ZION Communication

HELLOSIGNAL®

FIBER OPTICAL CABLE CATALOG

High Quality is Our Obligation

CATALOGUE

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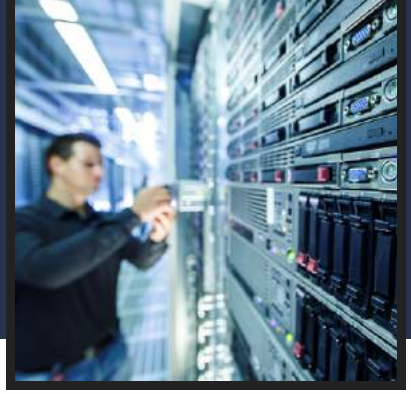

GIMM(50 ; 62.5μm) Fiber

Optical Characteristics

		50μm		62.5μm		
		Class A	Class B	Class A	Class B	
Attenuation	@850 nm	≤2.3	≤2.5	≤2.7	≤3.0	dB/km
	@1300 nm	≤0.6	≤0.7	≤0.6	≤0.8	dB/km
Bandwidth	@850 nm	≥500	≥500	≥200	≥160	MHz.km
	@1300 nm	≥1000	≥500	≥600	≥500	MHz.km
Zero dispersion wavelength		1295~1320		1320~1365		nm
Zero dispersion slope	1295~1300nm	≤0.001 (λo-1190)				ps/(nm²·km)
	1300~1320nm	≤0.11		≤0.097		ps/(nm²·km)
Numerical Aperture		0.2±0.015		0.275±0.015		NA
Numerical Aperture	@850 nm	1.482		1.496		
	@1300 nm	1.477		1.491		

Backscatter Characterisrics

Step(Mean of bidirectional measurement)	≤0.1		dB
Irregularities over fiber length and point discontinuity	≤0.1		dB
Diffrence backscatter coefficient (Bidirectional measurement)	≤0.08	≤0.1	dB

Geometrical Characteristics

Core diameter	50±2.5	62.5±2.5	μm
Cladding diameter	124.8±1.0		μm
Cladding non-circularity	≤1.0		%
Coating diameter	245±7		μm
Coating-cladding concentricity error	≤12.0		μm
Coating non-circularity	≤6.0		%
Core-cladding concentricity error	≤1.5		μm

Environmental Characteristics

@1310 nm @1550 nm @1625 nm

Temperature dependence Induced attenuation at	-60℃ to +85℃	≤0.1	dB/km
Temperature-humidity cycling Induced attenuation at	-10℃ to +85℃ , 98% RH	≤0.1	dB/km
Watersoak dependence Induced attenuation at	23℃, 30 days	≤0.1	dB/km
Damp heat dependence Induced attenuation at	85℃ & 85% RH ,30days	≤0.1	dB/km

Mechanical Specification

Proof test	off line	≥9.0N
		≥1.0%
		≥100kpsi

Macro-bend induced attenuation

100 turns around a mandrel of 60mm diameter	@850 nm	≤0.05dB
	@1300nm	≤0.05dB
Coating strip force	typical average force	1.5N
Dynamic stress corrosion susceptibility parameter	≥20	

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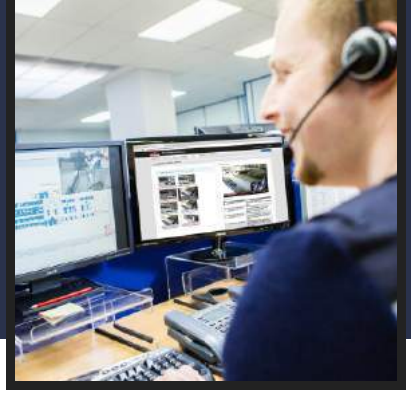

G655 Fiber

Optical Characteristics

Attenuation	@1550 nm	≤0.22dB/km
	@1625 nm	≤0.24dB/km
Attenuation vs. Wavelength Max. α difference	@1525～1575 nm	≤0.02dB/km
Dispersion coefficient	@1530～1565 nm	2.0~6.0ps/(nm²·km)
	@1565～1625 nm	4.5~11.2ps/(nm²·km)
Zero dispersion wavelength	⩽1520nm	
Zero dispersion slope	⩽0.084ps/(nm²·km)	
Zero dispersion slope *(Typical)*	⩽0.086ps/(nm²·km)	

PMD (Polarization Mode Disperson)

Maximum Individual Fibre		≤0.2ps/$\sqrt{km}$
Link Design Value (M=20,Q=0.01%)		≤0.08ps/$\sqrt{km}$
Typical value		0.04ps/$\sqrt{km}$
Cable cutoff wavelengthλcc		≤1450nm
Mode field diameter (MFD)	@1550 nm	9.6±0.5μm
Group index of refraction (Typical)	@1550 nm	1.469
Point discontinuities	@1550 nm	≤0.05dB

Geometrical Characteristics

Cladding diameter	124.8±0.7μm
Cladding non-circularity	≤1.0%
Coating diameter	245±7μm
Coating-cladding concentricity error	≤12.0μm
Coating non-circularity	≤6.0%
Core-cladding concentricity error	≤0.6μm
Curl (radius)	≥4m

Environmental Characteristics

	@1310 nm @1550 nm @1625 nm
Temperature dependence Induced attenuation at	-60℃ to +85℃ ≤0.05dBdB/km
Temperature-humidity cycling Induced attenuation at	-10℃ to +85℃ , 98% RH ≤0.05dBdB/km
Watersoak dependence Induced attenuation at	23℃, 30 days ≤0.05dBdB/km
Damp heat dependence Induced attenuation at	85℃ & 85% RH ,30days ≤0.05dBdB/km
Dry heat aging at	85℃ ≤0.05dBdB/km

Mechanical Specification

Proof test	off line	≥9.0N
		≥1.0%
		≥100kpsi

Macro-bend induced attenuation

1 turn around a mandrel of 32mm diameter	@1550nm	≤0.05dB
100 turn around a mandrel of 50 mm diameter		≤0.05dB
Coating strip force	typical average force	1.5N
Dynamic stress corrosion susceptibility parameter	≥27	

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G652D Fiber

Optical Characteristics

Attenuation	@1310 nm	≤0.35dB/km
	@1383 nm (after H2-aging)	≤0.35dB/km
	@1550 nm	≤0.22dB/km
	@1625 nm	≤0.24dB/km
Attenuation vs. Wavelength Max. α difference	@1285～1330 nm	≤0.03dB/km
	@1525～1575 nm	≤0.02dB/km
Dispersion coefficient	@1285～1340 nm	-3.0~3.0ps/(nm²·km)
	@1550 nm	≤18ps/(nm²·km)
	@1625 nm	≤22ps/(nm²·km)
Zero dispersion wavelength		1302～1322 nm
Zero dispersion slope		≤0.090ps/(nm²·km)
Zero dispersion slope *(Typical)*		≤0.086ps/(nm²·km)

PMD (Polarization Mode Disperson)

Maximum Individual Fibre		≤0.2ps/$\sqrt{km}$
Link Design Value (M=20,Q=0.01%)		≤0.1ps/$\sqrt{km}$
Typical value		0.01ps/$\sqrt{km}$
Cable cutoff wavelengthλcc		≤1260nm
Mode field diameter (MFD)	@1310 nm	9.2±0.4μm
	@1550 nm	10.4±0.5μm
Group index of refraction (Typical)	@1310 nm	1.466
	@1550 nm	1.467
Point discontinuities	@1310 nm	≤0.05dB
	@1550 nm	≤0.05dB

Geometrical Characteristics

Cladding diameter	125.0±1.0μm
Cladding non-circularity	≤0.7%
Coating diameter	245±5μm
Coating-cladding concentricity error	≤12.0μm
Coating non-circularity	≤6.0%
Core-cladding concentricity error	≤0.5μm
Curl (radius)	≥4m
Delivery length	2.1 to50.4km/reel

Environmental Characteristics

	@1310 nm @1550 nm @1625 nm	
Temperature dependence Induced attenuation at	-60℃ to +85℃	≤0.05dBdB/km
Temperature-humidity cycling Induced attenuation at	-10℃ to +85℃ , 98% RH	≤0.05dBdB/km
Watersoak dependence Induced attenuation at	23℃, 30 days	≤0.05dBdB/km
Damp heat dependence Induced attenuation at	85℃ & 85% RH ,30days	≤0.05dBdB/km
Dry heat aging at	85℃	≤0.05dBdB/km

Mechanical Specification

Proof test	off line	≥9.0N
		≥1.0%
		≥100kpsi

Mechanical Specification

1 turn around a mandrel of 32mm diameter	@1310 nm @1550 nm	≤0.05dB
100 turns around a mandrel of 50 mm diameter		≤0.05dB
100 turn around a mandrel of 60 mm diameter		≤0.05dB
Coating strip force	typical average force	1.7N
	peak force	≥1.3 ≤8.9N
Dynamic stress corrosion susceptibility parameter		≥20

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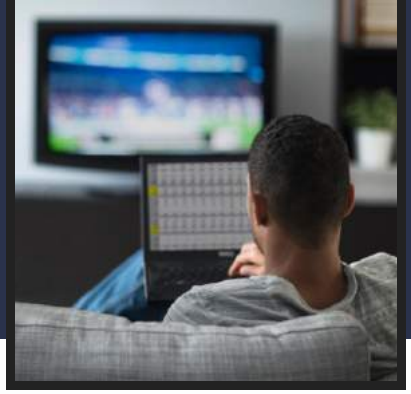

G657A2 Fiber

Optical Characteristics

Attenuation	@1310 nm	≤0.35dB/km
	@1383 nm (after H2-aging)	≤0.35dB/km
	@1460 nm	≤0.25dB/km
	@1550 nm	≤0.21dB/km
	@1625 nm	≤0.23dB/km
Attenuation vs. Wavelength	@1285～1330 nm	≤0.03dB/km
Max. α difference	@1525～1575 nm	≤0.02dB/km
Zero dispersion wavelength		1300～1324 nm
Zero dispersion slope		≤0.092ps/(nm²·km)

PMD (Polarization Mode Disperson)

Maximum Individual Fibre		≤0.2ps/$\sqrt{km}$
Link Design Value (M=20,Q=0.01%)		≤0.1ps/$\sqrt{km}$
Typical value		0.04ps/$\sqrt{km}$
Cable cutoff wavelengthλcc		≤1260nm
Mode field diameter (MFD)	@1310 nm	8.4～9.2μm
	@1550 nm	9.3～10.3μm
Group index of refraction (Typical)	@1310 nm	1.466
	@1550 nm	1.467
Point discontinuities	@1310 nm	≤0.05dB
	@1550 nm	≤0.05dB

