



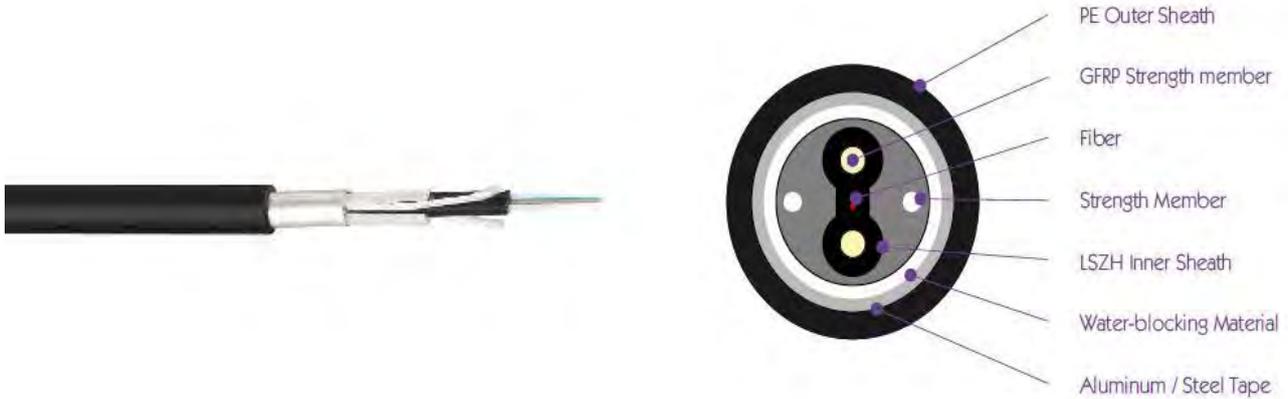
# Duct Installation Optical Fiber Cable

Good quality & Good service based on reasonable prices.

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# GJYXFHA / GJYXFHS Optical Fiber Cable Light Armor Bow type Drop Duct Installation



## Description:

The typical GJYXFHA/GJYXFHS duct bow-type drop cable is composed of one GJXFH cable in the middle and two strength members on both sides, longitudinal wrapped by aluminum / steel tape and HDPE sheath.

Novel groove design, easily strip and splice, simplified installation and maintenance, higher tensile strength

Suitable as duct cable

Waterproof, good safety

## Standard:

ITU-T Rec. G.657A	IEC 60794	GR-409
ISO9001	ICEA-596	YD/T 1997-2009

## Structure and technical parameters:

Cable Type	Cable Size(mm)	Cable Weight (Kg/km)	Tensile Strength Long/Short Term(N)	Crush Resistance Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)	Storage, operating Temperature( °C )
GJYXFHA-1	7.2±0.3	42	300/600	1000/2200	10/20	-20~+60
GJYXFHA-2	7.2±0.3	42	300/600	1000/2200	10/20	-20~+60
GJYXFHS-1	7.4±0.3	59	500/1000	1000/2200	10/20	-20~+60
GJYXFHS-2	7.4±0.3	59	500/1000	1000/2200	10/20	-20~+60



# GYFA Optical Fiber Cable APL Armored Stranded Loose Tube Duct Installation



1. Loose Tube: thermoplastic material, containing opticalfibres and water blocking yarn.
2. Central Strength Member: glass fibre reinforced plasticrod (GFRP) coated with PE when needed.
3. Filler Elements: thermoplastic rods.
4. Longitudinal Water Blocking Material: Water blocking tape.
5. Armor: APL
6. Outer Sheath: black polyethylene

## Features and Applications:

- Gel-free cable structure.
- Easy for installation and splicing.
- Duct installation and aerial installation.

## Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	2x12	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	2.4					
Central strength member	Material	GFPR					
	Diameter (mm)	2.25	2.25	2.6	2.6	3.5	3.5
	PE coated diameter (mm)	-	-	-	4.2	7.2	4.8
Outer Sheath	Thickness (mm)	Nominal:1.8					
Cable diameter(mm)Approx.		12.0	12.0	12.5	14.0	17.0	19.5
Cable weight(kg/km)Approx.		120	120	125	155	225	295
Operating temperature range( °C )		-40~+70					
Tensile Strength Short/ Long Term(N)		2700/900					
Crush resistance short/long term (N/100mm)		1000/300					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



## GYFS

# Optical Fiber Cable PSP Armored Stranded Loose Tube Duct Installation



1. Loose Tube: thermoplastic material, containing opticalfibres and water blocking yarn.
2. Central Strength Member: glass fibre reinforced plasticrod (GFRP) coated with PE when needed.
3. Filler Elements: thermoplastic rods.
4. Longitudinal Water Blocking Material: Water blocking tape.
5. Armor: corrugated steel tape.
6. Outer Sheath: black polyethylene

### Features and Applications:

- Gel-free cable structure.
- Easy for installation and splicing.
- Duct installation and aerial installation.

### Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	2x12	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	2.4					
Central strength member	Material	GFPR					
	Diameter (mm)	2.25	2.25	2.6	2.6	3.5	3.5
	PE coated diameter (mm)	-	-	-	4.2	7.2	4.8
Outer Sheath	Thickness (mm)	Nominal:1.8					
Cable diameter(mm)Approx.		12.5	12.5	13.0	14.5	17.5	20.0
Cable weight(kg/km)Approx.		130	130	140	175	255	320
Operating temperature range( °C )		-40~+70					
Tensile Strength Short/ Long Term(N)		2700/900					
Crush resistance short/long term (N/100mm)		1000/300					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



## GYFS-Semi dry Optical Fiber Cable PSP Armored Stranded Loose Tube Duct Installation



1. Loose Tube: thermoplastic material, containing opticalfibres and water blocking yarn.
2. Central Strength Member (CSM): Glass fibre reinforcedplastic rod (GFRP), coated with polyethylene when needed.
3. Filler Elements: thermoplastic rods.
4. Longitudinal Water Blocking Material: Water blocking tape.
5. Armor:corrugated steel tape
6. Outer Sheath: black polyethylene

### Features and Applications:

- Good crush resistance
- Duct installation or aerial installation
- Semi-dry core design, easy for installation and splice

### Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	4x6	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	1.9	2.4				
Central strength member	Material	GFPR					
	Diameter (mm)	2.0	2.0	2.6	2.6	2.6	2.6
	Coated CSM diameter (mm)	-	-	-	4.2	7.4	4.8
water blocking material	Material	Water blocking tape					
Armor	Material	Corrugated steel tape					
Outer Sheath	Thickness (mm)	Nominal:1.8					
Cable diameter(mm)Approx.		11.1	12.1	12.6	14.6	17.6	20.6
Cable weight(kg/km)Approx.		110	130	165	205	280	350
Operating temperature range( °C )		-40~+70					
Tensile Strength Short/ Long Term(N)		2000/600					
Crush resistance short/long term (N/100mm)		2000/600					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



# GYFTA

## Optical Fiber Cable GFRP CSM APL Armored Stranded Loose Tube Duct Installation



- 1. Loose Tube: thermoplastic material, containing opticalfibres and water blocking yarn.
- 2. Central Strength Member (CSM): Glass fibre reinforcedplastic rod (GFRP), coated with polyethylene when needed.
- 3. Filler Elements: thermoplastic rods.
- 4. Longitudinal Water Blocking Material: Water blocking tape.
- 5. Moisture-proof: laminated aluminum tape.
- 6. Outer Sheath: black polyethylene

### Features and Applications:

- Good flexibility
- Duct installation or aerial installation

### Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	4x6	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	1.9	2.4				
Central strength member	Material	GFPR					
	Diameter (mm)	2.0	2.0	2.6	2.6	2.6	2.6
	Coated CSM diameter (mm)	-	-	-	4.2	7.4	4.8
Moisture-proof	Material	Cable filling compound					
Armor	Material	Laminated aluminum tape					
Outer Sheath	Thickness (mm)	Nominal:1.8					
Cable diameter(mm)Approx.		10.2	10.6	11.4	13.6	16.4	19.5
Cable weight(kg/km)Approx.		90	110	130	165	240	290
Operating temperature range( °C )		-40~+70					
Tensile Strength Short/ Long Term(N)		2000/600					
Crush resistance short/long term (N/100mm)		1000/300					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



