Netceed

GYCFHTY-12/24/48/72/96/144/192/288 G.657A1

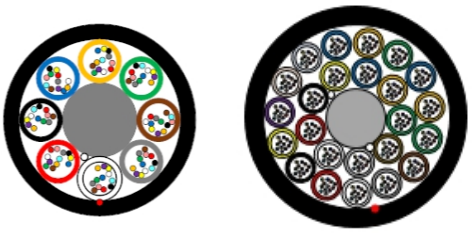
Part Number: 22-XJ20232-C

Description

- Loose tubes with 12 or 24 optical fibers, filled with thixotropic compound
- Stranded loose tubes and fillers (if necessary)
- Central strength member made of fibre reinforced plastic (FRP)
- Cable strand: dry, with water blocking yarns
- Outer sheath: HDPE, black, anti-UV, one ripcord under the sheath
- Reaction to fire:Fca

Product Image

(Not to scale)



Key Features

- Diameter reduced rigid loose tube, provides smaller cable diameter and blowing performance
- Dielectric design with dry core , environmentally friendly
- Smooth and low friction outer sheath , suitable for different micro ducts

Applications

- Blowing into micro ducts

Standards

- IEC 60793-1, IEC 60793-2, IEC 60794-5-10

Product Illustration

Fiber color	1	2	3	4	5	6	7	8	9	10	11	12
	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
	13	14	15	16	17	18	19	20	21	22	23	24
	blue	orange	green	brown	grey	white	red	natural	yellow	violet	pink	aqua

Tube color (single layer)	1	2	3	4	5	6	7	8	9	10	11	12
	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua

For 288F double layer:

Inner layer tube color	1	2	3	4	5	6	7	8	9			
	blue	orange	green	brown	grey	white	red	black	yellow			
Outer layer tube color	1	2	3	4	5	6	7	8	9	10	11	12
	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	auqa
	13	14	15									
	blue	orange	green									

Outer Sheath:Black, ink jet print, marking in 1 meter intervals as follows (for example):

Netceed [comtec code]/E MICRO BLOWN CABLE XFO G657A1 [YEAR] [WEEK] [Batch Number] [Length]m

Netceed [comtec code]/E HD MICRO BLOWN CABLE XFO G657A1 [YEAR] [WEEK] [Batch Number] [Length]m

Product Specifications

Fiber counts		12 (250 µm)	24 (250 µm)	48 (250 µm)	72 (250 µm)	96 (250 µm)
Recommended for microduct size		≥7mm(ID)	≥7mm(ID)	≥7mm(ID)	≥7mm(ID)	⩾8mm(ID)
Loose tubes x fibers		1x12	2x12	4x12	6x12	8x12
Dummies		5	4	2	0	0
Outer diameter ±0.3	mm	5.1				5.9
Weight ±15%	kg	22				33
Max. tensile load	N	500				1000
Min bending radius	mm	20x cable Ø (installation), 10x cable Ø (operation)				
Temperature Range	-20 ~ +70°C (storage / transportation), -10~ +70°C (Install), -20 ~ +70°C (Operation)					

Fiber counts		144 (250 µm)	144 (200 µm)	192 (200 µm)	288 (250µm)	288 (200 µm)
Recommended for microduct size		≥10mm (ID)	≥8mm (ID)	≥10mm (ID)	≥12.5mm(ID)	≥11.5mm(ID)
Loose tubes x fibers		12x12	6x24	8x24	(9+15)x12	(9+15)x12
Dummies		0	0	0	0	0
Outer diameter ±0.3	mm	7.9	5.7	6.7	9.2	8.5
Weight ±15%	kg	56	28	43	76	64
Max. tensile load	N	1000	600	1500	1500	1000
Min bending radius	mm	20x cable Ø (installation), 10x cable Ø (operation)				
Temperature Range	-20 ~ +70°C (storage / transportation), -10~ +70°C (Install), -20 ~ +70°C (Operation)					

