# **Prysmian**

# A Brand of Prysmian Group

# Aerial drop optical fibre cable

# TV06055



### **Cable Design**

### According to IEC/EN 60794

- Optical Fibre: 250µm single-mode.
- Units: 12 single-mode optical fibres bound together in acrylate resin to form a single unit.
- Strength Member: 3 x 0.32mm brass plated steel wires.
- Longitudinal Water Tightness: water swellable materials (core only).
- Outer Sheath: UV resistant HDPE.
- Stripes: Indicate planes for easy sheath removal.

## **Cable Application**

This multi-unit optical drop cable is design for aerial and/or duct applications and is suitable for use under 11 kV power cables. Please refer to our General Installation (Datasheet Ref: CIG059) and Safety & Handling recommendations (Generic Optical cable MSDS - Datasheet Ref: 9980-02-1) before handling.

### **Technical Data**

No. of Fibres			12	24	36	48			
Layout (Units x File	ores)	-	1 x 12 (3 fillers)	2 x 12 (2 fillers)	3 x 12	4 x 12			
Unit Diameter – Ø		mm	1.3						
Sheath Thickness		mm	1.9						
Cable Diameter - 9	Ø	mm	7.0 7.1						
Cable Weight		kg / km	43 45						
MIT (Maximum Installation Tension)		N	150						
MAT (Maximum Allowable Tension)		N	1200						
Breaking Load		N	1350 - 2000						
Minimum Setting Diameter		mm	140						
Temperature Range		°C	Transport & Storage: $-40 \rightarrow +70$ Installation: $-20 \rightarrow +45$ Operation: $-20 \rightarrow +45$						
Climatic Conditions		Sag %	Maximum Span (m)						
Max. wind speed (km/hr)	Max. ice loading (radial thickness)	1.8	68						
97 0	none 5mm	1.0							

## **Main Characteristics**

Test	Standard	Specified Value	Acceptance Criteria*		
Maximum Tension MAT	IEC 60794-1-21-E1	1200 N	$\Delta \alpha \le 0.05 \text{ dB}, \Delta I/I \le 0.80\%$		
Crush	IEC 60794-1-21-E3	2000 N / 100 mm, 10 min	∆α ≤ 0.05 dB		
Impact	IEC 60794-1-21-E4	2 J, 3 impacts, R = 300mm	∆α ≤ 0.05 dB		
Torsion	IEC 60794-1-21-E7	± 360 °, 2 m	∆α ≤ 0.05 dB		
Kink	IEC 60794-1-21-E10	D = 12 x OD	Cable integrity		
Bend	IEC 60794-1-21-E11	D = 12 x OD, 3 turns, 5 cycles	∆α ≤ 0.05 dB		
Temperature Range	IEC 60794-1-22-F1	-20 °C to +60 °C	$\Delta \alpha \le 0.05 \text{ dB/km}$		
	1LC 001 94-1-22-F1	-40 °C to +70 °C	Δα ≤ 0.15 dB/km		



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Water Penetration	IEC 60794-1-22-F5B	3 m sample, 1 m water, 24 h	no water penetration (core only)
Ageing	IEC 60794-1-22-F9	168 hours, +85 °C	$\Delta \alpha \le 0.25$ dB/km, $\Delta \alpha \le 0.10$ dB/km average

### **Optical Characteristics**

See the attached 250µm cabled optical fibre data sheet.

#### Identification

#### Fibre Colours (1):

No.	1	2	3	4	5	6	7	8	9	10	11	12
Colour	blue	orange	green	red	grey	yellow	brown	violet	black	white	pink	turquoise

### Unit Colours (1):



Fillers are coloured yellow.

(1) Other colour set available upon agreement.

#### **Sheath Colour:**

The outer sheath colour is black with yellow stripes.

### Sheath Marking (2):

The outer sheath is marked in 1-meter intervals as follows:

<length marking in meters>M \* FIBRE DROP CABLE <no. of fibres>F PRYSMIAN PGH <year of manufacture>

(2) Customized marking available upon agreement.

## Logistic

Packing:	Plywood reels.		
Delivery Lengths (3):	Standard delivery length is 2 km.		
Delivery Lengths 17.	Maximum delivery length is 6 km.		

(3) Other delivery lengths available upon agreement.

All optical measurements in accordance with ITU-T G650 recommendations

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