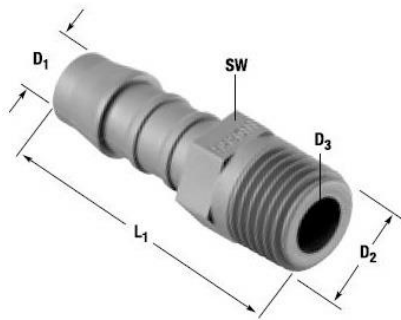


Lightweight tube connectors distinguished by high strength, toughness, resistance to abrasion and impact resistance.

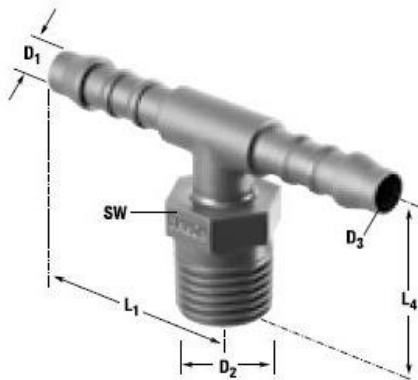
Temperature range -40 °C to 90 °C  
Max. allowable pressure 10 bar



31.132

### Male stud coupling, polyamide, conical male thread acc. to ISO 7-1

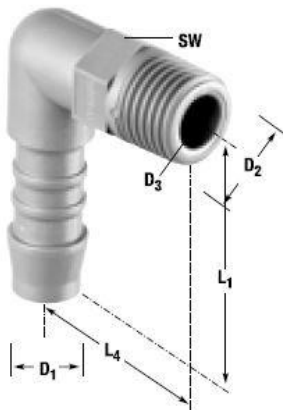
Art. No.	Type No.	Thread D <sub>2</sub> mm	For hose D <sub>1</sub> mm	I.D. D <sub>3</sub> mm	L <sub>1</sub> mm	a/f mm	min. tightening torque Nm
110945	31.120	M5	I.D. 3	2.5	19.5	6	0.5
110946	31.121	R 1/8	I.D. 4	2.5	27.0	10	2
110947	31.122	R 1/8	I.D. 6	4.0	32.5	10	2
110948	31.123	R 1/8	I.D. 8	5.6	38.0	14	2
110949	31.131	R 1/4	I.D. 4	2.5	32.0	14	7
110950	31.131/5	R 1/4	I.D. 5	3.0	36.0	14	7
110951	31.132	R 1/4	I.D. 6	4.0	37.5	14	7
110952	31.133	R 1/4	I.D. 8	5.6	41.0	14	7
110953	31.134	R 1/4	I.D. 10	7.0	43.5	14	7
110954	31.141	R 3/8	I.D. 6	4.0	39.0	17	10
110955	31.142	R 3/8	I.D. 8	5.6	41.0	17	10
110956	31.143	R 3/8	I.D. 10	7.0	43.5	17	10
110957	31.144	R 3/8	I.D. 12	8.6	45.5	17	10
110958	31.151	R 1/2	I.D. 8	5.6	49.0	22	20
110959	31.152	R 1/2	I.D. 12	8.6	54.0	22	20
110960	31.153	R 1/2	I.D. 16	12.0	58.0	22	20
110961	31.161	R 3/4	I.D. 16	12.0	58.0	27	25
110962	31.162	R 3/4	I.D. 19	15.0	58.0	27	25
110963	31.171	R 1	I.D. 25	21.0	69.0	32	25



32.242

**Male stud tee, polyamide, conical male thread acc. to ISO 7-1**

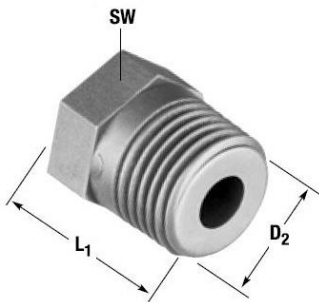
Art. No.	Type No.	Thread D <sub>2</sub> mm	For hose D <sub>1</sub> mm	I.D. D <sub>3</sub> mm	L <sub>1</sub> mm	L <sub>4</sub> mm	a/f mm	min. tightening torque Nm
110964	32.231	R 1/8	I.D. 4	2.5	21.0	18.0	10	2
110965	32.232	R 1/8	I.D. 6	4.0	28.5	21.0	10	2
110966	32.241	R 1/4	I.D. 4	2.5	21.0	23.0	14	7
110967	32.242	R 1/4	I.D. 6	4.0	28.5	26.0	14	7
110968	32.243	R 1/4	I.D. 8	5.6	33.0	27.5	14	7
110969	32.251	R 3/8	I.D. 10	7.0	35.5	30.0	17	10



32.342

### Male stud elbow, polyamide, conical male thread acc. to ISO 7-1

Art. No.	Type No.	Thread D <sub>2</sub> mm	For hose D <sub>1</sub> mm	I.D D <sub>3</sub> mm	L <sub>1</sub> mm	L <sub>4</sub> mm	a/f mm	min. tightening torque Nm
110970	32.331	R 1/8	I.D. 4	2.7	21.0	16.0	10	2
110971	32.332	R 1/8	I.D. 6	4.0	28.5	21.0	10	2
110973	32.341	R 1/4	I.D. 4	2.7	21.0	25.0	14	7
110974	32.342	R 1/4	I.D. 6	4.0	28.5	26.0	14	7
110975	32.343	R 1/4	I.D. 8	5.6	33.0	27.5	14	7
110976	32.344	R 1/4	I.D. 10	7.0	38.0	30.0	14	7
110977	32.351	R 3/8	I.D. 6	4.0	28.5	27.0	17	10
110978	32.352	R 3/8	I.D. 8	5.6	36.0	31.0	17	10
110979	32.353	R 3/8	I.D. 10	7.0	38.0	30.0	17	10
110980	32.354	R 3/8	I.D. 12	8.6	40.5	31.0	17	10
110981	32.361	R 1/2	I.D. 8	5.6	36.0	36.0	22	20
110982	32.362	R 1/2	I.D. 12	8.6	40.5	36.0	22	20
110983	32.371	R 3/4	I.D. 19	15.0	45.5	42.8	27	25



