# MEGAnet

# LIGHT speed Dual Drop Fibre Cable

Aerial and Duct applications

UV HD Polyethylene Sheath

Aramid yarns

Polycarbonate Mono tube, Thixotropic Gel ITU-T G.657.A2 optical fibers



Diagram depicts 12 fibre construction

#### **Product Features**

This dual drop cable has a thixotropic gel filled monotube containing 2, 4, 6, 8 or 12 fibres. The fibre colours follow the TIA/EIA-598 colour coding scheme.

Blue	Orange	Green	Brown	Grev	White	Red	Black	Vellow	Violet	Pink	Turquoise
Blue	Orange	Green	BIOWII	Gley	white	Reu	DIACK	Tenow	violet	FIIIK	Turquoise

Tubes colours follows TIA/EIA-598 colour coding scheme:

Opaque Natural

The cable is capable for up to 50m aerial drop installation.

The cable design is such that cables may be installed by means of air assisted installation

techniques into micro ducts; typically, 8/6 mm and 8/5mm micro ducts

The thixotropic gel filled tube allows for excellent sustained reliability over a wide temperature range.

The cable is engineered to ensure the optical fibres remain stress free over the designated temperature range.

The cable is water blocked

The High-Density Polyethylene sheath is UV stabilised for outdoor applications.

Maximum installation load of 144N



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## **Physical Properties**

Parameter			Test Method	
No. of elements		1		
No. of fibres		2 to 12		
Cable diameter - nor	minal	3.8 mm		
Cable weight - nomir	nal	12 kg/km		
Installation load - Ma	ıx	144 N	IEC 60794-1-21	
Minimum bend	Long term	30 mm	IEC 60794-1-21	
radius	Short term	12 mm		
Crush resistance via 100mm plates		650 N	IEC 60794-1-21	
Torsion		10 cycles 180° apart	IEC 60794-1-21	
Repeated bending		35 cycles R=20xD	IEC 60794-1-21	
Temperature		-10°C to +70°C	IEC 60794-1-22	
Water penetration 3m of cable / 1m hea	ad of water	No leakage	IEC 60794-1-22	
Drip test 300 mm sample of lo	oose tube @ 80°C	No leakage	IEC 60794-1-22	

## **Optical Properties**

Fibre Type		Single Mode (SM)		
Specification		ITU-TG.657A2		
		0.35 dB/km @ 1310 nm		
Attenuation		0.22 db/km @ 1550 nm		
		0.24 dB/km @ 1625 nm		
Mode field diameter	r	8.6 µm ±0.4 µm @ 1310 nn		
		9.6 µm ±0.5 µm @ 1550 nm		
Polarisation mode	dispersion (PMD <sub>Q</sub> )	≤ 0.06 ps/√km		
Cladding diameter		125 μm ±0.7 μm		
Core concentricity	error	≤ 0.5 µm		
Cladding non-circul	arity	≤ 0.7 %		
Cable cut off wavele	ength	≤ 1260 nm		
	1 turn @ 1550 nm	≤ 0.40 dB @ 7.5 mm Radius		
Macro band loss	1 turn @ 1625 nm	≤ 0.80 dB @ 7.5 mm Radius		
Macro Dena 1033	10 turns @ 1550 nm	≤ 0.03 dB @ 15 mm Radius		
	10 turns @ 1625 nm	≤ 0.10 dB @ 15 mm Radius		
Proof strain		0.7 Gpa		
Dynamic fatigue		> 20 Nd		



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