Incab

FIBER OPTIC CABLE

catalog 2025

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INCAB

One of the largest manufacturers of optical cables worldwide.

200,000+ sq ft
Production space

24
Proud representatives

18,000+ mi
Cables produced

20+
Free webinars in Learning Hub

70+
Employees

6
Free configurators

"Triple I" by Incab

Watch the factory video tour

When presenting Incab we always speak about our "triple I": innovative, intellectual, individual.

INNOVATIVE

We choose the most innovative technologies from among all available worldwide and build our products around them.

INDIVIDUAL

It is essential to us to address even the smallest details when serving our customers, no matter how large we grow.

INTELLECTUAL

It is vital to us that our products always contain our maximum intellectual potential.

We would be very happy to prove our "triple I" to you!

Mike Riddle
President

Incab
Rules of Life

01

Intellect. Innovations. Individual Approach

That's what we assumed as a basis of Incab at its initial stage and what remains important to us these days.

02

Creation. Hard Work. Benefit

A human is born to do good, do something inspiring and useful. That's our course. We rely on our diligence and energy while creating a top-notch product. It is some kind of religion to us :)

07

Love and Clients' Interests

If you truly love someone, you overcome any difficulties. Whenever you do things with love, they turn out amazing. Our business was born and is developing in love, and we always make sure everyone who encounters Incab feels love: Employees, Partners, and Customers.
Especially, Customers. The result of our work produces a direct effect on their business. We realize this responsibility and act in our Customers' best interests.

04

Personal Maximum and Utter Quality Control

We do everything hitting our personal maximum empowered with all our skills and efforts. To make the world's best product, we hire the best people and take the best materials and equipment.
They say we are absolute fans of quality. Most likely that is true.

05

Be the Cause not the Effect

There are two states: cause and effect. One can be an effect of circumstances, someone's deeds, etc. Or another can be a cause and set the trends, transform from the inside and change the world around. Incab welcomes people who are causes.

06

International. No Limits

We believe there are limits only in our mindsets. These obstacles are destroyed easily. You only need to be yourself and have faith in yourself. So we couldn't help but reach international frontiers. Because there are no limits, and a great product should be available worldwide.

07

Fun, Color of Life and Rock'n'Roll!

Life is beautiful and amazing. Our product is rich in color from the inside. It spilled out and colored up our routine. Since then we match only with fun, color of life and Rock'n'Roll!

A Passion for Sustainability

It is our corporate responsibility to launch and maintain manufacturing processes with regard to the environment, our employees, and also our customers' own sustainability aspirations by offering them sustainable products. Developing our production sites in the US and Europe we are committed to reach our sustainable development goals and operate in line with global environmental standards everywhere we do business. Simply put, care for the planet and for the employees well-being and safety is one of Incab's indisputable values.

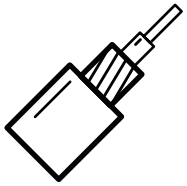
Lean Production

Recyclable and reusable wastes

Reusable packaging (wooden and steel reels)

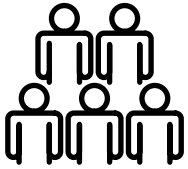
Continuous improvement of technologies and materials along the product life cycle

Incab environmental management system and health and safety management system are certified according to ISO 14001:2015 and ISO 45001:2018 by TÜV Thuringen



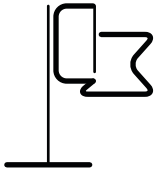
Product

- Cables do not emit toxic substances during their service life
- Long product life cycle (some designs up to 50 years)



People, Culture, Organization

- Variety of personal protective equipment to choose: ease of use while maintaining safety
- Creating a balanced environment



Sustainable Development Goals

- Reduce production emissions
- Reduce wastes
- Reduce packaging (reel-less cable coils)
- Reduce carbon footprint (development of local production sites)

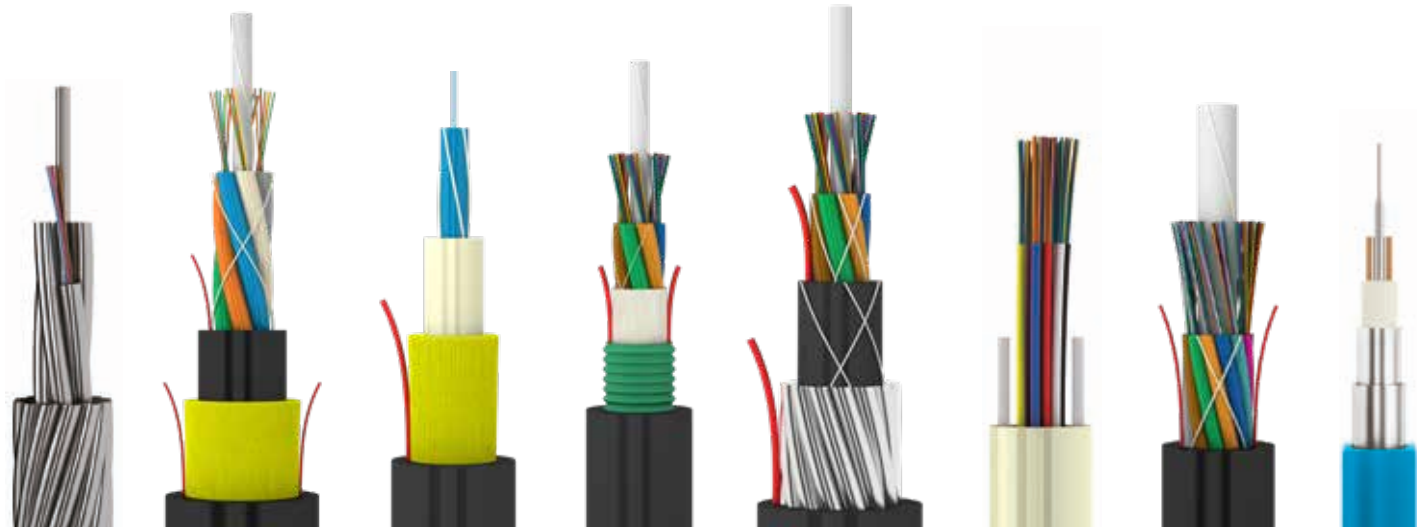
Based on the best available technology, our target is to have the lowest possible environmental impact and minimize it each year.

The widest product range

more than 100

types of cable designs

we design cables based on our Customers'
specific technical requirements



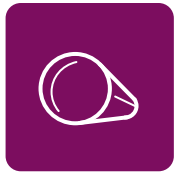
Fiber optic cable for all applications

Power utilities


InSky OPGW


InAir ADSS

Telecommunications


BlownIn


InDuct


InArmor


InWater


InAir ADSS


InAir Figure 8


InControl


InHome FTTH


InDrop FTTH


InFire Rated

Oil & Gas


Specialty Cable

InSky OPGW

InSky OPGW C

InSky OPGW CA

InSky OPGW AP

InSky OPGW S

InSky MASS

InSky ACS Ground Wire

InPhase OPPC

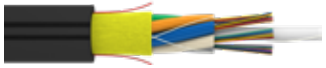
InAir ADSS

InAir ADSS FRP Defender

InAir ADSS DJ

InAir ADSS FiberGlass DJ

InAir ADSS

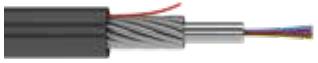


InAir ADSS FiberGlass

Specialty Cable

InFire Rated

InFire Rated Universal



InFire Rated Universal Dielectric

InFire Rated Dielectric

InFire Rated Dielectric Light

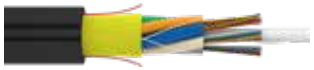
InFire Rated Outdoor

InDuct

InDuct

InDuct FiberGlass

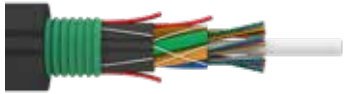
InDuct Aramid



InArmor

InArmor CST

InArmor CST DJ

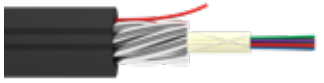


InArmor CT CST

InArmor⁺ SST

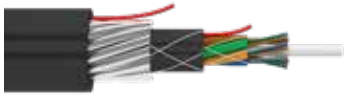
InArmor⁺ FiberGlass DJ

InArmor⁺ CT GSW



InArmor⁺ CT FRP

InArmor⁺ GSW



InArmor⁺ FRP

InArmor+ SST GSW

InArmor+ GSW Wetland

InArmor++ CT GSW2

InArmor++ CT FRP2

InArmor++ GSW2

InArmor++ FRP2

InArmor++ GSW2 Wetland

InWater

InWater Submersible CT GSW2

InWater Submersible SST GSW2

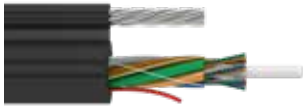
BlownIn

BlownIn CT

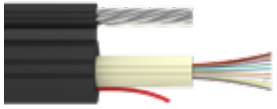
BlownIn

InAir Figure 8

InAir Figure 8 GSW



InAir Figure 8 CT GSW



InAir Figure 8 CT FRP

InControl

InControl Distribution TB DJ

InHome FTTH

InHome Riser TB

InHome Riser MT

InHome Distribution TB

InHome Distribution MT

InHome Simplex TB

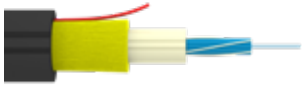
InHome Duplex TB

InDrop FTTH

InDrop Flat Type

InDrop Flat Type Toneable

InDrop Round Type TB



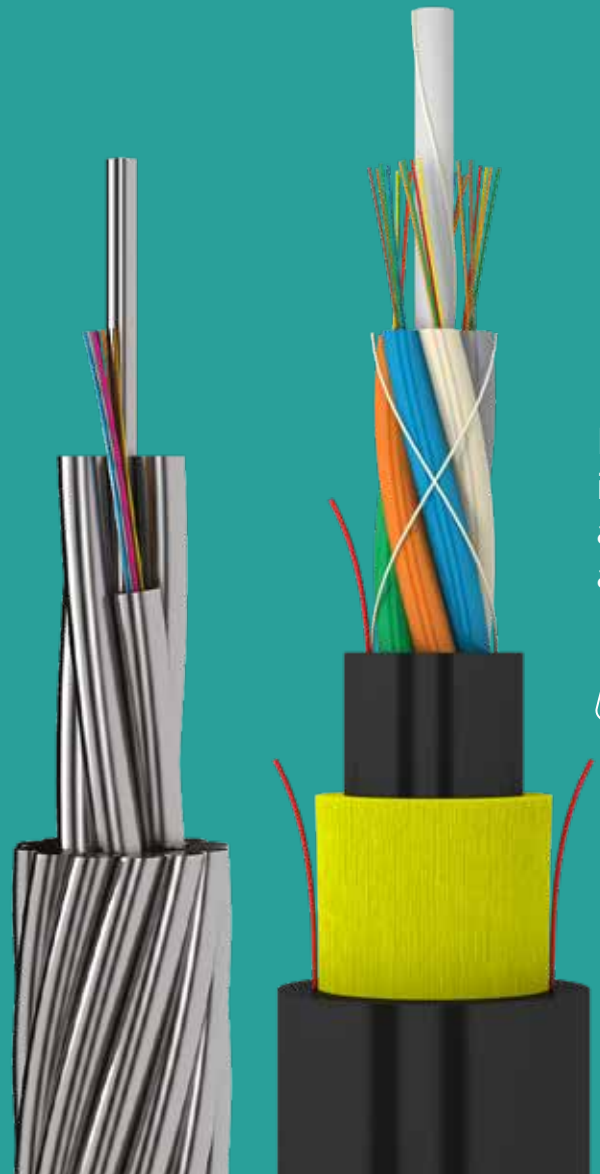
InDrop Round Type

OPGW & ADSS
Top Products

InSky OPGW

Designed for use as a static wire and a communication cable

Discover more



InAir ADSS

Designed for aerial installation on distribution and high-voltage power lines, as well as railway catenary

Discover more

InSky OPGW designs

InSky OPGW C p. 31

InSky OPGW CA p. 32

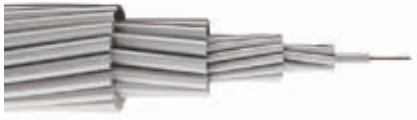
InSky OPGW AP p. 33

InSky OPGW S p. 34

InSky MASS p. 35

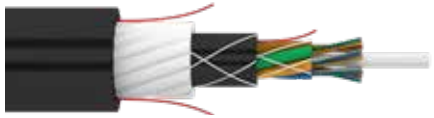
InSky ACS Ground Wire p. 36

InPhase OPPC p. 37



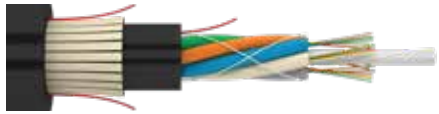
InAir ADSS designs

InAir ADSS FRP Defender p. 39



InAir ADSS DJ p. 40

InAir ADSS FiberGlass DJ p. 41

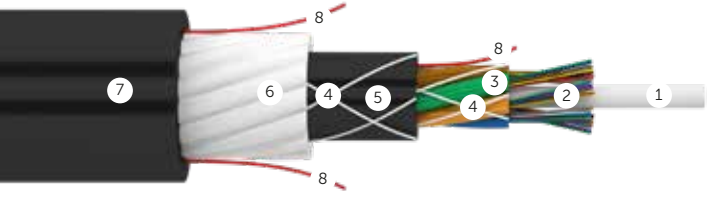


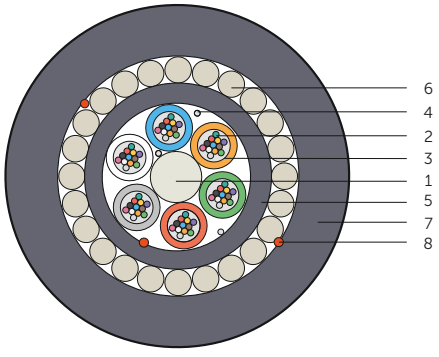
InAir ADSS p. 42

InAir ADSS FiberGlass p. 43

Anti-rodent solution
InAir ADSS FRP Defender

DESIGN





APPLICATION

This design combines enhanced optical reliability with the highest degree of rodent resistance available in an all-dielectric cable. It can also be used as an all-dielectric direct buried cable solution.

CABLE DESIGN

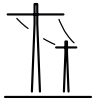
1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket
6. Fiberglass rods
7. Jacket
8. Ripcord

KEY FEATURES

Anti-rodent additive in the outer jacket for first line protection

Completely protected from water ingress

Superior protection from mechanical damage — FRP rods for strength and second-line protection



Designed for aerial applications of 138 kV or less where damage from squirrels/rodents is apparent

TECHNICAL PARAMETERS

Designs with the following technical parameters can be produced:

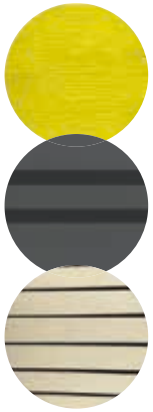
Maximum rated cable load	up to 4,496 lb
Span length	up to 2,000 ft**
Fiber count	up to 288 and more upon request

*Cables based on Customers' specific technical requirements can also be produced. Please, contact us for a cable designed to your exact specifications.
**depending on NESC conditions

InAir ADSS FRP Defender was created specifically to solve the rodent problem. This design has three lines of defense:

- A non-toxic anti-rodent additive in the outer jacket to discourage chewing (optional)
- FRP rods to stop chewing
- An inner jacket to ensure that the optical core is protected from water ingress

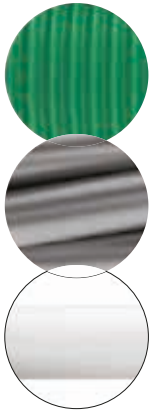
Let's see the effectiveness against rodents of different protective materials:



5% aramid yarns

70% PA and PP jackets

70% fiberglass yarns



100% corrugated steel tape (CST): traditional, but non-dielectric

100% galvanized steel wires (GSW): ultrastrong, but heavy and non-dielectric

100% fiberglass rods (FRP): "heavy duty" solution — light and all-dielectric

The best solution for rodent-protected ADSS!

