

# TECHNICAL DATA

## XTRA·GUARD® 4

### ENGINEERING SPECIFICATION

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Cable shall be Alpha Wire Company **XTRA·GUARD® 4**. Manufactured from stranded, tinned copper conductors in accordance with ASTM-B-33. Conductors shall be insulated and jacketed with thermoplastic elastomer (TPE) which meets the flame test for 300 volt cables at 210,000 BTU/HR and 600 volt cables at 70,000 BTU/HR. Conductor insulations shall conform with UL styles 1888, 300 volt, 125pC and UL Style 1722, 600 volt 125pC applications.

Insulated conductors shall be fully color coded. Cable shall meet or exceed the requirements of UL Style 20237, 20238, 20239, 20240 and CSA, AWM I A/B II A/B FT1 for 300v and 600v installations.

Cable shall conform to UL tray cable ratings UL standard 13 type PLTC (Power Limited Tray Cable) 90pC, 300v or UL Standard 1277 type TC (Tray Cable) 90pC, 600v.

Cable shall be approved for use in mines in accordance with Pennsylvania Bureau of Deep Mine Safety, P-MWMS-1-85 and be in compliance with **CE**. Cable shall exhibit superior resistance to ultra-violet light, ozone, cold impact, chemicals and water.

Cable shall exhibit minimum levels of corrosive outgassing when subjected to heat or thermal decomposition.

#### 1.0 PRODUCT SPECIFICATIONS

- 1.1 Stranded tin coated copper conductor per ASTM B-33
- 1.2 Size range 24 AWG thru 14 AWG
- 1.3 Fully color coded insulated conductors
- 1.4 Thermoplastic Elastomer insulated conductors
- 1.5 UL, CSA conductor styles — 300 volts  
24 AWG thru 16 AWG  
UL Style 1888  
CSA AWM I A/B 125°C
- 1.6 UL, CSA conductor styles — 600 volts  
18 AWG thru 14 AWG  
UL Style 1722  
CSA AWM I A/B 125°C
- 1.7 UL, CSA cable styles — 300 volts  
24 AWG thru 16 AWG  
UL Style 20237  
CSA AWM I A/B II A/B FT1
- 1.8 UL, CSA cable styles — 600 volts  
18 AWG thru 14 AWG  
UL Style 20238  
CSA AWM I A/B II A/B FT1
- 1.9 Shielding Options
  - A) Unshielded:  
Clear polyester wrap, 25% overlap
  - B) Foil Shielded:  
Aluminum/polyester, 25% overlap, foil facing in with stranded tinned copper drain wire equal in size to insulated conductors.
  - C) **SUPRASHIELD®**  
Foil/braid combination. Triple laminate, aluminum/polyester/aluminum bonded in one layer, 25% overlap, overall 70% coverage tinned copper braid shield.  
Provides maximum shielding effectiveness.
- 1.10 UL Tray Cable Ratings – 90°C – 300 volts  
22 AWG thru 16 AWG  
UL Standard 13 type PLTC (Power Limited Tray Cable)
- 1.11 UL Tray Cable Ratings – 90°C – 600 volts  
18 AWG thru 14 AWG  
UL Standard 1277 type TC (Tray Cable)
- 1.12 Meets or exceeds flame test for 300 Volt cables at 210,000 BTU/HR and 600v cables at 70,000 BTU/HR
- 1.13 Mine approved in accordance with Pennsylvania Bureau of Deep Mine Safety P-MWMS-1-85
- 1.14 Jacketing  
Thermoplastic Elastomer (TPE) 125°C UL Recognized

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