



# Loose Tube Single-Jacket Single-Armored Cable Dry

## FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

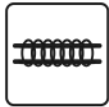
### Applications



Outdoor



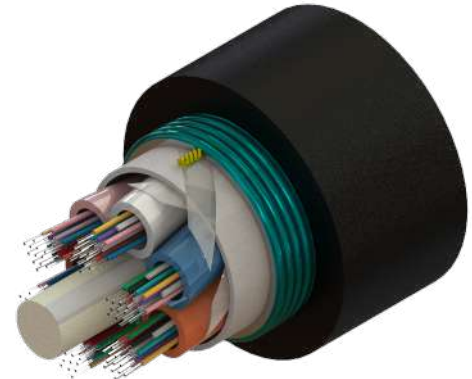
Duct Installation



Lashed



Direct-buried



LOOSE TUBE SINGLE-ARMORED SINGLE-JACKET  
CABLE DRY 72F G652.D FIBER FT

### Protections



Water Blocking



UV Resistant



Rodent  
Deterrent



Crush  
Resistant



Impact  
Resistant

### Quality

WAVEOPTICS® is a ISO-9001:2015 certified company.

We meet or exceed the following international standards:

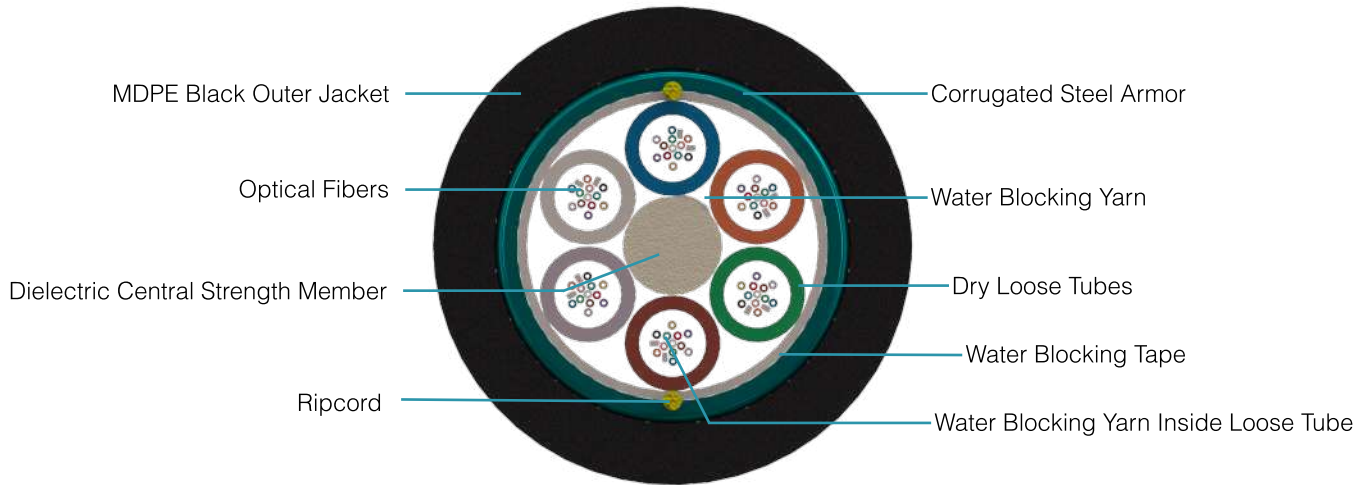
- Telcordia GR-20: Generic requirements for optical fiber and optical fiber cable.
- IEC 60794: Basic requirements for optical fiber and cable elements.
- ANSI/ICEA S-87-640: Standard for optical fiber outside plant communications cable.


In case you do not meet any of these standards or any of the mentioned specifications in this data sheet a notification must be made before signing it. If it is signed and the product does not meet these standards after testing, the material will be returned at the provider's expense.

# TECHNICAL DATA SHEET OUTDOOR CABLE

FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

## Dimensions & Properties



Design	
Fiber per Tube	2 - 12
Fiber / Loose Tube Color Code	
Dielectric Strength Member	FRP
Outer Jacket Material / Thickness	Medium Density Polyethylene / 1.6 mm (0.06 in)
Loose Tube Diameter	2.5 mm (0.1 in)
Steel tape thickness	0.25 mm
Ripcord material	Aramid Yarn 3,000 Denier
Drum length	20,000 ft (0 to +5%)
Temperature Range	
Operation	-40°C to 70°C (-40° F to 158° F)
Installation	-30°C to 70°C (-22° F to 158° F)
Storage / Transport	-40°C to 70°C (-40° F to 158° F)
Mechanical Properties	
Crush Resistance (short-term / long-term)	4,400 N/100 mm / 2,200 N/100 mm
Minimum Bend Radius (operation / installation)	10 x OD / 20 x OD

- The outer jacket must be easy to strip from the armor, it must be stripped with a maximum force of 6 N/mm.

