Incab
Europe

Fibre Optic Cables for the European Market

catalogue 2024

History. Rebranding

EMCAB → Incab Europe

1 Incab Europe was previously known as Emcab

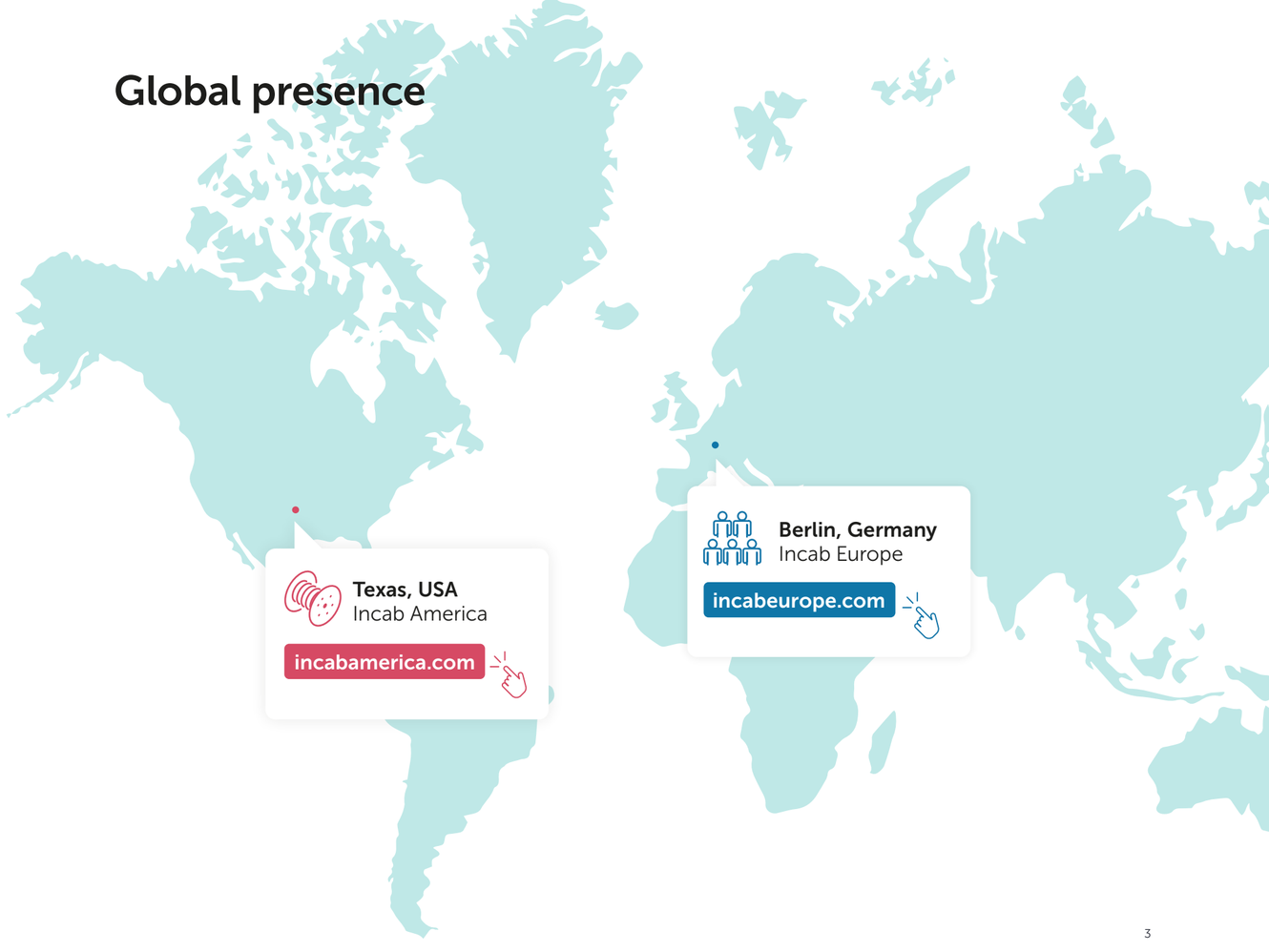
2 Since Spring 2022: change of ownership structure and renaming the company into Incab Europe

3 Incab Europe has become independent with Incab America as a reliable partner and the main production site

4 Each company is self-dependent and serves the clients in the respective market

Find out more: www.incabamerica.com

Global presence



Strategy

Incab Europe – an independent European enterprise

US manufacturing facility – the main production site

Building partnerships with European manufacturers

Developing own local production site

Secured partnership

Incab America is a relatively new player on the market, but we have managed to prove ourselves as a highly competitive manufacturer here, in the US. We've built our production site from scratch in Arlington, Texas, set the bar in the industry for long-term reliable performance and now we are rapidly developing. I strongly believe that Incab Europe is a great partner and resource when it comes to serving customers outside of the US and making Incab brand stronger. I'm sure that one day the word Incab will be the first word that comes to mind when people think of flawless fibre optic cables worldwide!

Mike Riddle, President of Incab America

Business cannot be taught but only be learned through experience. Incab Europe is not just another "kid on the block", it is the result of vast experience accumulated over many years of hard work of the entire team. When we say that we are a fibre optic cable producer with a guaranteed quality, we really mean it. And we deliver what we promise by all means!

Hans Götze, Managing Director of Incab Europe

Supply experience

As a legal successor of Emcab, Incab Europe takes on the supply experience and is committed to continue delivering high-quality cables to existing and new customers.

Deutsche Glasfaser · DB · vitronet · DANKERS · TVC · VolkerWessels Telecom · PRIMEVEST Capital Partners · MÁV · CommunityFibre · reggefiber · siers

Flexibility

Incab Europe's formula is tried-and-true:
You get the product manufactured with an authentic understanding of quality: utilizing the best equipment and the ultimate technology.

We are flexible enough to react to our customers' needs in a timely manner. Our focus is 100% on development and production of fibre optic cables in Europe and US.

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 the production site in 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 wellbeing and safety is one of Incab Europe's core values.

Lean production

- Continuous improvement of technologies and materials along the product life cycle
- REACH and RoHS compliance of raw materials
- Reusable packaging (wooden and steel reels)
- Recyclable and reusable wastes

Product

- Micro cables for blowing allow reducing plastic production
- Underground installation of air-blown cables minimizes the visual pollution of human-made landscapes
- Cables do not emit toxic substances during their service life
- Long product life cycle (some designs up to 50 years)

People, Culture, Organization

- Workwear rental service ensuring employees safety and wellbeing while reducing wastes
- Variety of personal protective equipment to choose: ease of use while maintaining safety
- Creating a balanced environment

Sustainable Development Goals

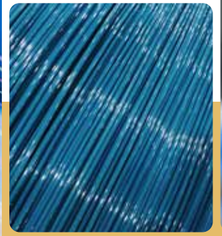
- Reduce production emissions
- Reduce wastes
- Reduce packaging (reel-less cable coils)
- Reduce carbon footprint (development of local production sites)

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

Mission

Connecting the entire world via fibre optic cable
delivering first-class solutions

Production



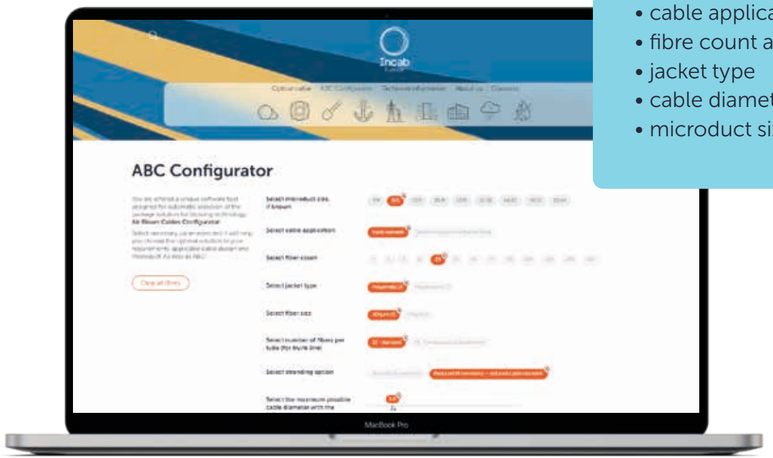
ABC Configurator

Air Blown Cables (ABC) Configurator is a unique software tool designed for automatic selection of the package solution for blowing technology. Select necessary parameters and it will help you choose the optimal solution to your requirements: applicable cable design and microduct size. **As easy as ABC!**

