

CHO-SHRINK® Conductive Heat Shrinkable Shielding



CHO-SHRINK Conductive Heat Shrinkable Shielding†

CHO-SHRINK tubing is a heat shrinkable polyolefin tubing which provides effective EMI shielding for cables, connectors and cable/connector terminations. CHO-SHRINK offers significant weight savings over conventional metal braid shielding, and can be applied easily with standard shrink tubing heating devices.

The main feature of CHO-SHRINK tubing is Chomerics' unique conductive coating, which is applied to the surface of the tubing and which remains flexible, uniform and intact even after maximum shrinking. The coating, a silver-based system, can be applied to the inside or outside surfaces, or both. Standard CHO-SHRINK tubing is conductive on the inside only.

Standard available length is 4 feet (1.22 m). For longer lengths, CHO-SHRINK sections may be "spliced" together using short pieces of outside-coated tubing to maintain electrical continuity from one length to the next.

Other CHO-SHRINK products include thin-wall sleeves and molded boots, transitions and breakouts.

Ordering Procedure

Use the following part numbering system to order CHO-SHRINK tubing. Standard (stocked) length is 4 feet. Ordering quantity should specify total length required. Part number indicates length of pieces.

For complete information request Technical Bulletin 24.

AVAILABLE STANDARD DIAMETERS AND WALL THICKNESSES			
Expanded Inside Diameter inches (mm)	Expanded Inside Diameter Code*	Recovered Wall Thickness inches (mm)	
1/8 (3.18)**	0002	.020 (0.51)	
3/16 (4.76)***	0003	.020 (0.51)	
1/4 (6.35)	0004	.025 (0.63)	
3/8 (9.53)	0006	.025 (0.63)	
1/2 (12.7)	0008	.025 (0.63)	
3/4 (19.05)	0012	.030 (0.76)	
1 (25.4)	0016	.035 (0.89)	
1-1/2 (38.1)	0024	.040 (1.02)	

* See ordering information. ** Two-foot maximum length.

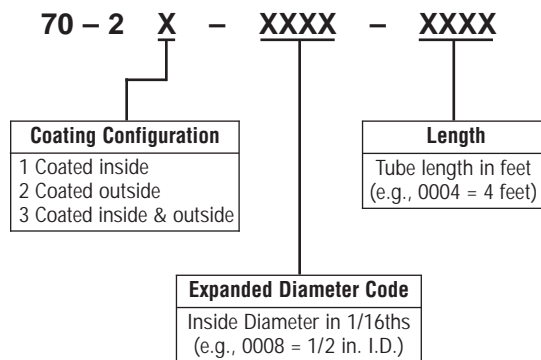
*** Four-foot maximum length. For custom sizes contact Chomerics

Typical Properties

Operating Temperature	- 66° to 275°F (- 54° to 135°C)
Shrink Temperature	250°F (121°C) (min.) 375°F (191°C) (max.)
Dielectric Strength*	
Tubing - per ASTM D876	500 V/mil
Boots - per ASTM D876	200 V/mil
Shrink Ratio	60-85%
Tensile Strength**	1500 psi (10.34 MPa)
Shielding Effectiveness	See Figure 1

* Recovered base material. ** After 100% recovery.

† patent pending



Example: 70-21-0016-0004 is 4 feet of 1 in. dia. tubing coated inside.

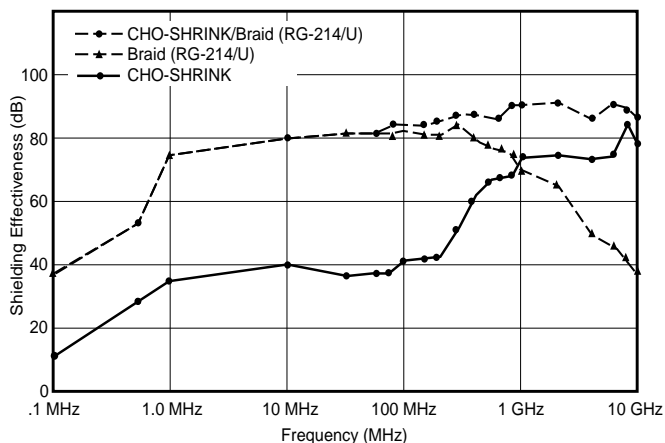


Figure 1 Shielding Effectiveness of CHO-SHRINK Compared to Wire Braid

Connector Boots and Cable Transitions

CHO-SHRINK connector boots provide EMI shielding, shield grounding and strain relief at connector backshell terminations. Chomerics' unique conductive coating applied to the inside surface assures an average of 60-80 dB of attenuation at 1 GHz.