# TECHNICAL DATA SHEET

## OUTDOOR CABLE

FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

### Dimensions & Properties

Fiber count	Loose tube / fillers	Cable weight (kg/km) (lb/kft) (±10%)	Tensile strength (N) (lbf) long-term / short-term	Nominal Outer Dimensions(mm) (in) (±5%)	Dielectric central strength member diameter (mm) (in) (Without PE / With PE)
2 - 12	1/5	130 (87)	2,200 / 4,400 (494/989)	12.5 (0.49)	2.6 (0.1)
24	2/4	130 (87)	2,200 / 4,400 (494/989)	12.5 (0.49)	2.6 (0.1)
36	3/3	130 (87)	2,200 / 4,400 (494/989)	12.5 (0.49)	2.6 (0.1)
48	4/2	130 (87)	2,200 / 4,400 (494/989)	12.5 (0.49)	2.6 (0.1)
60	5/1	130 (87)	2,200 / 4,400 (494/989)	12.5 (0.49)	2.6 (0.1)
72	6/0	130 (87)	2,200 / 4,400 (494/989)	12.5 (0.49)	2.6 (0.1)
96	8/0	162 (109)	2,200 / 4,400 (494/989)	14.1 (0.56)	3 / 4.2 (0.12 / 0.17)
144	12/0	225 (151)	2,200 / 4,400 (494/989)	17.3 (0.68)	3 / 7.4 (0.12 / 0.29)
288	24/0	276 (185)	2,200 / 4,400 (494/989)	20.4 (0.80)	3 / 5 (0.12 / 0.2)

### Printed Information on Outer Jacket

==/MONTH//YEAR/WAVEOPTICS OPTICAL CABLE == SJSAD ==PP==  ==/FIBER TYPE//==/FIBER COUNT//==/FEET\*/FT==/LOT#/=

- Printed in white and resistant to physical tests on marking, the cable could be rejected if the marking can be easily erased when scratched.
- Inkjet marking is accepted as long as it is plasma printed.
- Marking must be in feet with an every 2 feet + 1% interval.
- The marking must coincide with the above illustration.
- Different marking could be a cause of rejection.
- Lot numbers must never be repeated on any Packing List.

