



FIBER.REPAIR

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Thank You

01 ABOUT COMPANY

We are cabling veterans that can talk Proteon TokenRing before JRR. LattisNet over fiber...we did that.

Now we are match making clients who need fiber optic services with certified installers, distributors and products to get the job done fast. Find out how deep the team at

www.Fiber.Repair goes.

Thank you!



02 OUR PRODUCTS

▶ InSky OPGW

▶ InAir ADSS

▶ InDuct

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▶ BlownIn

InSky OPGW



InSky OPGW C



InSky OPGW CA



InSky OPGW AP



InSky OPGW S



InSky MASS



InSky ACS Ground Wire

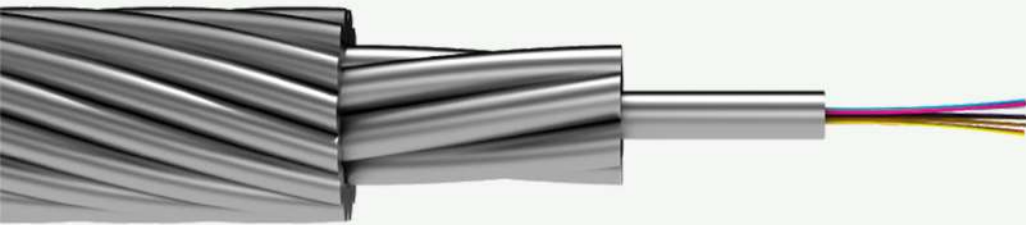


InPhase OPPC

03

INSKY OPGW C

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.



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

Select the optimal OPGW design for your project using our Configurator ACES: Advanced Cable Engineering System.

INSKY OPGW CA

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.

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

Find out the optimal OPGW design for your project using our Configurator ACES: Advanced Cable Engineering System.



InSky OPGW AP

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

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

Get the optimal OPGW design for your project using our Configurator ACES: Advanced Cable Engineering System.



InSky OPGW S

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.

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

Determine the optimal OPGW design for your project using our Configurator ACES: Advanced Cable Engineering System.



InSky MASS

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

InSky MASS (Metallic Aerial Self-Supporting) design is similar to OPGW design with a lower cost. It can have up to 48 fibers and its maximum rated design tension can reach up to 67,433 lb.

Approximately one third of all damage to ADSS cables, as a rule, occurs as a result of vandalism, mainly due to gunshots, while MASS is almost invulnerable to them.



InSky ACS Ground Wire

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

InSky ACS Ground Wire (Aluminum-Clad Steel Ground Wire) is a standard component of high-voltage transmission lines. It can be used when fiber capacity is not needed or when additional fault current capacity is required.

InSky ACS Ground Wire manufactured by Incab has a proven design life of 50 years and rated breaking strength (RBS) from 6,744 up to 157,366 lb. ACS ground wires shield high-voltage conductors from lightning strikes. Aluminum-clad steel ground wires are typically used in regions with much higher lightning activity (such as the USA or Brazil), showing excellent reliability under real operating conditions.



InPhase OPPC

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

InPhase OPPC (Optical Phase Conductor) is an optimal 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.

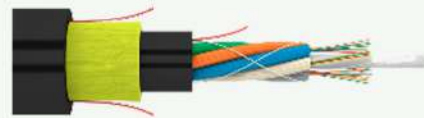
The main application of InPhase OPPC is the transmission of electrical power and construction of extensive optical communication system for data transmission. It can have up to 288 fibers and is highly corrosion-resistant.



InAir ADSS



InAir ADSS



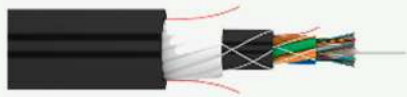
InAir ADSS DJ



InAir ADSS FiberGlass



InAir ADSS FiberGlass DJ



InAir ADSS FRP Defender

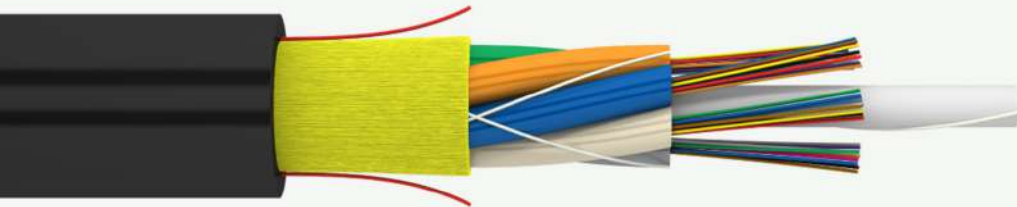
04

InAir ADSS

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.