Geometrical Characteristics

Cladding diameter	125.0±1.0μm
Cladding non-circularity	≤0.7%
Coating diameter	245±5μm
Coating-cladding concentricity error	≤12.0μm
Coating non-circularity	≤6.0%
Core-cladding concentricity error	≤0.5μm
Curl (radius)	≥4m
Delivery length	2.1 to50.4km/reel

Environmental Characteristics

		@1310 nm @1550 nm @1625 nm
Temperature dependence Induced attenuation at	-60℃ to +85℃	≤0.05dBdB/km
Temperature-humidity cycling Induced attenuation at	-10℃ to +85℃ , 98% RH	≤0.05dBdB/km
Watersoak dependence Induced attenuation at	23℃, 30 days	≤0.05dBdB/km
Damp heat dependence Induced attenuation at	85℃ & 85% RH ,30days	≤0.05dBdB/km
Dry heat aging at	85℃	≤0.05dBdB/km

Mechanical Specification

Proof test	off line	≥9.0N
		≥1.0%
		≥100kpsi

Mechanical Specification

10 turns around a mandrel of 15mm diameter	@1550 nm	≤0.03dB
10 turns around a mandrel of 15 mm diameter	@1625 nm	≤0.1dB
1 turn around a mandrel of 10 mm diameter	@1550 nm	≤0.1dB
1 turn around a mandrel of 10 mm diameter	@1625 nm	≤0.2dB
1 turn around a mandrel of 7.5 mm diameter	@1550 nm	≤0.2dB
1 turn around a mandrel of 7.5 mm diameter	@1625 nm	≤0.5dB
Coating strip force	typical average force	1.7N
	peak force	≥1.3 ≤8.9N
Dynamic stress corrosion susceptibility parameter		≥27

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G657A1 Fiber

Optical Characteristics

Attenuation	@1310 nm	≤0.35dB/km
	@1383 nm (after H2-aging)	≤0.35dB/km
	@1460 nm	≤0.25dB/km
	@1550 nm	≤0.21dB/km
	@1625 nm	≤0.23dB/km
Attenuation vs. Wavelength	@1285～1330 nm	≤0.03dB/km
Max. α difference	@1525～1575 nm	≤0.02dB/km
Dispersion coefficient	@1285～1340 nm	-3.4~3.4ps/(nm²·km)
	@1550 nm	≤18ps/(nm²·km)
	@1625 nm	≤22ps/(nm²·km)
Zero dispersion wavelength		1300～1324 nm
Zero dispersion slope		≤0.092ps/(nm²·km)
Typical value		0.086ps/(nm²·km)

PMD (Polarization Mode Disperson)

Maximum Individual Fibre		≤0.21ps/$\sqrt{km}$
Link Design Value (M=20,Q=0.01%)		≤0.1ps/$\sqrt{km}$
Typical value		0.04ps/$\sqrt{km}$
Cable cutoff wavelengthλcc		≤1260nm
Mode field diameter (MFD)	@1310 nm	8.4～9.2μm
	@1550 nm	9.3～10.3μm
Group index of refraction (Typical)	@1310 nm	1.466
	@1550 nm	1.467
Point discontinuities	@1310 nm	≤0.05dB
	@1550 nm	≤0.05dB

Geometrical Characteristics

Cladding diameter	125.0±1.0μm
Cladding non-circularity	≤0.7%
Coating diameter	245±5μm
Coating-cladding concentricity error	≤12.0μm
Coating non-circularity	≤6.0%
Core-cladding concentricity error	≤0.5μm
Curl (radius)	≥4m
Delivery length	2.1 to50.4km/reel

Environmental Characteristics

		@1310 nm @1550 nm @1625 nm
Temperature dependence Induced attenuation at	-60℃ to +85℃	≤0.05dBdB/km
Temperature-humidity cycling Induced attenuation at	-10℃ to +85℃ , 98% RH	≤0.05dBdB/km
Watersoak dependence Induced attenuation at	23℃, 30 days	≤0.05dBdB/km
Damp heat dependence Induced attenuation at	85℃ & 85% RH ,30days	≤0.05dBdB/km
Dry heat aging at	85℃	≤0.05dBdB/km

Mechanical Specification

Proof test	off line	≥9.0N
		≥1.0%
		≥100kpsi

Mechanical Specification

10 turns around a mandrel of 30 mm diameter	@1550 nm	≤0.25dB
10 turns around a mandrel of 30 mm diameter	@1625 nm	≤1.0dB
1 turn around a mandrel of 20 mm diameter	@1550 nm	≤0.75dB
1 turn around a mandrel of 20 mm diameter	@1625 nm	≤1.5dB
Coating strip force	typical average force	1.7N
	peak force	≥1.3 ≤8.9N
Dynamic stress corrosion susceptibility parameter		≥20

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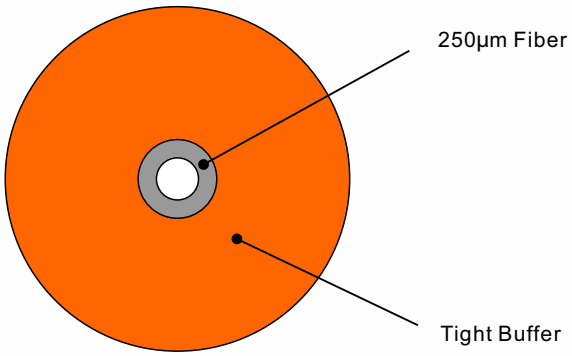
Tight Buffer Fiber Colour



Description

Tight buffer fiber is produced as that fiber is sheathed by buffer material. The selection of top-quality fiber, the specific production equipment and the accurately designed die make the performance of product.

Characteristics

- Good uniformity of the outer diameter of tight buffer fiber and excellent strippability.
- Good performance of flame-retardant.
- Low induced attenuation within the operating temperature range.
- Excellent geometrical dimension of the fiber.

Applications

- Indoor cable
- Making jumper, pigtail.
- Data communication

TGF Colour

Fiber Nuber	1	2	3	4	5	6	7	8	9	10	11	12
Colour	Blue	Orange	Green	Brown	Gray	Withe	Red	Black	Yellow	Violet	Pink	Aqua
Colour Code	BU	OG	GN	BN	GY	WH	RD	BK	YW	VT	PK	AA

Technical Parameters

Fiber Coating Diameter(μm)	TBF Diameter (μm)	TBF Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)	Bcoating Strip (N)
254±7	900±50	0.90	3/6	100/500	20D/10D	≤13.3

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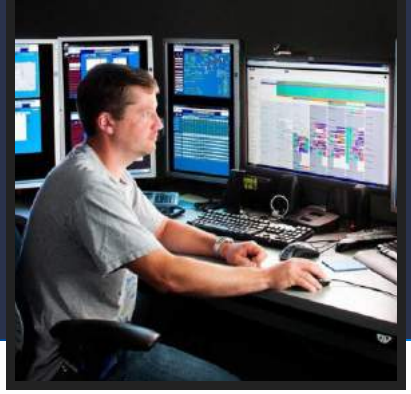
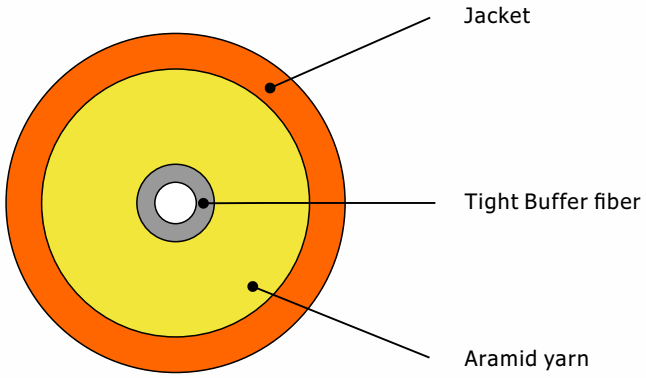


Simplex Cable GJFJV-1F



Description

GJFJV simplex cable use single Φ900μm or Φ600μm flame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a PVC or LSZH(Low smoke, Zero halogen, Flame-retardant)jacket.

Characteristics

- Tight buffer fiber ease of stripping .
- Tight buffer fiber have excellent flame-retardant performance.
- Aramid yarn as strength member make cable have excellent tensile strength.
- The jacket anti-corrosion, anti-water, anti-ultraviolet radiation, flame-retardant and harmless to environment etc.

Applications

- Option fiber jumper or pigtail.
- Indoor riser level and plenum level cable distribution.
- Interconnect between instruments, communication equipments.

Standards

Comply with standard YD/T 1258.2-2003、ICEA-596、GR-409、IEC 60794-2-10/11、etc; and meet the requirements of UL approval for OFNR and OFNP.

Technical Parameters

Cable Code	Cable Diameter (mm)	Cable Weight(kg/km)		TBF Diameter (μm)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
		PVC Jacket	LSZH Jacket				
GJFJV	1.80	3.50	4.50	900±50	60/100	100/500	50/30
GJFJV	2.80	6.00	7.50	900±50	60/100	100/500	50/30

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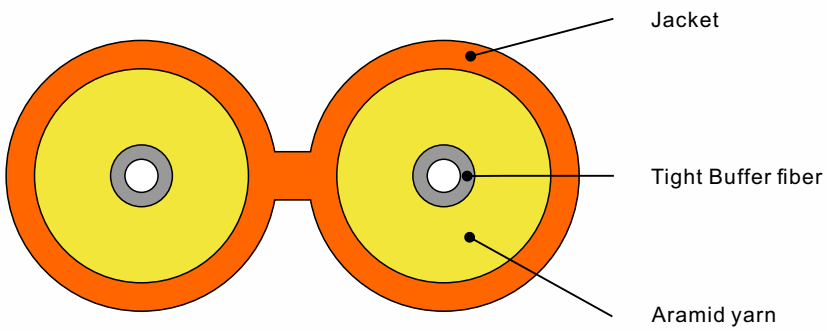
Duplex Cable GJFJV-2F



Description

GJFJV zipcord interconnect cable use Φ900μm or Φ600μm frame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a figure 8 PVC or LSZH(Low smoke, zero halogen, flame-retardant)jacket.

