

# Audio Control & Instrumentation Cable

1 pr 22 to 12AWG, Overall Screen, LSF Sheath



C4238, C4239, C4240, C4241, C4242, C4243

## Applications

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

## Cross Section Drawing



## Design

Unit	Properties
Conductor	Tinned Copper Wires
Insulation	Polyethylene Core 1: Black Core 2: Clear
Pair	Two wires twisted together
Screen	Aluminium/Polyester 100% Coverage
Drain wire	24 AWG (7 x 32) Tinned Copper wire
Sheath Material	LSF Standard colour: Grey
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.

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## Physical Characteristics

Part Number	C4238	C4239	C4240	C4241	C4242	C4243
Number of pairs	1					
Conductor size (AWG)	12	14	16	18	20	22
Conductor stranding (AWG)	19 x 25	19x27	19x29	7x26	7x28	7x30
Nom. Radial Thickness Insulation (mm)	0.8	0.8	0.8	0.5	0.5	0.4
Nom. Insulation diameter (mm)	3.95	3.42	3.02	2.16	1.73	1.54
Nom. Radial Thickness Sheath (mm)	0.9	0.9	0.8	0.7	0.6	0.6
Nom. Overall Diameter (mm)	9.8	9.0	7.9	5.8	4.8	4.4
Operating Temperature (°C)	-25 / +75					
Max. Recommended Pulling Tension (N)	665	420	270	200	110	80
Min. Bend Radius (install) (mm)	102	90	79	58	48	44
Nominal Cable Weight (kg/km)	122	90	65	43	29	24

## Electrical Characteristics

Part Number	C4238	C4239	C4240	C4241	C4242	C4243
Conductor AWG size (AWG)	12	14	16	18	20	22
Impedance ( $\Omega$ )	54	56	65	60	56	64
Max. DC Resistance Conductor ( $\Omega$ /km)	5.61	9.5	14.7	21.7	35.75	52.7
Max. DC Resistance Screen ( $\Omega$ /km)	78.5					
Capacitance conductor to conductor (pF/m)	80	76	76	75	75	75
Capacitance cond. To other cond.+screen (pF/m)	160	154	144	134	120	108
Nominal Inductance ( $\mu$ H/m)	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	600	300	300	300

## Reference Standards

(BS) EN 50290-2
IEC 60228
IEC 60332-1
RoHS directives