

# Route Shortage Optical Fiber Cable

Specializing in designing, manufacturing cables and providing customized services for our customers



# **Optical Fiber Cable for Short-Distance Line (Route Shortage)**

#### Introduction:

With the rapid development of metropolitan area networks and access networks, fewer and fewer urban duct and hole resources are available. The improvement of urban municipal construction management makes it harder and harder to acquire approval for excavation and installation of cable systems. However, the communication network structure is scattered geographically, thus the mass installation of optical cables is facing the conflict between high costs and low utilization. The above problems bring challenges such as routing selection and routing shortage to the construction of optical cable cabling.

Based on network construction experience and considerable advantages in optical cable manufacturing,

ZION proposes dedicated optical cables for line shortages.

Optical cable products for different routing scenarios are listed as follows:

GLFXTS Roader Micro-trench Uni-Tube Fibers Aramid PSP Armored

GPTCA63 Ducting laying in Waiver Sewer Stranded Loose Tubes APL Aramid Yarns Armored

GYTA Small 60-144F High-density fibers in Duct Micro Stranded Loose tubes CSM APL Armored





# GLFXTS Roader Micro-trench Uni-Tube Fibers Aramid PSP Armored Fiber Optic Cable for Short-Distance Line (Route Shortage)

#### Introduction:

It is a kind of optical cable with small diameter, can be laid by cutting a narrow trench on the road surface, burying the optical cable in it and then back filling it to the original road conditions. This optical cable consists of single-mode/multimode fibres, a loose tube, aramid yarns as the strength member, a steel tape armor and a pe sheath. It is featured with light weight, good flexibility, easy installation, low costs and fast installation speed, etc.

#### Features:

- Accurate process control ensuring good mechanical and temperature performances
- Tube filling compound providing key protection for fibres
- Unique design of sheath with steel tapes ensuring good rush performance
- Allowing to laid by micro trench on the road surface directly

#### Cross Section:



1, Fibers 2, Loose Tube 3, Aramid Yarns 4, PSP 5, Tube Filling Compound 6, Water-Blocking Tape 7, PE sheath

#### Technical Characteristics:

Туре	Fiber count Tube*Fibers	Diameter mm	Weight (kg/km)	Tensile Strength Long/Short(N)	Crush Resistance Long/short (N/100mm)
GLFXTS-02-12Xn	2-12 (1*12)	8.5±0.1(3.0Tube)	70	300/1000	300/1000

Note: This specification provides a normative reference. Adjustable outer diameter to suit your budget. Contact us ASAP.

#### Environmental Characteristics:

Transport/storage temperature: -20°C~70°C

#### Applications:

The cab le can be used as the drop cable of feeder segments in FTTH networks and can be laid by air blowing to connect the branch point with the access point for subscribers. The cab le is also applicable in backbone networks, metropolitan area networks and access networks.

#### Delivery Length:

Standard length: 2000m; Other length availabe



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## GPTCA63 Ducting laying in Waiver Sewer Stranded Loose Tubes APL Aramid Yarns Armored Fiber Optic Cable for Short-Distance Line (Route Shortage)

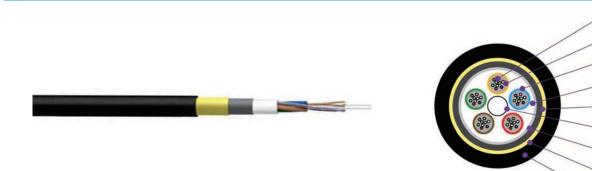
#### Introduction:

It is a kind of optical cable with self-supporting, can be laid in the storm sewers. Optical fibers are housed in loose tubes that are made of high modulus plastic and filled with tube filling compound, The tubes are stranded around a metallic central strength member to form a cable core, The core is filled with water blocking compound and armored with laminated aluminum tape. Then pe sheath is extruded and aramid yarn are placed outside the inner sheath as the strength member, Final, A PE outer sheath is extruded.