Characteristics

- Tight buffer fiber ease of stripping.
- Tight buffer fiber have excellent flame-retardant performance.
- Aramid yarn as strength member make cable have excellent tensile strength.
- Figure 8 structure jacket facilitate embranchment.
- The jacket anti-corrosion, anti-water, anti-ultraviolet radiation, flame-retardant and harmless to environment etc.
- All dielectric structure protect it from electromagnetic influence.
- Scientific design with serious processing art.

Applications

- Duplex optical fiber jumper or pigtail.
- Indoor riser level and plenum level cable distribution.
- Interconnect between instruments, communication equipment

Standards

Comply with standard YD/T 1258.2-2003、ICEA-596、GR-409、IEC 60794-2-10/11、etc; and meet the requirements of UL approval for OFNR and OFNP.

Technical Parameters

Cable Code	Cable Size (mm)	Cable Weight(kg/km)		TBF Diameter (μm)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
		PVC Jacket	LSZH Jacket				
GJFJV	(3.4±0.4)×(2.0±0.2)	8.00	8.70	900±50	100/200	100/200	50/30
GJFJV	(6.0±0.4)×(2.8±0.2)	11.60	14.80	900±50	100/200	100/200	50/30

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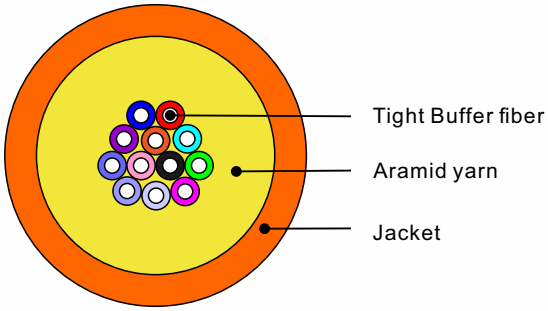
Distribution Cable GJFJV≤24F



Description

GJFJV multi-purpose distribution cable use several Φ900μm frame-retardant tight buffer fiber as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a PVC or LSZH(Low smoke, zero halogen, flame-retardant)jacket.

Characteristics

- Tight buffer fiber ease of stripping.
- Aramid yarn as strength member make cable have excellent tensile strength.
- The jacket anti-corrosion, anti-water, anti-ultraviolet radiation, flame-retardant and harmless to environment etc.

Applications

- Multi optical fiber jumper.
- Indoor any purpose cable distribution.

Standards

Comply with standard YD/T 1258.2-2005、ICEA-596、GR-409、IEC 60794-2-20/21、etc;
nd meet the requirements of UL approval OFNP.

Technical Parameters

Cable Code	Fiber Count	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)	Jacket Material
GJFJV	2	4.1±0.25	12.4	200/660	300/1000	20D/10D	PVC
GJFJV	4	4.8±0.25	16.2	200/660	300/1000	20D/10D	PVC
GJFJV	6	5.1±0.25	20	200/660	300/1000	20D/10D	PVC
GJFJV	8	5.6±0.25	26	200/660	300/1000	20D/10D	PVC
GJFJV	10	5.8±0.25	28	200/660	300/1000	20D/10D	PVC
GJFJV	12	6.2±0.25	31.5	200/660	300/1000	20D/10D	PVC
GJFJV	24	8.0±0.25	42.5	200/660	300/1000	20D/10D	PVC
GJFJV	2	3.2±0.25	10	200/660	300/1000	20D/10D	LSZH
GJFJV	4	4.8±0.25	18	200/660	300/1000	20D/10D	LSZH
GJFJV	6	5.1±0.25	22.5	200/660	300/1000	20D/10D	LSZH
GJFJV	8	5.6±0.25	28	200/660	300/1000	20D/10D	LSZH
GJFJV	10	5.8±0.25	32.5	200/660	300/1000	20D/10D	LSZH
GJFJV	12	6.2±0.25	38	200/660	300/1000	20D/10D	LSZH
GJFJV	24	8.0±0.25	58.5	200/660	300/1000	20D/10D	LSZH

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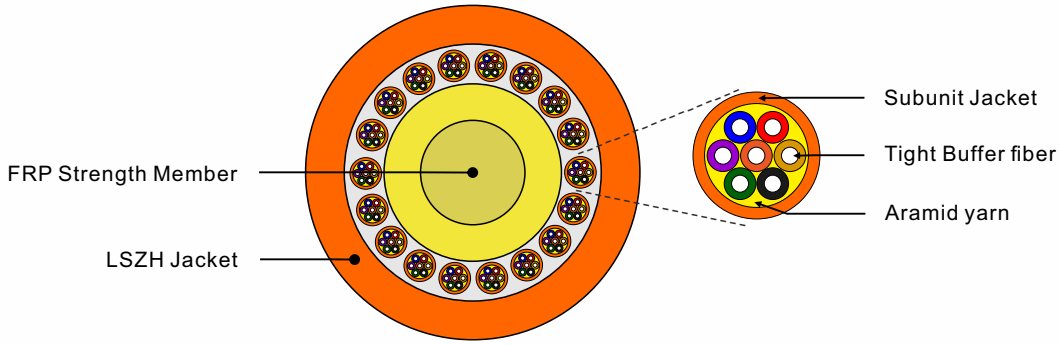
Mulit Purpose Description Cable MPC≥24F



Description

MPC multi-purpose distribution cable use 6-fiber subunits(Φ900μm tight buffer fiber, aramid yarn as strength member). A fiber reinforced plastic(FRP) locates in the center of core as a non-metallice strength member. The subunits are stranded around the cable core. The cable completed with a LSZH(Low smoke, zero halogen, flame-retardant)jacket.

Characteristics

- Stranded non-metallic strength member structure ensure the cable endure large tensile strength.
- Compact structure with high fiber capacity and density.
- The jacket anti-corrosion, anti-water, anti-ultraviolet radiation, flame-retardant and harmless to environment etc.
- All dielectric structure protect it form electromagnetic influence. Scientific design with serious processing art.

Applications

- Indoor any purpose cable distribution.
- Backbone distribution cable in a building.

Standards

Comply with standard YD/T 1258.2-2005、ICEA-596、GR-409、IEC 60794-2-20/21、IEC332-1 and IEC332-3C.

Technical Parameters

Cable Code	Fiber Count	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
MPC	24	10.4±0.5	96	400/1320	300/1000	20D/10D
MPC	30	12.4±0.5	149	400/1320	300/1000	20D/10D
MPC	36	13.5±0.5	185	400/1320	300/1000	20D/10D
MPC	48	15.7±0.5	265	400/1320	300/1000	20D/10D
MPC	60	18.0±0.5	350	400/1320	300/1000	20D/10D
MPC	72	20.5±0.5	440	400/1320	300/1000	20D/10D
MPC	96	20.5±0.5	448	400/1320	300/1000	20D/10D
MPC	108	20.5±0.5	448	400/1320	300/1000	20D/10D

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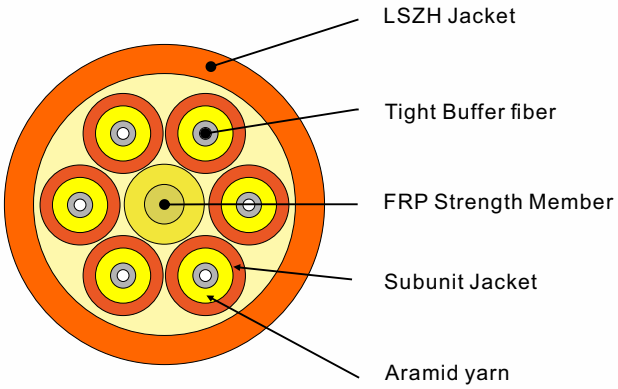
Break-out Cable GJBFJV



Description

GJBFV mulit-purpose break-out cable use simplex cable(Φ900μm tight buffer fiber, aramid yarn as strength member) as subunit. A fiber reinforced plastic(FRP) locates in the center of core as a non-metallice strength member. The subunits are stranded around the cable core. The cable completed with a PVC or LSZH(Low smoke, zero halogen, flame-retardant)jacket.

Characteristics

- Stranded non-metallic strength member structure ensure the cable endure large tensile strength.
- The jacket anti-corrosion, anti-water, anti-ultraviolet radiation,flame-retardant and harmless to environment etc.

Applications

- Indoor any purpose cable distribution.

Standards

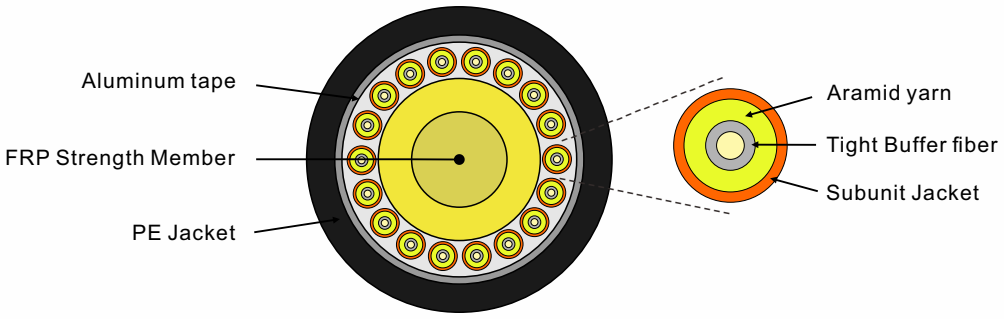
Comply with standard YD/T 1258.2-2005、ICEA-596、GR-409、IEC 60794-2-20/21、etc; and meet the requirements of UL approval for OFNP.

Technical Parameters

Cable Code	Fiber Count	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)	Jacket Material
GJBFJV	2	7.2±0.5	38	200/660	300/1000	20D/10D	PVC
GJBFJV	4	7.2±0.5	45.5	200/660	300/1000	20D/10D	PVC
GJBFJV	6	8.3±0.5	63	200/660	300/1000	20D/10D	PVC
GJBFJV	8	9.4±0.5	84	200/660	300/1000	20D/10D	PVC
GJBFJV	10	12.2±0.5	125	200/660	300/1000	20D/10D	PVC
GJBFJV	12	12.2±0.5	148	200/660	300/1000	20D/10D	PVC
GJBFJV	18	12.2±0.5	153	400/1320	300/1000	20D/10D	PVC
GJBFJV	2	7.2±0.5	45	200/660	300/1000	20D/10D	LSZH
GJBFJV	4	7.2±0.5	54	200/660	300/1000	20D/10D	LSZH
GJBFJV	6	8.3±0.5	75	200/660	300/1000	20D/10D	LSZH
GJBFJV	8	9.4±0.5	100	200/660	300/1000	20D/10D	LSZH
GJBFJV	10	12.2±0.5	145	200/660	300/1000	20D/10D	LSZH
GJBFJV	12	12.2±0.5	170	200/660	300/1000	20D/10D	LSZH
GJBFJV	18	12.2±0.5	176	400/1320	300/1000	20D/10D	LSZH

ZION Communication
Signal to the world

Waterproof Cable GJA



Description

GJA waterproof pigtail cable use simple cable(Φ900μm tight buffer fiber, aramid yarn as strength member) as subunit A fiber reinforced plastic(FRP) locates in the center of core as a non-metallice strength member. The subunits are stranded around the cable core. An aluminum polyethylene laminate is applied around the cable core. The cable is completed with a PE jacket.

