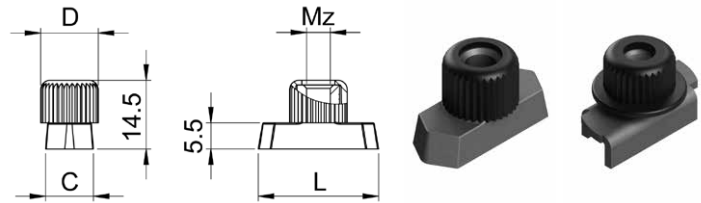
Stahl verzinkt, Serie A

Écrou pour rail de support

acier zingué, série A

Rail nut

zinc-plated steel, series A

RS TMA-VZ/TMVA-VZ

Type	Mat.-Nr.	L	C	D	Mz	kg/100
RS TMAB1-VZ	946.4160.000	25.4	10.4	12.0	M6	1.200
RS TMVAB1-VZ	946.4170.000	24.9	10.5	12.0	M6	0.700

Tragschienenmutter

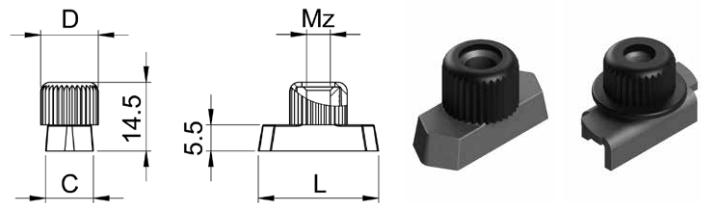
Edelstahl 1.4571, Serie A

Écrou pour rail de support

acier inoxydable 1.4571, série A

Rail nut

stainless steel 1.4571, series A

RS TMA-E1/TMVA-E1

Type	Mat.-Nr.	L	C	D	Mz	kg/100
RS TMAB1-E1	946.5160.000	25.4	10.4	12.0	M6	1.508
RS TMVAB1-E1	946.5170.000	24.9	10.5	12.0	M6	0.940

Typ TMVA mit Verlusicherung.

Type TMVA avec sécurité anti-perte.

Type TMVA with loss protection.

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Technical Information

Properties of polypropylene

Mechanical properties	Value	
Thickness	0.90 g/cm ³	
Charpy notched impact strength at +23 °C	7 kJ/m ²	(ISO 179/1eA)
Charpy notched impact strength at -20 °C	3 kJ/m ²	(ISO 179/1eA)
Modulus of elasticity (drawn)	1.400 N/mm ²	(ISO 527)
Tensile stress or tensile strength (Rm)	28 N/mm ²	(ISO 527)
Temperature resistance	-30 °C to +90 °C	

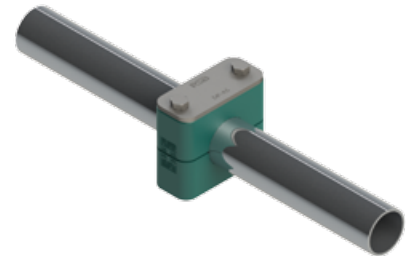


The data listed are average values and are considered only as noncommittal information; they do not relieve you of the independent acceptance inspection of the products we delivered. These values may be used only conditionally for construction purposes.

Screw tightening torques and axial tube holding power

The specified screw tightening torques and axial tube holding power are based on installation with cover plates and external hexagon screws according to ISO 4014/4017 (DIN 931/933). The axial tube holding power (pursuant to DIN 3015, Part 10) is a mean value, determined from three tests at +23 °C with a steel tube according to DIN 2448 made of St 37, where static friction is provided. The tube will not slide in the clamp when force is applied to the clamp in the axial tube direction at the specified test load (F).

Size	Retaining screw	Screw tightening torque (Nm)	Tube holding power F (kN)
0	M 6	8	0.6
1	M 6	8	1.1
2	M 6	8	1.2
3	M 6	8	1.4
4	M 6	8	1.5
5	M 6	8	1.9
6	M 6	8	2.0
7	M 6	8	2.3

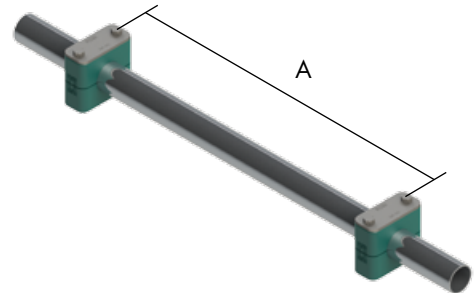


For the complete SERTO program,
please see our catalogue
or go to www.serto.net

Technical Information

Recommended clamp spacing

External diameter of tube (mm)	Clamp spacing A (m)
6.0 - 12.7	1.0
12.7 - 22.0	1.2
22.0 - 32.0	1.5
32.0 - 38.0	2.0
38.0 - 57.0	2.7
57.0 - 75.0	3.0



Tube elbow installation

Tube elbows should be fastened with tube clamps directly before and after the bend.



Products from this brochure are only sold in package quantities.