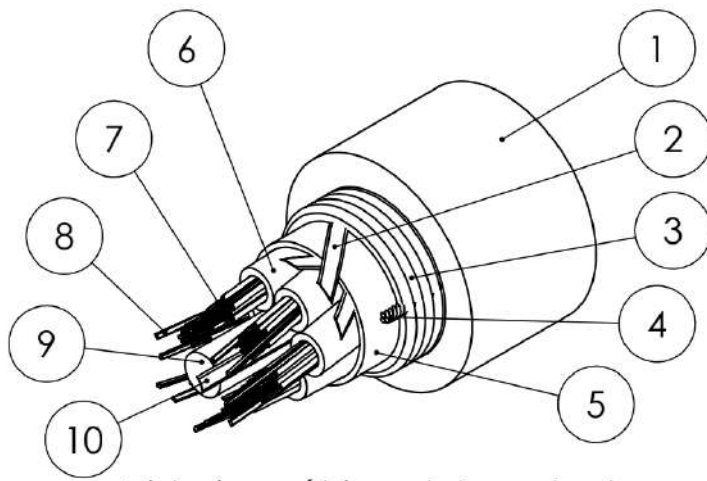
# TECHNICAL DATA SHEET

## OUTDOOR CABLE

FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

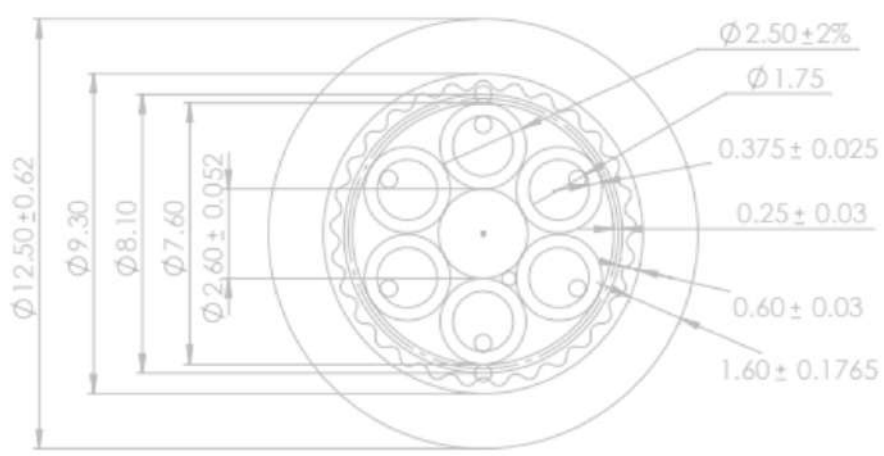
### Technical Drawings

6-72 Fibers



Vista isométrica del producto

Cable Components		
	Name	Description
1	Outer Jacket	Material: MDPE Color: Black Volume per km: 0.054789 m3
2	Binders (3)	Material: 1670 Dtex Total Weight per km: 0.623 kg
3	Steel armor	Material: Corrugated steel Width: 36 mm Weight per km: 51.3025 kg
4	Ripcords (2)	Material: Aramid 3000 Denier Color: Yellow Total weight per km: 0.66667 Position: 180° separation
5	Water Blocking tape	Material: polyester fibers with water absorption powder Measure: 28 mm Weight per km: 2.52 kg
6	Loose tube	Helical factor: 1.8% +/- 0.3 Volume per tube: 0.002503 m3 Filler volume: 0.004909 m3
7	Optical Fiber	Colored Fiber Helical factor: 1.8% +/- 0.3 fiber optic surplus per tube in one km: 0 - 0.05%
8	Water Blocking Yarn (6)	Material: Polyester 1500 Denier Total weight per km: 0.9996 kg (1 yarn per loose tube)
9	FRP	Material: glass fiber reinforced plastic Weight per km: 11.4149 kg
10	Central Water blocking Yarn	Material: Polyester 2500 Denier Weight per km: 0.2778 kg



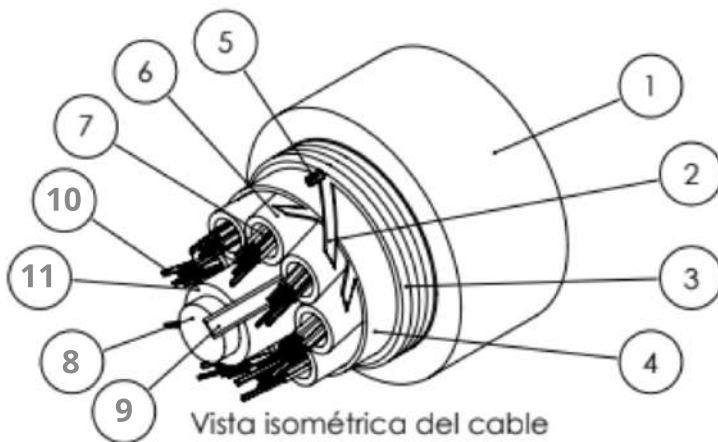
# TECHNICAL DATA SHEET

## OUTDOOR CABLE

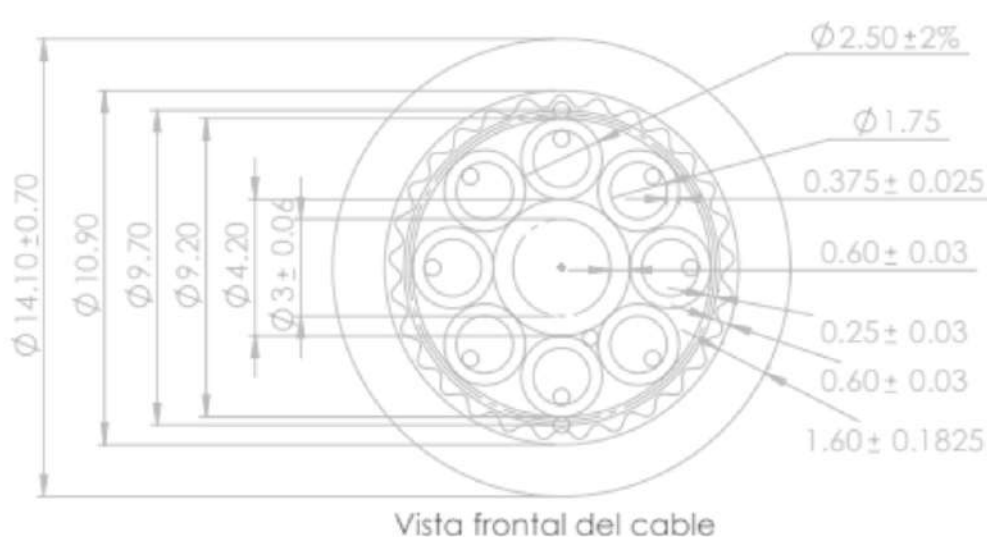
FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