Characteristics

- Stranded non-metallic strength member structure ensure the cable endure large tensile strength.
- The jacket anti-corrosion, anti-water, anti-ultraviolet radiation etc.
- APL moisture barrier.
- Scientific design with serious processing art.

Applications

- Indoor any purpose cable distribution.
- Interconnect from outdoor to indoor for optical cable distribution equipment.

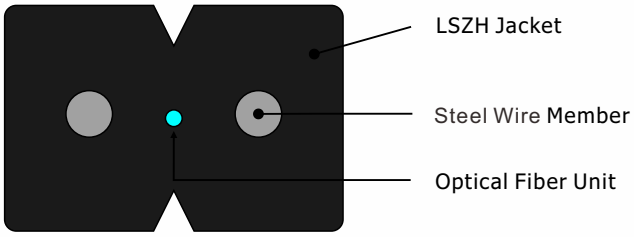
Standards

Comply with standard YD/T 1258.2-2005、ICEA-596、GR-409、IEC 60794, etc.

Technical Parameters

Fiber Count	TBF Diameter (μm)	TBF Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
2	8.9±0.5	58.1	220/660	300/1000	20D/10D
4	8.9±0.5	58.3	220/660	300/1000	20D/10D
6	9.8±0.5	73	220/660	300/1000	20D/10D
8	10.6±0.5	95.7	220/660	300/1000	20D/10D
12	13.4±0.5	155.2	220/660	300/1000	20D/10D

Bow-type Drop Cable GJXH



Description

The optical fiber unit is positioned in the center. Two parallel Fiber Reinforced(steel wire) are placed at the two sides. Then, the cable is completed with a black or color LSZH sheath.

Characteristics

- Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property.
- Two parallel steel wire strength members ensure good performance of crush resistance to protect the fiber.
- Simple structure, light weight and high practicability.
- Novel flute design. Easily strip and splice, simplify the installation and maintenance.
- Low smoke, zero halogen and flame retardant sheath.

Technical Parameters

Cable Code	Fiber Count	Cable Size (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GJXH	1	(2.0±0.1)×(3.0±0.1)	10	100/200	1000/2200	30/60
GJXH	2	(2.0±0.1)×(3.0±0.1)	10	100/200	1000/2200	30/60
GJXH	4	(2.0±0.1)×(3.0±0.1)	10	100/200	1000/2200	30/60

Storage/Operating Temperature:-20℃to+60℃

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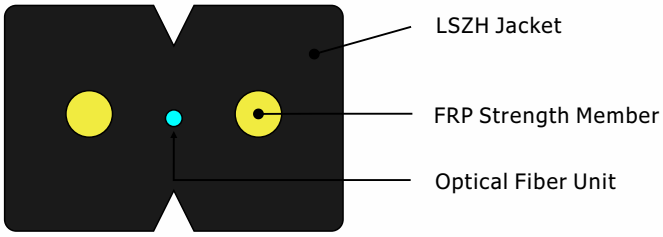
Bow-type Drop Cable GJXFH



Description

The optical fiber unit is positioned in the center. Two parallel Fiber Reinforced(FRP) are placed at the two sides. Then, the cable is completed with a black or color LSZH sheath.

Characteristics

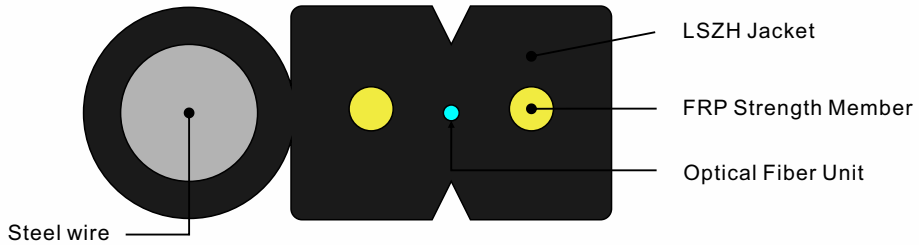
- Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property.
- Two parallel FRP strength members ensure good performance of crush resistance to protect the fiber.
- Simple structure, light weight and high practicability.
- Novel flute design. Easily strip and splice, simplify the installation and maintenance.
- Low smoke, zero halogen and flame retardant sheath.

Technical Parameters

Cable Code	Fiber Count	Cable Size (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GJXFH	1	(2.0±0.1)×(3.0±0.1)	9	40/80	500/1000	15/30
GJXFH	2	(2.0±0.1)×(3.0±0.1)	9	40/80	500/1000	15/30
GJXFH	4	(2.0±0.1)×(3.0±0.1)	9	40/80	500/1000	15/30

Storage/Operating Temperature:-20℃to+60℃

Self-Supporting Bow-type Drop Cable GJYXFCH



Description

The optical fiber unit is positioned in the center. Two parallel Fiber Reinforced(FRP) are placed at the two sides. A steel wire as the additional strength member is also applied. Then, the cable is completed with a black or color LSZH sheath.

Characteristics

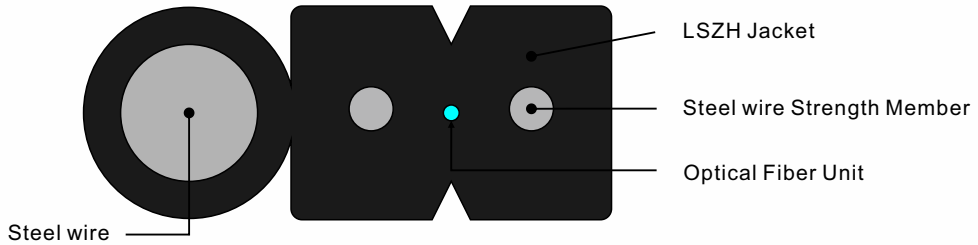
- Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property.
- Two parallel FRP strength members ensure good performance of crush resistance to protect the fiber.
- Single steel wire as the additional strength member ensure good performance of tensile strength.
- Simple structure, light weight and high practicability.
- Novel flute design. easily strip and splice, simplify the installation and maintenance.
- Low smoke, zero halogen and flame retardant sheath.

Technical Parameters

Cable Code	Fiber Count	Cable Size (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GJYXFCH	1	(2.0±0.1)×(5.2±0.1)	20	300/600	2200	15/30
GJYXFCH	2	(2.0±0.1)×(5.2±0.1)	20	300/600	2200	15/30
GJYXFCH	4	(2.0±0.1)×(5.2±0.1)	20	300/600	2200	15/30

Storage/Operating Temperature:-20℃to+60℃

Self-Supporting Bow-type Steel Wire Drop Cable GJYXCH



Description

The optical fiber unit is positioned in the center. Two parallel Fiber Reinforced(steel wire) are placed at the two sides. A steel wire as the additional strength member is also applied. Then, the cable is completed with a black or color LSZH sheath.

Characteristics

- Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property.
- Two parallel steel wire strength members ensure good performance of crush resistance to protect the fiber.
- Single steel wire as the additional strength member ensure good performance of tensile strength.
- Simple structure, light weight and high practicability.
- Novel flute design. easily strip and splice, simplify the installation and maintenance.
- Low smoke, zero halogen and flame retardant sheath.

Technical Parameters

Cable Code	Fiber Count	Cable Size (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GJYXCH	1	(2.0±0.1)×(5.2±0.1)	20	300/600	2200	15/30
GJYXCH	2	(2.0±0.1)×(5.2±0.1)	20	300/600	2200	15/30
GJYXCH	4	(2.0±0.1)×(5.2±0.1)	20	300/600	2200	15/30

Storage/Operating Temperature:-20℃to+60℃

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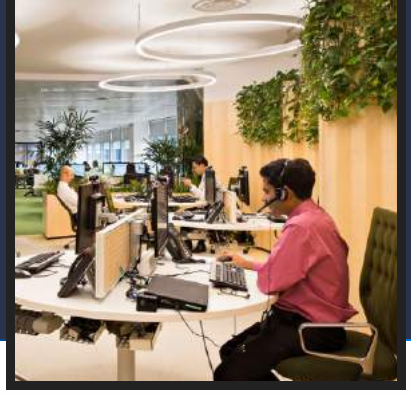
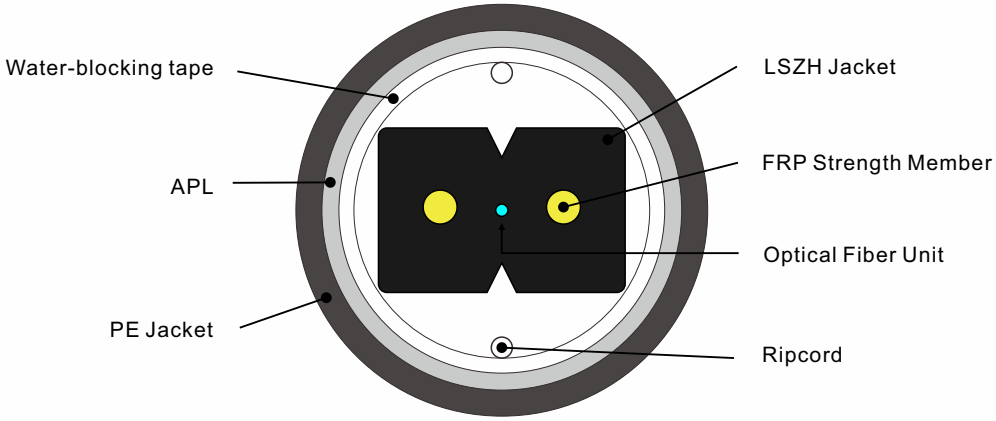


Bow-type Drop Cable for Duct GJXFHA



Description

The optical fiber unit is positioned in the center. Two parallel Fiber Reinforced(FRP) are placed at the two sides. Then, the cable is completed with a black or color LSZH sheath.

