



How to Order

INWB 103 – 104 – 022

Fitting Series

INWB = World Thread Inch Tube (All Brass)
 NW = World Thread Metric Tube (All Brass)

Fitting Style

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

Options

(Blank) = BUNA-N O-Ring
 F = Viton "O" Ring

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

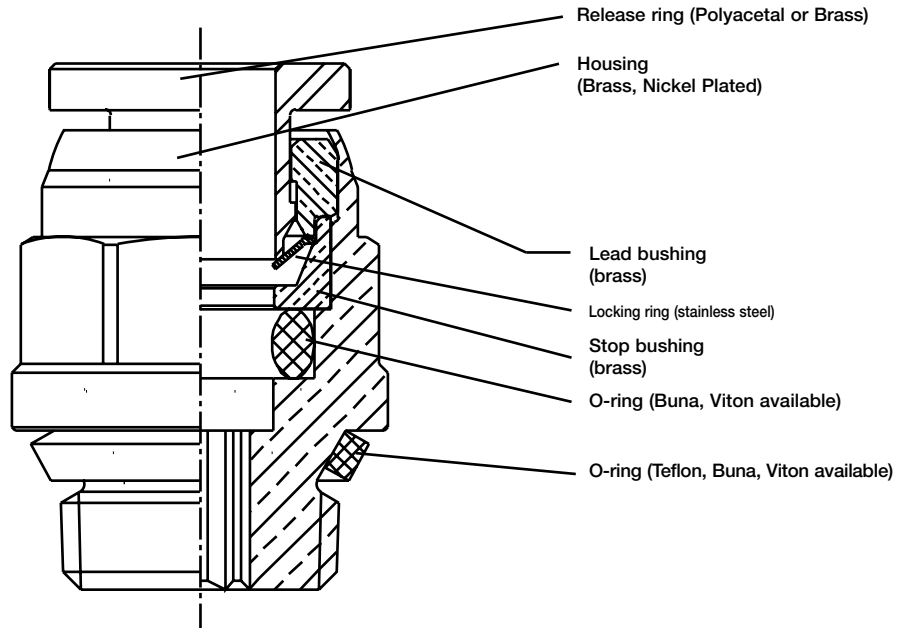
108 = 1/8"
 532 = 5/32"
 104 = 1/4"
 516 = 5/16"
 308 = 3/8"
 102 = 1/2"

Metric

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

* See Fitting Style Charts on
 pgs 4-7 for available Tube and
 Thread Configurations

- Pressure Rating to 265 psi
- 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 provide extreme versatility in use, which no longer requires the management of different fittings for different thread types or application.

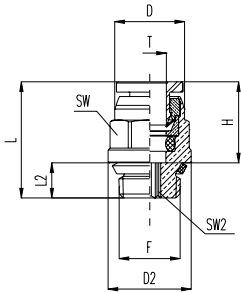
- Extremely versatile – One fitting design for multiple thread types
- Rapid assembly – Requires fewer turns to tighten and seal
- Re-usable – Fittings can be used several times without gasket deterioration
- Reliable seal – Helical thread profile and PTFE gasket ensure proper seal
- Maximum working pressure: 265 PSIG at 68°F (18 bar at 20°C)
- Conductor compatibility – Nylon, Polyurethane, Polyethylene

Numatics' World Tread™ 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) and (JIS B 0203) 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.



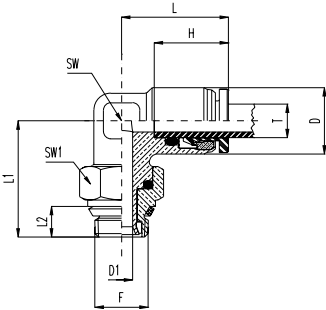
World Thread Fittings

INWB103 Male Connector/Inch Tube



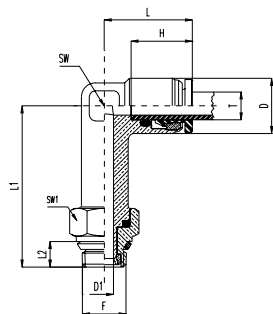
Brass Release Ring	Part Number	Tube Diameter (T)	Thread (F)	D	D2	L	L2	H	SW	SW2
INWB	103-108-020	1/8	1/8	0.370	0.472	0.709	0.217	0.472	0.375	0.063
INWB	103-108-021	1/8	1/4	0.370	0.591	0.787	0.303	0.472	0.375	0.063
INWB	103-532-020	5/32	1/8	0.390	0.512	0.709	0.217	0.492	0.438	0.063
INWB	103-532-021	5/32	1/4	0.390	0.591	0.795	0.303	0.492	0.438	0.063
INWB	103-104-020	1/4	1/8	0.465	0.552	0.799	0.217	0.531	0.500	0.156
INWB	103-104-021	1/4	1/4	0.465	0.591	0.886	0.303	0.531	0.500	0.156
INWB	103-104-022	1/4	3/8	0.465	0.748	0.906	0.323	0.531	0.500	0.156
INWB	103-516-020	5/16	1/8	0.689	0.787	0.925	0.323	0.650	0.594	0.156
INWB	103-516-021	5/16	1/4	0.689	0.945	1.004	0.406	0.650	0.594	0.219
INWB	103-516-022	5/16	3/8	0.807	0.866	1.004	0.303	0.650	0.594	0.219
INWB	103-308-020	3/8	1/8	0.807	0.866	1.043	0.323	0.669	0.688	0.156
INWB	103-308-021	3/8	1/4	0.807	0.945	1.043	0.406	0.669	0.688	0.219
INWB	103-308-022	3/8	3/8	0.807	0.866	1.071	0.323	0.669	0.688	0.250
INWB	103-308-023	3/8	1/2	0.807	0.945	1.161	0.406	0.669	0.688	0.250
INWB	103-102-021	1/2	1/4	0.807	0.945	1.142	0.406	0.728	0.813	0.250
INWB	103-102-022	1/2	3/8	0.807	0.866	1.181	0.323	0.728	0.813	0.250
INWB	103-102-023	1/2	1/2	0.807	0.945	1.220	0.406	0.728	0.813	0.375