### Technical Drawings

96 Fibers



Cable Components		
	Name	Description
1	Outer Jacket	Material: MDPE Color: Black Volume per km: 0.062832 m3
2	Binders (3)	Material: 1670 Dtex Total Weight per km: 0.671 kg
3	Steel armor	Material: Corrugated steel Width: 40 mm Weight per km: 57 kg
4	Water Blocking tape	Material: polyester fibers with water absorption powder Measure: 32 mm Weight per km: 2.88 kg
5	Ripcords (2)	Material: Aramid 3000 Denier Color: Yellow Total weight per km: 0.66667 Position: Separation 180°
6	Loose tube	Helical factor: 2.0% +/- 0.3 Volume per tube: 0.002503 m3 Filler volume: 0.004909 m3
7	Optical Fiber	Colored Fiber Helical factor: 2.0% +/- 0.3 fiber optic surplus per tube in one km: 0 - 0.05%
8	FRP	Material: glass fiber reinforced plastic Weight per km: 15.1974 kg
9	Central Water blocking Yarn	Material: Polyester 2500 Denier Weight per km: 0.2778 kg
10	Water Blocking Yarn (8)	Material: Polyester 1500 Denier Total weight per km: 4.8888 kg (1 yarn per loose tube)
11	Plastic coating on FRP	Material: MDPE Color: Black Volume per km: 0.006786 m3



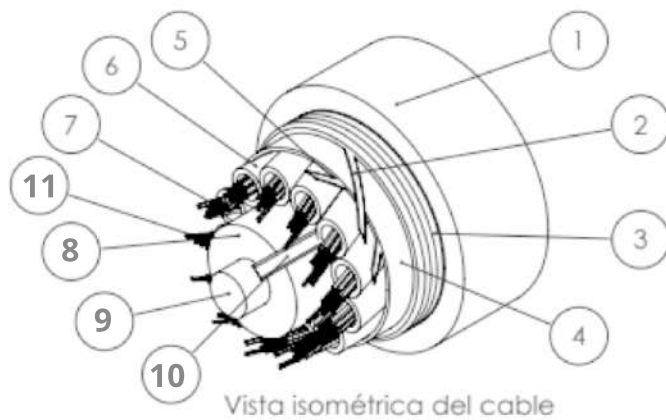
# TECHNICAL DATA SHEET

## OUTDOOR CABLE

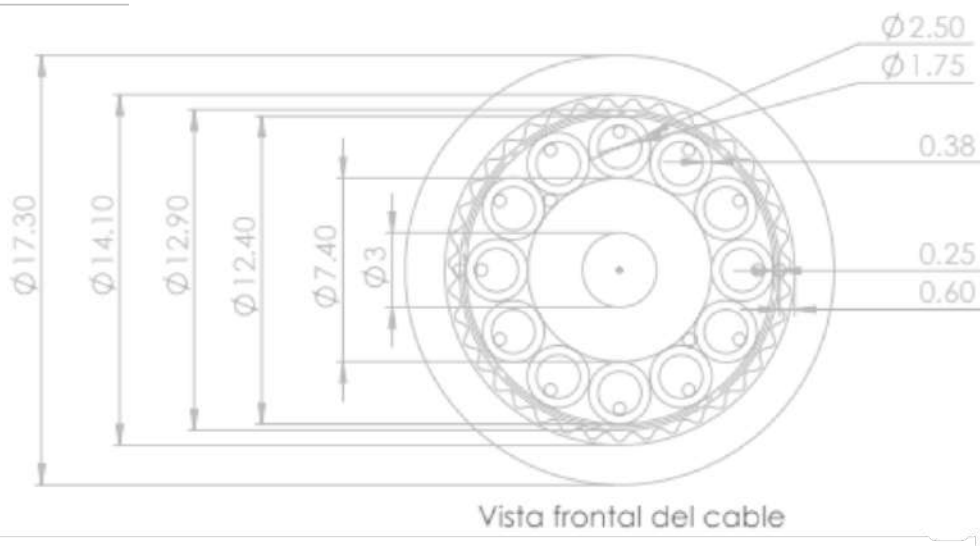
FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