Use our free software to select the complete package for blowing technology

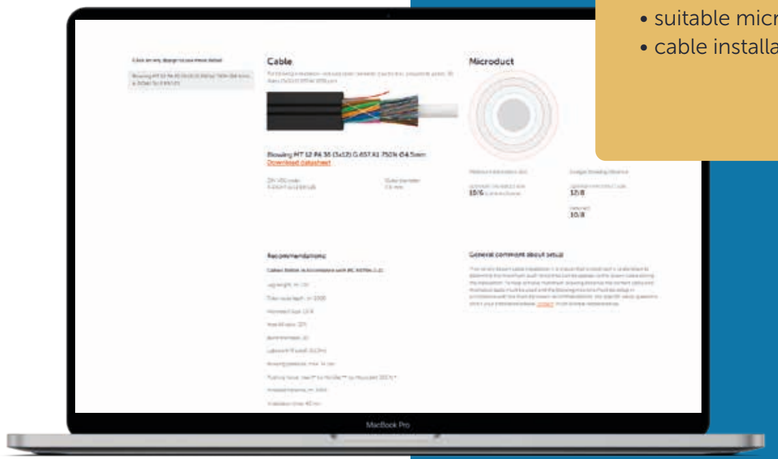
1. Select necessary characteristics:

- cable application
- fibre count and size
- jacket type
- cable diameter
- microduct size



2. Get:

- cable that meets your requirements and datasheet for it
- suitable microduct diameter
- cable installation tips



Incab Europe optical cables

Blowing

Ducting

Direct Buried

Submarine

Aerial

Indoor

Drop

OPGW/
Ground Wire

Fire Rated

Blowing

Discover more

Blowing into microducts

Installation into indoor/outdoor cable conduits and trays

Operating parameters

Operating temperature	-40°C...+70°C
Installation temperature	-30°C...+50°C
Transportation and storage temperature	-50°C...+70°C
Minimum bending radius	15 x cable diameter
Design life	25 years

Options

Jacket — polyethylene or polyamide

Fibre — G.657.A1 (200 µm or 250 µm)

Each and all blowing cables are tested according to IEC 60794-1-21:2015 Standard

Blowing distance 2000m. Performance confirmed

Discover detailed technical parameters for each design at incabeurope.com

Central tube (CT)

Blowing CT

Detailed features of this design on the website

Cable design

1. Optical fibre
2. PBT loose tube
3. Aramid yarns
4. Jacket

Features

Cables are tested according to IEC 60794-1-21:2015

Reduced weight and size. Convenient for microducts

Blowing track: 2000 m. Performance confirmed

Parameters

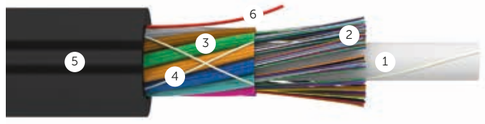
- Up to 24 fibres
- Cable diameter from 2.0 mm
- Operation tension up to 80 N
- Installation tension up to 150 N

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

Multi-tube (MT) design with 12 fibres per tube

Blowing MT 12

Detailed features of this design on the website



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Jacket
6. Ripcord

Features

Cables are tested according to IEC 60794-1-21:2015

Blowing track: 2000 m. Performance confirmed

Jacket — polyethylene or polyamide

Fibre — G.657.A1 (200 µm or 250 µm)

Parameters

- Up to 432 fibres
- 12 fibres per tube
- Cable diameter from 3.6 mm
- Operation tension up to 1 kN
- Installation tension up to 3 kN

We design cables based on our Customers' specific technical requirements.
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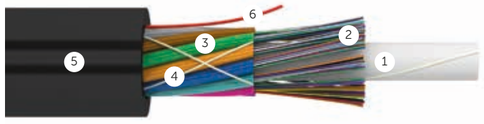
Multi-tube (MT) design with 24 fibres per tube

Blowing MT 24

Detailed features of this design on the website



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Jacket
6. Ripcord

Features

Cables are tested according to IEC 60794-1-21:2015

Easy to install

Blowing track: 2000 m. Performance confirmed

Parameters

- Up to 288 fibres
- 24 fibres per tube
- Cable diameter from 5.3 mm
- Operation tension up to 1 kN
- Installation tension up to 3 kN

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

Ducting

Discover more

Pulling into underground ducts and sewer pipes. Installation into indoor/outdoor cable conduits and trays

Direct buried installation

Installation along bridges, tunnels and other structures

Operating parameters

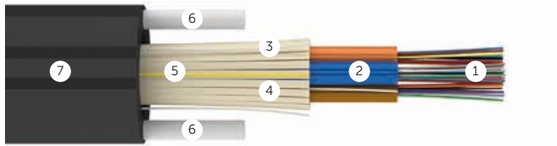
Operating temperature	-40°C...+70°C
Installation temperature	-30°C...+70°C
Transportation and storage temperature	-40°C...+70°C
Minimum bending radius	from 15 x cable diameter
Design life	25 years

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

Multi-tube (MT) fibreglass yarns soft tubes

Ducting MT FiberGlass Soft Tubes

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled soft tube
3. Water-swellable yarns
4. Fibreglass yarns
5. Ripcord
6. FRP rod
7. Jacket

Features

All-dielectric design

Easy strippable micro tubes

Suitable for aerial application

The most popular design

Parameters

- Up to 432 fibres
- Maximum rated design tension up to 1.5 kN

Multi-tube (MT) high fibre count (HFC) design (12 fibres per tube)

Ducting MT 12 HFC

Click here to see detailed features of this design

Cable design

1. Central strength member (FRP rod)
2. 3 layers of gel-filled loose tubes with optical fibres
3. Water-swellable yarns over each loose tubes layer
4. Water-swellable tape over stranded core
5. Ripcord
6. Jacket

Features

All-dielectric design

Easy to install

High fibre count

Parameters

- Up to 432 fibres
- Maximum rated design tension up to 0.7 kN
- Crush — 0.1 kN /cm

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

Multi-tube (MT) high fibre count (HFC) design (24 fibres per tube)

Ducting MT 24 HFC

Click here to see detailed features of this design

Cable design

1. Central strength member (FRP rod)
2. 3 layers of gel-filled loose tubes with optical fibres
3. Water-swellable yarns over each loose tubes layer
4. 3 layers of water-swellable tape over stranded core
5. Fibreglass yarns
6. Ripcord
7. Jacket

Features

All-dielectric design

Easy to install

High fibre count

Parameters

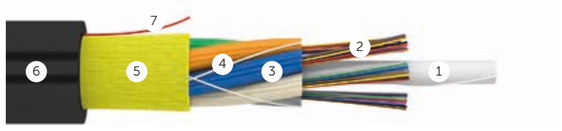
- Up to 864 fibres
- Maximum rated design tension up to 4 kN
- Crush — 0.3 kN /cm

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

Multi-tube (MT) aramid yarns

Ducting MT Aramid

Click here to see detailed features of this design



Cable design

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

Features

All-dielectric design

Easy to install

Reduced weight and size

Parameters

- Up to 432 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.22 kN /cm

We design cables based on our Customers' specific technical requirements.
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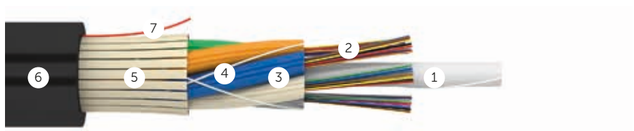
Multi-tube (MT) fibreglass yarns

Ducting MT FiberGlass

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Fibreglass yarns
6. Jacket
7. Ripcord

Features

All-dielectric design

Easy to install

Reduced weight and size

Parameters

- Up to 432 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.22 kN /cm

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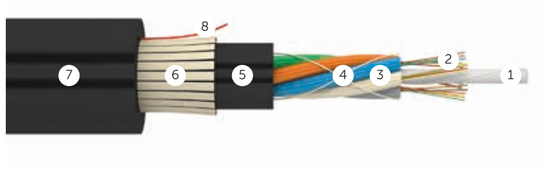
Multi-tube (MT) fibreglass yarns double jacket (DJ)

Ducting MT FiberGlass DJ

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Inner jacket
6. Fibreglass yarns
7. Jacket
8. Ripcord

Features

All-dielectric design

Fibreglass yarns prevent damage by rodents

Improved reliability due to inner jacketing

Parameters

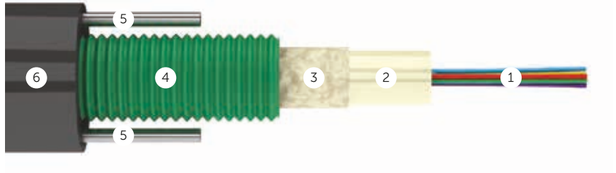
- Up to 432 fibres
- Maximum rated design tension to 2.7 kN
- Crush — 0.22 kN /cm

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

Central tube (CT) corrugated steel tape (CST)

Ducting CT CST Light

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Water-blocking gel
4. Corrugated steel tape armor
5. Steel wires
6. Jacket

