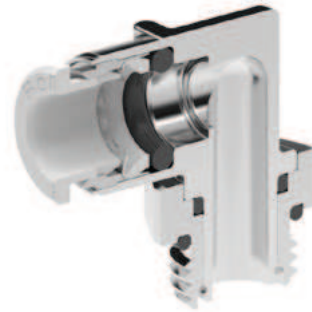


**ELSA Fittings Stainless Steel AISI 316L (1.4404) (Push-in)**

ELSA the Established push-in connector from AVS-Römer


**Stainless steel version**

Operating pressure Technical vacuum up to maximum pressure as stated in the respective specification table under PN. Temperature range 0 °C to +120 °C (for restrictions see specification table)

**Application**

ELSA push-in fittings made of stainless steel 1.4404 are used in particular for aggressive gases and liquid media under harsh operating conditions. These push-in fittings are equipped with FDA-compliant FKM sealing rings as standard, on request they are available with FDA-compliant and KTW-approved EPDM sealing rings.

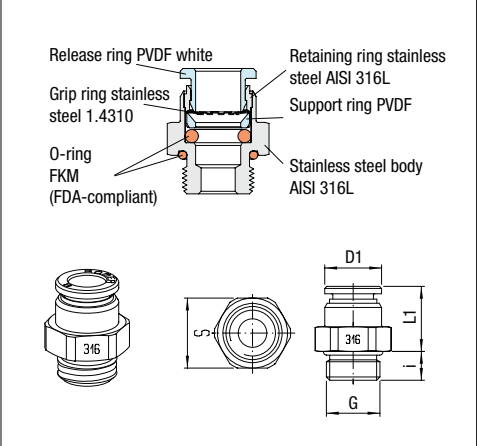
**CHARACTERISTICS**
**BODY MATERIAL / SUITABILITY**

<b>Stainless steel AISI 316L</b>	Corresponds to <b>1.4404 stainless steel</b> . Suitable for many aggressive media, in particular at higher pressures. The FKM seal is FDA-compliant and can be used in the food and pharmaceutical industries.							
<b>Other materials</b>	see relevant products							
<b>Approval</b>	NSF/ANSI 169							
<b>TUBE</b>								
<b>Outside diameter [mm]</b>	4, 6 and 8	10, 12						
<b>Permitted tolerance [mm]</b>	±0.1	±0.15						
<b>Permitted grades</b>	Polyamide (PA), polyurethane (PU), fluorine polymer (FEP and PFA)							
<b>THREAD</b>								
<b>External thread</b>	"M" cylindrical thread: Metric ISO thread M5							
<b>External thread</b>	"G" cylindrical thread: Whitworth pipe thread DIN ISO 228-1 G 1/8 up to G 3/8							
<b>External thread</b>	"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.							
<b>Internal thread</b>	"G" cylindrical thread: Whitworth pipe thread DIN ISO 228-1 G 1/8 up to G 1/2							
<b>OPERATING PRESSURE / TEMPERATURE</b>								
<b>Metal version</b>	<table border="1"> <tr> <td>PN</td> <td>T<sub>min</sub></td> <td>0 °C</td> </tr> <tr> <td>16</td> <td>T<sub>max</sub></td> <td>+120 °C</td> </tr> </table>	PN	T <sub>min</sub>	0 °C	16	T <sub>max</sub>	+120 °C	Means that the allowable operating pressure OP corresponds to the given nominal pressure PN in the specified temperature range "T".
PN	T <sub>min</sub>	0 °C						
16	T <sub>max</sub>	+120 °C						
<b>Allowable operating pressure and operating temperature of pipe/tube must be observed!</b>								
<b>THREAD SEAL</b>								
<b>Cylindrical threaded nipple</b>	Thread seal FKM O-ring	applies to all cylindrical threaded nipples						
<b>Conical threaded nipple</b>	Seal with Teflon tape winding (FDA-compliant) on request							
<b>"ROTATABLE" VERSION</b>								
<b>90° elbow- and T- adaptor, male</b>	not suitable for rotating or oscill. movements	Some types of fittings rotate 360° in order to facilitate alignment during assembly.						
<b>SPECIAL VERSIONS (NOT INCLUDED IN THE CATALOGUE)</b>								
We also manufacture ELSA push-in fittings in various customer-specific versions. <ul style="list-style-type: none"> <li>• other O-ring materials such as EPDM, FDA-compliant</li> <li>• for pipe/tube with inch dimensions</li> <li>• threaded connection, metric</li> </ul>								

