

Prysmian Sirocco Microduct Cables



Prysmian
Group

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Microduct Cables – Evolution of Density

Prysmian were first to launch new commercially available fibres.



2009 – 200µm Fibre
2019 – 180µm fibre

Same core diameter, smaller coating, reductions in cross sectional area

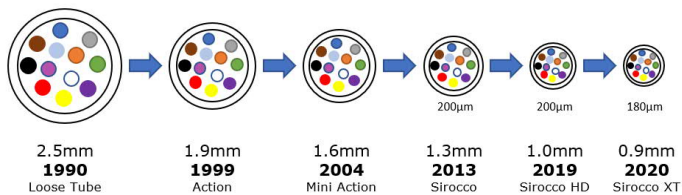
	250µm	200µm	180µm
OD	100%	80%	72%
A _{eff}	100%	64%	52%

BendBright fibre technologies enable greater packing of fibres into tubes



< macro bend loss
< micro bend loss

Loose tube evolution due to fibre technology, improved processes and raw materials.



12f loose tube evolution

The Sirocco cable range offers world record cable diameters and fibre densities benefiting both the TCO and the carbon footprint.

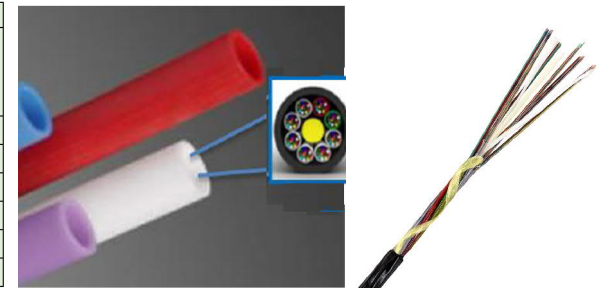


RANGE	SIROCCO		SIROCCO HD		SIROCCO EXTREME	
	200 A1	No/mm2	200 A2	No/mm2	180 A2	No/mm2
96	5.2	4.5	4.6	5.8	4.0	7.6
144	5.5	6.1	4.8	8.0	4.4	9.5
192	6.3	6.2	5.8	7.3	5.1	9.4
288	8.5	5.1	7.4	6.7	6.6	8.4
432	8.7	N/A	8.2	8.2	7.5	9.8
552	N/A	N/A	8.2	10.5	7.5	12.5

Sirocco and Sirocco^{HD} Microduct Cables

- Sirocco microduct cables utilize Prysmian’s BendBright-A1 200µm single-mode fibre (ITU-T G.657.A1).
- This cable range had the best diameters and fibre densities on the market for blown microduct cables.
- In 2020 we launched the new range of Sirocco^{HD} microduct cables.
- Sirocco^{HD} cables utilize Prysmian’s BendBright-A2 200µm single-mode fibre (ITU-T G.657.A2).
- This cable range provides world record diameters and fibre densities for blown microduct cables.
- They make it possible to install more fibres into congested duct space and enable the use of smaller ducts for new installations, resulting in lower installation costs and the use of less raw materials.
- This provides benefits for both the total cost of network deployment and the environmental footprint.
- Sirocco^{HD} cables are available from 96 to 552 fibres and conform to international standards for optical and mechanical performance.

Sirocco Microduct Cables					Sirocco HD Microduct Cables				
Fibre Count (No.)	Cable Diameter (mm)	Fibre Density (No / mm ²)	Min Duct Size (mm)	Construction (f/T + No T)	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 x 8	96	4.6	5.8	5.5	12 x 8
144	5.5	6.1	8.0	24 x 6	144	4.8	8.0	6.0	24 x 6
192	6.3	6.2	8.0	24 x 8	192	5.8	7.3	8.0	24 x 8
288	8.5	5.1	12.0	24 x 12	288	7.4	6.7	10.0	24 x 12
432	8.7	7.3	12.0	24 x 18	432	8.2	8.2	10.0	24 x 18 (5f)
552	-----	-----	-----	-----	552	8.2	10.5	10.0	24 x 23



The duct sizes listed are the minimum internal diameter of the duct that it is possible to use whilst keeping the duct fill factor below 70%



Thank you.



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