

RAPID Fittings Nickel-Plated Brass (Push-on)



Rapid brass

Operating pressure: Technical vacuum up to maximum pressure as stated in the respective specification table under PN.

Temperature range: -40 °C to +120 °C

(for restrictions see specification table)

Application

RAPID fittings are used with aggressive gaseous and liquid media, where elastomer seals are not resistant. With guide cone and Cap nut these fittings are particularly suited to very harsh operating conditions.

CHARACTERISTICS

BODY MATERIAL / SUITABILITY

Nickel-plated brass	CuZn39Pb3, galvanically nickel-plated. Suitable for many neutral gaseous and liquid media, especially compressed air, water, hydraulic oil etc. Special version chemically nickel-plated with FKM seal ring, FDA compliant.
Other materials	see relevant products

TUBE

Outside diameter [mm]	4.3/3 5/3 6/4 8/6 10/8	11.5/9 12/9 12/10 15/12.5 17.6/13
Permitted tolerance outside D	±0.1	±0.15
Permitted tolerance inside d	±0.1	±0.15
Permitted wall thickness tolerance	±0.1	±0.15
	With very soft tubes, for example PVC tubes, variations in the outside diameter or wall thickness of up to + 5/10 are allowable. In case of doubt please ask.	
Permitted grades	Polyamide (PA), polyurethane (PU), polyethylene (PE), fabric reinforced PVC, fluoropolymer (FEP) (PFA)	
THREAD		
External thread	"M" cylindrical thread: Metric ISO thread M5, M6 and M7.	
External thread	"G" cylindrical thread: Whitworth pipe thread DIN ISO 228-1 G 1/8 to G 1/2.	
External thread	"R" cylindrical thread: Whitworth pipe thread DIN 2999-1 and ISO 7/1 R 1/8 to R 1/2. Dimensions constructed so there can be pairing with internal thread according to DIN ISO 228-1.	
Internal thread	"G" cylindrical thread: Whitworth pipe thread DIN ISO 228-1 G 1/8 to G 1/2.	

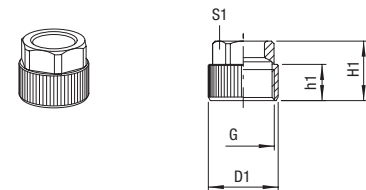
OPERATING PRESSURE / TEMPERATURE

Metal version	PN 25 T_{min} -40 °C T_{max} +120 °C Means that the fitting can be used up to the given nominal pressure PN within the specified temperature range "T".	Allowable operating pressure and operating temperature of pipe/tube must be observed!
THREAD SEAL		
Cylindrical threaded nipple	Seal with sealing rings made of copper, fibre, aluminium, polyamide or hard PVC.	
Conical threaded nipple	External thread self-sealing with pre-coating "D"	Film with non-reactive mineral solid materials, non-adhesive. Resistant to air, water, motor oils etc. in temperature range of -40 °C to +120 °C.
Straight, 90° elbow and T-adaptors, male	not suitable for rotating or oscill. movements	Some types of fittings are 360°-swivelling to facilitate adjustment during assembly.

Cap Nut

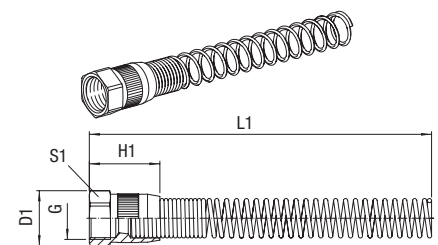
Price group **11** PN 25 $T_{min} -40\text{ °C}$
 $T_{max} +120\text{ °C}$
**Nickel-plated
brass**

for tube D/d	G	Exchangeable possible with	H1	h1	D1	S1	Weight in [g]	Type	Order number	Price
4.3/3	M7x0.75	250003	8.5	5	8	7	1.3	170M-43/0-M7x0.75	250002	o. r.
5/3	M7x0.75	250002	8.5	5	8	7	1.2	170M-5/0-M7x0.75	250003	o. r.
6/4	M8x0.75	-	10	6.5	9	8	1.7	170M-6/0-M8x0.75	250004	o. r.
6/4	M10x1	250017	11.5	7	11.5	10	3.8	170M-6/0-M10x1	250005	o. r.
8/6	M12x1	250018	11.5	7	13.5	12	4.5	170M-8/0-M12x1	250008	o. r.
10/8	M14x1	-	13.5	9	15.5	13	5.8	170M-10/0-M14x1	250010	o. r.
11.5/9	M16x1	250012	14.5	9	17.5	15	7.7	170M-115/0-M16x1	250011	o. r.
12/9	M16x1	250011	14.5	9	17.5	15	7.4	170M-12/0-M16x1	250012	o. r.
12/10	M16x1	250019	14.5	9	17.5	15	7.4	170M-12/0-M16x1	250012	o. r.
15/12.5	M20x1	250014	16.5	10.5	22	19	13.2	170M-15/12.5-M20x1	250013	o. r.
17.6/13	M20x1	250013	16.5	10.5	22	19	11.8	170M-176/0-M20x1	250014	o. r.
1/4/1/8	M10x1	250005	11.5	7	11.5	10	3.4	170M-64/0-M10x1	250017	o. r.
3/8/1/4	M12x1	250008	11.5	7	13.5	12	3.9	170M-96/0-M12x1	250018	o. r.
1/2/3/8	M16x1	250012	14.5	9	17.5	15	6.5	170M-13/0-M16x1	250019	o. r.

Illustration

Cap Nut with Anti-kink Protection

Price group **11** PN 25 $T_{min} -40\text{ °C}$
 $T_{max} +120\text{ °C}$
**Nickel-plated
brass**

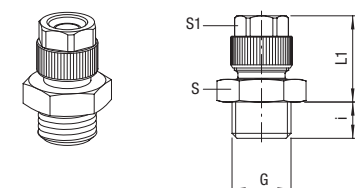
for tube D/d	G	Exchange possible with	L1*	H1	D1	S1	Weight in [g]	Type	Order number	Price
6/4	M10x1	250005	96	19	13.1	12	15.4	172M-6/0-M10x1	331005	o. r.
8/6	M12x1	250008	97	20	15.6	14	19.4	172M-8/0-M12x1	331008	o. r.
10/8	M14x1	250010	97	20	17.5	16	24.3	172M-10/0-M14x1	331010	o. r.
12/9	M16x1	250012	97	20	21.2	19	30.7	172M-12/0-M16x1	331012	o. r.
12/10	M16x1	250012	97	20	21.2	19	30.7	172M-12/0-M16x1	331012	o. r.

Illustration

Straight Adaptor - Male

Price group **11** PN 25 $T_{min} -40\text{ °C}$
 $T_{max} +120\text{ °C}$ Cylindrical thread

**Nickel-plated
brass**

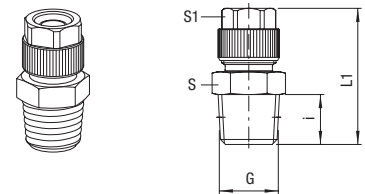
for tube D/d	G	i	L1*	S1	S	Weight in [g]	Type	Order number	Price
4.3/3	M 5	6	15.5	7	13	9.6	151M-43/3-M5	300004	o. r.
4.3/3	G 1/8	4	14.5	7	8	4.3	151M-43/3-1/8	300006	o. r.
5/3	M 5	5	14.5	7	8	4.7	151M-5/3-M5	300007	o. r.
5/3	M 6	6	15.5	7	13	9.6	151M-5/3-M6	300499	o. r.
5/3	G 1/8	4	15.5	8	8	5.1	151M-5/3-1/8	300009	o. r.
6/4	M 5	5	15.5	8	8	5.2	151M-6/4-M5	300010	o. r.
6/4	M 6	6	18.5	10	13	13.6	151M-6/4-M6	300500	o. r.
6/4	G 1/8	8	19	10	17	20.8	151M-6/4-1/8	300014	o. r.
6/4	G 1/4	9	19	10	19	25.7	151M-6/4-1/4	300015	o. r.
6/4	G 3/8	10	19.5	10	24	34.6	151M-6/4-3/8	300016	o. r.
6/4	G 1/2	6	18.5	12	13	15.7	151M-6/4-1/2	300017	o. r.
8/6	G 1/8	8	19	12	17	22.1	151M-8/6-1/8	300020	o. r.
8/6	G 1/4	9	19	12	19	26.9	151M-8/6-1/4	300021	o. r.
8/6	G 3/8	10	19.5	12	24	37.1	151M-8/6-3/8	300022	o. r.
8/6	G 1/2	6	20	13	14	19.7	151M-8/6-1/2	300023	o. r.
10/8	G 1/8	8	20.5	13	17	26.5	151M-10/8-1/8	300029	o. r.
10/8	G 1/4	9	20.5	13	19	31.8	151M-10/8-1/4	300030	o. r.
10/8	G 3/8	10	21	13	24	39.9	151M-10/8-3/8	300031	o. r.
10/8	G 1/2	8	22	15	17	30.3	151M-10/8-1/2	300032	o. r.
11.5/9	G 1/4	9	22	15	19	36.4	151M-115/9-1/4	300033	o. r.
11.5/9	G 3/8	8	22	15	17	29.9	151M-115/9-3/8	300034	o. r.
12/9	G 1/4	9	22	15	19	33.3	151M-12/9-1/4	300036	o. r.
12/9	G 3/8	9	22	15	19	33.6	151M-12/9-3/8	300037	o. r.
12/10	G 3/8	10	22.5	15	24**	44	151M-12/10-3/8	300043	o. r.
12/10	G 1/2	10	25	19	24**	53.4	151M-12/10-1/2	300044	o. r.
15/12.5	G 1/2	10	25	22	24**	51.2	151M-15/125-1/2	300048	o. r.
17.6/13	G 1/2	10	25	22	24**	51.2	151M-176/13-1/2	300050	o. r.

Illustration


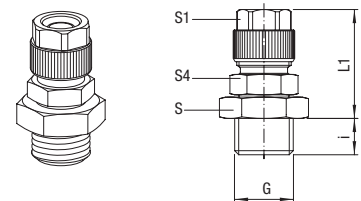
* approximate with fastened cap nut ** S24 = octagon

Straight Adaptor - Male

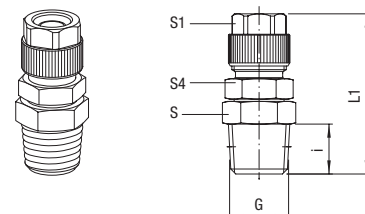
Price group	11	PN 25	T _{min} -40 °C T _{max} +120 °C	Conical thread	Thread "D" self-sealing T _{max} +100 °C			Nickel-plated brass		
for tube D/d	G	i	L1*	S1	S	self-sealing opt. "D"	Weight in [g]	Type	Order number	Price
4.3/3	R 1/8	7.5	23	7	10	-	7.5	151M-43/3-1/8K	300506	o. r.
5/3	R 1/8	7.5	23	7	10	-	7.5	151M-5/3-1/8K	300509	o. r.
6/4	R 1/8	7.5	26	10	12	-	12.5	151M-6/4-1/8K	300514	o. r.
6/4	R 1/8	7.5	26	10	12	D	12.5	151M-6/4-D1/8K	306514	o. r.
6/4	R 1/4	11	30	10	14	-	17.3	151M-6/4-1/4K	300515	o. r.
6/4	R 1/4	11	30	10	14	D	17.3	151M-6/4-D1/4K	306515	o. r.
6/4	R 3/8	11.5	30.5	10	17	-	26.2	151M-6/4-3/8K	300516	o. r.
8/6	R 1/8	7.5	26	12	12	-	17.2	151M-8/6-1/8K	300520	o. r.
8/6	R 1/8	7.5	26	12	12	D	17.2	151M-8/6-D1/8K	306520	o. r.
8/6	R 1/4	11	30	12	14	-	18.1	151M-8/6-1/4K	300521	o. r.
8/6	R 1/4	11	30	12	14	D	18.1	151M-8/6-D1/4K	306521	o. r.
8/6	R 3/8	11.5	30.5	12	17	-	28.4	151M-8/6-3/8K	300522	o. r.
8/6	R 3/8	11.5	30.5	12	17	D	28.4	151M-8/6-D3/8K	306522	o. r.
10/8	R 1/8	7.5	27.5	13	14	-	20.8	151M-10/8-1/8K	300529	o. r.
10/8	R 1/4	11	31.5	13	14	-	22.6	151M-10/8-1/4K	300530	o. r.
10/8	R 1/4	11	31.5	13	14	D	22.6	151M-10/8-D1/4K	306530	o. r.
10/8	R 3/8	11.5	32	13	17	-	27.9	151M-10/8-3/8K	300531	o. r.
10/8	R 1/2	14	35	13	22	-	41	151M-10/8-1/2K	300532	o. r.
12/10	R 3/8	11.5	33.5	15	17	-	30.5	151M-12/10-3/8K	300543	o. r.
12/10	R 1/2	14	36.5	15	22	-	46.1	151M-12/10-1/2K	300544	o. r.
15/12.5	R 1/2	14	39	19	22	-	58	151M-15/12.5-1/2K	300548	o. r.
17.6/13	R 1/2	14	39	22	22	-	59.2	151M-17.6/13-1/2K	300550	o. r.

Illustration

Straight Adaptor - Male - Positionable

Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Cylindrical thread	Sealing ring: NBR	not suitable for rotating or oscill. movement		Nickel-plated brass		
for tube D/d	G	i	L1*	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	6	24.5	10	13	13	20.3	131M-6/4-1/8	300414	o. r.
6/4	G 1/4	8	23.5	10	13	17	25.4	131M-6/4-1/4	300415	o. r.
8/6	G 1/8	6	24.5	12	13	13	20.5	131M-8/6-1/8	300420	o. r.
8/6	G 1/4	8	23.5	12	13	17	28.3	131M-8/6-1/4	300421	o. r.
10/8	G 1/4	8	25	13	14	17	32.3	131M-10/8-1/4	300430	o. r.
12/9	G 3/8	9	28.5	15	17	19	45.5	131M-12/9-3/8	300437	o. r.
12/10	G 3/8	9	28.5	15	17	19	46.2	131M-12/10-3/8	300443	o. r.