Design options with double armor and double jacket are also possible

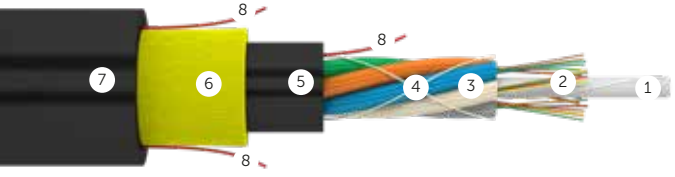
Suitable for ADSS

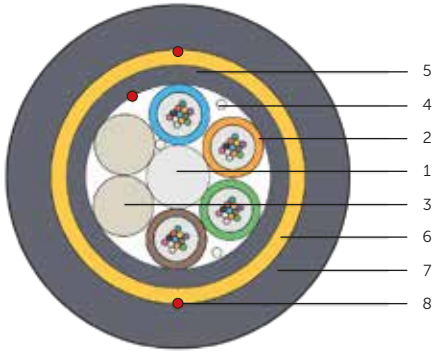
Dielectric

Non-dielectric

Track-resistant solution
InAir ADSS DJ TR*

DESIGN





APPLICATION

The best solution for long spans. With a track-resistant jacket, it can be used in electric fields up to 25 kV without causing surface discharges.

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket
6. Aramid yarns
7. Jacket
8. Ripcord

SPECIAL DESIGN OPTION*

Solution for long spans!

Track-resistant: outer jacket is made of track-resistant PE

TECHNICAL PARAMETERS

Designs with the following technical parameters can be produced:

Maximum rated cable load	up to 23,000 lb
Span length	up to 1 mile**
Fiber count	up to 288 and more upon request

**depending on NESC conditions

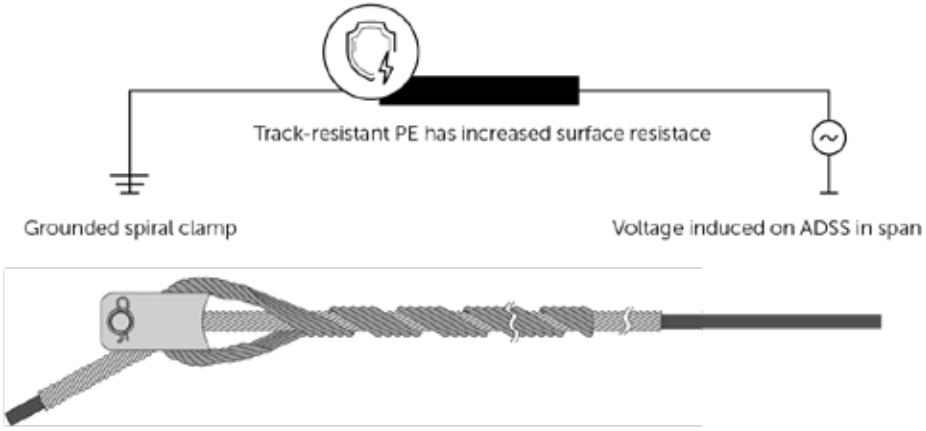
COMPARE MAXIMUM INDUCED VOLTAGE

12 kV Simple polyethylene

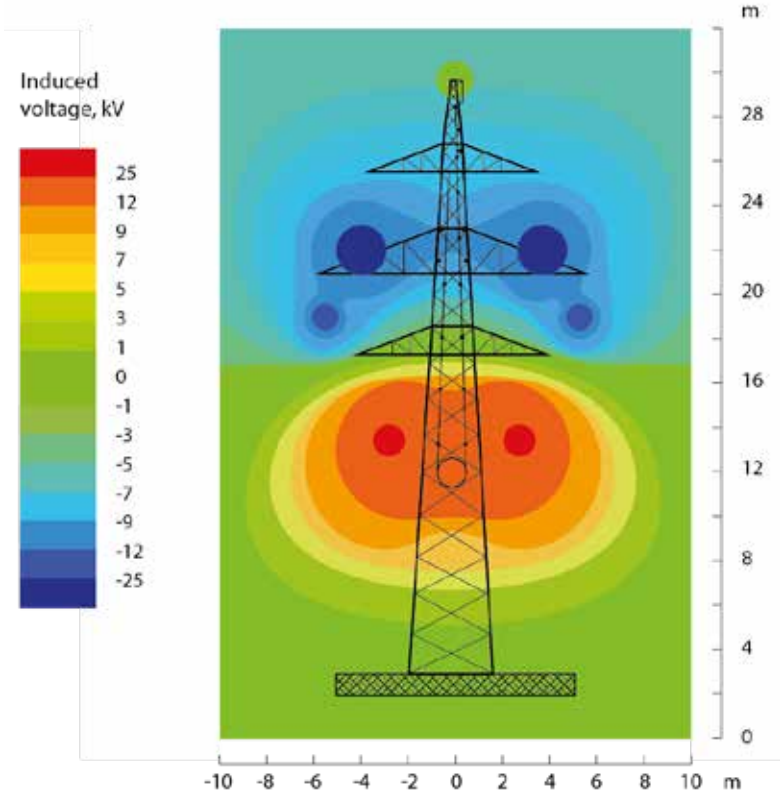
25 kV × 2,08 Track-resistant polyethylene

The necessity of track-resistant jacket depends on the attachment point on the tower. Please send us the following information and we'll recommend the optimal attachment point and the jacket type:

- Voltage class of power line
- Tower size and geometry
- Length of insulators
- Diameter of wires



CABLE ATTACHMENT POINT ANALYSIS

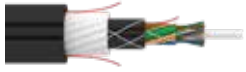


FTTH solutions

Discover more

Aerial Backbone 1

InAir ADSS FRP Defender



InAir ADSS DJ

InAir ADSS FiberGlass DJ

InAir ADSS

InAir ADSS FiberGlass

Aerial Distribution 2

InAir ADSS FRP Defender

InAir ADSS DJ

InAir ADSS FiberGlass DJ

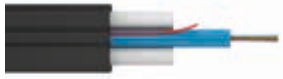
InAir ADSS

InAir ADSS FiberGlass

InAir Figure 8 GSW

Aerial Drop 3

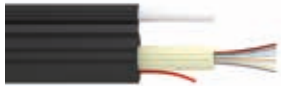
InDrop Flat Type



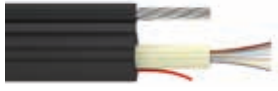
InDrop Round Type TB

InDrop Round Type

InAir Figure 8 CT FRP



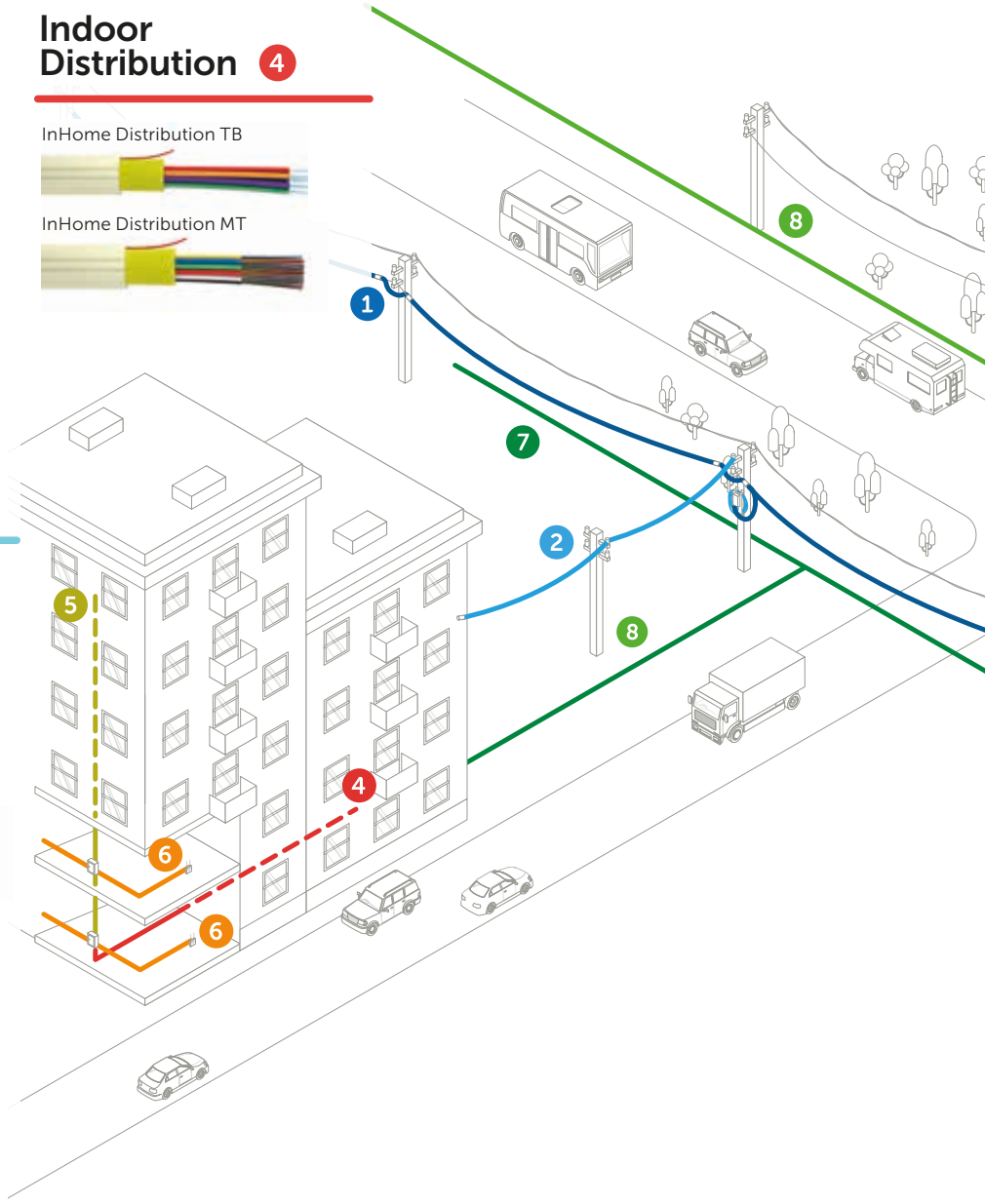
InAir Figure 8 CT GSW



Indoor Distribution 4

InHome Distribution TB

InHome Distribution MT



Riser 5

InHome Riser TB

InHome Riser

Indoor Drop 6

InHome Simplex TB

InDrop Round Type TB

InDrop Round Type

Underground Backbone 7

InDuct

InArmor CST

InArmor CST DJ

Underground Distribution 8

InDuct

InArmor CST

InArmor CST DJ

Underground Drop 9

InDrop Flat Type

InDrop Round Type TB

InDrop Round Type

InArmor CT CST

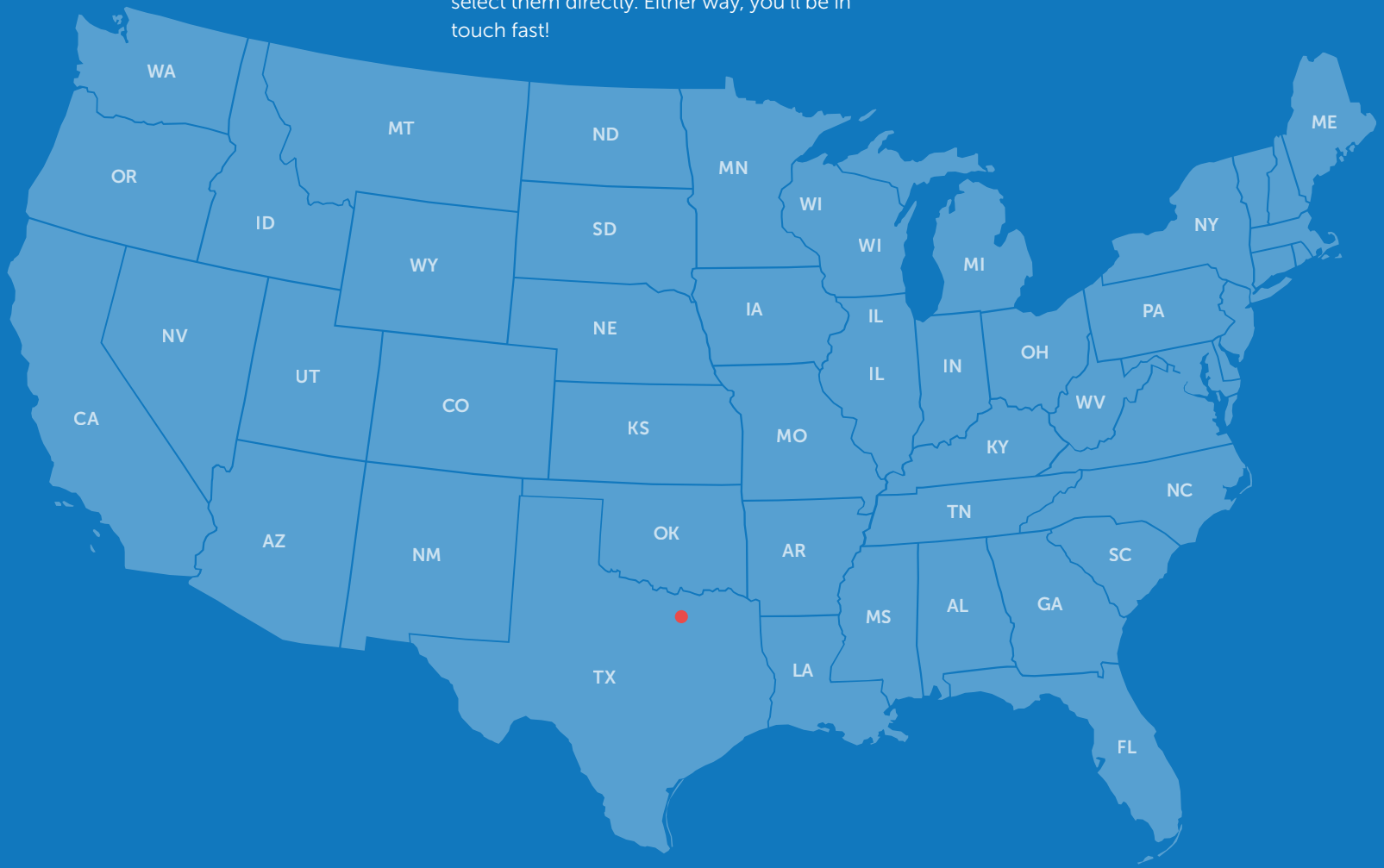
InArmor+ CT GSW

Find Your Rep

Discover more

Incab supports you with the help of our network of outstanding manufacturers' representatives. They are part of our extended family, and you probably already know them just as well as we do.

Explore the website page designed to help you easily identify and connect with our representative closest to you. You can select your state or locale, or if you recognize one of our representative's names, you can select them directly. Either way, you'll be in touch fast!



Supply Experience in Americas

North America

Latin America


Cooperation

With the leading global manufacturers in the industry

We offer full fiber cable solutions:

cable closure cable duct

ACES: Advanced Cable Engineering System

OPGW and ADSS Configurator

Try The Congifurator™

Design calculation

Cost estimation

Specifications generation

Optimal cable selection

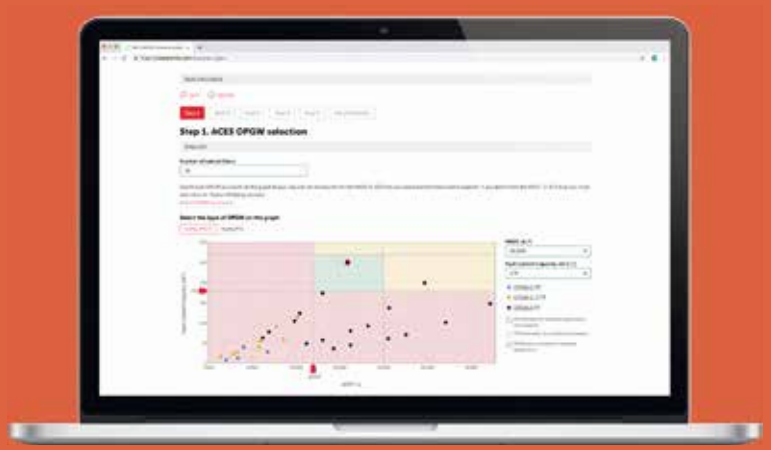
Space potential calculation

Calculation of tension and sags

Our Advanced Cable Engineering System (ACES) is a unique software tool to help engineers select the optimal OPGW and ADSS design along with the associated accessories, including dead ends, suspensions, down leads, splice closures and dampers.

ACES will also help engineers and planners prepare cost estimates, generate a complete bill of materials, determine reel lengths, and plan logistics.

ACES was developed by Incab in partnership with Preformed Line Products, and we very much appreciate their assistance.



SUPPORT

Incab America strives to provide the best possible technical support at all stages by consulting the customers on all aspects of optical communication and operation.

