FIBER OPTIC CABLE · GYXTW

GYXTW

Central Loose Tube Steel Wire Armored Fiber Optic Cable

G.652D / G.655 · 2–24 cores · Duct and aerial

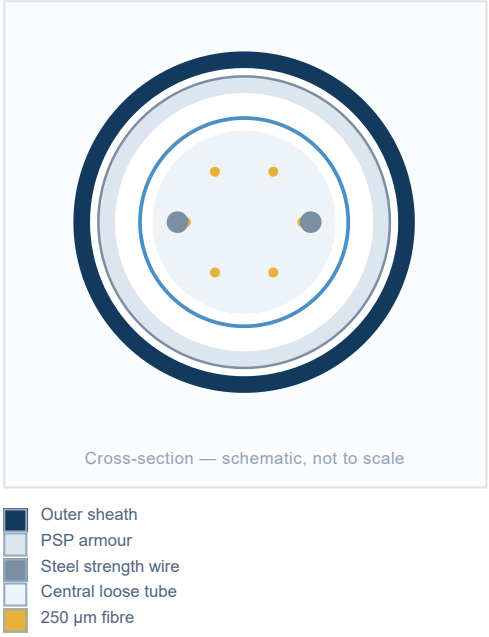
PRODUCT DESCRIPTION

GYXTW puts all fibres in a single central loose tube rather than stranding several tubes. The tube is filled with water-blocking gel and wrapped in a PSP steel tape, with two parallel steel wires embedded in the sheath to carry tensile load. The result is a small, light, low-cost cable for distribution and access routes where core count stays below 24.

KEY FEATURES

- Single central tube — smallest diameter per core count in the outdoor range
- Two parallel steel wires: 600/1500 N standard, 1000/3000 N reinforced
- PSP tape armour for crush and rodent protection
- Fast access: one tube to open, all fibres in one place
- Light weight keeps pole and duct loading low

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

- Outer sheath
- PSP armour
- Steel strength wire
- Central loose tube
- 250 µm fibre

GENERAL SPECIFICATIONS

CABLE TYPE	**GYXTW**
APPLICATION	**Duct · Aerial · Short span distribution**
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
Armour	Copolymer-coated steel tape (PSP)
Strength members	Two parallel steel wires embedded in the sheath
Water blocking	Thixotropic jelly in the tube
Outer sheath	UV-stabilised MDPE, black

Options: LSZH sheath · dry core without gel · 12-fibre colour code · ripcord · customer sheath printing.

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STRUCTURE AND DIMENSIONS

Cable model	Fibre count	Nominal weight (kg/km)	Version	Tensile load L / S (N)	Crush resistance L / S (N/100 mm)	Bend radius S / D
GYXTW-2~12Xn	2~12	82	Standard	600/1500	300/1000	10D/20D
GYXTW-14~24Xn	14~24	127	Standard	600/1500	300/1000	10D/20D
GYXTW-2~12Xn	2~12	124	Reinforced	1000/3000	300/1000	10D/20D
GYXTW-14~24Xn	14~24	147	Reinforced	1000/3000	300/1000	10D/20D

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