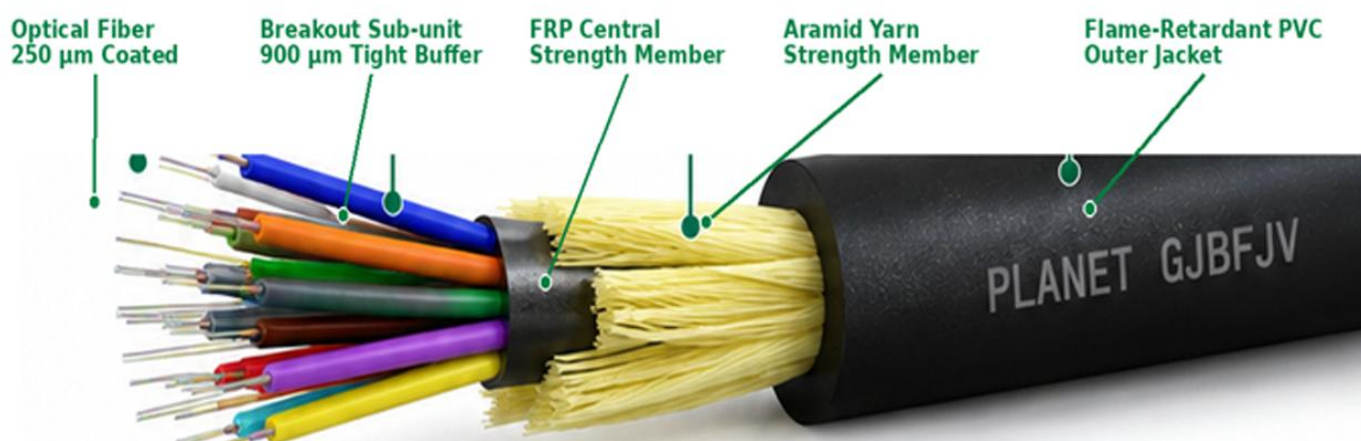


1. General Description

PLANET GJBFJV is an indoor breakout fiber optic cable designed for building backbone, riser, telecom-room and equipment interconnection applications. Each optical fiber is protected inside an individual breakout sub-unit with a 900 µm tight buffer and aramid yarn reinforcement. The sub-units are arranged around a non-metallic FRP central strength member and protected by a flame-retardant indoor sheath for robust handling, easy branch-out and direct termination.

OS2 G.652.D is the standard single-mode configuration. G.657.A1/A2 bend-insensitive single mode and OM3 / OM4 / OM5 50/125 µm multimode fibers are available as approved project options. Final fiber count, jacket material, color and certified flame classification shall be confirmed on the approved production datasheet.

OS2 / OM3 / OM4 / OM5 Fiber Options	BREAKOUT Individual Sub-units	ALL-DIELECTRIC FRP + Aramid	INDOOR PVC Std. / LSZH Opt.
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Cable Component	Function / Description
1. Outer Jacket	Flame-retardant PVC is the standard GJBFJV outer sheath. LSZH is available as an approved project option with separate flame/smoke evidence.
2. FRP Central Strength Member	Non-metallic FRP central member provides tensile reinforcement and maintains the all-dielectric cable construction.
3. Breakout Sub-unit	Each fiber is housed in an individual sub-unit with its own jacket and aramid yarn for mechanical protection, branch-out and direct termination.
4. Tight-Buffered Fiber	900 ± 50 µm tight buffer over 250 µm coated optical fiber. OS2 standard; OM3 / OM4 / OM5 available by project request.

2. Construction

Parameter	Specification
Fiber Type	OS2 G.652.D standard; G.657.A1 / G.657.A2, OM3, OM4 and OM5 available as approved project options.
Fiber Count	Typical 2F to 24F. Common counts: 2F, 4F, 6F, 8F, 12F and 24F; higher counts subject to approved design.
Breakout Sub-unit	Individual simplex sub-unit with tight-buffered fiber, aramid yarn and colored sub-unit jacket.
Tight Buffer	900 ± 50 µm, color-coded for identification and direct termination.
Sub-unit Strength Member	Aramid yarn surrounding the tight-buffered fiber inside each breakout sub-unit.
Central Strength Member	FRP (Fiber Reinforced Plastic), non-metallic / all-dielectric.
Outer Jacket	Flame-retardant indoor PVC standard. LSZH outer sheath available as approved project option using virgin compound.
Cable Identification	Sequential meter marking and PLANET GJBFJV / fiber count / fiber type / production information according to approved artwork.