If you want to receive a full range of meticulous after-sale service, Incab America is probably what you are looking for. We care about every customer and we want Incab cables to operate effectively and in the right way. We provide technical support on installation and maintenance.

Our technical support team does not exceed response time and gets back to Customers with answers as quickly as they can, usually within 24 business hours.

After all, you can always count on personal assistance of Mike Riddle, President of Incab America, who has 40-plus years of expertise in the industry and who is recognized connoisseur of standing reputation.

Learning Hub

Discover more

It is a video library of the webinars on OPGW or ADSS engineering, basics of fiber optics, basics of FTTH, etc. hosted by Incab America team.

For any inquiry or if you are interested in a private webinar, please contact us **marketing@incabamerica.com**

Product Portfolio

InSky OPGW

Discover more

APPLICATION

Protection of power lines from lightning overvoltage

Construction of optical communication systems

OPERATING PARAMETERS

Operating temperature*	-58°F...+185°F
Installation temperature	-22°F...+122°F
Transportation and storage temperature	-58°F...+185°F
Minimun bending radius	20x cable diameter
Design life	50 years

*Operating temperature range can be from -76° to +185°F upon request

We design cables based on our Customers' specific technical requirements. Please, contact us for a cable designed to your exact specifications.

CERTIFICATES

OPGW cables have been tested by the independent laboratory "Kinectrics" (Canada) according to IEEE 1222 standard.

Optical Ground Wire Central Loose Tube (C)

InSky OPGW C

Click here to see detailed features of this design

APPLICATION

An excellent choice when low weight and a small diameter are more important than rated breaking strength (RBS) and short circuit current resistance. Often used to replace existing conventional 3/8 inch HS/EHS groundwire.

FEATURES

- Up to 96 fibers
- ACS wires are highly corrosion-resistant
- Optical ground wire (OPGW) shields high-voltage conductors from lightning strikes
- Aluminum alloy wires provide conductivity for fault current

CABLE DESIGN

1. Optical fiber
2. Stainless steel tube filled with water-blocking gel
3. Stranded wires (aluminum-clad steel wires and/or aluminum alloy wires)

PARAMETERS

- Up to 96 fibers
- Rated breaking strength up to 47,210 lb (210 kN)
- Maximum rated design tension up to 28,101 lb (125 kN)
- Crush — 571 lb/in (1 kN/cm)

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Optical Ground Wire Central Aluminum-Clad Loose Tube (CA)

InSky OPGW CA

Click here to see detailed features of this design

APPLICATION

An excellent choice when moderate fault current capacity is needed in a compact diameter. It is also especially well-suited for highly corrosive locations, such as coastal areas.

FEATURES

- Up to 96 fibers
- Enhanced corrosion resistance: ACS wires and aluminum-clad stainless steel tube
- Optical ground wire (OPGW) shields high-voltage conductors from lightning strikes
- Aluminum alloy wires provide conductivity for fault current

CABLE DESIGN

1. Optical fiber
2. Aluminum-clad stainless steel tube filled with water-blocking gel
3. Stranded wires (aluminum-clad steel wires and/or aluminum alloy wires)

PARAMETERS

- Up to 96 fibers
- Rated breaking strength up to 47,210 lb (210 kN)
- Maximum rated design tension up to 28,101 lb (125 kN)
- Crush — 857 lb/in (1.5 kN/cm)

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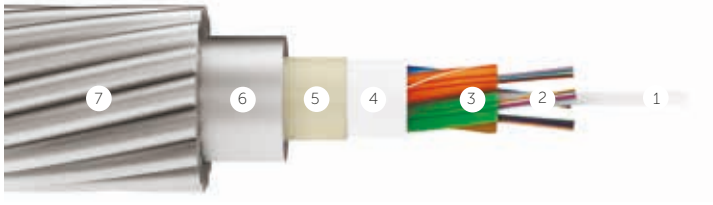
Optical Ground Wire Aluminum Pipe (AP)

InSky OPGW AP

Click here to see detailed features of this design



APPLICATION

An excellent design for moderate to high fault current capacities and when ease of splice prep is especially important.

FEATURES

- Up to 144 fibers
- Highly corrosion-resistant: ACS wires and aluminum pipe
- Convenient splice preparation
- Aluminum alloy wires provide conductivity for fault current
- Optical ground wire (OPGW) shields high-voltage conductors from lightning strikes

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable tape
5. Thermal barrier
6. Aluminum pipe
7. Aluminum-clad steel wire and/or aluminum alloy wires

PARAMETERS

- Up to 144 fibers
- Rated breaking strength up to 47,210 lb (210 kN)
- Maximum rated design tension up to 28,101 lb (125 kN)
- Crush — 571 lb/in (1 kN/cm)

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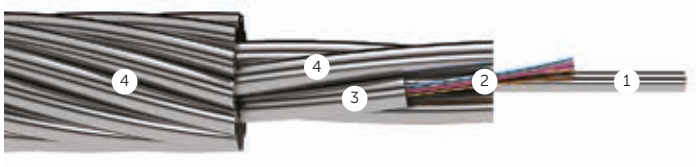
Optical Ground Wire Stranded (S)

InSky OPGW S

Click here to see detailed features of this design



APPLICATION

Combines excellent mechanical and electrical properties with much higher zero fiber strain margin to enhance long-term optical reliability. It is also more flexible and crush-resistant than other design types which makes pulling it in faster and makes it possible to pull farther and through more angles.

FEATURES

- Up to 432 fibers
- ACS wires are highly corrosion-resistant
- Optical ground wire (OPGW) shields high-voltage conductors from lightning strikes
- Aluminum alloy wires provide conductivity for fault current

CABLE DESIGN

1. Central strength member (aluminum-clad steel or aluminum alloy wire)
2. Optical fiber
3. Stainless steel tube filled with water-blocking gel
4. Stranded wires (aluminum-clad steel wires and/or aluminum alloy wires)

PARAMETERS

- Up to 432 fibers
- Rated breaking strength up to 61,822 lb (275 kN)
- Maximum rated design tension up to 37,093 lb (165 kN)
- Crush — 571 lb/in (1 kN/cm)

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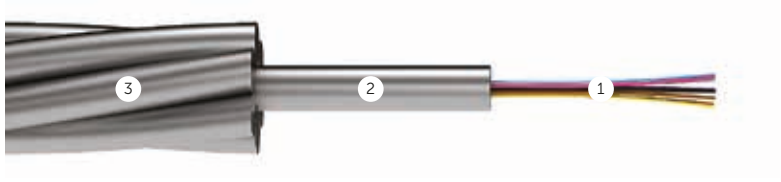
Metallic Aerial Self-Supporting (MASS)

InSky MASS

Click here to see detailed features of this design



APPLICATION

Designed for medium and high voltage power lines when it is not possible to use OPGW and ADSS or it is not economically feasible.

FEATURES

Maximum rated design tension 67,443 lb

ASC wire makes the cable exceedingly rustproof

High strength, small size

Large spans between towers, installation over rivers and ravines

CABLE DESIGN

1. Optical fiber
2. Stainless steel tube filled with water-blocking gel
3. Stranded wires (galvanized steel wires or aluminum clad steel wires)

PARAMETERS

- Up to 48 fibers
- Maximum rated design tension up to 67,443 lb (100 kN)
- Crush — 571 lb/in (1 kN/cm)

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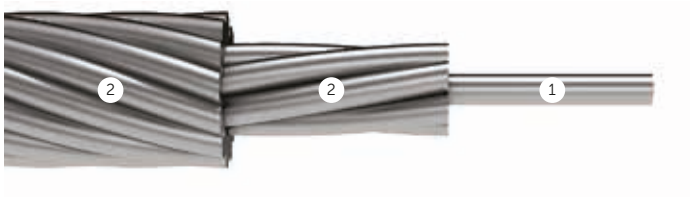
Aluminum-Clad Steel (ACS) Ground Wire

InSky ACS Ground Wire

Click here to see detailed features of this design



APPLICATION

Should be used when fiber optic capacity is not needed, or when additional fault current capacity is needed.

FEATURES

Aluminum-clad steel wires are corrosion-resistant

ACS ground wires shield high-voltage conductors from lightning strikes

A standard component of high-voltage transmission lines

CABLE DESIGN

1. Central strength member (aluminum-clad steel wire)
2. Stranded wires (aluminum-clad steel wires)

PARAMETERS

- Rated breaking strength up to 157,366 lb (700 kN)

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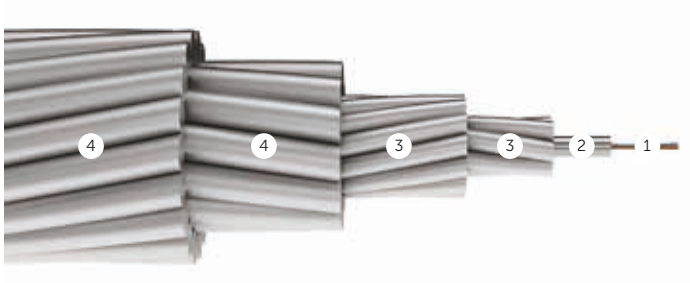
Optical Phase Conductor (OPPC)

InPhase OPPC

Click here to see detailed features of this design



APPLICATION

An effective aerial solution when OPGW or ADSS cannot be used.

FEATURES

Up to 288 fibers

ACS wires are highly corrosion-resistant

Effective solution to provide redundancy in harsh conditions, such as long cable spans, crossings of cable spans, power lines with previously installed OPGW and ADSS and others

CABLE DESIGN

1. Optical fiber
2. Stainless steel tube
3. Aluminum-clad steel wire
4. Aluminum alloy wire or aluminum wire

PARAMETERS

- Up to 288 fibers
- Rated breaking strength up to 44,962 lb (200 kN)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InAir ADSS

Discover more

APPLICATION

Designed for aerial installation on transmission towers, high voltage power lines and railway catenary; highly resistant to electromagnetic effect

Can also be used in ducts or as direct buried cable

Dry design — easy to strip

OPERATING PARAMETERS

Operating temperature*	-58°F...+158°F
Installation temperature	-22°F...+158°F
Transportation and storage temperature	-58°F...+158°F
Minimum bending radius	15x cable diameter
Design life	25 years

*Operating temperature range can be from -76° to +158°F upon request

We design cables based on our Customers' specific technical requirements. Please, contact us for a cable designed to your exact specifications.

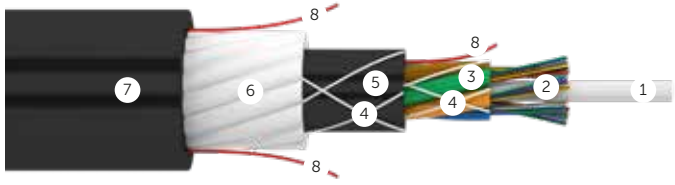
OPTIONS

Cables of this group may be produced as flame-retardant and with jacket which is made of a tracking-resistant material (can be used in case of cable exposure to the electric field with a potential above 12 kV)

FiberGlass Rods (FRP) Defender

InAir ADSS FRP Defender

Click here to see detailed features of this design



APPLICATION

This design combines enhanced optical reliability with the highest degree of rodent resistance available in an all-dielectric cable. It also can be used as an all-dielectric direct buried cable solution.

FEATURES

Anti-rodent additive in the outer jacket for first-line protection

Completely protected from water ingress

Superior protection from mechanical damage — FRP rods provide strength and second-line protection

Designed for use in aerial applications of 138 kV or less where damage from squirrels/ rodents is apparent

Maximum rated cable load up to 4,496 lb

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket
6. Fiberglass rods
7. Jacket
8. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated cable load up to 4,496 lb (20 kN)
- Crush up to 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
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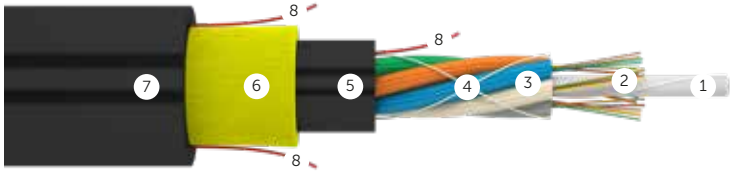
Double Jacket (DJ)

InAir ADSS DJ

Click here to see detailed features of this design



APPLICATION

The standard design for ruggedness and reliability. It is also the best solution for long spans. With a tracking-resistant jacket, it can be used in electric fields up to 25 kV.

FEATURES

All-dielectric design

Aerial installation on distribution and transmission lines up to 138 kV and above

For construction of communication lines between towns and cities with distances between towers reaching 1,640 ft

Wide range of operating temperatures. Installation temperature down to -22°F

The most reliable among InAir ADSS cables. Double tensile strength

Maximum rated cable load up to 22,481 lb

25 kV ×2.08

Special design option
Outer jacket is made of track-resistant PE

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket
6. Aramid yarns
7. Jacket
8. Ripcord

PARAMETERS

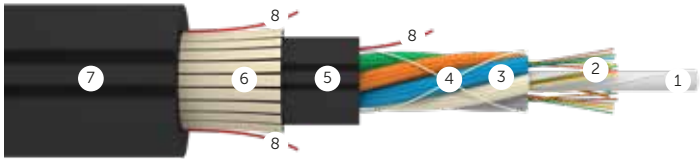
- Up to 144 fibers
- Maximum rated cable load up to 22,481 lb (100 kN)
- Crush — 126 lb/in (0.22 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

FiberGlass yarns Double Jacket (DJ)

InAir ADSS FiberGlass DJ

Click here to see detailed features of this design



APPLICATION

A great solution for short and medium spans. It's less expensive than comparable cables with aramid and provides a degree of rodent resistance.

FEATURES

- Cost-effective solution for city trunk lines
- Wide range of operating temperatures. Installation temperature down to -22°F
- All-dielectric design
- Maximum rated cable load up to 3,372 lb with span lengths up to 984 ft
- Aerial installation on distribution and transmission lines up to 138 kV and above
- **Special design option**
  Outer jacket is made of track-resistant PE

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket
6. Fiberglass yarns
7. Jacket
8. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated cable load up to 3,372 lb (15 kN)
- Crush — 126 lb/in (0.22 kN/cm)

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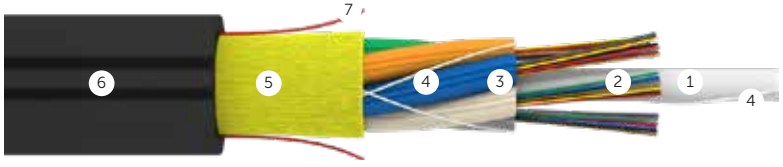
All-Dielectric Self-Supporting (ADSS)

InAir ADSS

Click here to see detailed features of this design



APPLICATION

A cost-effective solution for use on short and medium spans. It will have a smaller diameter and be lighter compared to a double jacket design.

FEATURES

- Cost-effective design
- All-dielectric design
- Dry design – easy to strip
- Reduced weight and size. Low susceptibility to ice and wind loads
- Aerial installation on distribution and transmission lines up to 35 kV
- Wide range of operating temperatures. Installation temperature down to -22°F
- Maximum rated cable load up to 2,248 lb with span lengths up to 656 ft
- Gel-filled option available

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. Dry loose tube
4. Water-swellable yarns
5. Aramid yarns
6. Jacket
7. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated cable load up to 2,248 lb (10 kN)
- Crush — 126 lb/in (0.22 kN/cm)

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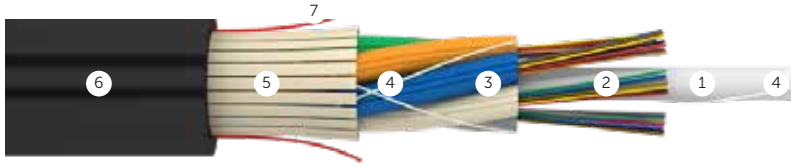
FiberGlass yarns

InAir ADSS FiberGlass

Click here to see detailed features of this design



APPLICATION

The most cost-effective solution for use on short and medium spans. It will have a smaller diameter and be lighter compared to a double jacket design. The fiberglass yarn provides a degree of rodent resistance.

FEATURES

- Maximum rated cable load up to 2,248 lb with span lengths up to 656 ft
- Dry design – easy to strip
- Reduced weight and size. Low susceptibility to ice and wind loads
- All-dielectric design
- Cost-effective solution for city trunk lines
- Aerial installation on distribution and transmission lines up to 35 kV
- Wide range of operating temperatures. Installation temperature down to -22°F
- Gel-filled option available

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. Dry loose tube
4. Water-swellable yarns
5. Fiberglass yarns
6. Jacket
7. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated cable load up to 2,248 lb (10 kN)
- Crush — 126 lb/in (0.22 kN/cm)

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Specialty Cables

The world around us is changing faster than ever before. Every day new challenges come up and instead of fighting the change, we should embrace it. Just like optical fiber does. From just being the key element of telecommunication networks, it has been adapted to the data acquisition and monitoring purposes for various applications.

