



Accessories



Accessories

Fittings · Flow Controls · Mufflers · Etc

We're everywhere you need us to be!



Accessories

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World Thread Fittings



How to Order

INW 103 V – 104 – 022

Fitting Series

INW = World Thread Inch Tube
NW = World Thread Metric Tube

Fitting Style

103 = Straight
109 = Swivel Elbow
109E = Extended Swivel Elbow
114 = Swivel Branch Tee
116 = Swivel Run Tee

INW Thread Size

020 = 1/8
021 = 1/4
022 = 3/8
023 = 1/2

NW Thread Size

000 = 1/8
001 = 1/4
002 = 3/8
003 = 1/2

Tube Size
Inch

108 = 1/8"
532 = 5/32"
104 = 1/4"
516 = 5/16"
308 = 3/8"
102 = 1/2"

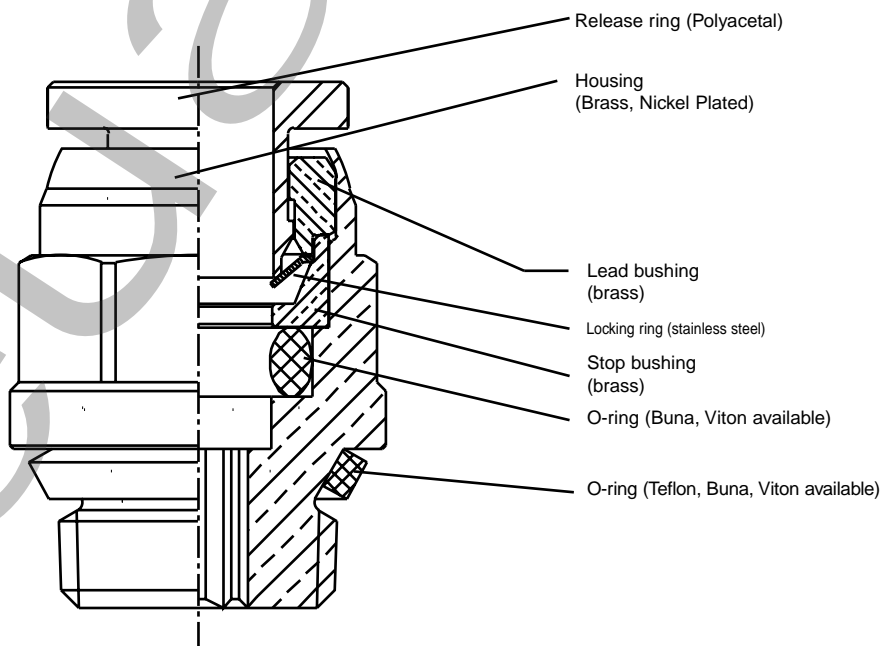
Metric

004 = 4mm
006 = 6mm
008 = 8mm
010 = 10mm

Material

V = Stainless Steel

- Pressure Rating to 265 psi
- Vacuum Rating: 29" of Mercury Hg
- Temperature range: -20°F to +176°F (BUNA N O-ring)
+230°F (Viton O-ring)
- Tube diameter: 1/8" to 1/2"
4mm to 12mm
- Thread size: 1/8 to 1/2



Numatics' World Thread™ IN-Fittings provides extreme versatility in use, which on longer requires the management of different fittings for different thread types or application.

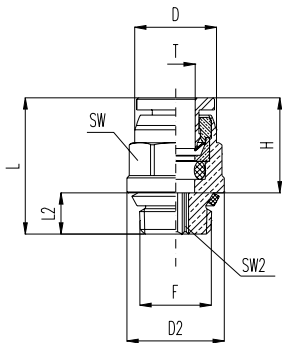
- Extremely versatile – One fitting design for multiple thread types
- Rapid assembly – Requires fewer turns to tighten and seal
- Re-usable – Fittings can be used several times with out gasket deterioration
- Reliable seal – Helical thread profile and PTFE gasket ensure proper seal
- Maximum working pressure: 265 PSIG at 68°F (18 bar at 20°C)
- Conductor compatibility – Nylon, Polyurethane, Polyethylene

Numatics' World Tread™ IN-of the NPTF is designed with a helical thread design that represents the envelope for the profile of the NPTF, ISO 228/1(BSPP), (G-Tap), ISO 7/1(BSPT), (JIS B 0202) thread types. In conjunction with the thread design the seal between the male and female threads is created with a PTFE gasket, housed in a groove at the rear of the thread. This gasket seal meets UNI 571-65 standards.



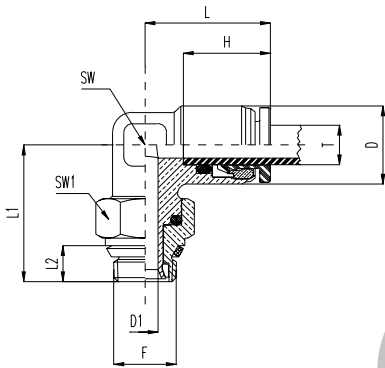
World Thread Fittings

INW103 Straight/Inch Tube



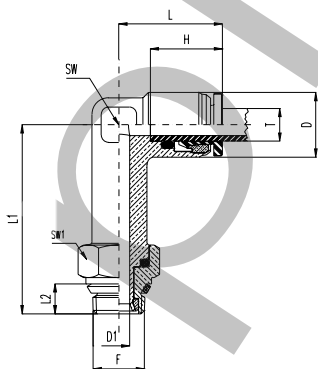
INW103	Tube Diameter T	Thread F	D	D2	L	L2	H	SW	SW2
INW103-108-020	1/8	1/8	0.370	0.472	0.709	0.217	0.472	0.375	0.063
INW103-108-021	1/8	1/4	0.370	0.591	0.787	0.303	0.472	0.375	0.063
INW103-532-020	5/32	1/8	0.390	0.512	0.709	0.217	0.492	0.438	0.063
INW103-532-021	5/32	1/4	0.390	0.591	0.795	0.303	0.492	0.438	0.063
INW103-104-020	1/4	1/8	0.465	0.552	0.799	0.217	0.531	0.500	0.156
INW103-104-021	1/4	1/4	0.465	0.591	0.886	0.303	0.531	0.500	0.156
INW103-104-022	1/4	3/8	0.465	0.748	0.906	0.323	0.531	0.500	0.156
INW103-516-020	5/16	1/8	0.689	0.787	0.925	0.323	0.650	0.594	0.156
INW103-516-021	5/16	1/4	0.689	0.945	1.004	0.406	0.650	0.594	0.219
INW103-516-022	5/16	3/8	0.807	0.866	1.004	0.303	0.650	0.594	0.219
INW103-308-020	3/8	1/8	0.807	0.866	1.043	0.323	0.669	0.688	0.156
INW103-308-021	3/8	1/4	0.807	0.945	1.043	0.406	0.669	0.688	0.219
INW103-308-022	3/8	3/8	0.807	0.866	1.071	0.323	0.669	0.688	0.250
INW103-308-023	3/8	1/2	0.807	0.945	1.161	0.406	0.669	0.688	0.250
INW103-102-021	1/2	1/4	0.807	0.945	1.142	0.406	0.728	0.813	0.250
INW103-102-022	1/2	3/8	0.807	0.866	1.181	0.323	0.728	0.813	0.250
INW103-102-023	1/2	1/2	0.807	0.945	1.220	0.406	0.728	0.813	0.375

INW109 Swivel Elbow/Inch Tube



INW109	Tube Diameter T	Thread F	D	D1	L	L1	H	L2	SW	SW1
INW109-108-020	1/8	1/8	0.394	0.157	0.650	0.768	0.472	0.217	0.354	0.500
INW109-108-021	1/8	1/4	0.394	0.157	0.650	0.768	0.472	0.303	0.354	0.594
INW109-532-020	5/32	1/8	0.394	0.157	0.669	0.768	0.492	0.217	0.354	0.500
INW109-532-021	5/32	1/4	0.394	0.157	0.669	0.874	0.492	0.303	0.354	0.594
INW109-104-020	1/4	1/8	0.472	0.157	0.768	0.799	0.531	0.217	0.433	0.500
INW109-104-021	1/4	1/4	0.472	0.236	0.768	0.8155	0.531	0.303	0.433	0.594
INW109-104-022	1/4	3/8	0.472	0.236	0.768	0.906	0.531	0.323	0.433	0.750
INW109-516-020	5/16	1/8	0.591	0.157	0.945	0.878	0.650	0.217	0.551	0.500
INW109-516-021	5/16	1/4	0.591	0.236	0.945	0.886	0.650	0.303	0.551	0.594
INW109-516-022	5/16	3/8	0.591	0.315	0.945	0.996	0.650	0.323	0.551	0.750
INW109-308-020	3/8	1/8	0.689	0.157	1.063	0.929	0.669	0.217	0.630	0.500
INW109-308-021	3/8	1/4	0.689	0.236	1.063	0.945	0.669	0.303	0.630	0.594
INW109-308-022	3/8	3/8								
INW109-308-023	3/8	1/2	0.689	0.315	1.063	1.197	0.669	0.406	0.630	0.938
INW109-102-021	1/2	1/4	0.827	0.236	1.201	1.059	0.728	0.303	0.688	0.594
INW109-102-022	1/2	3/8	0.827	0.315	1.201	1.122	0.728	0.323	0.688	0.750
INW109-102-023	1/2	1/2	0.827	0.315	1.201	1.280	0.728	0.406	0.688	0.938

INW109E Extended Swivel Elbow/Inch Tube



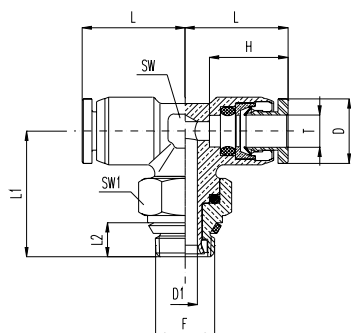
INW109E	Tube Diameter T	Thread F	D	D1	L	L1	L2	H	SW	SW1
INW109E-532-020	5/32	1/8	0.394	0.157	0.638	1.461	0.374	0.472	0.354	0.512
INW109E-532-021	5/32	1/4	0.394	0.157	0.638	1.598	0.512	0.472	0.354	0.591
INW109E-104-020	1/4	1/8	0.394	0.157	0.657	1.457	0.374	0.492	0.354	0.512
INW109E-104-021	1/4	1/4	0.394	0.157	0.657	1.594	0.512	0.492	0.354	0.591
INW109E-104-022	1/4	3/8	0.472	0.157	0.740	1.575	0.374	0.531	0.433	0.512
INW109E-516-020	5/16	1/8	0.472	0.236	0.740	1.693	0.512	0.531	0.433	0.591
INW109E-516-021	5/16	1/4	0.472	0.236	0.740	1.732	0.512	0.531	0.433	0.709
INW109E-516-022	5/16	3/8	0.591	0.157	0.925	1.772	0.374	0.531	0.551	0.512
INW109E-308-020	3/8	1/8	0.591	0.236	0.925	1.909	0.512	0.531	0.551	0.591
INW109E-308-021	3/8	1/4	0.630	0.315	0.925	1.969	0.512	0.531	0.551	0.709
INW109E-308-022	3/8	3/8	0.669	0.157	1.043	1.929	0.374	0.531	0.591	0.512
INW109E-108-020	1/8	1/8	0.709	0.236	1.043	2.067	0.512	0.531	0.591	0.591
INW109E-108-021	1/8	1/4	0.748	0.315	1.043	2.106	0.512	0.531	0.591	0.709



