CONSIDERATIONS IN APPLYING & CHOOSING HEAT SHRINKABLE TUBING

Heat shrinkable tubing is sold in its Expanded I.D. state. The application of heat activates the tubing's memory, causing the expanded tubing to "recover" or shrink down. When fully recovered, the tubing will shrink down to the Recovered I.D. When shrinking tubing, it is highly recommended to adhere to the estimated shrink temperature.

OLFLEX® TUBING is available in three heat shrink ratio varieties.

- 2 to 1 **Tubing will shrink down approximately 50%.**
- 3 to 1 **Tubing will shrink down approximately 67%.**
- 4 to 1 **Tubing will shrink down approximately 75%.**

As the tubing recovers, the tubing wall thickens. A small reduction in the tubing length known as longitudinal shrinkage will also occur during the shrinking process. Longitudinal shrinkage will typically range from 5-15% depending on the product.

When covering multiple substrates, you must consider the larger sized substrate that needs to be covered (i.e. connector) as well as the smaller cable diameter.

2:1 Shrink Ratio Example:
OLFLEX® 190, PN 601612 - Nominal O.D. 0.524 inch
*Note the cable O.D. is a nominal value that can vary roughly 5%

Rule of thumb: The Recovered I.D. should not be larger than the substrate O.D.
Choose tubing with a Recovered I.D. that is approximately 20-25% smaller than the substrate's O.D.
For example, Cable O.D.- .524" X .80 = .419, Cable O.D.- .524" X .75 = .393

2 to 1 **Tubing will shrink down approximately 50%.**
.75" tubing size x .5 = .375

Choice: The 3/4" size will adequately meet the shrink tube requirements

2 to 1 **SHRINK RATIO EXAMPLE**

For an O.D. of .524 inches and 2:1 Shrink Ratio, the recommended tubing size would be 3/4"

SIZE	INSIDE DIAMETER AS SUPPLIED (MIN) INCH	(MM)	INSIDE DIAMETER AFTER RECOVERY (MAX) INCH	(MM)	WALL THICKNESS AFTER RECOVERY (NOM) INCH	(MM)
1/16	0.063	1.60	0.032	0.82	0.020	0.51
1/8	0.125	3.18	0.063	1.60	0.025	0.64
3/16	0.187	4.75	0.093	2.36	0.025	0.64
1/4	0.250	6.35	0.125	3.18	0.025	0.64
3/8	0.375	9.53	0.187	4.75	0.028	0.71
1/2	0.500	12.70	0.250	6.35	0.028	0.71
3/4	0.750	19.05	0.375	9.53	0.033	0.84
1	1.000	25.40	0.500	12.70	0.038	0.97
1 1/2	1.500	38.10	0.750	19.05	0.043	1.09
2	2.000	50.80	1.000	25.40	0.048	1.22