InAir ADSS (All-Dielectric Self-Supporting) is a cost-effective self-supporting aerial cable for use on short and medium spans up to 656 ft with maximum rated design tension up to 2,248 lb.

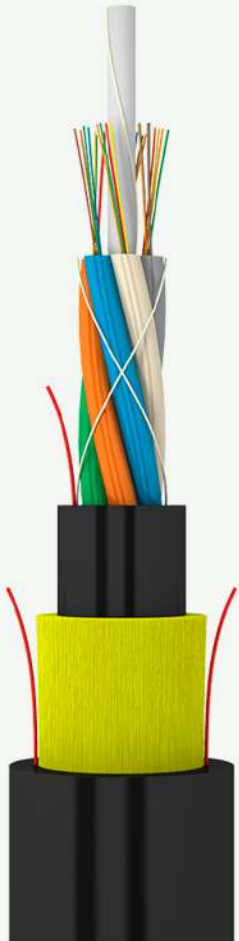
Check how this multi tube single jacket self-supporting cable can be deployed in FTTH system.



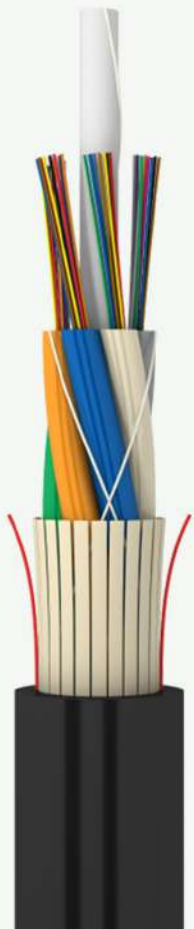
InAir ADSS DJ

InAir ADSS DJ (All-Dielectric Self-Supporting Double Jacket) is the most reliable among all-dielectric self-supporting double jacketed fiber optic cables. It is the best ADSS aerial solution for long spans as it can be installed in intercity communication lines with distances between towers reaching 1,640 ft.

Check how this aerial fiber optic cable can be deployed in FTTH system.



InAir ADSS FiberGlass

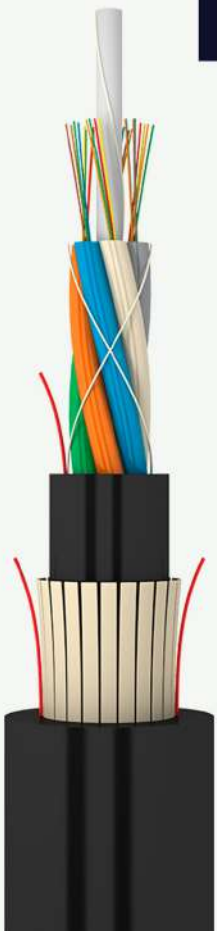


The most cost-effective solution for use on short and medium spans. It will have a smaller diameter and be lighter compared to a double jacket design. The fiberglass yarn provides a degree of rodent resistance.

InAir ADSS FiberGlass (All-Dielectric Self-Supporting Fiberglass yarns) is the most affordable self-supporting fiber optic cable for short and medium spans up to 656 ft.

Check how this multi tube single jacket self-supporting cable can be deployed in FTTH system.

InAir ADSS FiberGlass DJ

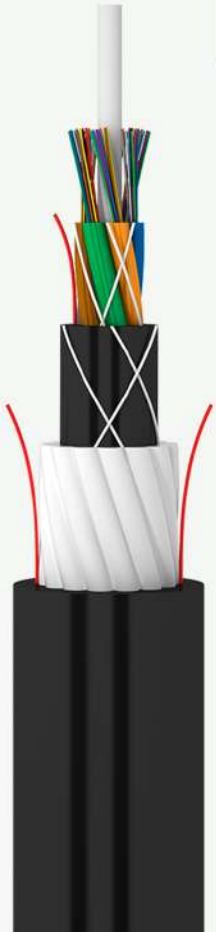


A great solution for short and medium spans. It's less expensive than comparable cables with aramid and provides a degree of rodent resistance.

