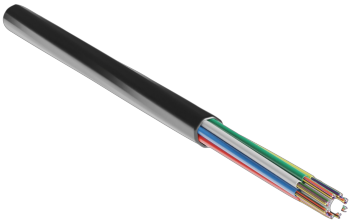
Micro Cable

GRHL 12-96 fibers G657A1 S12



Features

- Up to 96 fibers
- Super slim design or microducts down to 8mm
- Excellent installation performance
- Unique design with robust inner tubes
- Temperature range from -40 to +70°C
- Excellent bend performance, ≥30mm
- Easy to prepare and identify fibers
- Halogen-free

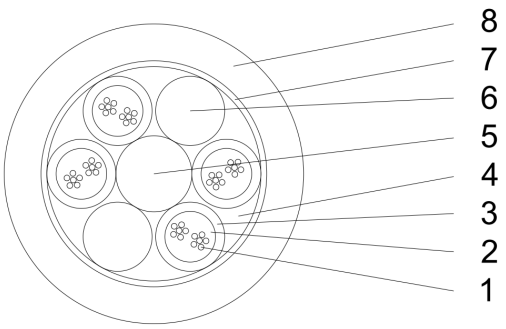
Application

The cable is a fiber optic micro cable for duct installation into microducts with an inner diameter of down to 8 mm. The cable is part of the Hexatronic Micro Cable System. The system is used for installing optical fibers in all types of metropolitan, rural access networks and in the backbone network. 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 fibers grouped inside protective tubes made of thermoplastic polyester.
The 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 major concern.
Micro cables from 12- to 96 fibers consist of up to 8 loose tubes with 12 fibers per tubes.

Product Information



1. Primary coated fiber: Silica, acrylate
2. Filling compound: Tixotropic gel
3. Loose tube: Polyester
4. Core: Dry, no filling compound
5. Central strength member: Glass fiber reinforced plastic, PE
6. Filler: Plastic fillers when applicable
7. Ripcord: Aramide yarn
8. Sheath: Polyethylene, halogen-free

Dry water blocking elements are applied to the cable core.

Technical Information

Product Color

Black Sheath

Color Code

S12

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-F5B

Fiber Type

G657A1

Attenuation @Wavelength [nm]

1310/1383/1550

Typical Attenuation [dB/km]

0.33/0.33/0.19

Maximum Attenuation [dB/km]

0.36/0.36/0.22

Conformance

Cable properties IEC 60794-5-10
Test methods IEC 60794-1-2x
Halogen free IEC 60754-2

Marking

Example of sheath marking, 1 time/meter:
"HEXATRONIC yymmddhh TOL4019501/96AH GRHL 96 G.657A1 xxxxx m"
where yymmddhh = year, month, day and hour of manufacture, xxxxx=running meter marking.

Installation Notes

Typical installation performance:

- Ducts ID 8-16 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.

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]	
GRHL 12/T12 G657A1 S12 TOL4019501/12AH	Black	12	1x12	80	750	50	1000	1	5.6	24	
GRHL 24/T12 G657A1 S12 TOL4019501/24AH	Black	24	2x12	80	750	50	1000	1	5.6	24	
GRHL 48/T12 G657A1 S12 TOL4019501/48AH	Black	48	4x12	80	750	50	1000	1	5.6	25	
GRHL 72/T12 G657A1 S12 TOL4019501/72AH	Black	72	6x12	80	750	50	1000	1	5.6	25	
GRHL 96/T12 G657A1 S12 TOL4019501/96AH	Black	96	8x12	120	1000	50	1000	1	6.4	36	