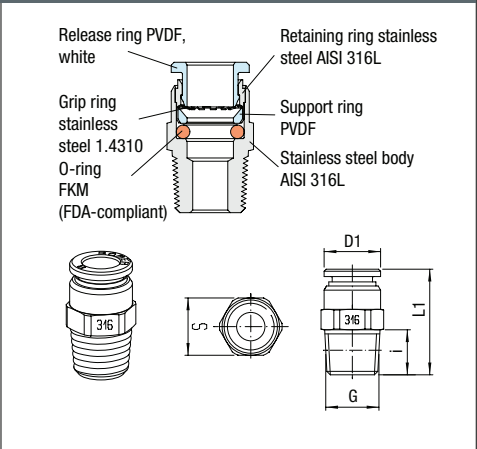


**Straight Adaptor - Male**

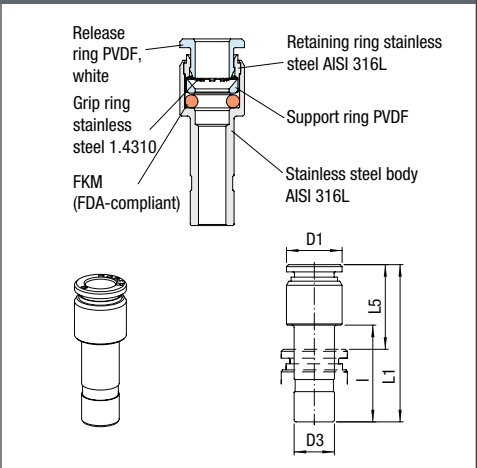
Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	Thread	cylindrical	Thread sealed by a	FKM O-Ring in recess	NSF	Stainless steel	AISI 316L	
for tube D	G	i	L1	D1	S	Weight in [g]	Type	Order number	Price						
4	M 5	3.5	16.5	8	8	3.4	951X4-4FF-M5	380054	o. r.						
4	G 1/8	5	14	10	13	8.6	951X4-4FF-1/8	380056	o. r.						
6	M 5	3.5	17.5	10	10	4.4	951X4-6FF-M5	380060	o. r.						
6	G 1/8	5	15	12	13	7.9	951X4-6FF-1/8	380062	o. r.						
6	G 1/4	7	14.5	12	17	15.9	951X4-6FF-1/4	380063	o. r.						
8	G 1/8	5	20	14	14	11.3	951X4-8FF-1/8	380066	o. r.						
8	G 1/4	7	16	14	17	14.4	951X4-8FF-1/4	380067	o. r.						
8	G 3/8	8	16	14	19	22.8	951X4-8FF-3/8	380068	o. r.						
10	G 1/4	7	22.5	16.5	17	19.6	951X4-10FF-1/4	380071	o. r.						
10	G 3/8	8	17.5	16.5	19	21.3	951X4-10FF-3/8	380072	o. r.						
10	G 1/2	9	15.5	16.5	24	36.6	951X4-10FF-1/2	380073	o. r.						
12	G 1/4	7	25	20	22	34.3	951X4-12FF-1/4	380074	o. r.						
12	G 3/8	8	19.5	20	22	7.4	951X4-12FF-3/8	380075	o. r.						

