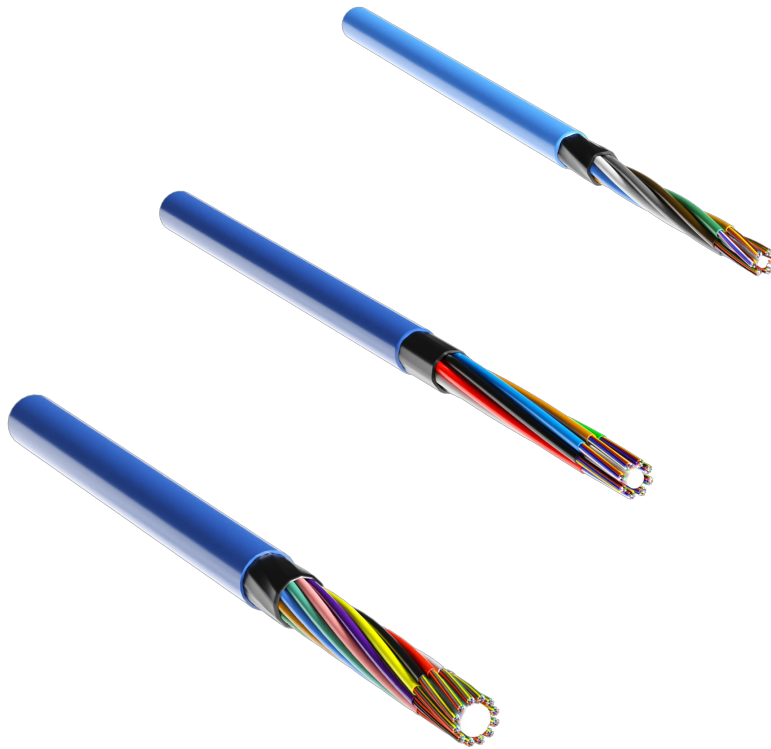


HEXATRONIC   
VIPER



# High Performance Micro Cable – Termite Protected

Nylon Coated 12-144 fibers G657A1 TIA598

---

## Features

- Up to 144 fibers
- Super slim design with additional termite resistant PA sheath
- Excellent installation performance
- Unique design with robust inner tubes that do not kink
- Temperature range from -30 to +70°C
- Excellent bend performance,  $\geq 75$ -85mm
- Easy to prepare and identify fibers
- Ultra low attenuation in cable

## 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 up to 12 tubes per cable. 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 10 to 12 mm. The cables have excellent bend performance and an extremely wide operational temperature range.

The termite resistant version features an extra, thin Polyamide sheath on top of the standard HDPE sheath.

## Design

The Micro Cables are designed with a double sheath with one layer of inner protective tubes made of a unique Polyamide compound wrapped around a central strength member. The Polyamide gives a special strength to the product, while increasing the bending properties as well as other benefits such as extreme temperature resistance. Each tube contains 12 or 24 fibers. As a result, The Viper Micro Cables are more durable during the installation process as they are able to withstand rough handling. The unique cable design with an extended operational temperature range of -30 to +70°C can be used in many environments, on all continents where heat and cold are often a major concern.

## Product Information

- 1 Primary coated fiber: Silica, acrylate
- 2 Loose tube: PA
- 3 Central strength member: Glass fiber reinforced plastic, PE
- 4 Slit up yarn: Aramid yarn
- 5 Wrapping: Water blocking yarns
- 6 Sheath: Polyethylene, halogen-free. Black fillers can replace empty white tubes.
- 7 Termite resistant sheath: Polyamide

## Technical Information

<b>Product Color</b>	Blue Sheath
<b>Color Code</b>	TIA598
<b>Temperature, Operation [°C]</b>	-30 to +70
<b>Temperature, Storage [°C]</b>	-40 to +70

<b>Temperature, Installation [°C]</b>	-15 to +50
<b>Water Blocking</b>	Longitudinal water blocking according to IEC 60794-1-2-F5B
<b>Fiber Type</b>	G657A1
<b>Attenuation @Wavelength [nm]</b>	1310/1383/1550
<b>Typical Attenuation [dB/km]</b>	0.33/0.33/0.19
<b>Average Attenuation [dB/km]</b>	0.34/0.34/0.22
<b>Maximum Attenuation [dB/km]</b>	0.36/0.36/0.23
<b>Conformance</b>	<p>Longitudinal water blocking according to IEC 60794-1-2-F5B.</p> <p>Mechanical and environmental tests in accordance with IEC 60794-5-10.</p> <p>Fiber parameters and tests according to the IEC series 60793-1 and 60793-2.</p>
<b>Marking</b>	The cables are length marked in meters, and the tubes and fibers are color coded according to TIA598 (Bellcore).
<b>Installation Notes</b>	<p>Typical installation performance:</p> <ul style="list-style-type: none"> <li>▪ Ducts ID ≥10 mm, cable OD ≤6.7 mm: 2000 m</li> <li>▪ Ducts ID ≥12 mm, cable OD ≤8.0 mm: 2000 m</li> </ul> <p>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.</p> <p>If the cable is installed by blowing the temperature shall be -15 to +40°C. The cable shall not be stored in direct sunlight. The sun may heat up the cable over the permitted temperature limit.</p>
<b>Ordering Information</b>	Supplied lengths: 2, 4, 6, 8 km

## Technical Details

TIA-598 Fibers and Tubes	1	2	3	4	5	6	7	8	9	10	11	12
	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
	13	14	15	16	17	18	19	20	21	22	23	24
	Blue	Orange	Green	Brown	Slate	White	Red	Clear	Yellow	Violet	Rose	Aqua

TIA 598 Color Code Chart

## Articles 6

Article name	Color	No. of Fibers	Layout	Bend Radius [mm]	Tensile Force [N]	Crush [N/100 mm]	Impact [J]	Diameter Ø [mm]	Weight [kg/km]
<b>GNHLN 12 T/12 G657A1 TIA-598</b> TOL4019044/12C	Blue	12	1x12	75	1200	2000	2	6.7	28
<b>GNHLN 24 T/12 G657A1 TIA-598</b> TOL4019044/24C	Blue	24	2x12	75	1200	2000	2	6.7	28
<b>GNHLN 48 T/12 G657A1 TIA-598</b> TOL4019044/48C	Blue	48	4x12	75	1200	2000	2	6.7	28
<b>GNHLN 72 T/12 G657A1 TIA-598</b> TOL4019044/72C	Blue	72	6x12	75	1200	2000	2	6.7	28
<b>GNHLN 96 T/12 G657A1 TIA-598</b> TOL4019044/96C	Blue	96	8x12	80	1200	2000	3	7.1	30
<b>GNHLN 144 T/12 G657A1 TIA-598</b> TOL4019044/144C	Blue	144	12x12	85	1200	2000	3	8.9	35