Features

Cost-effective design

Excellent rodent resistance

Reduced weight and size

Parameters

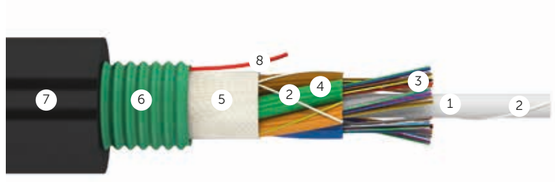
- Up to 24 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.5 kN /cm

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

Multi-tube (MT) corrugated steel tape (CST)

Ducting MT CST

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Water-swellable yarns
3. Optical fibre
4. Gel-filled loose tube
5. Water-swellable tape
6. Corrugated steel tape armor
7. Jacket
8. Ripcord

Features

- Cost-effective design
- Excellent rodent resistance
- Reduced weight and size
- Increased tightness due to application of water-swellable tape

Parameters

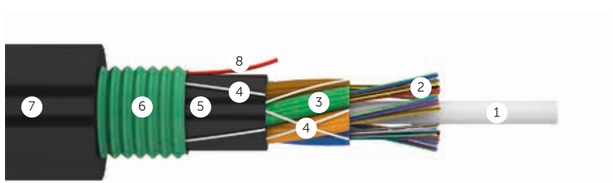
- Up to 432 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.22 kN /cm

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

Multi-tube (MT) corrugated steel tape (CST) double jacket (DJ)

Ducting MT CST DJ

Click here to see detailed features of this design



Cable design

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

Features

- Improved reliability due to inner jacketing
- Excellent rodent resistance
- Proven reliable design

Parameters

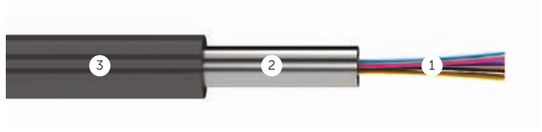
- Up to 432 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.22 kN /cm

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

Stainless steel tube (SST)

Ducting SST

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Steel tube
3. Jacket

Features

The smallest diameter

Excellent rodent resistance

100% waterproof

Parameters

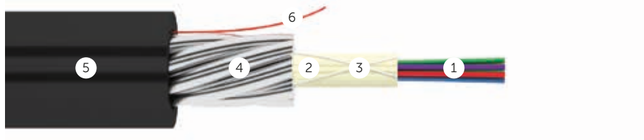
- Up to 96 fibres
- Maximum rated design tension up to 1.5 kN
- Crush — 0.7 kN /cm

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

Central tube (CT) galvanized steel wires (GSW)

Ducting CT GSW

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Water-swellable yarns
4. Armor of galvanized steel wires
5. Jacket
6. Ripcord

Features

Cost-effective design

Excellent rodent resistance

Reduced weight and size

100% waterproof

Parameters

- Up to 24 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.7 kN /cm

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

Direct Buried

Discover more

Direct buried installation

Pulling into underground ducts and sewer pipes. Installation into indoor/outdoor cable conduits and trays

Installation along bridges, tunnels and other structures

Operating parameters

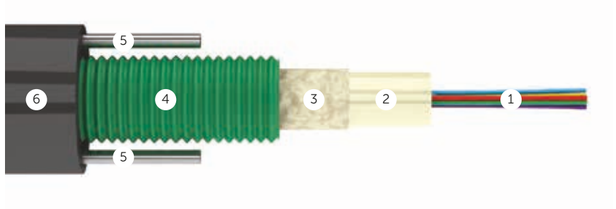
Operating temperature	-40°C...+70°C
Installation temperature	-10°C...+50°C
Transportation and storage temperature	-40°C...+70°C
Minimum bending radius	15 x cable diameter
Design life	25 years

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

Central tube (CT) corrugated steel tape (CST)

Direct Buried CT CST Light

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Water-blocking gel
4. Corrugated steel tape armor
5. Steel wires
6. Jacket

Features

Cost-effective design

Excellent rodent resistance

Reduced weight and size

Parameters

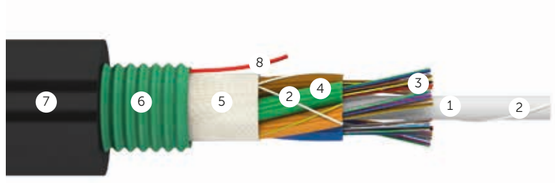
- Up to 24 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.5 kN /cm

We design cables based on our Customers' specific technical requirements.
Please, contact us for a cable designed to your exact specification — info@emcab.co

Multi-tube (MT) corrugated steel tape (CST)

Direct Buried MT CST

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Water-swellable yarns
3. Optical fibre
4. Gel-filled loose tube
5. Water-swellable tape
6. Corrugated steel tape armor
7. Jacket
8. Ripcord

Features

- Cost-effective design
- Excellent rodent resistance
- Reduced weight and size
- Increased tightness due to application of water-swellable tape

Parameters

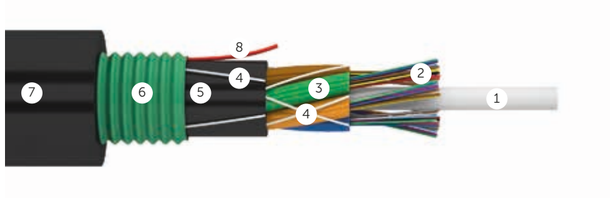
- Up to 432 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.22 kN /cm

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

Multi-tube (MT) corrugated steel tape (CST) double jacket (DJ)

Direct Buried MT CST DJ

Click here to see detailed features of this design



Cable design

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

Features

- Improved reliability due to inner jacketing
- Excellent rodent resistance
- Proven reliable design

Parameters

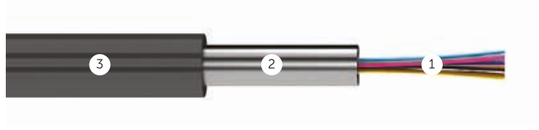
- Up to 432 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.22 kN /cm

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

Stainless steel tube (SST)

Direct Buried SST

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Steel tube
3. Jacket

Features

The smallest diameter

Excellent rodent resistance

100% waterproof

Parameters

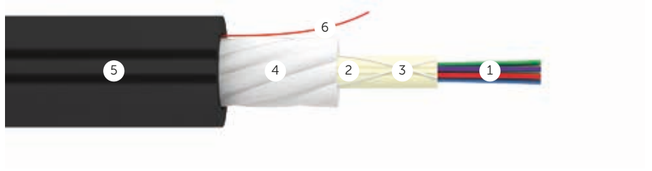
- Up to 96 fibres
- Maximum rated design tension up to 1.5 kN
- Crush — 0.7 kN /cm

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

Central tube (CT) fibreglass rods (FRP)

Direct Buried CT FRP

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Water-swellable yarns
4. Fibreglass rods
5. Jacket
6. Ripcord

Features

Reliable protection from serious mechanical impact

Excellent rodent resistance

Reduced weight and size

All-dielectric design

Parameters

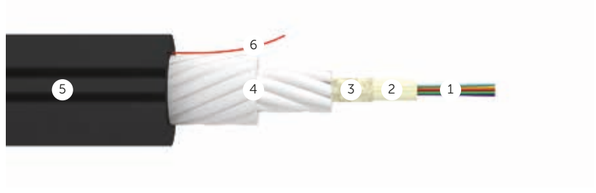
- Up to 24 fibres
- Maximum rated design tension up to 12 kN
- Crush — 0.7 kN /cm

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

Central tube (CT) fibreglass rods (FRP) double armor

Direct Buried CT FRP2

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Water-blocking gel
4. Double armor of fibreglass rods
5. Jacket
6. Ripcord

Features

- Suitable for application in harsh environments
- All-dielectric design
- Reduced weight and size

Parameters

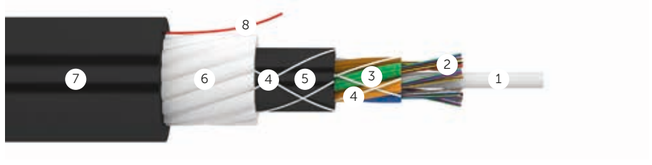
- Up to 24 fibres
- Maximum rated design tension up to 30 kN
- Crush up to 1 kN /cm

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

Multi-tube (MT) fibreglass rods (FRP) double jacket

Direct Buried MT FRP

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Inner jacket
6. Fibreglass rods
7. Jacket
8. Ripcord

Features

- Reliable protection from serious mechanical impact
- Excellent rodent resistance
- All-dielectric design
- Reduced weight, suitable for aerial installation

Parameters

- Up to 432 fibres
- Maximum rated design tension up to 20 kN
- Crush up to 1 kN /cm

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

Multi-tube (MT) fibreglass rods (FRP) double armor double jacket

Direct Buried MT FRP2

Click here to see detailed features of this design

Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-blocking gel
5. Inner jacket
6. Double armor of fibreglass rods
7. Jacket
8. Ripcord

