



# **TOUGH PHONE COMMUNICATION SYSTEM**

**SYSTEM CABLE**

## **DESCRIPTION**

All Tough Phone cables are specifically designed for industrial communication use. They are suitable for installation in metallic or non-metallic conduits, or in cable trays. Cables may be strung outdoor when provided with a messenger and line transient protection.

Outer jackets are extruded of black flame retardant, hard service 105° polyvinyl chloride. The PVC jacket has a 600 volt rating and is highly resistant to most industrial environments including moisture (fresh and salt water), petroleum products (oil, gasoline, kerosene), alcohol's, fixed alkalis (potash and lye) and mineral acids. The cable part number is printed in white ink on the exterior jacket.

Bending radius is eight (8) times the cable diameter. Recommended minimum low temperature for installation is -10°C (+14°F). All cables listed meet U.S. Coast Guard requirement CFR 46 Subpart 111.94.

### **W5160**

Sixteen (16) conductor cable designed for use with single page, five (5) channel Tough Phone system.

#### **Communication Conductors:**

**Talk Lines** - Five (5) twisted pairs with 3.0" (maximum) lay, each conductor #18 AWG (16 strand #30), soft-drawn bare copper with .015" wall of 105° C polyvinyl chloride insulation, armored with .004" nylon jacket.

**Page Lines** - (1) twisted pair with 3.0" (maximum) lay, each conductor #18 AWG (16 strands #30), soft-drawn bare copper with .015" wall of 105° C polyvinyl chloride insulation, armored with .004" nylon jacket.

**Mute Wire** - One #18AWG (16 strands #30) soft drawn bare copper with .015" C polyvinyl chloride insulation armored with .004" nylon jacket.

**Power Conductors:** One (1) twisted pair and one (1) single conductor with 3.0" (maximum) lay, each conductor #14 AWG (41 strands #30), soft drawn bare copper with .015" wall of 105° C polyvinyl chloride insulation armored with .004" nylon jacket. The above conductors are bound with mylar tape to provide a uniformly round cable. Overall jacket of .060" wall off hard service, black 105° C polyvinyl chloride. Maximum OD is .630" one thousand (1000) feet of continuous length is wound on a nonreturnable reel. Shipping weight per reel approximately 285 lbs.

### **W5020**

Two (2) conductor cable designed for use with Tough Phone speakers.

One (1) twisted pair with 3.0" (maximum) lay, each conductor #18 AWG (16 strands #30), soft drawn bare copper with .031" wall of polyvinyl chloride insulation. Conductors are assembled with non-wicking non-hygroscopic nylon filler as required to form a uniformly round cable. Overall jacket of .031" wall of black hard service, flame retardant, oil, chemical and weather resistant, 105° polyvinyl chloride. Maximum O.D. is .300" One thousand (1000) feet of continuous length is wound on a nonreturnable reel. Shipping weight per reel is approximately 50 lbs.

### **W5080**

Eight (8) conductor cable designed for use with single page, single channel Tough Phone systems.

#### **Communication Conductors:**

**Talk Lines** - One (1) twisted pair with 3.0" (maximum) lay, each conductor #18 AWG (16 strands #30), soft drawn bare copper with .015" wall of 105° C polyvinyl chloride insulation armored with .004" nylon jacket.

**Page Lines** - (1) twisted pair with 3.0" (maximum) lay, each conductor #18 AWG (16 strands #30), soft-drawn bare copper with .015" wall of 105° C polyvinyl chloride insulation, armored with .004" nylon jacket.

**Mute Wire** - One #18 AWG (16 strands #30) soft drawn bare copper with .015" wall of 105° C polyvinyl chloride insulation armored with .004" nylon jacket.

**Power Conductors:** One (1) twisted pair and one (1) single conductor with 3.0" (maximum) lay, each conductor #14 AWG (41 strands #30), soft drawn bare copper with .015" wall of 105° C polyvinyl chloride insulation armored with .004" nylon jacket. The above conductors are bound with mylar tape to provide a uniformly round cable. Overall jacket is .045" wall of hard service, black, 105° C polyvinyl chloride. Maximum O.D. is .475" One thousand (1000) feet of continuous length is wound on a nonreturnable reel. Shipping weight per reel is 225 lbs.