World Thread Fittings

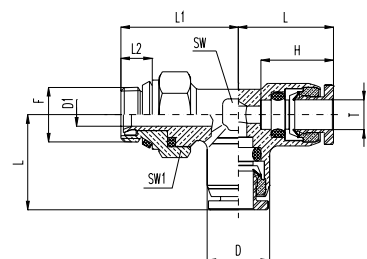


INW114 Swivel Branch Tee/Inch Tube



INW114	Tube Diameter	T	Thread	F	D	D1	L	L1	H	L2	SW	SW1
INW114-108-020	1/8	1/8	1/8	0.394	0.157	0.650	0.768	0.472	0.217	0.354	0.500	
INW114-108-021	1/8	1/4	1/4	0.394	0.157	0.650	0.787	0.472	0.303	0.354	0.594	
INW114-532-020	5/32	1/8	1/8	0.394	0.157	0.669	0.768	0.492	0.217	0.354	0.500	
INW114-532-021	5/32	1/4	1/4	0.394	0.157	0.669	0.787	0.492	0.303	0.354	0.594	
INW114-104-020	1/4	1/8	1/8	0.472	0.157	0.768	0.886	0.531	0.217	0.433	0.500	
INW114-104-021	1/4	1/4	1/4	0.472	0.236	0.768	0.906	0.531	0.303	0.433	0.594	
INW114-104-022	1/4	3/8	3/8	0.472	0.236	0.768	0.965	0.531	0.323	0.433	0.750	
INW114-516-020	5/16	1/8	1/8	0.591	0.157	0.945	0.874	0.650	0.217	0.551	0.500	
INW114-516-021	5/16	1/4	1/4	0.591	0.236	0.945	0.886	0.650	0.303	0.551	0.594	
INW114-308-020	3/8	1/8	1/8	0.689	0.157	1.063	0.925	0.669	0.217	0.630	0.500	
INW114-308-021	3/8	1/4	1/4	0.689	0.236	1.063	0.945	0.669	0.303	0.630	0.594	
INW114-308-022	3/8	3/8	3/8	0.689	0.315	1.063	1.043	0.669	0.323	0.630	0.750	
INW114-308-023	3/8	1/2	1/2	0.689	0.315	1.063	1.201	0.669	0.406	0.630	0.938	
INW114-102-021	1/2	1/4	1/4	0.827	0.236	1.201	1.063	0.728	0.303	0.688	0.594	
INW114-102-022	1/2	3/8	3/8	0.827	0.315	1.201	1.122	0.728	0.323	0.688	0.750	
INW114-102-023	1/2	1/2	1/2	0.827	0.315	1.201	1.280	0.728	0.406	0.688	0.938	

INW116 Swivel Run Tee/Inch Tube

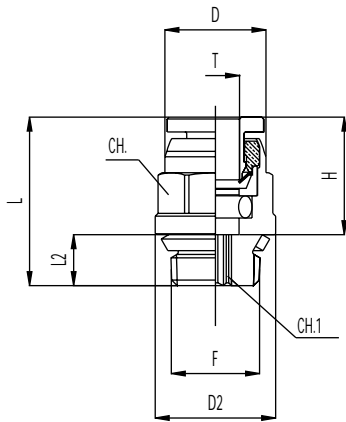


INW116	Tube Diameter	T	Thread	F	D	D1	L	L1	H	L2	SW	SW1
INW116-108-020	1/8	1/8	1/8	0.394	0.157	0.650	0.768	0.472	0.217	0.354	0.500	
INW116-108-021	1/8	1/4	1/4	0.394	0.157	0.650	0.787	0.472	0.303	0.354	0.594	
INW116-532-020	5/32	1/8	1/8	0.394	0.157	0.650	0.768	0.492	0.217	0.354	0.500	
INW116-532-021	5/32	1/4	1/4	0.394	0.157	0.638	0.787	0.492	0.303	0.354	0.594	
INW116-104-020	1/4	1/8	1/8	0.472	0.157	0.638	0.886	0.531	0.217	0.433	0.500	
INW116-104-021	1/4	1/4	1/4	0.472	0.236	0.657	0.906	0.531	0.303	0.433	0.594	
INW116-104-022	1/4	3/8	3/8	0.472	0.236	0.657	0.965	0.531	0.323	0.433	0.750	
INW116-516-020	5/16	1/8	1/8	0.591	0.157	0.740	0.874	0.650	0.217	0.551	0.500	
INW116-516-021	5/16	1/4	1/4	0.591	0.236	0.740	0.886	0.650	0.303	0.551	0.594	
INW116-308-020	3/8	1/8	1/8	0.689	0.157	0.740	0.925	0.669	0.217	0.630	0.500	
INW116-308-021	3/8	1/4	1/4	0.689	0.236	0.925	0.945	0.669	0.303	0.630	0.594	
INW116-308-022	3/8	3/8	3/8	0.689	0.315	0.925	1.043	0.669	0.323	0.630	0.750	
INW116-308-023	3/8	1/2	1/2	0.689	0.315	0.925	1.201	0.669	0.406	0.630	0.938	
INW116-102-021	1/2	1/4	1/4	0.827	0.236	1.043	1.063	0.728	0.303	0.688	0.594	
INW116-102-022	1/2	3/8	3/8	0.827	0.315	1.043	1.122	0.728	0.323	0.688	0.750	
INW116-102-023	1/2	1/2	1/2	0.827	0.315	1.043	1.280	0.728	0.406	0.688	0.938	



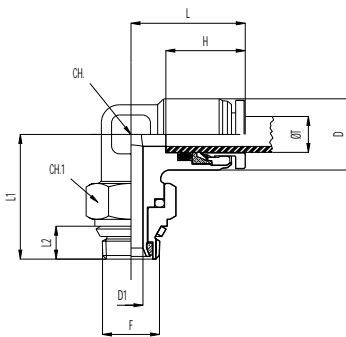
World Thread Fittings

NW103 Straight/Metric Tube



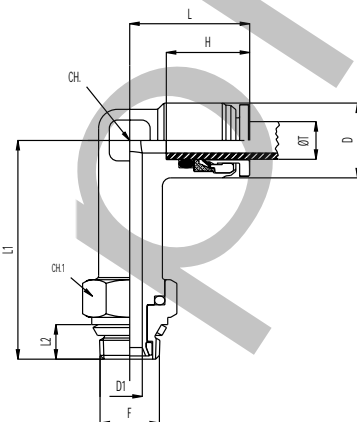
NW103	Tube Diameter	T	Thread F	D	D2	L	L2	H	CH	CH1
NW103-004-000	4		1/8	10.0	12	17.5	5.5	12.5	10	3
NW103-004-001	4		1/4	10.0	15	20.5	7.7	12.5	10	3
NW103-005-000	5		1/8	11.0	12	18.5	5.5	13.0	11	3
NW103-005-001	5		1/4	11.0	15	21.0	7.7	13.0	11	3
NW103-006-000	6		1/8	12.0	14	19.0	5.5	13.5	12	4
NW103-006-001	6		1/4	12.0	15	21.0	7.7	13.5	12	4
NW103-008-000	8		1/8	15.0	16	23.5	5.5	16.0	15	5
NW103-008-001	8		1/4	15.0	16	23.5	7.7	16.0	15	6
NW103-008-002	8		3/8	15.0	19	24.5	8.2	16.0	15	6
NW103-010-001	10		1/4	17.5	20	27.0	7.7	17.0	18	6
NW103-010-002	10		3/8	17.5	20	25.0	8.2	17.0	18	7
NW103-010-003	10		1/2	17.5	24	28.5	10.3	17.0	18	7
NW103-012-001	12		1/4	20.5	22	28.0	7.7	19.0	20	6
NW103-012-002	12		3/8	20.5	22	28.5	8.2	19.0	20	8
NW103-012-003	12		1/2	20.5	24	31.0	10.3	19.0	20	9

NW109 Swivel Elbow/Metric Tube



NW109	Tube Diameter	T	Thread F	D	D1	L	L1	H	L2	CH	CH1
NW109-004-000	4		1/8	10.0	4	16.5	19.5	12.5	5.5	9	13
NW109-004-001	4		1/4	10.0	4	16.5	20.0	12.5	7.7	9	15
NW109-005-000	5		1/8	11.0	4	16.5	21.0	13.0	5.5	10	13
NW109-005-001	5		1/4	11.0	4	16.5	21.5	13.0	7.7	10	15
NW109-006-000	6		1/8	12.0	4	19.0	20.5	13.5	5.5	11	13
NW109-006-001	6		1/4	12.0	4	19.0	21.0	13.5	7.7	11	15
NW109-008-000	8		1/8	15.0	4	23.5	22.5	16.0	5.5	14	13
NW109-008-001	8		1/4	15.0	6	23.5	23.0	16.0	7.7	14	15
NW109-008-002	8		3/8	15.0	8	23.5	25.5	16.0	8.2	14	19
NW109-010-001	10		1/4	17.5	6	26.5	23.7	17.0	7.7	16	15
NW109-010-002	10		3/8	17.5	8	26.5	26.4	17.0	8.2	16	19
NW109-010-003	10		1/2	17.5	8	26.5	30.5	16.8	11.8	16	19
NW109-012-001	12		1/4	20.5	6	29.1	27.1	18.6	7.7	17	15
NW109-012-002	12		3/8	20.5	8	29.1	28.5	18.6	8.2	17	19
NW109-012-003	12		1/2	20.5	8	29.1	32.5	17.0	8.2	15	19

NW109E Extended Swivel Elbow/Metric Tube



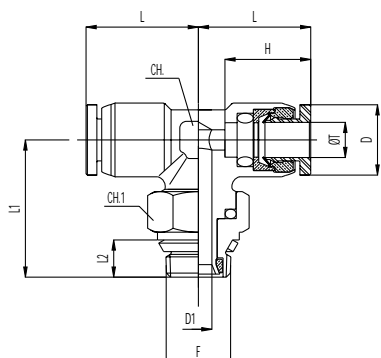
NW109E	Tube Diameter	T	Thread F	D	D1	L	L1	H	L2	CH	CH1
NW109E-004-000	4		1/8	10	4	16.5	34.5	12.5	5.5	9	13
NW109E-004-001	4		1/4	10	4	16.5	35	12.5	7.7	9	15
NW109E-006-000	6		1/8	12	4	19	37.5	13.5	5.5	11	13
NW109E-006-001	6		1/4	12	6	19	38	13.5	7.7	11	15
NW109E-008-000	8		1/8	15	4	23.5	42.5	16	5.5	14	13
NW109E-008-001	8		1/4	15	6	23.5	42.5	16	7.7	14	15
NW109E-008-002	8		3/8	15	8	23.5	45.2	16	8.2	14	19
NW109E-010-001	10		1/4	17.5	6	26.5	46.5	17	7.7	15	15
NW109E-010-002	10		3/8	17.5	8	26.5	49	17	8.2	15	19



World Thread Fittings

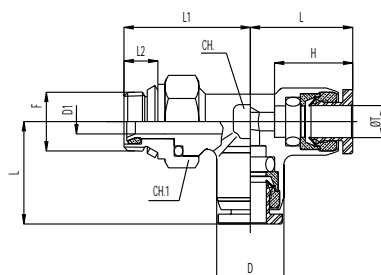


NW114 Swivel Branch Tee/Metric Tube



NW114	Tube Diameter	T	Thread	F	D	D1	L	L1	H	L2	SW	SW1
NW114-004-000	4		1/8	10.0	4	16.5	19.5	12.5	5.5	9	13	
NW114-005-000	5		1/8	11.0	4	16.5	21.0	13.0	5.5	10	13	
NW114-006-000	6		1/8	12.0	4	19.0	22.7	13.5	5.5	11	13	
NW114-006-001	6		1/4	12.0	6	19.0	23.6	13.5	7.7	11	15	
NW114-008-000	8		1/8	15.0	4	23.5	22.3	16.0	5.5	14	13	
NW114-008-001	8		1/4	15.0	6	23.5	22.5	16.0	7.7	14	15	
NW114-008-002	8		3/8	15.0	8	23.5	25.2	16.0	8.2	14	19	
NW114-010-001	10		1/4	17.5	6	26.5	23.7	17.0	7.7	15	15	
NW114-010-002	10		3/8	17.5	8	26.5	28.5	17.0	8.2	15	19	
NW114-010-003	10		1/2	17.5	8	26.5	26.5	16.8	8.2	16	19	
NW114-012-001	12		1/4	20.5	6	29.1	27.1	17.0	7.7	15	15	
NW114-012-002	12		3/8	20.5	8	29.1	28.5	17.0	8.2	15	19	
NW114-012-003	12		1/2	20.5	8	29.1	32.5	17.0	8.2	15	19	

