

Instrumentation Cable – 1 to 24 Triad

I 6AWG Power-Limited Tray Cable, 300v Overall Screen, PVC Sheath

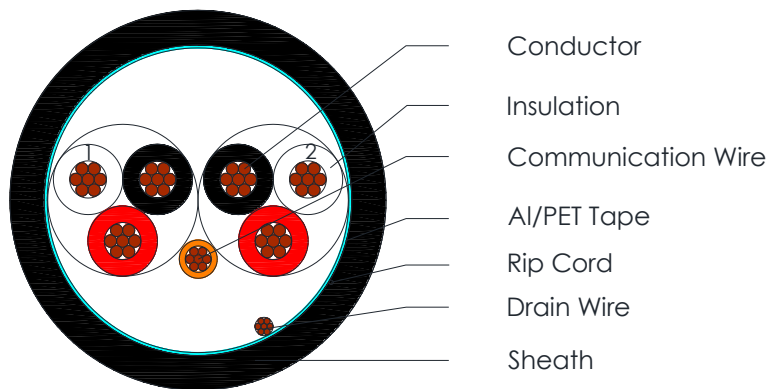


C2749, C2750, C2751, C2752, C2753, C2754

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 6AWG Power-Limited Tray Cable, 300v

Overall Screen, PVC Sheath



C2749, C2750, C2751, C2752, C2753, C2754

Physical Characteristics

Part Number	C2749	C2750	C2751	C2752	C2753	C2754
No of Triad	1	2	4	8	16	24
Nom. Conductor Configuration (AWG)	16(7x24)					
Insulation Diameter (mm)	2.40					
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	1.35	1.35	1.60	1.88	1.88
Nom. Overall Diameter (mm)	6.9	12.3	14.5	19.3	26.2	30.0
Operating Temperature (°C)	-30 / +105					
Max. Recommend. Pulling Tension (N)	271	1152	2104	4012	7820	11632
Min. Bend Radius (install) (mm)	69	120	146	190	286	298
Nominal Cable Weight (kg/km)	87	194	305	558	1100	1473

Electrical Characteristics

Part Number	C2749	C2750	C2751	C2752	C2753	C2754
No of Triad	1	2	4	8	16	24
Nom. Impedance (Ω)	45 \pm 10%					
Nom. Conductor Configuration (AWG)	16(7x24)					
Max. DC Resistance Conductor (Ω /km)	15.47					
Max. DC Resistance Communication wire Conductor (Ω /km)	57.4					
Max. DC Resistance Screen (Ω /km)	78.5					
Nom. Capacitance conductor to conductor (pF/m)	178					
Nom. Capacitance conductor to Shield (pF/m)	320					
Max. Operating Voltage (Vrms)	300					

Reference Standards

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