### Technical Drawings

144 Fibers



Cable Components		
	Name	Description
1	Outer Jacket	Material: MDPE Color: Black Volume per km: 0.078917 m3
2	Binders (3)	Material: 1670 Dtex Total Weight per km: 0.780 kg
3	Steel armor	Material: Corrugated steel Width: 48 mm Weight per km: 68.4 kg
4	Water Blocking tape	Material: polyester fibers with water absorption powder Measure: 40 mm Weight per km: 3.60 kg
5	Ripcords (2)	Material: Aramid 3000 Denier Color: Yellow Total weight per km: 0.66667 Position: Separation 180°
6	Loose tube	Helical factor: 2.3% +/- 0.3 Volume per tube: 0.002503 m3 Filler volume: 0.004909 m3
7	Optical Fiber	Colored Fiber Helical factor: 2.3% +/- 0.3 fiber optic surplus per tube in one km: 0 - 0.05%
8	Plastic coating on FRP	Material: MDPE Color: Black Volume per km: 0.035939 m3
9	FRP	Material: glass fiber reinforced plastic Weight per km: 15.1974 kg
10	Central Water blocking Yarn (2)	Material: Polyester 2500 Denier Weight per km: 0.5556 kg
11	Water Blocking Yarn (12)	Material: Polyester 1500 Denier Total weight per km: 1.9992 kg (1 yarn per loose tube)



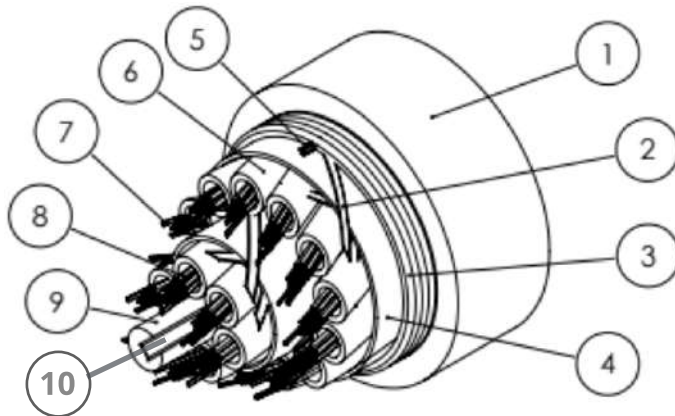
# TECHNICAL DATA SHEET

## OUTDOOR CABLE

FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

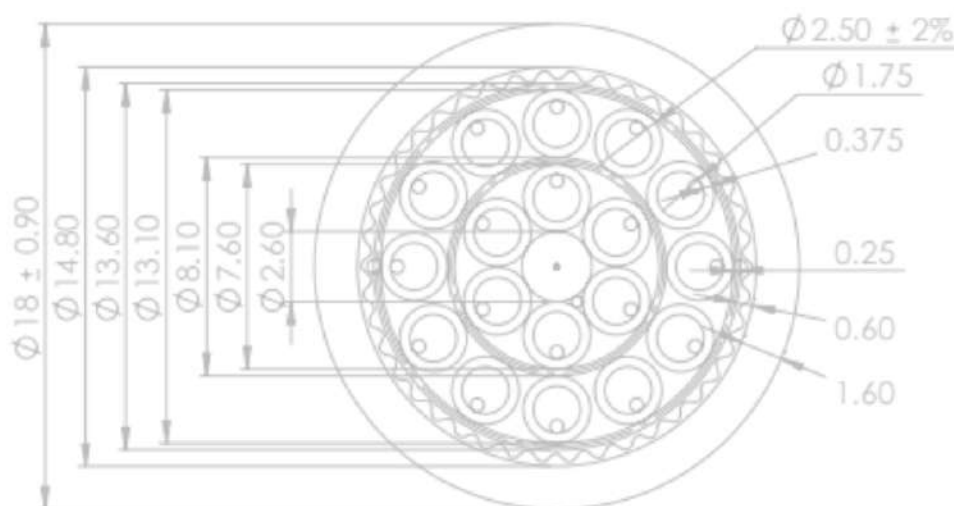
### Technical Drawings

196-216 Fibers



Vista isométrica del cable

Cable Components		
	Name	Description
1	Outer Jacket	Material: MDPE Color: Black Volume per km: 0.082436 m3
2	Binders (6)	Material: 1670 Dtex Total Weight per km: Outer stranding: 0.623 kg Inner stranding: 0.806 kg
3	Steel armor	Material: Corrugated steel Width: 52 mm Weight per km: 74.1 kg
4	Water Blocking tape (2)	Material: polyester fibers with water absorption powder Tape 1: 28 mm - 2.52 kg Tape 2: 44 mm - 3.96 kg
5	Ripcords (2)	Material: Aramid 3000 Denier Color: Yellow Total weight per km: 0.6667 kg Position: Separation 180°
6	Loose tube	Helical factor: Inner stranding: 1.8% +/- 0.3 Outer stranding: 2.3% +/- 0.3 Volume per tube: 0.002503 m3 Filler volume: 0.004909 m3
7	Optical Fiber	Colored Fiber Helical factor: Inner stranding: 1.8% +/- 0.3 Outer stranding: 2.3% +/- 0.3 fiber optic surplus per tube in one km: 0 - 0.05%
8	Water Blocking Yarn (18)	Material: Polyester 1500 Denier Total weight per km: 2.9988 kg (1 yarn per loose tube)
9	FRP	Material: glass fiber reinforced plastic Weight per km: 11.4149 kg
10	Central Water blocking Yarn	Material: Polyester 2500 Denier Weight per km: 0.2778 kg



