

Solution to microduct networks for fibre optic cables

nestor
cables

nestor **OPTIMUS**

Nestor Optimus product family includes all the products needed in microduct networks

- fibre optic cables
- single microducts and microduct bundles
- a range of accessories and tools



Why choose microduct technology and Nestor Optimus?

Long lifecycle

Once installed, the microduct network expands easily to accommodate future needs. You can easily add new users to it and increase the capacity of the network. Therefore it is an ideal flexible solution for ever-changing and growing suburbs.

Lighter installation methods

Microduct technology enables the use of lighter installation methods (such as microtrenching), which can reduce construction costs. Such methods cause also less interference to traffic and people living in close proximity to the construction site.

Complete solution

Nestor Optimus is a complete solution to create microduct networks for fibre optic cables. Nestor Cables' years of expertise will help you find the right products to your project.



Nestor Cables – Finnish developer and manufacturer of fibre optic cable solutions

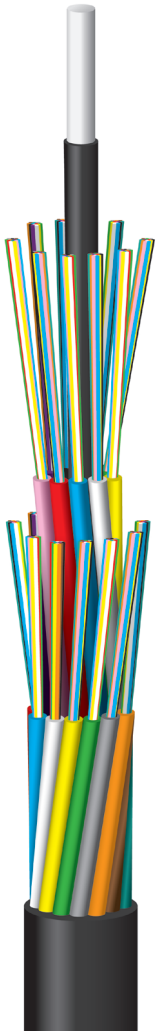
Nestor Cables is helping to build better connections for the world. We manufacture cables and connectivity accessories for information and communication networks. Our product range includes:

- Fibre optic cables, instrumentation cables and copper telecom cables
- Connectivity accessories for fibre optic networks
- Complete solutions for fibre optic networks

www.nestorcables.com

Fibre optic cables

- Selection includes cables with 1 - 288 fibres.
- Tests on the testing ground and in practice have shown the excellent blowing properties of the cables.
- Easy handling is taken into account in cable construction.
- The range also includes cables with a flexible cable construction.



FZOMU-SD Micro
 Ø 5,8 - 10,2 mm
 Backbone cable
 24 - 288 fibres



FZOMU-SD Flex Micro
 Ø 5,8 - 8,1 mm
 Backbone cable
 24 - 192 fibres



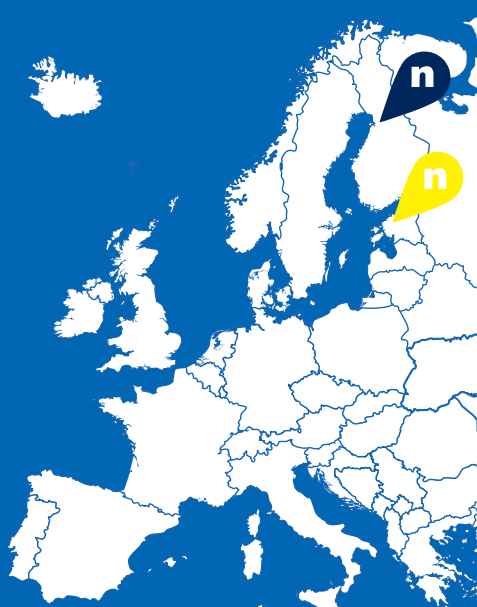
FYORMU Micro
 Ø 4,0 mm
 Drop cable
 2 - 24 fibres



FYORMU Micro
 Ø 2,5 mm
 Drop cable
 2 - 12 fibres



FRMU
 Ø 2,1 mm
 Drop cable
 2 - 12 fibres



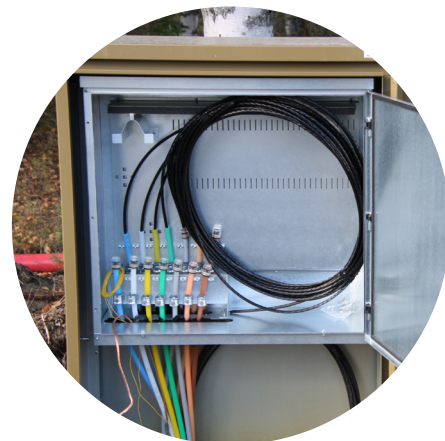
Single microducts & microduct bundles

- In the Nestor Optimus product family, there are microducts both for direct buried installation and for installation in protective ducts.
 - Direct buried installation is carried out by digging, microtrenching or ploughing.
 - Installation in protective or cable ducts can be carried out either by pushing, pulling or blowing.
- The microduct bundles may be provided with a tracer wire which allows the bundle to be located from the ground.
- Currently, our selection ranges from single ducts to bundles of 12 ducts.
 - The outer/inner diameter of our smallest microduct is 5/3.5 mm.
 - The outer/inner diameter of our largest microduct is 20/14 mm.
- Microducts can be colour-coded according to international standards.
- Microducts are made from HDPE.



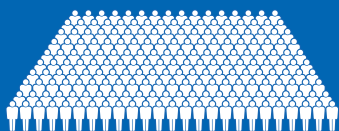
Accessories and tools

The Nestor Optimus product family includes different types of accessories and tools to connect and seal the parts of the network. Accessories such as end stops, gas blocks, straight connectors, cable seals, divisible seals and temporary end caps can all be found in our product range.



Connectivity products

Additionally, Nestor Cables can also offer products for connecting and terminating cables in microduct networks. Connectivity products can be found in our NesCon connectivity product family.



We employ over
100
professionals



Partners in over
10
countries



6 000
deliveries each year



Customers in over
50
countries

Finnish quality,
international
standards

ISO9001
QUALITY

ISO14001
ENVIRONMENT

OHSAS18001
HEALTH AND SAFETY



The table below includes products that are currently in the Nestor Optimus product family. The range of microducts is listed on the left side of the table. The right side of the table lists suitable cables and accessories for each microduct.

The delivery length of the microducts is usually 500 metres, but customer-specific delivery lengths are also possible.

Microduct			Recommended fibre optic cables	Recommended microduct accessories
Outer/inner diameter mm	Installation	Number of ducts		
5/3,5	Direct install	1	FRMU 2,1 mm FYORMU Micro 2,5 mm	Straight connector End stop Gasblock Cable seal Divisible seal
		2		
		4		
		7		
		12		
7/3,5	Direct buried	1	FRMU 2,1 mm FYORMU Micro 2,5 mm	Straight connector End stop Gasblock Cable seal Divisible seal
		2		
		4		
		7		
		12		
12/8	Direct buried	1	FYORMU Micro 4,0 mm FZOMU-SD Flex Micro 24-144 fibres FZOMU-SD Micro 24-96 fibres	Straight connector End stop Gasblock Divisible seal
		2		
		3		
		5		
		7		
12/10	Direct install	1	FZOMU-SD Flex Micro 24-192 fibres FZOMU-SD Micro 24-192 fibres	Straight connector End stop Gasblock Divisible seal
		2		
		4		
		7		
14/10	Direct buried	1	FZOMU-SD Flex Micro 24-192 fibres FZOMU-SD Micro 24-192 fibres	Straight connector End stop Gasblock Cable seal Divisible seal
		2		
		4		
		7		
18/12	Direct buried	1	FZOMU-SD Micro 24-288 fibres	Straight connector End stop Divisible seal
		2		
		3		
20/14	Direct buried	1	FZOMU-SD Micro 24-288 fibres	Straight connector End stop Divisible seal
		2		
		3		