

# 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: $\geq 50$ 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 $\Phi$ , 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

# Aerial and duct cable 5.0mm - PIA

## 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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