Vista frontal del cable

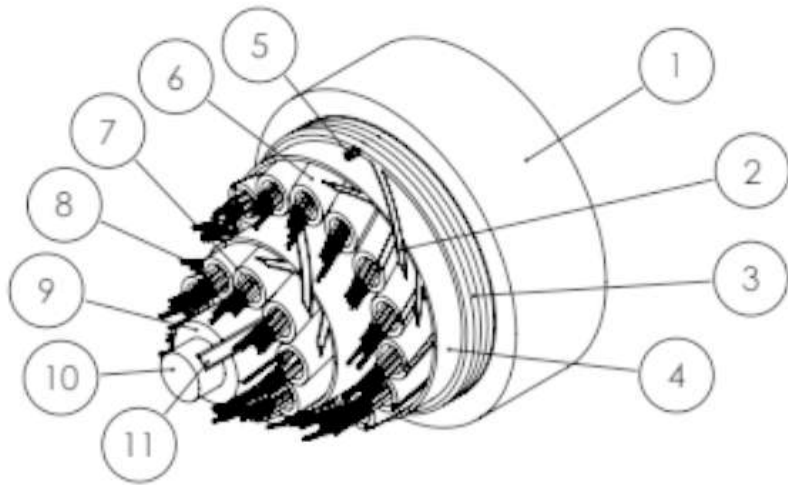
# TECHNICAL DATA SHEET

## OUTDOOR CABLE

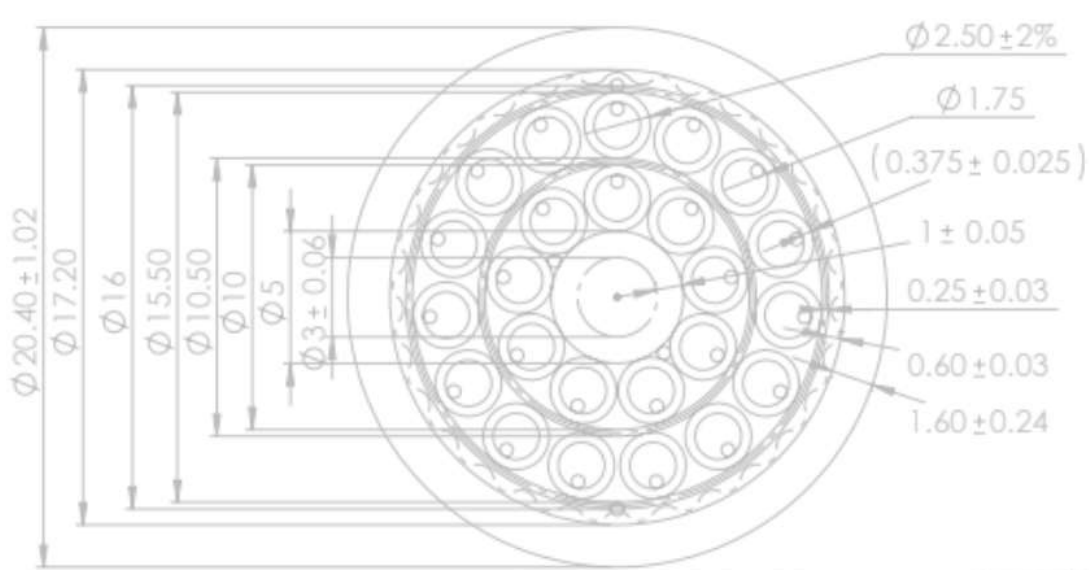
FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

### Technical Drawings

288 Fibers



Cable Components		
	Name	Description
1	Outer Jacket	Material: MDPE Color: Black Volume per km: 0.094499 m3
2	Binders (6)	Material: 1670 Dtex Total Weight per km: Outer stranding: 0.898 kg Inner stranding: 0.697 kg
3	Steel armor	Material: Corrugated steel Width: 60 mm Weight per km: 85.5 kg
4	Water Blocking tape (2)	Material: polyester fibers with water absorption powder Tape 1: 20 mm - 3.24 kg Tape 2: 32 mm - 4.68 kg
5	Ripcords (2)	Material: Aramid 3000 Denier Color: Yellow Total weight per km: 0.6667 kg Position: Separation 180°
6	Loose tube	Helical factor: Inner stranding: 2.1% +/- 0.3 Outer stranding: 2.5% +/- 0.3 Volume per tube: 0.002503 m3 Filler volume: 0.004909 m3
7	Optical Fiber	Colored Fiber Helical factor: Inner stranding: 2.1% +/- 0.3 Outer stranding: 2.5% +/- 0.3 fiber optic surplus per tube in one km: 0 - 0.05%
8	Water Blocking Yarn (24)	Material: Polyester 1500 Denier Total weight per km: 3.9984 kg (2 yarns in each loose tube)
9	Plastic coating on FRP	Material: MDPE Color: Black Volume per km: 0.012566 m3
10	FRP	Material: glass fiber reinforced plastic Weight per km: 15.1974 kg
11	Central Water blocking Yarn (2)	Material: Polyester 2500 Denier Weight per km: 0.5556 kg





