

Micro Cable, 12f x 24 (288f) - The Hexatronic Viper Series 250

12f x 24 - 288 fibers G.57A1, 250 µm



Features

- 288 fibers
- Robust, yet slim design
- Fits in microducts with an ID of ≥ 14 mm
- Bend resistant G657A1 fibers
- 12 fibers per tube for easy installation
- Excellent installation performance
- Easy to prepare and identify fibers
- Extremely low optical attenuation
- Extra wide temperature range of operation

Application

The Hexatronic Viper series of micro cables are characterized by state of the art installation performance when installed by blowing into microducts. Particularly, installations in access networks with difficult routes, which are facilitated by the enhanced performance of the Viper cables.

All parameters such as cable diameter, sheath friction, cable stiffness etc are optimized for best installation performance without compromising mechanical or environmental properties.

The micro cables are based on a slim loose tube design with 24 tubes and 12 fibers per tube. The design facilitates fiber preparation and mid-span access. The cables are suitable for long-distance, air blown installation in microducts, with an inner diameter of as little as 14 mm.

The cables have excellent bend performance and an extremely wide operational temperature range.

Design

The Hexatronic Viper series is designed with bend resistant G657A1 fibers. 12 fibers per tube also makes installations in many applications such as FTTH easier and quicker.

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Micro Cable, Super Slim 12f x 24 (288f) – The Viper Series 250

Typical Data

Temperature range
 Operation, $\Delta\alpha \leq 0.05$ dB/Km
-40 to +70°C

Storage-40 to +70°C
 Handling-15 to +50°C
 Cable temperature, blown installation
-15 to +40°C

Bending radius
 Cable bend radius, permanent
 ¼ turn/ single turn/ multiple turns
 $\geq 40/ 50/ 100$ mm

Tensile force
 During installation/ operation
 $\leq 3000/ 100$ N

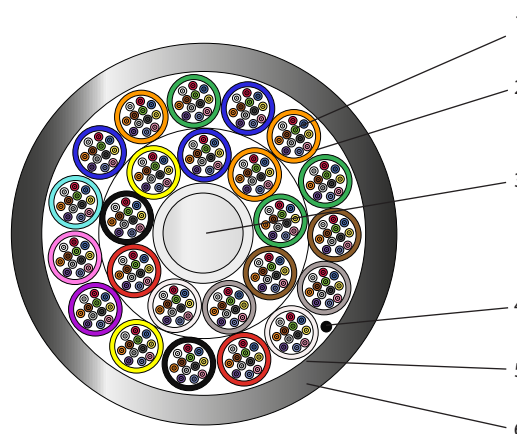
Crush resistance ($\Delta\alpha \leq 0.05$ dB after test, no damage)
 ≤ 1000 N/100 mm

Impact ($\Delta\alpha \leq 0.05$ dB after test, no damage)
3 J

Cable weight
83 kg/km

Design

1. Primary coated fiber..... Silica, acrylate
2. Loose tube Thermoplastic
3. Central strength member Glass fiber reinforced plastic, PE
4. Slit up yarn Aramide yarn
5. Wrapping..... Water blocking yarns
6. Sheath..... Polyethylene, halogen-free



Typical installation performance*

Ducts, inner diameter 14 mm
2000 m

* Installation performance verified on Hexatronic test track, according to IEC 60794. Installation performance is affected by the installed path, environmental conditions, installation equipment etc and actual performance may therefore deviate from the above specified values.

Delivery Information

Supplied lengths2, 4, 6, 8 km

The cable is length water blocking according to IEC 60794-1-2-F5B.
 Mechanical and environmental test in accordance with IEC 60794-5-10
 Fiber parameters and tests according to the IEC series 60793-2 and 60793-1
 The cable shall not be stored in direct sun light.
 The sun may heat up the cable over the permitted temperature limit

Transmission Characteristics, G657A1

Attenuation	@ 1310nm	@ 1383nm	@ 1550nm
Typical	0.32dB/km	0.32dB/km	0.18dB/km
Max	0.36dB/km	0.36dB/km	0.23dB/km

Color Code Systems

	1	2	3	4	5	6	7	8	9	10	11	12
S12 Fibers and Tubes	RD	BU	WH	GN	YE	SL	BR	BL	VT	OG	AQ	RO
	RD	BU	WH	GN	YE	SL	BN	CL	VT	OR	AQ	RO
TIA-598 Fibers and Tubes	BU	OG	GN	BR	SL	WH	RD	BL	YE	VT	RO	AQ
	BU	OG	GN	BR	SL	WH	RD	CL	YE	VT	RO	AQ

The above chart is a quick reference guide for identification of fibers and tubes in the most common cable designs.
 For detailed information about the color code systems, please contact Hexatronic.

Ordering Information

Product No.	Product Name	Tubes/Fibers		Diameter	Weight	For Microducts ID
		No.	Color Code	ø (mm)	kg/km	ø (mm)
TOL4019039/288AH	Micro Cable 288f G657A1, 24, x 12f S12	24x12 (288f)	S12	10.5	83	≥ 14
TOL4019039/288C	Micro Cable 288f G657A1, 12f x 24, TIA598	24x12 (288f)	TIA598	10.5	83	≥ 14