VIPER™

High Performance Micro Cable – Aerial Applications

12-96 fibers G657A1 TIA598

Features

- Optimized for aerial duct installation
- Excellent installation performance
- Bend resistant G657A1 fibers
- Unique design with robust inner tubes that do not kink
- Temperature range from -40 to +70°C
- Easy to prepare and identify fibers
- Slim design for microducts down to 8mm
- Halogen-free
- Up to 96 fibers

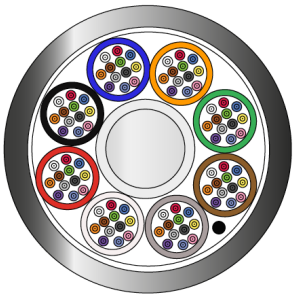
Application

The aerial micro cable is a cable for installation into microducts mounted on pole lines (aerial installation). The cable is part of the Hexatronic Micro Cable System. The system is used for installing optical fibers in all types of metropolitan and rural access networks. The system provides an easy, cost-efficient rollout and maintenance, which creates the opportunity for increasing broadband penetration, with the capability to grow with user needs.

Design

The Micro Cables are designed with inner protective tubes made of a unique compound. The Polyamide gives a special strength to the product, while increasing the bending properties as well as other benefits such as extreme temperature resistance.
As a result, Hexatronic 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 -40 to +70°C can be used in many environments, on all continents where heat and cold are often a factor.
The micro cable consists of up to 8 loose tubes with 12 fibers per tubes. This enables a fiber count from 12 to 96 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
Temperature, Storage [°C]	-40 to +70
Temperature, Installation [°C]	-15 to +50
Water Blocking	Longitudinal water blocking according to IEC 60794-1-2-F5C
Fiber Type	G657A1
Attenuation @Wavelength [nm]	1310/1383/1550
Typical Attenuation [dB/km]	0.32/0.32/0.18
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-F5C. 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	Example of sheath marking, 1 time/meter: "HEXATRONIC A35 Viper Aerial yymmddhhTOL4019029/96C GNHL-U-CDGNRV 96/T12 G657A1 TIA-598 xxxxx M" where yymmddhh = year, month, day and hour of manufacture, xxxxx=running meter marking.
Installation Notes	Typical installation performance: ▪ Ducts ID 8-10 mm, cable OD ≤6.7 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. 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 2

Article name	Color	No. of Fibers	Layout	Bend Radius [mm]	Tensile Force, Installation [N]	Crush [N/100 mm]	Diameter Ø [mm]	Weight [kg/km]
GNHL 48/T12 G657A1 TIA598 Aerial TOL4019029/48C	Black	48	4x12	23	700	2000	5.7	28
GNHL 96/T12 G657A1 TIA598 Aerial TOL4019029/96C	Black	96	8x12	23	1700	2000	6.7	39

