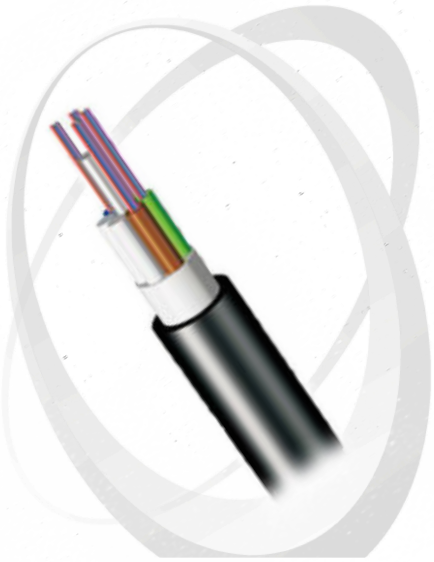
Air-Blown Micro Cable – 200 µm Fiber Loose Tube, All-Dielectric, Single Jacket

FEATURES

Wasin Fujikura® micro cables are designed for high quality air-blown installation. They can help to lower deployment costs while increasing capacity and fiber density in limited spaces.

Air-blown micro cable 200 µm fiber “Mini Micro” provides even greater capacity of fiber density and cost saving opportunities. Highly compact cable with greater fiber count per buffer tube.

The compact 24 single mode fibers are set in a buffer tube with PBT sheathing that provides excellent dimensional and thermal stability. The cable is supported by a central strength member with water blocking yarn through the interstices of the cable core around the buffer tubes. The cable is completed with an outer layer of MDPE sheathing. Optical fiber drawn from Fujikura preform

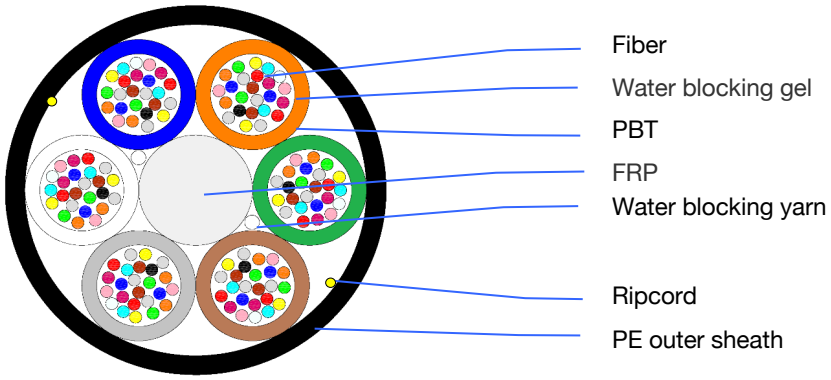


Cable Design	
Preform glass	Fujikura
Central Strength member	FRP+PE*
Fiber Type	G.652D
Loose Tube	PBTP
Water Blocking, Interstices	Yarn
Water blocking, Cable	Water-swellable tape
Water Blocking, Buffer Tube	Gel
Binder & Wrapping	Polyester yarn
Outer Sheath	Polyethylene

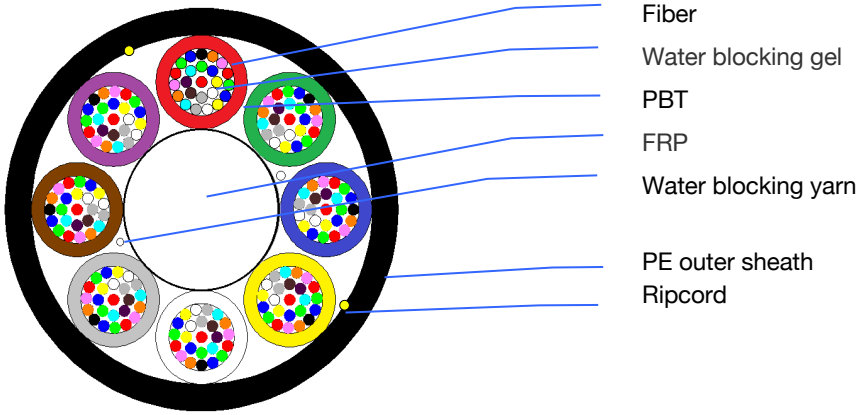
Fiber Count	Fibers/ No. of Tubes	Nominal Overall Diameter		Nominal Weight	
		Inches	mm	Lbs./1000ft	Kg/km
96	24/4	0.25	6.4	24	36
144	24/6	0.25	6.4	24	36
192	24/8	0.29	7.4	37	55
216	24/9	0.31	7.9	57	85
288	24/12	0.37	9.4	59	88
432	24/18	0.52	13.2	62	93
576	24/24	0.58	14.7	87	130