NW116 Swivel Run Tee/Metric Tube



NW116	Tube Diameter	T	Thread	F	D	D1	L	L1	H	L2	SW	SW1
NW116-004-000	4		1/8	10.0	4	16.5	19.5	12.5	5.5	9	13	
NW116-005-000	5		1/8	11.0	4	16.5	19.6	13.0	5.5	10	13	
NW116-006-000	6		1/8	12.0	4	19.0	22.3	13.5	5.5	11	13	
NW116-006-001	6		1/4	12.0	6	19.0	23.6	13.5	7.7	11	15	
NW116-008-000	8		1/8	15.0	4	23.2	22.3	16.0	5.5	14	13	
NW116-008-001	8		1/4	15.0	6	23.2	22.5	16.0	7.7	14	15	
NW116-008-002	8		3/8	15.0	8	23.4	25.2	16.0	8.2	14	19	
NW116-010-001	10		1/4	17.5	6	26.5	23.7	17.0	7.7	15	15	
NW116-010-002	10		3/8	17.5	8	26.5	26.4	17.0	8.2	15	19	
NW116-010-003	10		1/2	17.5	8	26.5	26.5	16.8	8.2	16	19	
NW116-012-001	12		1/4	20.5	6	29.1	27.1	17.0	7.7	15	15	
NW116-012-002	12		3/8	20.5	8	29.1	28.5	17.0	8.2	15	19	
NW116-012-003	12		1/2	20.5	8	29.1	32.5	17.0	8.2	15	19	



NPTF/Inch Tube Fittings

How to Order

IN 109 - 104 - 022 022

Fitting Series

IN = NPTF/Inch Tube

Fitting Style

- 100 = Union
- 101 = Bulkhead Union
- 103 = Straight
- 105 = Female Straight
- 106 = Union Elbow
- 107 = Elbow
- 109 = Swivel Elbow
- 109E = Extended Elbow
- 110 = Union Tee
- 114 = Swivel Branch Tee Swivel
- 116 = Swivel Run Tee
- 118 = Plug
- 119 = Male Union
- 120 = Threaded to Push-In Adapter
- 121 = Reducer
- 122 = Single Banjo
- 123 = Double Banjo
- 124 = Single Manifold
- 125 = Double Manifold
- 131 = Y Adapter
- 132 = Threaded to Push-In Y Adapter

Options

F = Viton "O" Ring

Thread Size

- 000 = No Thread
- 036 = 10-32 UNF
- 020 = 1/8 NPTF
- 021 = 1/4 NPTF
- 022 = 3/8 NPTF
- 02e = 1/2 NPTF

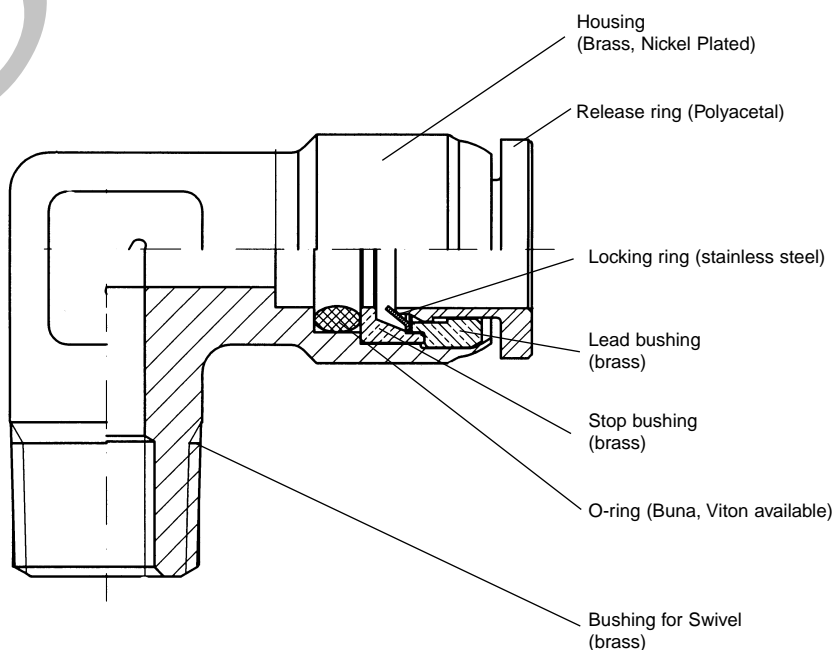
Tube Size

- 108 = 1/8"
- 532 = 5/32"
- 104 = 1/4"
- 516 = 5/16"
- 308 = 3/8"
- 102 = 1/2"

Material

(Blank)
Nickel Plated Brass

- Pressure Rating to 265 psi
- Vacuum Rating: 29" of Mercury Hg
- Temperature range: -20°F to +176°F (BUNA N O-ring)
+230°F (Viton O-ring)
- Push-in fittings with NPTF Threads
- Teflon thread sealant
- Tube diameter: 1/8" to 1/2"
- Thread size: 10-32 UNF to 1/2 NPTF

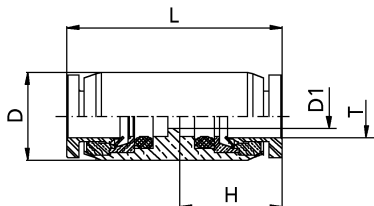




NPTF/Inch Tube Fittings

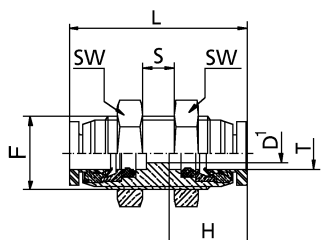


IN100 Union



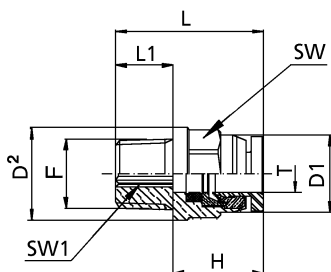
IN100	T	D	D1	L
IN100-108-000	1/8	0.394	0.094	0.984
IN100-532-000	5/32	0.394	0.118	1.024
IN100-104-000	1/4	0.472	0.157	1.110
IN100-516-000	5/16	0.591	0.236	1.299
IN100-308-000	3/8	0.709	0.276	1.398
IN100-102-000	1/2	0.787	0.413	1.575

IN101 Bulkhead Union



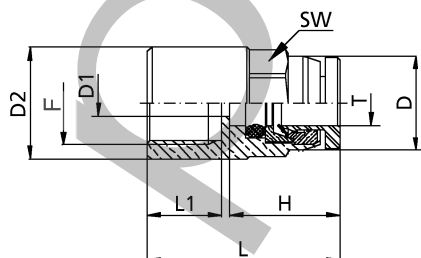
IN101	Tube Diameter	T	Thread F	D1	L	H	SW	S MAX
IN101-108-000	1/8		M11x1	0.094	1.091	0.472	0.551	0.197
IN101-532-000	5/32		M12x1	0.118	1.130	0.492	0.551	0.236
IN101-104-000	1/4		M13x1	0.157	1.244	0.531	0.630	0.315
IN101-516-000	5/16		M16x1	0.236	1.437	0.630	0.748	0.315
IN101-308-000	3/8		M19x1	0.276	1.614	0.669	0.866	0.433
IN101-102-000	1/2		M22x1	0.413	1.850	0.748	1.024	0.591

IN103 Straight



IN103	Tube Diameter	T	Thread F	D1	D2	L	L1	H	SW	SW1
IN103-108-036	1/8		10-32 UNF	0.370	0.370	0.697	0.165	0.472	/	5/64
IN103-108-020	1/8		1/8 NPTF	0.370	0.472	0.854	0.374	0.472	3/8	5/64
IN103-108-021	1/8		1/4 NPTF	0.370	0.551	0.992	0.512	0.472	3/8	5/64
IN103-532-036	5/32		10-32 UNF	0.394	0.394	0.717	0.165	0.492	/	5/64
IN103-532-020	5/32		1/8 NPTF	0.394	0.512	0.866	0.374	0.492	7/16	5/64
IN103-532-021	5/32		1/4 NPTF	0.394	0.551	1.004	0.512	0.492	7/16	5/64
IN103-104-036	1/4		10-32 UNF	0.472	0.472	0.772	0.165	0.531	/	5/64
IN103-104-020	1/4		1/8 NPTF	0.472	0.551	0.886	0.374	0.531	1/2	5/32
IN103-104-021	1/4		1/4 NPTF	0.472	0.551	1.024	0.512	0.531	1/2	5/32
IN103-104-022	1/4		3/8 NPTF	0.472	0.709	1.024	0.512	0.531	1/2	5/32
IN103-516-020	5/16		1/8 NPTF	0.591	0.669	1.055	0.374	0.630	19/32	7/32
IN103-516-021	5/16		1/4 NPTF	0.591	0.669	1.173	0.512	0.630	19/32	7/32
IN103-516-022	5/16		3/8 NPTF	0.591	0.709	1.173	0.512	0.630	19/32	7/32
IN103-308-020	3/8		1/8 NPTF	0.669	0.787	1.114	0.374	0.669	11/16	7/32
IN103-308-021	3/8		1/4 NPTF	0.669	0.787	1.232	0.512	0.669	11/16	1/4
IN103-308-022	3/8		3/8 NPTF	0.669	0.787	1.232	0.512	0.669	11/16	1/4
IN103-308-023	3/8		1/2 NPTF	0.669	0.866	1.390	0.709	0.669	11/16	1/4
IN103-102-021	1/2		1/4 NPTF	0.827	0.906	1.339	0.512	0.748	13/16	1/4
IN103-102-022	1/2		3/8 NPTF	0.827	0.906	1.339	0.512	0.748	13/16	3/8
IN103-102-023	1/2		1/2 NPTF	0.827	0.906	1.496	0.709	0.748	13/16	3/8

IN105 Female Straight

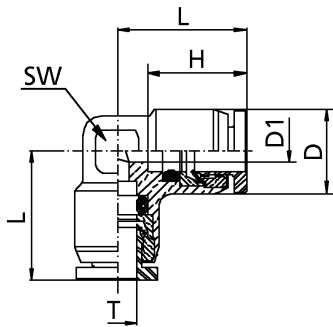


IN105	Tube Diameter	T	Thread F	D	D1	D2	L	L2	H	SW
IN105-108-020	1/8		1/8 NPTF	0.370	0.094	0.551	0.945	0.335	0.472	3/8
IN105-108-021	1/8		1/4 NPTF	0.370	0.094	0.669	1.102	0.472	0.472	3/8
IN105-532-020	5/32		1/8 NPTF	0.394	0.118	0.551	0.965	0.335	0.492	7/16
IN105-532-021	5/32		1/4 NPTF	0.394	0.118	0.669	1.122	0.472	0.492	7/16
IN105-104-020	1/4		1/8 NPTF	0.472	0.157	0.551	0.965	0.335	0.531	1/2
IN105-104-021	1/4		1/4 NPTF	0.472	0.157	0.669	1.142	0.472	0.531	1/2
IN105-516-020	5/16		1/8 NPTF	0.591	0.236	0.669	1.055	0.335	0.630	19/32
IN105-516-021	5/16		1/4 NPTF	0.591	0.236	0.669	1.213	0.472	0.630	19/32
IN105-308-021	3/8		1/4 NPTF	0.669	0.276	0.866	1.248	0.472	0.669	3/4
IN105-308-022	3/8		3/8 NPTF	0.669	0.276	0.866	1.366	0.495	0.669	11/16



