



## MATERIAL SPECIFICATION SHEET



### **No-Lead Brass Insert Fittings and Crimp Rings for CANPEX™ UV Plus, CANPEX™ ULTRA and CANPEX™ OXY Barrier SDR-9 Cross-Linked Polyethylene (PEX)**

#### **SCOPE:**

This product specification designates the requirements for brass insert fittings and black copper crimp rings to be used as connections for CANPEX UV Plus, CANPEX *ULTRA* and CANPEX *OXY* Barrier tubing. The connections are assembled with a full-circle crimp tool designed specifically for this purpose. These fittings are approved for use with ASTM Standard F876/F877 (PEX tubing/PEX Distribution Systems).

#### **MATERIALS:**

Brass insert fittings are manufactured from extruded or forged brass with some fittings supplied in copper. All fittings are precision made to tight tolerances for a consistent fit with PEX tubing. All fittings meet the rigorous requirements of ANSI/NSF 61 for lead extraction.

The black copper crimp rings are manufactured from UNS C10200 or UNS C12200 copper alloy. Rings are annealed to 35-45 Rockwell 15T scale for ease of crimping. The black coating is not a paint, but a surface treatment which does not add to the dimensions of the ring.

#### **MARKING & CERTIFICATION:**

Brass insert fittings and rings are manufactured and certified to the requirements of ASTM F 1807. All fittings and rings are marked with the F 1807 designation, PEX manufacturer's mark, and required mark(s) of third party certification organizations. Fittings meet the requirements of ANSI/NSF 61 for health effects and are suitable for contact with potable water and are marked with the "NL" to designate no lead. NSF International and other certification organizations conduct random on-site inspections of manufacturing facilities and independently test fittings for compliance with physical, performance and toxicological specifications.

#### **RECOMMENDED USES:**

Brass insert fittings are designed to be used with CANPEX UV Plus, CANPEX *ULTRA* and CANPEX *OXY* Barrier tubing for hot and cold water conveyance systems operating up to 180°F @ 100 psi. Applications include, but are not limited to, potable water distribution and hydronic heating systems. Brass insert fitting system components are interchangeable with components and tubing from other PEX suppliers provided they are manufactured to the same ASTM specifications, and certified by a recognized third party certifying organization. Because Seymour Industries has no control over the quality of other manufacturers' products, it does not extend any warranty to those components that are not supplied by Seymour Industries. For information on other hot and cold applications not listed here, consult your Seymour Industries representative.

Seymour Industries Ltd. no-lead brass insert fittings are compliant with the low lead requirements in all states. Seymour will not ship products for use in potable water applications with a lead content of above 0.25% into any state beginning January 2014.

Brass insert fittings which do not meet the 0.25% lead free calculation cannot be installed in potable water systems after January 3, 2014.

## No-Lead Brass Insert Fittings and Crimp Rings for CANPEX™ UV Plus, CANPEX™ ULTRA™ and CANPEX™ OXY Barrier PEX Tubing

Quality Assurance: When the product is marked with the ASTM F 1807 designation, it affirms that the product was manufactured, inspected, sampled and tested in accordance with these specifications and has been found to meet the specified requirements.

### FRICITION LOSS

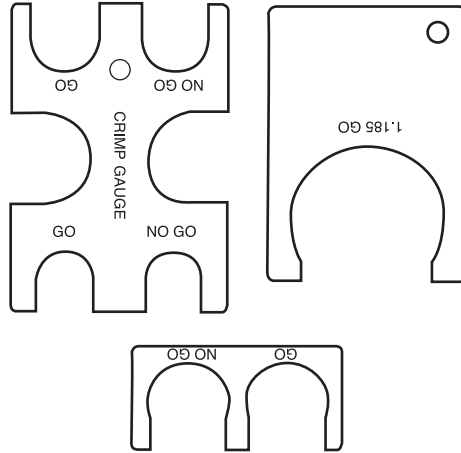
Equivalent Feet of SDR9 PEX Tubing

Size	Coupling	90° Elbow	Run Tee	Tee Branch
3/8"	2.9	9.2	2.9	9.4
1/2"	2.0	9.4	2.2	10.4
5/8"	2.5	9.4	2.2	10.0
3/4"	0.6	9.4	1.9	8.9
1"	1.3	10	2.3	11

This information is based on tubing nominal flow rate. (8 fps flow velocity)

### GO/NO GO GAUGES

Seymour Industries offers GO/NO GO gauges for easy testing of the finished crimp.



### CRIMPED DIAMETER DIMENSIONS

Final crimped outside diameters shall fall within these dimensions when measured with a micrometer or caliper.

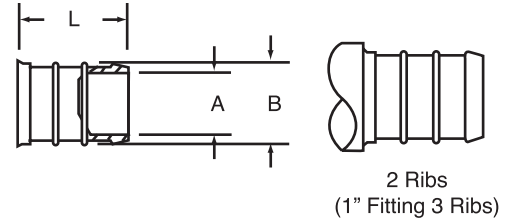
Size	A	B
3/8"	∅ 0.580"	∅ 0.595"
1/2"	∅ 0.700"	∅ 0.715"
5/8"	∅ 0.815"	∅ 0.830"
3/4"	∅ 0.945"	∅ 0.960"
1"	∅ 1.175"	∅ 1.190"

### BRASS INSERT FITTINGS

Typical Fitting Insert Dimensions

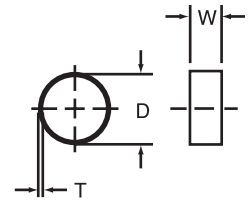
Size	A	B	L
3/8"	.242	0.345 ± .004	.630
1/2"	.361	0.471 ± .004	.630
5/8"	.454	0.570 ± .003	.630
3/4"	.546	0.667 ± .004	.630
1"	.719	0.856 ± .004	.630

NOTE: Dimensions are in English units.

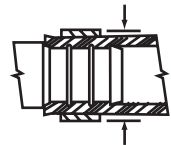


### COPPER CRIMP RING DIMENSIONS BEFORE CRIMPING

Size	D	W	T
3/8"	.630	0.325	.058
1/2"	.750	0.325	.056
5/8"	.875	0.325	.054
3/4"	1.00	0.325	.056
1"	1.25	0.365	.049



All dimensions shown are nominal.



NSF-pw

NSF International  
Performance and  
Health Effects  
(Standards 14 & 61)

IAPMO Certified

Warnock Hersey  
Certified to  
CSA B137.5

Note: All fittings may not be listed with each organization shown.