## GYFTS

# Optical Fiber Cable GFRP CSM PSP Armored Stranded Loose Tube Duct Installation



1. Loose Tube: thermoplastic material, containing opticalfibres and filled with a suitable water tightness compound.
2. Central Strength Member (CSM): Glass fibre reinforcedplastic rod (GFRP), coated with polyethylene when needed.
3. Filler Elements: thermoplastic rods.
4. Longitudinal Water Blocking Material: cable filling compound.
5. Armor:corrugated steel tape
6. Outer Sheath: black polyethylene

### Features and Applications:

- Good crush resistance
- Duct installation or aerial installation

### Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	4x6	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	1.9	2.4				
Central strength member	Material	GFPR					
	Diameter (mm)	2.0	2.0	2.6	2.6	2.6	2.6
	Coated CSM diameter (mm)	-	-	-	4.2	7.4	4.8
Moisture-proof	Material	Cable filling compound					
Armor	Material	Corrugated steel tape					
Outer Sheath	Thickness (mm)	Nominal:1.8					
Cable diameter(mm)Approx.		10.4	11.1	12.1	14.0	17.2	19.5
Cable weight(kg/km)Approx.		100	120	150	190	270	340
Operating temperature range( °C)		-40~+70					
Tensile Strength Short/ Long Term(N)		2000/600					
Crush resistance short/long term (N/100mm)		2000/600					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



# GYFTY Optical Fiber Cable GFRP CSM Stranded Loose Tube Duct Installation



1. Loose Tube: thermoplastic material, containing optical fibers and filled with gel.
2. Central Strength Member (CSM): Glass fibre reinforced plastic rod (GFRP), coated with polyethylene when needed.
3. Filler Elements: thermoplastic rods.
4. Longitudinal Water Blocking Material: cable filling compound.
5. Ripcord
6. Outer Sheath: black polyethylene

## Features and Applications:

- Non-metallic structure
- Lighting resistance
- Duct installation or aerial installation

## Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	4x6	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	1.9	2.4				
Central strength member	Material	GFPR					
	Diameter (mm)	2.0	2.0	2.6	2.6	2.6	2.6
	Coated CSM diameter (mm)	-	-	-	4.2	7.4	4.8
Water Blocking Material	Material	Cable filling compound					
Outer Sheath	Thickness (mm)	Nominal:1.8					
Cable diameter(mm)Approx.		9.8	10.2	11.1	13.2	16.4	18.8
Cable weight(kg/km)Approx.		80	90	105	150	220	270
Operating temperature range( °C )		-10~+70					
Tensile Strength Short/ Long Term(N)		2000/600					
Crush resistance short/long term (N/100mm)		1000/300					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



# GYFTY73-2 Anti-Rodent Anti Bird FRP Tape Double Sheath Stranded Loose Tube Duct Installation



- 1. Inner Sheath: black polyethylene.
- 2. Loose Tube: thermoplastic material, containing optical fibres and filled with gel.
- 3. Central Strength Member (CSM): glass fibre reinforced plastic rod (GFRP) coated with polyethylene when needed.
- 4. Filler
- 5. Longitudinal Water Blocking Material: cable filling compound.
- 6. Non-metallic Armor: FRP tape.
- 7. Outer Sheath: black polyethylene.

## Features and Applications:

- Good crush resistance
- Duct installation or aerial installation

## Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value				
		24	48	72	96	144
Loose Tube	Fiber Count	24	48	72	96	144
	No. of tubes*fibres per tube	2x12	4x12	6x12	8x12	12x12
Central strength member	Outer diameter (mm)	2.2				
	Material	GFPR				
	Diameter (mm)	2.25			2.6	2.8
Inner Sheath	Coated CSM diameter (mm)	-			3.7	6.1
	Material	HDPE				
	Thickness (mm)	Nominal:1.0				
Outer Sheath	Material	PE				
	Thickness (mm)	Nominal:1.8				
Cable diameter(mm)Approx.		13.0			14.6	16.8
Cable weight(kg/km)Approx.		132			152	196
Operating temperature range(°C)		-40~+70				
Tensile Strength Short/ Long Term(N)		2700/900				
Crush resistance short/long term (N/100mm)		1000/300				

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



# GYFXY Optical Fiber Cable FRP rods Uni-Tube Duct Installation



- 1. Loose Tube: thermoplastic material, containing optical fibres and filled with gel.
- 2. Strength Member: two glass fibre reinforced plastic rods (GFRP).
- 3. Longitudinal Water Blocking Material: Water blocking yarn.
- 4. Outer Sheath: black polyethylene.