Material number	SERTO type	Package qty.	Material number	SERTO type	Package qty.	Material number	SERTO type	Package qty.
906.1000.006	RS RGA-PP-0-6	25	946.3108.300	RS AKZ1A-SB-3	25	946.5118.200	RS AKZ2A-E 1-2	25
906.1000.012	RS RGA-PP-0-12	25	946.3108.400	RS AKZ1A-SB-4	25	946.5118.300	RS AKZ2A-E 1-3	25
906.1000.106	RS RGA-PP-1-6	25	946.3108.500	RS AKZ1A-SB-5	25	946.5118.400	RS AKZ2A-E 1-4	25
906.1000.108	RS RGA-PP-1-8	25	946.3108.600	RS AKZ1A-SB-6	25	946.5118.500	RS AKZ2A-E 1-5	25
906.1000.109	RS RGA-PP-1-9.5	25	946.3108.700	RS AKZ1A-SB-7	10	946.5118.600	RS AKZ2A-E 1-6	25
906.1000.110	RS RGA-PP-1-10	25	946.4130.000	RS DPA-VZ-0	25	946.5118.700	RS AKZ2A-E 1-7	10
906.1000.120	RS RGA-PP-1-12	25	946.4130.100	RS DPA-VZ-1	25	946.5130.000	RS DPA-E 1-0	25
906.1000.212	RS RGA-PP-2-12.7	25	946.4130.200	RS DPA-VZ-2	25	946.5130.100	RS DPA-E 1-1	25
906.1000.215	RS RGA-PP-2-15	25	946.4130.300	RS DPA-VZ-3	25	946.5130.200	RS DPA-E 1-2	25
906.1000.216	RS RGA-PP-2-16	25	946.4130.400	RS DPA-VZ-4	25	946.5130.300	RS DPA-E 1-3	25
906.1000.218	RS RGA-PP-2-18	25	946.4130.500	RS DPA-VZ-5	25	946.5130.400	RS DPA-E 1-4	25
906.1000.320	RS RGA-PP-3-20	25	946.4130.600	RS DPA-VZ-6	25	946.5130.500	RS DPA-E 1-5	25
906.1000.322	RS RGA-PP-3-22	25	946.4130.700	RS DPA-VZ-7	10	946.5130.600	RS DPA-E 1-6	25
906.1000.325	RS RGA-PP-3-25	25	946.4140.111	RS TS 11A-SB-1m	1	946.5130.700	RS DPA-E 1-7	10
906.1000.428	RS RGA-PP-4-28	25	946.4160.000	RS TMA-VZ	50	946.5140.111	RS TS11A-E 1-1m	1
906.1000.430	RS RGA-PP-4-30	25	946.4170.000	RS TMVA-VZ	50	946.5160.000	RS TMA-E 1	50
906.1000.533	RS RGA-PP-5-33.7	25	946.4210.000	RS SSA-VZ-0/1	50	946.5170.000	RS TMVA-E 1	50
906.1000.535	RS RGA-PP-5-35	25	946.4210.200	RS SSA-VZ-2	50	946.5210.000	RS SSA-E 1-0/1	50
906.1000.538	RS RGA-PP-5-38	25	946.4210.300	RS SSA-VZ-3	50	946.5210.200	RS SSA-E 1-2	50
906.1000.542	RS RGA-PP-5-42	25	946.4210.400	RS SSA-VZ-4	50	946.5210.300	RS SSA-E 1-3	50
906.1000.648	RS RGA-PP-6-48	25	946.4210.500	RS SSA-VZ-5	50	946.5210.400	RS SSA-E 1-4	50
906.1000.760	RS RGA-PP-7-60.3	10	946.4210.600	RS SSA-VZ-6	50	946.5210.500	RS SSA-E 1-5	50
946.3108.000	RS AKZ1A-SB-0	25	946.4210.700	RS SSA-VZ-7	20	946.5210.600	RS SSA-E 1-6	50
946.3108.100	RS AKZ1A-SB-1	25	946.5118.000	RS AKZ2A-E 1-0	25	946.5210.700	RS SSA-E 1-7	20
946.3108.200	RS AKZ1A-SB-2	25	946.5118.100	RS AKZ2A-E 1-1	25			



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url: <http://serto.net> email: sales@serto.net

RFQ form: <http://serto.net/rfqserto.htm>



Stainless steel



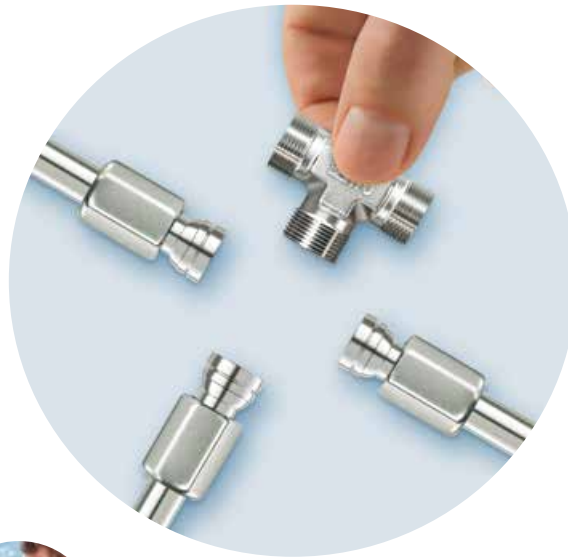
Plastics



Ready-to-fit tubes



Pre-assembled kits



Brass



Steel



Consulting

OXYGEN



Cleaning options



Valves, shut-off valves

**Note: See the next to last page for item package quantities.
Products from this brochure are only sold in package quantities.**