

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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Characteristics

Construction characteristics

Colour	Black
Connector type	Hardened Standard (Corning Optitap compatible)
Dielectric	Yes
Fiber optic type	SM (G657.A2)
Outer sheath	HDPE
Type of cable	Aerial

Dimensional characteristics

Approximate weight	20 kg/km
Cable Diameter	5.0 mm
Number of optical fibres	1

Mechanical characteristics

Breaking strength	Max 2 kN
Crush resistance	20 kg/cm
Maximum tensile load	800 N

Transmission characteristics

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

Usage characteristics

Field of application	Customer connection
Installation temperature, range	-5...50 (operation -20...70) °C
Installation type	Aerial - self-supporting
Minimum Bend Radius - Installed	R=10D without tension mm
Packaging	PCDC packaging

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