33.901

**Blanking plug, polyamide, conical male thread acc. to ISO 7-1**

Art. No.	Type No.	Thread D <sub>2</sub> mm	L <sub>1</sub> mm	a/f mm	min. tightening torque Nm
110984	33.900	R 1/8	26.0	10	2
110985	33.901	R 1/4	12.5	14	7
110986	33.902	R 3/8	17.5	17	10
110987	33.903	R 1/2	27.0	22	20

Chemical properties of the plastics used					
No.	Chemical substance	Concentration	Temperature	POM	PA 6
1	Acetone	100%	20 °C / 50 °C	1/3	1/0
2	Formic acid	98-100%	20 °C / 50 °C	4/4	4/4
3	Ammonium hydroxide (spirits of ammonia)	Any	20 °C / 50 °C	1/2	1/0
4	Benzine; normal and super unleaded	Commercial	20 °C / 50 °C	1/1	1/1
5	Benzene, benzene hydrocarbons	100%	20 °C / 50 °C	3/3	1/0
6	Bleaching lye (12.5% active chlorine)	Aqueous solution 12.5%	20 °C / 50 °C	4/4	4/4
7	Brake fluid (DOT4)	Commercial	20 °C / 50 °C	1/1	1/1
8	Butanol	Technically pure	20 °C / 50 °C	1/2	1/2
9	Chlorine, chlorine water	Commercial	20 °C / 50 °C	4/4	4/4
10	Disinfectant phenols	Diluted solution	20 °C / 50 °C	4/4	4/4
11	Diesel fuel, diesel oil	Commercial	20 °C / 50 °C	1/1	1/1
12	Decalcifier	Aqueous solution ~10%	20 °C / 50 °C	4/4	4/4
13	Photographic developer (1:100)	Commercial	20 °C / 50 °C	1/1	1/1
14	Natural gas (town gas, coal gas)	Commercial	20 °C / 50 °C	1/1	1/1
15	Crude oil	Commercial	20 °C / 50 °C	1/1	1/1
16	Acetic acid (glacial acetic acid)	90 %	20 °C / 50 °C	4/4	4/4
17	Ethyl alcohol	96 % (tech. pure)	20 °C / 50 °C	1/2	1/2
18	Photographic emulsion	Commercial	20 °C / 50 °C	1/0	1/0
19	Fruit juices	Commercial	20 °C / 50 °C	1/1	1/1
20	Glycerine	Technically pure	20 °C / 50 °C	1/1	1/1
21	Glysantin	Commercial	20 °C / 50 °C	1/1	1/1
22	Heating oil	Commercial	20 °C / 50 °C	1/1	1/1
23	Hydraulic fluid	Commercial	20 °C / 50 °C	1/0	1/0
24	Carbon dioxide, carbonic acid	Technically pure, saturated	20 °C / 50 °C	1/1	1/0
25	Coolants (based on glycol)	Commercial	20 °C / 50 °C	1/1	3/3
26	Methane	Technically pure	20 °C / 50 °C	1/1	1/1
27	Methanol	Technically pure	20 °C / 50 °C	1/1	1/1
28	Methyl ethyl ketone	100%	20 °C / 50 °C	3/3	1/0
29	Engine oils (HD)	Commercial	20 °C / 50 °C	1/1	1/1
30	Sodium hydroxide (lye; caustic soda)	40%	20 °C / 50 °C	1/1	1/1
31	Ozone	Gaseous	20 °C / 50 °C	4/4	3/4
32	Propanol	Technically pure	20 °C / 50 °C	1/1	1/1
33	Propane (liquefied gas)	Liquid	20 °C / 50 °C	1/1	1/0
34	Propene	96 %	20 °C / 50 °C	1/0	1/0
35	Rape oil (rape oil methyl ester)	Commercial	20 °C / 50 °C	1/1	1/1
36	Hydrochloric acid	Aqueous, 10%	20 °C / 50 °C	4/4	4/4
37	Lubricating oil/grease, soft soap	Commercial	20 °C / 50 °C	1/1	1/1
38	Sulphuric acid	Aqueous, 10%	20 °C / 50 °C	4/4	3/3
39	De-icing salt solution (brine)	Saturated	20 °C / 50 °C	1/2	1/1
40	Soap suds (dissolved detergent)	Diluted solution	20 °C / 50 °C	1/1	1/1
41	Water (drinking, river, sea)	Technically pure	20 °C / 50 °C	1/1	1/1
42	Citric acid	10 %	20 °C / 50 °C	2/4	1/0

0 = No data available/Not possible to make an appropriate statement

1 = Highly stable/suitable (change in dimensions: none or negligible and reversible; no damage even after extended period)

2 = Very stable/suitable (change in dimensions after short period: none or negligible and reversible; little change in dimensions, possibly irreversible change to properties after extended period)

3 = Limited stability (considerable changes to dimensions, possibly irreversible change to properties after extended period)

4 = Unstable/unsuitable (soluble or serious effects after a short period)

\* The specifications in this data sheet are based on tests carried out by the granular material manufacturer. They are intended to serve as guidelines for our customers, but cannot simply be applied to any case in which customers expose these products to demands which fall outside the scope of the tests performed. On no account should this be done without first consulting us.

Our customers must perform their own tests to determine whether our plastic hose connecting components are suitable for the application they are intended to be used in. We will be happy to offer any advice or information required.