

# Instrumentation cable

300V Power-Limited Tray Cable, 1 to 24 Triad 18AWG,

XLPE Insulated, Individual and overall Screen, PVC Sheath



**C2816, C2797, C2798, C2799, C2800, C2801, C2802, C2803**

## 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	C2816	C2797	C2798	C2799	C2800	C2801	C2802	C2803
No of Triad	1	2	3	4	8	12	16	24
Nom. Conductor Configuration (AWG)	18(7x26)							
Insulation Diameter (mm)	2.10							
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	1.63	1.88	1.88
Nom. Overall Diameter (mm)	6.22	11.4	12.7	13.5	17.8	21.4	24.7	30.5
Operating Temperature (°C)	-30 / +105							
Max. Recommend. Pulling Tension (N)	400	777	1166	1555	2491	3553	3696	7206
Min. Bend Radius (install) (mm)	63	114	127	135	168	216	267	305
Nominal Cable Weight (kg/km)	68	163	218	272	550	624	851	1257

## Electrical Characteristics

Part Number	C2816	C2797	C2798	C2799	C2800	C2801	C2802	C2803
No of Triad	1	2	3	4	8	12	16	24
Nom. Conductor Configuration (AWG)	18(7x26)							
Max. DC Resistance Conductor (Ω/km)	22.7							
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	