

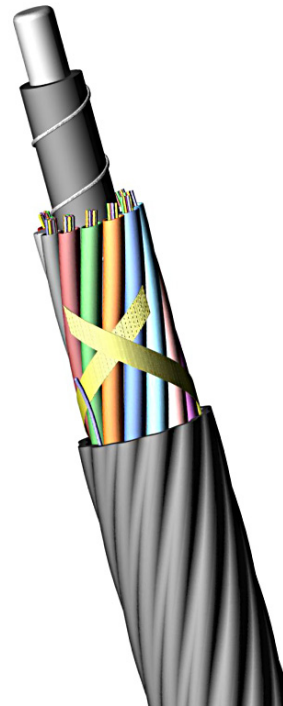
Stranded Micro Cable (24 ~ 144 cores)

Features:

- Optimum cable structure, high fiber density.
- Accurate fiber length balance, ensure stable performance.
- No gel in cable core for water blocking, low carbon and environmental.
- Structure Innovation in sheath, enhancing the blowing performance.

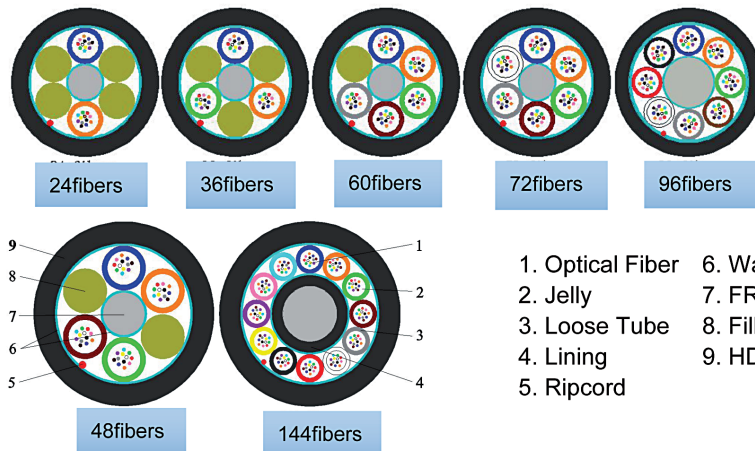
Standards:

- Unless otherwise specified in this specification, all requirements shall be mainly in accordance with the following standard specifications.
 - Optical fiber
ITU-T G.652D
IEC 60794-2-50
 - Optical cable
IEC 60794-5
IEC 60794-1-2



Stranded Micro Cable (24 ~ 144 cores)

Cable structure:



A Technical Index

Cable Type			Layer Cable							
Fiber Count			24	36	48	60	72	96	144 (A)	144 (B)
Number of loose tube			2	3	4	5	6	8	12	6
Number of filled string			4	3	2	1	0	0	0	0
Number of fiber/tube 12 24			12							24
Water blocking method	FRP or PE Lining		Water Blocking yarn							
	Cable Core		Water Blocking Kevlar							
Thickness of HDPE sheath			Nominal: 0.50mm, Average: 0.45mm, Minimum: 0.40mm							
Overall Diameter			5.6±0.2 mm				6.4±0.2 mm	8.2±0.2 mm	8.0±0.2mm	
Weight			27 kg/km				40 kg/km	65 kg/km	55kg/km	
Max. Tensile Strength			500N				1000N	1200N	1000N	
Max. Crushing Resistance			800N/100mm							
Min. Bending radius -Static			12 outer Φ							
Min. Bending radius -Dynamic			20 outer Φ							
Cable Fiber Attenuation (G.652D)			0.35dB/km max @1310nm 0.22dB/km max @1550nm							
Temperature range			Storage -40~+70°C; Installation -10~+40°C; Operation -40~+70°C							

B Testing Index

Blowing Tool	Typical blowing length		
FRAMCO (R)	Fiber Count	Duct type 8.0/10.0mm	Duct type 10.0/12.0mm
	24~72 Fibers	1800m	2300m
	96 Fibers	1800m	2300m
	144 (A) fibers	/	1200m
	144 (B) fibers	/	1500m

