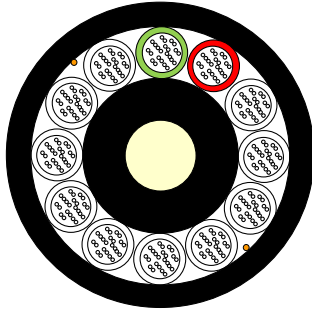


Outdoor microduct optical fibre cable with 200µm fibres

TV06682



-not to scale-

Cable Design

According to IEC/EN 60794

- **Optical Fibres:** 200µm single-mode G.657.A2.
- **Central Strength Member (CSM):** glass fibres reinforced plastic rod (GRP) with or without over-sheath.
- **Tubes:** thermoplastic material containing 24 optical fibres and filled with a suitable water tightness compound.
- **Stranding:** loose tubes, SZ stranded around the CSM.
- **Longitudinal Water Tightness:** water swellable materials (dry core).
- **Outer Sheath:** UV resistant HDPE, 2 ripcords beneath.

Cable Application

These outdoor Sirocco^{HD} microduct optical fibre cables are optimized for installation by blowing into microducts and protected microducts. Please refer to our General Installation, Safety & Handling recommendations before handling.

Technical Data

No. of Fibres		144	192	288	432	552
Layout (Tubes x Fibres)	-	6 x 24	8 x 24	12 x 24	18 x 24 (5 fillers)	23 x 24
Tube Diameter – Ø	mm			1.3		
CSM/Enlargement – Ø	mm	1.4	2.3	3.0 / 3.9		2.4
Sheath Thickness	mm	0.5	0.4	0.5		0.45
Cable Diameter – Ø	mm	5.0	5.7	7.5		8.5
Cable Weight	kg / km	23	30	54		65
MIT (Maximum Installation Tension)	N	230	300	540		650

Minimum Bending Radius	mm	Under Maximum Tension: 20 x Cable Ø		Without Tension: 20 x Cable Ø	
Temperature Range	°C	Transport & Storage: -40 → +70	Installation: -20 → +45	Operation: -10 → +40	

Main Characteristics

Test	Standard	Specified Value	Acceptance Criteria
Tensile Performance	IEC 60794-1-21-E1	1 x W, see table above	$\Delta\alpha \leq 0.05$ dB, $\Delta I/I \leq 0.60\%$
Crush	IEC 60794-1-21-E3	500 N / 100 mm, 1 min	$\Delta\alpha \leq 0.05$ dB
Impact	IEC 60794-1-21-E4	1 J, 3 impacts, R = 300 mm	$\Delta\alpha \leq 0.05$ dB
Repeated Bending	IEC 60794-1-21-E6	R = 20 x Cable Ø, 25 cycles	Cable integrity
Torsion	IEC 60794-1-21-E7	$\pm 360^\circ$, 2 m	$\Delta\alpha \leq 0.05$ dB
Kink	IEC 60794-1-21-E10	R = 20 x Cable Ø	Cable integrity
Bend	IEC 60794-1-21-E11	R = 20 x Cable Ø, 4 turns, 3 cycles	$\Delta\alpha \leq 0.05$ dB
Temperature Cycling	IEC 60794-1-22-F1	-10 °C to +40 °C -20 °C to +60 °C	$\Delta\alpha \leq 0.05$ dB/km $\Delta\alpha \leq 0.15$ dB/km
Water Penetration	IEC 60794-1-22-F5B	3 m sample, 1 m water, 24 h	no water penetration
Ageing	IEC 60794-1-22-F9	168 hours, +85 °C	$\Delta\alpha \leq 0.25$ dB/km, 0.10 dB/km average

Optical Characteristics

See the attached 200µm 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
No.	13	14	15	16	17	18	19	20	21	22	23	24
Colour	orange	green	red	white	yellow	pink	orange	green	red	white	yellow	pink

Tube Colours (inner and outer layer) ⁽¹⁾:

No.	Pilot	Intermediate	Marker
Colour	red	white	green


(1) Other colour set available upon agreement.

Sheath Colour:

The outer sheath colour is black.

Sheath Marking ⁽²⁾:

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

<length marking in meters>M  <no. of fibres>F G657A2 PRYSMIAN PGH <year of manufacture>

(2) Customized marking available upon agreement.

Logistic

Packing: Plywood or plastic reels.

Delivery Lengths ⁽³⁾: Standard delivery length is 2 km.
Maximum delivery length is 4 km for double layer and 6km for single layer construction.

(3) Other delivery lengths available upon agreement.

All optical measurements in accordance with ITU-T G650 recommendations

© Prysmian Group 2021, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: 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 Prysmian Group. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorised by Prysmian Group.