**Illustration**

**Straight Adaptor - Male**

Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	Thread	conical	NSF	Stainless steel	AISI 316L
for tube D	G	i	L1	D1	S	Weight in [g]	Type	Order number	Price			
4	R 1/8	7.5	20.5	10	10	6.6	951X4-4FF-1/8 K	380456	o. r.			
6	R 1/8	7.5	21.5	12	12	7.5	951X4-6FF-1/8K	380462	o. r.			
6	R 1/4	11	24.5	12	14	14.5	951X4-6FF-1/4K	380463	o. r.			
8	R 1/8	7.5	27	14	14	12.3	951X4-8FF-1/8K	380466	o. r.			
8	R 1/4	11	26.5	14	14	13.3	951X4-8FF-1/4 K	380467	o. r.			
8	R 3/8	11.5	24.5	14	17	21.7	951X4-8FF-3/8K	380468	o. r.			
10	R 1/4	11	32.5	16.5	17	22.3	951X4-10FF-1/4K	380471	o. r.			
10	R 3/8	11.5	28	16.5	17	21.6	951X4-10FF-3/8K	380472	o. r.			
10	R 1/2	14	26.5	16.5	22	38.7	951X4-10FF-1/2K	380473	o. r.			
12	R 1/2	14	31.5	20	22	40.4	951X4-12FF-1/2K	380476	o. r.			

**Illustration**

**Straight Stem Reducer**

Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	NSF	Stainless steel	AISI 316L	
for tube D	D3	I	L1	L5	D1	Weight in [g]	Type	Order number	Price		
4	6	18	31.5	17.5	10	6.3	947X4-4FF-D6	383652	o. r.		
6	8	20	34	18.5	12	9.3	947X4-6FF-D8	383653	o. r.		

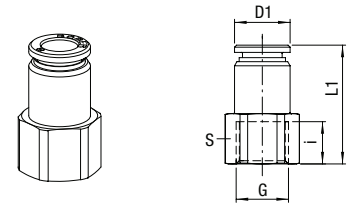
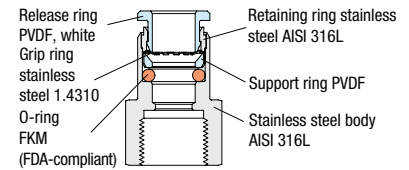
**Illustration**


**Straight Adaptor - Female**

Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	Thread	cylindrical
---------------	-----------	----	----	------------------	------	------------------	---------	--------	-------------


**Stainless steel  
AISI 316L**

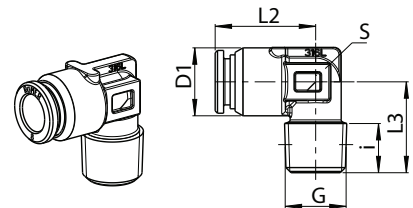
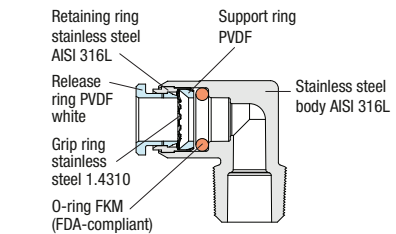
for tube D	G	i	L1	D1	S	Weight in [g]	Type	Order number	Price
4	G 1/8	8	24	10	13	10.8	946X4-4FF-1/8	380706	o. r.
6	G 1/8	8	25	12	13	12.5	946X4-6FF-1/8	380712	o. r.
6	G 1/4	10.5	27.5	12	17	20.5	946X4-6FF-1/4	380713	o. r.
8	G 1/8	8	27	14	14	16.2	946X4-8FF-1/8	380716	o. r.
8	G 1/4	10.5	29.5	14	17	22.3	946X4-8FF-1/4	380717	o. r.
8	G 3/8	11.5	30.5	14	19	23.3	946X4-8FF-3/8	380718	o. r.
10	G1/2	15	36.5	16.5	24	45.7	946X4-10FF-1/2	380719	o. r.