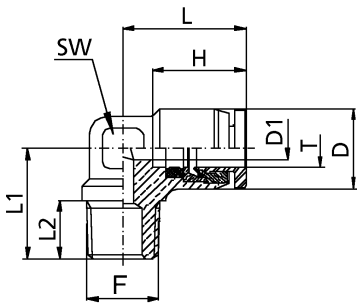
NPTF/Inch Tube Fittings

IN106 Union Elbow



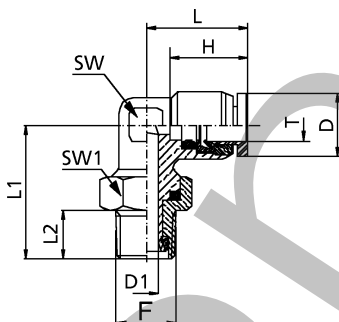
IN106	Tube Diameter	T	D	D1	L	H	SW
IN106-108-000	1/8	.0394	0.094	0.638	0.472	0.354	
IN106-532-000	5/32	0.394	0.118	0.657	0.492	0.354	
IN106-104-000	1/4	0.472	0.157	0.740	0.531	0.433	
IN106-516-000	5/16	0.591	0.236	0.858	0.630	0.551	
IN106-308-000	3/8	0.709	0.295	1.004	0.669	0.630	
IN106-102-000	1/2	0.827	0.413	1.161	0.748	0.685	

IN107 Elbow



IN107	Tube Diameter	T	Thread F	D	D1	L	L1	L2	H	SW
IN107-532-020	5/32	1/8 NPTF	0.394	0.118	0.657	0.650	0.374	0.492	0.354	
IN107-532-021	5/32	1/4 NPTF	0.394	0.118	0.657	0.787	0.512	0.492	0.354	
IN107-104-020	1/4	1/8 NPTF	0.472	0.157	0.740	0.693	0.374	0.531	0.433	
IN107-104-021	1/4	1/4 NPTF	0.472	0.157	0.740	0.831	0.512	0.531	0.433	
IN107-308-021	3/8	1/4 NPTF	0.709	0.295	1.004	0.945	0.512	0.685	0.630	
IN107-308-022	3/8	3/8 NPTF	0.709	0.295	1.004	0.945	0.512	0.685	0.630	

IN109 Swivel Elbow



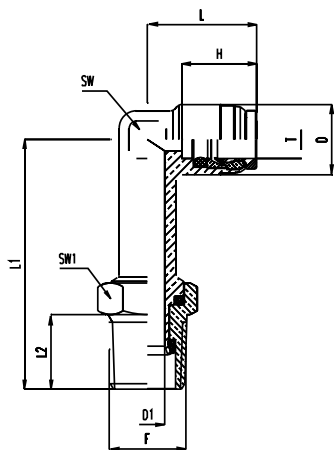
IN109	Tube Diameter	T	Thread F	D	D1	L	L1	L2	H	SW	SW1
IN109-108-036	1/8	10-32 UNF	0.394	0.087	0.638	0.630	0.165	0.472	0.354	0.354	
IN109-108-020	1/8	1/8 NPTF	0.394	0.157	0.638	0.874	0.374	0.472	0.354	0.512	
IN109-108-021	1/8	1/4 NPTF	0.394	0.157	0.638	1.008	0.512	0.472	0.354	0.591	
IN109-532-036	5/32	10-32 UNF	0.394	0.087	0.657	0.630	0.165	0.492	0.354	0.354	
IN109-532-020	5/32	1/8 NPTF	0.394	0.157	0.657	0.874	0.374	0.492	0.354	0.512	
IN109-532-021	5/32	1/4 NPTF	0.394	0.157	0.657	1.008	0.512	0.492	0.354	0.591	
IN109-104-036	1/4	10-32 UNF	0.472	0.087	0.740	0.709	0.165	0.531	0.433	0.354	
IN109-104-020	1/4	1/8 NPTF	0.472	0.157	0.740	0.906	0.374	0.531	0.433	0.512	
IN109-104-021	1/4	1/4 NPTF	0.472	0.236	0.740	1.031	0.512	0.531	0.433	0.591	
IN109-104-022	1/4	3/8 NPTF	0.472	0.236	0.740	1.071	0.512	0.531	0.433	0.709	
IN109-516-020	5/16	1/8 NPTF	0.591	0.157	0.925	0.984	0.374	0.630	0.551	0.512	
IN109-516-021	5/16	1/4 NPTF	0.591	0.236	0.925	1.122	0.512	0.630	0.551	0.591	
IN109-516-022	5/16	3/8 NPTF	0.591	0.315	0.925	1.181	0.512	0.630	0.551	0.709	
IN109-308-020	3/8	1/8 NPTF	0.709	0.157	1.043	1.043	0.374	0.669	0.630	0.512	
IN109-308-021	3/8	1/4 NPTF	0.709	0.236	1.043	1.181	0.512	0.669	0.630	0.591	
IN109-308-022	3/8	3/8 NPTF	0.709	0.315	1.043	1.220	0.512	0.669	0.630	0.709	
IN109-308-023	3/8	1/2 NPTF	0.709	0.315	1.043	1.358	0.709	0.669	0.630	0.866	
IN109-102-021	1/2	1/4 NPTF	0.827	0.236	1.181	1.299	0.512	0.748	0.685	0.591	
IN109-102-022	1/2	3/8 NPTF	0.827	0.315	1.181	1.299	0.512	0.748	0.685	0.709	
IN109-102-023	1/2	1/2 NPTF	0.827	0.315	1.181	1.476	0.709	0.748	0.685	0.866	



NPTF/Inch Tube Fittings

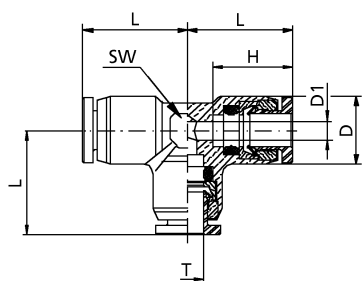


IN109E Extended Elbow



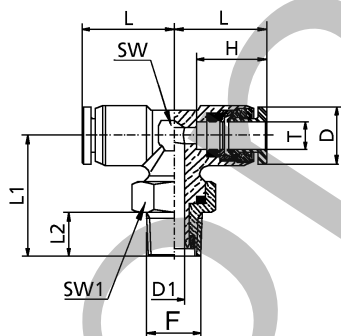
IN109E	Tube Diameter	T	Thread F	D	D1	L	L1	L2	H	SW	SW1
IN109E-108-020	1/8		1/8 NPTF	0.394	0.157	0.638	1.461	0.374	0.472	0.354	0.512
IN109E-108-021	1/8		1/4 NPTF	0.394	0.157	0.638	1.598	0.512	0.472	0.354	0.591
IN109E-532-020	5/32		1/8 NPTF	0.394	0.157	0.657	1.457	0.374	0.492	0.354	0.512
IN109E-532-021	5/32		1/4 NPTF	0.394	0.157	0.657	1.594	0.512	0.492	0.354	0.591
IN109E-104-020	1/4		1/8 NPTF	0.472	0.157	0.740	1.575	0.374	0.531	0.433	0.512
IN109E-104-021	1/4		1/4 NPTF	0.472	0.236	0.740	1.693	0.512	0.531	0.433	0.591
IN109E-104-022	1/4		3/8 NPTF	0.472	0.236	0.740	1.732	0.512	0.531	0.433	0.709
IN109E-516-020	5/16		1/8 NPTF	0.591	0.157	0.925	1.772	0.374	0.531	0.551	0.512
IN109E-516-021	5/16		1/4 NPTF	0.591	0.236	0.925	1.909	0.512	0.531	0.551	0.591
IN109E-516-022	5/16		3/8 NPTF	0.630	0.315	0.925	1.969	0.512	0.531	0.551	0.709
IN109E-308-020	3/8		1/8 NPTF	0.669	0.157	1.043	1.929	0.374	0.531	0.591	0.512
IN109E-308-021	3/8		1/4 NPTF	0.709	0.236	1.043	2.067	0.512	0.531	0.591	0.591
IN109E-308-022	3/8		3/8 NPTF	0.748	0.315	1.043	2.106	0.512	0.531	0.591	0.709

IN110 Union Tee



IN110	Tube Diameter	T	D	D1	L	H	SW
IN110-108-000	1/8		0.394	0.094	0.638	0.472	0.354
IN110-532-000	5/32		0.394	0.118	0.657	0.492	0.354
IN110-104-000	1/4		0.472	0.157	0.740	0.531	0.433
IN110-516-000	5/16		0.591	0.236	0.858	0.630	0.551
IN110-308-000	3/8		0.709	0.295	1.004	0.669	0.630
IN110-102-000	1/2		0.827	0.413	1.161	0.748	0.685

IN114 Swivel Branch Tee

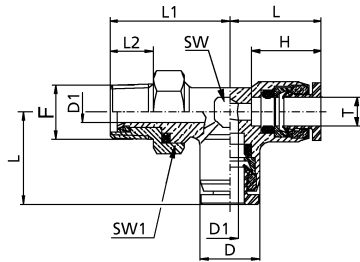


IN114	Tube Diameter	T	Thread F	D	D1	L	L1	L2	H	SW	SW1
IN114-108-036	1/8		10-32 UNF	0.394	0.087	0.638	0.630	0.165	0.472	0.354	0.354
IN114-108-020	1/8		1/8 NPTF	0.394	0.157	0.638	0.874	0.374	0.472	0.354	0.512
IN114-108-021	1/8		1/4 NPTF	0.394	0.157	0.638	1.008	0.512	0.472	0.354	0.591
IN114-532-036	5/32		10-32 UNF	0.394	0.087	0.657	0.630	0.165	0.492	0.354	0.354
IN114-532-020	5/32		1/8 NPTF	0.394	0.157	0.657	0.874	0.374	0.492	0.354	0.512
IN114-532-021	5/32		1/4 NPTF	0.394	0.157	0.657	1.008	0.512	0.492	0.354	0.591
IN114-104-020	1/4		1/8 NPTF	0.472	0.157	0.740	0.996	0.374	0.531	0.433	0.512
IN114-104-021	1/4		1/4 NPTF	0.472	0.236	0.740	1.142	0.512	0.531	0.433	0.591
IN114-104-022	1/4		3/8 NPTF	0.472	0.236	0.740	1.181	0.512	0.531	0.433	0.709
IN114-516-020	5/16		1/8 NPTF	0.591	0.157	0.925	0.984	0.374	0.630	0.551	0.512
IN114-516-021	5/16		1/4 NPTF	0.591	0.236	0.925	1.122	0.512	0.630	0.551	0.591
IN114-308-020	3/8		1/8 NPTF	0.709	0.157	1.043	1.043	0.374	0.669	0.630	0.709
IN114-308-021	3/8		1/4 NPTF	0.709	0.236	1.043	1.181	0.512	0.669	0.630	0.591
IN114-308-022	3/8		3/8 NPTF	0.709	0.315	1.043	1.220	0.512	0.669	0.630	0.709
IN114-308-023	3/8		1/2 NPTF	0.709	0.315	1.043	1.394	0.709	0.669	0.630	0.866
IN114-102-021	1/2		1/4 NPTF	0.827	0.236	1.181	1.299	0.512	0.748	0.685	0.591
IN114-102-022	1/2		3/8 NPTF	0.827	0.315	1.181	1.299	0.512	0.748	0.685	0.709
IN114-102-023	1/2		1/2 NPTF	0.827	0.315	1.181	1.476	0.709	0.748	0.685	0.866