InAir ADSS FiberGlass DJ is a great and cost-effective fiberglass double jacket cable for short and medium spans up to 984 ft making it applicable for city trunk lines. It's less expensive than cables with aramid yarns and provides a degree of rodent resistance due to fiberglass yarns.

Check how this aerial DJ cable can be deployed in FTTH system.

InAir ADSS FRP Defender

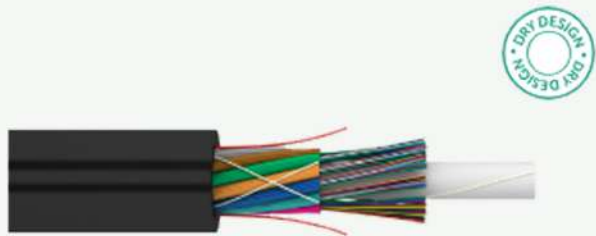


This design combines enhanced optical reliability with the highest degree of rodent resistance available in an all-dielectric cable. It also can be used as an all-dielectric direct buried cable solution.

Rodent gnawing damage is a very common problem in the USA, and it might be both extremely costly and very dangerous. InAir ADSS FRP Defender is a multi tube fiberglass rods cable which is specifically designed to solve the rodent problem.

Check how this defender ADSS cable can be deployed in FTTH systems.

InDuct



InDuct



InDuct FiberGlass



InDuct Aramid

05

InDuct

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

InDuct is a standard underground fiber optic cable. It's an all-dielectric and UV-resistant design.

Very important note: this InDuct cable has no levels of rodent resistance.

Typical application:

- It can be pulled into underground ducts and sewer pipes
- It can be installed along bridges, tunnels and other structures
- It can be installed into indoor/outdoor cable conduits and trays
- It can also be lashed



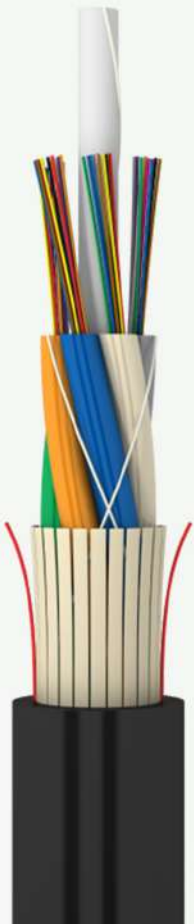
InDuct FiberGlass

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.

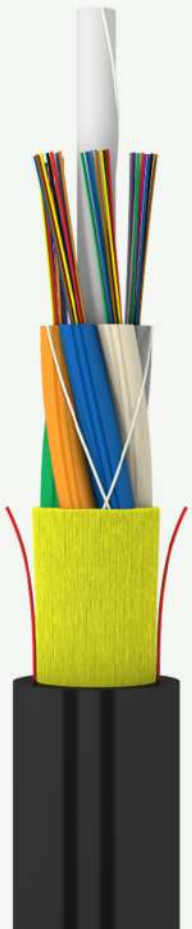
InDuct FiberGlass is an all-dielectric and UV-resistant design which can have up to 864 fibers. Its maximum rated design tension can reach up to 607 lb and crush is 126 lb/in.

Typical application:

- It can be pulled into underground ducts and sewer pipes
- It can be installed along bridges, tunnels and other structures
- It can be installed into indoor/outdoor cable conduits and trays
- It can also be lashed



InDuct Aramid



All-dielectric outside plant (OSP) cable is typically deployed in ducts.

InDuct Aramid is an all-dielectric outside plant cable with up to 144 fibers.

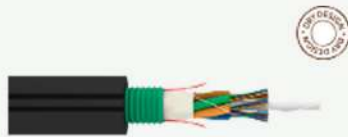
This cable consists of a stranded core with a central strength member (FRP), dry loose tubes with optical fibers and PE fillers (where applicable).