**Illustration**

**90° Elbow Adaptor - Male**

Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	Thread	conical
---------------	-----------	----	----	------------------	------	------------------	---------	--------	---------


**Stainless steel  
AISI 316L**

for tube D	G	i	L2	L3	D1	S	Weight in [g]	Type	Order number	Price
4	R 1/8	7.5	17	14.5	10.5	8	9.4	950X4M-4FF-1/8K	384003	a. A.
4	R 1/4	10.5	17	17.5	10.5	8	13.8	950X4M-4FF-1/4K	384004	a. A.
6	R 1/8	7.5	18.5	15.5	12.5	8	11.9	950X4M-6FF-1/8K	384005	a. A.
6	R 1/4	10.5	18.5	18.5	12.5	9	16.8	950X4M-6FF-1/4K	384006	a. A.
8	R 1/8	8.5	27.5	18.5	14	13	24.4	950X4-8FF-1/8K	380866	a. A.
8	R 1/4	10.5	27.5	23	14	13	26.8	950X4-8FF-1/4K	380867	a. A.
8	R 3/8	11	27.5	24.5	14	13	33.6	950X4-8FF-3/8K	380868	a. A.
10	R 1/4	10.5	29.5	23	16.5	13	26.8	950X4-10FF-1/4K	380871	a. A.
10	R 3/8	11	29.5	24.5	16.5	13	33.2	950X4-10FF-3/8K	380872	a. A.
12	R 3/8	11	32	24.5	20	17	46.5	950X4-12FF-3/8K	380875	a. A.

**Illustration**

**90° Elbow Adaptor - Male - Positionable**

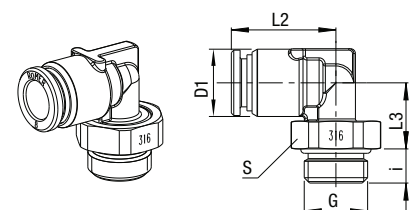
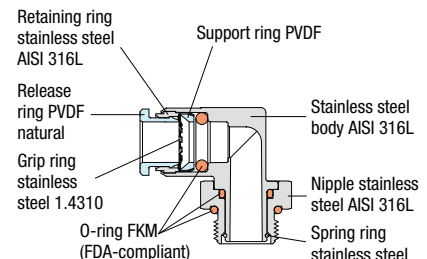
Product group	<b>13</b>	PN	16	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	Thread	cylindrical
---------------	-----------	----	----	------------------	------	------------------	---------	--------	-------------

Thread sealed by a FKM O-Ring in recess

not suitable for rotating or oscill. movement


**Stainless steel  
AISI 316L**

for tube D	G	i	L2	L3	D1	S	Weight in [g]	Type	Order number	Price
4	M 5	3.5	16.5	11	10.5	8	8.5	930X4M-4FF-M5	384103	o. r.
4	G 1/8	5	17	11.5	10.5	13	12.5	930X4M-4FF-1/8	384104	o. r.
4	G 1/4	7	17	11.5	10.5	17	19	930X4M-4FF-1/4	384105	o. r.
6	M 5	3.5	17.5	12	12.5	8	9.8	930X4M-6FF-M5	384106	o. r.
6	G 1/8	5	18.5	12.5	12.5	13	13.8	930X4M-6FF-1/8	384107	o. r.
6	G 1/4	7	18.5	12.5	12.5	17	20.8	930X4M-6FF-1/4	384108	o. r.
8	G 1/8	5	20	13.5	14.5	13	16.7	930X4M-8FF-1/8	384109	o. r.
8	G 1/4	7	21.5	13.5	14.5	17	23.8	930X4M-8FF-1/4	384110	o. r.
8	G 3/8	8	21.5	14	14.5	19	30.6	930X4M-8FF-3/8	384111	o. r.
10	G 1/4	7	29.5	17.5	16.5	17	35.5	930X4-10FF-1/4	381071	o. r.
10	G 3/8	8	29.5	19.5	16.5	19	40.1	930X4-10FF-3/8	381072	o. r.
12	G 1/4	7	32	18.5	20	17	54	930X4-12FF-1/4	381074	o. r.
12	G 3/8	8	32	19.5	20	19	58	930X4-12FF-3/8	381075	o. r.