## Features and Applications:

- Small diameter, light weight, easy for transportation and installation.
- Duct installation or aerial installation
- Lighting resistance

## Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



### Technical Data:

Item	Contents	Value	
	Fiber Count	6	12
Loose Tube	No. of tubes*fibres per tube	1x6	1x12
	Outer diameter (mm)	2.0	
Strength member	Material	GFPR	
	Diameter (mm)	1.0	
water blocking material	Material	Water blocking yarn	
Outer Sheath	Thickness (mm)	Nominal:2.5	
Cable diameter(mm)Approx.		7.5	
Cable weight(kg/km)Approx.		65	
Operating temperature range(°C)		-20~+70	
Tensile Strength Short/ Long Term(N)		2000/600	
Crush resistance short/long term (N/100mm)		2000/600	

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



## GYFY

# All-Dielectric Optical Fiber Cable GFRP CSM Stranded Loose Tube Duct Installation



1. Loose Tube: thermoplastic material, containing opticalfibres and water blocking yarn.
2. Central Strength Member: glass fibre reinforced plasticrod (GFRP) coated with PE when needed.
3. Filler Elements: thermoplastic rods.
4. Longitudinal Water Blocking Material: Water blocking tape.
5. Ripcord
6. Outer Sheath: black polyethylene

## Features and Applications:

- Lighting resistance.
- Gel-free and Non-metallic structure.
- Duct installation and aerial installation.

## Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.10 ps/√km	≤0.10 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	2x12	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	2.4					
Central strength member	Material	GFPR					
	Diameter (mm)	2.25	2.25	2.6	2.6	3.5	3.5
	PE coated diameter (mm)	-	-	-	4.2	7.2	4.8
Outer Sheath	Thickness (mm)	Nominal:1.8					
Cable diameter(mm)Approx.		11.0	11.0	11.6	13.0	16.0	18.5
Cable weight(kg/km)Approx.		100	100	105	120	180	225
Operating temperature range(°C)		-40~+70					
Tensile Strength Short/ Long Term(N)		2700/900					
Crush resistance short/long term (N/100mm)		1000/300					

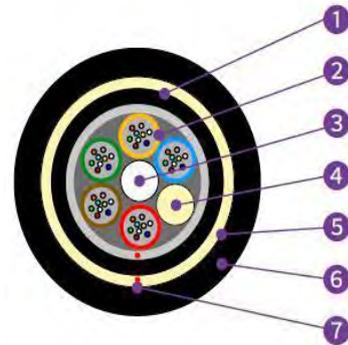
The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



# GYFY63

## All-Dielectric Optical Fiber Cable Anti rodent Glass Yarns Double Sheath Duct Installation



- 1. Inner Sheath: black polyethylene.
- 2. Loose Tube: thermoplastic material, containing optical fibres and filled with gel.
- 3. Central Strength Member (CSM): glass fibre reinforced plastic rod (GFRP) coated with polyethylene when needed.
- 4. Filler Elements: thermoplastic rods.
- 5. Non-metallic Armor: glass yarn.
- 6. Outer Sheath: black polyethylene.
- 7. Ripcord: two polyester ripcords under each sheath.

### Features and Applications:

- Non-metallic design, good tensile and crush resistance.
- Excellent anti-rodent performance.
- Duct or direct buried installation.
- Semi-dry core design, easy for installation and splice.

### Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	4x6	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	1.9	2.4				
Central strength member	Material	Phosphated steel wire					
	Diameter (mm)	2.0	2.0	2.6	2.6	2.6	2.6
	Coated CSM diameter (mm)	-	-	-	4.2	7.4	4.8
water blocking material	Material	Water blocking tape					
Inner Sheath	Thickness (mm)	Nominal:1.0					
Aarmor	Material	Glass yarn					
Outer Sheath	Thickness (mm)	Nominal:2.0					
Cable diameter(mm)Approx.		13.0	13.8	14.6	16.2	19.4	22.2
Cable weight(kg/km)Approx.		145	165	175	205	270	340
Operating temperature range(°C)		-40~+70					
Tensile Strength Short/ Long Term(N)		2700/900					
Crush resistance short/long term (N/100mm)		2200/700					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



# GYFY-Semi dry All-Dielectric Optical Fiber Cable GFRP CSM Stranded Semi-Dry Loose Tube Duct Installation



1. Loose Tube: thermoplastic material, containing optical fibers and filled with gel.
2. Central Strength Member: glass fibre reinforced plastic rod (GFRP) coated with PE when needed.
3. Filler Elements: thermoplastic rods.
4. Longitudinal Water Blocking Material: Water blocking tape.
5. Ripcord
6. Outer Sheath: black polyethylene.

## Features and Applications:

- Non-metallic structure Lighting resistance
- Duct installation or aerial installation
- Semi-dry core design, easy for installation and splice

## Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value					
	Fiber Count	24	48	72	96	144	288
Loose Tube	No. of tubes*fibres per tube	4x6	4x12	6x12	8x12	12x12	24x12
	Outer diameter (mm)	1.9	2.4				
Central strength member	Material	GFPR					
	Diameter (mm)	2.0	2.0	2.6	2.6	2.6	2.6
	Coated CSM diameter (mm)	-	-	-	4.2	7.4	4.8
water blocking material	Material	Water blocking tape					
Outer Sheath	Thickness (mm)	Nominal:1.8					
Cable diameter(mm)Approx.		10.0	10.8	11.6	13.2	16.4	19.2
Cable weight(kg/km)Approx.		85	100	120	155	220	275
Operating temperature range(°C)		-40~+70					
Tensile Strength Short/ Long Term(N)		2000/600					
Crush resistance short/long term (N/100mm)		1000/300					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



## GYTA-1 Optical Fiber Cable APL Armored Stranded Loose Tube Duct Installation

The bending insensitive optical fibres are housed in loose tubes that are made of high-modulus plastic and filled with tube filling compound. The loose tubes with smaller size are stranded to form a cable core. The core is armored with laminated aluminum tape. Then a PE outer sheath is extruded. This structure has a smaller size to enhance installation density of fibres in ducts.



1. Loose Tube: thermoplastic material, containing filled with gel.
2. Optical Fiber: 200um B6a2 Fibre
3. Central Strength Member(CSM): phosphate steel wire.
4. Cable Filling Compound.
5. Longitudinal Water Blocking Material: Water blocking tape.
- 6 Outer Sheath: black polyethylene with APL Tapes.

### Features and Applications:

Accurate process control ensuring good mechanical and temperature performances

The material of loose tubes with good hydrolysis resistance and relatively high strength

Tube filling compound providing the key protection for fibres

Using small-sized B6a2 fibres with good micro and macro bending performance

Comply with IEC60794-3-11(2007): Optical fibre cables- Part 3-11

Water resistance of optical cable is ensured by the following measures: Special water-blocking compound filled in loose tubes  
Laminated aluminum tape armor  
Cable filling compound ensuring longitudinal water resistance



## Technical Characteristics:

Cable Type	Fiber Count	Stranded units	Cable Diameter (mm)	Cable Weight (kg/km)	Bending Radius Dynamic/Static (MM)	Tensile Strength Long/Short Term (N)	Crush Resistance Long/Short Term (N/100 mm)
GYTA≤60	≤60	5	9.8	108	20D/10D	240/800	300/1000
GYTA-62~72	62~72	6	10.4	129	20D/10D	300/850	300/1000
GYTA-74~96	74~96	8	10.6	132	20D/10D	350/1200	300/1000
GYTA-98~120	98~120	10	12.1	161	20D/10D	450/1400	300/1000
GYTA-122~144	122~144	12	13.6	198	20D/10D	700/2000	300/1000