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Mechanical Data

Test	Condition	Acceptance Criteria
Tensile strength IEC 60794-1-21 E1	Tensile load: ref. product specifications Sample length: ≥ 50 m Test duration: 1 min	- Fiber strain ≤0.6% - Δα ≤0.05dB after test - No damage
Crush resistance IEC 60794-1-21 E3	Crush: 500N/10cm Test duration: 1 min, number of tests: 3	- Δα ≤0.05dB after test - No damage
Impact IEC 60794-1-21 E4	Impact energy: 1J; R = 300 mm Impact points: 3; Impact number: 1	- Δα ≤0.05dB after test - No damage
Torsion IEC 60794-1-21 E7	Sample length: 2 m; Angles: ± 180° Cycles: 10 cycles	- Δα ≤0.05dB after test - No damage
Bend IEC 60794-1-21 E11	Mandrel radius: 20D; Turn number: 4 Cycles: 3 cycles	- Δα ≤0.05dB after test - No damage

Environmental Data

Test	Condition	Acceptance Criteria
Temperature cycling IEC 60794-1-22 F1	Steps: -20°C~+70°C, 12 hours Cycles: 2	- Δα ≤ 0.15 dB/km - No damage
Water penetration IEC 60794-1-22 F5	Sample length: 3 m Water column height: 1 m, 24 h	- No water leakage

All optical measurements at 1550 nm

Fiber Specifications ITU-T G.657A1

Optical	Fibre attenuation (dB/km) … cabled	≤0.36 dB/km @1310nm ≤0.22 dB/km @1550nm
	Zero Dispersion Wavelength	1300~1324 nm
	Zero Dispersion Slope	≤0.092 ps/nm^2·km
	Cable Cutoff Wavelength (λcc)	≤1260 nm
	PMD(Max. Individual)	≤0.15 ps/ √ km
	PMD(Max. Link design)	≤0.06 ps/ √ km
	Dispersion @1285~1330nm	≤3.5 ps/nm ·km
	Dispersion @1550nm	≤18 ps/nm ·km
	Macro bending Loss (1 turn; Φ20 mm) @1550 nm (1 turn; Φ20 mm) @1625 nm (10 turns; Φ30 mm) @1550 nm (10 turns; Φ30 mm) @1625 nm	 ≤ 0.75 dB ≤ 1.50 dB ≤ 0.25 dB ≤ 1.00 dB
	Mode Field Diameter	(8.6~9.2) ±0.4 µm @1310 nm
Geometric	Outer diameter	200± 15 µm or 242± 5 µm
	Cladding diameter	125 ± 0.7 µm
	Core/clad concentricity error	≤0.5 µm
	Cladding non-circularity	≤0.8 %
Mechanical	Proof stress	≥ 0.69GPa

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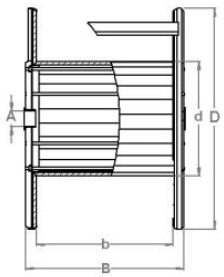
Logistic

Cable Type	Length	4km (±5%)	
GYCFHTY-12~72F (250 μm) (12F/T)	Drum Type Dimensions (tolerance: ±5cm) Weight(±15%)	Wooden 85*50*75 (132kg)	 D*d*B in cm
GYCFHTY-96F (250 μm) (12F/T)		Wooden 95*60*75 (184kg)	
GYCFHTY-144F (250 μm) (12F/T)		Wooden 115*60*75 (299kg)	
GYCFHTY-144F (200 μm) (24F/T)		Wooden 95*60*75 (164kg)	
GYCFHTY-192F (200 μm) (24F/T)		Wooden 100*60*75 (231kg)	
GYCFHTY-288F (250μm) (12F/T)		Wooden 115*60*75 (372kg)	
GYCFHTY-288F (200 μm) (12F/T)		Wooden 115*60*75 (324kg)	

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