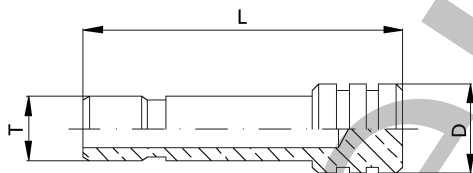
NPTF/Inch Tube Fittings

IN116 Swivel Run Tee



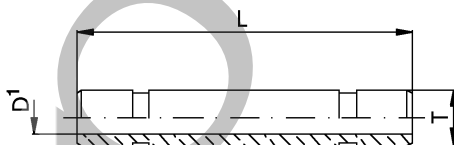
IN116	Tube Diameter	T	Thread F	D	D1	L	L1	L2	H	SW	SW1
IN116-108-036	1/8	10-32 UNF	0.394	0.087	0.638	0.630	0.165	0.472	0.354	0.354	
IN116-108-020	1/8	1/8 NPTF	0.394	0.157	0.638	0.874	0.374	0.472	0.354	0.512	
IN116-108-021	1/8	1/4 NPTF	0.394	0.157	0.638	1.008	0.512	0.472	0.354	0.591	
IN116-532-036	5/32	10-32 UNF	0.394	0.087	0.657	0.630	0.165	0.492	0.354	0.354	
IN116-532-020	5/32	1/8 NPTF	0.394	0.157	0.657	0.874	0.374	0.492	0.354	0.512	
IN116-532-021	5/32	1/4 NPTF	0.394	0.157	0.657	1.008	0.512	0.492	0.354	0.591	
IN116-104-020	1/4	1/8 NPTF	0.472	0.157	0.740	0.996	0.374	0.531	0.433	0.512	
IN116-104-021	1/4	1/4 NPTF	0.472	0.236	0.740	1.142	0.512	0.531	0.433	0.591	
IN116-104-022	1/4	3/8 NPTF	0.472	0.236	0.740	1.181	0.512	0.531	0.433	0.709	
IN116-516-020	5/16	1/8 NPTF	0.591	0.157	0.925	0.984	0.374	0.630	0.551	0.512	
IN116-516-021	5/16	1/4 NPTF	0.591	0.236	0.925	1.122	0.512	0.630	0.551	0.591	
IN116-308-020	3/8	1/8 NPTF	0.709	0.157	1.043	1.043	0.374	0.669	0.630	0.512	
IN116-308-021	3/8	1/4 NPTF	0.709	0.236	1.043	1.181	0.512	0.669	0.630	0.591	
IN116-308-022	3/8	3/8 NPTF	0.709	0.315	1.043	1.220	0.512	0.669	0.630	0.709	
IN116-308-023	3/8	1/2 NPTF	0.709	0.315	1.043	1.394	0.709	0.669	0.630	0.866	
IN116-102-021	1/2	1/4 NPTF	0.827	0.236	1.181	1.299	0.512	0.748	0.685	0.591	
IN116-102-022	1/2	3/8 NPTF	0.827	0.315	1.181	1.299	0.512	0.748	0.685	0.709	
IN116-102-023	1/2	1/2 NPTF	0.827	0.315	1.181	1.476	0.709	0.748	0.685	0.866	

IN118 Plug



IN118	T	D	L
IN118-108-000	1/8	0.197	0.827
IN118-532-000	5/32	0.236	0.906
IN118-104-000	1/4	0.315	0.984
IN118-516-000	5/16	0.394	1.063
IN118-308-000	3/8	0.472	1.102
IN118-102-000	1/2	0.591	1.260

IN119 Male Union



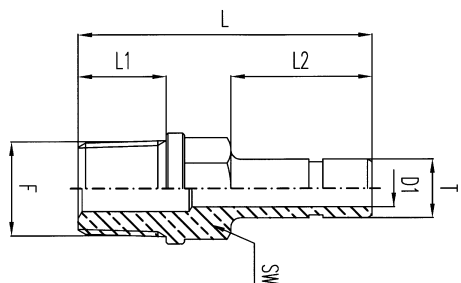
IN119	T	D1	L
IN119-108-000	1/8	0.063	1.102
IN119-532-000	5/32	0.079	1.181
IN119-104-000	1/4	0.157	1.260
IN119-516-000	5/16	0.236	1.535
IN119-308-000	3/8	0.295	1.614
IN119-102-000	1/2	0.394	1.811



NPTF/Inch Tube Fittings

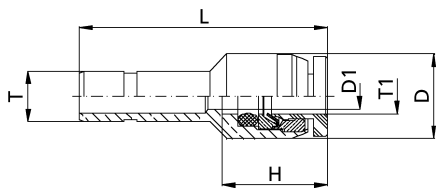


IN120 Threaded to Push-In Adapter



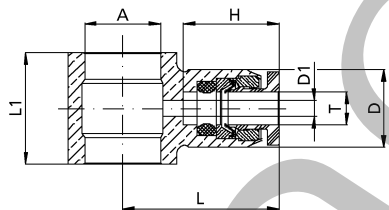
IN120	T	Thread F	D1	L	L1	L2	SW
IN120-108-020	1/8	1/8 NPTF	0.063	1.181	0.374	0.531	3/8
IN120-108-021	1/8	1/4 NPTF	0.063	1.358	0.512	0.531	1/2
IN120-532-020	5/32	1/8 NPTF	0.079	1.201	0.374	0.551	3/8
IN120-532-021	5/32	1/4 NPTF	0.079	1.378	0.512	0.551	1/2
IN120-104-020	1/4	1/8 NPTF	0.157	1.252	0.374	0.602	3/8
IN120-104-021	1/4	1/4 NPTF	0.157	1.429	0.512	0.602	1/2
IN120-516-020	5/16	1/8 NPTF	0.236	1.358	0.374	0.709	3/8
IN120-516-021	5/16	1/4 NPTF	0.236	1.535	0.512	0.709	1/2
IN120-308-021	3/8	1/4 NPTF	0.276	1.654	0.512	0.827	1/2
IN120-308-022	3/8	3/8 NPTF	0.276	1.673	0.512	0.827	19/32
IN120-102-022	1/2	3/8 NPTF	0.394	1.752	0.512	0.906	19/32
IN120-102-023	1/2	1/2 NPTF	0.394	1.949	0.709	0.906	11/16

IN121 Reducer



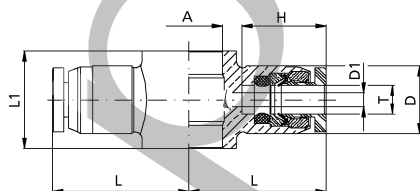
IN121	T	T1	D	D1	L	H
IN121-104-108	1/4	1/8	0.394	0.094	1.082	0.472
IN121-104-532	1/4	5/32	0.394	0.118	1.142	0.492
IN121-308-104	3/8	1/4	0.472	0.157	1.339	0.531
IN121-102-104	1/2	1/4	0.472	0.157	1.417	0.531
IN121-102-308	1/2	3/8	0.669	0.295	1.673	0.669

IN122 Single Banjo



IN122	Tube Diameter	T	A	D	D1	L	L1	H
IN122-108-020	1/8	1/8 NPTF	0.394	0.094	0.748	0.571	0.472	
IN122-532-036	5/32	10-32 UNF	0.394	0.110	0.748	0.472	0.492	
IN122-532-020	5/32	1/8 NPTF	0.394	0.118	0.795	0.571	0.492	
IN122-104-020	1/4	1/8 NPTF	0.472	0.157	0.811	0.571	0.531	
IN122-104-021	1/4	1/4 NPTF	0.472	0.157	0.890	0.689	0.531	
IN122-308-021	3/8	1/4 NPTF	0.709	0.295	1.067	0.709	0.669	

IN123 Double Banjo

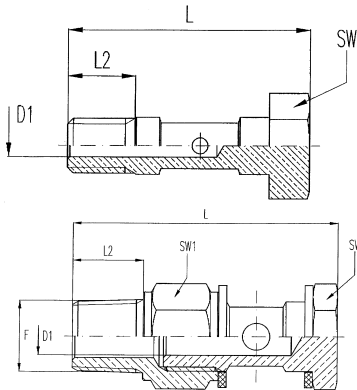


IN123	Tube Diameter	T	A	D	D1	L	L1	H
IN123-532-036	5/32	10-32 UNF	0.394	0.118	0.748	0.472	0.492	
IN123-104-020	1/4	1/8 NPTF	0.472	0.157	0.811	0.571	0.531	
IN123-104-021	1/4	1/4 NPTF	0.472	0.157	0.890	0.689	0.531	
IN123-308-021	3/8	1/4 NPTF	0.709	0.295	1.067	0.709	0.669	



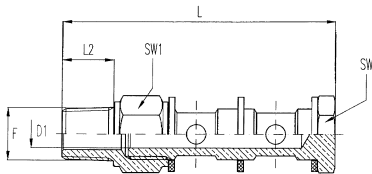
NPTF/Inch Tube Fittings

IN124 Single Manifold



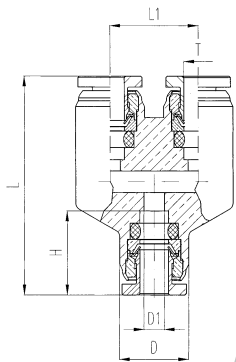
IN124	Thread F	L	L2	D1	SW	SW1
IN124-000-036	10-32 UNF	0.827	0.223	0.079	0.315	-
IN124-000-020	1/8 NPTF	1.634	0.374	0.197	0.551	0.551
IN124-000-021	1/4 NPTF	2.067	0.512	0.276	0.669	0.669

IN125 Double Manifold



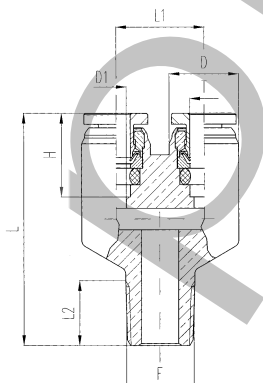
IN125	Thread F	L	L2	D1	SW	SW1
IN125-000-020	1/8 NPTF	2.187	0.374	0.197	0.551	0.551
IN125-000-021	1/4 NPTF	2.715	0.512	0.276	0.669	0.669

IN131 Y Adapter



IN131	Tube Diameter T	L	H	L 1	D	D1
IN131-108-000	1/8	1.240	0.472	0.512	0.394	0.094
IN131-532-000	5/32	1.280	0.492	0.512	0.394	0.118
IN131-104-000	1/4	1.398	0.531	0.598	0.472	0.157

IN132 Threaded to Push-In Y Adapter



IN132	Tube Diameter T	Thread F	L2	L	H	L1	D	D1
IN132-104-020	1/4	1/8 NPTF	0.165	1.319	0.472	0.512	0.394	0.094
IN132-108-020	1/8	1/8 NPTF	0.374	1.339	0.472	0.512	0.394	0.094
IN132-532-020	5/32	1/8 NPTF	0.374	1.350	0.492	0.512	0.394	0.118