Illustration

Straight Adaptor - Male - Positionable

Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Conical thread	Sealing ring: NBR	Thread "D" self-sealing	not suitable for rotating or oscill. movement		Nickel-plated brass		
for tube D/d	G	i	L1*	S1	S4	S	self-sealing opt. "D"	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	31.5	10	13	13	-	20	131M-6/4-1/8K	300714	o. r.
6/4	R 1/8	7.5	31.5	10	13	13	D	20	131M-6/4-D1/8K	306714	o. r.
6/4	R 1/4	11	34.5	10	13	14	-	25	131M-6/4-1/4K	300715	o. r.
6/4	R 1/4	11	34.5	10	13	14	D	26	131M-6/4-D1/4K	306715	o. r.
8/6	R 1/8	7.5	31.5	12	13	13	-	21.5	131M-8/6-1/8K	300720	o. r.
8/6	R 1/8	7.5	31.5	12	13	13	D	21.5	131M-8/6-D1/8K	306720	o. r.
8/6	R 1/4	11	34.5	12	13	14	-	27	131M-8/6-1/4K	300721	o. r.
8/6	R 1/4	11	34.5	12	13	14	D	27	131M-8/6-D1/4K	306721	o. r.
10/8	R 1/4	11	36	13	14	14	-	30.8	131M-10/8-1/4K	300730	o. r.
10/8	R 1/4	11	36	13	14	14	D	30.8	131M-10/8-D1/4K	306730	o. r.

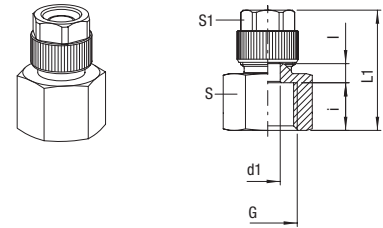
Illustration


* approximate with fastened cap nut

Straight Adaptor - Female

Price group	11	PN 25	T _{min} -40 °C T _{max} +120 °C	Cylindrical thread							Nickel-plated brass	
for tube D/d	G	i	L1*	I	d1	S1	S	Weight in [g]	Type	Order number	Price	
4.3/3	G 1/8	7	21	5.5	2.2	7	13	9.9	146M-43/3-1/8	300806	o. r.	
5/3	G 1/8	7	21	5.5	2.2	7	13	9.9	146M-5/3-1/8	300809	o. r.	
6/4	G 1/8	7	24	5.6	5.5	10	13	13.6	146M-6/4-1/8	300814	o. r.	
6/4	G 1/4	9	26.5	6.1	5.5	10	17	21.4	146M-6/4-1/4	300815	o. r.	
8/6	G 1/8	7	24	5.6	5.5	12	13	15.8	146M-8/6-1/8	300820	o. r.	
8/6	G 1/4	9	26.5	6.1	5.5	12	17	26.4	146M-8/6-1/4	300821	o. r.	
8/6	G 3/8	10	27.5	6.1	6.5	12	19	23.4	146M-8/6-3/8	300822	o. r.	
8/6	G 1/2	13.5	31.5	6.6	6.5	12	24	38.2	146M-8/6-1/2	300823	o. r.	
10/8	G 1/4	9	28	5.5	6.8	13	17	26.6	146M-10/8-1/4	300830	o. r.	
10/8	G 3/8	10	29	5.5	6.8	13	19	27.4	146M-10/8-3/8	300831	o. r.	
10/8	G 1/2	13.5	33	6	6.8	13	24**	42	146M-10/8-1/2	300832	o. r.	
11.5/9	G 3/8	10	30.5	6	7.6	15	19	32.2	146M-115/9-3/8	300834	o. r.	
12/9	G 3/8	10	30.5	6	7.6	15	19	31.9	146M-12/9-3/8	300837	o. r.	

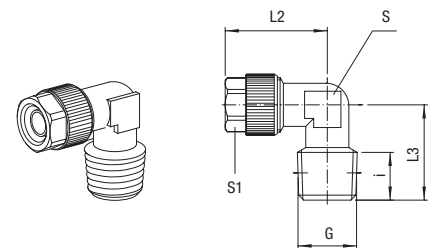
Illustration



90° Elbow Adaptor - Male

Price group	11	PN 25	T _{min} -40 °C T _{max} +120 °C	Conical thread		Thread "D" self-sealing T _{max} +100 °C			Nickel-plated brass		
for tube D/d	G	i	L2*	L3	S1	S	self-sealing opt. "D"	Weight in [g]	Type	Order number	Price
4,3/3	R 1/8	7.4	18	17	7	8	-	10.2	150M-43/3-1/8K	301156	o. r.
5/3	R 1/8	7.4	18	17	7	8	-	10.2	150M-5/3-1/8K	301159	o. r.
6/4	R 1/8	7.4	21.5	17	10	8	-	13.8	150M-6/4-1/8K	301164	o. r.
6/4	R 1/8	7.4	21.5	17	10	8	D	13.8	150M-6/4-D1/8K	306864	o. r.
6/4	R 1/4	10.5	22.5	21	10	10	-	20.6	150M-6/4-1/4K	301165	o. r.
6/4	R 1/4	10.5	22.5	21	10	10	D	20.6	150M-6/4-D1/4K	306865	o. r.
8/6	R 1/8	7.4	21.5	17	12	8	-	15.2	150M-8/6-1/8K	301170	o. r.
8/6	R 1/8	7.4	21.5	17	12	8	D	15.2	150M-8/6-D1/8K	306870	o. r.
8/6	R 1/4	10.5	22.5	21	12	10	-	22.6	150M-8/6-1/4K	301171	o. r.
8/6	R 1/4	10.5	22.5	21	12	10	D	22.6	150M-8/6-D1/4K	306871	o. r.
8/6	R 3/8	11.3	26.5	25	12	13	-	37.6	150M-8/6-3/8K	301172	o. r.
8/6	R 3/8	11.3	26.5	25	12	13	D	37.6	150M-8/6-D3/8K	306872	o. r.
10/8	R 1/8	7.4	24	17	13	10	-	20.6	150M-10/8-1/8K	301179	o. r.
10/8	R 1/8	7.4	24	17	13	10	D	20.6	150M-10/8-D1/8K	306879	o. r.
10/8	R 1/4	10.5	24	21	13	10	-	22	150M-10/8-1/4K	301180	o. r.
10/8	R 1/4	10	24	21	13	10	D	22	150M-10/8-D1/4K	306880	o. r.
10/8	R 3/8	11.3	27	25	13	13	-	40.2	150M-10/8-3/8K	301181	o. r.
10/8	R 3/8	11.3	27	25	13	13	D	40.2	150M-10/8-D3/8K	306881	o. r.
11,5/9	R 1/4	10.4	29	23	15	13	-	39.1	150M-115/9-1/4K	301183	o. r.
11,5/9	R 3/8	11.3	29	25	15	13	-	42.6	150M-115/9-3/8K	301184	o. r.
12/9	R 1/4	10.4	29	23	15	13	-	38.5	150M-12/9-1/4K	301186	o. r.
12/9	R 3/8	11.3	29	25	15	13	-	43.2	150M-12/9-3/8K	301187	o. r.
12/10	R 3/8	11.5	29	25	15	13	-	41	150M-12/10-3/8K	301193	o. r.
15/12,5	R 1/2	14.2	32.5	29	19	17	-	71.8	150M-15/125-1/2K	301198	o. r.
17,6/13	R 1/2	14.2	32.5	29	22	17	-	69.8	150M-176/13-1/2K	301200	o. r.

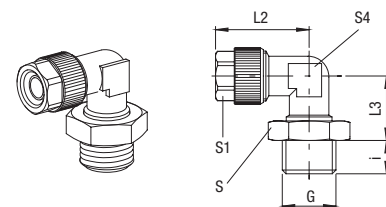
Illustration



90° Elbow Adaptor - Male - Positionable

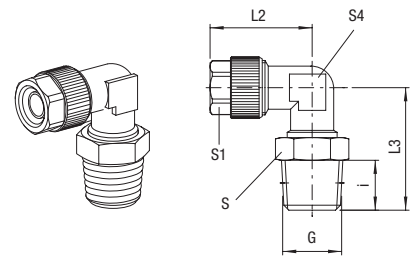
Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Cylindrical thread	Sealing ring: NBR			not suitable for rotating or oscill. movement		Nickel-plated brass	
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	6	22.5	14.5	10	10	13	24.2	130M-6/4-1/8	301314	o. r.
6/4	G 1/4	8	22.5	14.6	10	10	17	30.8	130M-6/4-1/4	301315	o. r.
8/6	G 1/8	6	22.5	14.5	12	10	13	25.3	130M-8/6-1/8	301320	o. r.
8/6	G 1/4	8	22.5	14.5	12	10	17	28.8	130M-8/6-1/4	301321	o. r.
10/8	G 1/4	8	24	14.5	13	10	17	28.7	130M-10/8-1/4	301330	o. r.

Illustration

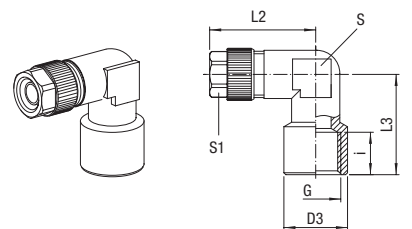


90° Elbow Adaptor - Male - Positionable

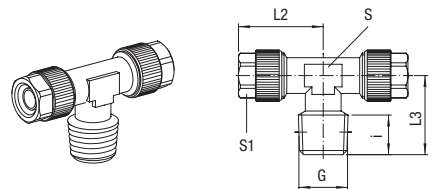
Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Conical thread			Sealing ring: NBR		Thread "D" self-sealing		not suitable for rotating or oscill. movement		Nickel-plated brass
for tube D/d	G	i	L2*	L3	S1	S4	S	self-sealing opt. "D"	Weight in [g]	Type		Order number	Price
6/4	R 1/8	7.5	22.5	21.5	10	10	13	-	24.2	130M-6/4-1/8K		301564	o. r.
6/4	R 1/8	7.5	22.5	21.5	10	10	13	D	24.5	130M-6/4-D1/8K		307264	o. r.
6/4	R 1/4	11	22.5	25.6	10	10	14	-	29.2	130M-6/4-1/4K		301565	o. r.
6/4	R 1/4	11	22.5	25.6	10	10	14	D	29.3	130M-6/4-D1/4K		307265	o. r.
8/6	R 1/8	7.5	22.5	21.5	12	10	13	-	25	130M-8/6-1/8K		301570	o. r.
8/6	R 1/8	7.5	22.5	21.5	12	10	13	D	25	130M-8/6-D1/8K		307270	o. r.
8/6	R 1/4	11	22.5	25.5	12	10	17	-	28.8	130M-8/6-1/4K		301571	o. r.
8/6	R 1/4	11	22.5	25.5	12	10	17	D	28.8	130M-8/6-D1/4K		307271	o. r.
10/8	R 1/4	11	24	25.5	13	10	17	-	32.4	130M-10/8-1/4K		301580	o. r.
10/8	R 1/4	11	24	25.5	13	10	17	D	32.4	130M-10/8-D1/4K		307280	o. r.

Illustration

90° Elbow Adaptor - Female

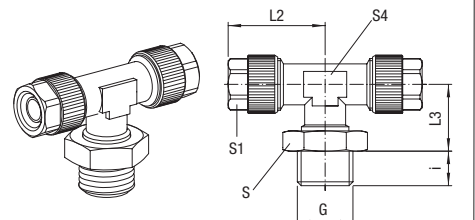
Price group	11	PN 25	T _{min} -40 °C T _{max} +120 °C	Cylindrical thread							Nickel-plated brass	
for tube D/d	G	i	L2*	L3	D3	S1	S	Weight in [g]	Type	Order number	Price	
6/4	G 1/8	7	22.5	20	13	10	10	21.5	149M-6/4-1/8	301464	o. r.	
6/4	G 1/4	9	25.5	26	17	10	13	38.8	149M-6/4-1/4	301465	o. r.	
8/6	G 1/8	7	22.5	20	13	12	10	22.6	149M-8/6-1/8	301470	o. r.	
8/6	G 1/4	9	25.5	26	17	12	13	39	149M-8/6-1/4	301471	o. r.	
10/8	G 1/4	9	29	26	17	13	13	43	149M-10/8-1/4	301480	o. r.	

Illustration

T-Adaptor - Male

Price group	11	PN 25	T _{min} -40 °C T _{max} +120 °C	Conical thread	Thread "D" self-sealing T _{max} +100 °C				Nickel-plated brass		
for tube D/d	G	i	L2*	L3	S1	S	self-sealing opt. "D"	Weight in [g]	Type	Order number	Price
4.3/3	R 1/8	7.4	18	17	7	8	-	13.8	141M-43/3-1/8K	301656	o. r.
5/3	R 1/8	7.4	18	17	7	8	-	13.8	141M-5/3-1/8K	301659	o. r.
6/4	R 1/8	7.4	21.5	17	10	8	-	22	141M-6/4-1/8K	301664	o. r.
6/4	R 1/8	7.4	21.5	17	10	8	D	22	141M-6/4-D1/8K	307464	o. r.
6/4	R 1/4	10.5	22.5	21	10	10	-	32.2	141M-6/4-1/4K	301665	o. r.
6/4	R 1/4	10.5	22.5	21	10	10	D	32.2	141M-6/4-D1/4K	307465	o. r.
8/6	R 1/8	7.4	21.5	17	12	8	-	25.1	141M-8/6-1/8K	301670	o. r.
8/6	R 1/8	7.4	21.5	17	12	8	D	25.1	141M-8/6-D1/8K	307470	o. r.
8/6	R 1/4	10.5	22.5	21	12	10	-	34.5	141M-8/6-1/4K	301671	o. r.
8/6	R 1/4	10.5	22.5	21	12	10	D	34.5	141M-8/6-D1/4K	307471	o. r.
10/8	R 1/8	7.4	24	17	13	10	-	33	141M-10/8-1/8K	301679	o. r.
10/8	R 1/4	10.5	24	21	13	10	-	37.8	141M-10/8-1/4K	301680	o. r.
10/8	R 1/4	10.5	24	21	13	10	D	37.8	141M-10/8-D1/4K	307480	o. r.
10/8	R 3/8	11.3	27	25	13	13	-	58	141M-10/8-3/8K	301681	o. r.
12/10	R 3/8	11.3	26	25	15	13	-	53.3	141M-12/10-3/8K	301693	o. r.
15/12.5	R 1/2	14.2	32.5	29	19	17	-	106	141M-15/12.5-1/2K	301698	o. r.
17.6/13	R 1/2	14.2	32.5	29	22	17	-	117.7	141M-17.6/13-1/2K	301700	o. r.

