



## **MICRO DUCT OPTICAL CABLE WITH PICO TUBES**

## **Cable Design**

#### IEC/EN 60794



-432F version illustrated not to scale -

- Central Strength Member (CSM): glass fibers reinforced plastic rod (GRP)
- **Tubes:** thermoplastic material containing 12 or 24 optical fibers and filled with a suitable water tightness compound.
- Stranding: loose tubes (and fillers), SZ stranded around the CSM.
- Longitudinal Water Tightness: water swellable elements (dry core)
- Outer Sheath: HDPE, UV resistant, 1 red ripcord beneath.

This dielectric optical cable is designed for blowing installation technique.

## **Technical data**

reennear aata									
No. of Fibers	-	432		552					
Design	-	18(3+15) x 24 23(8+15) x 24							
Fillers		5 -							
Tube diameter - ø	mm	1.3							
CSM/Enlargement - ø	mm	2.4							
Sheath thickness	mm	0.4							
Cable diameter - ø	mm	8.2±0.2							
Cable weight	Kg/Km	62							
Min. bending radius	mm	Under Maximum Ten 20xCable-ø	Without Tension: 15xCable-ø						
Temperature range	°C	Transport: -40 -> +70	Installation: -5 -> +40	Operation: -30 -> +60					

## **Main characteristics**

Test	Standard	Value	Requirement*
Max. Installation Tension	IEC 60794-1-2-E1	500N	$\Delta \alpha$ reversible, fiber strain $\leq$ 0.5%
Crush	IEC 60794-1-2-E3	1000 N / 100 mm, max. 5 min	$\Delta\alpha \leq$ 0.1 dB, no damage
Impact	IEC 60794-1-2-E4	2 J, 3 impacts, R=300 mm	$\Delta\alpha \leq$ 0.1 dB after test
Repeated Bending	IEC 60794-1-2-E6	R=20xOD, 100N, 25 cycles	$\Delta\alpha \leq$ 0.1 dB no damage
Torsion	IEC 60794-1-2-E7	+/-180°, 2m, 100N	$\Delta\alpha \leq$ 0.1 dB no damage
Cable Bend	IEC 60794-1-2-E11	R=20xOD, 5 turns, 3 cycles	$\Delta\alpha \leq$ 0.05 dB after test
Temperature Cycling	IEC 60794-1-2-F1	-30°C to +60°C	$\Delta \alpha \leq 0.1 dB/km$
Water Penetration	IEC 60794-1-2-F5B	3 m sample, 1 m water column, 24 h	No water penetration

\* values for single-mode fibers, all optical measurements performed at @1550nm

## **Optical Characteristics**

See the attached cabled optical fiber  $\textbf{G.657A2}~200 \mu m$  data sheet.

# SIROCCO<sup>HD</sup>



## Identification

Fiber Colors:												
No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	red	green	blue	yellow	white	grey	brown	violet	aqua	black	orange	pink
No.	13	14	15	16	17	18	19	20	21	22	23	24
Color	red	green	blue	yellow	white	grey	brown	violet	aqua	white	orange	pink
										11		

**Fiber Colors:** red, green, yellow, brown, blue, violet, grey, orange, pink, white, black, turquoise. |- one ring ||-two rings

#### **Tube Colors:**

Fib	re		Elements													
Count		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
422	1 <sup>st</sup>	RD24T	GR24T	BL24T	NTF	NTF	NTF	NTF	NTF	-	-	-	-	-	-	-
432	2 <sup>nd</sup>	RD24T	GR24T	WH24T												
	1 <sup>st</sup>	RD24T	GR24T	BL24T	YE24T	WH24T	GY24T	BN24T	VI24T	-	-	-	-	-	-	-
552	2 <sup>nd</sup>	RD24T	GR24T	WH24T												

#### **Sheath Color:**

The outer sheath color is black.

#### **Sheath Marking:**

The outer sheath is marked in 1 meter intervals by ink-jet method as follows:

PRYSMIAN SA yyyy FUMD LT E0 nn G.657A2 200µm mmmm

where: nn= total number of fibers, yyyy= year of production, mmmmM= Sequential Length Mark,

### Logistic

#### Packing:

Wooden drums with protection.

#### **Delivery Lengths:** 2100 ± 50 m, 3150 ± 80 m, 4200 ± 100 m

Other lengths available upon agreement, up to a maximum of 10% of the total number of cable lengths could be shorter than nominal values

© PrysmianGroup 2020, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by PrysmianGroup: any modification or alteration afterwards of product may give different result.

The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of PrysmianGroup. The information is believed to be correct at the time of issue. PrysmianGroup reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorized by PrysmianGroup.