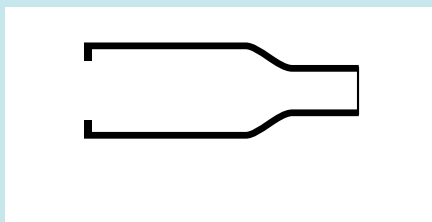
CHO-SHRINK boots shrink to a wide range of cable diameters (shrink

ratio is 4:1), and offer a 40-65% weight savings compared to metal EMI adapters. They are supplied with an optional conductive hot-melt adhesive/sealant applied to each end. For optimum mechanical strength, CHO-SHRINK lipped boots should be shrunk over shrink boot adapters which provide a knurled and grooved surface.

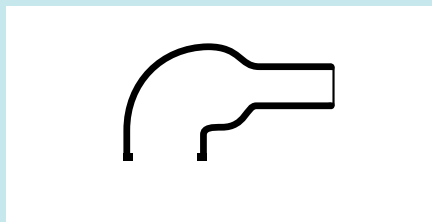
CHO-SHRINK polyolefin cable transitions are available in a variety

of shapes and sizes to provide shielding continuity for customized cable assemblies and harnesses.

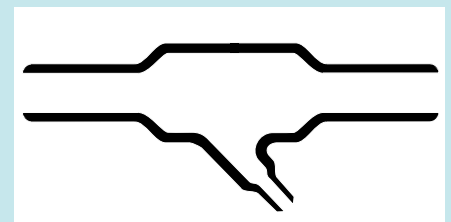
Typical CHO-SHRINK boots and transitions are shown below. Request Technical Bulletin **24** for part number and dimensional information on these standard parts. Consult Chomerics' Applications Engineering Department for assistance in specifying and ordering specialized parts.



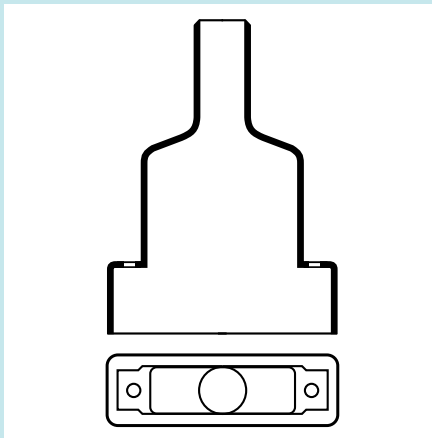
Straight Boot With Lip
(To fit Shrink Boot Adapter)
Also Available Without Lip



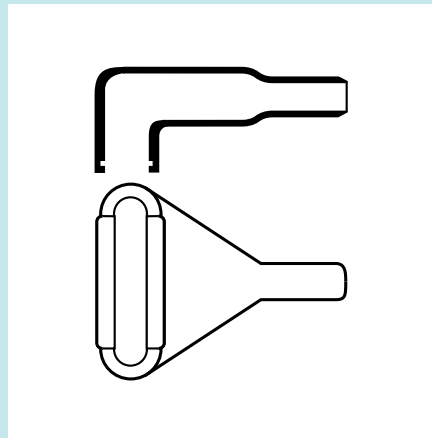
90° Boot With Lip
(To fit Shrink Boot Adapter)
Also Available Without Lip



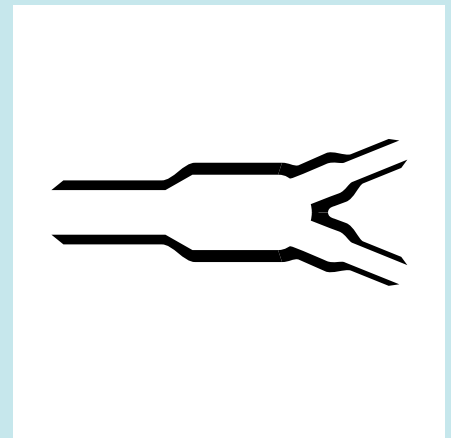
Transition, 45°



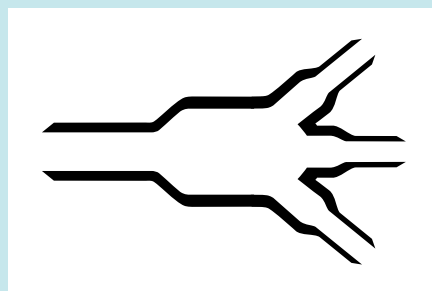
Rectangular Boot



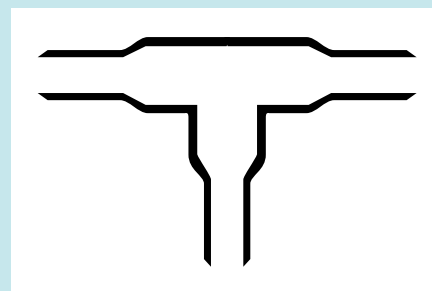
Rectangular Subminiature Boot, 90° Side Entry



Transition, Y



Transition, one to three cables



Transition, T