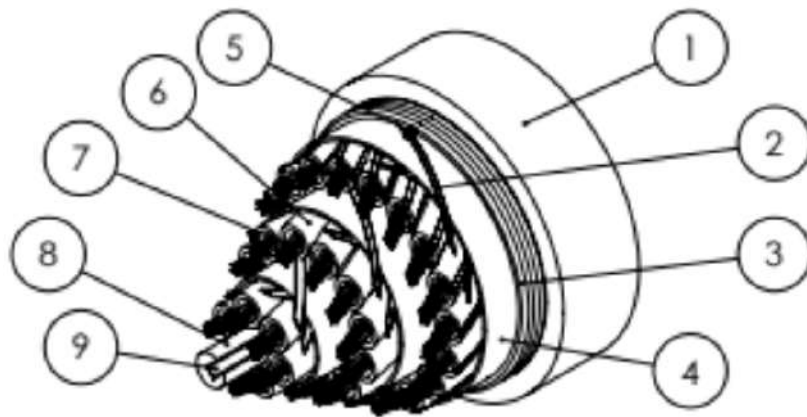
# TECHNICAL DATA SHEET

## OUTDOOR CABLE

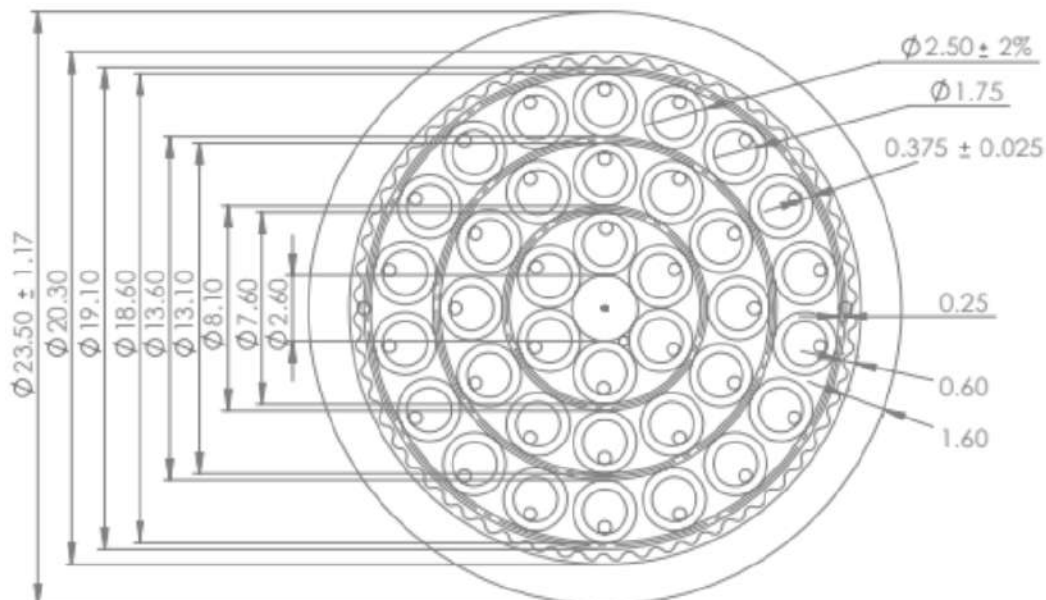
FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