Always keeping abreast of the latest developments Incab launched a range of specialty cables backed by extensive manufacturing experience since 2007. Now we are excited to introduce our new project dedicated to this type of cables.

Discover the full range of specialty cables for various applications, which are developed in cooperation with top-notch industry experts.

MEASURE


Temperature


Deformation


Movement


Acoustics


Pressure


Deviation angle


Leakage

REDUCE


Emergency reaction time


Forced downtime of technical facilities


Emergency damages


Incidents of theft


Environmental damage caused by leaks


Monitoring costs

Application areas

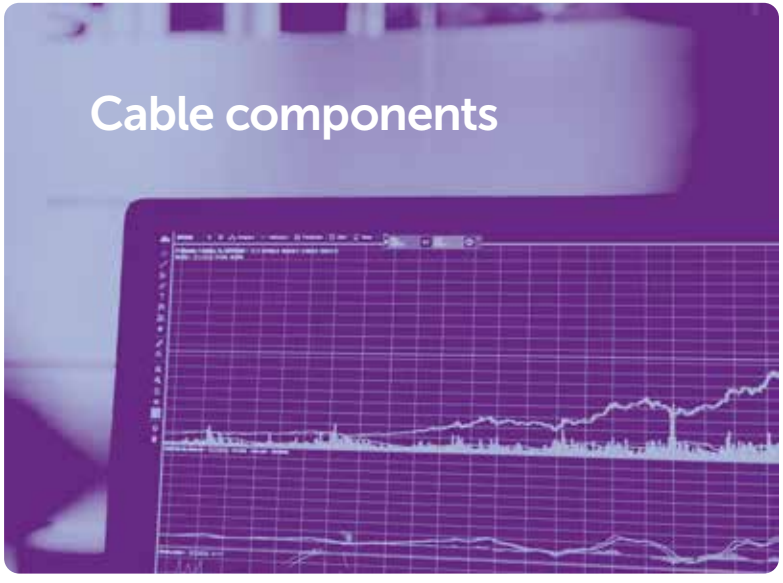
Oil & Gas

Retrievable designs, Permanent installation,
Downhole chemical injection,
Pipeline monitoring

Structural health monitoring

Bridges, Rail roads, Fire detection,
Soil movements, Cryogenic monitoring

Cable components



InFire Rated

Discover more

APPLICATION

Recommended for installation on sites with increased security requirements

OPERATING PARAMETERS

Operating temperature	-58°F...+158°F (-40°F...+140°F — InFire Rated Dielectric, InFire Rated Dielectric Light)
Installation temperature	+14°F...+122°F
Transportation and storage temperature	-58°F...+122°F
Minimum bending radius	10x cable diameter (15x cable diameter — InFire Rated Universal Doelectric, InFire Rated Dielectric Light)
Design life	25 years

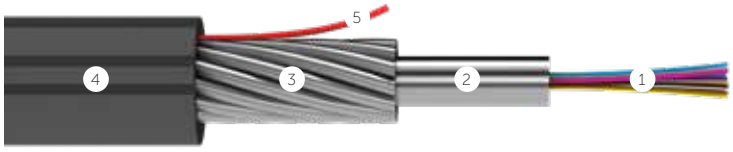
We design cables based on our Customers' specific technical requirements. Please, contact us for a cable designed to your exact specifications.

FEATURES

- remain operative exposed to fire for at least 180 minutes
- flame-retardant in group laying
- low toxicity of combustion products
- low smoke
- halogen-free

InFire Rated Universal

Click here to see detailed features of this design



APPLICATION

Suitable for any harsh environment where fire resistance is also needed.

FEATURES

- Remains functional under direct flame for at least 180 minutes
- Withstands the physical impact and water used during fire-fighting
- Minimum combustible content
- Resistance to crushing load 571 lb/in which is retained even after the fire
- Small size – thin, light, economical
- Suitable for all applications
- Up to 96 fibers

CABLE DESIGN

1. Optical fiber
2. Stainless steel tube
3. Armor of steel wires
4. Halogen-free jacket
5. Ripcord

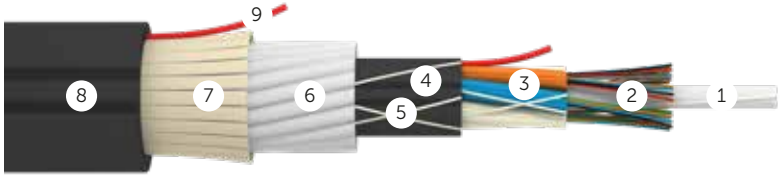
PARAMETERS

- Up to 96 fibers
- Maximum rated design tension up to 1,574 lb (7 kN)
- Crush — 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InFire Rated Universal Dielectric

Click here to see detailed features of this design



APPLICATION

An indoor/outdoor cable for applications where induced voltages and currents must be eliminated. Armor of FRP rods provides good mechanical properties. Suitable for power lines and other utilities.

FEATURES

- Remains functional under direct flame for at least 180 minutes
- All-dielectric design
- Suitable for all applications
- Excellent rodent resistance
- Up to 288 fibers
- UV-resistant

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Inner jacket made of halogen-free flame-retardant polymer compound
5. Water-sweallable yarns
6. Fiberglass rods
7. Fiberglass yarns
8. Halogen-free jacket
9. Ripcord

PARAMETERS

- Up to 288 fibers
- Maximum rated design tension up to 1,574 lb (7 kN)

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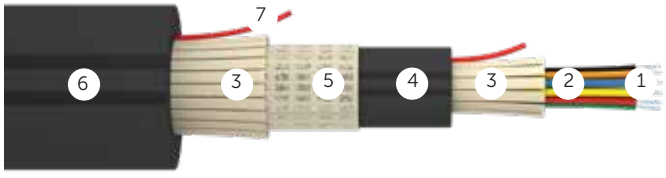
InFire Rated Dielectric

Click here to see detailed features of this design



APPLICATION

Fiberglass provides both strength and rodent resistance. Can be used indoors as a breakout cable, or anywhere that fire resistance is a must.

FEATURES

- Remains functional under direct flame for at least 180 minutes
- All-dielectric design
- Easy to install
- Up to 24 fibers

CABLE DESIGN

1. Optical fiber
2. Tight-buffer
3. Fiberglass yarns
4. Inner jacket made of halogen-free flame-retardant polymer compound
5. Mica glass tape
6. Halogen-free jacket
7. Ripcord

PARAMETERS

- Up to 24 fibers
- Maximum rated design tension up to 247 lb (1.1 kN)
- Crush — 114 lb/in (0.2 kN/cm)

We design cables based on our Customers' specific technical requirements.
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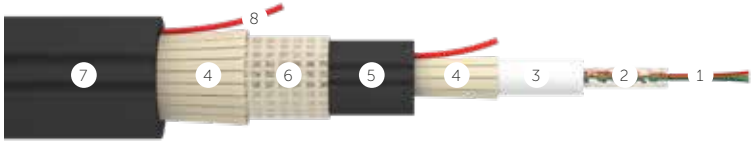
InFire Rated Dielectric Light

Click here to see detailed features of this design



APPLICATION

Fiberglass provides both strength and rodent resistance. Can be used indoors as a breakout cable, or anywhere that fire resistance is a must.

InFire Rated

FEATURES

- Remains functional under direct flame for at least 180 minutes
- All-dielectric design
- Up to 24 fibers

CABLE DESIGN

1. Optical fiber
2. Water-blocking gel
3. Loose tube
4. Fiberglass yarns
5. Inner jacket made of halogen-free flame-retardant polymer compound
6. Mica glass tape
7. Halogen-free jacket
8. Ripcord

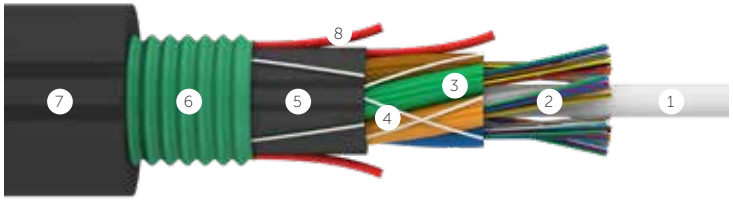
PARAMETERS

- Up to 24 fibers
- Maximum rated design tension up to 450 lb (2 kN)
- Crush — 114 lb/in (0.2 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InFire Rated Outdoor

Click here to see detailed features of this design



APPLICATION

An indoor/outdoor direct buried cable is deployed when rodent protection is a serious concern or when additional crush resistance is needed due to rocky soil.

ADVANTAGES

- Remains functional under direct flame for at least 180 minutes
- Excellent rodent resistance
- Up to 288 fibers
- Easy to install

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket made of halogen-free flame-retardant polymer compound
6. Corrugated steel tape
7. Halogen-free jacket
8. Ripcord

PARAMETERS

- Up to 288 fibers
- Maximum rated design tension up to 607 lb (2.7 kN)
- Crush — 126 lb/in (0.22 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InDuct

Discover more

APPLICATION

Designed for duct installations

Applied in tubes, ducts, trays, blocks, tunnels, collecting channels, with no risk of rodent attacks

Suitable for aerial installation: power lines, lamp posts, railway overhead systems

OPERATING PARAMETERS

Operating temperature*	-40°F...+158°F
Installation temperature	-22°F...+158°F
Transportation and storage temperature	-40°F...+158°F
Minimum bending radius	15x cable diameter
Design life	25 years

*Operating temperature range can be increased on request

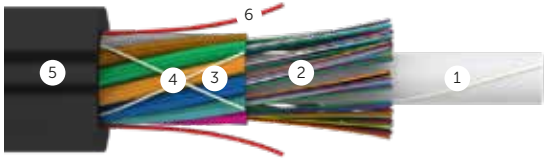
We design cables based on our Customers' specific technical requirements. Please, contact us for a cable designed to your exact specifications.

OPTIONS

All InDuct cables may be produced as flame-retardant.

InDuct

Click here to see detailed features of this design



APPLICATION

A standard dielectric cable for installation in ducts with no risk of rodent attacks

FEATURES

All-dielectric design

Up to 288 fibers

Maximum rated design tension up to 607 lb

CABLE DESIGN

1. Central strength member (FPR)
2. Optical fiber
3. Dry loose tube
4. Water-swellable yarns
5. Jacket
6. Ripcord

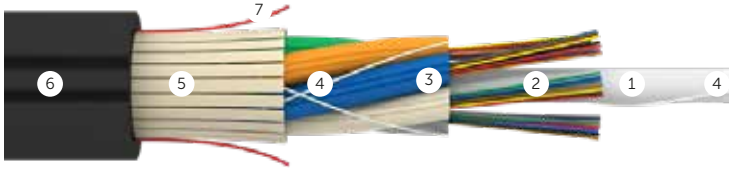
PARAMETERS

- Up to 288 fibers
- Maximum rated design tension up to 607 lb (2.7 kN)
- Crush — 126 lb/in (0.22 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InDuct FiberGlass

Click here to see detailed features of this design



APPLICATION

All-dielectric outside plant (OSP) cable is typically deployed in ducts. It can also be lashed to a messenger wire for aerial installation and can be attached to bridges or the lining inside a tunnel. The NESC permits OSP cable to be run up to 50 feet inside a building. Using fiberglass yarn lowers cost and provides a degree of rodent protection.

FEATURES

- All-dielectric design
- Up to 864 fibers

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. Dry loose tube
4. Water-swellable yarns
5. Fiberglass yarns
6. Polymer jacket
7. Ripcord

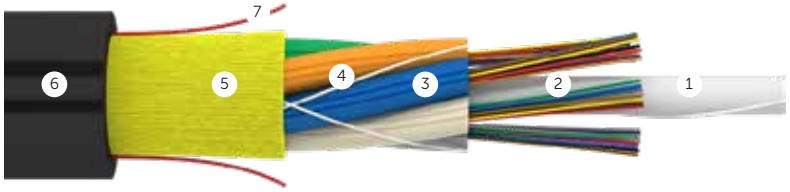
PARAMETERS

- Up to 864 fibers
- Maximum rated design tension up to 607 lb (2.7 kN)
- Crush — 126 lb/in (0.22 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InDuct Aramid

Click here to see detailed features of this design



APPLICATION

All-dielectric outside plant (OSP) cable is typically deployed in ducts. It can also be lashed to a messenger wire for aerial installation and can be attached to bridges or the lining inside a tunnel. The NESC permits OSP cable to be run up to 50 feet inside a building.

FEATURES

Easy to install

All-dielectric design

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. Dry loose tube
4. Water-swellable yarns
5. Aramid yarns
6. Jacket
7. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated design tension up to 607 lb (2.7 kN)
- Crush — 126 lb/in (0.22 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InArmor

Discover more

APPLICATION

Designed for harsh environments with potential mechanical impact: in all ground types, swamps and harsh rivers

Applied in ducts, trays, blocks, tunnels, and collecting channels

Suitable for aerial installation between buildings and structures (however, its higher weight and larger diameter compared to self-supporting cables must be taken into consideration)

OPERATING PARAMETERS

Operating temperature*	-58°F...+158°F
Installation temperature	-22°F...+122°F
Transportation and storage temperature	-58°F...+158°F
Minimum bending radius	15x cable diameter
Design life	25 years

*Operating temperature range can be increased on request

We design cables based on our Customers' specific technical requirements. Please, contact us for a cable designed to your exact specifications.

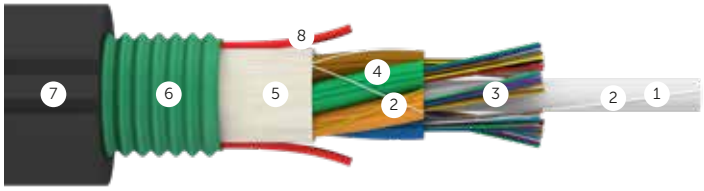
OPTIONS

All InArmor cables may be produced as flame-retardant.
InArmor+ SST cable may be produced with fire rated jacket.

Corrugated Steel Tape (CST)

InArmor CST

Click here to see detailed features of this design



APPLICATION

Direct buried cable used in rural and urban construction when aerial and conduit space is unavailable.

FEATURES

- The most popular design
- Excellent rodent resistance
- Reduced weight and size. Suitable for blowing in tubes
- Cost-effective design
- Increased tightness due to application of water-swellable tape

CABLE DESIGN

1. Central strength member (FRP)
2. Water-swellable yarns
3. Optical fiber
4. Dry loose tube
5. Water-swellable tape
6. Corrugated steel tape
7. Jacket
8. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated design tension up to 607 lb (2.7 kN)
- Crush from 126 lb/in (0.22 kN/cm)

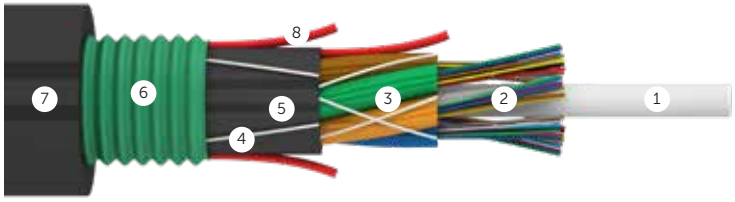
* InArmor CST cable may be produced with even higher maximum rated design tension up to 1.124 lb. Please contact us for details.

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Corrugated Steel Tape (CST) Double Jacket (DJ)

InArmor CST DJ

Click here to see detailed features of this design



APPLICATION

Direct buried cable deployed when rodent protection is a serious concern or when additional crush resistance is needed due to rocky soil.

FEATURES

- Proven reliable design
- Excellent rodent resistance
- Improved reliability due to inner jacket
- Cost-effective design

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. Dry loose tube
4. Water-swellable yarns
5. Inner jacket
6. Corrugated steel tape
7. Jacket
8. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated design tension up to 607 lb (2.7 kN)
- Crush — 126 lb/in (0.22 kN/cm)

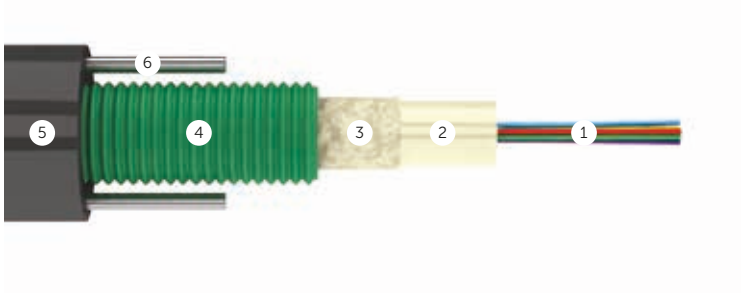
* InArmor CST DJ cable may be produced with even higher maximum rated design tension up to 1.124 lb. Please contact us for details.

