µSHEATH® Dielectric Glass Yarn Armored Cables
for Ducts and Direct Burial Installation
6 up to 288 OF – ø 9.2/21.2mm

STANDARDS

IEC/EN 60794

APPLICATIONS

The dielectric glass yarn armored µSHEATH® cables for ducts and direct burial are used for FTTH and long haul networks. These cables are dedicated for installation by pulling or air/water blowing in standard ducts. With the glass yarn armor they also can be directly buried in the ground. The presence of the glass yarn armor also offers rodent retardancy performance as well as excellent radial mechanical performance versus crush. For aerial installations, a range of 100m can be reached under standard conditions by replacing the glass yarns with aramid yearns *.
Modules and fibers managements (even derivation and mid span access) as well as fiber splicing, are easy thanks to the µSHEATH® technology.
With its µSHEATH® micromodules technology invented and patented by General Cable at the beginning of the 90's and continuously improved, General Cable can propose a wide and evolutive range of cables in order to provide time and cost savings for all types of applications and installation technics.

CONSTRUCTION

1. Colored Optical Fiber.
2. Colored µSHEATH® module.
3. µSHEATH® modules assembly with water swellable element(s) for watertightness.
4. Ripcord (as an option).
5. 2x2 dielectric strength elements embedded inside the inner jacket.
6. Black HDPE inner jacket (other colors available on demand).
7. Glass yarn dielectric armor.
8. Black HDPE outer jacket (other colors available on demand).

IDENTIFICATION

Fiber color code inside each µSHEATH® module

1	2	3	4	5	6	7	8	9	10	11	12

µSHEATH® module color

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

For cables with more than 12 µSHEATH® modules a longitudinal black strip or radial black rings are added on the module for easier identification.
Other module and fiber color codes are available on demand.

* For specific demand please contact us.

FIBERGEN µSHEATH

General Cable

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fibergen
µSheath

TECHNICAL SPECIFICATIONS

Capacity – Fiber Count	12	24	36	48	72
Modularity [1]	12 OF/module				
Module Count	1	2	3	4	6
Outer Diameter, mm	9.2	10.6	10.6	11.6	13.5
Tensile Strength, max/perm, daN	225 / 72	270 / 90	330 / 105	405 / 135	545 / 180
Crush Resistance, daN/cm	40	40	40	40	40
Bending radius [3] mini/kinking radius, mm	110 / 110	140 / 140	-	150 / 150	170 / 170
Cable Weight, kg/km	66	87	90	110	145
Indicative delivery length, m/drum type	6150m/F	6150m/G	6150m/G	6150m/G	6150m/G
Cable reference, X = fiber type	820A12X	820A24X	820A36X	820A48X	820A72X

Capacity – Fiber Count [2]	96	144	192	288 [2]
Modularity [1]	12 OF/module			
Module Count	8	12	16	24
Outer Diameter, mm	15.5	15.5	17	21.2
Tensile Strength, max/perm, daN	670 / 220	695 / 230	840 / 280	990 / 330
Crush Resistance, daN/cm	40	40	40	40
Bending radius [3] mini/kinking radius, mm	195 / 195	195/195	215 / 215	260 / 260
Cable Weight, kg/km	90	95	120	175
Indicative delivery length, m/drum type	6150/H	6150/H	6150/H	4100/H
Cable reference, X = fiber type	820A96X	820AASX	820ACOX	820AFKX

[1] Other modularities available: 2, 4 or 8 OF/ module.

[2] Higher fiber-count cables are also available.

Capacity – Fiber Count	12	24	36	48	72
Modularity	6 OF/module				
Module Count	2	4	6	8	12
Outer Diameter, mm	10.6	10.6	13.5	13.5	13.5
Tensile Strength, max/perm, daN	310 / 100	320 / 105	525 / 175	530 / 175	545 / 180
Crush Resistance, daN/cm	40	40	40	40	40
Bending radius [3] mini/kinking radius, mm	140 / 140	140 / 140	175 / 175	175 / 175	205 / 205
Cable Weight, kg/km	86	88	140	142	145
Indicative delivery length, m/drum type	6150/G	6150/G	6150/G	6150/G	6150/G
Cable reference, X = fiber type	820612X	820624X	820636X	820648X	820672X

[3] Bending radius at one point with reversible maximum attenuation of 0.1dB.

COMMON SPECIFICATIONS

	Operating temperature
Transport and storage	-40 / +70°C
Operation	-40 / +70°C
Installation	-5 / +45°C* * between-5 and +5°C prior storage of 24h at +20°C is recommended
Longitudinal Watertightness	IEC 60794-1-2-F5
Cable marking [4] (hot foil printing)	GENERAL CABLE 6 - WEEK/YEAR Number/Type of Fiber - Metric marking
Rodent Resistance	Rodent retardant

[4] Other marking available on demand.

General Cable