Typical application:

- It can be pulled into underground ducts and sewer pipes
- It can be installed along bridges, tunnels and other structures
- It can be installed into indoor/outdoor cable conduits and trays
- It can also be lashed

InArmor

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InArmor CST



InArmor CST DJ



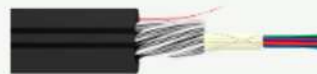
InArmor CT CST



InArmor+ SST



InArmor+ FiberGlass DJ



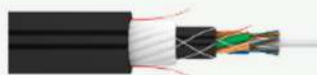
InArmor+ CT GSW



InArmor+ CT FRP



InArmor+ GSW



InArmor+ FRP



InArmor+ SST GSW



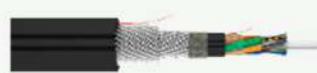
InArmor+ GSW Welland



InArmor++ CT GSW2



InArmor++ CT FRP2



InArmor++ GSW2



InArmor++ FRP2

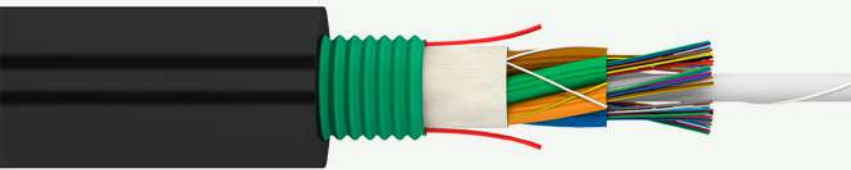


InArmor++ GSW2 Welland

06

InArmor CST

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



InArmor CST is a cost-effective and one of the most popular designs. It is a multi-tube cable with corrugated steel tape as an anti-rodent armoring.

Typically, this cable consists of a stranded core with a central strength member (FRP) and dry loose tubes with optical fibers.

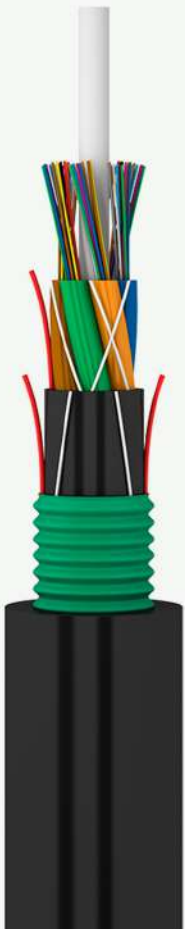
InArmor CST's maximum rated design tension can reach up to 607 lb but it may be produced with even higher MRDT up to 1.124 lb.

InArmor CST DJ

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

InArmor CST DJ is a cost-effective and proven reliable design. It is a multi-tube cable with corrugated steel tape as an anti-rodent armoring and double jacket.

Typically, this cable consists of a stranded core with a central strength member (FRP) and dry loose tubes with optical fibers.



InArmor CT CST

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

Maximum rated design tension (MRDT) 607 lb (2.7 kN)

Crush 286 lb/in (0.5 kN/cm)

Fiber count, up to 12 16 24

Cable diameter, in 0.287 0.295 0.307

Cable weight, lb/ft 0.048 0.049 0.051

Minimum bending radius, in 4.3 4.4 4.6



InArmor+ SST

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

Maximum rated design tension (MRDT)	337 lb (1.5 kN)
Crush	400 lb/in (0.7 kN/cm)
Fiber count, up to	96



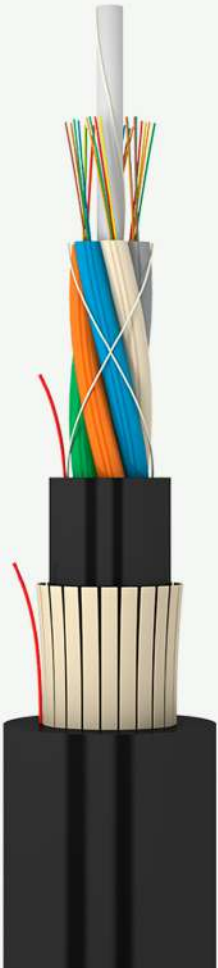
InArmor+ FiberGlass DJ

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.

InArmor+ FiberGlass DJ is a multi-tube cable with fiberglass yarns and double jacket. It is an all-dielectric design that features UV-resistance and moderate rodent protection.