INWB109 Swivel Elbow/Inch Tube



Brass Release Ring	Part Number	Tube Diameter (T)	Thread (F)	D	D1	L	L1	H	L2	SW	SW1
INWB	109-108-020	1/8	1/8	0.394	0.157	0.650	0.768	0.472	0.217	0.354	0.500
INWB	109-108-021	1/8	1/4	0.394	0.157	0.650	0.768	0.472	0.303	0.354	0.594
INWB	109-532-021	5/32	1/4	0.394	0.157	0.669	0.874	0.492	0.303	0.354	0.594
INWB	109-104-020	1/4	1/8	0.472	0.157	0.768	0.799	0.531	0.217	0.433	0.500
INWB	109-104-021	1/4	1/4	0.472	0.236	0.768	0.8155	0.531	0.303	0.433	0.594
INWB	109-516-020	1/4	1/8	0.472	0.236	0.768	0.906	0.531	0.323	0.433	0.750
INWB	109-516-021	5/16	1/4	0.591	0.157	0.945	0.878	0.650	0.217	0.551	0.500
INWB	109-308-020	3/8	1/8	0.689	0.157	1.063	0.929	0.669	0.217	0.630	0.500
INWB	109-308-021	3/8	1/4	0.689	0.236	1.063	0.945	0.669	0.303	0.630	0.594
INWB	109-308-022	3/8	3/8	0.689	0.315	1.063	1.039	0.669	0.323	0.630	0.750
INWB	109-308-023	3/8	1/2	0.689	0.315	1.063	1.197	0.669	0.406	0.630	0.938
INWB	109-102-021	1/2	1/4	0.827	0.236	1.201	1.059	0.728	0.303	0.688	0.594
INWB	109-102-022	1/2	3/8	0.827	0.315	1.201	1.122	0.728	0.323	0.688	0.750
INWB	109-102-023	1/2	1/2	0.827	0.315	1.201	1.280	0.728	0.406	0.688	0.938

INWB109E Extended Swivel Elbow/Inch Tube



Brass Release Ring	Part Number	Tube Diameter (T)	Thread (F)	D	D1	L	L1	L2	H	SW	SW1
INWB	109E-108-020	1/8	1/8	0.709	0.236	1.043	2.067	0.512	0.531	0.591	0.591
INWB	109E-108-021	1/8	1/4	0.748	0.315	1.043	2.106	0.512	0.531	0.591	0.709
INWB	109E-532-020	5/32	1/8	0.394	0.157	0.638	1.461	0.374	0.472	0.354	0.512
INWB	109E-532-021	5/32	1/4	0.394	0.157	0.638	1.598	0.512	0.472	0.354	0.591
INWB	109E-104-020	1/4	1/8	0.394	0.157	0.657	1.457	0.374	0.492	0.354	0.512
INWB	109E-104-021	1/4	1/4	0.394	0.157	0.657	1.594	0.512	0.492	0.354	0.591
INWB	109E-104-022	1/4	3/8	0.472	0.157	0.740	1.575	0.374	0.531	0.433	0.512
INWB	109E-516-020	5/16	1/8	0.472	0.236	0.740	1.693	0.512	0.531	0.433	0.591
INWB	109E-516-021	5/16	1/4	0.472	0.236	0.740	1.732	0.512	0.531	0.433	0.709
INWB	109E-516-022	5/16	3/8	0.591	0.157	0.925	1.772	0.374	0.531	0.551	0.512
INWB	109E-308-020	3/8	1/8	0.591	0.236	0.925	1.909	0.512	0.531	0.551	0.591
INWB	109E-308-021	3/8	1/4	0.630	0.315	0.925	1.969	0.512	0.531	0.551	0.709
INWB	109E-308-022	3/8	3/8	0.669	0.157	1.043	1.929	0.374	0.531	0.591	0.512