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Central Tube (CT) Corrugated Steel Tape (CST)

InArmor CT CST

Click here to see detailed features of this design



APPLICATION

Typical applications are in conduits and sewer pipes where rodent attacks are common.

FEATURES

- Cost-effective design
- Excellent rodent resistance
- Reduced weight and size
- Up to 24 fibers

CABLE DESIGN

1. Optical fiber
2. PBT loose tube filled with water-blocking gel
3. Water-blocking gel
4. Corrugated steel tape
5. Jacket
6. Steel wires

PARAMETERS

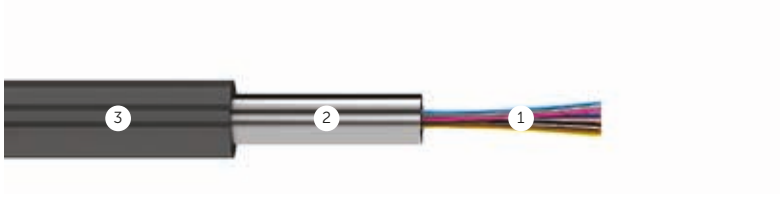
- Up to 24 fibers
- Maximum rated design tension up to 607 lb (2.7 kN)
- Crush from 286 lb/in (0.5 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Stainless Steel Tube (SST)

InArmor+ SST

Click here to see detailed features of this design



APPLICATION

Designed for short underground pulls requiring low tension. It is highly crush resistant.

FEATURES

- The smallest diameter
- Excellent rodent resistance
- 100% waterproof

CABLE DESIGN

1. Optical fiber
2. Stainless steel tube filled with water-blocking gel
3. Jacket

PARAMETERS

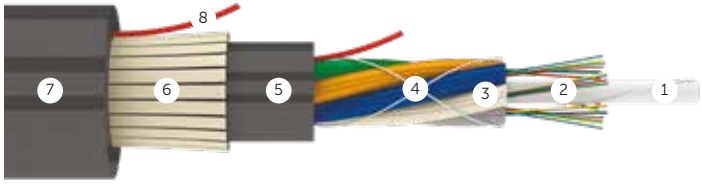
- Up to 96 fibers
- Maximum rated design tension up to 337 lb (1.5 kN)
- Crush from 400 lb/in (0.7 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

FiberGlass yarns Double Jacket (DJ)

InArmor+ FiberGlass DJ

Click here to see detailed features of this design



APPLICATION

A dielectric armored cable for applications where electrical conductors are in the same conduit system. It is a cost-effective solution for crowded urban conduits with rodent problems.

FEATURES

All-dielectric design

Fiberglass yarns prevent damage by rodents

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket
6. Fiberglass yarns
7. Jacket
8. Ripcord

PARAMETERS

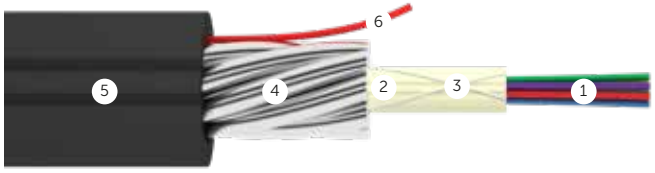
- Up to 144 fibers
- Maximum rated design tension up to 607 lb (2.7 kN)
- Crush from 126 lb/in (0.22 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Central Tube (CT) Galvanized Steel Wires (GSW)

InArmor+ CT GSW

Click here to see detailed features of this design



APPLICATION

Direct buried cable that can also be installed in ducts.

FEATURES

- Cost-effective design
- Excellent rodent resistance
- Resistance to crushing load 400 lb/in
- Up to 24 fibers
- Reduced weight and size
- 100% waterproof
- Maximum rated design tension up to 4,496 lb

CABLE DESIGN

1. Optical fiber
2. PBT loose tube filled with water-blocking gel
3. Water-swellable yarns
4. Armor of galvanized steel wires
5. Jacket
6. Ripcord

PARAMETERS

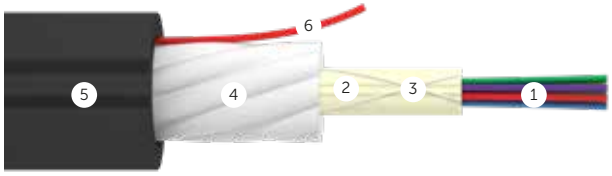
- Up to 24 fibers
- Maximum rated design tension up to 4,496 lb (20 kN)
- Crush from 400 lb/in (0.7 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Central Tube (CT) FiberGlass Rods (FRP)

InArmor+ CT FRP

Click here to see detailed features of this design



APPLICATION

Excellent as a direct buried, drop cable.

FEATURES

- Reduced weight, suitable for aerial installation
- All-dielectric design
- Reliable protection from serious mechanical impact
- Resistance to crushing load 400 lb/in
- Up to 24 fibers
- Excellent rodent resistance
- Maximum rated design tension up to 2,698 lb

CABLE DESIGN

1. Optcal fiber
2. PBT loose tube flled with water-blocking gel
3. Water-swellable yarns
4. Armor of fiberglass rods
5. Jacket
6. Ripcord

PARAMETERS

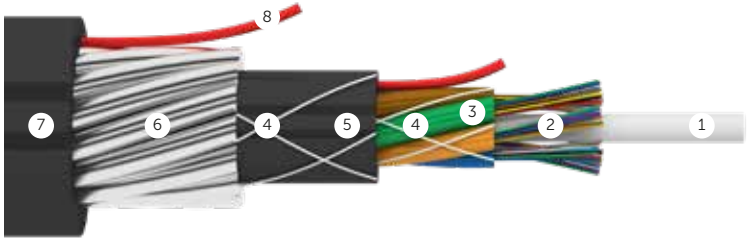
- Up to 24 fibers
- Maximum rated design tension up to 2,698 lb (12 kN)
- Crush 400 lb/in (0.7 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Galvanized Steel Wires (GSW)

InArmor+ GSW

Click here to see detailed features of this design



APPLICATION

Direct buried cable designed for rocky soils where crushing is a big concern.

FEATURES

- The most popular design
- Reliable protection from serious mechanical impact
- Excellent rodent resistance
- Maximum rated design tension up to 17,985 lb
- Resistance to crushing load up to 571 lb/in

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket
6. Armor of galvanized steel wires
7. Jacket
8. Ripcord

PARAMETERS

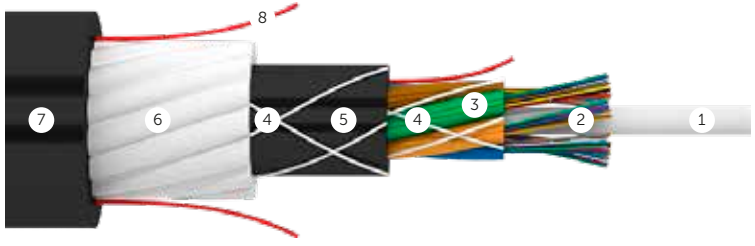
- Up to 144 fibers
- Maximum rated design tension up to 17,985 lb (80 kN)
- Crush — up to 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

FiberGlass Rods (FRP)

InArmor+ FRP

Click here to see detailed features of this design



APPLICATION

Excellent for underground installations in close proximity to underground power circuits.

FEATURES

- Reduced weight, suitable for aerial installation
- Reliable protection from serious mechanical impact
- Excellent rodent resistance
- All-dielectric design
- Maximum rated design tension up to 4,496 lb
- Resistance to crushing load up to 571 lb/in

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Inner jacket
6. Fiberglass rods
7. Jacket
8. Ripcord

PARAMETERS

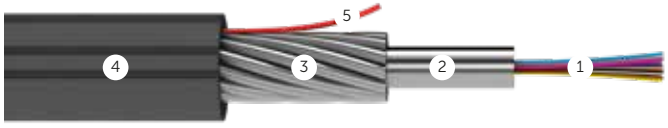
- Up to 144 fibers
- Maximum rated design tension up to 4,496 lb (20 kN)
- Crush — up to 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Stainless Steel Tube (SST) Galvanized Steel Wires (GSW)

InArmor+ SST GSW

Click here to see detailed features of this design



APPLICATION

A good option for tunnels, mines, oil refineries, and gas fields.

FEATURES

- Up to 96 fibers
- Resistance to crushing load up to 571 lb/in
- 100% waterproof
- Maximum rated design tension up to 8,992 lb
- Excellent rodent resistance

CABLE DESIGN

1. Optical fiber
2. Stainless steel tube filled with water-blocking gel
3. Armor of steel wires
4. Jacket
5. Ripcord

PARAMETERS

- Up to 96 fibers
- Maximum rated design tension up to 8,992 lb (40 kN)
- Crush — from 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
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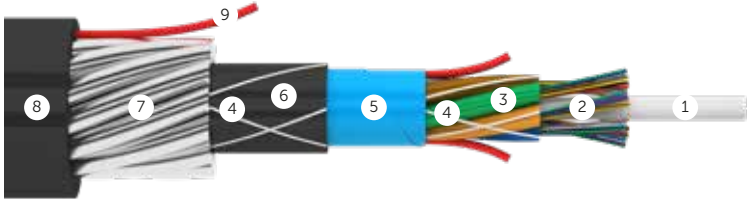
Galvanized Steel Wires (GSW) Wetland

InArmor+ GSW Wetland

Click here to see detailed features of this design



APPLICATION

Designed specifically for wetland applications, such as creeks, ponds, lakes,and river crossings. Can also be used on bridge crossings or other harsh environments.

FEATURES

- Excellent solution for wetland and cross-river installation
- Aluminum and polymer tape protects the cable core from moisture
- Resistance to crushing load up to 571 lb/in
- Aluminum polymer tape protects optical fiber from hydrogen penetration
- Maximum rated design tension up to 17,985 lb
- Excellent rodent resistance

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Aluminum and polymer tape
6. Inner jacket
7. Armor of galvanized steel wires
8. Jacket
9. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated design tension up to 17,985 lb (80 kN)
- Crush — up to 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

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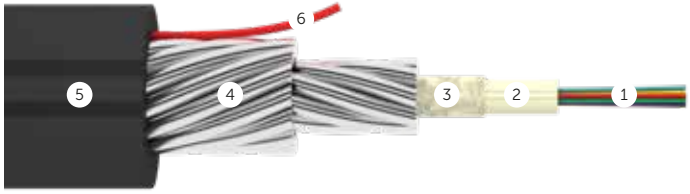
Central Tube (CT) Galvanized Steel Wires (GSW) Double Armor

InArmor++ CT GSW2

Click here to see detailed features of this design



APPLICATION

Direct buried cable for a robust and cost-effective installation with extremely rocky soils or permafrost.

InArmor

FEATURES

- Suitable for harsh environments
- Resistance to crushing load up to 571 b/in
- Up to 24 fibers
- Excellent rodent resistance
- Maximum rated design tension up to 17,985 lb

CABLE DESIGN

1. Optical fiber
2. PBT loose tube filled with water-blocking gel
3. Water-blocking gel
4. Double armor of galvanized steel wires
5. Jacket
6. Ripcord

PARAMETERS

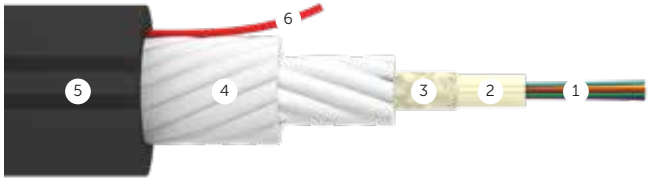
- Up to 24 fibers
- Maximum rated design tension up to 17,985 lb/in (80 kN)
- Crush up to 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Central Tube (CT) FiberGlass Rods (FRP) Double Armor

InArmor++ CT FRP2

Click here to see detailed features of this design



APPLICATION

Excellent as a direct buried, drop cable.

FEATURES

- Suitable for harsh environments
- All-dielectric design
- Reduced weight and size
- Resistance to crushing load up to 571 lb/in
- Maximum rated design tension up to 6,744 lb
- Excellent rodent resistance

DESIGN

1. Optical fiber
2. PBT loose tube filled with water-blocking gel
3. Water-blocking gel
4. Double armor of fiberglass plastic rods
5. Jacket
6. Ripcord

PARAMETERS

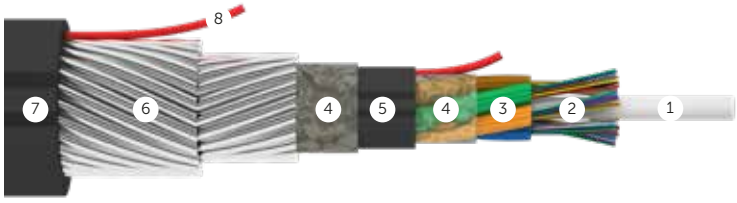
- Up to 24 fibers
- Maximum rated design tension up to 6,744 lb (30 kN)
- Crush — up to 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Galvanized Steel Wires (GSW) Double Armor

InArmor++ GSW2

Click here to see detailed features of this design



APPLICATION

Direct buried cable designed for extremely rocky soil, including permafrost, and applications in the harshest environments.

FEATURES

- Suitable for harsh environments
- Maximum rated design tension up to 17,985 lb
- Excellent rodent resistance
- Resistance to crushing load 571 lb/in (1 kN/cm)

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-blocking gel
5. Inner jacket
6. Double armor of galvanized steel wires
7. Jacket
8. Ripcord

PARAMETERS

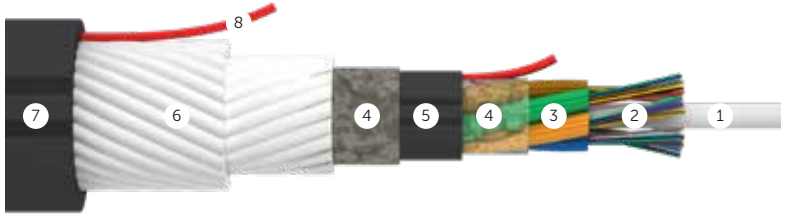
- Up to 144 fibers
- Maximum rated design tension up to 17,985 lb (80 kN)
- Crush — 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

FiberGlass Rods (FRP) Double Armor

InArmor++ FRP2

Click here to see detailed features of this design



APPLICATION

Direct buried cable for extremely rocky soil, including permafrost. Designed to operate within strong electrical fields.

FEATURES

- Suitable for harsh environments
- Maximum rated design tension up to 8,992 lb
- Resistance to crushing load up to 571 lb/in
- All-dielectric design
- Excellent rodent resistance

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-blocking gel
5. Inner jacket
6. Double armor of fiberglass plastic rods
7. Jacket
8. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated design tension up to 8,992 lb (40 kN)
- Crush — from 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Galvanized Steel Wires (GSW) Double Armor Wetland

InArmor++ GSW2 Wetland

Click here to see detailed features of this design

APPLICATION

Designed specifically for wetland applications, such as creeks, ponds, lakes, and river crossings. Can also be used on bridge crossings or other harsh environments.

ADVANTAGES

- Excellent solution for wetland and cross-river installation
- Aluminum and polymer tape protects the cable core from moisture
- Resistance to crushing load 571 lb/in
- Aluminum polymer tape protects optical fiber from hydrogen penetration
- Maximum rated design tension up to 17,985 lb
- Suitable for harsh environments
- Excellent rodent resistance

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-blocking gel
5. Aluminum and polymer tape
6. Inner jacket
7. Double armor of galvanized steel wires
8. Jacket
9. Ripcord

PARAMETERS

- Up to 144 fibers
- Maximum rated design tension up to 17,985 lb (80 kN)
- Crush — 571 lb/in (1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

BlownIn

Discover more

APPLICATION

Rigid yet flexible enough
to be installed into microducts

OPERATING PARAMETERS

Operating temperature*	-40°F...+158°F
Installation temperature	-4°F...+122°F
Transportation and storage temperature	-58°F...+158°F
Minimum bending radius	10× cable diameter
Design life	25 years

*Operating temperature range can be increased on request.

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications.