This cable can be mainly:

- Pulled into underground ducts and sewer pipes
- Installed along bridges, tunnels and other structures
- Installed into indoor/outdoor cable conduits and trays
- Aerial lashed



InArmor+ CT GSW

Direct buried cable that can also be installed in ducts.

Maximum rated design tension (MRDT) 1124...2698 lb (5...12 kN)

Crush 400 lb/in (0.7 kN/cm)

Fiber count, up to 24

Maximum rated design tension (MRDT) 1124 lb (5 kN)

Crush 400 lb/in (0.7 kN/cm)

Fiber count, up to 16 24

Cable diameter, in 0.319 0.327

Cable weight, lb/ft 0.078 0.083

Minimum bending radius, in 4.8 4.9



InArmor+ CT FRP

Excellent as a direct buried, drop cable.

Maximum rated design tension (MRDT) 1798...2698 lb (8...12 kN)

Crush 400 lb/in (0.7 kN/cm)

Fiber count, up to 24

Maximum rated design tension (MRDT) 1798 lb (8 kN)

Crush 400 lb/in (0.7 kN/cm)

Fiber count, up to 16 24

Cable diameter, in 0.421 0.429

Cable weight, lb/ft 0.08 0.085

Minimum bending radius, in 6.3 6.4



InArmor+ GSW

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

Maximum rated design tension (MRDT) 2248...17985 lb (10...80 kN)

Crush 228...571 lb/in (0.4...1 kN/cm)

Maximum rated design tension (MRDT) 2248 lb (10 kN)

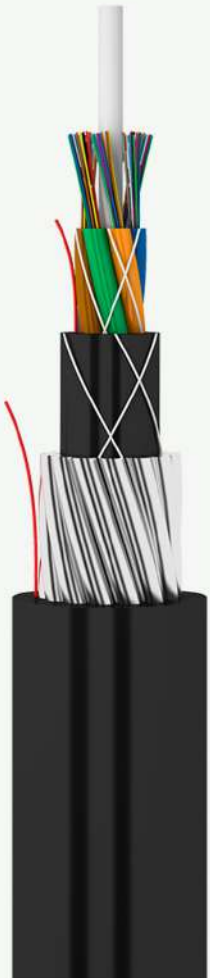
Crush 228 lb/in (0.4 kN/cm)

Fiber count, up to 48 (4x12) 72 (6x12) 96 (4x24) 144 (6x24)

Cable diameter, in 0.646 0.512 0.555 0.559

Cable weight, lb/ft 0.170 0.198 0.2 0.282

Minimum bending radius, in 8.3 7.7 8.4 9.7

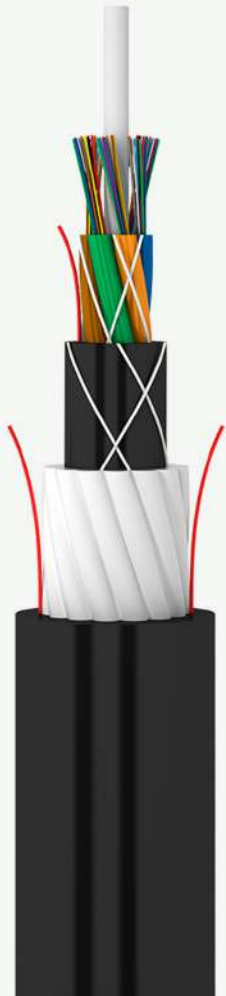


InArmor+ FRP

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

InArmor+ FRP is a multi-tube all-dielectric and UV-resistant cable with fiberglass rods armor ensuring excellent rodent resistance. This design features reliable protection from serious mechanical impact.

InArmor+ FRP consists of a stranded core with central strength member (FRP) and loose tubes with optical fibers (up to 144). The stranded core is fixed by water-swellable yarns. The armor consists of FRP rods. There are water-swellable yarns between an inner jacket and FRP rods.