#### Features:

- Accurate process control ensuring good mechanical and temperature performances
- Tube filling compound providing key protection for fibres
- Unique design of sheath with aramid yarn ensuring good tension performance
- Water resistance of optical cable is ensured by the water blocking compound, aluminum tape armor

#### Cross Section:



1, Fibers 2, Tube Filling Compound 3 Loose Tube with Gel 4, Cable Filling Compound 5, PE Inner Sheath 6, CSM 7, Aluminum Tape(APL) 8, Aramid Yarns 9, PE Outer sheath







#### Technical Characteristics:

Туре	Stranded Units	Max Fibers /Tube	Diameter mm	Weight (kg/km)	Tensile Strength Long/Short(N)	Crush Resistance Long/short (N/100mm)
GPTCA63-04-30Xn	5	6	13.0±0.1	143	2500	1000/2200
GPTCA63-32-36Xn	6	6	14.0±0.1	190	2500	1000/2200
GPTCA63-38-48Xn	8	6	14.0±0.1	195	3500	1000/2200
GPTCA63-50-72Xn	6	12	15.3±0.1	202	4500	1000/2200
GPTCA63-74-96Xn	8	12	17.0±0.1	260	5500	1000/2200
GPTCA63-98-120Xn	10	12	19.2±0.1	305	6500	1000/2200

Note: This specification provides a normative reference. Adjustable outer diameter to suit your budget.Contact us ASAP.

#### Environmental Characteristics:

Transport/storage temperature: -20  $^\circ\!\mathrm{C}\,{\sim}70\,^\circ\!\mathrm{C}$ 

#### Applications:

The cab le can be used as the drop cable of feeder segments in FTTH networks and can be laid by air blowing to connect the branch point with the access point for subscribers. The cab le is also applicable in backbone networks, metropolitan area networks and access networks.

#### Delivery Length:

Standard length:2000m;Other length availabe





## GYTA Small 60-144F High-density fibers in Duct Micro Stranded Loose tubes CSM APL Armored Fiber Optic Cable for Short-Distance Line (Route Shortage)

#### Introduction:

It is a kind of optical cable with bending insensitive optical fibers.Optical fibers are housed in loose tubes that are made of high modulus plastic and filled with tube filling compound, The tubes are stranded around a central strength member to form a cable core, armored with laminated aluminum tape. Final, A PE outer sheath is extruded.

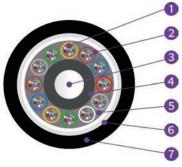
#### Features:

- Accurate process control ensuring good mechanical and temperature performances
- Tube filling compound providing key protection for fibres
- Using small sized fibers with good micro and marco bending performance

• Water resistance of optical cable is ensured by the water blocking compound, aluminum tape armor, cable filling compound ensuring longitudinal water resistance

#### Cross Section:





1.Fibers, 2.Loose Tube with Gel, 3.CSM, 4.PE Layer, 5.Compound, 6.Aluminum Tape, 7.PE Outer sheath





#### Technical Characteristics:

Туре	Stranded Units	Max Fibers /Tube	Diameter mm	Weight (kg/km)	Tensile Strength Long/Short(N)	Crush Resistance Long/short (N/100mm)
GYTA≤60	5	12	6.9±0.1(1.2Thickness)	48	240/800	300/1000
GYTA 62-72	6	12	7.1±0.1(1.2Thickness)	53	300/850	300/1000
GYTA 74-96	8	12	8.1±0.1(1.2Thickness)	72	350/1200	300/1000
GYTA 98-120	10	12	9.0±0.1(1.2Thickness)	89	450/1400	300/1000
GYTA 122-144	12	12	9.8±0.1(1.2Thickness)	110	700/2000	300/1000

Note: This specification provides a normative reference. Adjustable outer diameter to suit your budget.Contact us ASAP.

#### Environmental Characteristics:

Transport/storage temperature: -20  $^\circ \mathrm{C}$  ~70  $^\circ \mathrm{C}$ 

Compound flow:No filling compound or coating compound drop out of optical cable at  $70\,^\circ\!\mathrm{C}$ 

Water penetration:No water comes out within 24 hours after 1m water head is applied to the entire cross section of 3m long optical cable

#### Delivery Length:

Standard length:2000m;Other length availabe





# GLOBAL MARKET



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