Features

Excellent rodent resistance

All-dielectric design

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

Parameters

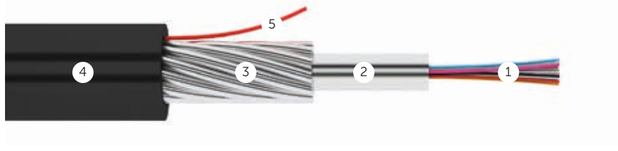
- Up to 432 fibres
- Maximum rated design tension up to 40 kN
- Crush — 1 kN /cm

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

Stainless steel tube (SST) galvanized steel wires (GSW)

Direct Buried SST GSW

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled stainless steel tube
3. Armor of galvanized steel wires
4. Jacket
5. Ripcord

Features

100% waterproof

Excellent rodent resistance

Parameters

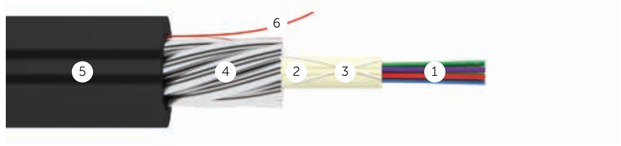
- Up to 96 fibres
- Maximum rated design tension up to 40 kN
- Crush — 1 kN /cm

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

Central tube (CT) galvanized steel wires (GSW)

Direct Buried CT GSW

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Water-swellable yarns
4. Armor of galvanized steel wires
5. Jacket
6. Ripcord

Features

- Cost-effective design
- Excellent rodent resistance
- Reduced weight and size
- Reliable protection from serious mechanical impact

Parameters

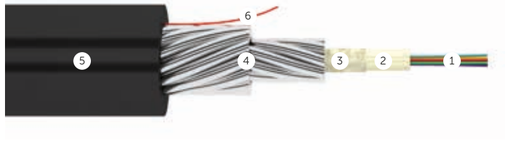
- Up to 24 fibres
- Maximum rated design tension up to 20 kN
- Crush — 0.7 kN /cm

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

Central tube (CT) galvanized steel wires (GSW) double armor

Direct Buried CT GSW2

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Water-blocking gel
4. Double armor of galvanized steel wires
5. Jacket
6. Ripcord

Features

- Excellent rodent resistance
- Suitable for harsh environment applications

Parameters

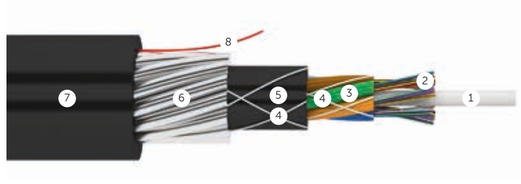
- Up to 24 fibres
- Maximum rated design tension up to 80 kN
- Crush up to 1 kN /cm

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

Multi-tube (MT) galvanized steel wires (GSW) double jacket

Direct Buried MT GSW

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Inner jacket
6. Armor of galvanized steel wires
7. Jacket
8. Ripcord

Features

Reliable protection from serious mechanical impact

Excellent rodent resistance

Parameters

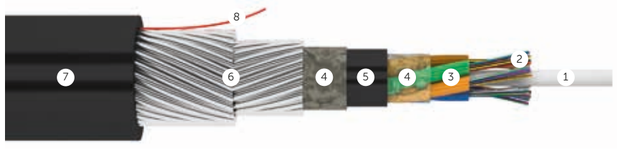
- Up to 432 fibres
- Maximum rated design tension up to 80 kN
- Crush up to 1 kN /cm

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

Multi-tube (MT) galvanized steel wires (GSW) double armor double jacket

Direct Buried MT GSW2

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-blocking gel
5. Inner jacket
6. Double armor of galvanized steel wires
7. Jacket
8. Ripcord

Features

Excellent rodent resistance

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

Parameters

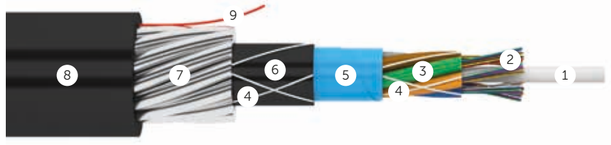
- Up to 288 fibres
- Maximum rated design tension up to 80 kN
- Crush — 1 kN /cm

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

Multi-tube (MT) galvanized steel wires (GSW)

Direct Buried MT GSW Special

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Aluminum and polymer tape
6. Inner jacket
7. Armor of galvanized steel wires
8. Jacket
9. Ripcord

Features

Aluminum and polymer tape protects the cable core from moisture

Excellent solution for wetland and cross-river installation

Aluminum and polymer tape protects optical fibre from hydrogen penetration

Parameters

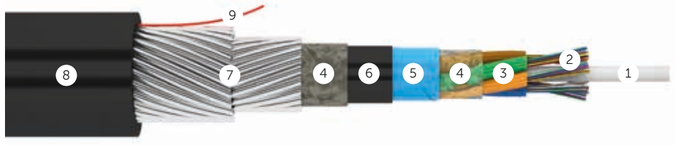
- Up to 432 fibres
- Maximum rated design tension up to 80 kN
- Crush up to 1 kN /cm

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

Multi-tube (MT) galvanized steel wires (GSW) double armor

Direct Buried MT GSW2 Special

Click here to see detailed features of this design



Cable design

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

Features

Aluminum and polymer tape protects the cable core from moisture

Excellent solution for wetland and cross-river installation

Suitable for application in harsh environments

Aluminum and polymer tape protects optical fibre from hydrogen penetration

Parameters

- Up to 288 fibres
- Maximum rated design tension up to 80 kN
- Crush — 1 kN /cm

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

Submarine

Discover more

Underwater installation

Direct buried installation

Operating parameters

Operating temperature	-50°C...+70°C
Installation temperature	-30°C...+50°C
Transportation and storage temperature	-50°C...+70°C
Minimum bending radius	15 x cable diameter
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.

Central tube (CT) galvanized steel wires (GSW) double armor

Submarine CT GSW2

Click here to see detailed features of this design

Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Water-blocking gel
4. Armor of galvanized steel wires
5. Water-swellable tape
6. Aluminum and polymer tape
7. Inner jacket
8. Jacket

Features

Installation down to 2500 m

Suitable for application in harsh environments

Parameters

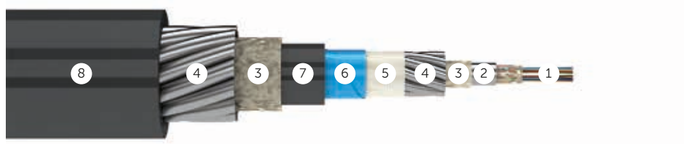
- Up to 24 fibres
- Maximum rated design tension up to 70 kN
- Crush — 1.5 kN /cm

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

Stainless steel tube (SST) galvanized steel wires (GSW) double armor

Submarine SST GSW2

Click here to see detailed features of this design



Cable design

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

Features

Installation down to 5000 m

Suitable for application in harsh environments

Parameters

- Up to 96 fibres
- Maximum rated design tension up to 85 kN
- Crush — 1.5 kN /cm

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

Aerial

Discover more

Aerial installation between poles and buildings

Aerial installation on powerlines

Pulling into underground ducts and sewer pipes. Installation into indoor/ outdoor cable conduits and trays

Installation along bridges, tunnels and other structures

Operating parameters

Operating temperature	-50°C...+70°C *-60°C ... +70°C
Installation temperature	-30°C...+70°C
Transportation and storage temperature	-50°C...+70°C
Minimum bending radius	from 10 x cable diameter
Design life	25 years

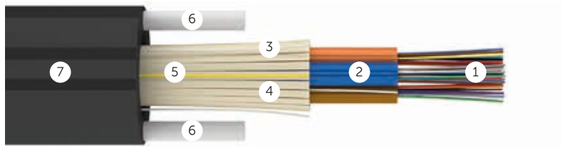
*Upon request

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

Fibreglass yarns soft tubes

Aerial FiberGlass Soft Tubes

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled soft tube
3. Water-swellable yarns
4. Fibreglass yarns
5. Ripcord
6. FRP rod
7. Jacket

Features

All-dielectric design

Easy strippable micro tubes

Suitable for ducting application

Parameters

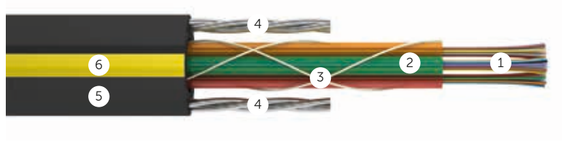
- Up to 432 fibres
- Maximum rated design tension up to 1.5 kN

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

Ultra-light weight (ULW) compact fibre unit (CFU)

Aerial ULW CFU

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Compact fibre unit (CFU)
3. Water-swellable yarns
4. Strength member (brass coated steel wires)
5. Jacket
6. Extruded strip