Central Tube (CT) design for blowing

BlownIn CT

Click here to see detailed features of this design

APPLICATION

Convenient for blowing into microducts

FEATURES

- Up to 24 fibers
- Reduced weight and size. Convenient for microducts
- Operation tension up to 34 lb
- All-dielectric design

CABLE DESIGN

1. Optical fiber
2. PBT loose tubes filled with water-blocking gel
3. Aramid yarns
4. Jacket

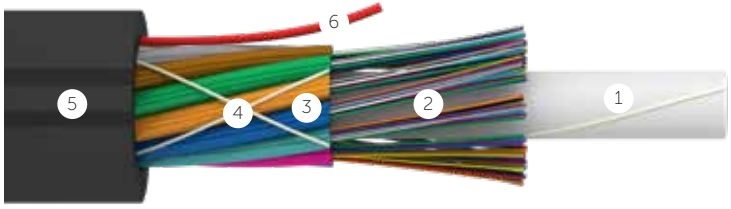
PARAMETERS

- Up to 24 fibers
- Operation tension up to 18 lb (0.08 kN)
- Installation tension up to 34 lb (0.15 kN)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

BlownIn

Click here to see detailed features of this design



APPLICATION

Convenient for blowing into microducts

FEATURES

- Up to 432 fibers
- Easy to install
- Operation tension up to 225 lb
- All-dielectric design

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Jacket
6. Ripcord

PARAMETERS

- Up to 432 fibers
- Operation tension up to 225 lb (1 kN)
- Installation tension up to 674 lb (3 kN)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InWater

Discover more

APPLICATION

Applied in sea areas (coastal shelf and deep-sea), on navigable rivers, in lakes and water storage basins, in harsh environments, in bogs and unnavigable rivers.

OPERATING PARAMETERS

Operating temperature*	-58°F...+158°F
Installation temperature	-22°F...+122°F
Transportation and storage temperature	-58°F...+158°F
Minimum bending radius	15x cable diameter
Design life	25 years

*Operating temperature range can be increased on request.

We design cables based on our Customers' specific technical requirements. Please, contact us for a cable designed to your exact specifications.

Central Tube (CT) Galvanized Steel Wires (GSW) Double Armor

InWater Submersible CT GSW2

Click here to see detailed features of this design

APPLICATION

Typical applications are marine areas such as coastal waterways, swamps, and lakes.

FEATURES

Installation down to 8,202 ft

Suitable for harsh environments

CABLE DESIGN

1. Optical fiber
2. Water-blocking gel
3. Loose tube
4. Armor of steel wires
5. Water-swellable tape
6. Aluminum and polymer tape
7. Inner jacket
8. Jacket

PARAMETERS

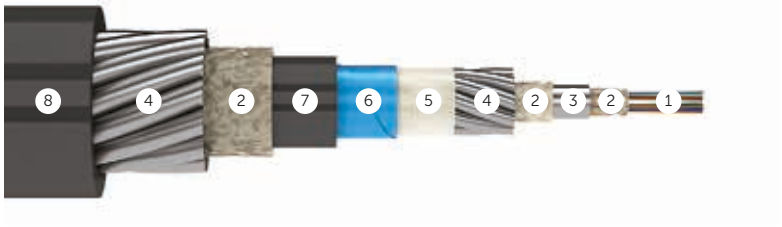
- Up to 24 fibers
- Maximum rated design tension up to 15,737 lb (70 kN)
- Crush — 857 lb/in (1.5 kN)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Stainless Steel Tube (SST) Galvanized Steel Wires (GSW) Double Armor

InWater Submersible SST GSW2

Click here to see detailed features of this design



APPLICATION

Typical applications are marine areas such as coastal waterways, swamps, and lakes.

FEATURES

- Installation down to 16,404 ft
- Suitable for harsh environments
- Up to 96 fibers

CABLE DESIGN

1. Optical fiber
2. Water-blocking gel
3. Steel tube
4. Armor of steel wires
5. Water-blocking tape
6. Aluminum and polymer tape
7. Inner jacket
8. Jacket

PARAMETERS

- Up to 96 fibers
- Maximum rated design tension up to 19,109 lb (85 kN)
- Crush — 857 lb/in (1.5 kN)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InAir Figure 8

Discover more

APPLICATION

Designed for aerial installations: on power lines, lamp posts, between buildings and structures. Suitable for aerial installation on transmission equipment and power facilities in dielectric package

OPERATING PARAMETERS

Operating temperature*	-58°F...+158°F
Installation temperature	-22°F...+122°F
Transportation and storage temperature	-58°F...+158°F
Minimum bending radius	15x cable diameter
Design life	25 years

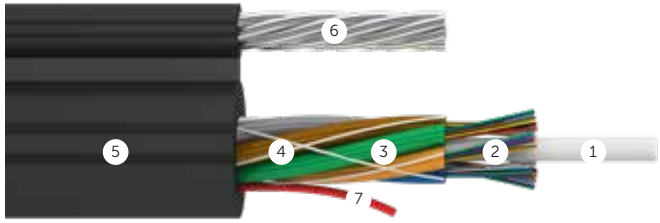
*Operating temperature range can be increased on request

We design cables based on our Customers' specific technical requirements. Please, contact us for a cable designed to your exact specifications.

Galvanized Steel Wires (GSW)

InAir Figure 8 GSW

Click here to see detailed features of this design



APPLICATION

A figure-8 design for a simple one-step installation in the communications space of distribution lines.

FEATURES

Affordable alternative to InAir ADSS cable

Low installation cost

CABLE DESIGN

1. Central strength member (FRP)
2. Optical fiber
3. PBT loose tubes filled with water-blocking gel
4. Water-swellable yarns
5. Jacket
6. Steel wire
7. Ripcord

PARAMETERS

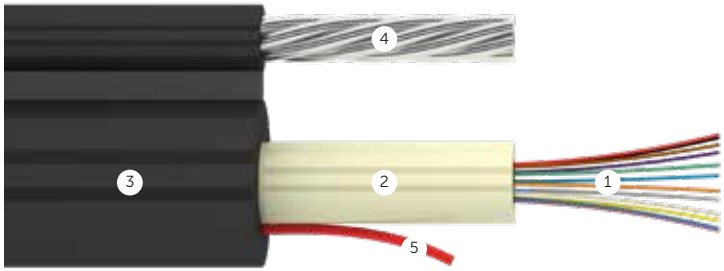
- Up to 144 fibers
- Maximum rated cable load up to 2,698 lb (12 kN)
- Crush — 126 lb/in (0.22 kN/cm)
- External strength member jacket diameter up to 0.276 in

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Central Tube (CT) Galvanized Steel Wires (GSW)

InAir Figure 8 CT GSW

Click here to see detailed features of this design



APPLICATION

A figure-8 design for a simple one-step installation in the communications space of distribution lines. A nice solution for fiber drop cable to the home.

FEATURES

- Reduced weight and size
- Cost-effective design
- Low installation cost

CABLE DESIGN

1. Optical fiber
2. PBT loose tube filled with water-blocking gel
3. Jacket
4. Steel wire
5. Ripcord

PARAMETERS

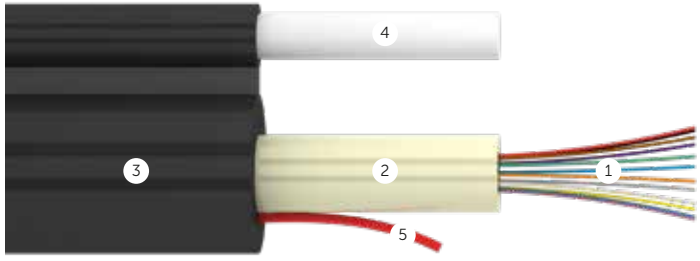
- Up to 24 fibers
- Maximum rated cable load up to 2,698 lb (12 kN)
- Crush — 171 lb/in (0.3 kN/cm)
- External strength member jacket diameter up to 0.268 in

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Central Tube (CT) FiberGlass Rod (FRP)

InAir Figure 8 CT FRP

Click here to see detailed features of this design



APPLICATION

A figure-8 design for applications where induced voltage and current must be eliminated.

FEATURES

- All-dielectric design
- Cost-effective design
- Reduced weight and size

CABLE DESIGN

1. Optical fiber
2. PBT loose tube filled with water-blocking gel
3. Jacket
4. Dielectric rod
5. Ripcord

PARAMETERS

- Up to 24 fibers
- Maximum rated cable load up to 1,349 lb (6 kN)
- Crush — 171 lb/in (0.3 kN/cm)
- External strength member jacket diameter up to 0.288 in

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InControl

Discover more

APPLICATION

Optimized for use in substations using today's Smart Grid technology control systems

Highly versatile design that can be used both indoors and outdoors

Very good for direct-buried installation in substations

OPERATING PARAMETERS

Operating temperature*	-22°F...+140°F
Installation temperature	+14°F...+122°F
Transportation and storage temperature	-58°F...+122°F
Minimum bending radius	10x cable diameter
Design life	25 years

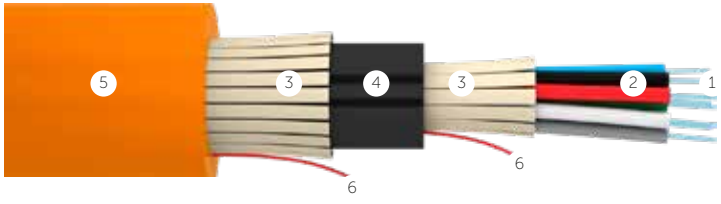
*Operating temperature range can be increased on request

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications.

Distribution Tight-buffered (TB) Double Jacket (DJ)

InControl Distribution TB DJ

Click here to see detailed features of this design



APPLICATION

Optimized for use in substations using today's Smart Grid technology control systems. Highly versatile design that can be used both indoors and outdoors. Very good for direct-buried installation in substations.

FEATURES

- UV-resistant
- Rodent resistance
- Flame-retardant
- All-dielectric design

CABLE DESIGN

1. Optical fiber
2. Tight buffer
3. Fiberglass yarns
4. Inner jacket
5. Outer jacket
6. Ripcord

PARAMETERS

- Up to 24 fibers
- Maximum operation tension up to 247 lb (1.1 kN)
- Maximum installation tension up to 472 lb (2.1 kN)
- Crush — 86 lb/in (0.15 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InHome FTTH

Discover more

APPLICATION

Designed for installation inside buildings (including vertical installation), in trays, channels, for installation on outer sides of the buildings

Applied in ducts, trays, blocks, tunnels, collecting channels in protecting tubes

Designed for aerial installations: power lines, lamp posts, between buildings and structures

OPERATING PARAMETERS

Operating temperature*	-22°F...+122°F (Riser) +14°F...+122°F (InHome Distribution TB, InHome Distribution MT, InHome Duplex, InHome Simplex) -40°F...+140°F (InHome Distribution Fire Rated)
Installation temperature	+14°F...+122°F
Transportation and storage temperature	-58°F...+122°F
Minimum bending radius	10× cable diameter
Design life	25 years

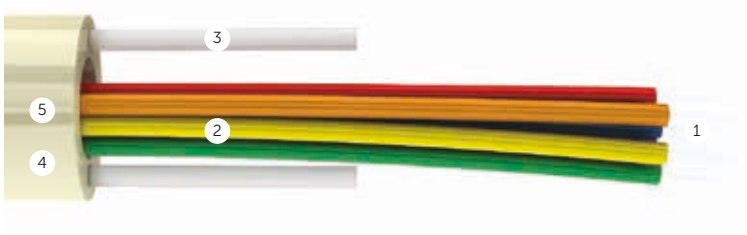
*Operating temperature range can be increased on request.
Different combinations of fiber counts and loose tubes in a cable are available on request

We design cables based on our Customers' specific technical requirements. Please, contact us for a cable designed to your exact specifications.

Riser tight-buffered (TB)

InHome Riser TB

Click here to see detailed features of this design



APPLICATION

Applications include interior buildings and campus ducts.

FEATURES

- Perfect solution for multi-dwelling units: the fiber is buffered up to floor box or subscriber's flat
- Operation temperature range down to -22°F
- All-dielectric design
- Easy access to the fiber at any place of the cable
- Up to 48 fibers
- Flame-retardant
- UV-resistant

CABLE DESIGN

1. Optical fiber
2. Tight-buffer
3. Fiberglass rods
4. Halogen-free flame-retardant jacket
5. Match marks (jacket opening marking)

PARAMETERS

- Up to 48 fibers
- Maximum rated design tension up to 90 lb (0.4 kN)
- Crush — 46 lb/in (0.08 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Riser micro tube (MT)

InHome Riser MT

Click here to see detailed features of this design

APPLICATION

A micro loose tube design that's flame-retardant for elevator and other vertical shafts plus cable trays, raceways, ducts, and similar installations.

FEATURES

Perfect solution for multi-dwelling units: a separate micro loose tube is guided to every inter-floor box. With 100% penetration, the number of micro loose tubes equals the number of floors, the number of fibers equals the number of units on the floor

High density of fibers makes it possible to bundle up to 24 fibers into micro loose tubes and place up to 48 micro loose tubes in a cable

Easy access to fiber at any place of the cable

Operation temperature down to -22°F

All-dielectric design

Flame-retardant

UV-resistant

CABLE DESIGN

1. Optical fiber
2. Micro tubes
3. Fiberglass rods
4. Halogen-free flame-retardant jacket
5. Match marks (jacket opening marking)

PARAMETERS

- Up to 288 fibers
- Maximum rated design tension up to 90 lb (0.4 kN)
- Crush — 46 lb/in (0.08 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Distribution tight-buffered (TB)

InHome Distribution TB

Click here to see detailed features of this design

APPLICATION

Tight-buffered break-out cable for inside buildings and in equipment trays.

FEATURES

- Perfect solution for offices and data centers
- More flexible compared to Riser Cable
- All-dielectric design
- Easy termination
- Flame-retardant
- UV-resistant
- Up to 48 fibers

CABLE DESIGN

1. Optical fiber
2. Tight-buffer
3. Aramid yarns
4. Halogen-free flame-retardant jacket
5. Ripcord

PARAMETERS

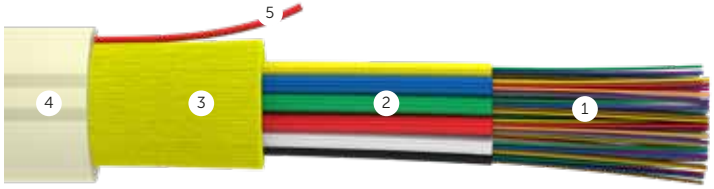
- Up to 48 fibers
- Maximum operation tension up to 180 lb (0.8 kN)
- Maximum installation tension up to 360 lb (1.6 kN)
- Crush — 114 lb/in (0.2 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Distribution micro tube (MT)

InHome Distribution MT

Click here to see detailed features of this design



APPLICATION

A micro loose tube break-out cable that's flame-retardant for elevator and other vertical shafts plus cable trays, raceways, ducts, and similar installations.

FEATURES

- High density of fibers makes it possible to bundle up to 24 fibers into micro loose tubes and place up to 48 micro loose tubes in a cable
- All-dielectric design
- Flame-retardant
- UV-resistant

CABLE DESIGN

1. Optical fiber
2. Micro tubes
3. Aramid yarns
4. Halogen-free flame-retardant jacket
5. Ripcord

PARAMETERS

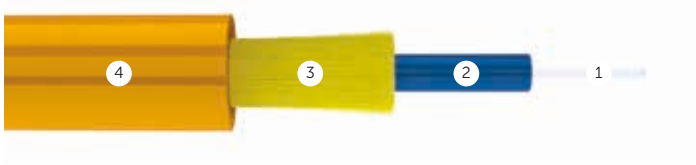
- Up to 144 fibers
- Maximum operation tension up to 180 lb (0.8 kN)
- Maximum installation tension up to 360 lb (1.6 kN)
- Crush — 57 lb/in (0.1 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Simplex tight-buffered (TB)

InHome Simplex TB

Click here to see detailed features of this design



APPLICATION

Single tight-buffered fiber in a single unit cable for indoor applications, including equipment racks.