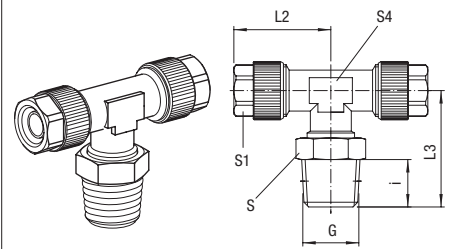
Illustration

T-Adaptor - Male - Positionable

Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Cylindrical thread	Sealing ring: NBR	not suitable for rotating or oscill. movement					Nickel-plated brass	
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price	
6/4	G 1/8	6	22.5	14.5	10	10	13	34.4	121M-6/4-1/8	301814	o. r.	
6/4	G 1/4	8	22.5	14.6	10	10	17	41	121M-6/4-1/4	301815	o. r.	
8/6	G 1/8	6	22.5	14.5	12	10	13	36	121M-8/6-1/8	301820	o. r.	
8/6	G 1/4	8	22.5	14.6	12	10	17	42.3	121M-8/6-1/4	301821	o. r.	
10/8	G 1/4	8	24	14.5	13	10	17	47.5	121M-10/8-1/4	301830	o. r.	

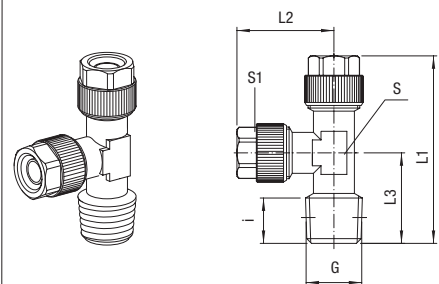
Illustration


T-Adaptor - Male - Positionable

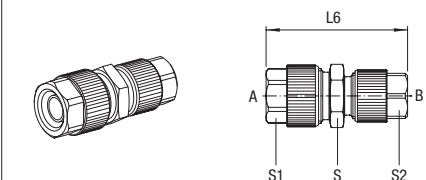
Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C		Conical thread		Sealing ring: NBR		Thread "D" self-sealing		not suitable for rotating or oscill. movement		Nickel-plated brass
for tube D/d	G	i	L2*	L3	S1	S4	S	self-seal- ing opt. "D"	Weight in [g]	Type		Order number	Price
6/4	R 1/8	7.5	22.5	23	10	10	13	-	31.2	121M-6/4-1/8K		301864	o. r.
6/4	R 1/8	7.5	22.5	23	10	10	13	D	31.2	121M-6/4-D1/8K		307664	o. r.
6/4	R 1/4	11	22.5	25.5	10	10	14	-	36.3	121M-6/4-1/4K		301865	o. r.
6/4	R 1/4	11	22.5	25.5	10	10	14	D	36.3	121M-6/4-D1/4K		307665	o. r.
8/6	R 1/8	7.5	22.5	21.5	12	10	13	-	31.9	121M-8/6-1/8K		301870	o. r.
8/6	R 1/8	7.5	22.5	21.5	12	10	13	D	31.9	121M-8/6-D1/8K		307670	o. r.
8/6	R 1/4	11	22.5	25.5	12	10	17	-	41.7	121M-8/6-1/4K		301871	o. r.
8/6	R 1/4	11	22.5	25.5	12	10	17	D	41.7	121M-8/6-D1/4K		307671	o. r.
10/8	R 1/4	11	24	25.5	13	10	17	-	45.6	121M-10/8-1/4K		301880	o. r.
10/8	R 1/4	11	24	25.5	13	10	17	D	45.6	121M-10/8-D1/4K		307680	o. r.

Illustration

Side T-Adaptor - Male

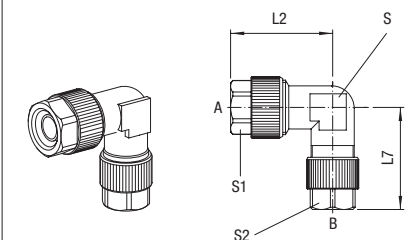
Price group	11	PN 25	T _{min} - 40 °C T _{max} +120 °C	Conical thread					Nickel-plated brass		
for tube D/d	G	i	L1*	L2*	L3	S1	S	Weight in [g]	Type	Order number	Price
4.3/3	R 1/8	7.4	35	18	17	7	8	14.8	142M-43/3-1/8K	301956	o. r.
5/3	R 1/8	7.4	35	18	17	7	8	14.8	142M-5/3-1/8K	301959	o. r.
6/4	R 1/8	7.4	38.5	21.5	17	10	8	22.3	142M-6/4-1/8K	301964	o. r.
6/4	R 1/4	10.5	43.5	22.5	21	10	10	32.5	142M-6/4-1/4K	301965	o. r.
8/6	R 1/8	7.4	38.5	21.5	17	12	8	25	142M-8/6-1/8K	301970	o. r.
8/6	R 1/4	10.5	43.5	22.5	21	12	10	34.2	142M-8/6-1/4K	301971	o. r.
10/8	R 1/8	7.4	41	24	17	13	10	35.5	142M-10/8-1/8K	301979	o. r.
10/8	R 1/4	10.5	45	24	21	13	10	38.5	142M-10/8-1/4K	301980	o. r.
10/8	R 3/8	11.3	52	27	25	13	13	58.5	142M-10/8-3/8K	301981	o. r.
12/10	R 3/8	11.3	54	29	25	15	13	60.5	142M-12/10-3/8K	301993	o. r.
15/12.5	R 1/2	14.2	61.5	32.5	29	19	17	96.2	142M-15/125-1/2K	301998	o. r.
17.6/13	R 1/2	14.2	61.5	32.5	29	22	17	98	142M-176/13-1/2K	302000	o. r.

Illustration

Straight Fitting

Price group	11	PN 25	T _{min} - 40 °C T _{max} +120 °C							Nickel-plated brass
for tube A D/d	for tube B D/d	L6*	S1	S2	S	Weight in [g]	Type	Order number	Price	
4.3/3	4.3/3	25	7	7	8	6.4	158M-43/3	302203	o. r.	
5/3	4.3/3	25	7	7	8	6.4	158M-5/3-43/3	302205	o. r.	
5/3	5/3	25	7	7	8	6.2	158M-5/3	302206	o. r.	
6/4	4.3/3	28	10	7	12	12.3	158M-6/4-43/3	302208	o. r.	
6/4	5/3	28	10	7	12	12.2	158M-6/4-5/3	302209	o. r.	
6/4	6/4	31	10	10	12	16.9	158M-6/4	302210	o. r.	
8/6	6/4	31	12	10	12	18	158M-8/6-6/4	302211	o. r.	
8/6	8/6	31	12	12	12	20.9	158M-8/6	302212	o. r.	
10/8	6/4	33	13	10	14	21.7	158M-10/8-6/4	302213	o. r.	
10/8	8/6	33	13	12	14	24.7	158M-10/8-8/6	302214	o. r.	
10/8	10/8	34.5	13	13	14	28.9	158M-10/8	302215	o. r.	
12/10	12/10	38	15	15	17	39.8	158M-12/10	302219	o. r.	
15/12.5	15/12.5	43.5	19	19	22	68.9	158M-15/125	302223	o. r.	
17.6/13	17.6/13	43.5	22	22	22	65.4	158M-176/13	302225	o. r.	

Illustration

90° Elbow Connector

Price group	11	PN 25	T _{min} -40 °C T _{max} +120 °C								Nickel-plated brass	
for tube A D/d	for tube B D/d	L2*	L7*	S1	S2	S	Weight in [g]	Type	Order number	Price		
4.3/3	4.3/3	18	18	7	7	8	10,1	155M-43/3	302428	o. r.		
5/3	4.3/3	18	18	7	7	8	9	155M-5/3-43/3	302430	o. r.		
5/3	5/3	18	18	7	7	8	9,8	155M-5/3	302431	o. r.		
6/4	6/4	22,5	22,5	10	10	8	18,2	155M-6/4	302435	o. r.		
8/6	6/4	22,5	22,5	12	10	10	24,1	155M-8/6-6/4	302436	o. r.		
8/6	8/6	22,5	22,5	12	12	10	25,6	155M-8/6	302437	o. r.		
10/8	10/8	24	24	13	13	10	31	155M-10/8	302440	o. r.		
12/10	12/10	29	29	15	15	13	46,1	155M-12/10	302444	o. r.		
15/12.5	15/12.5	32.5	32.5	19	19	17	on rep.	155M-15/125	302448	o. r.		
17.6/13	17.6/13	32.5	32.5	22	22	17	on rep.	155M 176/13	302450	o. r.		

Illustration


* approximate with fastened cap nut

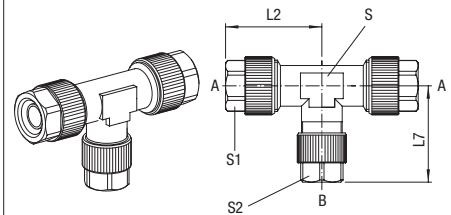
T-Connector

Price group **11** PN 25 $T_{min} -40\text{ °C}$
 $T_{max} +120\text{ °C}$

Nickel-plated brass

for tube A D/d	for tube B D/d	L2*	L7*	S1	S2	S	Weight in [g]	Type	Order number	Price
4.3/3	4.3/3	19	19	7	7	8	14.8	154M-43/3	302628	o. r.
5/3	4.3/3	19	19	7	7	8	14.8	154M-5/3-43/3	302630	o. r.
5/3	5/3	19	19	7	7	8	14.6	154M-5/3	302631	o. r.
6/4	6/4	21.5	21.5	10	10	8	26.7	154M-6/4	302635	o. r.
8/6	6/4	21.5	21.5	12	10	8	27.7	154M-8/6-6/4	302636	o. r.
8/6	8/6	21.5	21.5	12	12	8	28.7	154M-8/6	302637	o. r.
10/8	6/4	24	22.5	13	10	10	39.5	154M-10/8-6/4	302638	o. r.
10/8	8/6	24	22.5	13	12	10	40.6	154M-10/8-8/6	302639	o. r.
10/8	10/8	24	24	13	13	10	44	154M-10/8	302640	o. r.
11.5/9	11.5/9	29	29	15	15	13	71	154M-115/9	302641	o. r.
12/9	12/9	29	29	15	15	13	70.3	154M-12/9	302642	o. r.
12/10	12/10	29	29	15	15	13	64	154M-12/10	302644	o. r.
15/12.5	15/12.5	32.5	32.5	19	19	17	112	154M-15/125	302648	o. r.
17.6/13	17.6/13	32.5	32.5	22	19	17	115	154M 176/13	302650	o. r.

Illustration



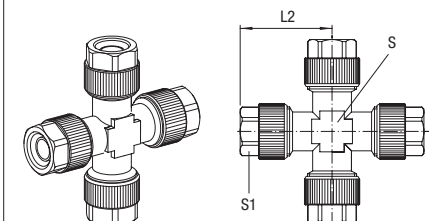
Cross Connector

Price group **11** PN 25 $T_{min} -40\text{ °C}$
 $T_{max} +120\text{ °C}$

Nickel-plated brass

for tube D/d	L2*	S1	S	Weight in [g]	Type	Order number	Price
6/4	22.5	10	10	43.4	160M-6/4	302835	o. r.
8/6	22.5	12	10	47.2	160M-8/6	302837	o. r.
10/8	24	13	10	54	160M-10/8	302840	o. r.

Illustration



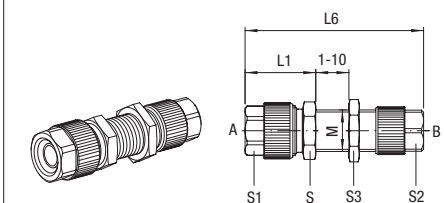
Straight Bulkhead Fitting

Price group **11** PN 25 $T_{min} -40\text{ °C}$
 $T_{max} +120\text{ °C}$

Nickel-plated brass

for tube A D/d	for tube B D/d	M	L1*	L6*	S1	S2	S3	S	Weight in [g]	Type	Order number	Price
4.3/3	4.3/3	M7x0.75	14	35	7	7	10	8	9.7	159M-43/3	303003	o. r.
5/3	4.3/3	M7x0.75	14	35	7	7	10	8	9.7	159M-5/3-43/3	303005	o. r.
5/3	5/3	M7x0.75	14	35	7	7	10	8	9.5	159M-5/3	303006	o. r.
6/4	4.3/3	M7x0.75	17	38	10	7	10	12	15.2	159M-6/4-43/3	303008	o. r.
6/4	5/3	M7x0.75	17	38	10	7	10	12	15.1	159M-6/4-5/3	303009	o. r.
6/4	6/4	M10x1	17	43	10	10	13	12	24.2	159M-6/4	303010	o. r.
8/6	6/4	M10x1	17	43	12	10	13	12	24.3	159M-8/6-6/4	303011	o. r.
8/6	8/6	M12x1	17.5	43.5	12	12	17	14	34.2	159M-8/6	303012	o. r.
10/8	6/4	M10x1	19	45	13	10	13	14	30.3	159M-10/8-6/4	303013	o. r.
10/8	8/6	M12x1	19	45	13	12	17	14	37.7	159M-10/8-8/6	303014	o. r.
10/8	10/8	M14x1	19.5	47.5	13	13	17	17	44.9	159M-10/8	303015	o. r.
11.5/9	11.5/9	M16x1	21	50	15	15	19	19	63	159M-115/9	303016	o. r.
12/9	12/9	M16x1	21	50	15	15	19	19	60.8	159M-12/9	303017	o. r.
12/10	12/10	M16x1	21	50	15	15	19	19	58	159M-12/10	303019	o. r.
15/12.5	15/12.5	M20x1	24	55	19	19	24**	22	96	159M-15/125	303023	o. r.
17.6/13	17.6/13	M20x1	24	55	22	22	24**	22	106	159M-176/13	303025	o. r.

Illustration



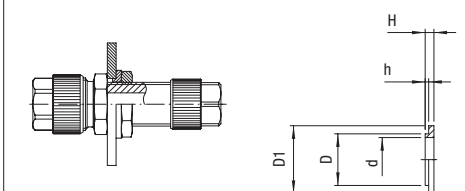
Bulkhead Fitting Accessories

Price group **11**

Nickel-plated brass

D1	D	d	H	h	Weight in [g]	Type	Order number	Price
15.5	9.8	7.1	2	0.8	1.8	258M-10-7	251991	o. r.
15.5	11.8	10.1	2	0.8	1.3	258M-12-10	251992	o. r.
17.5	13.8	10.1	2	0.8	2.1	258M-14-10	251993	o. r.
17.5	13.8	12.1	2	0.8	1.6	258M-14-12	251994	o. r.