Features

Aerial installation on distribution lines up to 11 kV

Easy strippable design

Ultra-light weight

Parameters

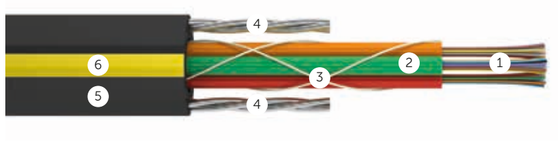
- Up to 96 fibres
- Maximum rated design tension up to 1.25 kN
- Crush — 2 kN/cm

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

Ultra-light weight (ULW) soft tubes

Aerial ULW Soft Tubes

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled soft tubes
3. Water-swellable yarns
4. Strength member (brass coated steel wires)
5. Jacket
6. Extruded strip

Features

Aerial installation on distribution lines up to 11 kV

Easy strippable design

Ultra-light weight

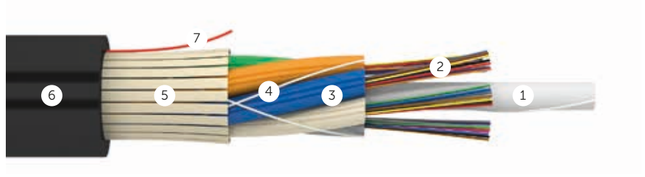
Parameters

- Up to 96 fibres
- Maximum rated design tension up to 1.25 kN
- Crush — 2 kN/cm

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

Aerial FiberGlass

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Fibreglass yarns
6. Jacket
7. Ripcord

Features

- Aerial installation on distribution and transmission lines up to 35 kV
- Maximum rated design tension up to 10 kN with span lengths up to 200 meters
- Low susceptibility to ice and wind loads
- Reduced weight and size
- All-dielectric design
- Cost-effective design
- Wide range of operating temperatures. Installation temperature down to -30°C

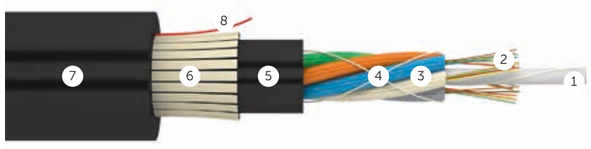
Parameters

- Up to 432 fibres
- Maximum rated design tension up to 10 kN
- Crush — 0.22 kN /cm

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

Aerial FiberGlass DJ

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Inner jacket
6. Fibreglass yarns
7. Jacket
8. Ripcord

Features

- Aerial installation on distribution and transmission lines of 35 kV and above with tracking-resistant jacket
- Cost-effective solution for city trunk lines
- Maximum rated design tension up to 15 kN with span lengths up to 300 meters
- Wide range of operating temperatures. Installation temperature down to -30°C
- All-dielectric design
- Fibreglass yarns prevent damage by rodents

Parameters

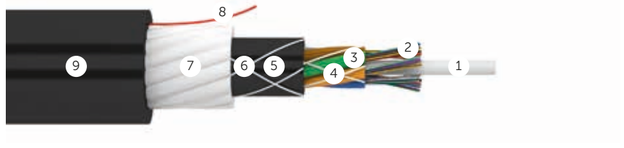
- Up to 432 fibres
- Maximum rated design tension up to 15 kN
- Crush — 0.22 kN /cm

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

Fibreglass rods anti-rodent

Aerial Defender

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Inner jacket
6. Water-swellable yarns
7. FRP rods
8. Ripcord
9. Jacket

Features

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

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

Completely protected from water ingress

All-dielectric design

Parameters

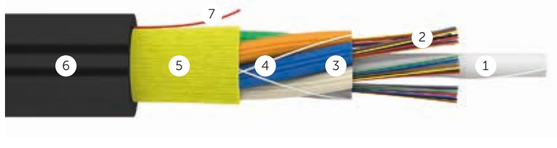
- Up to 432 fibres
- Maximum rated design tension up to 20 kN
- Crush up to 1 kN /cm

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

Aramid yarns

Aerial Aramid

Click here to see detailed features of this design



Cable design

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

Features

Aerial installation on distribution and transmission lines up to 35 kV

Maximum rated design tension up to 10 kN with span lengths up to 200 meters

Low susceptibility to ice and wind loads

Reduced weight and size

Wide range of operating temperatures. Installation temperature down to -30°C

All-dielectric design

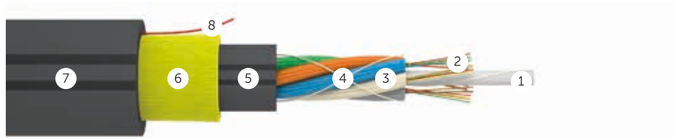
Parameters

- Up to 432 fibres
- Maximum rated design tension up to 10 kN
- Crush — 0.22 kN /cm

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

Aerial Aramid DJ

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-blocking gel
5. Inner jacket
6. Aramid yarns
7. Jacket
8. Ripcord

Features

Aerial installation on distribution and transmission lines of 35 kV and above with tracking-resistant jacket

The most reliable among Aerial cables. Double tensile strength

All-dieletric design

For construction of communication lines between towns and cities with distances between towers reaching 500 meters

Wide range of operating temperatures. Installation temperature down to -30°C

Parameters

- Up to 432 fibres
- Maximum rated design tension up to 100 kN
- Crush — 0.22 kN /cm

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

Indoor

Discover more

Installation into indoor/outdoor cable conduits and trays

Pulling into underground ducts and sewer pipes

Installation along bridges, tunnels and other structures

Operating parameters

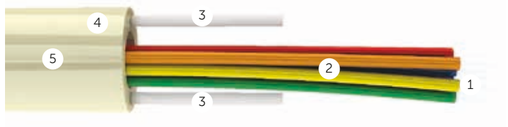
Operating temperature	-40°C...+60°C
Installation temperature	-10°C...+50°C
Transportation and storage temperature	-50°C...+50°C
Minimum bending radius	10 x cable diameter
Design life	25 years

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

Riser tight-buffered (TB)

Riser TB

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Tight buffer
3. FRP rod
4. Halogen-free flame-retardant jacket
5. Match marks (jacket opening marking)

Features

Euroclass B2ca confirmed

Perfect solution for high buildings: the fibre is buffered up to floor box or up to the subscriber's flat

Flame-retardant

Easy access to the fibre at any place of the cable

All-dielectric design

UV-resistant

Operation temperature range down to -30°C

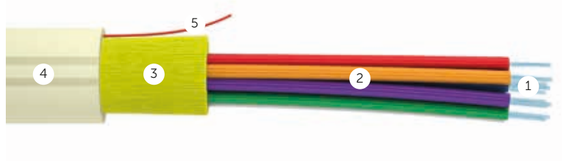
Parameters

- Up to 48 fibres
- Maximum rated design tension up to 400 N
- Crush — 80 N/cm

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

Distribution TB

Click here to see detailed features of this design



Cable design

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

Features

- Euroclass B2ca confirmed
- Easy termination
- More flexible compared to Riser Cable
- Flame-retardant
- All-dielectric design
- UV-resistant
- Perfect solution for offices and data centers

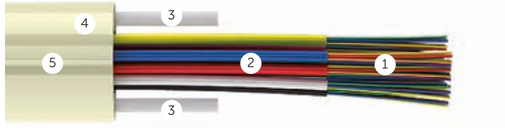
Parameters

- Up to 48 fibres
- Maximum operation tension up to 800 N
- Maximum rated design tension up to 1600 N
- Crush — 100 N/cm

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

Riser MT

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Micro tubes
3. FRP rod
4. Halogen-free flame-retardant jacket
5. Match marks (jacket opening marking)

Features

- Euroclass Eca confirmed
- All-dielectric design
- Operation temperature down to -30°C
- Easy access to fibre at any place of the cable
- Flame-retardant
- UV-resistant
- Perfect solution for multi-dwelling units
- High density of fibres makes it possible to bundle up to 24 fibres into micro loose tubes and place up to 48 micro loose tubes in a cable

Parameters

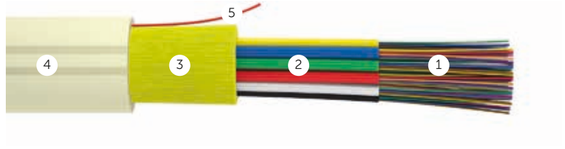
- Up to 1152 fibres
- Maximum rated design tension up to 400 N
- Crush — 80 N/cm

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

Distribution micro tube (MT)

Distribution MT

Click here to see detailed features of this design



Cable design

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

Features

All-dielectric design

Flame-retardant

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

UV-resistant

Parameters

- Up to 288 fibres
- Maximum operation up to 800 N
- Maximum installation up to 1600 N
- Crush — 100 N/cm

