

# PVC/NYLON MULTIPLE PAIRS ELECTRONIC INSTRUMENT WIRE INDIVIDUAL & OVERALL SHIELD 600 VOLT TC

APPLICATION: These cables offer resistance to a wide range of chemicals, including acids, alkalies, alcohol, petroleum and mineral oils. This product is UL listed as Type TC tray cable for cable tray installation in NEC Class 1, Division 2 and with restrictions in Class II, Division 2 hazardous areas. It is constructed in compliance with NEC Article 340 and has a 600-volt rating.

CONSTRUCTION SPECIFICATIONS:

Conductor Primary Insulation Color Code

7 strand bare copper 15 mils PVC/4 mils nylon Black and White pairs Each pair numbered

Group Identification Pair & Overall Shield

Jacket

Multiple twisted pairs of insulated copper wire Black PVC Jacket Aluminum Mylar shield over individual pair Copper drain wire

100% coverage aluminum - Mylar\* with drain wire Black PVC

## **Technical Information**

### **Product Dimensions**

No. of Pairs	Gauge Size	Overall Diameter Nominal / Maximum		Minimum Bend Radius		Maximum Pulling Tension		Net Weight	
		Inches	mm	Inches	mm	lb	kg	lb/k ft	kg/km
2	18	0.470/0.540	11.90/13.70	4.78	122	187	85	87	129
4	18	0.521/0.554	13.23/14.07	3.1	79	150	68	133	198
8	18	0.700/0.749	17.78/19.02	4.5	114	285	129	250	372
12	18	0.843/0.896	21.41/22.76	5.4	136	389	176	349	520

#### Draduct Characteristics

Physical Characteristics	Test Method	Primary Insulation	Outer Jacket	
Temperature Rating	UL Subject 13	90°C		
	UL Subject 1277		90°C	
Tensile Strength	UL Subject 83	2500	2000	
(Min. PSI @ 72°F)		17.2 MPa	13.8 MPa	
Ultimate Elongation				
(Min. % @ 72°F)	UL Subject 83	200	200	
Deformation (T <sub>2</sub> /T <sub>1</sub> , Min.)	UL Subject 83	0.75	0.5	
Air Oven Aging				
(7 days at 136°C)	UL Subject 83			
% retained tensile		75		
% retained elongation		65		
(7 days at 121°C)	UL Subject 1277			
% retained tensile	(Die Cut Samples)		70	
% retained elongation			45	
Limiting O, Index (% O, Min.)	ASTM D-2863		27	
Flammability				
Single - Vertical	UL Subject 1277	Pass		
Cable Tray - Ribbon Burner	UL Subject 1277		Pass	
Mechanical Moisture Absorption (Max. Mg/ln²)	UL Subject 83	20		
Heat Shock	UL Subject 83	No Cracks	No Crack	
1hr. at 121°C	02 000,000.00	140 014085		
Cold Bend (@-25°C)	UL Subject 83	No Cracks		
4 hours	UL Subject 1277	110 010010	No Crack	
	0200000000			
Minimum Recommended Installation Temperature		-10°C	-10°C	

# **Electrical Characteristics**

Dielectric Constant (24Hrs. @ 75°C) Increase in Capacitance (Max %)	UL Subject 83 UL Subject 83	10	
1-14 Days		10	
7-14 Days		5	
Insulation Resistance Constant	UL Subject 83		
Min. @ 15.6°C (60°F)		3000	

The specifications listed above are subject to change without notice. In any change, the product's performance will remain the same, or be improved. \*Dupont Trademark.