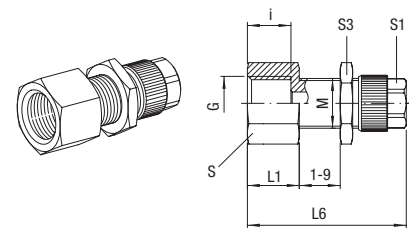
Illustration



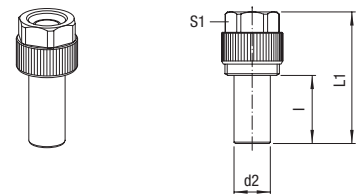
* approximate with fastened cap nut ** S24 = octagon

Bulkhead Adaptor also Suitable for Pressure Gauge

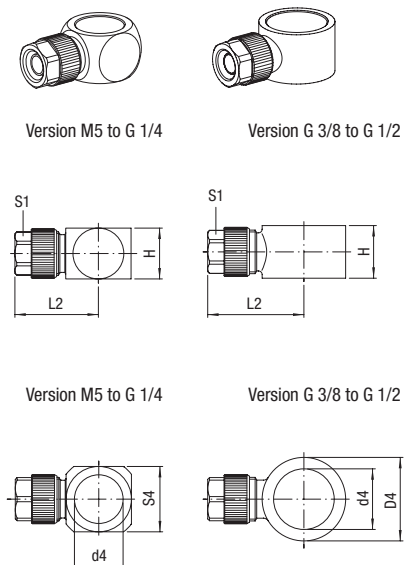
Price group	11	PN 25	T _{min} - 40 °C T _{max} +120 °C	Cylindrical thread M, G	Nickel-plated brass							
for tube D/d	G	M	i	L1	L6*	S1	S3	S	Weight in [g]	Type	Order number	Price
4.3/3	M 5	M7x0.75	4.5	7	28	7	10	8	7.4	145M-43/3-M5	303104	o. r.
5/3	M 5	M7x0.75	4.5	7	28	7	10	8	7.4	145M-5/3-M5	303107	o. r.
6/4	G 1/8	M10x1	7	10	36	10	13	13	20.1	145M-6/4-1/8	303114	o. r.
8/6	G 1/4	M12x1	9	12.5	38.5	12	17	17	34.9	145M-8/6-1/4	303121	o. r.
10/8	G 1/4	M14x1	9	12.5	40.5	13	17	17	40.5	145M-10/8-1/4	303130	o. r.
11.5/9	G 3/8	M16x1	10	13.5	42.5	15	19	19	48.6	145M-115/9-3/8	303134	o. r.
12/9	G 3/8	M16x1	10	13.5	42.5	15	19	19	48.5	145M-12/9-3/8	303137	o. r.

Illustration

Straight Solder-in Fitting

Price group	11	PN 25	T _{min} -40 °C T _{max} +120 °C						Bright brass
for tube D/d	d2	L1*	I	S1	Weight in [g]	Type	Order number	Price	
4.3/3	6	26	15	7	4.6	147Y-43/3-6	303353	o. r.	
5/3	6	26	15	7	4.6	147Y-5/3-6	303356	o. r.	
6/4	6	29	15	10	9.7	147Y-6/4-6	303360	o. r.	
8/6	8	29	15	12	14	147Y-8/6-8	303362	o. r.	
10/8	10	35.5	20	13	19.3	147Y-10/8-10	303365	o. r.	
12/10	12	37	20	15	25.8	147Y-12/10-12	303369	o. r.	
15/12.5	15	39.5	20	19	46.9	147Y-15/125-15	303373	o. r.	
17.6/13	15	39.5	20	22	44.5	147Y-176/13-15	303375	o. r.	

Illustration

Banjo Ring Piece

Price group	11	PN 25	T _{min} - 20 °C T _{max} +120 °C								Nickel-plated brass
for tube D/d	for hollow screw	L2*	H	d4	S1	S4 and D4	Weight in [g]	Type	Order number	Price	
4.3/3	M 5	15.5	9	5.1	7	9	6.8	161M-43/3S-M5	303404	o. r.	
4.3/3	G 1/8	18	14	10.1	7	14	15.3	161M-43/3S-1/8	303406	o. r.	
5/3	M 5	15.5	8.6	5.1	7	9	6.7	161M-5/3S-M5	303407	o. r.	
5/3	G 1/8	18	14	10.1	7	14	15.1	161M-5/3S-1/8	303409	o. r.	
6/4	M 5	16.5	8.6	5.1	8	9	7.5	161M-6/4S-M5	303410	o. r.	
6/4	G 1/8	21	14	10.1	10	14	20	161M-6/4S-1/8	303414	o. r.	
6/4	G 1/4	23	14	13.4	10	18	25.5	161M-6/4S-1/4	303415	o. r.	
6/4	G 3/8	26.5	14.5	16.7	10	21	24.3	161M-6/4-3/8	303466	o. r.	
6/4	G 1/2	29	14.5	21	10	26	35.3	161M-6/4-1/2	303467	o. r.	
8/6	G 1/8	21	14	10.1	12	14	21.6	161M-8/6S-1/8	303420	o. r.	
8/6	G 1/4	23	14	13.4	12	18	27.4	161M-8/6S-1/4	303421	o. r.	
8/6	G 3/8	24.5	14.5	16.7	12	21	25.1	161M-8/6-3/8	303472	o. r.	
8/6	G 1/2	29	14.5	21	12	26	34.9	161M-8/6-1/2	303473	o. r.	
10/8	G 1/8	22.5	14	10.1	13	14	24.2	161M-10/8S-1/8	303429	o. r.	
10/8	G 1/4	24.5	14	13.4	13	18	30.3	161M-10/8S-1/4	303430	o. r.	
10/8	G 3/8	28	14.5	16.7	13	21	27.1	161M-10/8-3/8	303481	o. r.	
10/8	G 1/2	30.5	14.5	21	13	26	37.1	161M-10/8-1/2	303482	o. r.	
11.5/9	G 3/8	29.5	14.5	16.7	15	21	31.7	161M-115/9-3/8	303484	o. r.	
12/9	G 3/8	29.5	14.5	16.7	15	21	32	161M-12/9-3/8	303487	o. r.	
12/10	G 3/8	29.5	14.5	16.7	15	21	31	161M-12/10-3/8	303493	o. r.	
12/10	G 1/2	32	14.5	21	15	26	39.1	161M-12/10-1/2	303494	o. r.	
15/12.5	G 1/2	34.5	14.5	21	19	26	48.9	161M-15/125-1/2	303498	o. r.	
17.6/13	G 1/2	34.5	14.5	21	19	26	46	161M-176/13-1/2	303500	o. r.	

Illustration


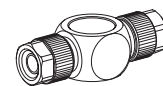
Banjo T-Ring Piece

Price group **11** PN 25 $T_{min} - 20\text{ °C}$
 $T_{max} + 120\text{ °C}$

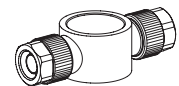
Nickel-plated brass

for tube D/d	for hollow screw	L2*	H	d4	S1	S4 and D4	Weight in [g]	Type	Order number	Price
4.3/3	M 5	15.5	8.6	5.1	7	9	9.2	162M-43/3S-M5	303704	o. r.
4.3/3	G 1/8	18	14	10.1	7	14	17.6	162M-43/3S-1/8	303706	o. r.
5/3	M 5	15.5	8.6	5.1	7	9	9	162M-5/3S-M5	303707	o. r.
5/3	G 1/8	18	14	10.1	7	14	17.1	162M-5/3S-1/8	303709	o. r.
6/4	M 5	16.5	9.6	5.1	8	9	10.5	162M-6/4S-M5	303710	o. r.
6/4	G 1/8	21	14	10.1	10	14	26.6	162M-6/4S-1/8	303714	o. r.
6/4	G 1/4	23	14	13.4	10	18	32.1	162M-6/4S-1/4	303715	o. r.
6/4	G 3/8	26.5	14.5	16.7	10	21	32.2	162M-6/4-3/8	303766	o. r.
6/4	G 1/2	29	14.5	21	10	26	49.2	162M-6/4-1/2	303767	o. r.
8/6	G 1/8	21	14	10.1	12	14	29.6	162M-8/6S-1/8	303720	o. r.
8/6	G 1/4	23	14	13.4	12	18	36.2	162M-8/6S-1/4	303721	o. r.
8/6	G 3/8	24.5	14.5	16.7	12	21	36	162M-8/6-3/8	303772	o. r.
8/6	G 1/2	29	14.5	21	12	26	43.4	162M-8/6-1/2	303773	o. r.
10/8	G 1/8	22.5	14	10.1	13	14	34.5	162M-10/8S-1/8	303729	o. r.
10/8	G 1/4	24.5	14	13.4	13	18	41.2	162M-10/8S-1/4	303730	o. r.
10/8	G 3/8	28	14.5	16.7	13	21	39.8	162M-10/8-3/8	303781	o. r.
10/8	G 1/2	30.5	14.5	21	13	26	53.3	162M-10/8-1/2	303782	o. r.

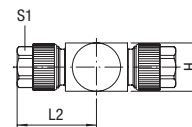
Illustration



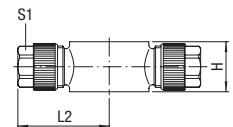
Version M5 to G 1/4



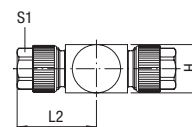
Version G 3/8 to G 1/2



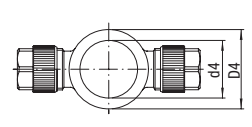
Version M5 to G 1/4



Version G 3/8 to G 1/2



Version M5 to G 1/4



Version G 3/8 to G 1/2

Banjo - Short

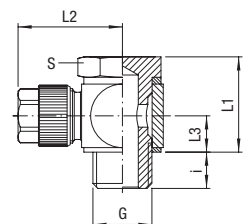
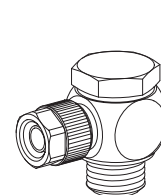
Price group **11** PN 25 Seal: A = Alu
 $T_{min} - 20\text{ °C}$, $T_{max} + 120\text{ °C}$

Seal: N = polyamide
 $T_{min} - 20\text{ °C}$, $T_{max} + 90\text{ °C}$

Nickel-plated brass

for tube D/d	G	i**	L1**	L2*	L3**	S	Weight in [g]	Type	Order number	Price
4.3/3	M 5	4.5	13.5	15.5	5	8	10.4	152M-43/3S-M5N	325014	o. r.
4.3/3	G 1/8	6	20.5	18	8	14	28.6	152M-43/3S-1/8A	325021	o. r.
4.3/3	G 1/8	6	20.5	18	8	14	28.6	152M-43/3S-1/8N	325022	o. r.
5/3	M 5	4.5	13.5	15.5	5	8	9.8	152M-5/3S-M5N	325026	o. r.
5/3	G 1/8	6	20.5	18	8	14	28.1	152M-5/3S-1/8A	325033	o. r.
5/3	G 1/8	6	20.5	18	8	14	28.1	152M-5/3S-1/8N	325034	o. r.
6/4	M 5	4.5	13.5	16.5	5	8	10.4	152M-6/4S-M5N	325038	o. r.
6/4	G 1/8	6	20.5	21	8	14	32.8	152M-6/4S-1/8A	325061	o. r.
6/4	G 1/8	6	20.5	21	8	14	31.8	152M-6/4S-1/8N	325062	o. r.
6/4	G 1/4	8	21	23	8	17	49.2	152M-6/4S-1/4A	325065	o. r.
6/4	G 1/4	8	21	23	8	17	49.2	152M-6/4S-1/4N	325066	o. r.
6/4	G 3/8	8.5	22	26.5	8.5	19	58.5	152M-6/4-3/8A	325369	o. r.
6/4	G 3/8	8.5	22	26.5	8.5	19	58.5	152M-6/4-3/8N	325370	o. r.
6/4	G 1/2	9.5	22	29	8.5	27	100	152M-6/4-1/2A	325373	o. r.
6/4	G 1/2	9.5	22	29	8.5	27	100	152M-6/4-1/2N	325374	o. r.
8/6	G 1/8	6	20.5	21	8	14	34.6	152M-8/6S-1/8A	325097	o. r.
8/6	G 1/8	6	20.5	21	8	14	34.6	152M-8/6S-1/8N	325098	o. r.
8/6	G 1/4	8	21	23	8	17	50.6	152M-8/6S-1/4A	325101	o. r.
8/6	G 1/4	8	21	23	8	17	50.6	152M-8/6S-1/4N	325102	o. r.
8/6	G 3/8	8.5	22	26.5	8.5	19	60	152M-8/6-3/8A	325405	o. r.
8/6	G 3/8	8.5	22	26.5	8.5	19	60	152M-8/6-3/8N	325406	o. r.
8/6	G 1/2	9.5	22	29	8.5	27	100	152M-8/6-1/2A	325409	o. r.
8/6	G 1/2	9.5	22	29	8.5	27	100	152M-8/6-1/2N	325410	o. r.