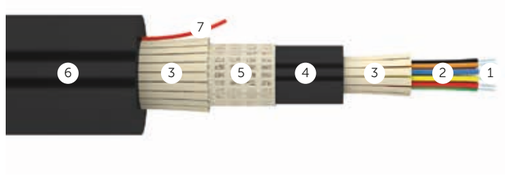
Indoor

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

Tight-buffered double jacket

Distribution Fire Rated

Click here to see detailed features of this design



Cable design

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

Features

Remains functional under direct flame for at least 180 minutes

Easy to install

All-dielectric design

UV-resistant

Parameters

- Up to 24 fibres
- Maximum rated design tension up to 1100 N
- Crush — 200 N/cm

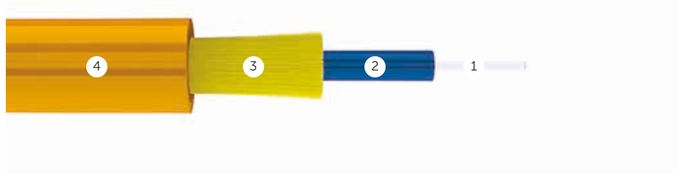
Indoor

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

Tight-buffered aramid yarns

Simplex

Click here to see detailed features of this design



Cable design

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

Features

- Euroclass B2ca confirmed
- Flame-retardant
- Cable can be terminated with a standard connector
- UV-resistant
- Compact and flexible
- Perfect solution for patch cords manufacturing
- All-dielectric design

Parameters

- Maximum rated design tension 180 N
- Crush — 50 N/cm

We design cables based on our Customers' specific technical requirements.
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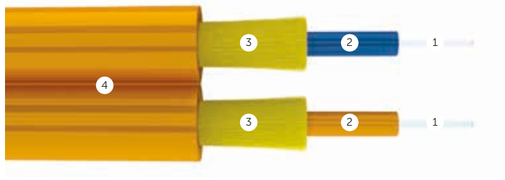
Indoor

Tight-buffered aramid yarns

Duplex

Click here to see detailed features of this design



Cable design

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

Features

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

Parameters

- Maximum rated design tension 180 N
- Crush — 50 N/cm

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

Indoor

Drop

Discover more

Aerial installation between poles and buildings

Installation along bridges, tunnels and other structures

Pulling into underground ducts and sewer pipes. Installation into indoor/ outdoor cable conduits and trays

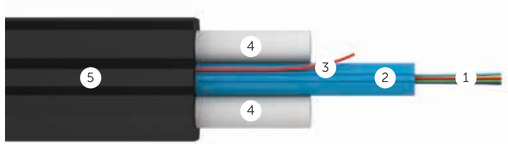
Operating parameters

Operating temperature	-50°C...+70°C
Installation temperature	-10°C...+50°C
Transportation and storage temperature	-50°C...+70°C
Minimum bending radius	15 x cable diameter
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.

Flat Type Drop

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Ripcord
4. FRP rod
5. Jacket

Features

All-dielectric design

Reduced weight and size

Operating temperature range down to -40°C

Parameters

- Up to 24 fibres
- Maximum rated design tension up to 3 kN
- Crush — 1 kN/cm

We design cables based on our Customers' specific technical requirements.
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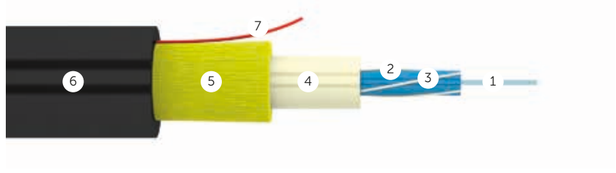
Round Type Drop TB

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Tight buffer
3. Water-swellable yarns
4. PBT loose tube
5. Aramid yarns
6. Jacket
7. Ripcord

Features

All-dielectric design

Reduced weight and size

Cost-effective design

Parameters

- Maximum rated design tension 2 kN
- Crush — 0.3 kN/cm

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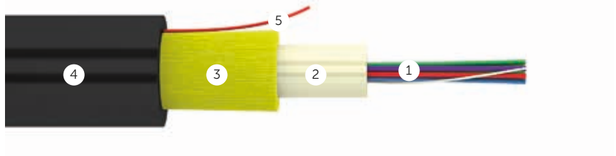
Round Type Drop

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Aramid yarns
4. Jacket
5. Ripcord

Features

All-dielectric design

Reduced weight and size

Cost-effective design

Parameters

- Up to 24 fibres
- Maximum rated design tension up to 2 kN
- Crush — 0.13 kN/cm

We design cables based on our Customers' specific technical requirements.
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OPGW / Ground Wire

Discover more

Installation on medium and high-voltage power lines to protect phase conductors from direct lightning strikes

Used for distributed acoustic and temperature monitoring (DAS, DTS) to prevent third-party intervention, detect place of lightning strike and short circuit

Operating parameters

Operating temperature	**-50°C...+85°C** ***-60°C ... +85°C**
Installation temperature	**-30°C...+50°C**
Transportation and storage temperature	**-50°C...+85°C**
Minimum bending radius	**20 × cable diameter**
Design life	**50 years**

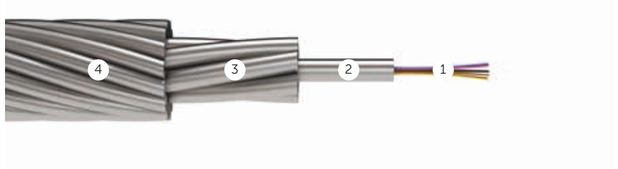
* Upon request

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

Central tube (C)

OPGW C

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled stainless steel tube
3. Stranded wires (aluminum-clad steel wires and/or aluminum alloy wires)
4. Stranded wires (aluminum-clad steel wires and/or aluminum alloy wires)

Features

Aluminum-clad steel wires are corrosion-resistant

Aluminum alloy wires shield the high-voltage conductors from lightning strikes

Parameters

- Up to 96 fibres
- Rated breaking strength up to 210 kN
- Maximum rated design tension up to 125 kN
- Crush — 1 kN/cm

We design cables based on our Customers' specific technical requirements.
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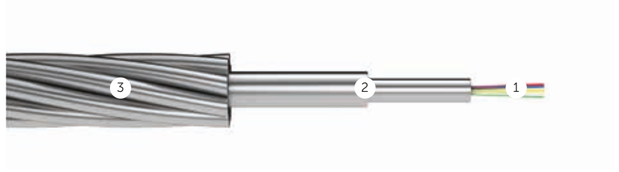
Aluminum-clad (CA) central tube

OPGW CA

Click here to see detailed features of this design



Cable design

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

Features

Highly corrosion-resistant: ACS wires and aluminum-clad stainless steel tube

Aluminum alloy wires shield the high-voltage conductors from lightning strikes

Parameters

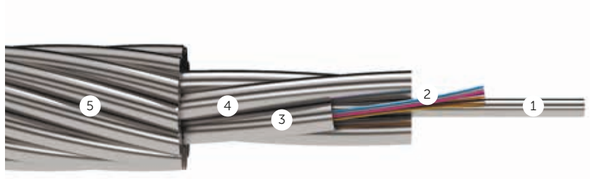
- Up to 96 fibres
- Rated breaking strength up to 210 kN
- Maximum rated design tension up to 125 kN
- Crush — 1.5 kN/cm

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

Stranded (S) steel tube

OPGW S

Click here to see detailed features of this design



Cable design

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

Features

Aluminum-clad steel wires are corrosion-resistant

Aluminum alloy wires shield the high-voltage conductors from lightning strikes

Parameters

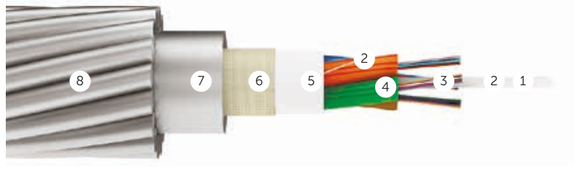
- Up to 432 fibres
- Rated breaking strength up to 275 kN
- Maximum rated design tension up to 165 kN
- Crush — 1 kN/cm

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

Aluminum pipe (AP)

OPGW AP

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Water-swellable yarns
3. Optical fibre
4. Gel-filled loose tube
5. Water-swellable tape
6. Thermal barrier
7. Aluminum pipe
8. Aluminum-clad steel wires and/or aluminum alloy wires

Features

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

Parameters

- Up to 144 fibres
- Rated breaking strength up to 210 kN
- Maximum rated design tension up to 125 kN
- Crush — 1 kN/cm

We design cables based on our Customers' specific technical requirements.
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Aluminum-clad steel wires

Ground Wire

Click here to see detailed features of this design

Cable design

1. Central strength member (aluminum-clad steel wire)
2. Stranded wires (aluminum-clad steel wires and/or aluminum alloy wires)
3. Stranded wires (aluminum-clad steel wires and/or aluminum alloy wires)

Features

- Aluminum-clad steel wires are corrosion resistant
- Aluminum alloy wires shield the high-voltage conductors from lightning strikes