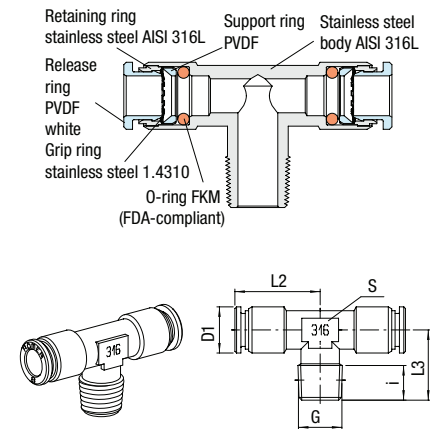
**Illustration**


**T-Adaptor - Male**

Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	Thread	conical
---------------	-----------	----	----	------------------	------	------------------	---------	--------	---------


**Stainless steel  
AISI 316L**

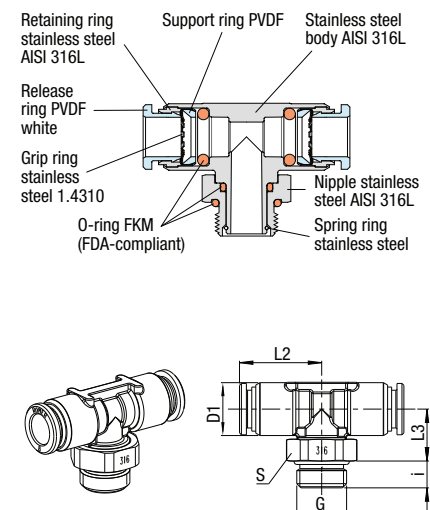
for tube D	G	i	L2	L3	D1	S	Weight in [g]	Type	Order number	Price
4	R 1/8	9	22	18.5	10	10	19.3	941X4-4FF-1/8K	381856	o. r.
6	R 1/8	9	24	18.5	12	10	21.1	941X4-6FF-1/8K	381862	o. r.
6	R 1/4	10.5	24	21	12	10	24.6	941X4-6FF-1/4K	381863	o. r.
8	R 1/8	8.5	27.5	18.5	14	13	35	941X4-8FF-1/8K	381866	o. r.
8	R 1/4	10.5	27.5	23	14	13	38	941X4-8FF-1/4K	381867	o. r.
8	R 3/8	11	27.5	24.5	14	13	43	941X4-8FF-3/8K	381868	o. r.
10	R 1/4	10.5	29.5	23	16.5	13	39.2	941X4-10FF-1/4K	381871	o. r.
10	R 3/8	11	29.5	24.5	16.5	13	43	941X4-10FF-3/8K	381872	o. r.
12	R 3/8	11	32	24.5	20	17	66.3	941X4-12FF-3/8K	381875	o. r.

**Illustration**

**T-Adaptor - Male - Positionable**

Product group	<b>13</b>	PN	16	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	Thread	cylindrical	Thread sealed by a FKM O-Ring in recess
---------------	-----------	----	----	------------------	------	------------------	---------	--------	-------------	---


