

# INDEX

<b>Revision Sheet</b>	Page 2
<b>Central Loose Tube ADSS Optical Cables (ASU)</b>	3-4

	Name	Signature	Date
Issued by	Zhang Zixin	<i>Zhang Zixin</i>	24 <sup>th</sup> Jun. 2024
Approved by	Wang Wusheng	<i>Wang Wusheng</i>	24 <sup>th</sup> Jun. 2024

<b>CUSTOMER APPROVAL</b>			
	Name	Signature	Date
Approved by			

NOTE: Please return this TD signed for acceptance together with the purchase order. An unsigned TD will be considered fully accepted upon receipt of the purchase order.

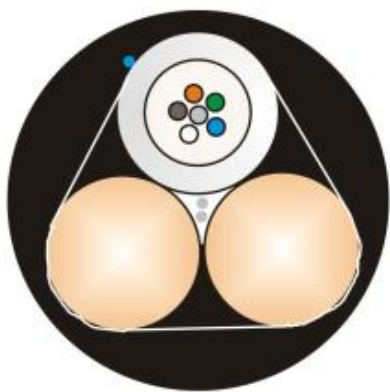
**REVISION SHEET**

<b>Issue No.</b>	<b>Date</b>	
02	24 <sup>th</sup> Jun. 2024	Issue for ASU cables (DRAFT)

DRAFT

# TD 24-428

## Central Loose Tube ADSS Optical Cables (ASU) Cable Design



- not to scale -

- **Tube:** thermoplastic material, containing up to 24 optical fibres and filled with a suitable water tightness compound.
- **strength member:** tow glass fibre reinforced plastic material (FRP).
- **Stranding:** The loose tube and two FRP rods are applied in SZ stranded
- **Longitudinal water tightness:** water blocking yarns (dry core).
- **Outer Sheath:** Black UV resistant polyethylene. 1 ripcord beneath.

### Technical data

No. of Fibres		12	24
Design(element × fibre per tube)		1x12	1x24
Loose Tube / Filler - Ø nominal	mm	2.3	3.0
CSM/coating nominal diameter	mm	2.0	2.2
Outer sheath nominal thickness	mm	1.35	1.35
Cable nominal Diameter	mm	7.2	8.5
Cable Weight	kg / km	43	57
Maximum span	m	120	120
Min. bending radius	mm	Without Tension 10 x Cable-Ø	Under Maximum Tension 20 x Cable-Ø
Temperature range	°C	Installation -10 -> +60;	Transport. & Storage -40 -> +70 ; Operation -25 -> +65

Please refer to our General Installation, Safety & Handling recommendations before handling.

### Main characteristics

Test	Standard	Value	Sanction*
Max. Operating tension	IEC 60794-1-21-E1	2.0 x W x 9.81 N W=weight of 1km cable	fibre strain ≤0.2%, Δα reversible
Crush(short term)	IEC 60794-1-21-E3	1500 N / 100mm	Δα ≤ 0.1 dB
Temperature range	IEC 60794-1-22-F1	-25 -> +65°C	Δα ≤ 0.1 dB /km
Water Penetration	IEC 60794-1-22-F5C	sample=3m, water=1m	No water leakage after 24 hour

\* values for single-mode fibres, all optical measurements performed at 1550 nm.

### Optical Characteristics

See the attached cabled optical fibre data sheet.

# TD 24-428

## Identification

### Fibre Colours

No.	1	2	3	4	5	6	7	8	9	10	11	12
colour	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
No.	13	14	15	16	17	18	19	20	21	22	23	24
colour	Blue with black tracer	Orange with black tracer	Green with black tracer	Brown with black tracer	Grey with black tracer	White with black tracer	Red with black tracer	Natural with black tracer	Yellow with black tracer	Violet with black tracer	Pink with black tracer	Aqua with black tracer

### Loose Tube Colours

No.	1
Colour	natural

### Sheath Colour:

The outer sheath colour is black.

### Sheath Marking:

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



## Logistic

### Packing:

Wooden drums with protection.

### Delivery Lengths:

Standard delivery length is 4km with a tolerance of -5% / +5%.

© PrysmianGroup 2024, 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 authorised by PrysmianGroup.