Parameters

- Rated breaking strength up to 700 kN

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

Fire Rated

Discover more

Installation into indoor/outdoor cable conduits and trays

Pulling into underground ducts and sewer pipes

Installation along bridges, tunnels and other structures

Direct buried installation

Aerial installation between poles and buildings

Aerial installation on powerlines

Operating parameters

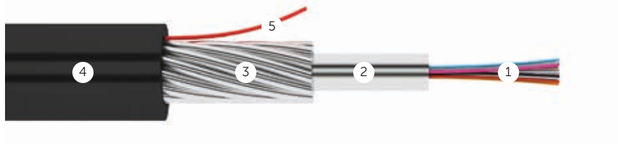
Operating temperature	-50°C...+70°C
Installation temperature	-10°C...+50°C
Transportation and storage temperature	-50°C...+50°C
Minimum bending radius	from 10 x cable diameter
Design life	25 years

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

Stainless steel tube halogen-free jacket design

Fire Rated Universal

Click here to see detailed features of this design



Cable design

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

Features

Remains functional under direct flame for at least 180 minutes

Suitable for all applications

Resistance to crushing load 1 kN/cm which is retained even after the fire

Withstands the physical impact and water used during fire-fighting

Small size – thin, light, economical

Parameters

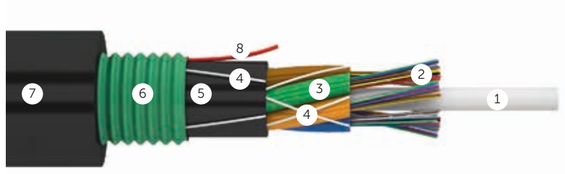
- Up to 96 fibres
- Maximum rated design tension up to 7 kN
- Crush — 1 kN /cm

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

Corrugated steel tape halogen-free jacket design

Fire Rated Outdoor

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Water-swellable yarns
5. Inner jacket made of halogen-free flame-retardant polymer compound
6. Corrugated steel tape armor
7. Halogen-free jacket
8. Ripcord

Features

Remains functional under direct flame for at least 180 minutes

Easy to install

Excellent rodent resistance

Parameters

- Up to 288 fibres
- Maximum rated design tension up to 2.7 kN
- Crush — 0.22 kN /cm

We design cables based on our Customers' specific technical requirements.
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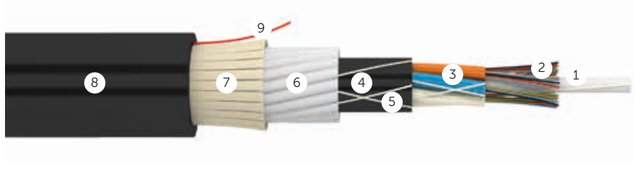
Fibreglass rods halogen-free jacket design

Fire Rated Universal Dielectric

Click here to see detailed features of this design



Cable design

1. Central strength member (FRP rod)
2. Optical fibre
3. Gel-filled loose tube
4. Inner jacket made of halogen-free flame-retardant polymer compound
5. Water-sweallable yarns
6. Fibreglass rods
7. Fibreglass yarns
8. Halogen-free jacket
9. Ripcord

Features

Remains functional under direct flame for at least 180 minutes

Suitable for all applications

All-dielectric design

Parameters

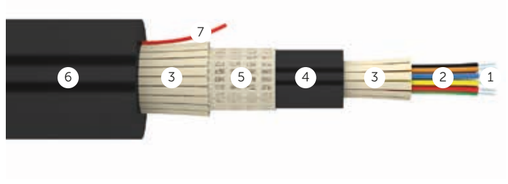
- Up to 288 fibres
- Maximum rated design tension up to 7 kN
- Crush — 0.4 kN /cm

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

Tight-buffered halogen-free jacket design

Fire Rated Dielectric

Click here to see detailed features of this design



Cable design

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

Features

- Remains functional under direct flame for at least 180 minutes
- Easy to install
- All-dielectric design
- UV resistance

Parameters

- Up to 24 fibres
- Maximum rated design tension up to 1.1 kN
- Crush — 0.2 kN/cm

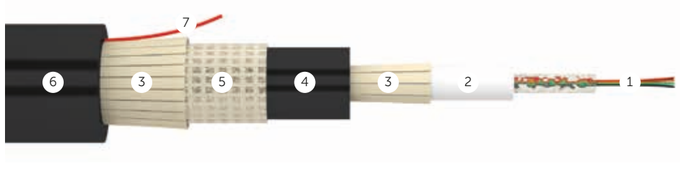
Fire Rated

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

Central tube halogen-free jacket design

Fire Rated Dielectric Light

Click here to see detailed features of this design



Cable design

1. Optical fibre
2. Gel-filled loose tube
3. Fibreglass yarns
4. Inner jacket made of halogen-free flame-retardant polymer compound
5. Mica glass tape
6. Halogen-free jacket
7. Ripcord

Features

- Remains functional under direct flame for at least 180 minutes
- All-dielectric design

Parameters

- Up to 24 fibres
- Maximum rated design tension up to 2 kN
- Crush — 0.2 kN /cm

Fire Rated

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

Technical Information

Here you can find useful links, unique free software, up-to-date parameters and color identification of optical fibres, guidelines for transportation, storage and maintenance of fibre optic cable, and other information designed to help you build a reliable optical communication system.

Discover more
at incabeurope.com

Types and Parameters of Optical Fibre

Corning® fibre is used in all Incab Europe cables.
Its fibre attenuation is at least 10% lower than that of the other standard single-mode fibres.

It is 10-times more bend-resistant compared to other standard single-mode fibres, and is 100%-compatible with other single-mode fibres.
We normally use Corning optical fibres in our cables, but we can also use fibres of other manufacturers on request.

Discover more

Single-Mode Fibre

Fibre type	G.657.A1	G.657.A1	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-T recommendation	G.657.A1	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	≤ 0.5	≤ 0.5	≤ 0.5
Cladding Diameter	125.0 ± 0.7	125.0 ± 0.7	125.0 ± 0.7	125.0 ± 0.7	125.0 ± 0.7	125.0 ± 0.7	125.0 ± 0.7
Cladding Non-Circularity	≤ 0.7%	≤ 0.7%	≤ 0.7%	≤ 0.7%	≤ 0.7%	≤ 0.7%	≤ 0.7%
Coating Diameter	242 ± 5	242 ± 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

Fibre type	G.657.A1	G.657.A1	ULL	G.655.D	G.654.E	G.657.A2	G.657.B3
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	0.092	0.07	0.092	0.092	-
Zero Dispersion Wavelength, nm	1304 - 1324	1304 - 1324	1304 - 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 ± 0.4	-	-	8.6 ± 0.4	8.6 ± 0.4
1550 nm wavelength	10.4 ± 0.5	10.4 ± 0.5	10.4 ± 0.5	9.6 ± 0.4	12.4 ± 0.5	9.6 ± 0.5	9.6 ± 0.5
Macrobend Loss, dB, λ=1550 nm/1625 nm							
(1 turn x R16 mm)	-	-	≤ 0.1 / -	≤ 0.50 / ≤ 0.50	-	-	-
(1 turn x R10 mm)	≤ 0.50 / ≤ 1.5	≤ 0.50 / ≤ 1.5	-	-	-	-	-
(1 turn x R7.5 mm)	-	-	-	-	-	≤ 0.4 / ≤ 0.8	-
(1 turn x R5 mm)	-	-	-	-	-	-	≤ 0.10 / ≤ 0.30
(100 turns x R25 mm)	-	-	-	-	≤ 0.1 / ≤ 0.1	-	-
(100 turns x R30 mm)	-	-	- / ≤ 0.05	≤ 0.05 / ≤ 0.05	-	-	-

Multimode Fibre

Fibre 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 ± 2.5
Core-Clad Concentricity	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
Cladding Diameter	125.0 ± 1.0	125.0 ± 1.0	125.0 ± 1.0	125.0 ± 1.0	125.0 ± 2.0
Cladding Non-Circularity	≤ 1.0%	≤ 1.0%	≤ 1.0%	≤ 1.0%	≤ 1.0%
Coating Diameter	242 ± 5	242 ± 5	242 ± 5	242 ± 5	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	≤ 0.6	≤ 0.6	≤ 0.6	≤ 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	500	500	500	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

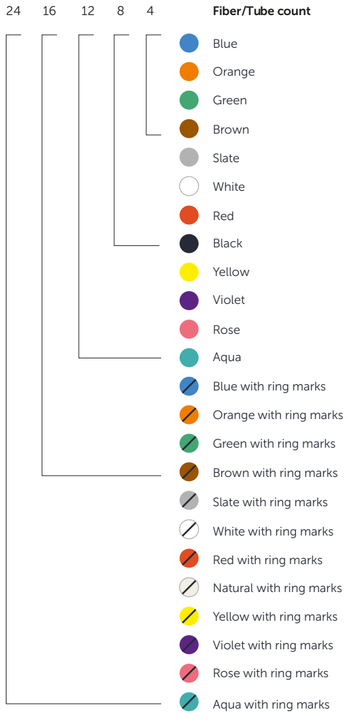
Fibre type	OM2	OM3	OM4	OM5	OM1
Fibre brand	Corning® ClearCurve® OM2	Corning® ClearCurve® OM3	Corning® ClearCurve® OM4	Corning® ClearCurve® OM5	Corning® InfiniCor® 300
Standard	ITU-T G.651	ITU-T G.651	ITU-T G.651	ITU-T G.651	IEC 60793-2-10
Attenuation to macrobending (2 turns on a bend former, radius 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

We use all the main color coding systems.
Other color identifications are available on request.