**Stainless steel  
AISI 316L**

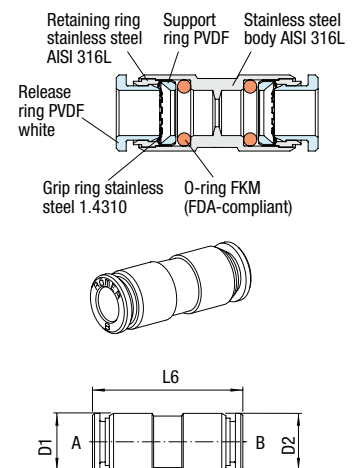
for tube D	G	i	L2	L3	D1	S	Weight in [g]	Type	Order number	Price
4	M 5	3.5	16.5	11	10.5	8	11.6	921X4M-4FF-M5	384303	o. r.
4	G 1/8	5	17.5	11.5	10.5	13	15.9	921X4M-4FF-1/8	384304	o. r.
4	G 1/4	7	17.5	11.5	10.5	17	22.5	921X4M-4FF-1/4	384305	o. r.
6	M 5	3.5	17.5	12	12.5	8	13.9	921X4M-6FF-M5	384306	o. r.
6	G 1/8	5	18.5	12	12.5	13	18.5	921X4M-6FF-1/8	384307	o. r.
6	G 1/4	7	19.5	12.5	12.5	17	25.9	921X4M-6FF-1/4	384308	o. r.
8	G 1/8	5	20	13	14.5	13	26.2	921X4M-8FF-1/8	382309	o. r.
8	G 1/4	7	21.5	13.5	14.5	17	33.5	921X4M-8FF-1/4	382310	o. r.
8	G 3/8	8	22.5	14	14.5	19	41	921X4M-8FF-3/8	382311	o. r.
10	G 1/4	7	29.5	17.5	16.5	17	47.2	921X4-10FF-1/4	382071	o. r.
10	G 3/8	8	29.5	19.5	16.5	19	52.6	921X4-10FF-3/8	382072	o. r.
12	G 3/8	8	32	19.5	20	19	77.7	921X4-12FF-3/8	382075	o. r.

**Illustration**

**Straight Connector**

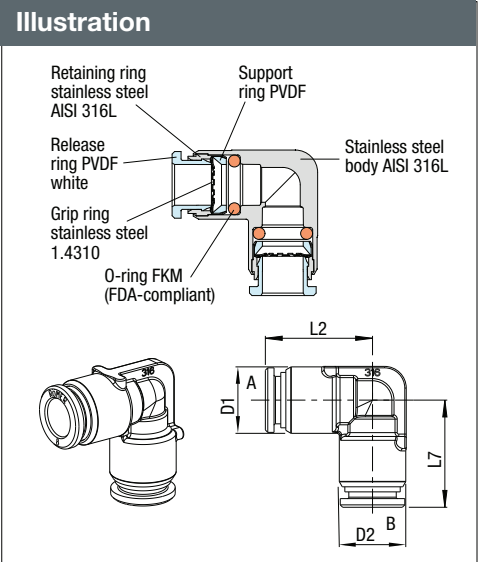
Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C
---------------	-----------	----	----	------------------	------	------------------	---------


**Stainless steel  
AISI 316L**

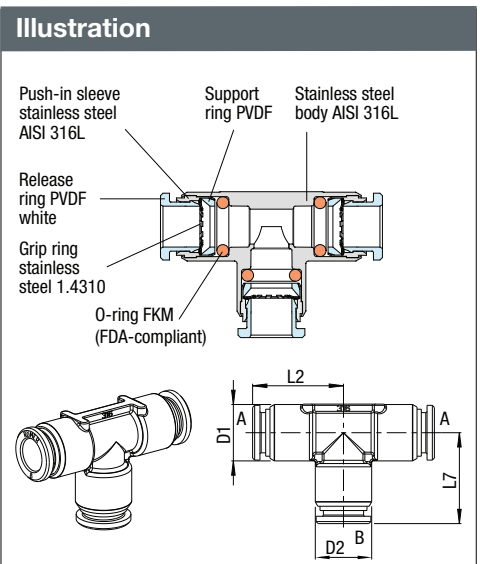
for tube AD	for tube BD	L6	D1	D2	Weight in [g]	Type	Order number	Price
4	4	31	10	10	8.2	958X4-4FF	383054	o. r.
6	6	34	12	12	10.2	958X4-6FF	383060	o. r.
8	8	36.5	14	14	13.7	958X4-8FF	383062	o. r.