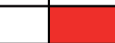
C Cable Parameters

Item	Testing Method	Testing Results		Specified Value
Tension performance	IEC 60794-1-2-E1	Optical fiber strain	Additional attenuation	Max. Tensile Strength = Short term Allowable tension ≈3× (Long term Allowable Tension)
		Short term: ≤0.3% Long term: ≤0.1%	Short term: Δa <0.1 dB, Δa reversible; Long term: Δa ≤0.03 dB	
Crush	IEC 60794-1-2-E3	Short termΔa <0.10 dB, Δa reversible; Long term: Δa≤0.03 dB; The outer sheath has no visible crack.		Short term crushing force =800 N Long term crushing force =400 N
Repeated bending	IEC 60794-1-2-E6	After test, Δa ≤0.03 dB; The outer sheath has no visible crack		R=20 outer Φ
				24~72:Bending load =50N
				96 ~ 144: Bending load =100N
				Bending times =30
Torsion	IEC 60794-1-2-E7	After test, Δa ≤0.03 dB; The outer sheath has no visible crack.		Torsion angle=±180°
				24~72: Torsion load =50N
				96~144: Torsion load =100N
				Torsion times =10
Cable bend	IEC 60794-1-2-E11A	After test, The optical fiber can't be broken; The outer sheath has no visible crack.		R=20 outer Φ 10Turns Cycles times =5
All optical testing proceeded at 1550 nm				

D Environment performance:

ITEMS	TESTING METHOD	TESTING RESULTS		
Temperature cycling	IEC 60794-1-2-F1	Allowable additional attenuation (1550nm)		
		G.652B	G.652D	G.655
		$\Delta a \leq 0.10$ dB/km, Δa reversible;		
Water penetration	Water column: 1m, 1m cable, Period: 24 hours	No water leak through the open end of cable		
Filling compound flow	70°C Period: 24 hours	No compound flow from the cable		

E Other Index
Fiber Colors:

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

<Colors> with black ring marks in 100mm intervals

NO.	13	14	15	16	17	18	19	20	21	22	23	24
Color	Blue	Orange	Green	Brown	Grey	White	Red	natural	Yellow	Violet	Pink	Aqua
												

Loose Tube Colors

(Loose tube colors can be determined by the requirement of customer)

- 24~72 Fibers: 1~6 colors,
- 96 Fibers: 1~8 colors,
- 144 (A) Fibers: 1~12 colors,
- 144 (B) Fibers: 1~6 colors.

Filled String Colors:

All filler string are uncolored (natural).

Cable core:

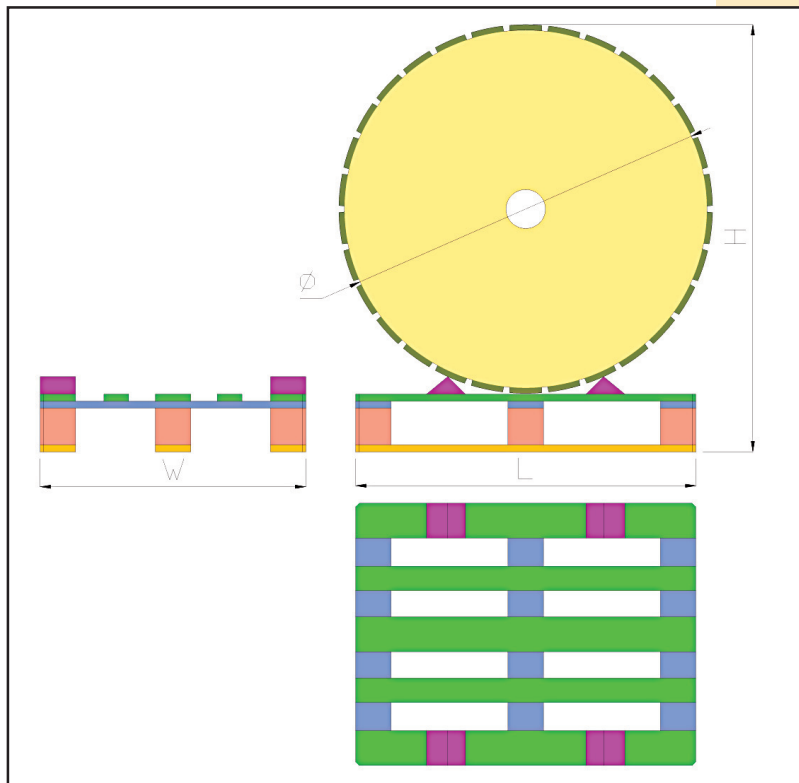
SZ stranding.

F Delivery Lengths:

Fiber Count	Drum Length	Drum Size	Packing Size H×L×W (mm)
24~72 Fibers	2000	Φ620×450	660×450×825
	4000	Φ710×570	915×750×570
	6000	Φ800×570	1005×840×570
	8000	Φ840×730	1045×880×730
96 Fibers	2000	Φ620×570	660×570×825
	4000	Φ800×570	1005×840×570
	6000	Φ840×730	1045×880×730
	8000	Φ940×730	1145×980×730
144 Fibers	2000	Φ800×570	840×570×1005
	4000	Φ940×730	1125×980×730
	6000	Φ1050×730	1265×1100×730

E Packing

Wooden or plywood drums with protection.



LanPro is continuously improving its products and reserves the right to change specifications and availability without prior notice.