PRYSMIAN SIROCCO MICRODUCT CABLES

A revolution in the telecommunications industry

prysmian

The planet's pathways

CONNECTING PEOPLE THROUGH TECHNOLOGY

Bridging the connectivity gap from countries to communities.

The invention and adoption of new technologies is driving us into a new era of digital demand. Artificial intelligence is unlocking creative freedom in our workplaces.

Augmented reality is amplifying our everyday world. Edge computing is connecting families, businesses, and allies across the globe – all with increasing speed.

Over the last 30 years, fibre optic cabling has evolved to support today's new era of hyper-connectivity. In 2022, more than 630 million kilometres of fibre were installed globally, compared with just 200 million kilometres in 2010, as we link continents, countries, cities and homes.

And that isn't set to change. Prysmian is the world's largest producer of telecom cables, with unrivalled expertise, technology and production capability. Our extensive range of optical fibre and copper cabling solutions links communications with communities on a global scale.

Whether you're concerned with high bandwidth, fibre density, rapid installation or reduction of deployment costs, we can help you build a network which provides outstanding future-fit connectivity.

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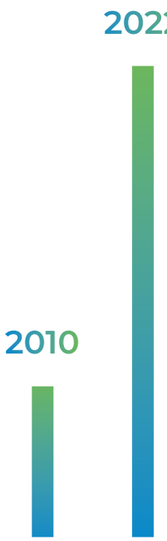


A NEW STANDARD FOR FIBRE NETWORK EFFICIENCY

Network operators are under ever-increasing pressure to save space, time and costs. They need to become as efficient as possible when it comes to making use of space, and providing high-performing, future-fit solutions.

Prysmian's Sirocco microduct cables have been designed with these pressures in mind. Using Prysmian's BendBright™ A1 200 µm single-mode fibres (G.657.A1), Sirocco microduct cables have a smaller diameter than other cables on the market, making it possible to install more fibres within a limited space.

Their reduced diameter also enables the use of smaller ducts for new installations, resulting in lower installation costs and the use of less raw material. This provides benefits for both the total cost of network deployment and the environmental footprint.

With their high fibre count and reduced diameter, Sirocco microduct cables make installation faster and more cost effective. **Specifically designed for air-blowing installation, they are the ideal component for high-density access networks, FTTx and 5G infrastructure,** and are available in fibre counts ranging from 36-864. They conform to international standards for both optical and mechanical performance.

SIROCCO

Sirocco microduct cables

Fibre count (N o.)	Cable diameter (mm)	Fibre density (No. / mm²)	Min duct size (mm)	Construction (No. T × f/T)
36	5.2	1.7	7	3 × 12
48	5.2	2.3	7	4 × 12
96	5.2	4.5	7	8 × 12
144	5.5	6.1	7	6 × 24
192	6.3	6.2	8	8 × 24
288	8.5	5.1	12	12 × 24
432	8.7	7.3	12	18 × 24
576	10.1	7.2	13	24 × 24
864	13.0	6.5	16	24 × 36

Lower installation costs
Less raw material
36-864 fibre count

High fibre count

Reduced diameter

Cost effective

Install more fibres within a limited space

The duct sizes listed are the minimum internal diameter of the duct that can be used whilst keeping the duct fill factor below 70%.

AND THE INNOVATION DOESN'T STOP THERE

Prysmian's Sirocco^{HD} range provides world record diameters and fibre densities for air-blown microduct cables with 200µm optical fibre. An evolution of the Sirocco microduct cable family, Sirocco^{HD} offers extreme fibre counts and an even further reduced diameter, making them an unrivalled space-saving cabling solution.

Sirocco^{HD} microduct cables use Prysmian's BendBright™ XS 200 µm bend loss optimised single-mode fibres, so network operators can be further reassured their systems are running efficiently.

With their extreme fibre count and reduced diameter, **Sirocco^{HD} microduct cables are designed for air-blowing installation in high-density access networks, FTTx and 5G infrastructure.**

Sirocco^{HD} cables also benefit from the use of Prysmian's Sirocco PicoTube technology, which makes them up to 20% smaller than previously available microduct cables. Now, it's possible to install more fibres within congested duct space than ever before, and to use smaller ducts for new installations.

This new family of Sirocco cables is a welcome revolution in the context of the world's evolving connectivity requirements. With lower installation costs, the use of less raw material, and less need for specialist installation engineers, network operators will benefit from the reduction of both OPEX and of their environmental footprint.

SIROCCO^{HD}

Sirocco^{HD} microduct cables

Fibre count (No.)	Cable diameter (mm)	Fibre density (No. / mm²)	Min duct size (mm)	Construction (No. T × f/T)
36	3.0	5.1	4	6 × 6
48	3.5	5.0	5	8 × 6
96	4.6	5.8	5.5	8 × 12
144	5.0	7.3	6	6 × 24
192	5.8	7.3	7	8 × 24
288	7.5	6.5	10	12 × 24
432	8.0	8.6	10	18 × 24
576	9.5	8.1	12	24 × 24
864	11.0	9.1	13	24 × 36

Lower installation costs
Less raw material
36-864 fibre count

Bend-insensitive fibre is a crucial part of the world's shift towards flexible and reliable connectivity. Microbending is especially likely to occur within high-density cables, where fibres may be subject to stress, and bending loss is more likely to occur in high-density networks in space limited connectivity devices.