Metric Fittings

How to Order

N 102 - 006 - 001

Fitting Series

N = Metric

Thread Size

- 100 = Union
- 101 = Bulkhead Union
- 102 = Straight
- 104 = Straight w/o external hex
- 105 = Female Straight
- 106 = Union Elbow
- 108 = Swivel Elbow
- 110 = Union Tee
- 113 = Swivel Branch Tee
- 115 = Swivel Run Tee
- 117 = Union Cross
- 118 = Plug
- 119 = Male Union
- 120 = Threaded to Push-In Adapter
- 121 = Reducer
- 122 = Single Banjo
- 123 = Double Banjo
- 124 = Single Manifold
- 125 = Double Manifold

Thread Size

- 000 = 1/8 G
- 001 = 1/4 G
- 002 = 3/8 G
- 003 = 1/2 G
- 005 = M5

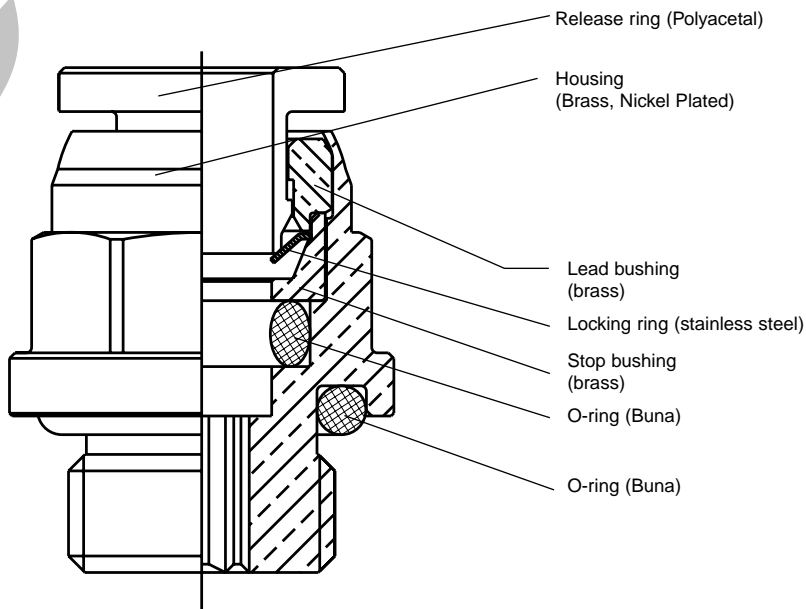
Tube Size

- 004 = 4mm
- 005 = 5mm
- 006 = 6mm
- 008 = 8mm
- 010 = 10mm
- 012 = 12mm

Material

- (Blank)
- Nicklel Plated Brass

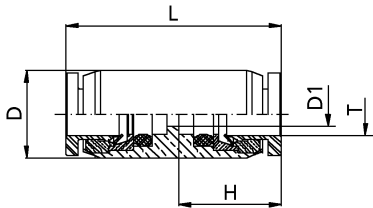
- Pressure Rating to 265 psi
- Vacuum Rating: 29" of Mercury Hg
- Temperature range: -20°F to +176°F (BUNA N O-ring)
+230°F (Viton O-ring)
- Push-in fittings with G Threads
- Tube diameter: 4mm to 12mm
- Thread size: M5 to 1/2 G





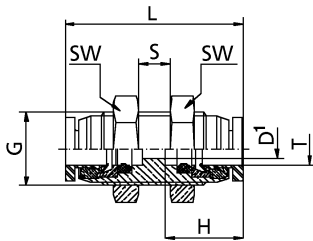
Metric Fittings

N100 Union



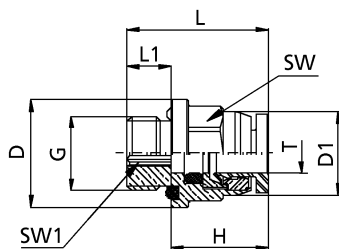
N100	Tube Diameter T	D	D1	H	L
N100-004-000	4.0	10.0	2.0	12.2	26.0
N100-005-000	5.0	11.0	3.0	12.7	27.0
N100-006-000	6.0	12.0	4.0	13.3	28.0
N100-008-000	8.0	15.0	6.0	15.8	33.0
N100-010-000	10.0	18.0	8.0	16.8	35.5
N100-012-000	12.0	20.0	10.0	18.9	41.0

N101 Bulkhead Union



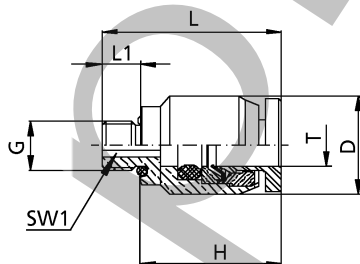
N101	Tube Diameter T	External Thread G	D1	H	L	min. S	max. S	SW
N101-004-000	4.0	M11	2.0	12.2	28.7	0	6	14
N101-005-000	5.0	M12	3.0	12.7	29.2	0	6	15
N101-006-000	6.0	M13	4.0	13.3	31.6	0	8	16
N101-008-000	8.0	M16	6.0	15.8	36.5	0	8	19
N101-010-000	10.0	M19	8.0	16.8	41.6	0	11	22
N101-012-000	12.0	M22	10.0	18.9	48.0	0	15	26

N102 Straight



N102	Tube Diameter T	Thread G	D	D1	H	L	L1	SW	SW1
N102-004-000	4.0	1/8	14.0	9.9	12.2	18.1	5.7	10	3
N102-004-001	4.0	1/4	17.0	9.9	12.2	18.8	6.0	10	3
N102-005-000	5.0	1/8	14.0	10.9	12.7	18.8	5.7	11	3
N102-005-001	5.0	1/4	17.0	10.9	12.7	19.2	6.0	11	3
N102-006-000	6.0	1/8	14.0	11.9	13.3	19.0	5.7	12	4
N102-006-001	6.0	1/4	17.0	11.9	13.3	19.8	6.0	12	4
N102-008-000	8.0	1/8	17.0	15.0	15.8	24.5	5.7	15	6
N102-008-001	8.0	1/4	19.0	15.0	15.8	22.0	6.0	16	6
N102-008-002	8.0	3/8	21.0	15.0	15.8	22.7	6.5	16	6
N102-010-001	10.0	1/4	20.0	17.4	16.8	25.3	6.0	18	7
N102-010-002	10.0	3/8	22.0	17.4	16.8	23.3	6.5	18	7
N102-010-003	10.0	1/2	26.0	17.4	16.8	28.3	9.5	18	7
N102-012-001	12.0	1/4	22.0	20.0	18.9	27.4	6.0	20	7
N102-012-002	12.0	3/8	22.0	20.0	18.9	28.0	6.0	20	7
N102-012-003	12.0	1/2	26.0	20.0	18.9	31.5	9.5	20	9

N104 Straight without External Hex

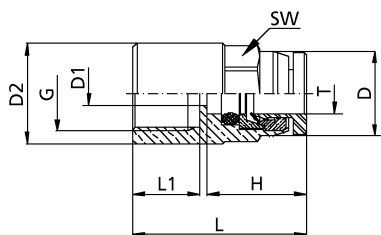


N104	Tube Diameter T	Thread G	D	H	L	L1	SW1
N104-004-005	4.0	M5	10.0	14.4	18.4	4.0	2
N104-005-005	5.0	M5	11.0	14.7	18.7	4.0	2
N104-006-005	6.0	M5	12.0	15.3	19.3	4.0	2



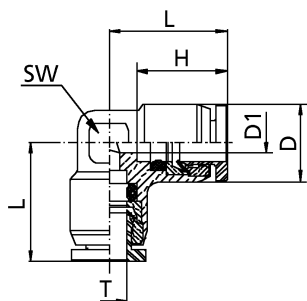
Metric Fittings

N105 Female Straight



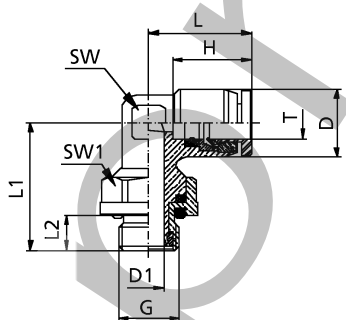
N105	Tube Diameter T	Thread G	D	D1	D2	H	L	L1	SW
N105-004-005	4.0	M5	9.9	2.0	8.0	12.2	19.4	5.5	10
N105-004-000	4.0	1/8	9.9	2.0	12.0	12.2	22.4	8.5	10
N105-005-005	5.0	M5	10.9	3.0	8.0	12.7	19.7	5.5	11
N105-005-000	5.0	1/8	10.9	3.0	12.0	12.7	22.7	8.5	11
N105-005-001	5.0	1/4	10.9	3.0	17.0	12.7	24.7	10.5	11
N105-006-000	6.0	1/8	11.9	4.0	12.0	13.3	23.3	8.5	12
N105-006-001	6.0	1/4	11.9	4.0	17.0	13.3	25.3	10.5	12
N105-008-000	8.0	1/8	15.0	6.0	12.0	15.8	25.8	8.5	15
N105-008-001	8.0	1/4	15.0	6.0	17.0	15.8	28.3	10.5	15
N105-010-001	10.0	1/4	17.4	8.0	17.0	16.8	29.3	10.5	18
N105-010-002	10.0	3/8	17.4	8.0	20.0	16.8	30.3	11.5	18
N105-012-001	12.0	1/4	20.0	10.0	22.0	18.9	32.0	10.5	20
N105-012-002	12.0	3/8	20.0	10.0	22.0	18.9	33.0	11.5	20
N105-012-003	12.0	1/2	20.0	10.0	26.0	18.9	37.4	16.0	20

N106 Union Elbow



N106	Tube Diameter T	D	D1	H	L	SW
N106-004-000	4.0	9.9	2.0	12.2	16.6	9
N106-005-000	5.0	10.9	3.0	12.7	16.6	10
N106-006-000	6.0	11.9	4.0	13.3	19.1	11
N106-008-000	8.0	15.0	6.0	15.8	21.8	14
N106-010-000	10.0	17.4	8.0	16.8	25.3	16
N106-012-000	12.0	20.4	10.0	18.9	29.1	17

N108 Swivel Elbow

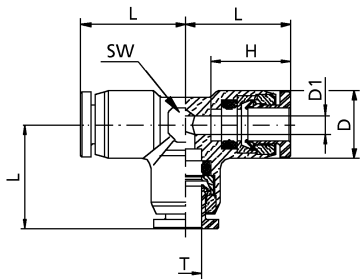


N108	Tube Diameter T	Thread G	D	D1	H	L	L1	L2	SW	SW1
N108-004-005	4.0	M5	9.9	2.3	12.2	16.6	16.5	4.0	9	9
N108-004-000	4.0	1/8	9.9	4.0	12.2	16.6	19.8	5.7	9	13
N108-004-001	4.0	1/4	9.9	4.0	12.2	16.6	20.0	6.0	9	15
N108-005-005	5.0	M5	10.9	2.3	12.7	16.6	18.0	4.0	10	9
N108-005-000	5.0	1/8	10.9	4.0	12.7	16.6	20.0	5.7	10	13
N108-005-001	5.0	1/4	10.9	4.0	12.7	16.6	20.2	6.0	10	15
N108-006-005	6.0	M5	11.9	2.3	13.3	19.1	18.5	4.0	11	9
N108-006-000	6.0	1/8	11.9	4.0	13.3	19.1	20.9	5.7	11	13
N108-006-001	6.0	1/4	11.9	6.0	13.3	19.1	21.0	6.0	11	15
N108-008-000	8.0	1/8	15.0	4.0	15.8	23.3	22.7	5.7	14	13
N108-008-001	8.0	1/4	15.0	6.0	15.8	23.3	22.7	6.0	14	15
N108-008-002	8.0	3/8	15.0	8.0	15.8	23.3	25.2	6.5	14	18
N108-010-000	10.0	1/8	17.4	4.0	16.8	26.5	24.0	5.7	16	13
N108-010-001	10.0	1/4	17.4	6.0	16.8	26.5	24.1	6.0	16	15
N108-010-002	10.0	3/8	17.4	8.0	16.8	26.5	26.4	6.5	16	18
N108-010-003	10.0	1/2	17.4	8.0	16.8	26.5	30.4	9.5	16	18
N108-012-001	12.0	1/4	20.0	6.0	18.9	29.1	27.3	6.0	17	15
N108-012-002	12.0	3/8	20.0	8.0	18.9	29.1	29.5	6.5	17	18
N108-012-003	12.0	1/2	20.0	8.0	18.9	29.1	33.5	9.5	17	18