**Illustration**


90° Elbow Connector									
Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	NSF	Stainless steel AISI 316L
for tube AD	for tube BD	L2	L7	D1	D2	Weight in [g]	Type	Order number	Price
4	4	17.5	17.5	10,5	10,5	8.3	955X4M-4FF	384403	o. r.
6	6	19.5	19.5	12,5	12,5	11.6	955X4M-6FF	384405	o. r.
8	8	22.5	22.5	14,5	14,5	16.3	955X4M-8FF	384407	o. r.
10	10	26	26	17	17	25.5	955X4M-10FF	384409	o. r.
12	12	32	32	20	20	53.6	955X4-12FF	383142	o. r.

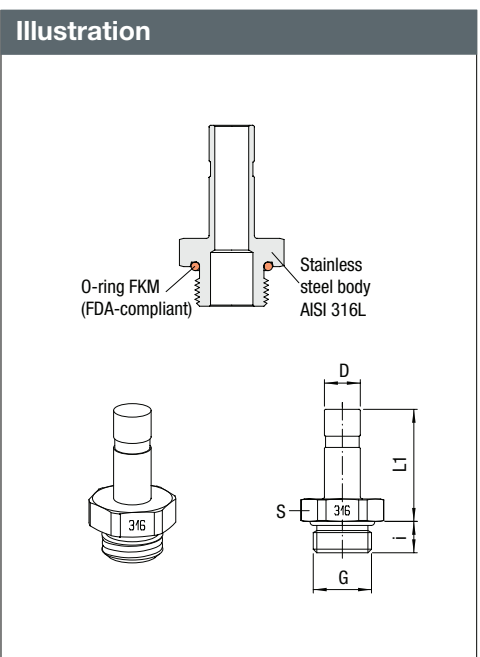


T-Connector									
Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	NSF	Stainless steel AISI 316L
for tube AD	for tube BD	L2	L7	D1	D2	Weight in [g]	Type	Order number	Price
4	4	17.5	17.5	10,5	10,5	11.5	954X4M-4FF	384453	o. r.
6	6	19.5	19.5	12,5	12,5	15.8	954X4M-6FF	384455	o. r.
8	8	22.5	22.5	14,5	14,5	21.7	954X4M-8FF	384457	o. r.
10	10	26	26	17	17	34.1	954X4M-10FF	384459	o. r.
12	12	32	32	20	20	73.3	954X4-12FF	383242	o. r.

