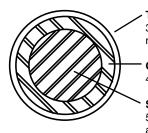
## Knitted Wire Mesh Tape (1000 Series)

Knitted Mesh Tape is a double-layered strip of knitted wire mesh providing an effective EMI shield for electrical and electronic cable assemblies. The knitted construction maximizes conformability and flexibility while minimizing bulk and weight. Knitted mesh tape uses Sn/Cu/Fe knitted or Monel wire to provide good physical strength and shielding effectiveness.

## Cross Section of Ferrous (FX) Wire — Figure 1



## Tin Coating

3% by weight offering low impedance contact and maximum corrosion resistance.

Copper Cladding 40% by weight offering maximum conductivity.

Steel Core 57% by weight offering maximum strength and permeability.



Recommended lead for most applications is 13mm (0.50 in.), although some additional shielding will be achieved when utilizing a 6mm (0.25 in.) lead. The length of EMC Shielding Tape required for each cable using these two types of lead wraps can be obtained by referring to Figure 2.

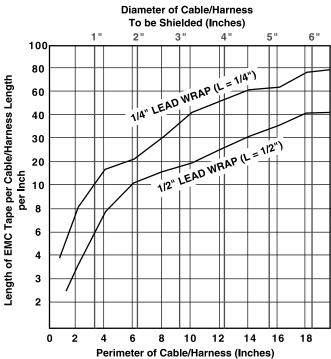
## Tape Length vs Cable Size — Figure 2

**Specifications** 

| Material Description |  |  |
|----------------------|--|--|
| Wire Mesh            | Sn/Cu/FE (tin-coated, copper-clad<br>steel — see Figure 1)<br>0.114 + 0.012 mm (.0045 + .0005<br>in.) diameter in accordance with<br>ASTM B-520. |  |
| Width                | 25.4 mm (1.00 in.) nominal   |  |
| Thickness            | 0.45 mm (.02 in.) nominal.   |  |
| Weight               | 745 grams per 100 meters<br>(8.0 oz. per 100 feet)   |  |

| Performance Characteristics |  |  |  |  |
|-----------------------------|--|--|--|--|
| Pull Strength               | 222 Newtons (50 lbs.)  |  |  |  |
| Elongation<br>(Maximum)     | 100 percent  |  |  |  |
| Necking<br>(Typical)        | 47 percent at 111 Newtons (25 lbs.)<br>75 percent at 222 Newtons (50 lbs.) |  |  |  |

| Material     | H-Field | E-Field<br>10MHz | Plane Wave |       |
|--------------|---------|------------------|------------|-------|
| wateria      | 100 kHz |                  | 1 GHz      | 10GHz |
| Ferrous (FX) | 45      | 60               | 40         | 30    |



| Part Number   | Sleeve Dia. | Mesh Width       |  |
|---------------|-------------|------------------|--|
| 1008-0A004-xx | 0.437"      | 0.312" to 0.437" |  |
| 1012-0A006-xx | 0.625"      | 0.500" to 0.625" |  |
| 1016-0A007-xx | 0.750"      | 0.625" to 0.750" |  |
| 1020-0A008-xx | 0.875"      | 0.750" to 0.875" |  |
| 1026-0A010-xx | 1.125"      | 1.000" to 1.250" |  |
| 1034-0A016-xx | 1.250"      | 1.250" to 1.500" |  |
| 1042-0A022-xx | 2.250"      | 2.000" to 2.500" |  |
| 1100-0A065-xx | 5.500"      | 7.000" to 8.000" |  |

A: 7 or 8 will replace the A depending upon material requested. xx: 31 for monel wire; 32 for aluminum wire; 34 for tin-plated, copperclad steel.