Discover more

ANSI / TIA 598



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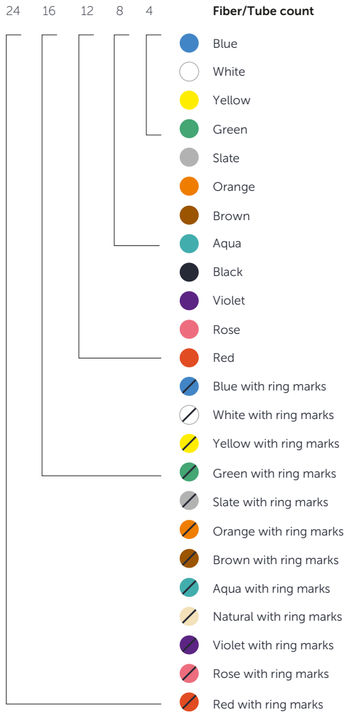
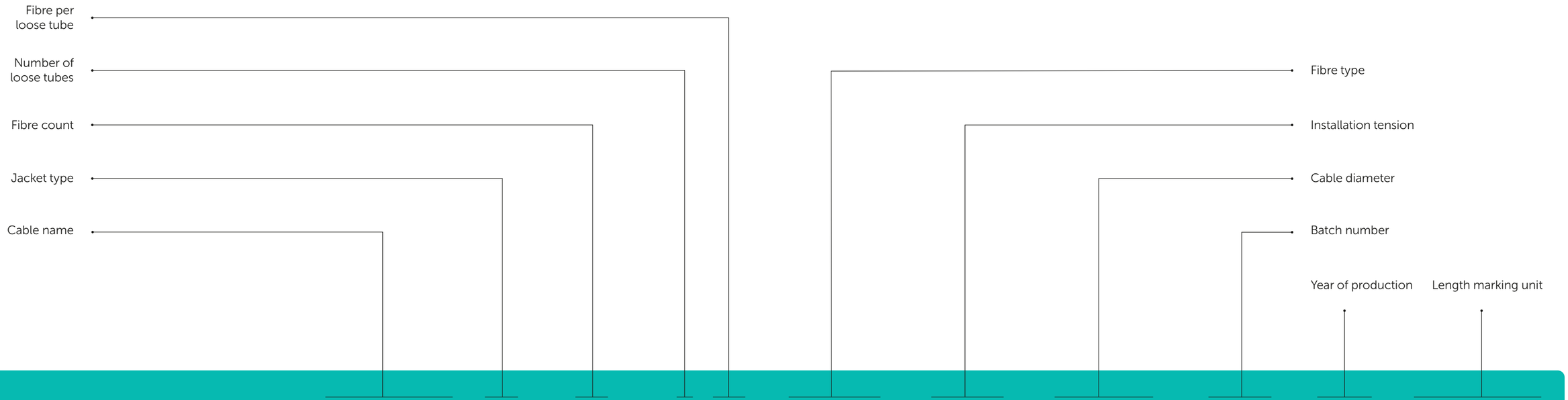


Marking System

Discover more

Marking is printed through each meter according to INCAB EUROPE standard below or individual customer requirements.



Transportation. Storage. Installation

Discover more

Transportation Guides:

- The reels should not be placed on their sides.
- The reels should be fixed. No nailing is allowed while fixing the 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 -50°C to +50°C.

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

- Our cables are designed for installation by hand or standard installation equipment.
- Cable termination and installation should be done in ways and with instruments that eliminate the danger of cable damage.
- Basic requirements:
  - Length of cable axial torsion at an angle ±360° ≥4 m
  - Admissible static bending radius for duct cables ≥250 mm
  - Admissible static bending radius of loose tube ≥20 × cable diameter

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 from the hub or interior!

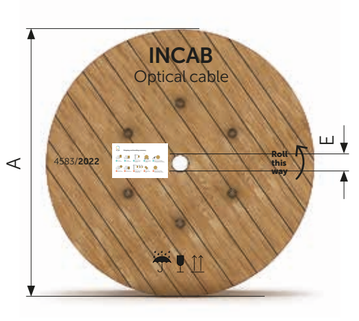
Never lift directily with the rigging when hoisting by crane!

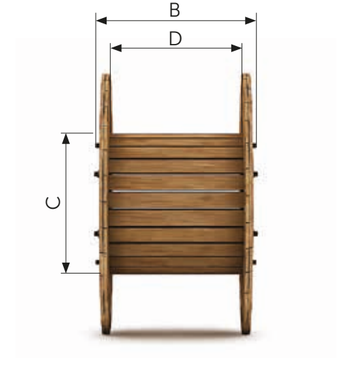
Never store or put reels on their side!

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

Reel Dimensions

Reel Type	Dimensions, mm					Reel weight including lagging, kg
	A	B	C	D	E	
4	400	370	162	305	80	5
5	500	560	320	500	80	9
6	600	560	320	500	80	10
8b	800	646	450	500	80	50
10	1000	646	545	500	80	95
12	1220	650	650	500	80	125
12a	1220	864	650	710	80	145
14	1400	875	750	710	80	198
14g	1400	1065	750	900	80	206
16a	1600	970	800	800	80	273
17a	1700	1094	900	900	80	330
17mod	1700	1294	900	1100	80	440
18a	1800	1120	900	900	80	400
18mod	1800	1320	900	1100	80	500
18u	1800	1230	1000	1000	80	650





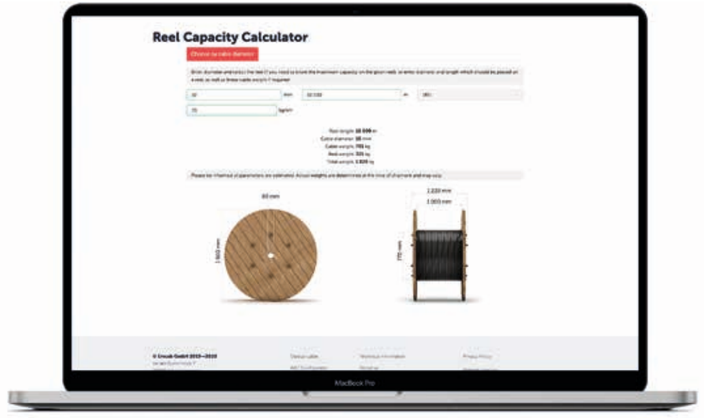
Digital Assistants

Try our free automated tools which help you choose suitable reel and simplify your ordering process.

Reel Capacity Calculator

By entering cable diameter and weight (if needed) you will be offered the available reel options for the required cable length and total reel capacity. It will calculate the maximum reel length and total weight of reel with cable which is essential for your logistics purposes.

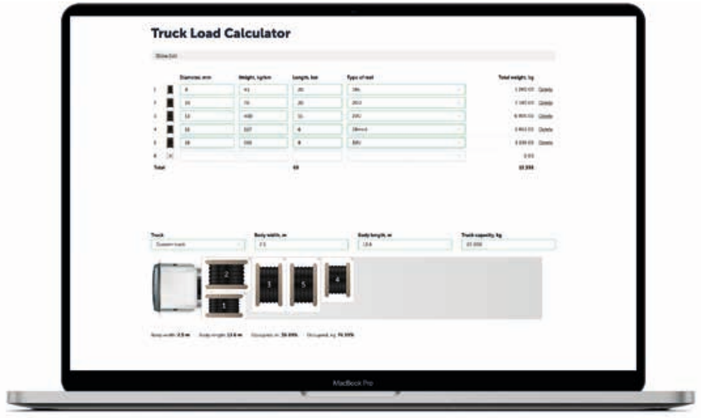
Discover more



Truck Load Calculator

By entering the required cable diameter and weight you'll see how many reels can be placed on the truck and efficiently plan your logistics. The truck dimensions can be customised, too.

Discover more



Certification

We care about producing and supplying the high-quality products that meet the best international standards.
The management systems used in production are recognized as ISO compliant.
All materials used in cables manufacturing are RoHS compliant and all manufacturing processes are REACH compliant.

Certificate ISO 9001, ISO 14001, ISO 45001

Conformity to RoHS and REACH

Discover more

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