

TABLE 15.6

## THICKNESSES OF INSULATION ON TYPE TA WIRE

| Conductor Size | Minimum Acceptable Thicknesses |      |              |      |                     |      |              |      |
|----------------|--------------------------------|------|--------------|------|---------------------|------|--------------|------|
|                | PVC Insulation                 |      |              |      | Asbestos Insulation |      |              |      |
|                | Average                        |      | At Any Point |      | Average             |      | At Any Point |      |
|                | Mils                           | mm   | Mils         | mm   | Mils                | mm   | Mils         | mm   |
| 14 — 7 AWG     | 20                             | 0.51 | 18           | 0.46 | 20                  | 0.51 | 18           | 0.46 |
| 6 — 2          | 30                             | 0.76 | 27           | 0.69 | 25                  | 0.64 | 21           | 0.53 |
| 1 — 4/0        | 40                             | 1.02 | 36           | 0.91 | 30                  | 0.76 | 26           | 0.66 |

## 16. Centering

16.1 Within the limits specified in paragraph 15.1, the insulation shall have a circular cross section, shall be applied concentrically about the conductor (so that the conductor is well centered in the insulation), and shall fit tightly thereto. If the insulation is applied in more than one layer, adjacent layers shall form an integral mass. This mass shall be taken as a whole for all measurements and tests.

## NONMETALLIC COVERINGS AND FILLERS

## 17. Braids in General

17.1 A Type TA wire and a Type TBS wire shall have an impregnated overall braid applied to the outer surface of the insulation. The braid shall be one of the following: entirely of cotton, entirely of spun rayon, entirely of glass, a combination of 50 percent glass and 50 percent spun rayon, or a combination of 50 percent glass and 50 percent cotton (see rupture test in paragraph 27.2). Type FEPB wire in size Nos. 14 — 7 AWG shall be provided with a lacquer-coated glass braid applied over the insulation. Type FEPB wire in size Nos. 6 — 2 AWG shall be provided with either of the following:

A. An impregnated overall close-weave braid of a good-quality long-fiber chrysotile-asbestos yarn having a magnetic rating (MR) not higher than 4 and having an 80 percent or higher asbestos content by weight after extraction of the impregnating compound.

B. A lacquered overall close-weave braid consisting of 50 percent of glass and 50 percent of the asbestos yarn mentioned in item A. Type FEP and Type TFE wires shall not be provided with any overall covering.

## 18. Fillers

18.1 Fillers are acceptable in a pump cable or in a multiple-conductor assemble but are not required.

## 19. Cotton Braids

19.1 A cotton braid shall be of a close-weave, shall completely cover the insulation over which it is applied, and shall be fabricated on a machine having the same number of ends per carrier throughout. Each end shall consist of the same kind (that is, soft or glazed), size, and ply of yarn.

## 20. Glass Braids

20.1 A glass braid and a combination glass-and-cotton or glass-and-spun-rayon braid shall comply with the requirement in paragraph 19.1, and shall employ a glass yarn not smaller than No. 150—1/0.