FIBER OPTIC CABLE · GYFBY / GYFXY

GYFBY / GYFXY

Elliptical Flat All-Dielectric Fiber Optic Cable

G.652D / G.655 / G.657A · 2–12 cores · aerial and duct drop

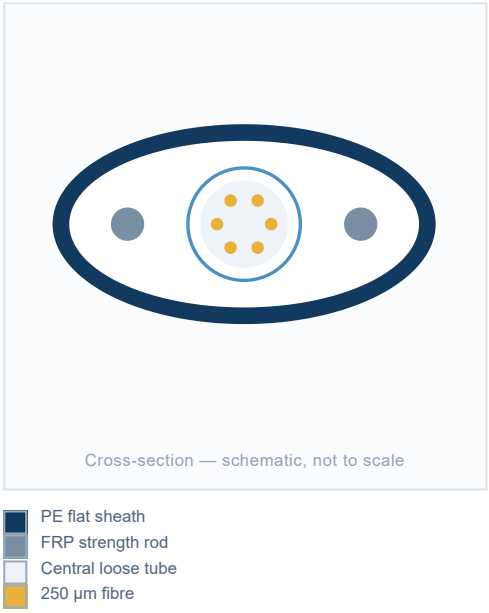
PRODUCT DESCRIPTION

GYFBY and GYFXY are flat, all-dielectric cables with a central loose tube and two parallel FRP rods. The flat section sits against a wall or inside a narrow duct without rolling, and because there is no metal anywhere in the cable it needs no bonding or earthing. GYFBY uses a PE sheath for aerial and duct drop; GYFXY is the wider, heavier build for longer flat runs.

KEY FEATURES

- All-dielectric: two FRP rods carry the load, no metal, no earthing
- Flat profile stays put on walls and in narrow ducts
- Central gel-filled tube protects the fibre with controlled excess length
- UV-stabilised PE sheath for exposed aerial runs
- 2 to 12 cores as standard; GYFXY also built to 24 cores

Other fibre types, core counts and sheath compounds are available on request — see the ordering information on page 2.



Cross-section — schematic, not to scale

- PE flat sheath
- FRP strength rod
- Central loose tube
- 250 µm fibre

GENERAL SPECIFICATIONS

CABLE TYPE	**GYFBY / GYFXY**
APPLICATION	**Aerial drop · Duct · Flat-profile FTTH last mile**
STANDARDS	**YD/T 769 · IEC 60794-1**
TEMPERATURE	**-40 °C to +70 °C**
SHEATH OPTIONS	**PE · LSZH**

CABLE CONSTRUCTION

Central loose tube	PBT, gel-filled, 2–12 fibres
Strength members	Two parallel FRP rods, one each side of the tube
Water blocking	Water-blocking tape and compound, fully dielectric
Outer sheath	UV-stabilised PE, flat profile

Options: LSZH sheath · 14–24 cores in the GYFXY build · dry core · ripcord · customer sheath printing.

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STRUCTURE AND DIMENSIONS

Cable model	Fibre count	Cable size (mm)	Nominal weight (kg/km)	Tensile load L / S (N)	Crush resistance L / S (N/100 mm)	Bend radius D / S
GYFBY-2~12Xn	2~12	9.0	70	350 / 500	300 / 1000	15D / 30D
GYFXY-2~12Xn	2~12	10.2	81	400 / 1000	300 / 1000	10D / 20D

TWO BUILDS	FIBRE COUNT	TEMPERATURE
GYFBY · GYFXY	**2–12**	**-40 to +70**
see table	cores	°C

OPTICAL CHARACTERISTICS

Fibre type	Attenuation 1310 nm (dB/km) typ. / max	Attenuation 1550 nm (dB/km) typ. / max	Cut-off λcc (nm)	Remark
G.652D	0.36 / 0.50	0.22 / 0.40	≤ 1260	Low water peak, full band 1260–1625 nm
G.655	0.40 / 0.50	0.23 / 0.40	≤ 1450	Non-zero dispersion shifted, for DWDM backbone
G.657A1/A2	0.36 / 0.50	0.22 / 0.40	≤ 1260	Bend insensitive, min. bend radius 10 mm

> Attenuation measured at +20 °C on cabled fibre, before splicing. Multimode fibre (OM1–OM4) available on request.

QUALITY ASSURANCE

- 100 % attenuation and length test on every fibre before packing
- Inspection certificate and test report issued with every drum
- Third-party inspection (SGS, TÜV, BV) can be arranged on request
- Pre-shipment sample and drum marking approved by the customer

TYPE TESTS

Test	Method	Acceptance
Tensile strength	IEC 60794-1-21 E1	Rated load applied, no fibre strain, Δα ≤ 0.05 dB
Crush	IEC 60794-1-21 E3	Rated load applied, Δα ≤ 0.05 dB after recovery
Impact	IEC 60794-1-21 E4	10 impacts, 4.5 J, R300 mm, Δα ≤ 0.05 dB
Temperature cycling	IEC 60794-1-22 F1	−40 °C to +70 °C, 2 cycles, Δα ≤ 0.05 dB/km
Water penetration	IEC 60794-1-22 F5B	1 m head, 24 h, no water at the far end

ORDERING INFORMATION

Order code: **GYFBY-GYFXY-[cores]Xn-[fibre type]-[sheath].** Example: GYFBY-GYFXY-12Xn-G652D-PE. State the fibre type, sheath compound, drum length and any sheath marking. Standard drum length 2 km or 4 km; other lengths on request.

> Nominal values, subject to normal manufacturing tolerances.
> Core counts and fibre types outside the table are built to order — weight, tensile and bending data confirmed on the order drawing.

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