3. Mechanical & Environmental Characteristics

Parameter	Minimum / Reference Requirement
Operating Temperature	-20°C to +70°C
Installation Temperature	-10°C to +50°C
Storage / Transport Temperature	-20°C to +70°C
Minimum Bend Radius - Installation	10 × cable O.D.
Minimum Bend Radius - Static	5 × cable O.D.
Tensile Strength	≥ 800 N short term / ≥ 300 N long term
Crush Resistance	≥ 1000 N/100 mm short term / ≥ 300 N/100 mm long term
Installation Environment	Indoor riser, tray, conduit, backbone and equipment-room routes; not intended for direct burial or exposed outdoor installation.

4. Optical Characteristics - OS2 / OM3 / OM4 / OM5

Parameter	OS2 (G.652.D)	OM3 (50/125)	OM4 (50/125)	OM5 (50/125)
Wavelength (nm)	1310 / 1550	850 / 1300	850 / 1300	850 / 1300 / 953
Attenuation @ 1310 nm	≤ 0.35 dB/km	—	—	—
Attenuation @ 1550 nm	≤ 0.21 dB/km	—	—	—
Attenuation @ 850 nm	—	≤ 3.0 dB/km	≤ 3.0 dB/km	≤ 3.0 dB/km
Attenuation @ 1300 nm	—	≤ 1.0 dB/km	≤ 1.0 dB/km	≤ 1.0 dB/km
EMB @ 850 nm	—	≥ 2000 MHz·km	≥ 4700 MHz·km	≥ 4700 MHz·km
EMB @ 953 nm	—	—	—	≥ 2470 MHz·km
Fiber Standard	ITU-T G.652.D / IEC 60793-2-50	IEC 60793-2-10 A1a.2	IEC 60793-2-10 A1a.3	IEC 60793-2-10 A1a.4

Fiber Count	Structure	Typical O.D. (mm)	Typical Application
4F	Breakout sub-units around FRP	Approx. 7.2	Indoor links / equipment interconnection
6F	Breakout sub-units around FRP	Approx. 9.0	Building distribution / backbone
8F	Breakout sub-units around FRP	Approx. 10.0	LAN / data-center distribution
12F	Breakout sub-units around FRP	Approx. 12.5	Riser / backbone / higher-density indoor routes

5. Applications

- Indoor building backbone and vertical/riser cabling
- Data centers, enterprise LAN and campus networks
- Equipment-room and optical distribution-frame interconnection
- Fiber-to-the-desk and protected horizontal distribution
- Multi-fiber patch-cord / pigtail breakout applications
- Commercial, educational and industrial indoor communication networks

6. Standards & Compliance

Standard / Requirement	Status / Reference
IEC 60794-2 Series	Reference family for indoor optical fiber cable construction and applicable mechanical/environmental tests.
IEC 60793-2-50	Optical fiber specification reference for OS2 single mode.
ITU-T G.652.D	Standard OS2 single-mode fiber configuration.
IEC 60793-2-10	OM3 / OM4 / OM5 multimode fiber specification when supplied.
IEC 60332-1-2	Single-cable flame propagation for the qualified flame-retardant PVC / LSZH construction.
IEC 60754-1/2 + IEC 61034-2	Applicable only when an LSZH version is ordered and supported by valid test evidence.
RoHS / REACH	Compliant / available subject to applicable production declarations.
CPR / EN 50575	Optional project-specific classification and Declaration of Performance for the exact approved construction.

7. Quality & Verification

Controlled production with approved materials, in-process/final inspection, lot traceability and documentation available upon consultant request. No design or material change is permitted without prior written PLANET approval.

8. Available Project Options

- G.657.A1 / G.657.A2 bend-insensitive single mode
- OM3 / OM4 / OM5 50/125 µm multimode options
- LSZH outer sheath option with valid flame/smoke test evidence
- Custom fiber count, sub-unit color sequence and breakout arrangement
- Custom jacket color, printing and sequential meter marking
- Project-specific CPR / flame classification subject to certified construction

9. Product Identification Principle

Approved identification shall state fiber type, fiber count, breakout construction, strength members and jacket material.

PLANET GJBFJV
Part Number: PL-GJBFJV
Indoor Breakout Cable | Individual Sub-units | 900 µm Tight Buffer | Aramid Yarn | FRP Central Strength Member | PVC Standard / LSZH Option

25-Year System Warranty

Subject to proper installation and certified components usage.

Part Number	Description
PL- GJBFJV-xxS2	Indoor Fiber Optic Cable Single Mode OS2
PL- GJBFJV-xxM3	Indoor Fiber Optic Cable Multi Mode OM3
PL- GJBFJV-xxM4	Indoor Fiber Optic Cable Multi Mode OM4
PL- GJBFJV-xxM5	Indoor Fiber Optic Cable Multi Mode OM5

XX: Number of Core