

Instrumentation cable

300V Power-Limited Tray Cable, 1 to 24 Triad 16AWG,

XLPE Insulated, Individual and overall Screen, PVC Sheath



C2817, C2804, C2805, C2806, C2807, C2808, C2809, C2810

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.

Design

Unit	Properties
Conductor	Flexible Tinned Copper wire
Insulation	Cross linked Polyethylene (XLPE) Colours for Triads: Black & White & Red and Numbered Communication wire: Orange
Drain Wire	Tinned Copper wire
Individual Screen	Aluminium/Polyester tape
Drain Wire	Tinned Copper wire
Overall Screen	Aluminium/Polyester tape
Rip cord	Nylon yarn
Sheath Material	UV Resistant & Fire resistant Low smoke Polyvinyl Chloride (LSF 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.

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Physical Characteristics

Part Number	C2817	C2804	C2805	C2806	C2807	C2808	C2809	C2810
No of Triad	1	2	4	6	8	12	16	24
Nom. Conductor Configuration (AWG)	16(7x24)							
Communication wire conductor configuration (AWG)	NA	22(7x30)						
Communication wire Insulation Diameter (mm)	NA	1.58						
Inner shield Drain Wire size (AWG)	NA	24(7x32)						
Inner Screen Coverage (%)	NA	115						
Outer shield Drain Wire size (AWG)	24(7x32)							
Outer Screen Coverage (%)	115							
Nom. Radial Thickness Sheath (mm)	0.94	1.35	1.35	1.35	1.63	1.88	1.88	2.13
Nom. Overall Diameter (mm)	6.9	12.9	14.5	17.0	19.8	24.4	29.2	33.5
Operating Temperature (°C)	-30 / +105							
Max. Recommend. Pulling Tension (N)	578	733	2504	3120	3736	6672	9417	14000
Min. Bend Radius (install) (mm)	70	124	145	170	193	254	292	337
Nominal Cable Weight (kg/km)	87	200	342	461	580	906	1280	1790

Electrical Characteristics

Part Number	C2817	C2804	C2805	C2806	C2807	C2808	C2809	C2810
No of Triad	1	2	4	6	8	12	16	24
Nom. Conductor Configuration (AWG)	16(7x24)							
Max. DC Resistance Conductor (Ω /km)	15.47							
Max. DC Resistance Communication wire Conductor (Ω /km)	NA	57.4						
Max. DC Resistance Inner Screen (Ω /km)	NA	78.5						
Max. DC Resistance Outer Screen (Ω /km)	75.4							
Max. Operating Voltage (Vrms)	300							

Reference Standards

IEC 60228	IEC 60332-3-24
BS/EN 50290	IEC 61034
RoHS directives	