Characteristics

- Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property.
- Two parallel FRP strength members ensure good performance of crush resistance to protect the fiber.
- Simple structure, light weight and high practicability.
- Novel flute design. easily strip and splice, simplify the installation and maintenance.
- Low smoke, zero halogen and flame retardant sheath.
- APL moisture barrier.

Technical Parameters

Cable Code	Fiber Count	Cable Size (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GJXFHA	1	7.3±0.2	42	40/80	2000	15/30
GJXFHA	2	7.3±0.2	42	40/80	2000	15/30
GJXFHA	4	7.3±0.2	42	40/80	2000	15/30

Storage/Operating Temperature:-20℃to+60℃

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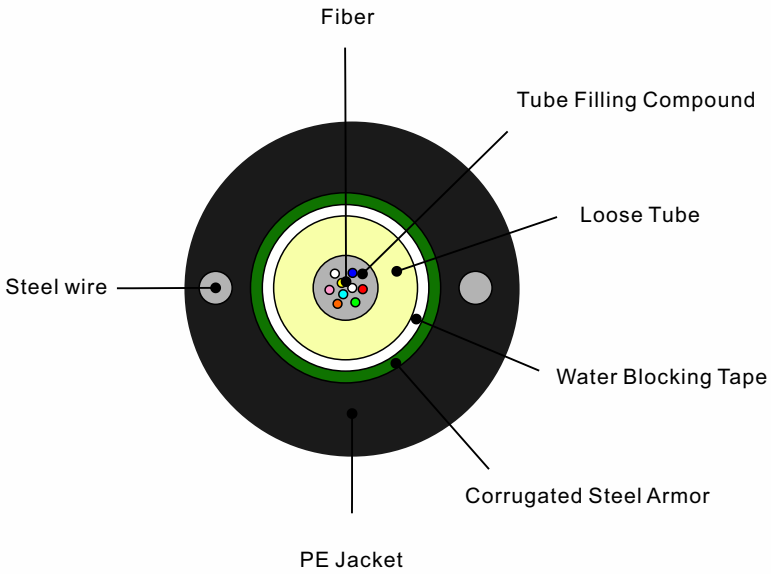
Unitube Light-armored Cable GYXTW



Description

The fibers, 250μm, are positioned in a loose tube made of a high modulus plastic. The tube are filled with a water-resistant filling compound. The tube is wrapped with a layer of PSP longitudinally. Between the PSP and the loose tube water-blocking material is applied to keep the cable compact and watertight. Two parallel steel wires are placed at the two side of the steel tape. The parallel steel wires are placed at the two sides tape. The cable is completed with a polyethylene(PE) sheath.

Standards

GYXTW cable complies with standard YD/T 769-2003.

Characteristics

- Good mechanical and temperature performance.
- High strength loose tube that is hydrolysis resistant.
- Special tube filling compound ensure a critical protection of fiber.
- Crush resistance and flexibility.
- PSP enhancing moisture-proof.
- Two parallel steel wires ensure tensile strength
- Small diameter, light weight and friendly installation
- Long delivery length
- Application:duct/aerial

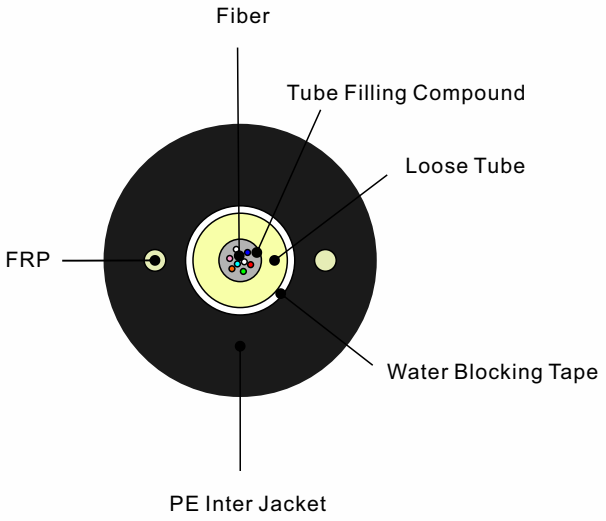
Technical Parameters

Cable Code	Fiber Count	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GYXTW	4	8	60	600/1500	300/1000	10D/20D

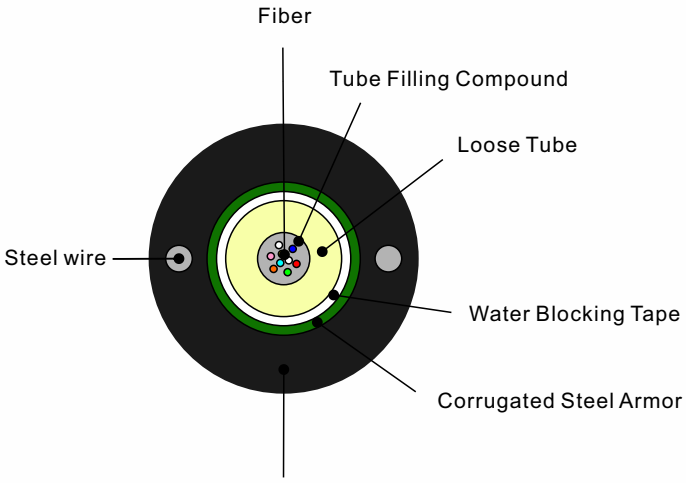
Storage/Operating Temperature:-40℃to+70℃

Similar Types

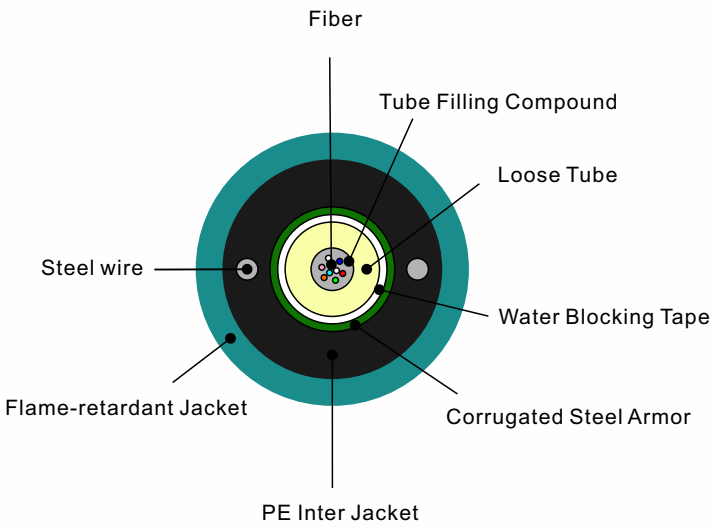
GYFXT Structure



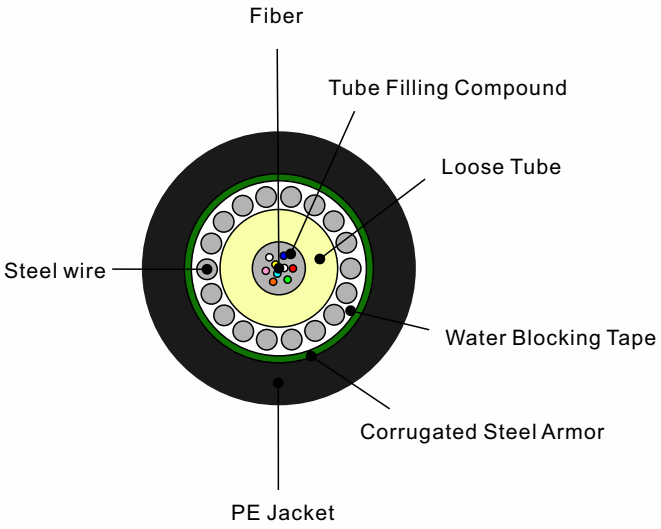
GYXTZW Structure



MGXTW Structure



GYXTS Structure



ZION Communication
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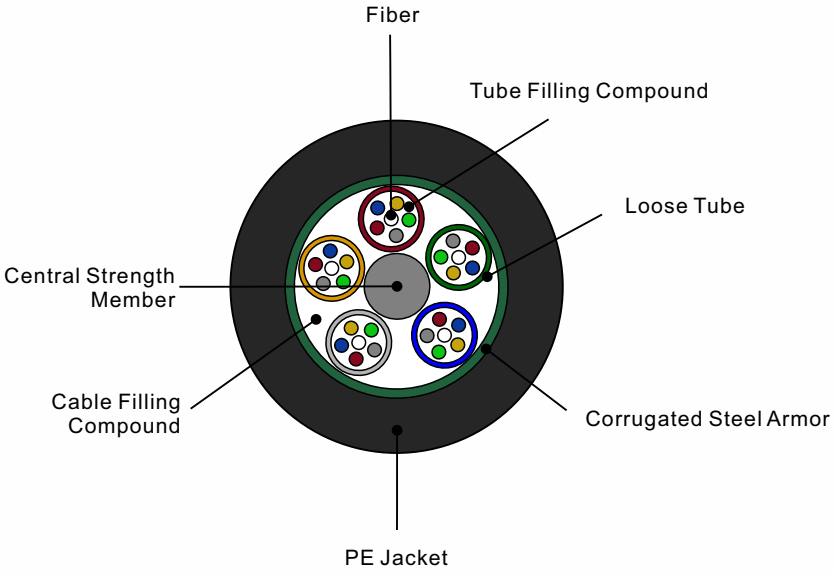
Stranded Loose Tube Cable GYTS



Description

The fibers, 250μm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A steel wire, sometimes sheathed with polyethylene (PE) for cable with high fiber count, locates in the center of core as a metallic strength member. Tubes (and fillers) are stranded around the strength member into a compact and circular cable core. The PSP is longitudinally applied over the cable core, witch is filled with the filling compound to protect it from water ingress. Then, the cable is completed with a PE sheath.