FEATURES

- Cable can be terminated with a standard connector
- Compact and flexible
- Flame-retardant
- UV-resistant
- All-dielectric design
- Perfect solution for patch cord manufacturing

CABLE DESIGN

1. Optical fiber
2. Tight-buffer
3. Aramid yarns
4. Halogen-free flame-retardant jacket

PARAMETERS

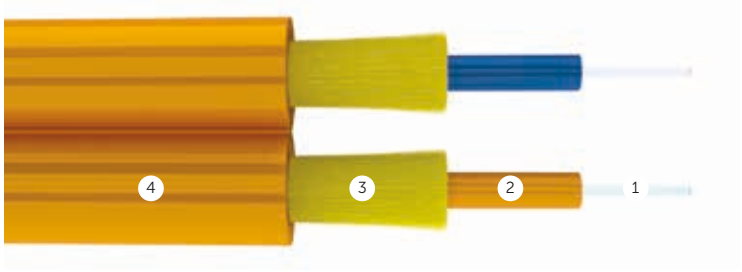
- 1 fiber
- Maximum rated design tension up to 40 lb (0.18 kN)
- Crush — 29 lb/in (0.05 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Duplex tight-buffered (TB)

InHome Duplex TB

Click here to see detailed features of this design



APPLICATION

Duplex tight-buffered zipcord. Applications include indoor cable with fire-retardance for buildings and equipment racks.

FEATURES

- Cable can be terminated with a standard connector
- Compact and flexible
- Flame-retardant
- UV-resistant
- All-dielectric design
- Perfect solution for patch cord manufacturing

CABLE DESIGN

1. Optical fiber
2. Tight-buffer
3. Aramid yarns
4. Halogen-free flame-retardant jacket

PARAMETERS

- 2 fibers
- Maximum rated design tension up to 40 lb (0.18 kN)
- Crush — 29 lb/in (0.05 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InDrop FTTH

Discover more

APPLICATION

Designed for aerial installation on transmission towers,lamp posts, between buildings and structures

Designed for installation inside buildings, in trays, in ducts, on outer sides of buildings

OPERATING PARAMETERS

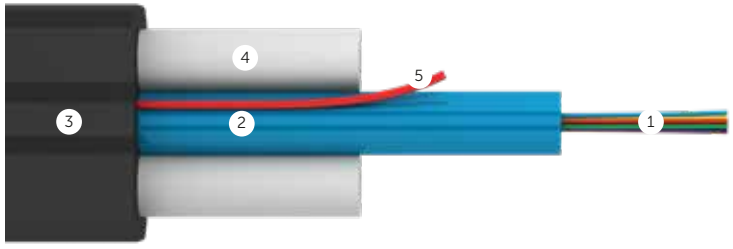
Operating temperature*	-58°F...+122°F (InDrop Round Type TB) -40°F...+158°F (InDrop Flat Type, InDrop Round Type)
Installation temperature	+14°F...+122°F
Transportation and storage temperature	-58°F...+122°F -40°F...+158°F (InDrop Flat Type)
Minimum bending radius	10x cable diameter
Design life	25 years

*Operating temperature range can be increased on request.

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications.

InDrop Flat Type

Click here to see detailed features of this design



APPLICATION

Flat, self-supporting, drop cable for aerial installation on short spans.

FEATURES

- All-dielectric design
- Maximum rated design tension up to 674 lb
- Operation temperature down to -40°F
- Suitable for aerial installation up to 328 ft

CABLE DESIGN

1. Optical fiber
2. PBT loose tube filled with water-blocking gel
3. Jacket
4. Dielectric rod
5. Ripcord

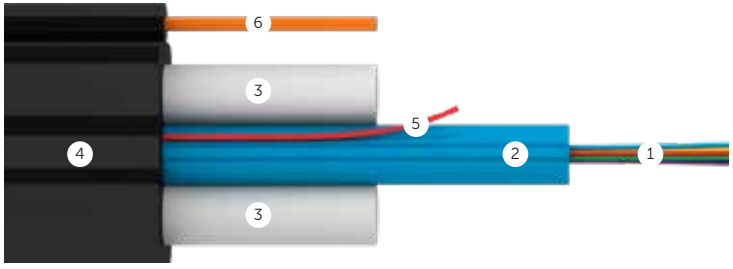
PARAMETERS

- Up to 24 fibers
- Maximum rated design tension up to 674 lb (3 kN)
- Crush — 228 lb/in (0.4 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InDrop Flat Type Toneable

Click here to see detailed features of this design



APPLICATION

The toneable version allows for easy detection of a buried cable with a toning conductor that can be separated. The cable is suitable for direct burial

FEATURES

- Toning conductor allows for effortless detection in underground installation
- UV-resistant
- Suitable for direct burial

CABLE DESIGN

1.Optical fiber
2.PBT loose tube filled with water-blocking gel
3.Jacket
4.Dielectric rod
5.Ripcord
6.Toning conductor

PARAMETERS

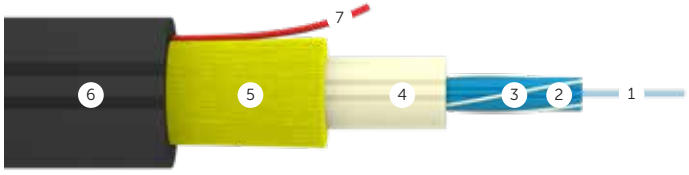
- Up to 24 fibers
- Maximum rated design tension up to 674 lb (3 kN)
- Crush — 228 lb/in (0.4 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

Round type Tight-buffered (TB)

InDrop Round Type TB

Click here to see detailed features of this design



APPLICATION

Single fiber drop cable for end-user or equipment connections.

FEATURES

- All-dielectric design
- Minimal weight and size
- Maximum rated design tension up to 1,442 lb
- Cost-effective design

CABLE DESIGN

1. Optical fiber
2. Tight-buffer
3. Water-swellable yarns
4. PBT loose tube filled with water-blocking gel
5. Aramid yarns
6. Jacket
7. Ripcord

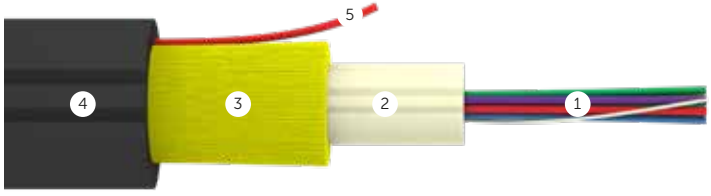
PARAMETERS

- 1 fiber
- Maximum rated design tension up to 1,442 lb (6.7 kN)
- Crush — 171 lb/in (0.3 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

InDrop Round Type

Click here to see detailed features of this design



APPLICATION

Applied between buildings, internal building feeds and distribution networks.

FEATURES

- All-dielectric design
- Minimal weight and size
- Maximum rated design tension up to 1,442 lb
- Cost-effective design

CABLE DESIGN

1. Optical fiber
2. PBT loose tube filled with water-blocking gel
3. Aramid yarns
4. Jacket
5. Ripcord

PARAMETERS

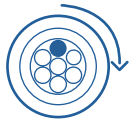
- Up to 24 fibers
- Maximum rated design tension up to 1,442 lb (6.7 kN)
- Crush — 74 lb/in (0.13 kN/cm)

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specifications — sales@incabamerica.com

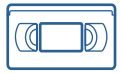
Knowledge Base

Our experience in the production and delivery of optical fiber cable is now available for you in our Knowledge Database. Here you can find useful articles and links, calculations and selection templates, data on parameters and color identification of the optical fibers, guidelines for transportation, storage and maintenance of the optical fiber cable, and other information designed to help you build a reliable optical communication system.

Discover more

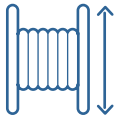


Optical Fiber Specifications and Color Coding



Video Guides for Cable Termination

Transportation, Storage and Installation Guides



Reel Dimensions

Truck Load Calculator

Marking System

Types and Parameters of Optical Fiber

By default Corning® optical fiber is used in manufacturing, however, at the client's request, we can produce cable with fiber from another supplier.

Single-Mode Fiber

Fiber type	U	U	ULL	G.655.D	G.654.E	G.657.A2	G.657.B3
Product name	Corning® SMF-28® Ultra	Corning® SMF-28® Ultra 200	Corning® SMF-28® ULL	Corning® LEAF®	Corning® TXF®	Corning® ClearCurve® LBL	Corning® ClearCurve® ZBL
ITU recommendation	G.652.D / G.657.A1	G.652.D / G.657.A1	G.652.B / G.654.C	G.655.D	G.654.E	G.652.D / G.657.A2/B2	G.657.B3
Dimensional Specifications							
Core-Clad Concentricity	0.5	0.5	0.5	0.5	0.8	0.5	0.5
Cladding Diameter	125±0.7	125±0.7	125±0.7	125±0.7	125±0.7	125±0.7	125±0.7
Cladding Non-Circularity	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Coating Diameter	242±5	200±5	242±5	242±5	242±5	242±5	242±5
Transmission Specifications							
Wavelength, nm	1310 – 1625	1310 – 1625	1310 – 1625	1550	1550 – 1625	1310 – 1625	1310 – 1625
Maximum Attenuation (dB/km):							
1310 nm wavelength	0.32	0.32	0.31	—	—	0.35	0.35
1383 nm wavelength	0.32	0.32	—	0.40	—	0.35	0.35
1490 nm wavelength	0.21	0.21	—	—	—	0.24	0.24
1550 nm wavelength	0.18	0.18	0.17	0.19	0.17	0.20	0.20
1625 nm wavelength	0.20	0.20	0.20	0.21	0.19	0.23	0.23
Dispersion ps/(nm*km)							
1550 nm wavelength	18	18	18	4	23	18	18
1625 nm wavelength	22	22	22	10	29	23	23
Polarization Mode Dispersion (PMD), ps/√km	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Zero Dispersion	0.092	0.092	0.07	0.092	0.092	—	—
Zero Dispersion Wavelength, nm	1304...1324	1304...1324	1300...1324	—	1304...1324	1304...1324	—
Cable Cutoff Wavelength, nm	1260	1260	1260	1360	1520	1260	1260

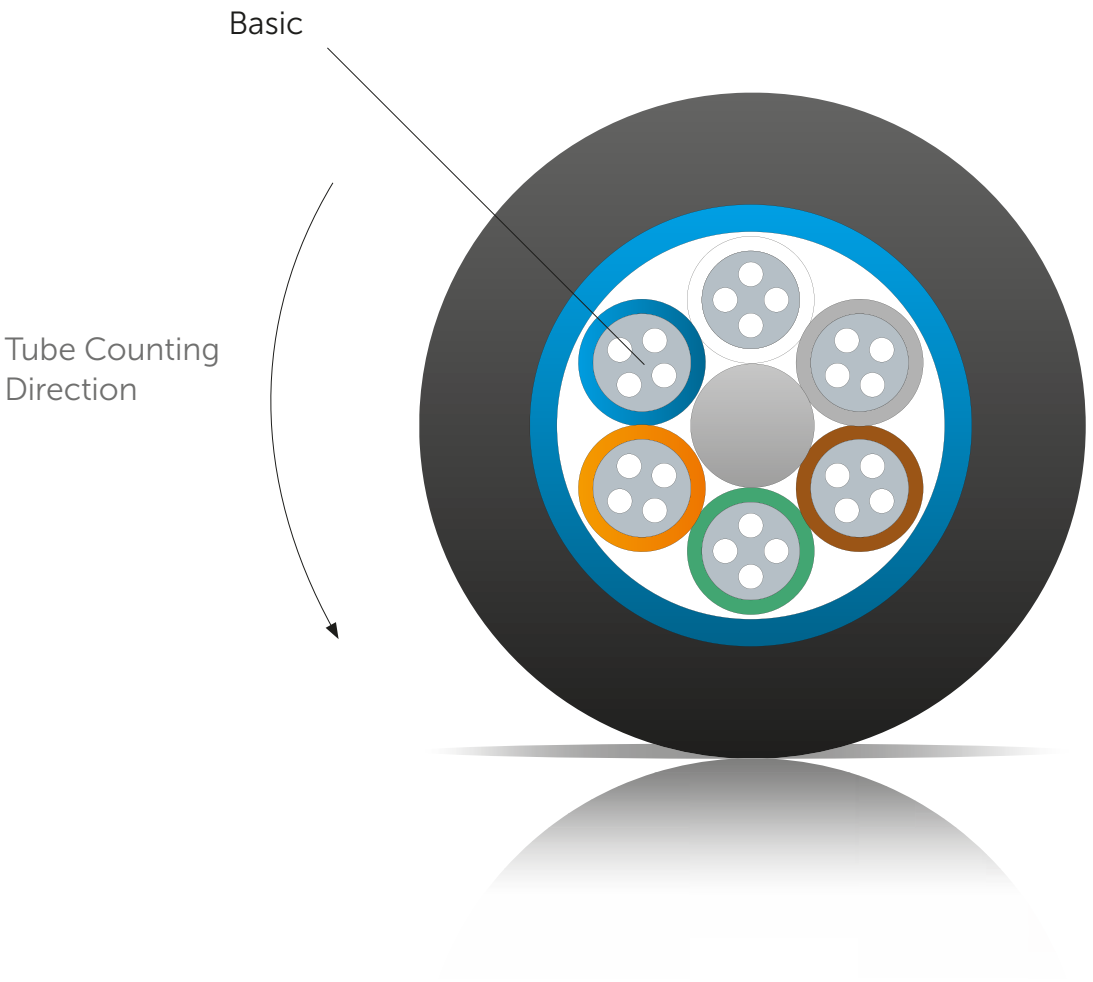
Mode-Field Diameter, (μm)							
1310 nm wavelength	9.2±0.4	9.2±0.4	9.2±0.5	—	—	8.6±0.4	8.6±0.4
1550 nm wavelength	10.4±0.5	10.4±0.5	10.5±0.5	9.6±0.4	12.4±0.5	9.6±0.5	9.65±0.5
Macrobend Loss, dB, λ=1550 nm/1625 nm							
(1 turn x R16.0 mm), dB	—	—	0.1/—	0.5/0.5	—	—	—
(1 turn x R10.0 mm), dB	0.5/1.5	0.5/1.5	—	—	—	—	—
(1 turn x R7.5 mm), dB	—	—	—	—	—	0.4/0.8	—
(1 turn x R5.0 mm), dB	—	—	—	—	—	—	0.1/0.3
(100 turn x R30 mm), dB	—	—	—/0.05	0.05/0.05	0.1/0.1	—	—

Multimode Fiber

Fiber type	OM2	OM3	OM4	OM5	OM1
Product name	Corning® ClearCurve® OM2	Corning® ClearCurve® OM3	Corning® ClearCurve® OM4	Corning® ClearCurve® OM5	Corning® InfiniCor® 300
Standard	ITU-T G.651	ITU-T G.651	ITU-T G.651	ITU-T G.651	IEC 60793-2-10
Dimensional Specifications					
Core Diameter	50.0±2.5	50.0±2.5	50.0±2.5	50.0±2.5	62.5±3.0
Core-Clad Concentricity			1.5		
Cladding Diameter	125±1	125±1	125±1	125±1	125±2
Cladding Non-Circularity			1		
Coating Diameter			242±5		
Maximum Attenuation (dB/km)					
850 nm wavelength	2.3	2.3	2.3	2.3	2.9
953 nm wavelength	–	–	–	1.7	–
1300 nm wavelength			0.6		
Numerical Aperture	0.200±0.015	0.200±0.015	0.200±0.015	0.200±0.015	0.275±0.015
Overfilled Bandwidth (MHz * km)					
850 nm wavelength	700	1500	3500	3500	200
953 nm wavelength	–	–	–	1850	–
1300 nm wavelength			500		
Effective Group Index of Retraction					
850 nm wavelength	1.482	1.482	1.482	1.482	1.496
1300 nm wavelength	1.477	1.477	1.477	1.477	1.491
Attenuation to macrobending (2 turns on a bend former, radius of 15 mm), dB:					
at a wavelength of 850 nm	0.1	0.1	0.1	0.1	–
at a wavelength of 1300 nm	0.3	0.3	0.3	0.3	–
Attenuation to macrobending (2 turns on a bend former, radius of 7.5 mm), dB:					
at a wavelength of 850 nm	0.2	0.2	0.2	0.2	–
at a wavelength of 1300 nm	0.5	0.5	0.5	0.5	–

Color Coding
ANSI/TIA-598-D-2014

Other colors are available on request


Basic
Tube Counting
Direction

Shipping and Handling

Transportation Guides:

- The reels should not be placed on their sides.
- The reels should not be fixed. No nailing is allowed while fixing reels.
- The truck should have a wooden floor.

Storage Guides:

- The reels should be protected from mechanical impact, as well as from sunlight, precipitation and dust.
- The reels should not be placed on their sides.
- The storage temperature range is from -58°F to +122°F.

Installation guideline overview. Ask Incab for the installation guidelines for the specific cable you are using:

- OPGW, ADSS, and other self-supporting Incab aerial cables. You may use IEEE Standard 524-2016 (https://standards.ieee.org/standard/524-2016.html) as a general guideline for installing these types of cables from Incab. However, you should refer to our datasheet and our detailed installation guidelines for the specific Incab cable that you are working with.

