

Product type designation

Product description

FO FRNC Cable GP

Glass fiber-optic cable, sold by the meter, unassembled
SIMATIC NET FO FRNC CABLE (50/125/OM2), CABLE FREE OF
HALOGEN, SPLITTABLE, FOR FIXED INSTALLATION, MAX.
LENGTH 1000 M MIN. ORDER QUANTITY 20 M SOLD BY THE
METER,



Suitability for use	Halogen-free cable (acc. to IEC 61034-1 / 61034-2 and IEC 60754-1 / IEC 60754-2) for use indoors and outdoors with permanent installation, UL approval
Version of the assembled FO cable	For assembly with four BFOC or SC connectors
Cable designation	AT-W(ZN)HH 2G 50/125 UV

Optical data

Damping ratio per length	
<ul style="list-style-type: none"> at 850 nm / maximum at 1300 nm / maximum 	<p>2.7 dB/km</p> <p>0.7 dB/km</p>
Bandwidth length product	
<ul style="list-style-type: none"> at 850 nm at 1300 nm 	<p>600 GHz·m</p> <p>1200 GHz·m</p>

Mechanical data

Number of fibers / per FOC core	1
Number of FO cores / per FOC cable	2
Version of the FO conductor fiber	Multi-mode gradient fiber 50/125 µm, OM 2
Design of the FOC core	Hollow core, filled, diameter 1400 µm
Design of the fiber-optic cable	Segmentable
Outer diameter	
<ul style="list-style-type: none"> of the optical fibers of the optical fiber sheath of the FOC core sheath 	<p>50 µm</p> <p>125 µm</p> <p>2.9 mm</p>
Symmetrical deviation / of the outer diameter of the FOC core sheath	0.1 mm

Outer diameter / of the cable	9.2 mm
Symmetrical deviation / of the outer diameter of the line	0.3 mm
Material <ul style="list-style-type: none"> • of the fiber-optic cable core • of the optical fiber sheath • of the FOC core sheath • of the fiber-optic cable sheath • of the strain relief 	Quartz glass Quartz glass FRNC FRNC Aramid fibers
Color <ul style="list-style-type: none"> • of the FOC core sheath • of cable sheath 	Orange/black green
Bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	90 mm 135 mm
Tensile load / during operation / maximum	500 N
Short-term shear force per length	500 N/cm
Weight per length	85 kg/km

Permitted ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation 	-40 ... +85 °C -40 ... +85 °C -40 ... +85 °C -5 ... +50 °C
Burning behavior	Flame-resistant acc. to IEC 60332-1-2 and IEC 60332-3-22 (Cat. A)
Chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease • to water 	acc. to IEC 60811-404 with test oil IRM 902 (acc. to ISO 1817), +70 °C, 4 h and +25 °C, 168 h Conditional resistance Conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product property <ul style="list-style-type: none"> • halogen-free • silicon-free 	Yes Yes
Product component / Rodent protection	No
Cable length <ul style="list-style-type: none"> • for glass FOC / for 100BaseFX / for Industrial Ethernet / maximum • for glass FOC / for 1000BaseSX / for Industrial Ethernet / maximum 	5000 m 750 m

- for glass FOC / for 1000BaseLX / for Industrial Ethernet / maximum
- for glass FOC / with PROFIBUS / maximum

2000 m

3000 m

Standards, specifications, approvals

Certificate of suitability

UL approval: cULus OFN FT1 (NEC Article 770, UL 1651) / CSA approval: OFN (CSA-Standard C22.2 No232)

- RoHS conformity

Yes

Further Information / Internet Links

Internet-Link

- to website: Selector SIMATIC NET SELECTION TOOL
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>

<http://www.siemens.com/simatic-net>

<https://mall.industry.siemens.com>

<http://www.siemens.com/automation/net/catalog>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

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