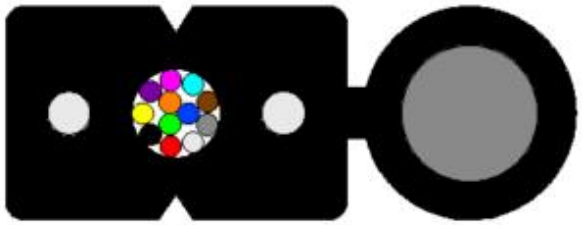
SELF-SUPPORTING DROP CABLE

12F
DROP · LSZH

MODEL **GJYXFCH-12B6a1**

Self-supporting flat drop cable with a PBT loose tube, two GFRP strength members and a 1.0 mm galvanised steel messenger, finished with a low-smoke zero-halogen sheath.



FIBRE COUNT	FIBRE TYPE
12	**G.657A1**
SHEATH	MESSENGER
LSZH	**1.0 mm**

01 CONSTRUCTION

Cable cross-section

The GJYXFCH-12B6a1 is a flat self-supporting drop cable for aerial and facade runs. A PBT loose tube filled with gel carries up to 12 G.657A1 fibres; two GFRP strength members sit either side of it, a 1.0 mm galvanised steel wire forms the messenger lobe, and the whole is sheathed in LSZH.

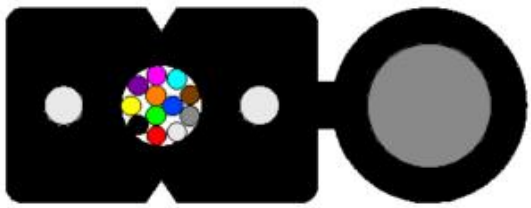


FIG. 1 Flat drop cable cross-section — messenger lobe on the right

CROSS-SECTION LEGEND

1.0 mm galvanised steel wire · 0.5 mm GFRP · G.657A1 fibre · LSZH sheath · PBT loose tube with gel · ripcord.

CABLE ASSEMBLY & DIMENSIONS

ITEM	CONTENT	VALUE
Fiber	Mode	G.657A1
Fiber	Qty	12
Supporting strength member	Material	Galvanised steel wire (10-20 g/m²)
Supporting strength member	Diameter	1.0 ± 0.05 mm
Strength member	Material	GFRP
Strength member	Diameter	0.5 ± 0.05 mm
Outer sheath	Material	LSZH
Outer sheath	Colour	Black
Outer sheath	Dimension	2.2 ± 0.2 × 6.2 ± 0.3 mm

02 FIBRE

Fiber performance

All characteristics of the cable fibre (fibre of finished cable) shall be at least in accordance with ITU-T Recommendation G.657A1 and shall be as follows.

GEOMETRICAL CHARACTERISTICS

CHARACTERISTIC	CONDITION	VALUE	UNIT
Cladding diameter		125 ± 0.7	μm
Cladding non-circularity		≤ 1.0	%
Core / cladding concentricity		≤ 0.6	μm
Coating diameter (uncoloured)		245 ± 10	μm

TRANSMISSION CHARACTERISTICS

CHARACTERISTIC	CONDITION	VALUE	UNIT
Mode field diameter (MFD)	1310 nm	(8.6 - 9.2) ± 0.4	μm
Attenuation coefficient	1310 / 1550 nm	≤ 0.38 / ≤ 0.28	dB/km
Cable cut-off wavelength (λcc)		≤ 1260	nm
Zero-dispersion wavelength		1300 - 1324	nm
Zero-dispersion slope		≤ 0.092	ps/(nm²·km)

03 IDENTIFICATION

Fiber identification

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

Illustration colours are for reference only and do not indicate exact colour codes.

PRINTING

ITEM	CONTENT
Marking colour	White
Marking method	Ink jet printing
Marking content	As per customer requirement
Marking remark	Markings on the cable jacket shall be at every 1-metre interval

04 PERFORMANCE

Cable performance

ITEM	SPECIFICATION
Cable bending radius	30 mm (static) · 60 mm (dynamic)
Operating temperature	−40 °C to +70 °C
Storage / transport temperature	−40 °C to +70 °C
Installation temperature	−10 °C to +50 °C

05 TESTING

Mechanical & environmental performance

S/N	ITEM	TEST METHOD	ACCEPTANCE
1	Tensile strength IEC 60794-1-21-E1	Short time 660 N · long time 300 N 50 m · 1 min	Δ loss 0.2 dB/km @1550 nm No fibre break, no sheath damage
2	Crush test IEC 60794-1-21-E3	2,200 N · 1 min	Δ loss 0.2 dB/km @1550 nm No fibre break, no sheath damage
3	Impact resistance IEC 60794-1-2-E4	3 points · 1 impact each · 1 kg × 1 m	Δ loss 0.2 dB/km @1550 nm No fibre break, no sheath damage
4	Temperature cycling IEC 60794-1-2-F1	−10 → +60 °C · 8 h per step · 2 cycles	Δ loss 0.2 dB/km @1550 nm No fibre break, no sheath damage
5	Fire retardant IEC 60332-1-2	—	PASS

06 PACKING

Packing

DRUM	Each single length is wound on an iron stand-wooden composite or pure wooden drum.
STANDARD LENGTH	1,000 m per drum, ±2%.
PROTECTION	Covered by a plastic buffer sheet and sealed with strong wooden battens.
TEST ALLOWANCE	At least 3 m of the cable inner end is reserved for testing.

Other drum lengths and fibre counts on request.

ZUOYEAL

ZUOYEAL TECHNOLOGY

Connecting More, With Fiber

This datasheet describes the GJYXFCH-12B6a1 self-supporting drop cable at the time of publication. Dimensions and configurations may change without notice; confirm current values with ZUOYEAL before ordering.

12F · G.657A1 · LSZH

Connecting More, With Fiber