Standards

GYTS cable complies with standard YD/T 901-2001
as well as IEC60794-1

Characteristics

- Good mechanical and temperature performance.
- High strength loose tube that is hydrolysis resistant.
- Special tube filling compound ensure a critical protection of fiber.
- Special designed compact structure is good at preventing loose tube from shrinking.
- Crush resistance and flexibility.
- PE sheath protects cable from ultraviolet radiation
- The following measures are taken to ensure the cable watertight:
- Steel wire used as the central strength member
- Loose tube filling compound
- 100% cable core filling
- PSP enhancing moisture-proof
- Application:duct/aerial/direct buride

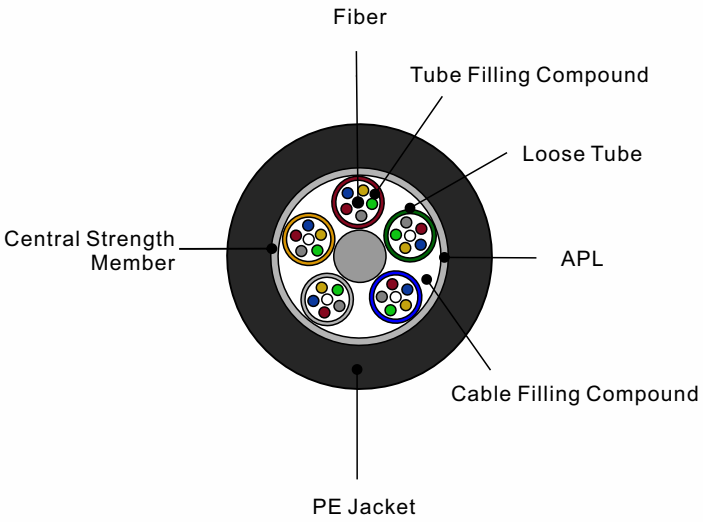
Technical Parameters

Cable Type (Increased by 2fibers)	Fiber Count	Tube	Fillers	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GYTS	4	1	4	9	80	600/1500	300/1000	10D/20D

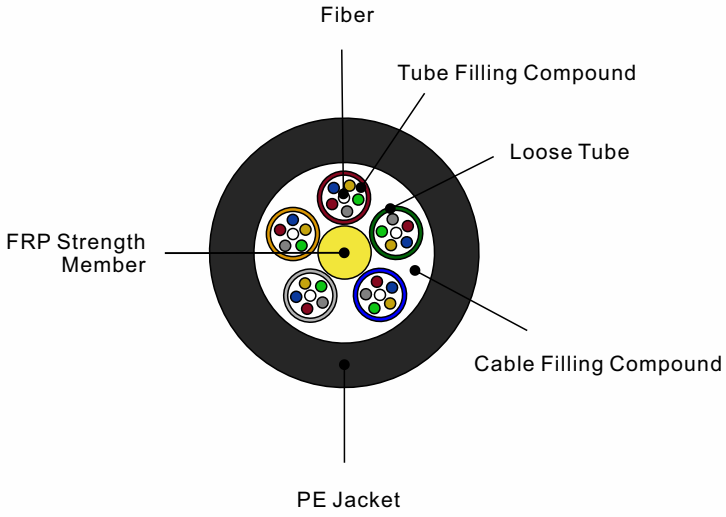
Storage/Operating Temperature:-40℃to+70℃

Similar Types

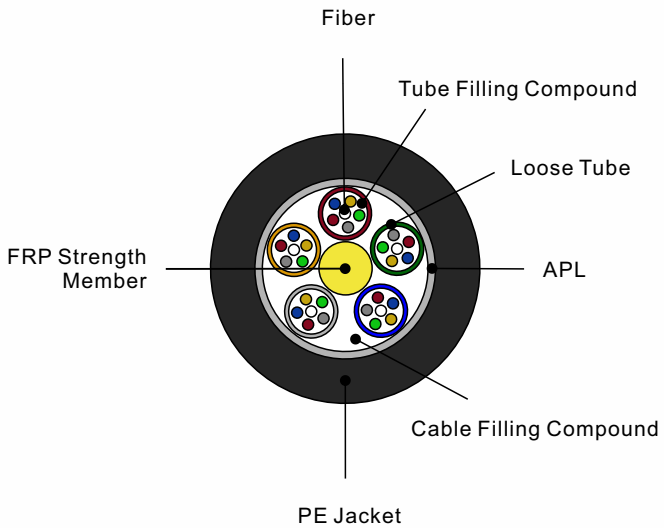
GYTA Structure



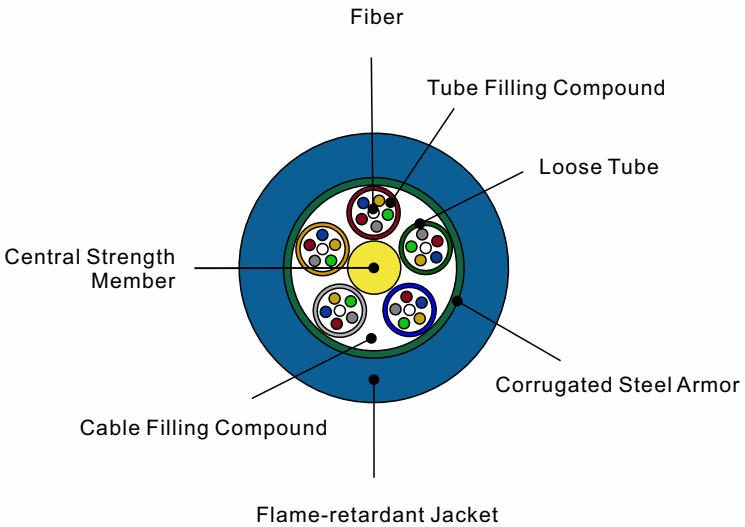
GYFTY Structure



GYFTA Structure

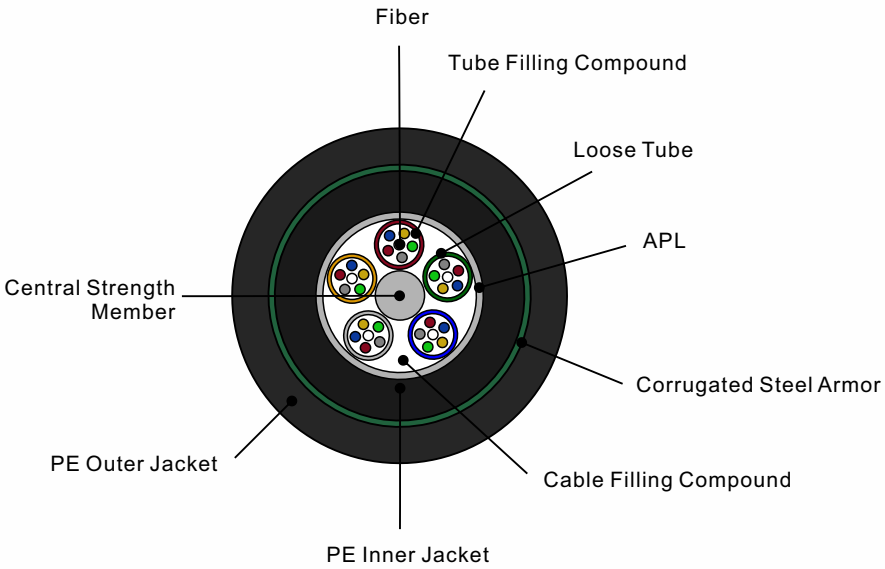


MGTS Structure



ZION Communication
Signal to the world

Double Sheathed Cable GYTA53



Description

The fibers, 250μm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A steel wire, sometimes sheathed with polyethylene (PE) for cable with high fiber count, locates in the center of core as a metallic strength member. Tubes(and fillers) are stranded around the strength member into a compact and circular cable core. An Aluminum Polyethylene Laminate(APL) is applied around the cable core, witch is filled with the filling compounding to protect it from water ingress. Then, the cable core is covered with a thin PE inner sheath. After the PSP is longitudinally applied over the inner sheath, the cable is completed with a PE outer sheath.

Standards

GYTA53 cable complies with standard YD/T 901-2001 as well as IEC60794-1

Characteristics

- Good mechanical and temperature performance.
- High strength loose tube that is hydrolysis resistant.
- Special tube filling compound ensure a critical protection of fiber.
- Crush resistance and flexibility.
- The following measures are taken to ensure the cable watertight:
- Steel wire used as the central strength member
- Loose tube filling compound
- 100% cable core filling
- PSP enhancing moisture-proof
- Water-blocking material
- Application:duct/aerial/direct buride

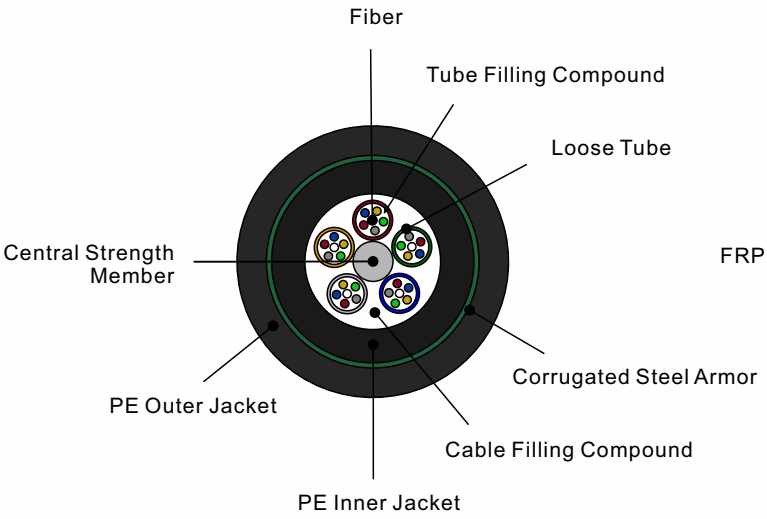
Technical Parameters

Cable Type (Increased by 2fibers)	Fiber Count	Tube	Fillers	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GYTA53	4	1	4	12.5	130	1000/3000	1000/3000	10D/20D

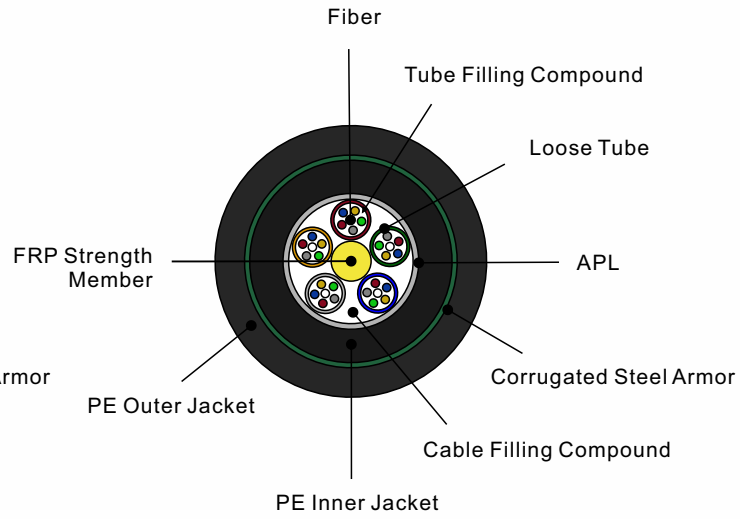
Storage/Operating Temperature:-40℃to+70℃