**Note: The minimum thickness of the sheath is 0.5mm*
**Note: Nominal Overall Diameter (O.D.) ± 0.3mm*

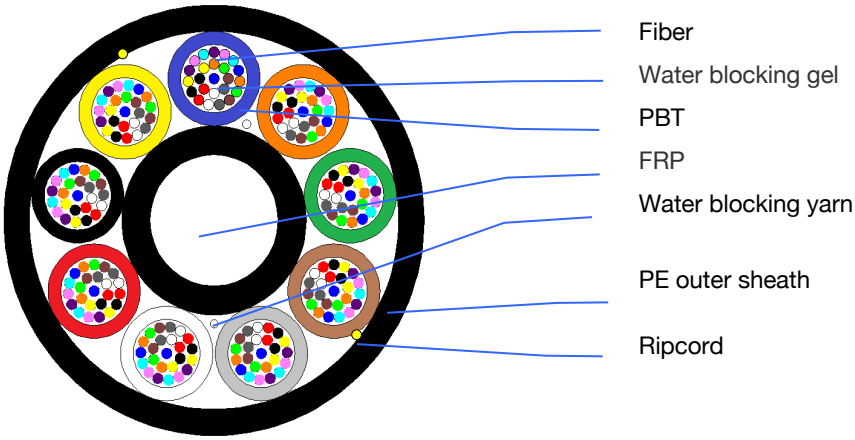
CROSS SECTION



Product No. GCYFTY-144B3- 200μm



Product No. GCYFTY-192B3-200μm



Product No. GCYFTY-216B3-200μm

FIBER CHARACTERISTICS- G.652D

The single mode, fiber optic cable complies with the requirements of this specification and meet relevant ITU-T Recommendation G.652. All optical and geometrical parameters are checked to ensure that they meet or exceed industry specifications:

GEOMETRIC CHARACTERISTICS

Geometric Characteristics		Construction
Mode field diameter	1310nm	9.2±0.4μm
Cladding diameter		125±1.0μm
Core concentricity error		≤0.7μm
Cladding non-circularity		≤1.0%
Cut-off wavelength (λcc) (for cable)		≤1260nm
Cut-off wavelength (λcc) (for fiber)		1180nm –1330nm
Primary coating diameter	(Color layer not included)	200±10μm
	(Color layer included)	205±15μm
Coating-cladding concentricity error		≤12.5μm
Fiber curl radius		≥4m

TRANSMISSION CHARACTERISTICS

Transmission Characteristics		Performance
Attenuation	1310nm	≤0.36dB/km
	1550nm	≤0.25dB/km
Macro bending loss	Φ=60mm, 100 turns at 1550nm	≤0.1dB
Chromatic dispersion	Within 1288~1339nm	≤3.5ps/nm·km
	1550nm	≤18ps/nm·km
Zero dispersion wavelength		1300~1324nm
Zero dispersion slope		≤0.092ps/nm2·km

PERFORMANCE

Performance	Test Method	Specification
Tension Performance IEC749-1-21-E1 (EIA-455-33)	- Load: 600N (135lbf) - Time: 5 minutes	- Loss change ≤ 0.05 dB @1550nm (after test) - Fiber strain: ≤0.60% - No sheath damage
Crush Test IEC749-1-21-E3 (EIA-455-41)	- Load: 1000N / 100mm - Time: 1 minute - Length: 100 mm	- No fiber degradation - No sheath damage
Impact Test IEC749-1-21-E4	- Impact height: 1m - Impact weight: 300g - Points of impacts: 3 - Impacts per point: 1	- No fiber degradation - No sheath damage
Repeated Bending IEC794-1-21-E6 (EIA/TIA-455-104)	- Bending Radius: 20 X D - Load 5kg (11lbs.) - Flexing rate: 2 sec/cycle - No. of cycle: 35	- No fiber degradation - No sheath damage
Water Penetration IEC794-1-E5B (EIA-455-82A)	- Height of water: 1m - Sample length: 3 m - Time: 24 hr.	- No water leakage
Twist / Torsion IEC794-1-21-E7 (EIA-455-81)	- Length: 1 m - Load: 100N - Twist rate: ≤6 sec/cycle - Twist angle: ±180° - No. of cycle: 10	- No fiber degradation - No sheath damage
Temperature Cycling IEC60794-1-22-F1 (EIA/TIA-455-3)	- Temperature step: (+68°F → -40°F→ +158°F →+68°F) - Number of cycle: 2 turns - Time per each step: 12 hrs.	- Loss Change ≤ 0.05 dB@1550nm (90%) - Loss Change ≤ 0.15 dB@1550nm (10%) - No sheath damage

**D: Cable Diameter*

COLOR CODE

Fiber Color Code

Position	1	2	3	4	5	6	7	8	9	10	11	12
Fiber Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua
Position	13	14	15	16	17	18	19	20	21	22	23	24
Fiber Color	Blue with black ring	Orange with black ring	Green with black ring	Brown with black ring	Slate with black ring	White with black ring	Red with black ring	Natural with black ring	Yellow with black ring	Violet with black ring	Pink with black ring	Aqua with black ring

Loose Tube Color Code

Position	1	2	3	4	5	6	7	8	9	10	11	12
Loose Tube Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua

*Compliant with TIA/EIA-598, “Optical Fiber Cable Color Coding.”

SHEATH MARKING

CABLE & LENGTH MARKING

The sheath shall be marked with white characters at intervals of one meter with following information. Other marking is also available if requested by customer.

1) Name of the manufacturer: "NWF"
2) Year of manufacture: "2021"
3) Name of customer and contact detail
4) Fiber type and counts: "GCYFTY-144B3-200um"
5) Length marking in one-meter (or one foot) intervals: "××××m or "××××f