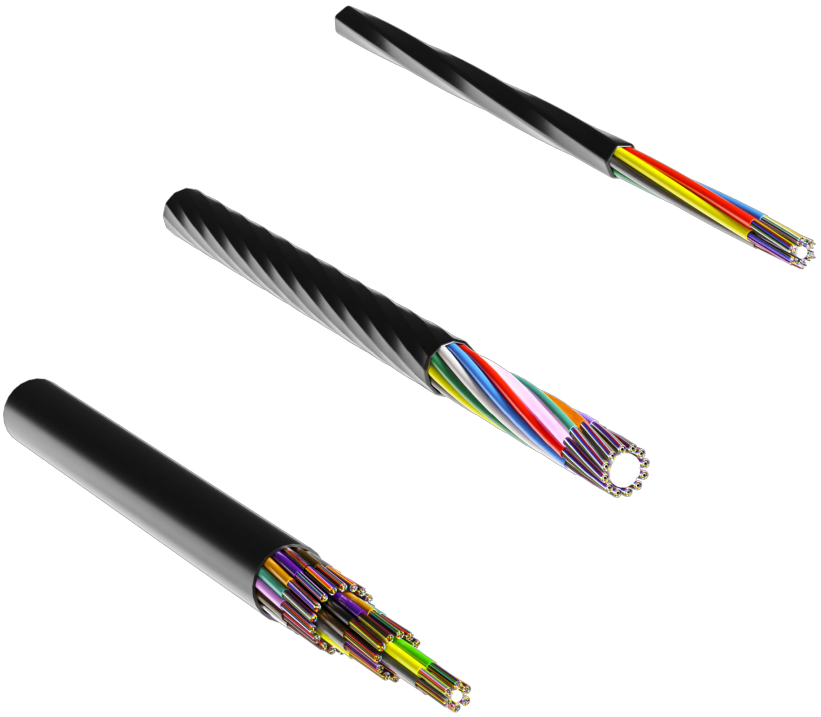
HEXATRONIC VIPER



High Performance Micro Cable – Super Slim

12-864 fibers G657A1 200 µm TIA598

Features

- Super slim design with 200um fibers
- Up to 864 fibers
- Excellent installation performance
- Unique design with robust inner tubes that do not kink
- Temperature range from -40 to +70°C (12-96f: -35 to +70°C)
- Excellent bend performance, ≥30 mm
- Easy to prepare and identify fibers

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 compromizing mechanical or environmental properties.
The micro cables are based on a slim loose tube design with up to 36 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 8 to 16 mm, depending on fiber count. The cables have excellent bend performance and an extremely wide operational temperature range.

Design

The Micro Cables are designed with one, two or three layers of inner protective tubes made of a unique compound. The compound gives a special strength to the product, while increasing the bending properties as well as other benefits such as extreme temperature resistance.
To enable installation into smallest possible microducts, the Hexatronic Viper 200 series is designed with 200 µm fibers.

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: Aramide yarn
5. Wrapping: Water blocking yarns
6. Sheath: Polyethylene, halogen-free

Black fillers can replace empty white tubes.

Technical Information

Product Color	Black Sheath
Color Code	TIA598
Temperature, Operation [°C]	-40 to +70 (12-96f: -35 to +70)
Temperature, Storage [°C]	-40 to +70
Temperature, Installation [°C]	-15 to +50
Water Blocking	Longitudinal water blocking according to IEC 60794-1-2-F5B
Fiber Type	G657A1
Attenuation @Wavelength [nm]	1310/1383/1550
Typical Attenuation [dB/km]	0.32/0.32/0.19
Average Attenuation [dB/km]	0.33/0.33/0.21
Maximum Attenuation [dB/km]	0.36/0.36/0.23
Conformance	Longitudinal water blocking according to IEC 60794-1-2-F5B. Mechanical and environmental tests in accordance with IEC 60794-5-10. Fiber parameters and tests according to the IEC series 60793-2 and 60793-1.
Marking	The cables are length marked in meters, and the tubes and fibers are color coded according to TIA598 (Bellcore).
Installation Notes	Typical installation performance: • Ducts ID 8-10 mm, cable OD ≤6.7 mm: 2000 m • Ducts ID 12 mm, cable OD ≤8.0 mm: 2000 m • Ducts ID 15-16 mm, cable OD <11 mm: 2000 m, cable OD 11-12 mm: 1500 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. The cable should be installed at a temperature between -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.

Ordering Information	Supplied lengths: 2, 4, 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

Article name	Color	No. of Fibers	Layout	Bend Radius [mm]	Tensile Force, Installation [N]	Tensile Force, Operation [N]	Crush [N/100 mm]	Impact [J]	Diameter Ø [mm]	Weight [kg/km]	Length [m]
GNHL 12/T12 G657A1 200um TIA598 TOL4019038/12C	Black	12	1x12	80	600	100	1000	3	4.3	14	2000/K7, 4000/K7, 6000/K8, 8000/K8
GNHL 24/T12 G657A1 200um TIA598 TOL4019038/24C	Black	24	2x12	80	600	125	1000	3	4.3	14	2000/K7, 4000/K7, 6000/K8, 8000/K8
GNHL 48/T12 G657A1 200um TIA598 TOL4019038/48C	Black	48	4x12	80	800	150	1000	3	4.3	14	2000/K7, 4000/K7, 6000/K8, 8000/K8
GNHL 72/T12 G657A1 200um TIA598 TOL4019038/72C	Black	72	6x12	80	800	200	1000	3	4.3	14	2000/K7, 4000/K7, 6000/K8, 8000/K8
GNHL 96/T12 G657A1 200um TIA598 TOL4019038/96C	Black	96	8x12	80	1500	400	1000	2	5.1	17	2000/K7, 4000/K7, 6000/K10, 8000/K10
GNHL 144/T24 G657A1 200um TIA598 TOL4019035/144C	Black	144	6x24	100	850	60	3000	5	5.6	26	2000/K7, 4000/K8, 6000/K10, 8000/K10

Article name	Color	No. of Fibers	Layout	Bend Radius [mm]	Tensile Force, Installation [N]	Tensile Force, Operation [N]	Crush [N/100 mm]	Impact [J]	Diameter Ø [mm]	Weight [kg/km]	Length [m]
GNHL 192/T24 G657A1 200um TIA598 TOL4019035/192C	Black	192	8x24	100	1200	60	3000	5	6.7	38	2000/K7, 4000/K10, 6000/K10, 8000/K12
GNHL 288/T24 G657A1 200um TIA598 ft TOL4019035/288C	Black	288	12x24	100	2000	60	3000	5	8.5	57	2000/K10, 4000/K12, 6000/K12
GNHL 288/T12 G657A1 200um TIA598 TOL4019038/288C	Black	288	24x12	100	1200	100	2000	5	7.95	65	2000/K8, 4000/K10, 6000/K12, 8000/K12
GNHL 864/T24 G657A1 200um TIA598 TOL4019035/864C	Black	864	36x24	120	5000	250	1800	–	11.7	100	2000/K10, 4000/K12