

Prysmian Sirocco microduct cables

A revolution in the telecommunications industry



Prysmian
Group

Linking
the Future

Connecting countries, communities, and people through technology

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 2018, more than 550 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.



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 Group'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 96 to 576. They conform to international standards for both optical and mechanical performance.

SIROCCO

Sirocco microduct cables				
Fibre count (No.)	Cable diameter (mm)	Fibre density (No. / mm ²)	Min duct size (mm)	Construction (f/T + No. T)
96	5.2	4.5	8.0	12 × 8
144	5.5	6.1	8.0	24 × 6
192	6.3	6.2	8.0	24 × 8
288	8.5	5.1	12.0	24 × 12
432	8.7	7.3	12.0	24 × 18
576	10.1	7.2	13.0	24 × 24

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

Lower installation costs
Less raw material
96 – 576 fibre count



High fibre count



Reduced diameter



Cost effective



Install more fibres within a limited space

And the innovation doesn't stop there



Prysmian Group's Sirocco^{HD} range provides world record diameters and fibre densities for air-blown microduct cables with 200 µm 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-A2 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 Group's 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.



World record diameters



PicoTube technology



Extreme fibre count



20% smaller

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 Group'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.

Lower installation costs
Less raw material
96 – 576 fibre count

SIROCCO^{HD}

Sirocco ^{HD} microduct cables				
Fibre count (No.)	Cable diameter (mm)	Fibre density (No. / mm ²)	Min duct size (mm)	Construction (f/T + No. T)
96	4.6	5.8	5.5	12 × 8
144	5.0	7.3	6.0	24 × 6
192	5.8	7.3	8.0	24 × 8
288	7.5	6.5	10.0	24 × 12
432	8.2	8.2	10.0	24 × 18
552	8.7	9.3	12.0	24 × 23
576	9.5	8.1	12.0	24 × 24

Record-breaking solutions for an evolving market

Prysmian Group'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 180 µm 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. / mm ²)	Min duct size (mm)	Construction (f/T + No. T)
96	4.0	7.6	5.0	12 × 8
144	4.5	9.1	5.5	24 × 6
192	5.2	9.0	6.0	24 × 8
288	6.7	8.2	8.0	24 × 12
432	7.5	9.8	10.0	24 × 18
552	7.5	12.5	10.0	24 × 23
576	8.2	10.9	10.0	24 × 24



+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 Group's commitment to innovating for the ever-changing demands of the market and needs of its customers.

Lower installation costs
Less raw material
96 – 576 fibre count

The right solution for every project

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

SIROCCO

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432	8.7	7.3	12.0	24 × 18
552	-	-	-	-
576	10.1	7.2	13.0	24 × 24

SIROCCO^{HD}

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Fibre count (No.)	Cable diameter (mm)	Fibre density (No. / mm ²)	Min duct size (mm)	Construction (f/T + No. T)
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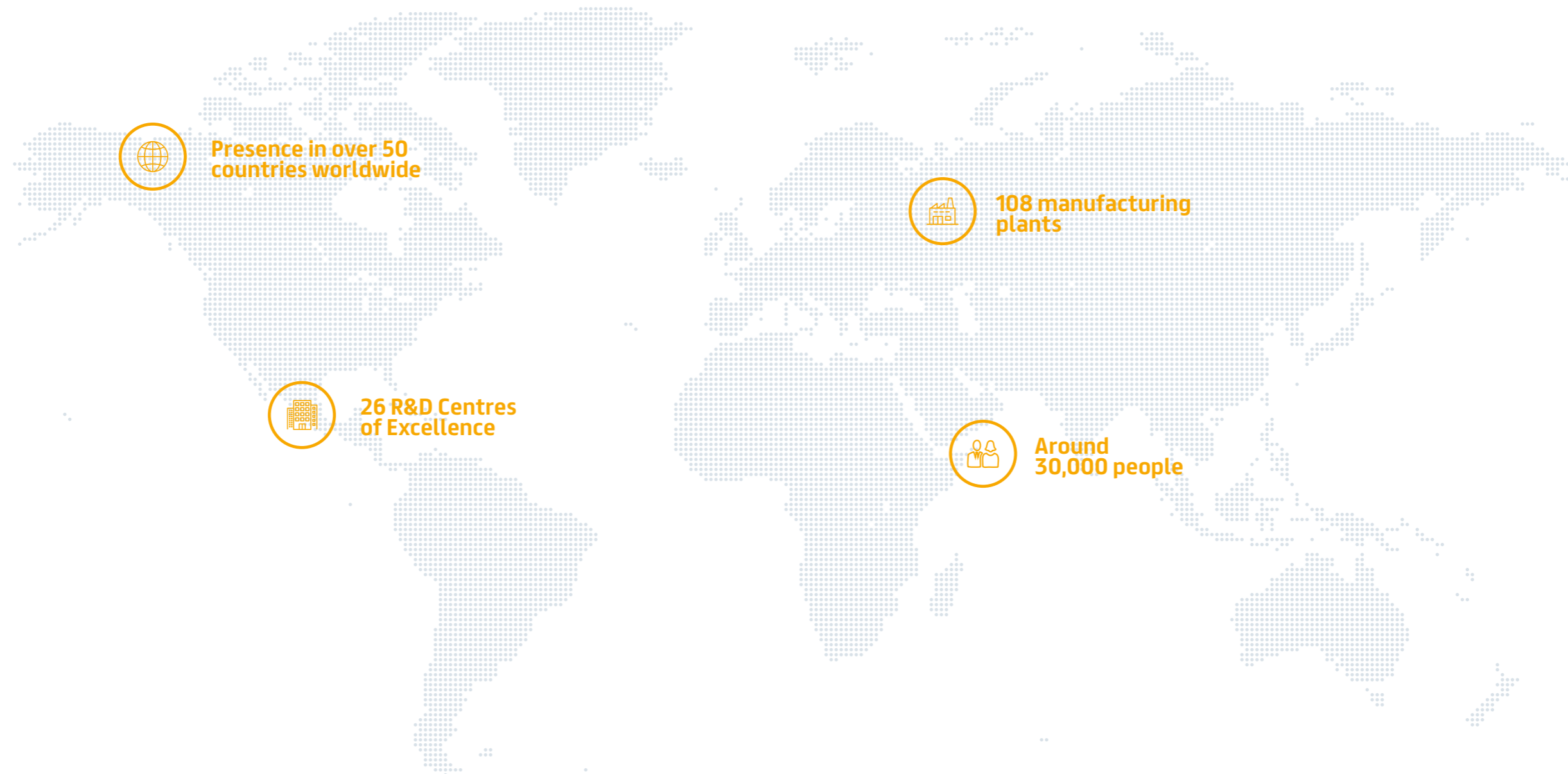
Linking energy and communications to global growth

As global leader in cable systems, Prysmian Group provides superior service to energy and telecoms industries around the world.

The Group's commitment to innovation is shown through the scalable cabling solutions we deliver to every customer. Our presence spans 50 countries, including 108 plants, 26 R&D Centres of Excellence, and 30,000 employees, allowing us to service markets and communities worldwide. With nearly 150 years of experience, the Group is strongly positioned in high-tech markets and offers an unrivalled range of products, services, technologies and know-how.

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. With three leading brands – Prysmian, Draka and General Cable – under the umbrella of Prysmian Group, we are able to create products which are powerful, reliable and easily deployable. For a future-fit business solution, every time.



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