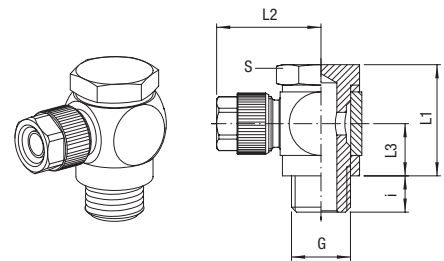
Illustration



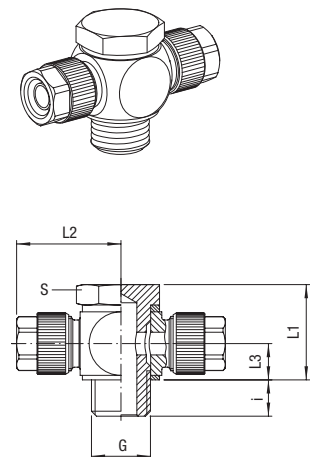
* approximate with fastened cap nut ** approximate with fastened fitting

Banjo - Long

Price group	11	PN 25	Seal: N = polyamide $T_{min} -20\text{ °C}$, $T_{max} +90\text{ °C}$	Cylindrical thread	Nickel-plated brass					
for tube D/d	G	i**	L1**	L2*	L3**	S	Weight in [g]	Type	Order number	Price
4.3/3	G 1/8	6.5	24	18	12	14	29.4	156M-43/3S-1/8N	326522	o. r.
5/3	G 1/8	6.5	24	18	12	14	29.4	156M-5/3S-1/8N	326534	o. r.
6/4	G 1/8	6.5	24	21	12	14	34.7	156M-6/4S-1/8N	326562	o. r.
6/4	G 1/4	8	24.5	23	12	17	51.8	156M-6/4S-1/4N	326566	o. r.
6/4	G 3/8	9	25	26.5	12	19	64.8	156M-6/4-3/8N	326870	o. r.
6/4	G 1/2	10	25	29	12	27	106	156M-6/4-1/2N	326874	o. r.
8/6	G 1/8	6.5	24	21	12	14	36.4	156M-8/6S-1/8N	326598	o. r.
8/6	G 1/4	8	24.4	23	12	17	53.4	156M-8/6S-1/4N	326602	o. r.
8/6	G 3/8	9	25	26.5	12	19	63	156M-8/6-3/8N	326906	o. r.
8/6	G 1/2	10	25	29	12	27	105	156M-8/6-1/2N	326910	o. r.
10/8	G 1/8	6.5	24	22.5	12	14	38.6	156M-10/8S-1/8N	326634	o. r.
10/8	G 1/4	8	24.5	24.5	12	17	57	156M-10/8S-1/4N	326638	o. r.
10/8	G 3/8	9	25	28	12	19	66	156M-10/8-3/8N	326942	o. r.
10/8	G 1/2	10	25	30.5	12	27	110	156M-10/8-1/2N	326946	o. r.
11.5/9	G 3/8	9	25	29.5	12	19	71	156M-115/9-3/8N	326954	o. r.
12/9	G 3/8	9	25	29.5	12	19	71	156M-12/9-3/8N	326966	o. r.
12/10	G 3/8	9	25	29.5	12	19	71	156M-12/10-3/8N	326990	o. r.
12/10	G 1/2	10	25	32	12	27	108	156M-12/10-1/2N	326994	o. r.
15/12.5	G 1/2	10	25	34.5	12	27	117	156M-15/125-1/2N	327010	o. r.
17.6/13	G 1/2	10	25	34.5	12	27	115	156M-176/13-1/2N	327018	o. r.

Illustration

T-Banjo - Short

Price group	11	PN 25	Seal: A = Alu $T_{min} -20\text{ °C}$, $T_{max} +120\text{ °C}$	Seal: N = polyamide $T_{min} -20\text{ °C}$, $T_{max} +90\text{ °C}$	Nickel-plated brass					
for tube D/d	G	i**	L1**	L2*	L3**	S	Weight in [g]	Type	Order number	Price
4.3/3	M 5	4.5	13.5	15.5	5	8	13	153M-43/3S-M5N	328014	o. r.
4.3/3	G 1/8	6	20.5	18	8	14	30.3	153M-43/3S-1/8A	328021	o. r.
4.3/3	G 1/8	6	20.5	18	8	14	30.3	153M-43/3S-1/8N	328022	o. r.
5/3	M 5	4.5	13.5	15.5	5	8	13.2	153M-5/3S-M5N	328026	o. r.
5/3	G 1/8	6	20.5	18	8	14	30.9	153M-5/3S-1/8A	328033	o. r.
5/3	G 1/8	6	20.5	19	8	14	30.9	153M-5/3S-1/8N	328034	o. r.
6/4	M 5	4.5	13.5	16.5	5	8	13.9	153M-6/4S-M5N	328038	o. r.
6/4	G 1/8	6	20.5	21	8	14	40.3	153M-6/4S-1/8A	328061	o. r.
6/4	G 1/8	6	20.5	21	8	14	39.4	153M-6/4S-1/8N	328062	o. r.
6/4	G 1/4	8	21	23	8	17	56	153M-6/4S-1/4A	328065	o. r.
6/4	G 1/4	8	21	23	8	17	55.1	153M-6/4S-1/4N	328066	o. r.
6/4	G 3/8	8.5	22	26.5	8.5	19	68	153M-6/4-3/8A	328369	o. r.
6/4	G 3/8	8.5	22	26.5	8.5	19	68	153M-6/4-3/8N	328370	o. r.
6/4	G 1/2	9.5	22	29	8.5	27	114	153M-6/4-1/2A	328373	o. r.
6/4	G 1/2	9.5	22	29	8.5	27	114	153M-6/4-1/2N	328374	o. r.
8/6	G 1/8	6	20.5	21	8	14	42.5	153M-8/6S-1/8A	328097	o. r.
8/6	G 1/8	6	20.5	21	8	14	42.5	153M-8/6S-1/8N	328098	o. r.
8/6	G 1/4	8	21	23	8	17	62	153M-8/6S-1/4A	328101	o. r.
8/6	G 1/4	8	21	23	8	17	62	153M-8/6S-1/4N	328102	o. r.
8/6	G 3/8	8.5	22	26.5	8.5	19	72	153M-8/6-3/8A	328405	o. r.
8/6	G 3/8	8.5	22	26.5	8.5	19	72	153M-8/6-3/8N	328406	o. r.
8/6	G 1/2	9.5	22	29	8.5	27	113	153M-8/6-1/2A	328409	o. r.
8/6	G 1/2	9.5	22	29	8.5	27	113	153M-8/6-1/2N	328410	o. r.

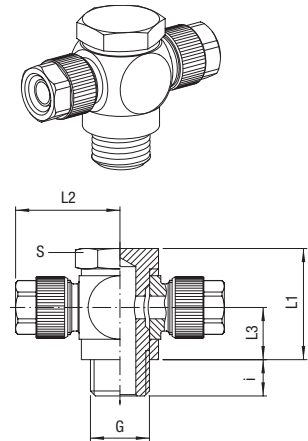
Illustration


* approximate with fastened cap nut ** approximate with fastened fitting

T-Banjo - Long

Price group	11	PN 25	Seal: N = polyamide T _{max} -20 °C, T _{max} +90 °C	Cylindrical thread	Nickel-plated brass					
for tube D/d	G	i***	L1***	L2*	L3***	S	Weight in [g]	Type	Order number	Price
4.3/3	G 1/8	6.5	24	18	12	14	32.3	157M-43/3S-1/8N	329522	o. r.
5/3	G 1/8	6.5	24	18	12	14	32.3	157M-5/3S-1/8N	329534	o. r.
6/4	G 1/8	6.5	24	21	12	14	41.6	157M-6/4S-1/8N	329562	o. r.
6/4	G 1/4	8	24.5	23	12	17	59	157M-6/4S-1/4N	329566	o. r.
6/4	G 3/8	9	25	26.5	12	19	71	157M-6/4-3/8N	329870	o. r.
6/4	G 1/2	10	25	29	12	27	120	157M-6/4-1/2N	329874	o. r.
8/6	G 1/8	6.5	24	21	12	14	43.8	157M-8/6S-1/8N	329598	o. r.
8/6	G 1/4	8	24.4	23	12	17	64	157M-8/6S-1/4N	329602	o. r.
8/6	G 3/8	9	25	24.5	12	19	75	157M-8/6-3/8N	329906	o. r.
8/6	G 1/2	10	25	29	12	27	119	157M-8/6-1/2N	329910	o. r.
10/8	G 1/8	6.5	24	22.5	12	14	48.8	157M-10/8S-1/8N	329634	o. r.
10/8	G 1/4	8	24.5	24.5	12	17	68	157M-10/8S-1/4N	329638	o. r.
10/8	G 3/8	9	25	28	12	19	80	157M-10/8-3/8N	329942	o. r.
10/8	G 1/2	10	25	30.5	12	27	127	157M-10/8-1/2N	329946	o. r.

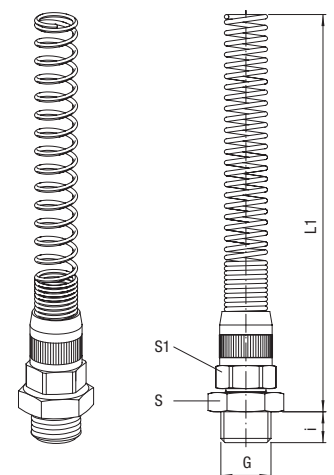
Illustration



Straight Adaptor - Male with Anti-kink Protection

Price group	11	PN 25	T _{mix} -40 °C T _{max} +120 °C	Cylindrical thread							Nickel-plated brass
for tube D/d	G	i	L1*	S1	S	Weight in [g]	Type	Order number	Price		
6/4	G 1/8	6	102	12	13	27.1	151M-6/4KS-1/8	300364	o. r.		
6/4	G 1/4	8	102.5	12	17	34.3	151M-6/4KS-1/4	300365	o. r.		
6/4	G 3/8	9	102.5	12	19	38.6	151M-6/4KS-3/8	300366	o. r.		
6/4	G 1/2	10	103	12	24**	53.1	151M-6/4KS-1/2	300367	o. r.		
8/6	G 1/8	6	103	14	13	31.3	151M-8/6KS-1/8	300370	o. r.		
8/6	G 1/4	8	103	14	17	37.2	151M-8/6KS-1/4	300371	o. r.		
8/6	G 3/8	9	103.5	14	19	43.5	151M-8/6KS-3/8	300372	o. r.		
8/6	G 1/2	10	104	14	24**	58.4	151M-8/6KS-1/2	300373	o. r.		
10/8	G 1/8	6	103.5	16	14	39.2	151M-10/8KS-1/8	300379	o. r.		
10/8	G 1/4	8	104	16	17	44.7	151M-10/8KS-1/4	300380	o. r.		
10/8	G 3/8	9	104	16	19	50.7	151M-10/8KS-3/8	300381	o. r.		
10/8	G 1/2	10	104.5	16	24**	65.1	151M-10/8KS-1/2	300382	o. r.		
12/9	G 1/4	8	104	19	17	47	151M-12/9KS-1/4	300386	o. r.		
12/9	G 3/8	9	104	19	19	56.1	151M-12/9KS-3/8	300387	o. r.		
12/10	G 3/8	9	104	19	19	56.8	151M-12/10KS-3/8	300393	o. r.		
12/10	G 1/2	10	104.5	19	24**	68	151M-12/10KS-1/2	300394	o. r.		

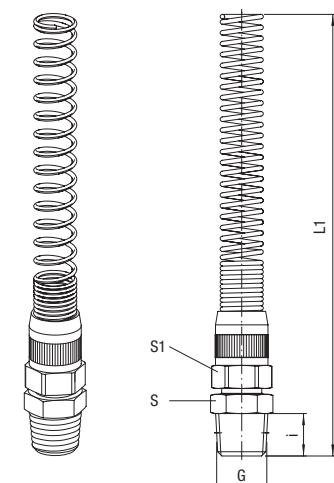
Illustration



Straight Adaptor - Male with Anti-kink Protection

Price group	11	PN 25	T _{mix} -40 °C T _{max} +120 °C	Conical thread	Thread "D" self-sealing T _{max} +100 °C	Nickel-plated brass				
for tube D/d	G	i	L1*	S1	S	self-sealing opt. "D"	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	109.5	12	12	-	24.5	151M-6/4KS-1/8K	300664	o. r.
6/4	R 1/8	7.5	109.5	12	12	D	24.5	151M-6/4KS-D1/8K	306664	o. r.
6/4	R 1/4	11	113.5	12	14	-	29.8	151M-6/4KS-1/4K	300665	o. r.
6/4	R 1/4	11	113.5	12	14	D	29.8	151M-6/4KS-D1/4K	306665	o. r.
6/4	R 3/8	11.5	114	12	17	-	36.7	151M-6/4KS-3/8K	300666	o. r.
8/6	R 1/8	7.5	110.5	14	12	-	30.4	151M-8/6KS-1/8K	300670	o. r.
8/6	R 1/8	7.5	110.5	14	12	D	30.4	151M-8/6KS-D1/8K	306670	o. r.
8/6	R 1/4	11	114.5	14	14	-	35.3	151M-8/6KS-1/4K	300671	o. r.
8/6	R 1/4	11	114.5	14	14	D	35.3	151M-8/6KS-D1/4K	306671	o. r.
8/6	R 3/8	11.5	115	14	17	-	41.6	151M-8/6KS-3/8K	300672	o. r.
10/8	R 1/8	7.5	111	16	14	-	38.3	151M-10/8KS-1/8K	300679	o. r.
10/8	R 1/4	11	115	16	14	-	41.3	151M-10/8KS-1/4K	300680	o. r.
10/8	R 1/4	11	115	16	14	D	41.3	151M-10/8KS-D1/4K	306680	o. r.
10/8	R 3/8	11.5	115.5	16	17	-	48.2	151M-10/8KS-3/8K	300681	o. r.
10/8	R 1/2	14	118.5	16	22	-	61	151M-10/8KS-1/2K	300682	o. r.
12/10	R 3/8	11.5	115.5	19	17	-	55.8	151M-12/10KS-3/8K	300693	o. r.
12/10	R 1/2	14	118.5	19	22	-	67.9	151M-12/10KS-1/2K	300694	o. r.

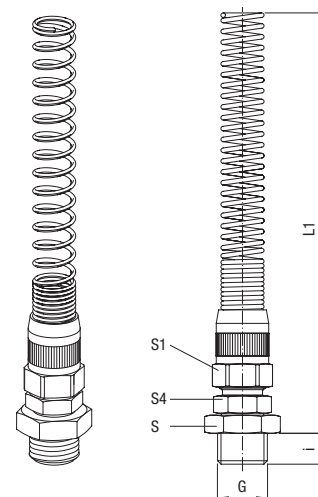
Illustration



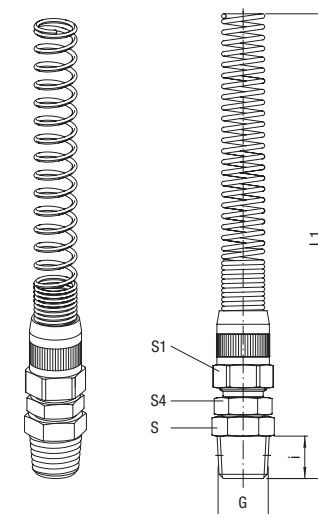
* approximate with fastened cap nut ** S24 = octagon *** approximate with fastened fitting

Straight Adaptor - Male - Positionable with Anti-kink Protection

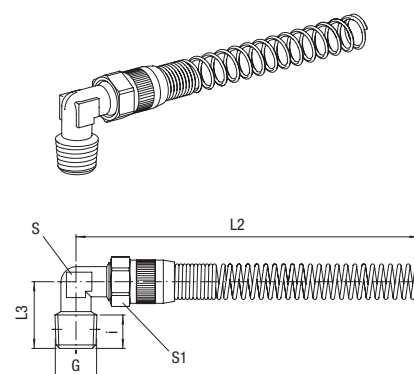
Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Cylindrical thread	Sealing ring: NBR	not suitable for rotating or oscill. movement		Nickel-plated brass		
for tube D/d	G	i	L1*	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	6	108	12	13	13	31,6	131M-6/4KS-1/8	300464	o. r.
6/4	G 1/4	8	108,5	12	13	17	37,3	131M-6/4KS-1/4	300465	o. r.
8/6	G 1/8	6	109	14	13	13	34,6	131M-8/6KS-1/8	300470	o. r.
8/6	G 1/4	8	109	14	13	17	42,7	131M-8/6KS-1/4	300471	o. r.
10/8	G 1/4	8	110	16	14	17	49,2	131M-10/8KS-1/4	300480	o. r.
12/9	G 3/8	9	110	19	17	19	67,9	131M-12/9KS-3/8	300487	o. r.
12/10	G 3/8	9	110	19	17	19	67,8	131M-12/10KS-3/8	300493	o. r.