Prysmian's BendBright 200 µm single-mode fibres overcome these challenges to offer stable connectivity and increased resilience. This means, in addition to offering an unrivalled extreme fibre count and reduced diameter, Sirocco^{HD} microduct cables also provide faster and more cost-effective installation with a reduced requirement for specialised engineers.

World record diameters

Extreme fibre count

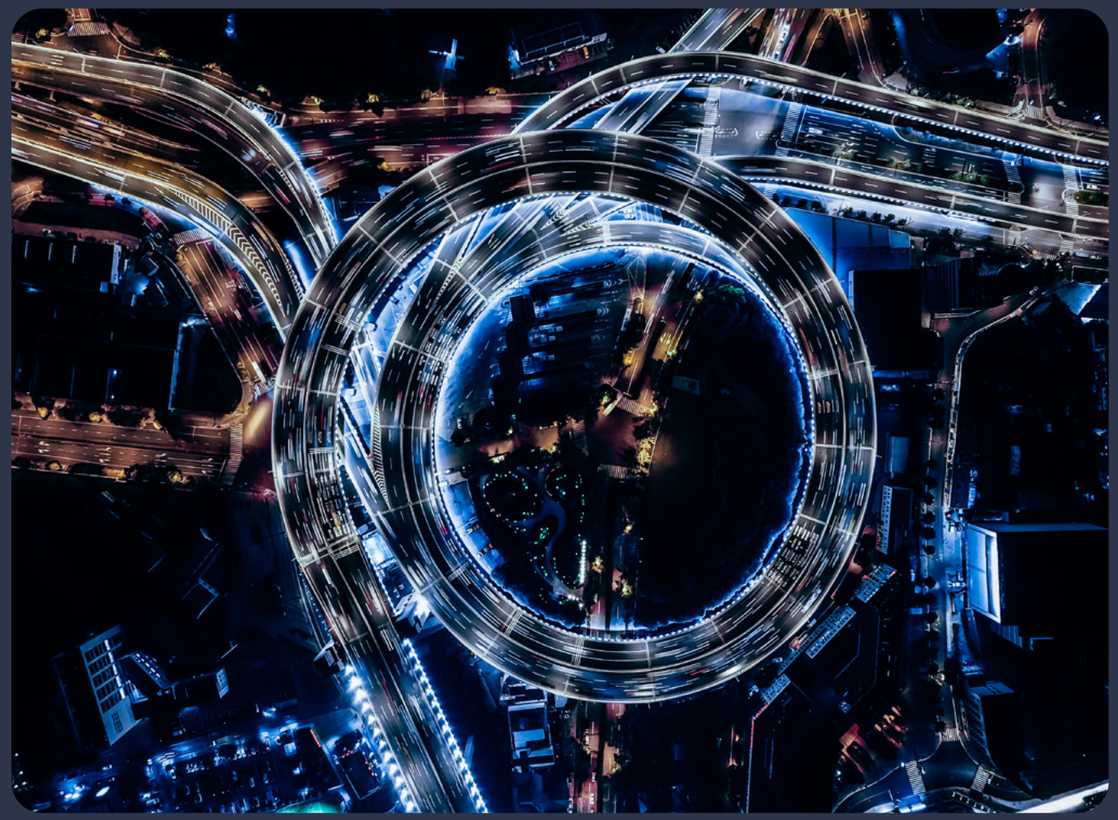
PicoTube technology

20% smaller

RECORD-BREAKING SOLUTIONS FOR AN EVOLVING MARKET

Prysmian's Sirocco^{EXTREME} microduct cables unite two technological advancements to record-breaking effect. Further to the innovation of 180-micron fibre and Sirocco^{HD} microduct cables, what could be more extreme than combining the two? Introducing even smaller diameters for bigger environmental and economic benefits.

Sirocco^{EXTREME} cables use Prysmian's BendBright^{XS} Single Mode 180µ fibre and PicoTube technology, making them an exceedingly efficient space-saving solution.



SIROCCO^{EXTREME}

Sirocco^{EXTREME} microduct cables

Fibre count (No.)	Cable diameter (mm)	Fibre density (No. / mm²)	Min duct size (mm)	Construction (No. T × f/T)
36	2.7	6.3	3.5	6 × 6
48	3.0	6.8	4	8 × 6
96	4.0	7.6	5	8 × 12
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864	9.8	11.5	12	24 × 36

+500 fibres in 10 mm microducts

First 180 µm fibre

Extreme fibre densities

Breaking new ground in fibre density and offering smaller diameters than both the Sirocco and Sirocco^{HD} ranges, **Sirocco^{EXTREME} microduct cables are typically used in access, metro, FTTx and 5G networks and are designed for air-blowing installation.**

