

Pre-Connectorized Drop Cable (PCDC)

AERIAL AND DUCT CABLE 5.0MM - PIA

Aginode Ref: PCDCIxxxx - SP2065

This outdoor cable is suitable for duct and aerial installation, featuring a jelly-filled loose tube with 1 fibre, dry water-blocking materials, and an HDPE sheath reinforced with two embedded FRP rods.

This cable is designed for outdoor duct and aerial installations. It features a loose tube construction containing 1 fibre, filled with jelly for fibre protection. The cable includes water-blocking materials to prevent moisture ingress. Its outer sheath is made of high-density polyethylene (HDPE) and includes two fibre-reinforced plastic (FRP) elements embedded symmetrically in the sheath for added strength and stability.

Breaking load: max 2000N

PIA Approved



STANDARDS

IEC 60794

IEC 60793

Test Methods

All optical measurements at 1550 nm

Test	Conditions	Acceptance criteria
Tension Loading IEC 60794-1-2 E1	Tensile strength: 800N and 300N Sample length: ≥ 50 m, 1 min	$\Delta\alpha \leq 0.1$ dB under 300N and reversible under 800N
Crush/Compression IEC 60794-1-2 E3	Crush: 20Kg/cm, 1min Number of tests: 3, at least 20cm apart.	$\Delta\alpha$ reversible No damage
Impact IEC 60794-1-2 E4	Impact energy: 5Nm, R=300mm number of test: 3	$\Delta\alpha$ reversible
Torsion IEC 60794-1-2 E7	1m, $\pm 180^\circ$, 10 cycles	$\Delta\alpha \leq 0.1$ dB
Bending IEC 60794-1-2 E11	R=10xCable Φ , 4 turn, 3 cycles	$\Delta\alpha$ reversible
Temperature Cycling IEC 60794-1-2 F1	-20~+70°C, two cycles, t1=180min	$\Delta\alpha \leq 0.1$ dB
Water penetration IEC 60794-1-2 F5B	Height of water column: 1m Sample length: 3m, 24h	No water leakage

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Caractéristiques

Caractéristiques de construction

Couleur	Noir
Type de connecteur	Hardened Standard (Corning Optitap compatible)
Dielectric	Yes
Type de fibres optiques	SM (G657.A2)
Gaine extérieure	PE haute densité
Type de câble	Aerial

Caractéristiques dimensionnelles

Masse approximative	20 kg/km
Diamètre du câble	5.0 mm
Nombre de fibres optiques	1

Caractéristiques mécaniques

Breaking strength	Max 2 kN
Résistance à l'écrasement	20 kg/cm
Force de traction maximale	800 N

Caractéristiques de transmission

Insertion Loss, maximum, dB	0.25 dB
Insertion loss, typical value	0.12 dB
Return Loss, Minimum, dB	65 dB

Caractéristiques d'utilisation

Application	Customer connection
Température ambiante d'installation, plage	-5...50 (operation -20...70) °C
Type d'installation	Aerial - self-supporting
Rayon de courbure minimum - installé	R=10D without tension mm
Conditionnement	PCDC packaging