ZUOYEAL

MULTI-TUBE MIDSPAN CABLE · G.657A1

72 - 144 F
MIDSPAN

MODEL **MULTI-TUBE**

Multi-tube midspan indoor cable, 72 to 144 fibres in 12-fibre sub-unit tubes, aramid yarn, LSZH flame-retardant sheath.

FIBRES	PER TUBE
72 / 96 / 144	**12 F**
JACKET	REEL
LSZH YELLOW	**500 m**



01 OVERVIEW

Scope & cable construction

The ZY-GJFJH multi-tube midspan cable groups 12 tight-buffered fibres in each sub-unit tube, then strands 6, 8 or 12 of these tubes around a central strength member under a flame-retardant LSZH sheath. Each tube can be opened independently at a midspan point, which keeps the remaining fibres protected while a branch is taken out.

CONSTRUCTION

- 12 × 900 µm tight-buffered fibres per sub-unit tube.
- Sub-unit tubes numbered No.1 - No.12 for identification.
- Aramid yarn 1670 Dtex strength member inside each tube.
- GFRP central strength member, non-woven tape, 1 red ripcord.
- LSZH flame-retardant outer sheath, yellow or customized.



FIG. 1 Multi-tube cable cross-section

02 CONSTRUCTION DATA

Cable construction & dimensions

ITEM	ZY-GJFJH-72B6a1	ZY-GJFJH-96B6a1	ZY-GJFJH-144B6a1
Fiber count	72 F	96 F	144 F
Configuration	6 sub-unit tubes	8 sub-unit tubes	12 sub-unit tubes
Structure	12 F per sub-unit tube	12 F per sub-unit tube	12 F per sub-unit tube
Optical fiber	ITU-T G.657A1	ITU-T G.657A1	ITU-T G.657A1
Strength member	Aramid 1670 Dtex	Aramid 1670 Dtex	Aramid 1670 Dtex
Sub-unit tube	LSZH, flame retardant	LSZH, flame retardant	LSZH, flame retardant
Sub-unit colour	Yellow or customized	Yellow or customized	Yellow or customized
Sub-unit diameter	5.2 ± 0.3 mm	5.2 ± 0.3 mm	5.2 ± 0.3 mm
Rip cord	1 pc, red	1 pc, red	1 pc, red
Tape	Non-woven fabric	Non-woven fabric	Non-woven fabric
Outer sheath	LSZH, flame retardant	LSZH, flame retardant	LSZH, flame retardant
Sheath colour	Yellow or customized	Yellow or customized	Yellow or customized
Cable diameter	18.8 ± 1 mm	21.9 ± 1 mm	28.6 ± 1 mm
Tensile strength	800 N	800 N	800 N
Crush resistance	1,000 N	1,000 N	1,000 N
Cutting length	500 m/reel	500 m/reel	500 m/reel

03 IDENTIFICATION

Fibre colour code

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Gray	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua

12-fibre colour code

GROUP / TUBE IDENTIFICATION

- Each sub-unit tube carries 12 tight-buffered fibres.
- Each tube is marked No.1 - No.12 for identification.



Sub-unit tubes with No.1 - No.6 marking



Sub-unit tube opened — 12 buffered fibres

04 FIBRE PERFORMANCE

ITU-T G.657A1

PARAMETER	SPECIFICATION
Attenuation @ 1310 nm	≤ 0.360 dB/km before / ≤ 0.40 dB/km after
Attenuation @ 1383 nm	≤ 0.340 dB/km before / ≤ 0.40 dB/km after
Attenuation @ 1550 nm	≤ 0.250 dB/km before / ≤ 0.30 dB/km after
Attenuation @ 1625 nm	≤ 0.260 dB/km before / ≤ 0.30 dB/km after
Zero-dispersion wavelength	1300 - 1324 nm
Zero-dispersion slope	≤ 0.092 ps/(nm²·km)
Cable cut-off wavelength	≤ 1260 nm
Macro-bending loss — 1 turn, Ø 20 mm	≤ 0.75 dB @ 1550 nm / ≤ 1.5 dB @ 1625 nm
Macro-bending loss — 10 turns, Ø 30 mm	≤ 0.25 dB @ 1550 nm / ≤ 1.0 dB @ 1625 nm
Mode field diameter @ 1310 nm	8.6 ± 0.4 µm
Cladding diameter	125 ± 0.7 µm
Cladding non-circularity	≤ 1.0 %
Core / clad concentricity error	≤ 0.5 µm
Proof stress	0.69 GPa

05 PACKING

- 500 m per reel, wooden drum.
- Drum sealed and protected for transport.
- Cable ends sealed; test report on the drum flange.

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This datasheet describes the multi-tube midspan cable 72/96/144 F at the time of publication. Dimensions and configurations may change without notice; confirm current values with ZUOYEAL before ordering.

72 / 96 / 144 F · 12 F PER TUBE · LSZH

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