Similar Types

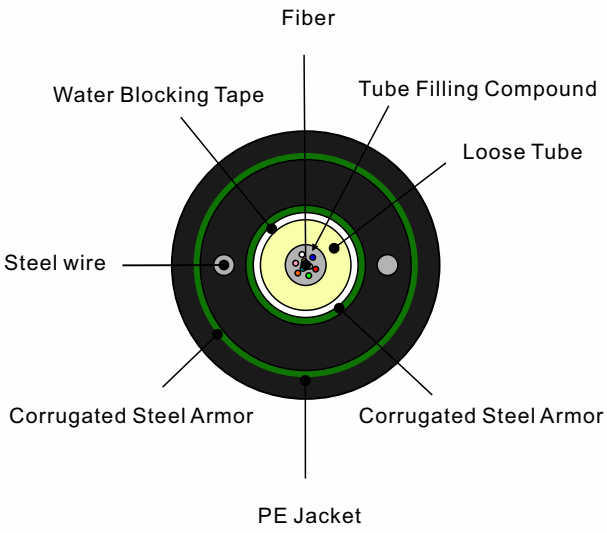
GYTY53 Structure



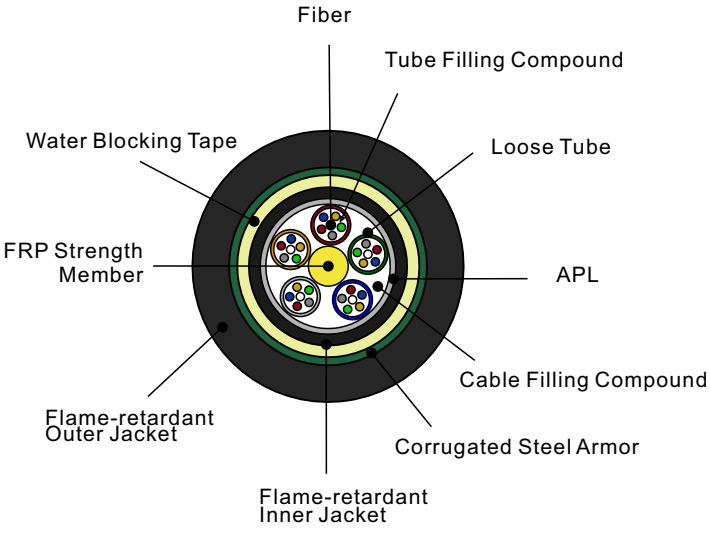
GYFTA53 Structure



GYXTW53 Structure



GYFTZA53 Structure



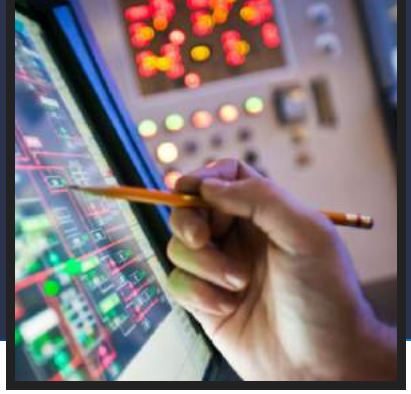
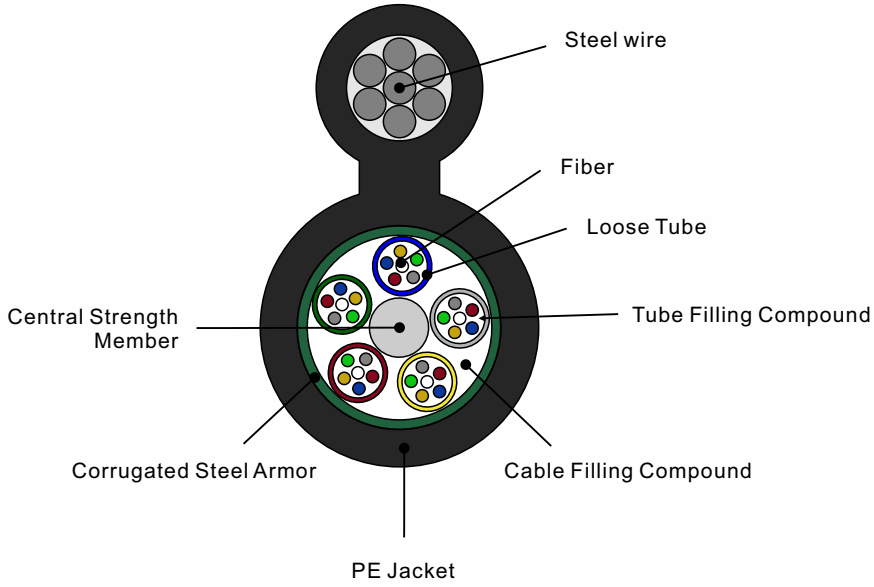


Figure 8 Cable GYTC8S



Description

The fibers, 250μm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A steel wire locates in the center of core as a metallic strength member. The tube(and fillers) are stranded around the strength member into a compact and circular cable core. After an Aluminum Polyethylene Laminate(APL) moisture battier is applied around the cable core, this part of cable accompanied with the stranded wires as the supporting part are completed with a polyethylene(PE) sheath to be figure 8 structure.
figure 8 cable GYTC8Y, GYTC8Y are also available on request.
This type of cable is specifically applied for self-supporting aerial installation.

Standards

GYTS cable complies with standard YD/T 901-2001
as well as IEC60794-1

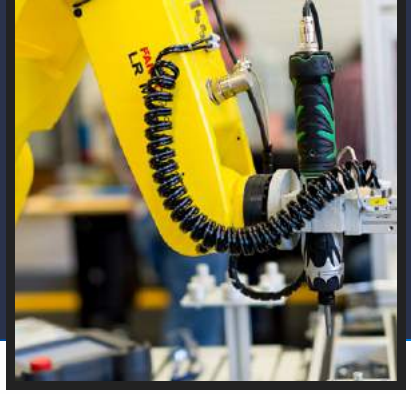
Characteristics

- High tensile strength of stranded wires meet the requirement of self-supporting and reduce the installation cast.
- Good mechanical and temperature performance.
- High strength loose tube that is hydrolysis resistant.
- Special tube filling compound ensure a critical protection of fiber.
- The following measures are taken to ensure the cable watertight:
- Steel wire used as the central strength member
- Loose tube filling compound
- 100% cable core filling
- APL moisture barrier
- Application:Self-supporting

Technical Parameters

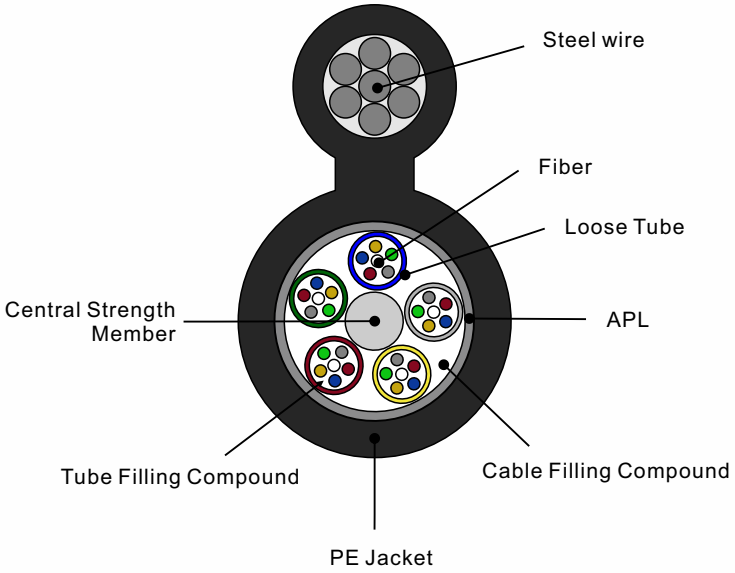
Cable Type (Increased by 2fibers)	Fiber Count	Tube	Fillers	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short term(N)	Crush Resistance Long/Short term(N/100mm)	Bending Radius Dynamic/Static(mm)
GYTC8S	4	1	4	6.8×9.2×18.0	214	1000/3000	300/1000	10D/20D

