Fieldbus or Profibus Cables

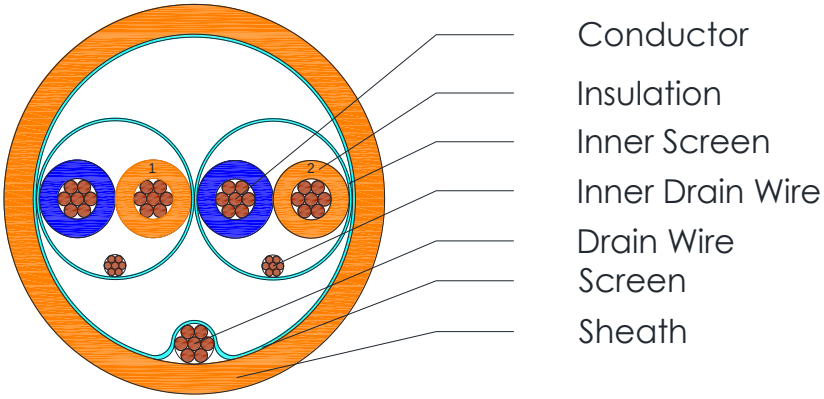
16AWG, 1 to 16PR, IS/OS Screen, PVC Sheath

C14001, C14002, C14003, C14004, C14005, C14006

Applications

Harsh environment digital and serial two-way communication, oil and gas extraction and refining sites, petrochemical, Profibus process automation or Foundation FieldBus process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.

Cross Section Drawing



Design

Unit	Properties
Conductor	Tinned Copper wire, flexible
Insulation	Polypropylene (PP) Blue and Orange with Number from 2pr and up,
Inner Drain Wire	Tinned Copper wire
Inner Screen	Aluminium/Polyester 100% Coverage
Overall Screen	Aluminium/Polyester 100% Coverage
Drain Wire	Tinned Copper wire
Sheath Material	Polyvinyl Chloride (PVC) Standard Colour: Orange
Standard Put Up Length	305 or 500 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	C14001	C14002	C14003	C14004	C14005	C14006
Number of Pairs	1	2	5	8	12	16
Conductor configuration (AWG)	16 (7 x 24)					
Nom. Radial Thickness Insulation (mm)	0.74					
Nom. Inner Drain Wire size (AWG)	20 (7 x 28)					
Nom. Drain Wire size (AWG)	-	16 (7 x 24)				
Nom. Radial Thickness Sheath (mm)	1.40	1.40	1.40	1.70	1.90	1.90
Nom. Overall Diameter (mm)	9.1	14.7	18.6	22.8	27.9	30.5
Operating Temperature (°C)	-25 / +105					
Max. Pulling Tension (N)	398	635	1585	2536	3812	5080
Min. Bend Radius (install) (mm)	94	147	186	228	279	305
Nominal Cable Weight (kg/km)	98	193	356	534	759	967

Electrical Characteristics

Part Number	C14001	C14002	C14003	C14004	C14005	C14006
Nom. DC Resistance Conductor (Ω/km)	13.7					
Nom. DC Resistance Inner Screen (Ω/km)	24.6					
Nom. DC Resistance Screen (Ω/km)	-	16.1				
Nominal Impedance (Ω)	100					
Capacitance core to core (Pf/m)	79					
Capacitance core to rest (Pf/m)	148					
Max. Capacitance unbalance (Pf/m)	3.95					
Nom. Attenuation at 0.039 MHz (dB/100m)	0.26					
Nom. Velocity of Propagation (%)	66					
Nom. Inductance (µH/m)	0.62					
Max. Recom. Current @ 25°C (Amps)	8.0	5.2				
Max. Operating Voltage (Vrms)	300					

Reference Standards

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