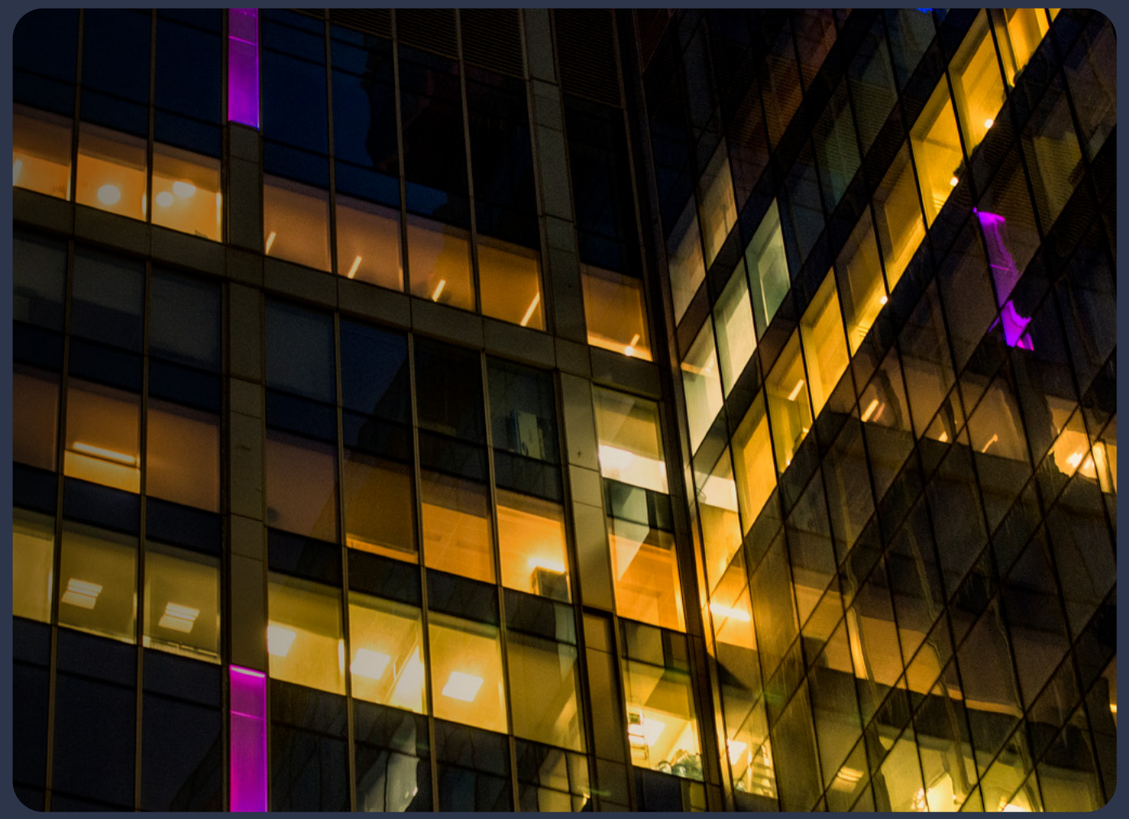
15% smaller than Sirocco^{HD} cables, the new range means more of these fibres can be installed into an existing duct space and smaller ducts can be used for newer installations. Designed to keep installation costs down and use less raw material, Sirocco^{EXTREME} cables will benefit the bottom line and the environmental footprint of network deployments.

The enhanced specifications of the growing Sirocco family of microduct cables is a testament to the Prysmian's commitment to innovating for the ever-changing demands of the market and needs of its customers.

Lower installation costs
Less raw material
36-864 fibre count

THE RIGHT SOLUTION FOR EVERY PROJECT

Available in a variety of fibre counts, densities and duct sizes, and all containing Prysmian's BendBright™ optical fibres, you can be sure you'll find the perfect solution for your business's specific requirements.



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Sirocco microduct cables

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SIROCCO^{HD}

Sirocco^{HD} microduct cables

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48	3.5	5.0	5	8 × 6
96	4.6	5.8	5.5	8 × 12
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DRIVING NEW ENERGY AND INTELLIGENCE EVERYWHERE

Prysmian is a global cabling solutions provider leading the energy transition and digital transformation.

By leveraging its wide geographical footprint and extensive product range, its track record of technological leadership and innovation, and a strong customer base, the company is well-placed to capitalise on its leading positions and win in new, growing markets. Prysmian's business strategy perfectly matches key market drivers by developing resilient, high-performing, sustainable and innovative cable solutions in the segments of Transmission, Power Grid, Electrification and Digital Solutions. Prysmian is a public company listed on the Italian Stock Exchange, with almost 150 years of experience, about 30,000 employees, 108 plants and 26 R&D centres in over 50 countries.

Our partnerships span numerous industries, providing the means for businesses across the globe to evolve. Our next-generation fibre optic cables are powering the growth of the 5G network. Our data cabling solutions support increasingly complex asset monitoring. We have provided specialist underground and submarine cables for power transmission and distribution, energy transmission cables for specialist applications, and have maintained the highest standards of excellence throughout.

150
Years of experience

+50
Countries

30k
Employees

+15 billion
Sales in euros

26
R&D centres

prysmian

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