

# Lon Works Cables, 22AWG, Individually Screened or Unscreened, HFFR Sheath

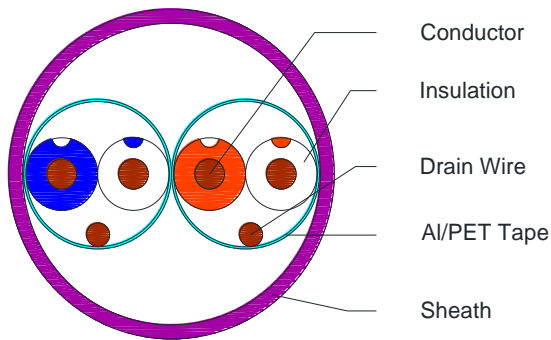


C1346, C1347, C1348, C1349

## Applications

Lon Works Interface Bus systems

## Cross Section Drawing



## Design

Unit	Properties
Conductor	Solid Bare Copper Wire
Insulation	Solid PE or Foam PE Pair 1, WHITE/Blue + BLUE/White Pair 2, WHITE/Orange + ORANGE/White
Lay Up	Two wires twisted to a pair.
Drain Wire (if applicable)	Tinned Copper 24 AWG (0.5 mm)
Screen (if applicable)	Each pair individually screened with an Aluminium/Polyester foil 100% Coverage
Cable Core	one pair or two pairs stranded
Sheath Material	Halogen-Free Flame Retardancy (HFFR) Standard colour: Purple
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.

**Lon Works Cables,  
22AWG, Individually Screened or Unscreened,  
HFFR Sheath**



**C1346, C1347, C1348, C1349**

**Physical Characteristics**

Part Number	C1346	C1347	C1348	1349
Number of pairs	1	2	1	2
Nom. Diameter Conductor (AWG)	22			
Insulation material	PE	PE	Foam PE	Foam PE
Nom. Radial Thickness Insulation (mm)	0.24	0.24	0.45	0.45
unscreened pair(s)	1	2	-	-
Individually screened pair(s)	-	-	1	2
Nom. Radial Thickness Sheath (mm)	0.6			
Nom. Overall Diameter (mm)	3.5	5.2	4.6	7.6
Operating Temperature (°C)	-25 / +75			
Max. Recommended Pulling Tension (N)	50	100	50	100
Min. Bend Radius (install) (mm)	35	52	46	76
Nominal Cable Weight (kg/km)	17	28	24	56

**Electrical Characteristics**

Part Number	C1346	C1347	C1348	C1349
Nominal Impedance (Ω)	100			
Max. DC Resistance Conductor (Ω/km)	61			
Max. DC Resistance Screen (Ω/km)	-	-	78.5	78.5
Capacitance conductor to conductor (pF/m)	46	46	40	40
Capacitance cond. To other cond.+screen (pF/m)	-	-	75	75
Max. Recommended Current at 25°C (Amp)	2.5			
Max. Operating Voltage (Vrms)	300			
Nom. Attenuation (dB/100m)				
1MHz	1.5	1.5	2.1	2.1
4MHz	3.1	3.1	4.3	4.3
10MHz	4.9	4.9	7.2	7.2
16MHz	6.3	6.3	8.9	8.9
20MHz	6.9	6.9	10.2	10.2
Nom. NEXT (dB)				
1MHz	59			
4MHz	50			
10MHz	44			
16MHz	41			
20MHz	40			

**Reference Standards**

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