SIROCCO

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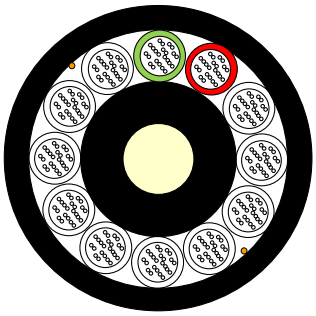
Outdoor microduct optical fibre cable with 200µm fibres

TC06520



-not to scale-

Cable Design

According to IEC/EN 60794

- **Optical Fibres:** 200µm single-mode G.657.A1.
- **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 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
Design	Ref	60096576	60096575	60096574
Layout (Tubes x Fibres)	-	6 x 24	8 x 24	12 x 24
Tube Diameter – Ø	mm	1.65		
CSM/Enlargement – Ø	mm	1.7	2.0 / 2.7	2.4 / 5.0
Sheath Thickness	mm	0.4		
Cable Diameter – Ø	mm	5.8	6.8	9.1
Cable Weight	kg / km	30	40	70
MIT (Maximum Installation Tension)	N	300	400	700
Minimum Bending Radius	mm	Under Maximum Tension: 20 x Cable Ø	Without Tension: 50 x CSM Ø	
Temperature Range	°C	Transport & Storage: -40 → +70	Installation: -20 → +45	Operation: -20 → +60

Main Characteristics

Test	Standard	Specified Value	Acceptance Criteria
Tensile Performance	IEC 60794-1-21-E1	1 x W, see table above	Δα ≤ 0.05 dB, Δl/l ≤ 0.60%
Crush	IEC 60794-1-21-E3	1000 N / 100 mm, 1 min	Δα ≤ 0.05 dB
Impact	IEC 60794-1-21-E4	1 J, 3 impacts, R = 300 mm	Δα ≤ 0.05 dB
Repeated Bending	IEC 60794-1-21-E6	R = 50 x CSM Ø, 25 cycles	Cable integrity
Torsion	IEC 60794-1-21-E7	± 360 °, 2 m	Δα ≤ 0.05 dB
Kink	IEC 60794-1-21-E10	R = 50 x CSM Ø	Cable integrity
Bend	IEC 60794-1-21-E11	R = 50 x CSM Ø, 4 turns, 3 cycles	Δα ≤ 0.05 dB
Temperature Cycling	IEC 60794-1-22-F1	-20 °C to +60 °C	Δα ≤ 0.05 dB/km
		-30 °C to +70 °C	Δα ≤ 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	Δα ≤ 0.25 dB/km, 0.10 dB/km average

Optical Characteristics

See the attached optical fibre data sheet ref: 200µm single-mode G.657.A1 (HC).

Identification

Fibre Colours:

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:

No.	Pilot	Intermediate	Marker
Colour	red	white	green

Sheath Colour:

The outer sheath colour is black.

Sheath Marking:

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

ETC GROUP *<COMTEC CODE>*/A HD MICRO BLOWN CABLE *<no. of fibres>*FO G657A1 *<year>* *<week>* *<batch number>* *<length marking>*M

SAP Code		COMTEC CODE
144FO	60096576	830123
192FO	60096575	830124
288FO	60096574	830125

Logistic

Packing:	Plywood or plastic reels.
Delivery Lengths:	Standard delivery length is 2 km. Maximum delivery length is 6 km.

All optical measurements in accordance with ITU-T G650 recommendations

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