

M E S C

Middle East Specialized Cables Co.

BUILDING MANAGEMENT SYSTEMS

INSTRUMENTATION / PROCESS CONTROL CABLES (TYPE PLTC 300 VOLTS)

PVC INSULATED, SINGLE PAIR/TRIAD, OVERALL SHIELDED

TEMPERATURE RANGE 105°C

Specification: GEN. TO UL13, BELDEN & CUSTOMERS REQUIREMENTS



CONSTRUCTION:

Conductor	Plain Copper to ASTM B-3 & Stranded to class B of ASTM B-8
Insulation	Low smoke zero halogen compound
Color Code	Black/White for pair Black/White/Red for triad
Pair / Triad	Two/Three insulated conductors are uniformly twisted to form a pair/triad with 40~60 mm twist lay assembled with non-hygroscopic fillers if necessary and wrapped with polyester binder tape.
Collective Shield	Twisted pair/triad is shielded with aluminum polyester tape is applied with 100% coverage and an overlap of 25% with metal side in, in contact with a stranded tinned copper drain wire of size one even gauge smaller than the conductor size.
Outer Jacket	Extruded Black color Low smoke zero halogen compound
Printing on the Jacket (For Pair)	TYPE PLTC 1PR18AWG SHIELDED DIR BUR SUN RES OIL RES I 90 C MESC MONTH YEAR 1PR18AWG METER MARKING
Printing on the Jacket (For Triad)	TYPE PLTC 1TR18AWG SHIELDED DIR BUR SUN RES OIL RES I 90 C MESC MONTH YEAR 1TR18AWG METER MARKING

TECHNICAL DATA:

Flame Retardance	UL 13 vertical tray flame test or IEC 60332-3 Cat C
UV / Sunlight Resistance (Outer Sheath)	Passes after 720 hours (UL 1581)
Light Transmission	≥ 60% (IEC 61034-2)
Halogen Acid Gas (Outer Sheath)	≤ 0.5% (IEC 60754-1)
Limiting Oxygen Index (Outer Sheath)	≥ 30 (ASTM D2863)
Temperature Range	- 5°C to 50°C (During installation) - 20°C to 90°C (During Operation)
Voltage Rating	300 Volts
Conductor Resistance (UL13) at 20°C	≤ 23.4 Ω/Km (18AWG)
Mutual Capacitance (Between Conductors) (at 1KHz)	≤ 250 nF/Km
Capacitance (Between Conductor and Shield) (at 1KHz)	≤ 490 nF/Km
Inductance (at 1kHz)	≤ 1.0 mH/Km
L/R Ratio	≤ 25 μH/Ω (18AWG)
Voltage Test (UL 13)	2500 V _{DC} for 2 seconds

DIMENSION AND WEIGHT DETAILS:

MESC CODE	NO. OF PAIRS / TRIADS	SIZE (AWG)	NO. OF STRANDS	INSULATION THICKNESS (mm)	OUTER JACKET THICKNESS (mm)	OVERALL DIAMETER (mm)	APPROX. WEIGHT (kg/km)
B21D-01P18AWG-U0BK8-H3	1P	18	7	≥0.38	0.89	6.5	66
B21D-01T18AWG-U0BK8-H3	1T	18	7	≥0.38	0.89	6.9	71

Note: O.D. Tolerance of ±2.0 mm