Storage/Operating Temperature:-40℃to+70℃

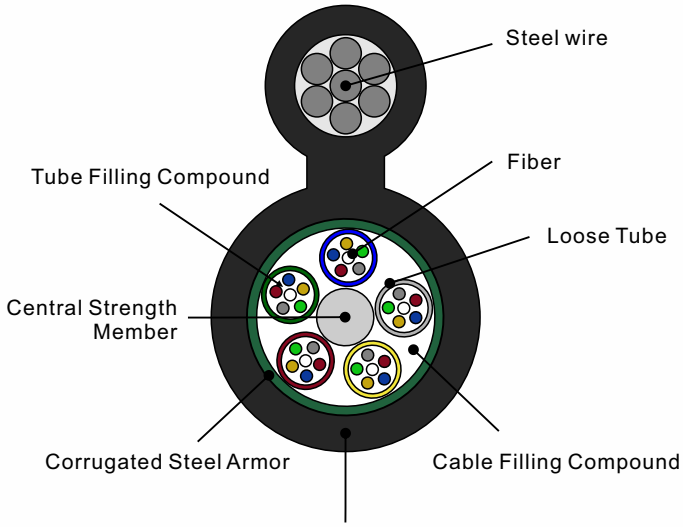


Similar Types

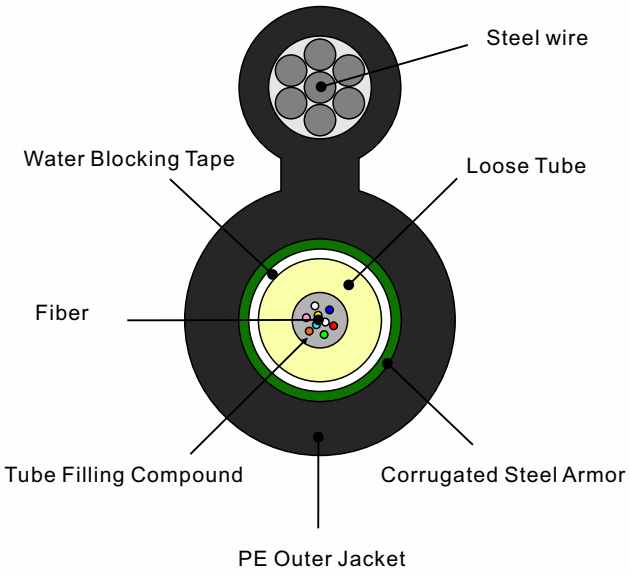
GYTC8A Structure



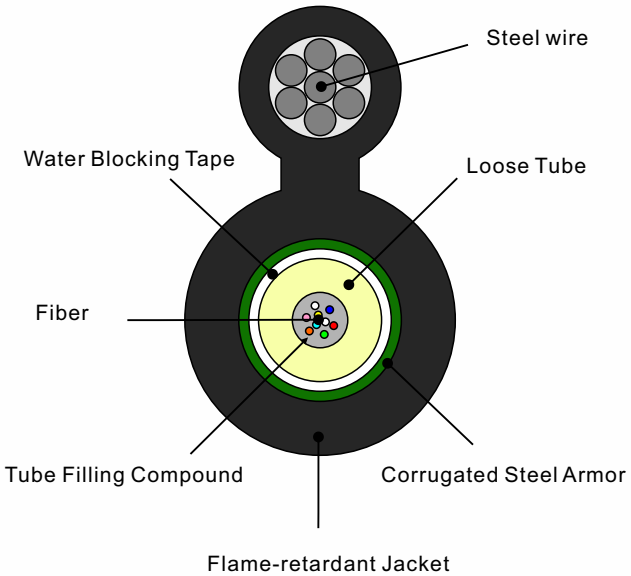
GYTCZ8S Structure



GYXTC8S Structure



GYXTCZ8S Structure



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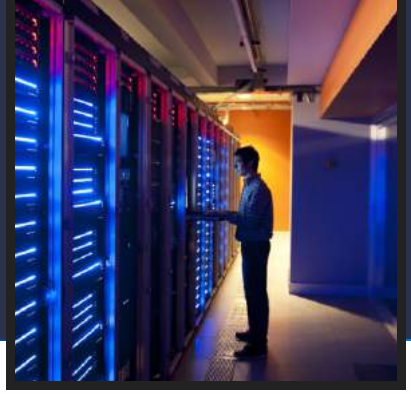
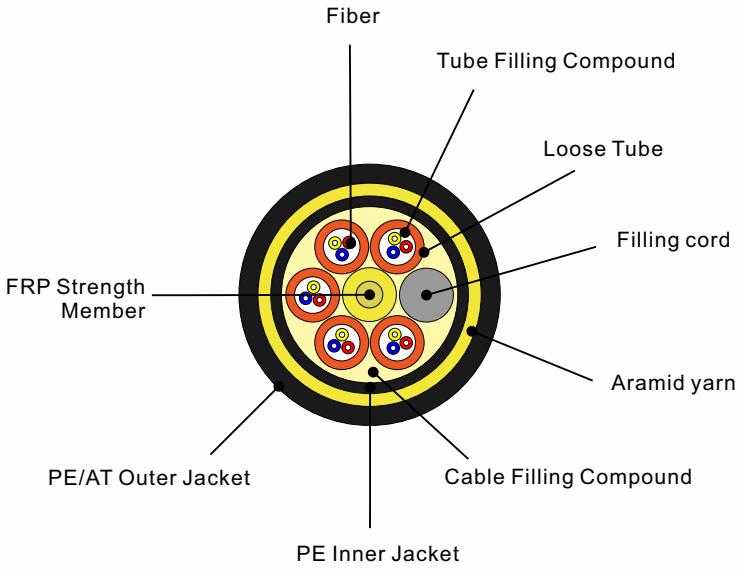


All Dielectric self-supporting Aerial Cable ADSS



Description

ADSS cable is loose tube stranded. Fiber, 250μm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. The tubes(and fillers) are stranded around a FRP(Fiber Reinforced Plastic) as a non-metallic central strength member into a compact and circular cable core. After the cable core is filled with filling compound, it is covered with thin PE(polyethylene) inner sheath. After stranded layer of aramid yarns are applied over the inner sheath as strength member, the cable is completed with PE or AT(anti-tracking) outer sheath.

Standards

ADSS cable complies with standard IEEE 1222-2004 as well as IEC60794-1

Characteristics

- Can be installed without shutting off the power
- Excellent AT performance. The maximum inductive at the operating point of AT sheath can reach 25kv
- Light weight and small diameter reducing the load caused by ice and wined and load on towers and backprops.
- Large span lengths and the largest span is over 1000m
- Good performance of tensile strength and temperature .
- The design life span is over 30 years
- Application: self-supporting

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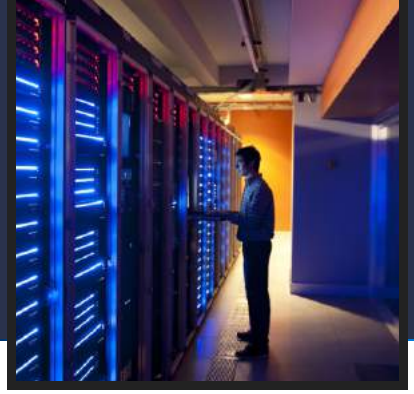
Technical Parameters

Ref.outer Diameter (mm)	Ref.Weight(kg/km)		Ref.daily max. Working tension (kN)	Max.allo wable Working tension (kN)	Break Strength (kN)	Strength Member CSA (mm^2)	Modulus of Expansion (kN/mm^2)	Heat Expansion Coefficient (kN/mm^2)	Suitable Span(m) NESC Standard.m			
	PE Sheath	AT Sheath							A	B	C	D
12.5	125	136	1.50	4	10	4.6	7.6	1.8	160	100	140	100
13.0	132	142	2.25	6	15	7.6	8.3	1.5	230	150	200	150
13.3	137	148	3.00	8	20	10.35	9.45	1.3	300	200	290	200
13.6	145	156	3.60	10	24	13.8	10.8	1.2	370	250	350	250
13.8	147	159	4.50	12	30	14.3	11.8	1.0	420	280	400	280
14.5	164	177	5.40	15	36	18.4	13.6	0.9	480	320	460	320
14.9	171	185	6.75	18	45	22.0	16.40	0.6	570	380	550	380
15.1	179	193	7.95	22	53	26.4	18.04	0.3	670	460	650	460
15.5	190	204	9.00	26	60	32.2	19.1	0.1	750	530	750	530
15.6	194	208	10.5	28	70	33.0	19.6	0.1	800	560	800	560
16.3	211	226	12.75	34	85	40.0	20.1	0.1	880	650	880	650
16.8	226	242	15.45	41	103	48.0	24.0	-0.4	1000	750	1000	760
17.2	236	253	16.2	45	108	51.0	25.1	-0.5	1100	800	1100	830
17.9	249	266	18.0	50	120	58.8	26.1	-0.8	1180	880	1180	900

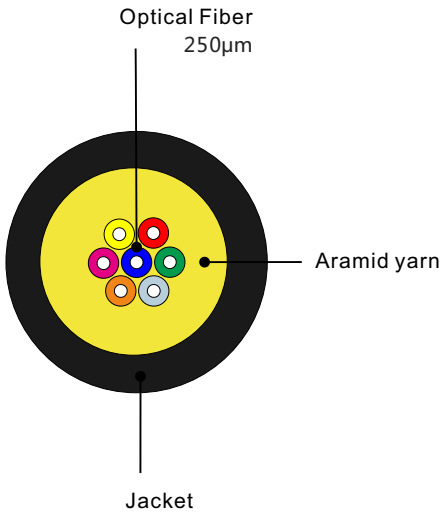
Storage/Operating Temperature:-40℃to+70℃

Optical Characteristics

		G625	G655	50/125μm	65.5/125μm
Attenuation (+20℃)	@ 850 nm			≤3.0dB/km	≤3.3dB/km
	@1300 nm			≤1.0dB/km	≤1.0dB/km
	@1310 nm	≤0.36dB/km	≤0.40dB/km		
	@1550 nm	≤0.22dB/km	≤0.23dB/km		
Bandwidth(Class A)	@ 850 nm			≥500MHz·km	≥200MHz·km
	@1300 nm			≥1000MHz·km	≥600MHz·km
Numerical Aperture				0.200±0.015NA	0.275±0.015NA
Cable cutoff wavelengthλcc		≤1260nm	≤1450nm		

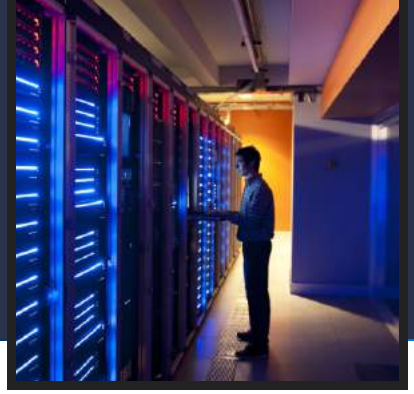


8 Core Mini Cable



Fiber Parameters

Lo.	Gck q		Sl g	Qncaggta_rgml E,435?/
/	Mode Field Diameter	1310nm	μm	9.0±0.4
		1550nm	μm	10.1±0.5
2	Cladding Diameter		μm	124.8±0.7
3	Cladding Non-Circularity		%	=0.7
4	Core-Cladding Concentricity Error		μm	=0.5
5	Coating Diameter		μm	245±5
6	Coating Non-Circularity		%	=6.0
7	Cladding-Coating Concentricity Error		μm	=12.0
8	Cable Cutoff Wavelength		nm	λ_{cc}=1260
9	Attenuation(max.)	1310nm	dB/m	=0.4
		1550nm	dB/m	=0.3
10	Macro-Bending Loss	1turn×10mm radius @1550nm	dB	=0.75
		1turn×10mm radius @1625nm	dB	=1.5



Cable Parameters

Items		Specifications
Dg cpCount		8
Colored Fiber	Color	Blue Orange Green Brown Gray White Red
Outer Jacket	Dimension	3.0±0.1 mm
	Material	LSZH
	Color	Black
Strength Member		Kevlar

Mechanical and Environmental Characteristics

Items	Unite	Specifications
Tension Long Term	N	200
Tension Short Term	N	400
Crush Long Term	N/10cm	100
Crush Short Term	N/10cm	500
Min. Bend Radius Dynamic	mm	20D
Min. Bend Radius Static	mm	10D
Installation Temperature	□	-10 +60
Operating Temperature	□	-20 +60
Storage Temperature	□	-20 +60

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