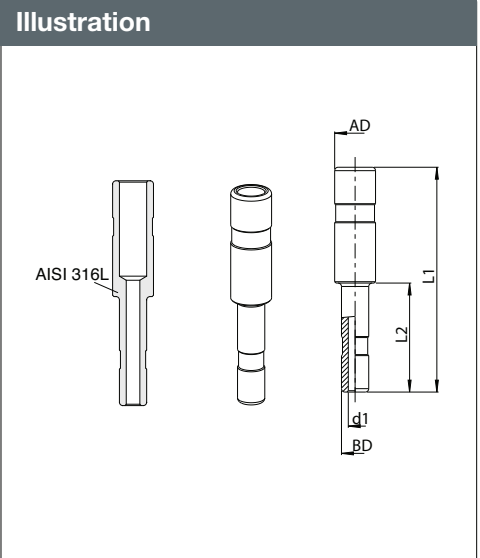


Straight Stem Adaptor											
Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+140 °C	Thread cylindrical	Thread sealed by a FKM O-Ring in recess	NSF	Stainless steel AISI 316L
connection D	G	i	L1	S	Weight in [g]	Type	Order number	Price			
4	G 1/8	5	21.5	13	6.5	908X4-4FF-1/8	383806	o. r.			
4	G 1/4	7	22	17	12.5	908X4-4FF-1/4	383807	o. r.			
6	G 1/8	5	22.5	13	7.3	908X4-6FF-1/8	383812	o. r.			
6	G 1/4	7	23	17	16.7	908X4-6FF-1/4	383813	o. r.			
8	G 1/8	5	24.5	13	8.2	908X4-8FF-1/8	383816	o. r.			
8	G 1/4	7	25	17	16.1	908X4-8FF-1/4	383817	o. r.			
10	G 1/4	7	29	17	15.5	908X4-10FF-1/4	383821	o. r.			
10	G 3/8	8	29	19	23.4	908X4-10FF-3/8	383822	o. r.			
12	G 3/8	8	31	19	26.3	908X4-12FF-3/8	383825	o. r.			

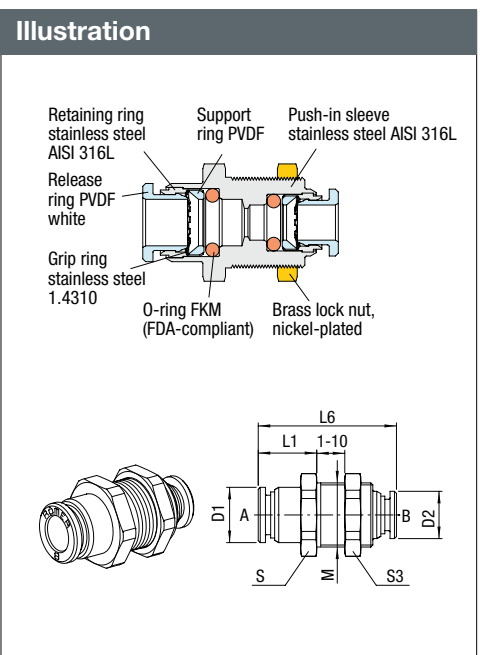
Examples of possible combinations of ELSA push-in connectors to obtain rotatable connections.



Straight Double Stem Connector									
Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	NSF	Stainless steel AISI 316L
for push-in connection AD	for push-in connection BD	d1	L1	L2	Weight in [g]	Type	Order number	Price	
6	4	2	33	16	3.6	904X4-D6-D4	283852	o. r.	
6	6	4	34.5	-	5	904X4-D6	283853	o. r.	
8	8	6	37.5	-	5	904X4-D8	283854	o. r.	



Straight Bulkhead Connector												
Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	NSF	Stainless steel AISI 316L			
for tube AD	for tube BD	M	L1	L6	D1	D2	S	S3	Weight in [g]	Type	Order number	Price
4	4	M12x1	12.5	31	10	10	14	17	17.2	959X4-4FF	383429	o. r.
6	6	M14x1	12.5	31.5	12	12	17	17	22	959X4-6FF	383435	o. r.
8	8	M14x1	13.5	32.5	14	14	17	17	29.2	959X4-8FF	383437	o. r.



Straight Bulkhead Adaptor - Female													
Product group	<b>13</b>	PN	20	T <sub>min</sub>	0 °C	T <sub>max</sub>	+120 °C	Thread	cylindrical	NSF	Stainless steel AISI 316L		
for tube D	G	M	L1	i	L6	d1	D1	S4	S3	Weight in [g]	Type	Order number	Price
4	G 1/8	M12x1	6.5	8	25.5	3	10	14	17	18.6	945X4-4FF-1/8	383606	o. r.
6	G 1/8	M14x1	6.5	8	25.5	5	12	17	17	24.2	945X4-6FF-1/8	383612	o. r.
6	G 1/4	M14x1	12	10.5	31	5	12	17	17	29.6	945X4-6FF-1/4	383613	o. r.
8	G 1/8	M16x1	7	8	27	7	14	19	19	33	945X4-8FF-1/8	383616	o. r.
8	G 1/4	M16x1	9.5	10.5	29.5	7	14	19	19	40.7	945X4-8FF-1/4	383617	o. r.

