# **OSP Broadband Category 5e** BBDe, BBDNe and BBDGe

#### PRODUCT DESCRIPTION

BBD Category 5e Outside Plant (OSP) cables are designed to provide extension of the LAN beyond the premises. The core is filled wih PFM™ thixotropic filling compund to prevent water ingress. PFM gel will not drip even in cell tower applications at elevated temperatures. A variety of constructions are available to suit multiple environmental needs. Shielded designs feature dry water block between the shield and the core jacket to prevent water ingress. All designs are suitable for buried applications.

### **APPLICATIONS**

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) IEEE 802.3af
- PoE+ IEEE 802.3at Type 1 and 2
- ATM and token ring
- WiMAX cell towers
- BBDNe: Lashed aerial, underground conduit or low-risk direct burial
- BBDGe: Direct burial where additional mechanical protection is required

## **FEATURES**

## • Transmission performance characterized to 350 MHz

- BBDe: Unshielded
- BBDNe: Aluminum tape shield
- BBDGe: Copper-clad steel armor
   Protection against EMI/RFI
- Dry block between shield/armor
   Prevents water ingress between and inner jacket
- PFM gel-filled core construction
- OSP-grade black polyethylene jacket
- ColorTip™ circuit identification system

#### BENEFITS

- OSP rated cable connections for work area and backbone LAN
- Small, robust design for unshielded applications
- · Protection against EMI/RFI
- and provides rodent resistance
- shield in inner cable preventing damage to equipment
- · Prevents intrusion of moisture and easily wipes clean during installation
- Outside plant rated cable for years of reliable performance
- Easily identifiable conductor mates even in low-light environments



## **TECHNICAL GUIDELINE**

Special connectivity is required for these cable designs. Refer to the "OSP Broadband Installation Guidelines" on our site for more information: SuperiorEssex.com/TechTip.aspx



Solid Annealed

Copper Conductor

Thermoplastic Insulation

SPECIFICATIONS			
Pair Count	4		
Conductor	Solid annealed copper		
AWG (mm)	24 (0.51)		
Filling Compound	PFM <sup>™</sup> thixotropic gel		
Insulation	Solid polyolefin		
Shield/Armor	BBDe: Unshielded BBDNe: Electrically continuous 0.008 in (0.20 mm) polymer coated smooth aluminum tape, applied with an overla BBDGe: Electrically continuous 0.005 in (0.13 mm) corrugated copper-clad steel armor, applied with an overlap		
Dry Water Block	BBDNe: SAP powder BBDGe: SAP yarn		
Jacket	Black, sunlight and weather resistant polyethylene		
Characteristic Impedance (Ohms)	100 ± 15		
Nominal Velocity of Propagation (%)	65		
Performance Compliance	ANSI/TIA-568-C.2 ANSI/ICEA S-107-704-2006 Article 800, NEC (NFPA 70) RoHS-compliant		

Part Number	Product Code	Shield/Armor	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package
04-001-58	BBDe	None	0.26 (6.6)	30 (45)	1,000' Plywood ree
04-002-58	BBDe	None	0.26 (6.6)	30 (45)	2,500' Plywood ree
04-003-58	BBDe	None	0.26 (6.6)	30 (45)	5,000' Plywood ree
04-601-58	BBDe	None	0.26 (6.6)	30 (45)	Cut to length
04-001-54	BBDNe	Coated aluminum tape	0.36 (9.1)	55 (82)	1,000' Plywood ree
04-002-54	BBDNe	Coated aluminum tape	0.36 (9.1)	55 (82)	2,500' Plywood ree
04-003-54	BBDNe	Coated aluminum tape	0.36 (9.1)	55 (82)	5,000' Plywood ree
04-601-54	BBDNe	Coated aluminum tape	0.36 (9.1)	55 (82)	Cut to length
04-001-55	BBDGe	Copper-clad steel	0.36 (9.1)	64 (95)	1,000' Plywood ree
04-002-55	BBDGe	Copper-clad steel	0.36 (9.1)	64 (95)	2,500' Plywood ree
04-003-55	BBDGe	Copper-clad steel	0.36 (9.1)	64 (95)	5,000' Plywood ree
04-601-55	BBDGe	Copper-clad steel	0.36 (9.1)	64 (95)	Cut to length