### Technical Drawings

432 Fibers



Cable Components		
	Name	Description
1	Outer Jacket	Material: MDPE Color: Black Volume per km: 0.110082 m3
2	Binders (9)	Material: 1670 Dtex Total Weight per km: Outer stranding: 0.623 kg Intermediate stranding: 0.806 kg Inner stranding: 1.023 kg
3	Steel armor	Material: Corrugated steel Width: 68 mm Weight per km: 96.9 kg
4	Water Blocking tape (3)	Material: polyester fibers with water absorption powder Tape 1: 28 mm - 2.52 kg per km Tape 2: 44 mm - 3.96 kg per km Tape 3: 64 mm - 5.76 kg per km
5	Ripcords (2)	Material: Aramid 3000 Denier Color: Yellow Total weight per km: 0.6667 kg Position: Separation 180°
6	Loose tube	Helical factor: Inner stranding: 1.8% +/- 0.3 Intermediate stranding: 2.3% +/- 0.3 Outer stranding: 3.1% +/- 0.3 Volume per tube: 0.002503 m3 Filler volume: 0.004909 m3
7	Optical Fiber	Colored Fiber Helical factor: Inner stranding: 1.8% +/- 0.3 Intermediate stranding: 2.3% +/- 0.3 Outer stranding: 3.1% +/- 0.3 fiber optic surplus per tube in one km: 0 - 0.05%
8	FRP	Material: glass fiber reinforced plastic Weight per km: 11.9952 kg
9	Water Blocking Yarn (36)	Material: Polyester 1500 Denier Total weight per km: 5.9976 kg (1 yarns in each loose tube)
10	Central Water blocking Yarn	Material: Polyester 2500 Denier Weight per km: 0.2778 kg



# TECHNICAL DATA SHEET OUTDOOR CABLE

FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

## Lot Numbers

- Lot numbers must never repeat and will be defined as it is shown in the following configurator:

**XXXXXX**

### Provider Number

B- ITECO

### Lot number

Four consecutive numbers

- Lot numbers begin with the assigned provider number and followed by four consecutive numbers.
- All lot numbers for a purchase order must be defined before production.
- Lot numbers should not repeat even if they are assigned to different purchase orders or different products. For example:

If a purchase order is placed for a Loose Tube Single Armored Single-Jacket Cable Dry and the last lot number for the complete order is B0009 a new purchase order is placed for Air Blown Micro Cable, this batch must begin with a B0010 and so on.

# TECHNICAL DATA SHEET

## OUTDOOR CABLE

FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

### Drum Dimensions and Pallet Packaging Information



Drum Length (ft) (m) (+5%)	Fiber Count	A (mm) (in) (±5%)	B (mm) (in) (± 5%)	Drum and Pallet Total Weight (kg) (lb) (± 10%)	Total Packaging (±5%)	
					a (mm) (in)	b (mm) (in)
20,000 (6,096)	2-72	1,730 (68)	720 (28)	1,021 (2,251)	1,790 (71)	720 (28)
	96	1,500 (59)	1,100 (43)	1,312 (2,893)	1,500 (59)	1,100 (43)
	144	2,000 (79)	1,100 (43)	1,805 (3,980)	2,000 (79)	1,100 (43)
10,000 (3,048)	288	1,800 (71)	1,100 (43)	2,013 (4,437)	1,800 (71)	1,100 (43)

- All drums must be dry pine wood.
- Flange thickness must be 60mm ±7mm.
- Wood export certification must be provided.
- Drums must be fungus free, If the wood is plagued with fungus when the reels are submitted to inspection for our quality department.
- No tags with any brand different to WAVEOPTICS® inside or outside the drum or flanges.
- There must not be fumigation seals over the stenciling or under test reports/identification labels.
- The flanges must have a metal center reinforcement.
- Longer reel lengths than the 5% tolerance won't be accepted unless to have an authorized deviation format signed by both companies.
- Shorter reel lengths than the once specified in the packaging information won't be accepted.
- There must be a gap of at least 1 inch from the end of the cable winding to the end of the flange.
- The cable must be covered by "polypac" (Metallic Foamed Polyethylene) in order to protect the cable.

**All drums include:\***

1. Drum handling instructions
2. Test report certificate
3. Product description (weight, dimensions, lot and part number)
4. End cable marking
5. Both ends include end caps to protect against humidity

# TECHNICAL DATA SHEET OUTDOOR CABLE

FOSPC-XXX-X-SJSAD-FT000-US / 2-288 Fibers

## Transmission Performance by Fiber Type

Fiber Type	Single Mode
Waveoptics® Fiber Type	G652.D
Waveoptics® Fiber Code	F
Wavelength (nm)	1310/1550
Max.attn. (dB/km) (1)	0.35/0.25
Cable Marking Specifications	G652.D
Notes: (1) Maximum attenuation after cabling process	

## Part Number Configuration

# FOSPC-XXX-X-SJSAD-FT000-US

### Fiber Count

006 - 006 Fibers  
 012 - 012 Fibers  
 024 - 024 Fibers  
 036 - 036 Fibers  
 048 - 048 Fibers  
 060 - 060 Fibers  
 072 - 072 Fibers  
 096 - 096 Fibers  
 144 - 144 Fibers  
 288 - 288 Fibers

### Waveoptics® Fiber Type

F - SM G652.D

### Optical Cable Compliance

US - Waveoptics® Standard

Date	
Provider name a signature	Approver name and signature