

### Applications

Screened one pair cable suitable for Audio, Control, Instrumentation and Building Management Systems (BMS)

### Sector - BT BMS-TEC®

Audio, Control & Instrumentation

### Standard References

(BS) EN 50290-2  
IEC 60332-3C  
RoHS directives

### Design

- 1. Conductor**  
Tinned Copper wires  
One twisted pair
- 2. Insulation**  
Polyolefin  
**Core 1:** Black  
**Core 2:** Clear
- 3. Drain Wire**  
24 AWG (7 x 32)  
Tinned Copper
- 4. Screen**  
Aluminium/Polyester  
100% Coverage

### 5. Sheath Material

Halogen-Free  
Flame-Retardant (HFFR)  
Standard colour: Purple

### Standard Put Up Length

305 metres

### Physical Characteristics

BTCL Part Number	Unit	C1303	C1305	C1270	C1272	C1308	C1310
Number of pairs		1	1	1	1	1	1
Conductor size	AWG	12	14	16	18	20	22
Conductor stranding	mm	19x0.48	19x0.38	19x0.29	7x0.40	7x0.325	7x0.25
Nom. Radial Thickness Insulation	mm	0.8	0.8	0.8	0.5	0.4	0.4
Nom. Radial Thickness Sheath	mm	0.9	0.9	0.8	0.8	0.8	0.6
Nom. Overall Diameter	mm	9.9	8.8	7.8	6.0	5.3	4.5

### Electrical Characteristics

BTCL Part Number	Unit	C1303	C1305	C1270	C1272	C1308	C1310
No of pairs x conductor AWG size		1PR x 12	1PR x 14	1PR x 16	1PR x 18	1PR x 20	1PR x 22
Max. DC Resistance Conductor	Ω/km	5.61	9.36	15.47	22.7	35.75	57.4
Max. DC Resistance Screen	Ω/km	78.5	78.5	78.5	78.5	78.5	78.5
Capacitance conductor to conductor	pF/m	110	110	110	120	120	140
Capacitance cond. to other cond. +scrn	pF/m	260	254	244	225	210	200
Nominal Inductance	μH/m	0.6	0.6	0.6	0.6	0.6	0.6
Max. Recommended Current at 25°C	Amps	13	9.5	7.1	5.2	3.9	2.9
Max. Operating Voltage	Vrms	600	600	300	300	300	300

### Miscellaneous

BTCL Part Number	Unit	C1303	C1305	C1270	C1272	C1308	C1310
No of pairs x conductor AWG size		1PR x 12	1PR x 14	1PR x 16	1PR x 18	1PR x 20	1PR x 22
Operating Temperature	°C	-25 / +75					
Max. Recommended Pulling Tension	N	665	420	270	200	110	80
Min. Bend Radius (install)	mm	99	88	78	60	53	45
Cable weight	kg/km	132.6	97.9	74.3	48.4	37.2	27.1

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