

## TUBING *Technical Specifications*

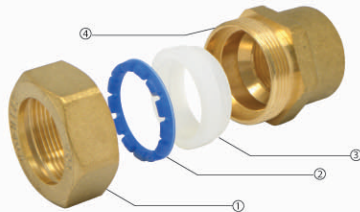
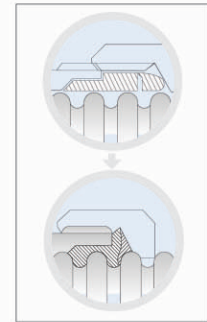
CSST Material:	Stainless Steel 304 (ASTM A 240)
Insulation:	High Density EPDM
Coating:	UVA/UVB
Sizes (Inner Diameter):	1/2" (0.55 in)   3/4" (0.83 in)   1" (1.03 in)
CSST Thickness:	0.012"
Insulation Thickness:	1/2"   3/4"   1"
Lengths:	50 ft.
Operating Temperature:	300° F @ 147 psi
Intermittent Hi-Temp Exposure Limit:	350° F
Insulation Exteneral Exposure Limit:	-74° F ~ 300° F
Maximum Working Pressure:	1/2": 220 psi   3/4": 176   1": 147 psi

Minimum Bend Radius	
Size	Recommended Min.
1/2"	3 inches
3/4"	3 inches
1"	5 inches

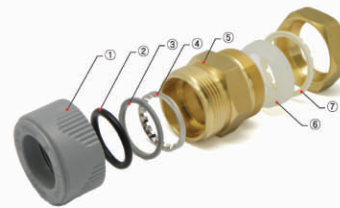
Maximum Surface Temperature	300° F
Minimum Surface Temperature	-74° F

## FITTINGS *Technical Specifications*

Fitting Nut & Body:	Brass UNS C37700 (ASTM DS-561)
Sealing Ring:	Silicone
Isolation Ring:	Nylon 66 / Fiberglass High-Temperature Gasket
Push-Fit Fitting Body:	Brass UNS C37700 (ASTM DS-561)
Push-Fit Sealing Ring:	EPDM
Push-Fit Isolation Ring:	Nylon 66 / Fiberglass High-Temperature Gasket
Push-Fit Nut:	Nylon 66
Push-Fit Grab Ring:	Stainless Steel 304
Burst Pressure:	1420 psi
Intermittent Hi-Temp Exposure Limit:	428° F



1. Fitting Nut
2. Isolation Ring
3. Sealing Ring
4. Fitting Body



1. Push-Fit Nut
2. Push-Fit Sealing Ring
3. Push-Fit Isolation Ring
4. Push-Fit Grab Ring
5. Fitting Body
6. Sealing Ring
7. Isolation Ring

## FRICION LOSS DATA

Friction loss of tubing calculated in pounds per square inch (PSI) of pressure lost per foot of tubing with a friction constant = 70 and no bends. Sharp bends are calculated the same as for fittings and gradual bends calculated the same as straight pipe.

GPM	Nominal Size (ID)			
	1/2"	3/4"	1"	1-1/4"
1	0.032	0.004	0.002	0.001
2	0.114	0.015	0.005	0.002
3	0.241	0.032	0.012	0.004
4	0.41	0.055	0.02	0.008
5	0.619	0.083	0.03	0.011
6	0.867	0.117	0.042	0.016
7	1.153	0.153	0.055	0.021
8	1.476	0.199	0.071	0.027
9	1.836	0.248	0.088	0.034
10	2.231	0.301	0.107	0.041

1. Table is based on the \*Hazen-Williams formula.
2. Fluid velocities in excess of 5-8 ft/sec are not recommended.
3. Friction loss values shown are for the flow rates that do not exceed a velocity of 8 ft/sec.

$$*P = 4.52Q^{1.85} / C^{1.85} D^{4.87}$$

Where: P = friction loss, psi per linear foot  
Q = flow, gpm  
D = average I.D., in inches  
C = 70, friction constant