## Environmental Characteristics:

Transport/storage temperature: -40°C to +70°C

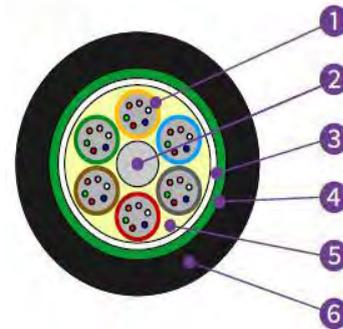
Compound flow: No filling compound or coating compound drop out of optical cable at 70°C

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



## GYTS-1 Optical Fiber Cable PSP Armored Stranded Loose Tube Duct Installation

In the GYTS cable, single-mode/multimode fibres are positioned in the loose tubes, which are made of high modulus plastic materials, while the loose tubes strand together around metallic central strength member into a compact and circular cable core. For certain high fibre count cables, the strength member would be covered with polyethylene (PE). The water-blocking materials are distributed into interstices of the cable core, and the PSP is longitudinally applied around the cable core before a PE sheath is extruded over it.



1. Loose Tube: thermoplastic material, containing optical fibers and filled with gel.
2. Central Strength Member(CSM): phosphate steel wire.
3. Armor: corrugated steel tape.
4. Longitudinal Water Blocking Material: Water blocking tape.
5. Cable Filling Compound
6. Outer Sheath: black polyethylene.

### Features:

Excellent mechanical and temperature performance guaranteed by the accurate excess fibre length

Critical protection to fibres, based on the excellent hydrolysis resistance and strength performance of tube material and special filling compound filled in the tube

Excellent crush resistance and flexibility

Excellent ultraviolet prevention with PE sheath

The following measures are taken to ensure the water blocking performance of the cable:

- Single steel wire used as the central strength member
- Special water-blocking filling compound in the loose tube
- 100% cable core filling
- PSP moisture barrier



### Technical Characteristics:

Cable Type	Fiber Count	Tubes + Fillers	Max. No. of Fibers in Tube	Cable Diameter (mm)	Cable Weight (kg/km)	Tensile Strength Long/Short Term (N)	Crush Resistance Long/Short Term (N/100 mm)
GYTS-2~30	2~30	5	6	9.8	-	600/1500	300/1000
GYTS-32~36	32~36	6	6	10.4	-	600/1500	300/1000
GYTS-38~60	38~60	6	12	10.6	-	600/1500	300/1000
GYTS-62~72	62~72	6	12	12.1	-	600/1500	300/1000
GYTS-74~96	74~96	8	12	12.1	-	600/2000	300/1000
GYTS-98~120	98~120	10	12	15.8	-	600/2500	300/1000
GYTS-122~144	122~144	12	12	15.8	-	600/2500	300/1000



GYTS-30



GYTS-36

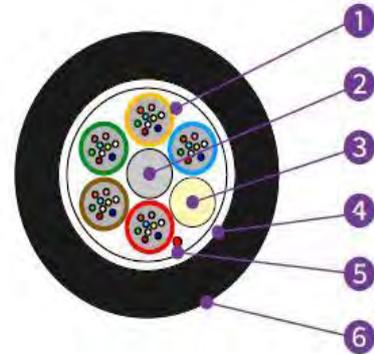


GYTS-96



# GYTY

## Optical Fiber Cable Non Armored Stranded Loose Tube Duct Installation



- 1. Loose Tube: thermoplastic material, containing optical fibers and filled with gel.
- 2. Central Strength Member(CSM): phosphate steel wire.
- 3. Filler Elements: thermoplastic rods.
- 4. Longitudinal Water Blocking Material: Water blocking tape.
- 5. Ripcord
- 6. Outer Sheath: black polyethylene

### Features and Applications:

- High tensile strength and semi-dry core design.
- Specially designed for easy sheath removal.
- Duct installation or aerial installation.

### Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



### Technical Data:

Item	Contents	Value					
	Fiber Count	12	24	48	72	96	144
Loose Tube	No. of tubes*fibres per tube	2x6	2x12	4x12	6x12	8x12	12x12
	Outer diameter (mm)	1.9	2.1				
Central strength member	Material	Phosphate steel wire					
	Diameter (mm)	1.8				2.0	2.0
	Coated CSM diameter (mm)	2.3				3.5	6.1
water blocking material	Material	Water blocking tape					
Outer Sheath	Thickness (mm)	Nominal:1.6					
Cable diameter(mm)Approx.		9.9	10.4	10.4	10.4	11.5	14.2
Cable weight(kg/km)Approx.		88	88	90	92	120	160
Operating temperature range(°C)		-20~+70					
Tensile Strength Short/ Long Term(N)		2700/900					
Crush resistance short/long term (N/100mm)		2000/600					

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



# GYXTW Optical Fiber Cable PSP Armored Central Tube Duct Installation



- 1. Strength Member: two phosphate steel wires.
- 2. Loose Tube: thermoplastic material, containing opticalfibres and water blocking yarn.
- 3. Longitudinal Water Blocking Material: Water blocking tape.
- 4. Armor: corrugated steel tape.
- 5. Outer Sheath: black polyethylene.

## Features and Applications:

- High crush resistance.
- Small diameter and light weight.
- Duct or direct buried installation or aerial installation together with tension strand wire.

## Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Polarization mode dispersion	Individual fibre	≤0.20 ps/√km	≤0.20 ps/√km	-	-
	Design link value (M=20,Q=0.01%)	≤0.1 ps/√km	≤0.1 ps/√km	-	-



## Technical Data:

Item	Contents	Value		
	Fibre Count	6	12	24
Loose Tube	No. of tubes*fibres per tube	1x6	1x12	1x24
	Outer diameter (mm)	3.0	3.0	3.2
Water blocking tape	Longitudinal Water Blocking Material			
Armor	Corrugated steel tape			
Outer Sheath	Black polyethylene			
Strength Member	Two phosphate steel wires (Diameter 1.2mm)			
Cable diameter(mm) Approx.	10.6			
Cable weight(kg/km) Approx.	100			
Operating temperature range(°C)	-40~+70			
Tensile Strength Short/ Long Term(N)	1500/600			
Crush resistance short/long term (N/100mm)	3000/1000			

The colour arrangement of fibre and tube is specified in the colour identification table.

Other structure and fibre count are also available according to customer requirements.



# GYXY Optical Fiber Cable Non Armored Central Tube Duct Installation

The fibers, 250 μ m, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. Over the tube, water-blocking material is applied to keep the cable watertight. Two parallel steel wires are placed at the two sides. The cable is completed with a polyethylene (PE) sheath.



## Characteristics:

- Good mechanical and temperature performance
- High strength loose tube that is hydrolysis resistant
- Special tube filling compound ensure a critical protection of fiber
- Two parallel steel wires ensure tensile strength
- PE sheath protects cable from ultraviolet radiation
- Two parallel steel wires ensure tensile strength
- Small diameter, light weight and friendly installation

## Optical Characteristics:

		G.652.D	G.655	50/125um	62.5/125um
Attenuation	@850nm	-	-	≤3.0 dB/km	≤3.0 dB/km
	@1300nm	-	-	≤1.0 dB/km	≤1.0 dB/km
	@1310nm	≤0.36 dB/km	≤0.40 dB/km	-	-
	@1550nm	≤0.22 dB/km	≤0.23 dB/km	-	-
Bandwidth	@850nm	-	-	≥500 MHz · km	≥200 MHz · km
	@1300nm	-	-	≥1000 MHz · km	≥600 MHz · km
Numerical Aperture		-	-	0.200±0.015NA	0.275±0.015NA
Cable Cut-off Wavelength λ <sub>cc</sub>		≤1260nm	≤1260nm	-	-



## Technical Characteristics:

Cable Type	Fiber Count	Cable Diameter (mm)	Cable Weight (kg/km)	Bending Radius Dynamic/Static (MM)	Tensile Strength Long/Short Term (N)	Crush Resistance Long/Short Term (N/100 mm)
GYXY-2~12	2~12	9.5	90	10D/20D	600/1500	300/1000
GYXY-12~24	12~24	10.2	100	10D/20D	1000/3000	300/1000

Storage/Operating temperature: -40°C to +70°C

 GLOBAL MARKET

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