Illustration

Straight Adaptor - Male - Positionable with Anti-kink Protection

Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Conical thread		Sealing ring: NBR		Thread "D" self-sealing		not suitable for rotating or oscill. movement		Nickel-plated brass
for tube D/d	G	i	L1*	S1	S4	S	self-sealing opt. "D"	Weight in [g]	Type	Order number	Price	
6/4	R 1/8	7.5	115.5	12	13	13	-	28.2	131M-6/4KS-1/8K	300764	o. r.	
6/4	R 1/8	7.5	115.5	12	13	13	D	28.2	131M-6/4KS-D1/8K	306764	o. r.	
6/4	R 1/4	11	119.5	12	13	14	-	35.9	131M-6/4KS-1/4K	300765	o. r.	
6/4	R 1/4	11	119.5	12	13	14	D	35.9	131M-6/4KS-D1/4K	306765	o. r.	
8/6	R 1/8	7.5	116.5	14	13	13	-	33.7	131M-8/6KS-1/8K	300770	o. r.	
8/6	R 1/8	7.5	116.5	14	13	13	D	33.7	131M-8/6KS-D1/8K	306770	o. r.	
8/6	R 1/4	11	120.5	14	13	14	-	41.9	131M-8/6KS-1/4K	300771	o. r.	
8/6	R 1/4	11	120.5	14	13	14	D	41.9	131M-8/6KS-D1/4K	306771	o. r.	
10/8	R 1/4	11	121	16	14	14	-	48.9	131M-10/8KS-1/4K	300780	o. r.	
10/8	R 1/4	11	121	16	14	14	D	48.9	131M-10/8KS-D1/4K	306780	o. r.	

Illustration

90° Elbow Adaptor - Male with Bend Protection Spiral

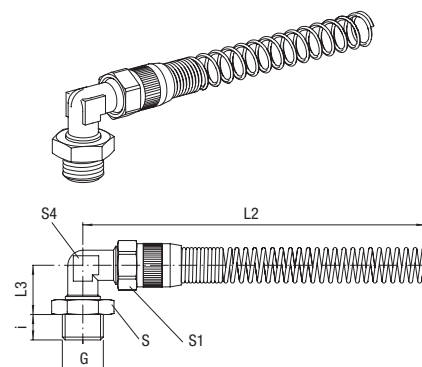
Price group	11	PN 25	T _{min} -40 °C T _{max} +120 °C	Conical thread		Thread "D" self-sealing T _{max} +100 °C			Nickel-plated brass		
for tube D/d	G	i	L2*	L3	S1	S	self-sealing opt. "D"	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.4	107.2	17	12	8	-	25.2	150M-6/4KS-1/8K	301264	o. r.
6/4	R 1/8	7.4	106	17	12	8	D	25.2	150M-6/4KS-D1/8K	306964	o. r.
6/4	R 1/4	10.5	107	21	12	10	-	34.4	150M-6/4KS-1/4K	301265	o. r.
6/4	R 1/4	10.5	107	21	12	10	D	34.4	150M-6/4KS-D1/4K	306965	o. r.
8/6	R 1/8	7.4	107	17	14	8	-	29.1	150M-8/6KS-1/8K	301270	o. r.
8/6	R 1/8	7.4	107	17	14	8	D	29.1	150M-8/6KS-D1/8K	306970	o. r.
8/6	R 1/4	10.5	108	21	14	10	-	37.2	150M-8/6KS-1/4K	301271	o. r.
8/6	R 1/4	10.5	108	21	14	10	D	37.2	150M-8/6KS-D1/4K	306971	o. r.
8/6	R 3/8	11.3	114	25	14	13	-	54.5	150M-8/6KS-3/8K	301272	o. r.
10/8	R 1/8	7.4	108	17	16	10	-	40.9	150M-10/8KS-1/8K	301279	o. r.
10/8	R 1/4	10.5	108	21	16	10	-	42.7	150M-10/8KS-1/4K	301280	o. r.
10/8	R 1/4	10.5	108	21	16	10	D	44.9	150M-10/8KS-D1/4K	306980	o. r.
10/8	R 3/8	11.3	112	25	16	13	-	60.9	150M-10/8KS-3/8K	301281	o. r.
12/10	R 3/8	11.3	113	25	19	13	-	62.8	150M-12/10KS-3/8K	301293	o. r.

Illustration


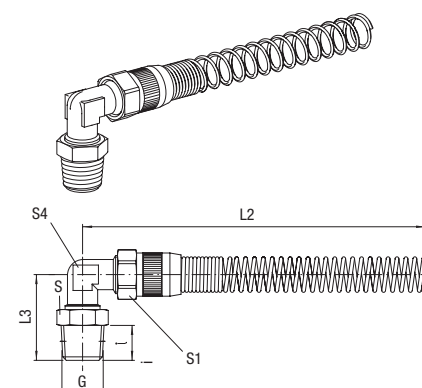
* approximate with fastened cap nut

90° Elbow Adaptor - Male - Positionable with Anti-kink Protection

Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Cylindrical thread	Sealing ring: NBR	not suitable for rotating or oscill. movement		Nickel-plated brass			
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	6	107	14.5	12	10	13	35.5	130M-6/4KS-1/8	301364	o. r.
6/4	G 1/4	8	107	14.6	12	10	17	43	130M-6/4KS-1/4	301365	o. r.
8/6	G 1/8	6	108	14.5	14	10	13	39	130M-8/6KS-1/8	301370	o. r.
8/6	G 1/4	8	108	14.6	14	10	17	46.5	130M-8/6KS-1/4	301371	o. r.
10/8	G 1/4	8	108	14.5	16	10	17	51.9	130M-10/8KS-1/4	301380	o. r.

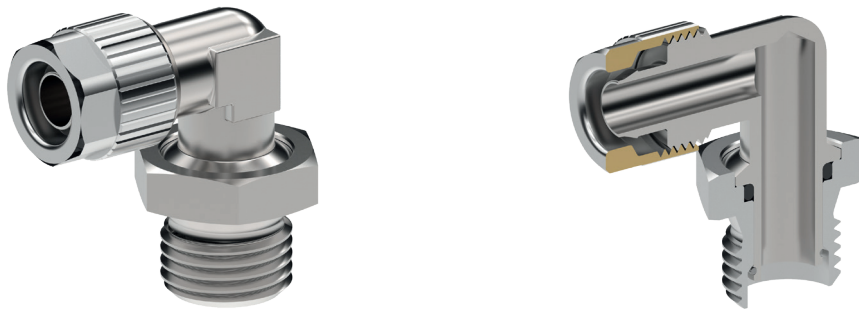
Illustration

90° Elbow Adaptor - Male - Positionable with Anti-kink Protection

Price group	11	PN 16	T _{min} -20 °C T _{max} +80 °C	Conical thread	Sealing ring: NBR		Thread "D" self-sealing		not suitable for rotating or oscill. movement		Nickel-plated brass	
for tube D/d	G	i	L2*	L3	S1	S4	S	self-sealing opt. "D"	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	106	21.5	12	10	13	-	34.6	130M-6/4KS-1/8K	301614	o. r.
6/4	R 1/8	7.5	106	21.5	12	10	13	D	34.6	130M-6/4KS-D1/8K	307314	o. r.
6/4	R 1/4	11	107	25.5	12	10	14	-	41.3	130M-6/4KS-1/4K	301615	o. r.
6/4	R 1/4	11	107	25.5	12	10	14	D	41.3	130M-6/4KS-D1/4K	307315	o. r.
8/6	R 1/8	7.5	107	21.5	14	10	13	-	39.1	130M-8/6KS-1/8K	301620	o. r.
8/6	R 1/8	7.5	107	21.5	14	10	13	D	39.1	130M-8/6KS-D1/8K	307320	o. r.
8/6	R 1/4	11	108	25.5	14	10	17	-	44.5	130M-8/6KS-1/4K	301621	o. r.
8/6	R 1/4	11	108	25.5	14	10	17	D	44.5	130M-8/6KS-D1/4K	307321	o. r.
10/8	R 1/4	11	108	25.5	16	10	17	-	49.7	130M-10/8KS-1/4K	301630	o. r.
10/8	R 1/4	11	108	25.5	16	10	17	D	49.7	130M-10/8KS-D1/4K	307330	o. r.

Illustration


* approximate with fastened cap nut



RAPID Fittings Stainless Steel AISI 316L (1.4404) with Union Nut Nickel-Plated Brass (Push-on)

Rapid version with Union nut (nickel-plated brass)

Operating pressure: Technical vacuum up to maximum pressure as stated in the respective specification table under PN.

Temperature range: -40 °C to +140 °C
(for restrictions see specification table)

Application

RAPID fittings are used with aggressive gaseous and liquid media, where elastomer seals are not resistant. With guide cone and Union nut these fittings are particularly suited to very harsh operating conditions.

CHARACTERISTICS
BODY MATERIAL / SUITABILITY

Stainless steel AISI 316L	corresponds to stainless steel 1.4404 . Suitable for many aggressive media. The FKM seal ring is FDA-compliant and can be used in the food and pharmaceutical industries.
Union nut: Nickel-plated brass	CuZn39Pb3, galvanically nickel-plated. Union nut not in contact with the medium.
Other materials	see relevant products
Approval	NSF/ANSI 169

TUBE

Outside diameter D [mm] Inside diameter d [mm]	6/4 8/6 10/8	12/10
Permitted tolerance outside D	±0.1	±0.15
Permitted tolerance inside d	±0.1	±0.15

Permitted wall thickness tolerance	±0.1 With very soft tubes, for example PVC tubes, variations in the outside diameter or wall thickness of up to + 5/10 are allowable. In case of doubt please ask.
Permitted grades	Polyamide (PA), polyurethane (PU), polyethylene (PE), fabric reinforced PVC, fluoropolymer (FEP) (PFA)
THREAD	
External thread	"G" cylindrical thread: Whitworth pipe thread DIN ISO 228-1 G 1/8 to G 1/2
External thread	"R" Conical thread: Whitworth pipe thread DIN 2999-1 and ISO 7/1 R 1/8 to R 1/2. Dimensions constructed so there can be pairing with internal thread according to DIN ISO 228-1.

OPERATING PRESSURE / TEMPERATURE

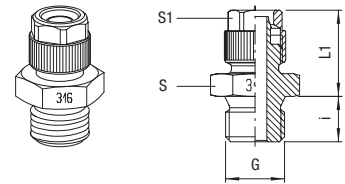
Metal version	PN 25 T _{min} -40 °C T _{max} +140 °C	Means that the fitting can be used up to the given nominal pressure PN within the specified temperature range "T". Allowable operating pressure and operating temperature of pipe/tube must be observed!
----------------------	--	--

THREAD SEAL	
Cylindrical threaded nipple	Seal with sealing rings made of copper, fibre, aluminium, polyamide or hard PVC. Seal with chambered O-ring (FDA-compliant) on request
Conical threaded nipple	Seal with Teflon tape winding (FDA-compliant) on request
Straight, 90° elbow and T-adaptors, male	not suitable for rotating or oscill. movements Some types of fittings are 360°-swivelling to facilitate adjustment during assembly.

Straight Adaptor - Male

Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C	Cylindrical thread	 Union nut: Nickel-plated brass		Stainless steel AISI 316L		
for tube D/d	G	i	L1*	S1	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	8	18.5	10	13	13.2	151X4-6/4M-1/8	360064	o. r.
6/4	G 1/4	10	19	10	17	22.8	151X4-6/4M-1/4	360065	o. r.
8/6	G 1/8	8	18.5	12	13	15.9	151X4-8/6M-1/8	360070	o. r.
8/6	G 1/4	10	19	12	17	25	151X4-8/6M-1/4	360071	o. r.
10/8	G 1/8	8	20	13	14	21.2	151X4-10/8M-1/8	360079	o. r.
10/8	G 1/4	10	20.5	13	17	26.2	151X4-10/8M-1/4	360080	o. r.
10/8	G 3/8	10	20.5	13	19	34.4	151X4-10/8M-3/8	360081	o. r.
12/10	G 1/4	10	22	15	17	27.9	151X4-12/10M-1/4	360092	o. r.
12/10	G 3/8	10	22	15	19	36.1	151X4-12/10M-3/8	360093	o. r.
12/10	G 1/2	12	22.5	15	24**	52.9	151X4-12/10M-1/2	360094	o. r.

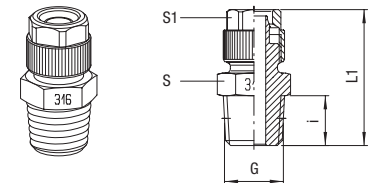
Illustration



Straight Adaptor - Male

Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C	Conical thread	 Union nut: Nickel-plated brass		Stainless steel AISI 316L		
for tube D/d	G	i	L1*	S1	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	26	10	12	12	151X4-6/4M-1/8K	360464	o. r.
6/4	R 1/4	11	30	10	14	19	151X4-6/4M-1/4K	360465	o. r.
8/6	R 1/8	7.5	26	12	12	14.6	151X4-8/6M-1/8K	360470	o. r.
8/6	R 1/4	11	30	12	14	22	151X4-8/6M-1/4K	360471	o. r.
10/8	R 1/8	7.5	27.5	13	14	21.4	151X4-10/8M-1/8K	360479	o. r.
10/8	R 1/4	11	31.5	13	14	24	151X4-10/8M-1/4K	360480	o. r.
10/8	R 3/8	11.5	32	13	17	33.2	151X4-10/8M-3/8K	360481	o. r.
12/10	R 3/8	11.5	33.5	15	17	35.2	151X4-12/10M-3/8K	360493	o. r.
12/10	R 1/2	14	36.5	15	22	on req.	151X4-12/10M-1/2K	360494	o. r.