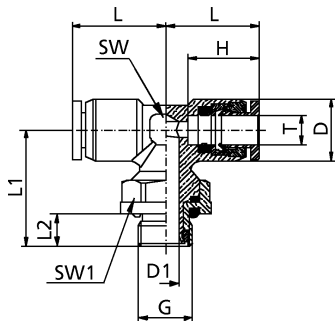
Metric Fittings

N110 Union Tee



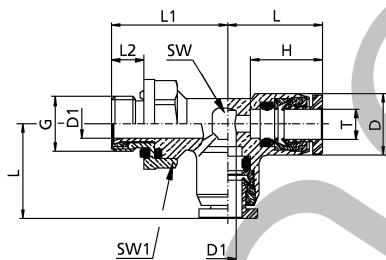
N110	Tube Diameter T	D	D1	H	L	SW
N110-004-000	4.0	9.9	2.0	12.2	16.6	9
N110-005-000	5.0	10.9	3.0	12.7	16.6	10
N110-006-000	6.0	11.9	4.0	13.3	19.1	11
N110-008-000	8.0	15.0	6.0	15.8	21.8	14
N110-010-000	10.0	17.4	8.0	16.8	25.3	16
N110-012-000	12.0	20.4	10.0	18.9	29.1	17

N113 Swivel Branch Tee



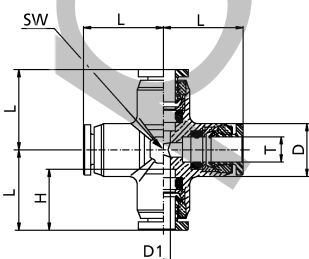
N113	Tube Diameter T	Thread G	D	D1	H	L	L1	L2	SW	SW1
N113-004-000	4.0	1/8	9.9	4.0	12.2	16.6	19.8	5.7	9	13
N113-005-000	5.0	1/8	10.9	4.0	12.7	16.6	20.0	5.7	10	13
N113-006-000	6.0	1/8	11.9	4.0	13.3	19.1	20.9	5.7	11	13
N113-006-001	6.0	1/4	11.9	6.0	13.3	19.1	21.5	6.0	11	15
N113-008-000	8.0	1/8	15.0	4.0	15.8	23.3	22.7	5.7	14	13
N113-008-001	8.0	1/4	15.0	6.0	15.8	23.3	22.7	6.0	14	15
N113-008-002	8.0	3/8	15.0	8.0	15.8	23.3	25.2	6.5	14	18
N113-010-001	10.0	1/4	17.4	6.0	16.8	26.5	24.1	6.0	16	15
N113-010-002	10.0	3/8	17.4	8.0	16.8	26.5	26.4	6.5	16	18
N113-010-003	10.0	1/2	17.4	8.0	16.8	26.5	30.4	9.0	16	18
N113-012-001	12.0	1/4	20.0	6.0	18.9	29.1	27.3	6.0	17	15
N113-012-002	12.0	3/8	20.0	8.0	18.9	29.1	29.5	6.5	17	18
N113-012-003	12.0	1/2	20.0	8.0	18.9	29.1	33.5	8.5	17	18

N115 Swivel Run Tee



N113	Tube Diameter T	Thread G	D	D1	H	L	L1	L2	SW	SW1
N115-004-000	4.0	1/8	9.9	4.0	12.2	16.6	19.8	5.7	9	13
N115-005-000	5.0	1/8	10.9	4.0	12.7	16.6	20.0	5.7	10	13
N115-006-000	6.0	1/8	11.9	4.0	13.3	19.1	20.9	5.7	11	13
N115-006-001	6.0	1/4	11.9	6.0	13.3	19.1	21.5	6.0	11	15
N115-008-000	8.0	1/8	15.0	4.0	15.8	23.3	22.7	5.7	14	13
N115-008-001	8.0	1/4	15.0	6.0	15.8	23.3	22.7	6.0	14	15
N115-008-002	8.0	3/8	15.0	8.0	15.8	23.3	25.2	6.5	14	18
N115-010-001	10.0	1/4	17.4	6.0	16.8	26.5	24.1	6.0	16	15
N115-010-002	10.0	3/8	17.4	8.0	16.8	26.5	26.4	6.5	16	18
N115-010-003	10.0	1/2	17.4	8.0	16.8	26.5	30.4	9.5	16	18
N115-012-001	12.0	1/4	20.0	6.0	18.9	29.1	27.3	6.0	17	15
N115-012-002	12.0	3/8	20.0	8.0	18.9	29.1	29.5	6.5	17	18
N115-012-003	12.0	1/2	20.0	8.0	18.9	29.1	33.5	9.5	17	18

N117 Union Cross

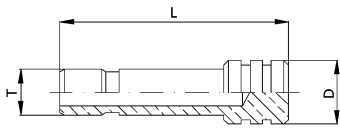


N117	Tube Diameter T	D	D1	H	L	SW
N117-004-000	4.0	9.9	2.0	12.2	16.6	9
N117-005-000	5.0	10.9	3.0	12.7	16.6	10
N117-006-000	6.0	11.9	4.0	13.3	19.1	11
N117-008-000	8.0	15.0	6.0	15.8	21.8	14
N117-010-000	10.0	17.4	8.0	16.8	25.3	16
N117-012-000	12.0	20.4	10.0	18.9	29.1	17



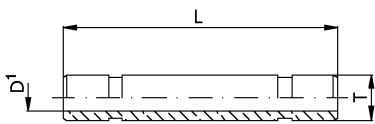
Metric Fittings

N118 Plug



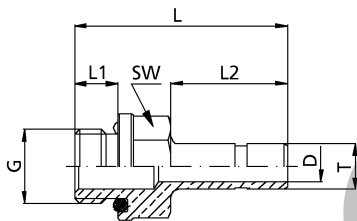
N118	Tube Diameter	T	D	L
N118-004-000	4.0	6.0	23.1	
N118-005-000	5.0	7.0	25.1	
N118-006-000	6.0	8.0	25.1	
N118-008-000	8.0	10.0	27.1	
N118-010-000	10.0	12.0	28.1	
N118-012-000	12.0	14.0	32.0	

N119 Male Union



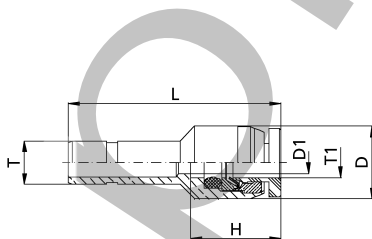
N119	Tube Diameter	T	D	L
N119-004-000	4.0	2.0	30.0	
N119-005-000	5.0	3.0	30.0	
N119-006-000	6.0	4.0	32.0	
N119-008-000	8.0	6.0	38.0	
N119-010-000	10.0	8.0	41.0	
N119-012-000	12.0	10.0	46.0	

N120 Threaded to Push-In Adapter



N120	Tube Diameter	T	Thread G	D	L	L1	L2	SW
N120-004-005	4.0	M5	2.0	23.0	4.0	14.0	9	
N120-004-000	4.0	1/8	2.0	26.7	5.7	14.0	12	
N120-004-001	4.0	1/4	2.0	27.0	6.0	14.0	15	
N120-005-005	5.0	M5	2.0	24.0	4.0	15.0	9	
N120-005-000	5.0	1/8	3.0	27.7	5.7	15.0	12	
N120-005-001	5.0	1/4	3.0	28.0	6.0	15.0	15	
N120-006-005	6.0	M5	2.0	24.3	4.0	15.3	9	
N120-006-000	6.0	1/8	4.0	28.0	5.7	15.3	12	
N120-006-001	6.0	1/4	4.0	28.3	6.0	15.3	15	
N120-008-000	8.0	1/8	6.0	30.7	5.7	18.0	12	
N120-008-001	8.0	1/4	6.0	31.0	6.0	18.0	15	
N120-008-002	8.0	3/8	6.0	32.0	6.5	18.0	18	
N120-010-001	10.0	1/4	8.0	34.0	6.0	21.0	15	
N120-010-002	10.0	3/8	8.0	35.0	6.5	21.0	18	
N120-010-003	10.0	1/2	8.0	40.0	9.5	21.0	18	
N120-012-001	12.0	1/4	10.0	36.0	6.0	23.0	15	
N120-012-002	12.0	3/8	10.0	37.0	6.5	23.0	18	
N120-012-003	12.0	1/2	10.0	42.0	9.5	23.0	18	

N121 Reducer

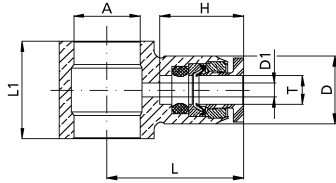


N121	from Tube Diameter	T	to Tube Diameter	T1	D	D1	H	L
N121-005-000	5.0	4.0	10.0	3.0	12.2	28.2		
N121-006-000	6.0	4.0	10.0	3.0	12.2	29.2		
N121-006-001	6.0	5.0	11.0	3.0	12.7	29.6		
N121-008-000	8.0	4.0	10.0	2.0	12.2	32.2		
N121-008-001	8.0	5.0	11.0	3.0	12.7	32.5		
N121-008-002	8.0	6.0	12.0	4.0	13.3	33.1		
N121-010-002	10.0	6.0	12.0	4.0	13.3	25.9		
N121-010-003	10.0	8.0	15.0	6.0	15.8	38.3		
N121-012-002	12.0	6.0	12.0	4.0	13.3	36.3		
N121-012-003	12.0	8.0	15.0	6.0	15.8	40.3		
N121-012-004	12.0	10.0	18.0	8.0	16.8	42.8		



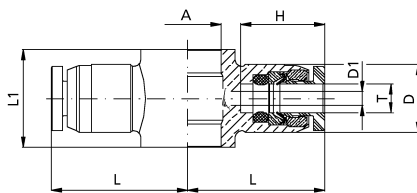
Metric Fittings

N122 Single Banjo



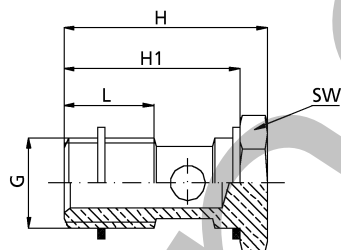
N122	Tube Diameter	T	for Banjo Bolts	A	D	D1	H	L	L1
N122-004-005	4.0		M5	10.0	2.0	12.2	19.0	12.0	
N122-004-000	4.0		1/8	10.0	2.0	12.2	20.2	14.5	
N122-005-005	5.0		M5	11.0	3.0	12.7	20.0	12.0	
N122-005-000	5.0		1/8	11.0	3.0	12.7	20.6	14.5	
N122-006-005	6.0		M5	12.0	4.0	13.3	20.6	12.0	
N122-006-000	6.0		1/8	12.0	4.0	13.3	20.6	14.5	
N122-006-001	6.0		1/4	12.0	4.0	13.3	22.6	14.5	
N122-008-000	8.0		1/8	15.0	6.0	15.8	23.8	17.5	
N122-008-001	8.0		1/4	15.0	6.0	15.8	25.8	17.5	
N122-010-001	10.0		1/4	17.6	8.0	16.8	27.1	18.0	
N122-012-001	12.0		1/4	20.0	10.0	18.9	31.5	18.0	