  To obtain a copy of our datasheet or our detailed installation instructions, please send us an email at support@incabamerica.com.

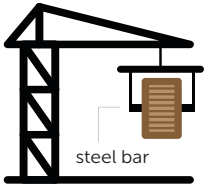
- For all other types of Incab cable, please refer to our datasheets and standard industry practice.
  If you have any questions or need any additional information, please contact us at support@incabamerica.com.

Please find detailed information on our website **incabamerica.com** or upon request at **support@incabamerica.com**

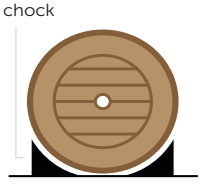
SHIPPING AND HANDLING SUMMARY

Always lift from the side!

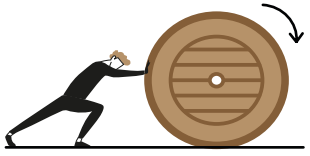
Always lift from the bottom!



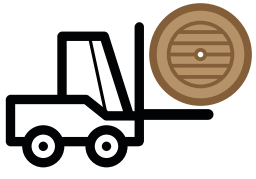
Always use a steel bar when hoisting by crane!



Always store reels upright and chock securely!



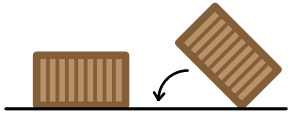
Reels can only be rolled by hands on a smooth flat surface of a shopfloor for a short distance



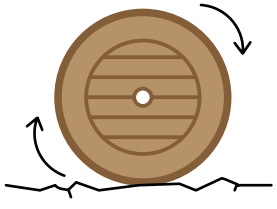
Never lift from the front or back!

Never lift form the hub or interior!

Never lift directly with the rigging when hoisting by crane!



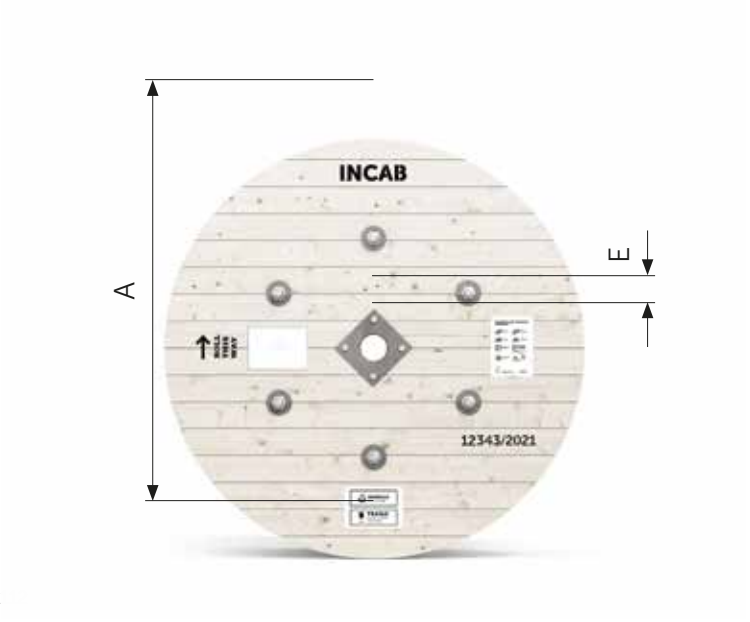
Never store or put reels on their side!

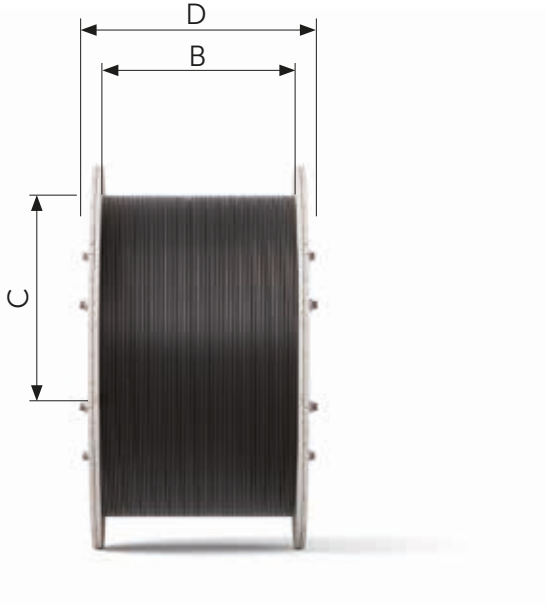


Reels cannot be rolled for transport purposes in open areas and on uneven surfaces

Reel Dimensions

Reel Type	Dimensions, in					Approximate reel weight, lbs
Wooden Reels	**A**	**B**	**C**	**D**	**E**	
NRW2-58.32.28	58	32	28	39	3 1/4	342
NRW2-66.36.36	66	36	36	43	3 1/4	534
NRW2-72.36.36	72	36	36	43	3 1/4	610
NRW2-78.44.40	78	44	40	47	3 1/4	880
NRW2-84.42.48	84	42	48	49	3 1/4	1097
Steel Reels						
RM1-60.32.28	60	32	28	39 3/8	3 1/4	372
RM1-63.30.31.5	63	30	31 1/2	37 3/8	3 1/4	451
RM1-66.36.36	66	36	36	37	3 1/4	526
RM1-72.36.36	72	36	36	41	3 1/4	592
RM1-78.36.48	78	36	48	41	3 1/4	735
RMT1-84.42.48	84	42	48	50	3 1/4	944






ROLL THIS WAY
FRAGILE
HANDLE


INCAB


Quality means doing it right
when no one is looking.
Henry Ford

Quality philosophy

PHILOSOPHY

Quality is in the heart of everything we do.
Our quality policy is implemented through:

— 100% step-by-step quality control;

— conducting of bidirectional OTDR control at the phase of final inspection, all OTDR traces are saved;

— high-quality materials;

— quality management system is recognized as both effective and ISO compliant by TÜV Thüringen;

— software to select the right type of fiber optic cable, the right size of the reels, and the optimal arrangement of reels on trucks and in containers;

— software for aerial cable calculations: OPGW and ADSS;

— calculation of power line electromagnetic fields;

— continuous customer feedback.

STEP-BY-STEP QUALITY CONTROL

Quality Control employees carry out stringent control at all stages of the manufacturing process, including:

— incoming control of materials;

— measuring parameters of each optical fiber;

— control of fiber length in loose tubes;

— verification of compliance with the design requirements;

— check of resistance and tightness of the jacket (for armored cables);

— control of marking and packing.

Our line operators control the dimensions of the products throughout the manufacturing process. We use advanced high-precision control and measurement equipment:

— Yokogawa AQ7260 Optical Time Domain Reflectometer;

— Ando AQ6319 Spectrum Analyzer;

— PK2500 Optical Spectrum Analyzer;

— PK2400 Fiber Geometry System;

— EXFO FTB-400 Universal Test System;

— Zumbach Geometry Testers;

— Photon Kinetics OTDR;

— BOTDA/BOTDR fibrisTerre.

All measurements are recorded and analyzed for further quality improvement.

CERTIFICATES

Quality Management System is certified to ISO 9001:2015 by TÜV Thüringen.
All Riser and Plenum cables have been tested according to IEC standards.
OPGW cables have been tested by the independent laboratory "Kinectrics" (Canada) according to IEEE 1222 standard.

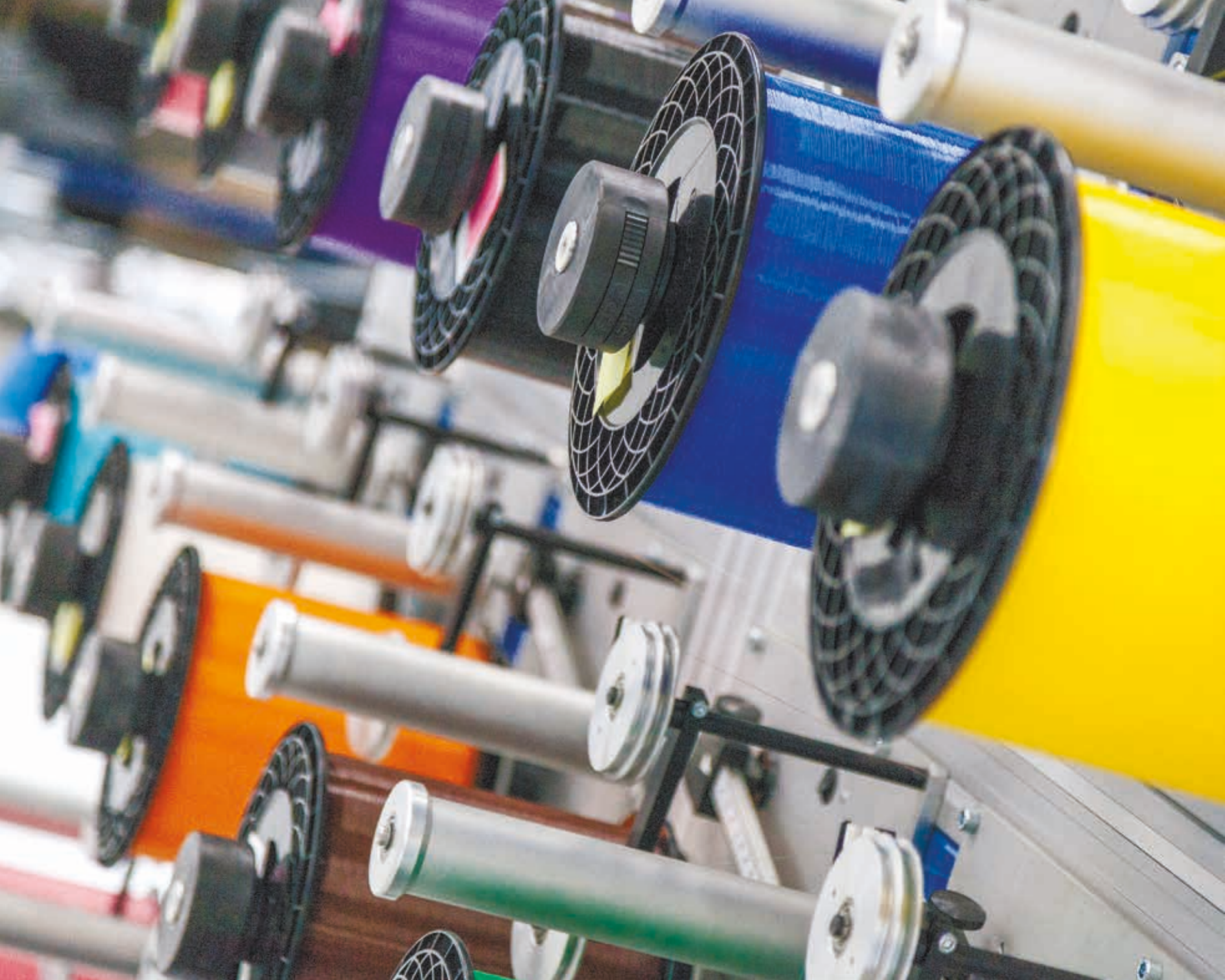
TEST CENTER

Our Test Center is equipped according to the latest industry standards to conduct type approval and periodic mechanical and environmental resistance tests per IEEE 1222, IEEE 1138, and IEC 60794-1-2 (water penetration, temperature cycling, high humidity, vibration, stretching, bending, torsion, crush, compression). Before the launch into production, operators conduct a double independent check according to specially designed instruction checklists.

FEEDBACK

In order to meet the world's highest quality standards, we continuously monitor feedback from our customers.
For comments and suggestions, please, contact us — **support@incabamerica.com**


02/XX/XX



Best Materials

To produce Incab cables, we use the most advanced materials available in the market and cooperate with the best suppliers.

CORNING

Enhanced Corning® SMF-28®
Ultra fiber

DUPONT™

Kevlar© aramid yarns

DOW®

Medium Density Polyethylene DOW
High Density Polyethylene DOW

Best Equipment

CAPACITY:

— 4,400 mi of cable per month

— 650 mi of OPGW per month

PRODUCTION EQUIPMENT BY:

Maillefer, Medek&Schorner, Nexans, Photonium, Compotec and other manufacturers.

Fiber Optic Cable:

— coloring lines;

— loose tube lines;

— stranding lines;

— sheathing lines with aramid servers;

— steel wire armoring machines.

OPGW:

— production line for manufacture of stainless steel tubes containing optical fibers;

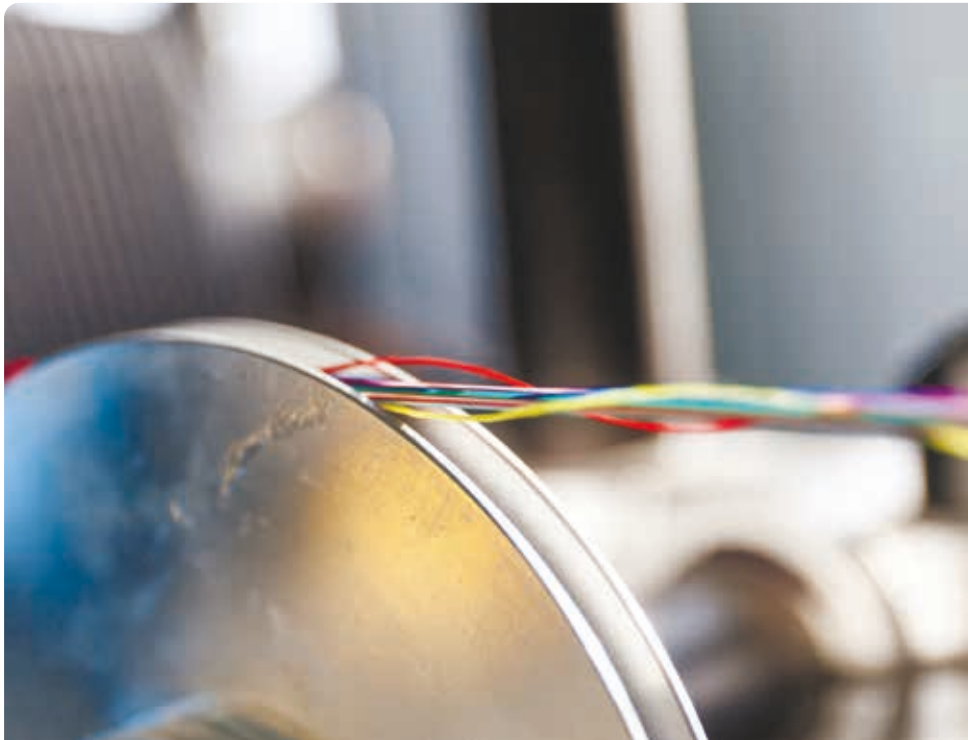
— pre-cleaning and rewinding line;

— cladding line;

— drawing line;

— stranding lines (planetary type stranding machines).


8
18
9



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Inspiration Lab

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gifts

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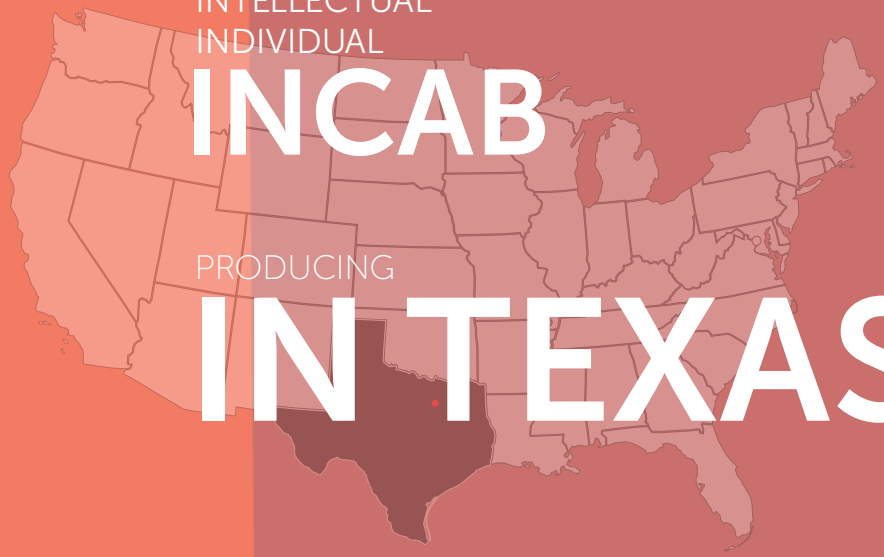

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