InArmor+ SST GSW

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

Maximum rated design tension (MRDT) 1574 lb (7 kN)

Crush 571 lb/in (1 kN/cm)

Fiber count, up to 36 48 72 96

Cable diameter, in 0.378 0.39 0.406 0.425

Cable weight, lb/ft 0.114 0.122 0.130 0.14

Minimum bending radius, in 5.7 5.8 6.16.4

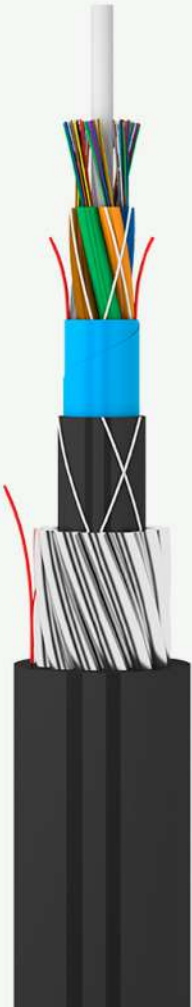
InArmor+ GSW Wetland

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

Maximum rated design tension (MRDT) 1574...17985 lb (7...80 kN)

Crush 228 lb/in (0.4 kN/cm)

Fiber count, up to 144



InArmor++ CT GSW2

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

Maximum rated design tension (MRDT) 6744...17985 lb (30...80 kN)

Crush 571 lb/in (1 kN/cm)

Fiber count, up to 24

Maximum rated design tension (MRDT) 8992 lb (40 kN)

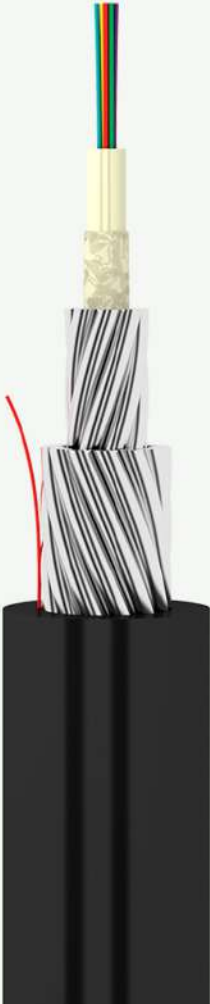
Crush 571 lb/in (1 kN/cm)

Fiber count, up to 12 16 24

Cable diameter, in 0.504 0.508 0.52

Cable weight, lb/ft 0.252 0.258 0.27

Minimum bending radius, in 7.6 7.6 7.8



InArmor++ CT FRP2

Excellent as a direct buried, drop cable.

Maximum rated design tension (MRDT) 3372...6744 lb (15...30 kN)

Crush 571 lb/in (1 kN/cm)

Fiber count, up to 24



InArmor++ GSW2

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

Maximum rated design tension (MRDT) 17985 lb (80 kN)

Crush 571 lb/in (1 kN/cm)

Fiber count, up to 24 48 72 96 144

Cable diameter, in 0.772 0.787 0.819 0.835 0.913

Cable weight, lb/ft 0.537 0.573 0.608 0.63 0.8

Minimum bending radius, in 11.6 11.8 12.3 12.5 13.7





InArmor++ FRP2

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

InArmor++ GSW2 Wetland

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

Maximum rated design tension (MRDT) 17985 lb (80 kN)

Crush 571 lb/in (1 kN/cm)

Fiber count, up to 144



InArmor

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BlownIn CT



BlownIn

07

BlownIn CT

Convenient for blowing into microducts

BlownIn CT, as all air blown fiber optic cables, is rigid yet flexible enough to be installed into microducts. This micro fiber optic cable consists of a PBT central loose tube with optical fibers (can have up to 24 fibers) and water-blocking gel.



It is an all-dielectric design suitable for indoor and outdoor cable conduits and trays. This design also features reduced weight (reaching up to 0.007 lb/ft) and size (with cable diameter reaching up to 0.134 in). Operation tension can be up to 18 lb (0.08 kN) and installation tension can reach up to 34 lb (0.15 kN)

BlownIn

Convenient for blowing into microducts

BlownIn is a multitube design that can have up to 432 fibers. It is an all-dielectric and UV-resistant micro air blown cable suitable for indoor and outdoor cable conduits and trays.

BlownIn cables can be manufactured in several options:

Option PE 250
250 μm fiber
HDPE outer jacket

Option PA 250
250 μm fiber
PA outer jacket

Option PA 200
200 μm fiber
PA outer jacket



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THANK YOU

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