N123 Double Banjo



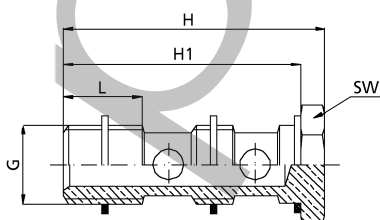
N123	Tube Diameter	T	for Banjo Bolts	A	D	D1	H	L	L1
N123-004-005	4.0		M5	10.0	2.0	12.2	19.0	12.0	
N123-004-000	4.0		1/8	10.0	2.0	12.2	20.2	14.5	
N123-005-005	5.0		M5	11.0	3.0	12.7	20.0	12.0	
N123-005-000	5.0		1/8	11.0	3.0	12.7	20.6	14.5	
N123-006-005	6.0		M5	12.0	4.0	13.3	20.6	12.0	
N123-006-000	6.0		1/8	12.0	4.0	13.3	20.6	14.5	
N123-006-001	6.0		1/4	12.0	4.0	13.3	22.6	14.5	
N123-008-000	8.0		1/8	15.0	6.0	15.8	23.8	17.5	
N123-008-001	8.0		1/4	15.0	6.0	15.8	25.8	17.5	
N123-010-001	10.0		1/4	17.6	8.0	16.8	27.1	18.0	
N123-012-001	12.0		1/4	20.0	10.0	18.9	31.5	18.0	

N124 Single Manifold



IN124	Thread F	L	L2	D1	SW	SW1
IN124-000-036	10-32 UNF	0.827	0.223	0.079	0.315	-
IN124-000-020	1/8 NPTF	1.634	0.374	0.197	0.551	0.551
IN124-000-021	1/4 NPTF	2.067	0.512	0.276	0.669	0.669

N125 Double Manifold



N125	Thread G	H	H1	L	SW
N125-000-000	1/8	43.0	39.0	8.0	14
N125-000-001	1/4	45.5	41.0	11.0	17



NPTF Stainless Steel Fittings



How to Order

IN 113 V - 104 - 022

Fitting Series

IN = NPTF

Fitting Style

- 100 = Union
- 103 = Straight
- 111 = Union Elbow
- 113 = Elbow
- 131 = Union Tee
- 133 = Male Tee

Thread Size

- 000 = No Thread
- 036 = 10-32 UNF
- 020 = 1/8 NPTF
- 021 = 1/4 NPTF
- 022 = 3/8 NPTF
- 02e = 1/2 NPTF

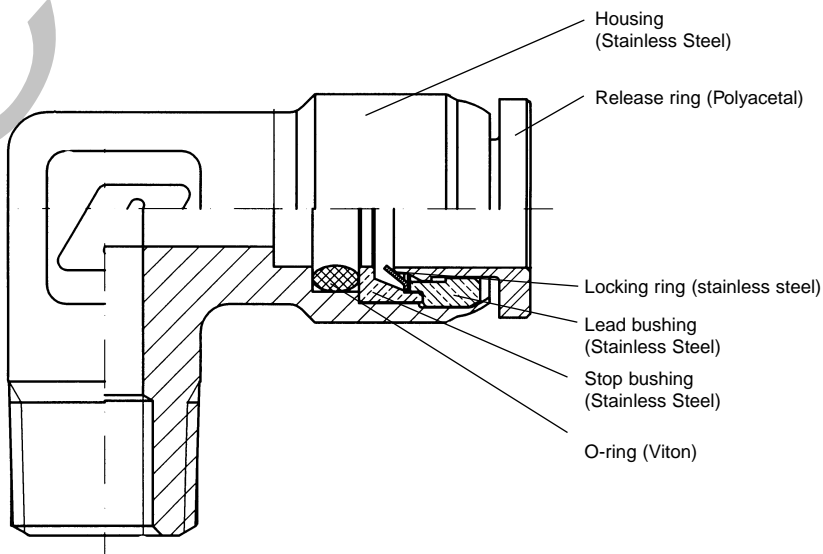
Tube Size

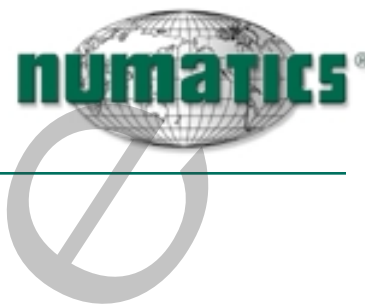
- 108 = 1/8"
- 532 = 5/32"
- 104 = 1/4"
- 516 = 5/16"
- 308 = 3/8"
- 102 = 1/2"

Material

Stainless Steel

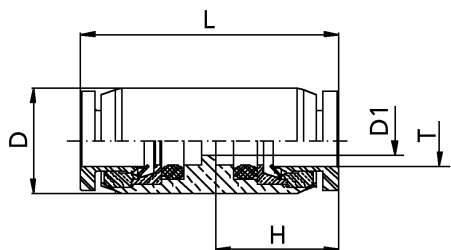
- Max. pressure range 265 psi
- Vacuum rating: 29" of Mercury Hg
- Temperature range: -20°F to 230°F (Viton gaskets)
- Push-in fittings with NPTF Threads
- Tube diameter: 1/8" to 1/2"
- Thread size: 10-32 UNF to 1/2 NPTF
- Teflon thread sealant





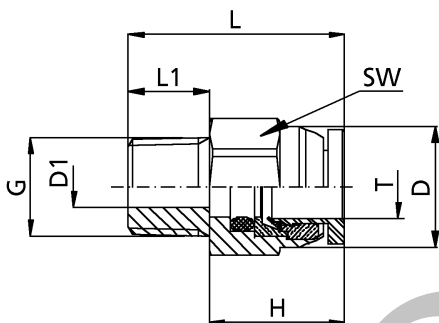
NPTF Stainless Steel Fittings

IN100V Union



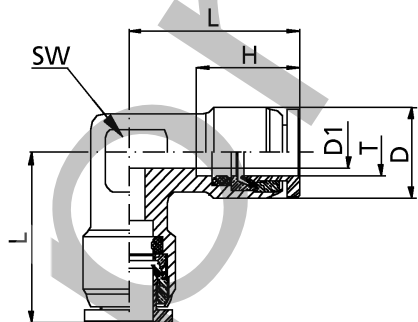
IN100V	Tube Diameter	T	D	D1	L	H
IN100V-532-000	5/32	0.394	0.118	1.024	0.492	
IN100V-104-000	1/4	0.472	0.157	1.110	0.531	
IN100V-516-000	5/16	0.591	0.236	1.299	0.630	
IN100V-308-000	3/8	0.709	0.276	1.398	0.669	
IN100V-102-000	1/2	0.787	0.413	1.575	0.748	

IN103V Straight



IN103V	Tube Diameter	T	Thread F	D	D1	L	L2	H	SW
IN103V-532-020	5/32	1/8 NPTF	0.394	0.118	0.866	0.374	0.492	7/16	
IN103V-104-020	1/4	1/8 NPTF	0.472	0.157	0.886	0.374	0.531	1/2	
IN103V-104-021	1/4	1/4 NPTF	0.472	0.157	1.024	0.512	0.531	1/2	
IN103V-516-020	5/16	1/8 NPTF	0.591	0.236	1.055	0.374	0.630	19/32	
IN103V-516-021	5/16	1/4 NPTF	0.591	0.236	1.173	0.512	0.630	19/32	
IN103V-308-021	3/8	1/4 NPTF	0.669	0.295	1.232	0.512	0.669	11/16	
IN103V-308-022	3/8	3/8 NPTF	0.669	0.295	1.232	0.512	0.669	11/16	
IN103V-102-021	1/2	1/4 NPTF	0.827	0.413	1.339	0.512	0.748	13/16	
IN103V-102-022	1/2	3/8 NPTF	0.827	0.413	1.339	0.512	0.748	13/16	

IN111V Union Elbow

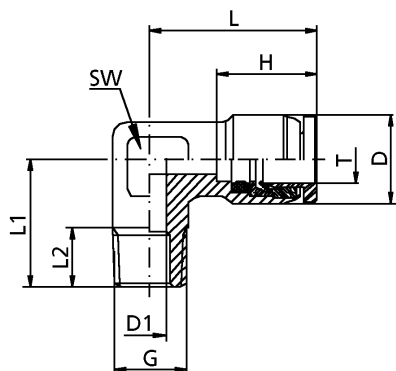


IN111V	Tube Diameter	T	D	D1	L	H	SW
IN111V-532-000	5/32	0.433	0.118	0.846	0.492	0.472	
IN111V-104-000	1/4	0.472	0.157	0.870	0.531	0.472	
IN111V-516-000	5/16	0.591	0.236	0.992	0.630	0.472	
IN111V-308-000	3/8	0.709	0.295	1.004	0.669	0.551	



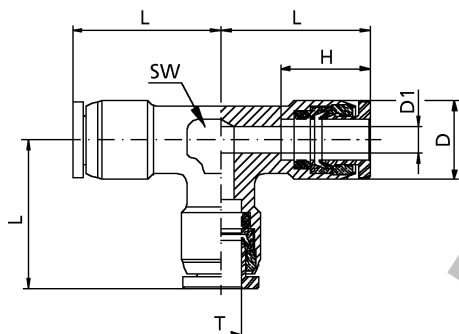
NPTF Stainless Steel Fittings

IN113V Male Elbow



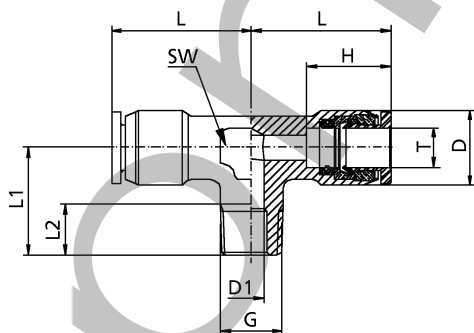
IN113V	Tube Diameter	T	Thread F	D	D1	L	L1	L2	H	SW
IN113V-532-020	5/32		1/8 NPTF	0.433	0.118	0.846	0.768	0.374	0.492	0.472
IN113V-104-020	1/4		1/8 NPTF	0.472	0.157	0.870	0.768	0.374	0.531	0.472
IN113V-104-021	1/4		1/4 NPTF	0.472	0.157	0.870	1.043	0.512	0.531	0.472
IN113V-516-021	5/16		1/4 NPTF	0.591	0.236	0.992	1.043	0.512	0.630	0.551
IN113V-308-021	3/8		1/4 NPTF	0.709	0.295	1.004	0.906	0.512	0.669	0.669

IN131V Union Tee



IN131V	Tube Diameter	T	D	D1	L	H
IN131V-532-000	5/32		0.433	0.118	0.846	0.492
IN131V-104-000	1/4		0.472	0.157	0.870	0.531
IN131V-516-000	5/16		0.591	0.236	0.992	0.630
IN131V-308-000	3/8		0.709	0.295	1.004	0.669

IN133V Male Tee



IN133V	Tube Diameter	T	Thread F	D	D1	L	L1	L2	H	SW
IN133V-532-020	5/32		1/8 NPTF	0.433	0.118	0.846	0.768	0.374	0.492	0.472
IN133V-104-020	1/4		1/8 NPTF	0.472	0.157	0.870	0.768	0.374	0.531	0.472
IN133V-104-021	1/4		1/4 NPTF	0.472	0.157	0.870	1.043	0.512	0.531	0.551
IN133V-516-021	5/16		1/4 NPTF	0.591	0.236	0.992	1.043	0.512	0.630	0.472
IN133V-308-021	3/8		1/4 NPTF	0.709	0.295	1.004	0.906	0.512	0.669	0.551