

# Instrumentation Cable – 1 to 24 Triad

## 18AWG Power-Limited Tray Cable, 300v Overall Screen, PVC Sheath

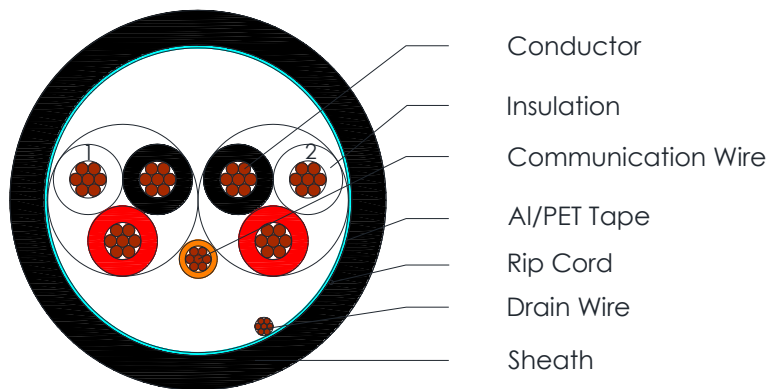


**C2743, C2744, C2745, C2746, C2747, C2748**

### Applications

Power limited tray cable (PLTC) is designed for installation indoors or outdoors, aerially, in conduits, ducts and cable trays in circuits not exceeding 300 volts. PLTC is often used in industrial control systems, intercom systems, burglar alarms and point-of-sale systems.

### Cross Section Drawing



### Design

Unit	Properties
Conductor	Flexible Bare Copper wire
Insulation	Polyvinyl Chloride Colours for Triads: Black & White & Red and Numbered Communication wire: Orange
Drain Wire	Tinned Copper wire
Screen	Aluminium/Polyester tape
Rip cord	Nylon yarn
Sheath Material	UV Resistant Polyvinyl Chloride (PVC) Standard Colour: Black
Standard Put Up Length	305 metres

\*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

# Instrumentation Cable – 1 to 24 Triad

## I 8AWG Power-Limited Tray Cable, 300v

### Overall Screen, PVC Sheath



#### C2743, C2744, C2745, C2746, C2747, C2748

#### Physical Characteristics

Part Number	C2743	C2744	C2745	C2746	C2747	C2748
No of Triad	1	2	4	8	16	24
Nom. Conductor Configuration (AWG)	18(7x26)					
Insulation Diameter (mm)	2.10					
Communication wire conductor configuration (AWG)	N.A.	22(7x30)				
Communication wire Insulation Diameter (mm)	N.A.	1.58				
Drain Wire size (AWG)	24(7x32)					
Screen Coverage (%)	115					
Nom. Radial Thickness Sheath (mm)	0.94	1.40	1.40	1.63	1.96	1.96
Nom. Overall Diameter (mm)	6.2	10.7	13.2	14.7	22.9	25.9
Operating Temperature (°C)	-30 / +105					
Max. Recommend. Pulling Tension (N)	174	733	1066	2225	4663	6450
Min. Bend Radius (install) (mm)	62	107	132	147	229	259
Nominal Cable Weight (kg/km)	62	130	238	476	728	1034

#### Electrical Characteristics

Part Number	C2743	C2744	C2745	C2746	C2747	C2748
No of Triad	1	2	4	8	16	24
Nom. Impedance ( $\Omega$ )	50 $\pm$ 10%					
Nom. Conductor Configuration (AWG)	18(7x26)					
Max. DC Resistance Conductor ( $\Omega$ /km)	22.7					
Max. DC Resistance Communication wire Conductor ( $\Omega$ /km)	57.4					
Max. DC Resistance Screen ( $\Omega$ /km)	78.5					
Max. Operating Voltage (Vrms)	300					

#### Reference Standards

IEC 60332-1
IEC 60228
BS)EN 50290
RoHS directives