

# Audio Control & Instrumentation Cable, 12 AWG Screened & RS 485 Composite Cable HFFR/LSZH Sheath

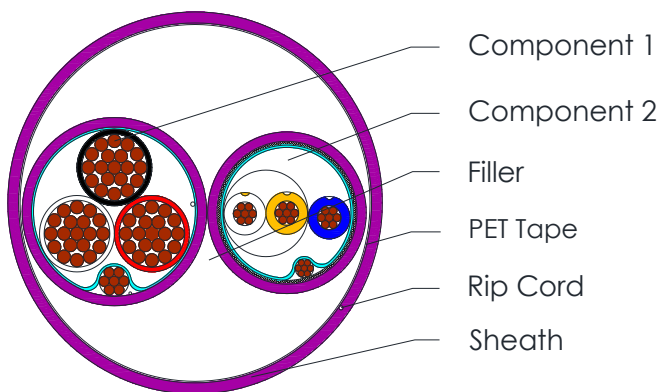


C5154, C5001

## Applications

Screened Multi-Conductor cable suitable for Audio, Control, Instrumentation and Building Management Systems (BMS)

## Cross Section Drawing



## Design

Unit		Properties
Component 1	Conductor	Bare Copper wire, 12AWG flexible
	Insulation	HFFR Core 1: Black, Core 2: White, Core 3: Red
	Screen	Aluminium/Polyester 100% Coverage
	Drain Wire	Tinned Copper wire
	Rip cord	Nylon yarn
	Sheath Material	Flame-Retardant Halogen Free (HFFR/LSZH) Standard colour: Black or Purple as customer's request
Component 2	Conductor	Tinned Copper wire, flexible
	Insulation	Foamed PE Pair 1: WHITE/Orange + ORANGE/White Core 1: BLUE/White
	Screen	Aluminium/Polyester 100% Coverage
	Drain Wire	Tinned Copper wire
	Braid	Tinned Copper wire
	Sheath Material	Flame-Retardant Halogen Free (HFFR/LSZH) Standard colour: Black or Purple as customer's request
Overall	Cabling	Cabling two components together with filler and PET Tape
	Rip cord	Nylon yarn
	Sheath Material	UV Resistant Flame-Retardant Halogen Free (HFFR/LSZH) Standard colour: Black or Purple as customer's request
Standard Put Up Length		305 meters

\*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

# Audio Control & Instrumentation Cable, 12 AWG Screened & RS 485 Composite Cable HFFR/LSZH Sheath



**C5154, C5001**

## Physical Characteristics

Part Number	C5154		C5001	
	1	2	1	2
Component No.	1	2	1	2
No of core/pairs	2C	1P	3C	1.5P
Conductor Size (AWG)	12 (19 x 25)	24 (7 x 32)	12 (19 x 25)	22 (7 x 30)
Nom. Diameter Conductor	2.3	0.60	2.3	0.75
Nom. Radial Thickness Insulation (mm)	0.30	0.60	0.30	0.60
Nom. Drain wire Diameter(mm)	7*0.32	7*0.20	7*0.32	7*0.20
Nom. Braid Coverage (%)	-	65	-	65
Nom. Radial Thickness Inner Sheath (mm)	0.6	0.6	0.6	0.6
Nom. Inner sheath Diameter (mm)	7.1	5.5	7.7	7.2
Nom. Radial Thickness Outer Sheath (mm)	0.8		0.8	
Nom. Overall Diameter (mm)	14.3		16.6	
Operating Temperature range (°C)	-25 / +75		-25 / +75	
Max. Recommended Pulling Tension (N)	1154		1340	
Min. Bend Radius (install) (mm)	143		166	
Nominal Cable Weight (kg/km)	179		245	

## Electrical Characteristics

Part Number	C5154		C5001	
	1	2	1	2
Component	1	2	1	2
Nom. Impedance (Ω)	-	120	-	120
Max. DC Resistance Conductor (Ω/km)	5.61	88.0	5.61	57.4
Max. DC Resistance Screen (Ω/km)	78.5	15.0	78.5	20
Max. Attenuation at 1MHz (dB/100m)	-	2.6	-	2.05
Capacitance conductor to conductor (Pf/m)	190	32	190	36
Capacitance conductor to rest (Pf/m)	345	70	345	69
Nominal Inductance (μH/m)	0.5	-	0.5	-
Max. Recommended Current at 25°C (Amps)	12	2.1	12	2.7
Max. Operating Voltage (Vrms)	300	300	300	300

## Reference Standards

(BS) EN 50290-2
IEC 60228
IEC 60754-1 & 2
IEC 61034, IEC 60332-3-24
RoHS directives