FIBER OPTIC CABLE · GYXTY

GYXTY

Central Loose Tube Non-Armored Fiber Optic Cable

G.652D / G.655 · Y sheath · 2–36 cores

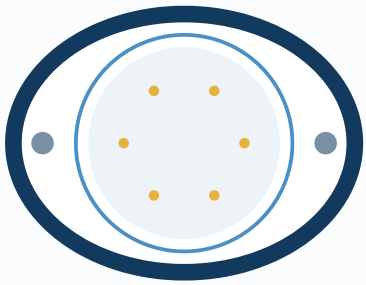
PRODUCT DESCRIPTION

GYXTY is a lightweight central tube cable with a Y-profile sheath: the two steel strength wires sit in the sheath wings rather than inside the core, so the tube stays round and the cable stays small. Without steel tape armour it is the lightest outdoor option for short aerial spans and duct runs up to 36 cores.

KEY FEATURES

- Y-profile sheath holds the strength wires clear of the fibre tube
- No steel tape armour — lowest weight and smallest bend radius in the range
- Tensile 600/1500 N (2–12 cores) or 1000/3000 N (14 cores and above)
- Crush resistance 1000/3000 N per 100 mm
- Quick mid-span access for splicing in aerial distribution

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

Y-profile sheath
Steel strength wire
Central loose tube
250 µm fibre

GENERAL SPECIFICATIONS

CABLE TYPE	**GYXTY**
APPLICATION	**Aerial · Duct · Lightweight routes**
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, all fibres in one tube
Strength members	Two steel wires in the wings of the Y sheath
Water blocking	Thixotropic jelly in the tube
Outer sheath	Y-profile MDPE, black

Options: LSZH sheath · dry core without gel · ripcord · customer sheath printing.

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STRUCTURE AND DIMENSIONS

Cable model	Fibre count	Nominal weight (kg/km)
GYXTY-2~12Xn	2~12	76
GYXTY-14~18Xn	14~18	83
GYXTY-20~24Xn	20~24	93
GYXTY-26~30Xn	26~30	101
GYXTY-30~36Xn	30~36	107

TENSILE LOAD L / S	CRUSH RESISTANCE L / S	BEND RADIUS S / D
600/1500 · 1000/3000	**1000 / 3000**	**10D / 20D**
N (by core count)	N/100 mm	× cable OD

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: **GYXTY-[cores]Xn-[fibre type]-[sheath].** Example: GYXTY-48Xn-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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