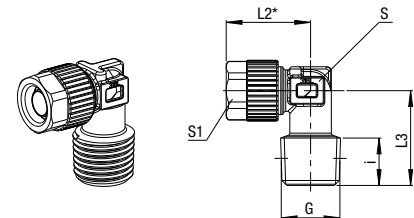
Illustration



90° Elbow Adaptor - Male

Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C	Conical thread					Union nut Nickel-plated brass	Stainless steel AISI 316L
for tube D/d	G	i	L2*	L3	S1	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	17.5	16.9	10	8	13.5	150X4M-6/4M-1/8K	361321	o. r.
6/4	R 1/4	10.5	17.5	19.9	10	9	18.4	150X4M-6/4M-1/4K	361322	o. r.
8/6	R 1/8	7.5	18.5	18	12	9	16.9	150X4M-8/6M-1/8K	361323	o. r.
8/6	R 1/4	10.5	18.5	21	12	10	22.1	150X4M-8/6M-1/4K	361324	o. r.
8/6	R 3/8	10.8	26.5	24.5	12	13	39.4	150X4-8/6M-3/8K	361072	o. r.
10/8	R 1/8	9	24.5	18.5	13	10	29.5	150X4-10/8M-1/8K	361079	o. r.
10/8	R 1/4	10.5	24.5	21	13	10	24.5	150X4-10/8M-1/4K	361080	o. r.
10/8	R 3/8	10.8	27	24.5	13	13	39.6	150X4-10/8M-3/8K	361081	o. r.
12/10	R 3/8	11.5	29	25	15	13	42.2	150X4-12/10M-3/8K	361093	o. r.
12/10	R 1/2	14.2	30.5	29	15	17	58.5	150X4-12/10M-1/2K	361094	o. r.

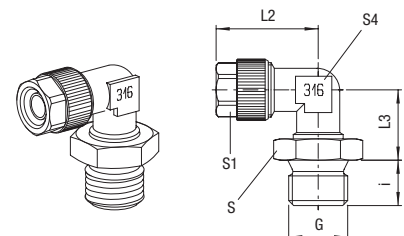
Illustration



90° Elbow Adaptor - Male - Positionable

Price group	13	PN 16	T _{min} 0 °C T _{max} +140 °C	Cylindrical thread	Seal: FKM FDA-compliant	not suitable for rotating or oscill. movement			 Union nut: Nickel-plated brass		Stainless steel AISI 316L
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	8	22.5	14	10	10	13	23.4	130X4-6/4M-1/8FF	361164	o. r.
6/4	G 1/4	10	22.5	14.5	10	10	17	26.8	130X4-6/4M-1/4FF	361165	o. r.
8/6	G 1/8	8	22.5	14	12	10	13	24	130X4-8/6M-1/8FF	361170	o. r.
8/6	G 1/4	10	22.5	14.5	12	10	17	28.2	130X4-8/6M-1/4FF	361171	o. r.
10/8	G 1/4	10	24	14.5	13	10	17	29.7	130X4-10/8M-1/4FF	361180	o. r.

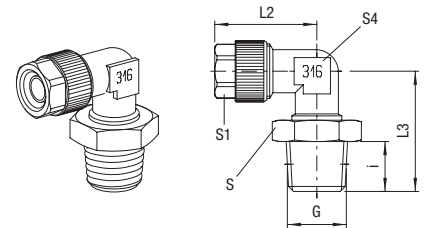
Illustration



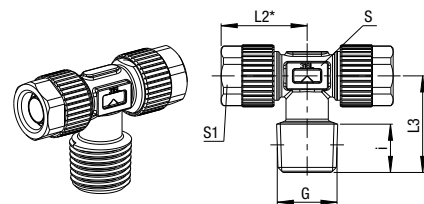
* approximate with fastened Union nut ** S24 = octagon

90° Elbow Adaptor - Male - Positionable

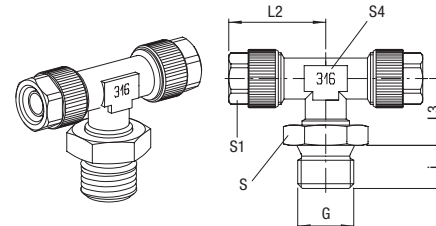
Price group	13	PN 16	T _{min} 0 °C T _{max} +140 °C	Conical thread	Seal: FKM FDA-compliant	not suitable for rotating or oscill. movement				Union nut Nickel-plated brass	Stainless steel AISI 316L
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	22.5	21.5	10	10	13	22.5	130X4-6/4M-1/8KFF	361264	o. r.
6/4	R 1/4	11	22.5	25.5	10	10	17	26.6	130X4-6/4M-1/4KFF	361265	o. r.
8/6	R 1/8	7.5	22.5	21.5	12	10	13	23.6	130X4-8/6M-1/8KFF	361270	o. r.
8/6	R 1/4	11	22.5	25.5	12	10	17	28.1	130X4-8/6M-1/4KFF	361271	o. r.
10/8	R 1/4	11	24	25.5	13	10	17	29.4	130X4-10/8M-1/4KFF	361280	o. r.

Illustration

T-Adaptor - Male

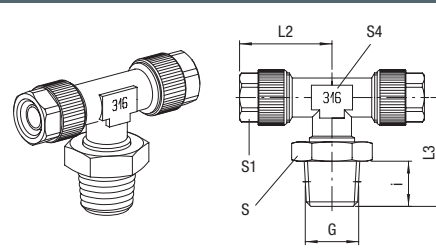
Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C	Conical thread					Union nut: Nickel-plated brass	Stainless steel AISI 316L
for tube D/d	G	i	L2*	L3	S1	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	17.5	16.9	10	8	20.8	141X4M-6/4M-1/8K	361821	o. r.
6/4	R 1/4	10.5	17.5	19.9	10	9	25.7	141X4M-6/4M-1/4K	361822	o. r.
8/6	R 1/8	7.5	18.5	18	12	9	26	141X4M-8/6M-1/8K	361823	o. r.
8/6	R 1/4	10.5	18.5	21	12	10	31.4	141X4M-8/6M-1/4K	361824	o. r.
10/8	R 1/8	9	25	18.5	13	10	34.1	141X4-10/8M-1/8K	361479	o. r.
10/8	R 1/4	10.5	25	21	13	10	37.9	141X4-10/8M-1/4K	361480	o. r.
10/8	R 3/8	11.3	27	25	13	13	39.6	141X4-10/8M-3/8K	361481	o. r.
12/10	R 3/8	11.3	29	25	15	13	59.9	141X4-12/10M-3/8K	361493	o. r.
12/10	R 1/2	14.2	30.5	29	15	17	91	141X4-12/10M-1/2K	361494	o. r.

Illustration

T-Adaptor - Male - Positionable

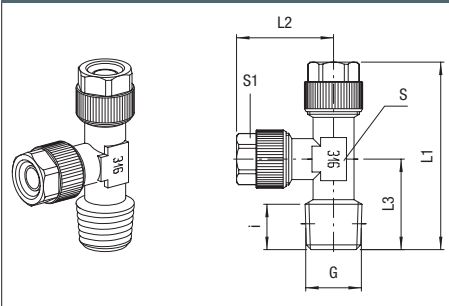
Price group	13	PN 16	T _{min} 0 °C T _{max} +140 °C	Cylindrical thread	Seal: FKM FDA-compliant	not suitable for rotating or oscill. movement		Union nut: Nickel -plated brass	Stainless steel AISI 316L		
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	8	22.5	14	10	10	13	32.3	121X4-6/4M-1/8FF	361564	o. r.
6/4	G 1/4	10	22.5	14.5	10	10	17	35.1	121X4-6/4M-1/4FF	361565	o. r.
8/6	G 1/8	8	22.5	14	12	10	13	34.2	121X4-8/6M-1/8FF	361570	o. r.
8/6	G 1/4	10	22.5	14.5	12	10	17	38.2	121X4-8/6M-1/4FF	361571	o. r.
10/8	G 1/4	10	24	14.5	13	10	17	41.5	121X4-10/8M-1/4FF	361580	o. r.

Illustration

T-Adaptor - Male - Positionable

Price group	13	PN 16	T _{min} 0 °C T _{max} +140 °C	Conical thread	Seal: FKM FDA-compliant	not suitable for rotating or oscill. movement				Union nut: Nickel -plated brass	Stainless steel AISI 316L
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	22.5	21.5	10	10	13	32.2	121X4-6/4M-1/8KFF	361664	o. r.
6/4	R 1/4	11	22.5	25.5	10	10	17	36.4	121X4-6/4M-1/4KFF	361665	o. r.
8/6	R 1/8	7.5	22.5	21.5	12	10	13	34.3	121X4-8/6M-1/8KFF	361670	o. r.
8/6	R 1/4	11	22.5	25.5	12	10	17	38.9	121X4-8/6M-1/4KFF	361671	o. r.
10/8	R 1/4	11	24	25.5	13	10	17	40.9	121X4-10/8M-1/4KFF	361680	o. r.

Illustration

Side T-Adaptor - Male

Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C						Union nut: Nickel-plated brass	Stainless steel AISI 316L	
for tube D/d	G	i	L1*	L2*	L3	S1	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	9	41	22.5	18.5	10	10	26.8	142X4-6/4M-1/8K	361764	o. r.
6/4	R 1/4	10.5	43.5	22.5	21	10	10	29.5	142X4-6/4M-1/4K	361765	o. r.
8/6	R 1/8	9	41	22.5	18.5	12	10	28.9	142X4-8/6M-1/8K	361770	o. r.
8/6	R 1/4	10.5	43.5	22.5	21	12	10	31.6	142X4-8/6M-1/4K	361771	o. r.
10/8	R 1/8	9	43.5	25	18.5	13	10	on req.	142X4-10/8M-1/8K	361779	o. r.
10/8	R 1/4	10.5	46	25	21	13	10	on req.	142X4-10/8M-1/4K	361780	o. r.
10/8	R 3/8	11.5	52	27	25	13	13	on req.	142X4-10/8M-3/8K	361781	o. r.

Illustration


* approximate with fastened Union nut

90° Elbow Connector

Price group **13** PN 25 $T_{min} -40\text{ °C}$ $T_{max} +140\text{ °C}$

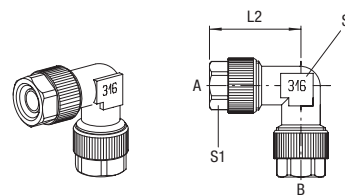


Union nut: Nickel-plated brass

Stainless steel AISI 316L

for tube A D/d	for tube B D/d	L2*	S1	S	Weight in [g]	Type	Order number	Price
6/4	6/4	22.5	10	10	23.4	155X4-6/4M	362185	o. r.
8/6	8/6	22.5	12	10	24.6	155X4-8/6M	362187	o. r.
10/8	10/8	25	13	10	29.2	155X4-10/8M	362190	o. r.
12/10	12/10	29	15	13	on req.	155X4-12/10M	362194	o. r.

Illustration



T-Connector

Price group **13** PN 25 $T_{min} -40\text{ °C}$ $T_{max} +140\text{ °C}$

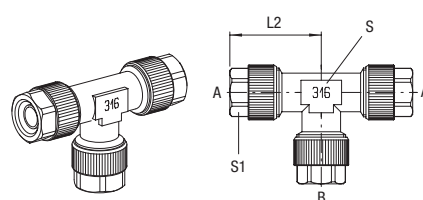


Union nut: Nickel-plated brass

Stainless steel AISI 316L

for tube A D/d	for tube B D/d	L2*	S1	S	Weight in [g]	Type	Order number	Price
6/4	6/4	22.5	10	10	31.7	154X4-6/4M	362385	o. r.
8/6	8/6	22.5	12	10	34.1	154X4-8/6M	362387	o. r.
10/8	10/8	25	13	10	42.7	154X4-10/8M	362390	o. r.
12/10	12/10	29	15	13	63.9	154X4-12/10M	362394	o. r.

Illustration



* approximate with fastened Union nut

RAPID Fittings Stainless Steel AISI 316L (1.4404) (Push-on)

Rapid version

Operating pressure Technical vacuum up to maximum pressure as stated in the respective specification table under PN.

Temperature range: -40 °C to +140 °C (for restrictions see specification table)

Application

Rapid fittings are used with aggressive gaseous and liquid media, where elastomer seals are not resistant. With guide cone and cap nut these fittings are particularly suited to very harsh operating conditions.

CHARACTERISTICS
BODY MATERIAL / SUITABILITY

Stainless steel AISI 316L	Corresponds to 1.4404 stainless steel . Suitable for many aggressive media. The FKM sealing ring is FDA-compliant and can be used in the food and pharmaceutical industries.
Other materials	see relevant products
Approval	NSF/ANSI 169

TUBE

Outside diameter D [mm] Inside diameter d [mm]	6/4 8/6 10/8	12/10
Perm. tolerance outside D	±0.1	±0.15
Perm. tolerance inside d	±0.1	±0.15

Max. wall thickness tolerance	±0.1 With very soft tubes, for example PVC tubes, variations in the outside diameter or wall thickness of up to + 5/10 are allowable. In case of doubt please ask.
--------------------------------------	---

Permitted grades	Polyamide (PA), polyurethane (PU), polyethylene (PE), fabric reinforced PVC, fluorine polymer (FEP and PFA)
-------------------------	---

THREAD

External thread	“G” cylindrical thread: Whitworth pipe thread DIN ISO 228-1 G 1/8 up to G 1/2
External thread	“R” conical thread: Whitworth pipe thread DIN 2999-1 and ISO 7/1 R 1/8 up to R 1/2. Designed for pairing with internal thread according to DIN ISO 228-1.

OPERATING PRESSURE / TEMPERATURE

Metal version	PN 25 T _{min} -40 °C T _{max} +140 °C	Means that the fitting can be used up to the given nominal pressure PN within the specified temperature range “T”. Allowable operating pressure and operating temperature of pipe/tube must be observed!
----------------------	--	--

THREAD SEAL

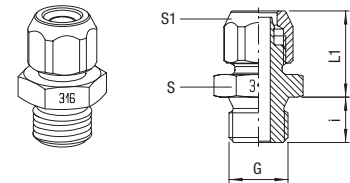
Cylindrical threaded nipple	Seal with sealing rings made of copper, fiber, aluminium, polyamide or hard PVC. Seal with chambered O-ring (FDA-compliant) on request
Tapered threaded nipple	Seal with Teflon tape winding (FDA-compliant) on request

Straight, 90° elbow and T-adaptors, male	not suitable for rotating or oscill. movements	Some types of fittings rotate 360° in order to facilitate alignment during assembly or for compensating movement.
---	--	---

Straight Adaptor - Male

Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C	Thread cylindrical					Stainless steel AISI 316L
for tube D/d	G	i	L1*	S1	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	8	18.5	12	13	14.8	151X4-6/4-1/8	360014	o. r.
6/4	G 1/4	10	19	12	17	23.9	151X4-6/4-1/4	360015	o. r.
8/6	G 1/8	8	18.5	14	13	17.5	151X4-8/6-1/8	360020	o. r.
8/6	G 1/4	10	19	14	17	26.8	151X4-8/6-1/4	360021	o. r.
10/8	G 1/8	8	20	17	14	27.5	151X4-10/8-1/8	360029	o. r.
10/8	G 1/4	10	20.5	17	17	32	151X4-10/8-1/4	360030	o. r.
10/8	G 3/8	10	20.5	17	19	40.7	151X4-10/8-3/8	360031	o. r.
12/10	G 3/8	10	22	19	19	43.8	151X4-12/10-3/8	360043	o. r.
12/10	G 1/2	12	22.5	19	24	47.3	151X4-12/10-1/2	360044	o. r.

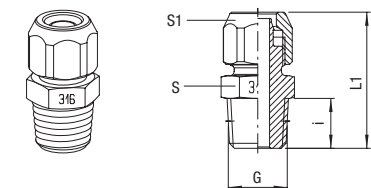
Illustration



Straight Adaptor - Male

Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C	Thread conical					Stainless steel AISI 316L
for tube D/d	G	i	L1*	S1	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	26	12	12	14.2	151X4-6/4-1/8K	360414	o. r.
6/4	R 1/4	11	30	12	14	21.8	151X4-6/4-1/4K	360415	o. r.
8/6	R 1/8	7.5	26	14	12	16.7	151X4-8/6-1/8K	360420	o. r.
8/6	R 1/4	11	30	14	14	25.1	151X4-8/6-1/4K	360421	o. r.
10/8	R 1/8	7.5	27.5	17	14	27.9	151X4-10/8-1/8K	360429	o. r.
10/8	R 1/4	11	31.5	17	14	30.7	151X4-10/8-1/4K	360430	o. r.
10/8	R 3/8	11.5	32	17	17	41.2	151X4-10/8-3/8K	360431	o. r.
12/10	R 3/8	11.5	33.5	19	17	34	151X4-12/10-3/8K	360443	o. r.
12/10	R 1/2	14	36.5	19	22	34.0	151X4-12/10-1/2K	360444	o. r.

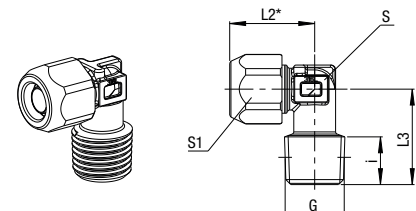
Illustration



90° Elbow Adaptor - Male

Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C	Thread conical					 NSF GRACED	Stainless steel AISI 316L
for tube D/d	G	i	L2*	L3	S1	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	17.5	16.9	12	8	15.2	150X4M-6/4-1/8K	361301	o. r.
6/4	R 1/4	10.5	17.5	19.9	12	9	20.1	150X4M-6/4-1/4K	361302	o. r.
8/6	R 1/8	7.5	18.5	18	14	9	19	150X4M-8/6-1/8K	361303	o. r.
8/6	R 1/4	10.5	18.5	21	14	10	24.3	150X4M-8/6-1/4K	361304	o. r.
8/6	R 3/8	10.8	26.5	24.5	14	13	41.4	150X4-8/6-3/8K	361022	o. r.
10/8	R 1/8	9	24.5	18.5	17	10	27	150X4-10/8-1/8K	361029	o. r.
10/8	R 1/4	10.5	24.5	21	17	10	30.6	150X4-10/8-1/4K	361030	o. r.
10/8	R 3/8	10.8	27	24.5	17	13	46.2	150X4-10/8-3/8K	361031	o. r.
12/10	R 3/8	11.3	29	25	19	13	48.6	150X4-12/10-3/8K	361043	o. r.
12/10	R 1/2	14.2	30.5	29	19	17	66.1	150X4-12/10-1/2K	361044	o. r.

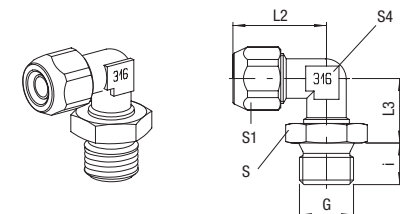
Illustration



90° Elbow Adaptor - Male - Positionable

Price group	13	PN 16	T _{min} 0 °C T _{max} +140 °C	Thread cylindrical	Seal: FKM (FDA-compliant)	not suitable for rotating or oscill. movement			NSF	Stainless steel AISI 316L	
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	8	22.5	14	12	10	13	24.9	130X4-6/4-1/8FF	361114	o. r.
6/4	G 1/4	10	22.5	14.5	12	10	17	28.6	130X4-6/4-1/4FF	361115	o. r.
8/6	G 1/8	8	22.5	14	14	10	13	25.6	130X4-8/6-1/8FF	361120	o. r.
8/6	G 1/4	10	22.5	14.5	14	10	17	30.2	130X4-8/6-1/4FF	361121	o. r.
10/8	G 1/4	10	24	14.5	17	10	17	36.1	130X4-10/8-1/4FF	361130	o. r.

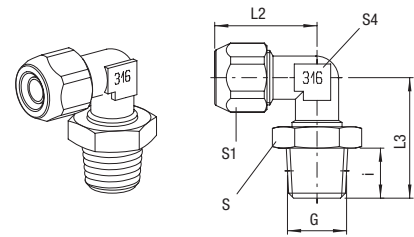
Illustration



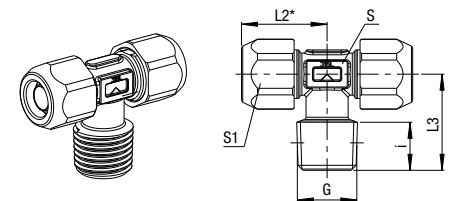
* Approx. dimension with cap nut tightened

90° Elbow Adaptor - Male - Positionable

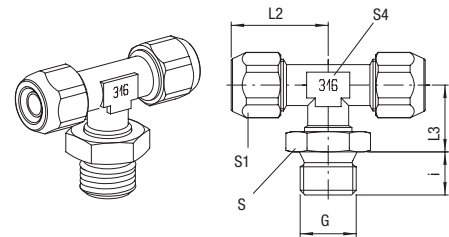
Price group	13	PN 16	T _{min} 0 °C T _{max} +140 °C	Thread conical	Seal: FKM (FDA-compliant)	not suitable for rotating or oscill. movement		NSF	Stainless steel AISI 316L		
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	22.5	21.5	12	10	13	26	130X4-6/4-1/8KFF	361214	o. r.
6/4	R 1/4	11	22.5	25.5	12	10	17	29.4	130X4-6/4-1/4KFF	361215	o. r.
8/6	R 1/8	7.5	22.5	21.5	14	10	13	25.2	130X4-8/6-1/8KFF	361220	o. r.
8/6	R 1/4	11	22.5	25.5	14	10	17	30.4	130X4-8/6-1/4KFF	361221	o. r.
10/8	R 1/4	11	24	25.5	17	10	17	36.7	130X4-10/8-1/4KFF	361230	o. r.

Illustration

T-Adaptor - Male

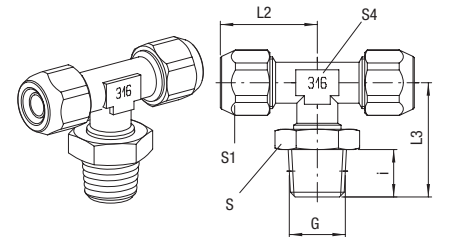
Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C	Thread conical			NSF	Stainless steel AISI 316L		
for tube D/d	G	i	L2*	L3	S1	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	17.5	17	12	8	24.2	141X4M-6/4-1/8K	361801	o. r.
6/4	R 1/4	10.5	17.5	20	12	9	29.1	141X4M-6/4-1/4K	361802	o. r.
8/6	R 1/8	7.5	18.5	18	14	9	30.3	141X4M-8/6-1/8K	361803	o. r.
8/6	R 1/4	10.5	18.5	21	14	10	35.7	141X4M-8/6-1/4K	361804	o. r.
10/8	R 1/8	9	25	18.5	17	10	46.9	141X4-10/8-1/8K	361429	o. r.
10/8	R 1/4	10.5	25	21	17	10	50.8	141X4-10/8-1/4K	361430	o. r.
10/8	R 3/8	11.3	27	25	17	13	69.5	141X4-10/8-3/8K	361431	o. r.
12/10	R 3/8	11.3	29	25	19	13	74.2	141X4-12/10-3/8K	361443	o. r.
12/10	R 1/2	14.2	30.5	29	19	17	106	141X4-12/10-1/2K	361444	o. r.

Illustration

T-Adaptor - Male - Positionable

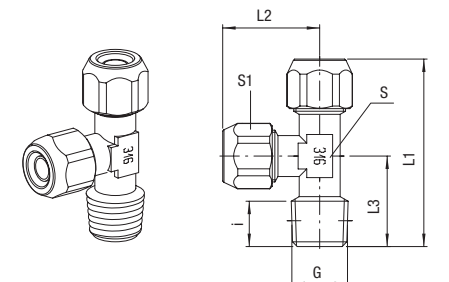
Price group	13	PN 16	T _{min} 0 °C T _{max} +140 °C	Thread cylindrical	Seal: FKM (FDA-compliant)	not suitable for rotating or oscill. movement		NSF	Stainless steel AISI 316L		
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	G 1/8	8	22.5	14	12	10	13	35.8	121X4-6/4-1/8FF	361514	o. r.
6/4	G 1/4	10	22.5	14.5	12	10	17	38.3	121X4-6/4-1/4FF	361515	o. r.
8/6	G 1/8	8	22.5	14	14	10	13	37.5	121X4-8/6-1/8FF	361520	o. r.
8/6	G 1/4	10	22.5	14.5	14	10	17	41.4	121X4-8/6-1/4FF	361521	o. r.
10/8	G 1/4	10	24	14.5	17	10	17	55.0	121X4-10/8-1/4FF	361530	o. r.

Illustration

T-Adaptor - Male - Positionable

Price group	13	PN 16	T _{min} 0 °C T _{max} +140 °C	Thread conical	Seal: FKM (FDA-compliant)	not suitable for rotating or oscill. movement		NSF	Stainless steel AISI 316L		
for tube D/d	G	i	L2*	L3	S1	S4	S	Weight in [g]	Type	Order number	Price
6/4	R 1/8	7.5	22.5	21.5	12	10	13	35.8	121X4-6/4-1/8KFF	361614	o. r.
6/4	R 1/4	11	22.5	25.5	12	10	17	39.6	121X4-6/4-1/4KFF	361615	o. r.
8/6	R 1/8	7.5	22.5	21.5	14	10	13	37.5	121X4-8/6-1/8KFF	361620	o. r.
8/6	R 1/4	11	22.5	25.5	14	10	17	42.1	121X4-8/6-1/4KFF	361621	o. r.
10/8	R 1/4	11	24	25.5	17	10	17	55	121X4-10/8-1/4KFF	361630	o. r.

Illustration

Side T-Adaptor - Male

Price group	13	PN 25	T _{min} -40 °C T _{max} +140 °C		Thread conical						Stainless steel AISI 316L	
for tube D/d	G	i	L1*	L2*	L3	S1	S	Weight in [g]	Type	Order number	Price	
6/4	R 1/8	9	41	22.5	18.5	12	10	30	142X4-6/4-1/8K	361714	o. r.	
6/4	R 1/4	10.5	43.5	22.5	21	12	10	32.8	142X4-6/4-1/4K	361715	o. r.	
8/6	R 1/8	9	41	22.5	18.5	14	10	32.1	142X4-8/6-1/8K	361720	o. r.	
8/6	R 1/4	10.5	43.5	22.5	21	14	10	34.8	142X4-8/6-1/4K	361721	o. r.	
10/8	R 1/8	9	43.5	25	18.5	17	10	44.4	142X4-10/8-1/8K	361729	o. r.	
10/8	R 1/4	10.5	46	25	21	17	10	55.4	142X4-10/8-1/4K	361730	o. r.	
10/8	R 3/8	11.3	52	27	25	17	13	68	142X4-10/8-3/8K	361731	o. r.	

Illustration


* Approx. dimension with cap nut tightened

90° Elbow Connector

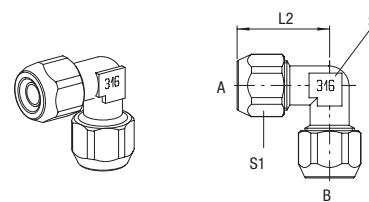
Price group **13** PN 25 $T_{min} -40\text{ °C}$
 $T_{max} +140\text{ °C}$



**Stainless steel
AISI 316L**

for pipe A D/d	for pipe B D/d	L2*	S1	S	Weight in [g]	Type	Order number	Price
6/4	6/4	22.5	12	10	26.2	155X4-6/4	362135	o. r.
8/6	8/6	22.5	14	10	28.3	155X4-8/6	362137	o. r.
10/8	10/8	25	17	10	41.4	155X4-10/8	362140	o. r.
12/10	12/10	29	19	13	60	155X4-12/10	362144	o. r.

Illustration



T-Connector

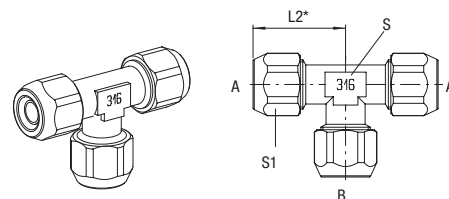
Price group **13** PN 25 $T_{min} -40\text{ °C}$
 $T_{max} +140\text{ °C}$



**Stainless steel
AISI 316L**

for pipe A D/d	for pipe B D/d	L2*	S1	S	Weight in [g]	Type	Order number	Price
6/4	6/4	22.5	12	10	37	154X4-6/4	362335	o. r.
8/6	8/6	22.5	14	10	40.7	154X4-8/6	362337	o. r.
10/8	10/8	25	17	10	61	154X4-10/8	362340	o. r.
12/10	12/10	29	19	13	115	154X4-12/10	362344	o. r.

Illustration



* Approx. dimension with cap nut tightened