# **SIEMENS**

## **Data sheet**

## 6XV1843-5EH10-0CB0

# product type designation product description

## MM FO CORD SC/BFOC, 50/125

Multimode glass fiber-optic cable, preassembled

MM FO Cord SC/BFOC; 50/125; pre-assembled with 1x SC duplex connector and 1x BFOC plug; length 1.0 m.



Figure similar

version of the assembled PO cable cable designation LV(ZN)H 2x50/125 OM4 wire length optical data attenuation factor per length a 850 mn / maximum at 1500 mm / maximum 3.5 dB/km bandwidth length product at 850 mn at 1300 mm at 1300 mm 1300 GHz/m mechanical data number of FO cores / per FOC core number of FO cores / per FOC cable version of the FOC core outer diameter of the optical fibers sheath of the optical fiber sheath 2.8 mm width / of cable sheath 125 mm width / of cable sheath 12.8 mm width / of cable sheath 0 of the FOC core sheath 12.5 mm width / of cable sheath 12.5 mm for the fiber-optic cable core 0 out glass 0 of the FOC core sheath 0 of the FOC core sheath 0 of the FOC core sheath 12.8 mm width / of cable sheath 12.8 mm for the fiber-optic cable core 0 of the fiber-optic cable sheath 0 of the FOC core sheath 0 of the FOC core sheath 0 of the fiber-optic cable sheath 1 of the fiber-optic cable sheath 1 of the fiber-optic cable sheath 1 of the strain relief 1 or the FOC core sheath 0 of the FOC	suitability for use	Cable for applications in the control cabinet
wire length optical data attenuation factor per length	version of the assembled FO cable	Pre-assembled with 1x SC DUPLEX connector and 2x, BFOC connector
attenuation factor per length  • at 850 nm / maximum  • at 1300 nm  • at 1300 nm  mochanical data  number of Fibers / per FCC core  number of FDC cores / per FCC cable  2 version of the FOC core  outer diameter  • of the optical fibers sheath  • of the optical fiber sheath  tickness / of cable sheath  at tickness / of cable sheath  of the fiber-optic cable core  of the FOC core sheath  • of the optical fiber sheath  • of the fiber-optic cable sheath  of the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the FOC core sheath  • of the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the FOC core sh	cable designation	I-V(ZN)H 2x50/125 OM4
attenuation factor per length  • at 850 nm / maximum  • at 1300 nm / maximum  • at 850 nm  • at 850 nm  • at 850 nm  • at 1300 nm / maximum  • at 1300 nm  •	wire length	1 m
at 850 nm / maximum at 1.5 dB/km bandwidth length product at 850 nm at 850 nm book of Hz/m at 850 nm at 850 nm book of Hz/m book of Hz/m at 850 nm book of Hz/m bo	optical data	
• at 1300 nm / maximum bandwidth length product • at 850 m • at 1300 nm	attenuation factor per length	
bandwidth length product  • at 850 nm • at 1300 nm  mechanical data  number of fibers / per FOC core  number of FO cores / per FOC cable  version of the FO conductor fiber  design of the FOC core  outer diameter  • of the optical fibers  • of the optical fiber sheath  • of the FOC core sheath  of the FOC core sheath  tickness / of cable sheath  • of the fiber-optic cable core  • of the optical fiber sheath  • of the fiber-optic cable sheath  tof the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the FOC core sheath  LSZH  • of the FOC core sheath  • of the strain relief  color  • of the FOC core sheath  • of the FOC	• at 850 nm / maximum	3.5 dB/km
at 850 nm at 1300 mm 1300 GHz·m  mechanical data number of fibers / per FOC core number of FO cores / per FOC cable 2 version of the FO conductor fiber design of the FOC core outer diameter of the optical fibers sheath of the optical fiber sheath 125 μm of the FOC core sheath 2.8 mm  width / of cable sheath 15.9 mm  thickness / of cable sheath 0 of the fiber-optic cable core Other fiber-optic cable sheath 0 of the fiber-optic cable sheath 1 cort in the FOC core sheath 0 of the fiber-optic cable sheath 1 cort in the FOC core sheath 0 of the fiber-optic cable sheath 1 cort in the FOC core sheath 0 of the FOC core sheath 0 of the FOC core sheath 1 cort in the FOC core sheath 0 of the FOC core sheath 1 cort in the FCC core sheath 1 cort i	• at 1300 nm / maximum	1.5 dB/km
e at 1300 nm  mechanical data  number of fibers / per FOC core number of FO cores / per FOC cable  version of the FO conductor fiber  design of the FOC core outer diameter of the optical fibers of the optical fiber sheath of the FOC core sheath tickness / of cable sheath  of the fiber-optic cable core of the optical fiber sheath  e of the fiber-optic cable sore of the optical fiber sheath  suidth / of cable sheath  to the fiber-optic cable core of the optical fiber sheath  e of the fiber-optic cable sheath  suidth / of cable sheath  material  of the fiber-optic cable sheath  ER-LSZH of the fiber-optic cable sheath  sort fire fiber-optic cable sheath  fre-LSZH of the fiber-optic cable sheath  green/green  bending radius  with single bend / minimum permissible  during installation / short-term out out on the sterior of core per length  to No continuous shear force per length	bandwidth length product	
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 4 design of the FOC core Fixed core outer diameter  • of the optical fibers 50 µm • of the optical fiber sheath 125 µm • of the optical fiber sheath 2.8 mm width / of cable sheath 5.9 mm thickness / of cable sheath 2.8 mm material  • of the fiber-optic cable core Quartz glass • of the optical fiber sheath Quartz glass • of the fiber-optic cable sheath FR-LSZH • of the fiber-optic cable sheath LSZH • of the strain relief Aramid fibers  color  • of the FOC core sheath green/green  bending radius • with single bend / minimum permissible 42 mm  tensile load • during installation / short-term 500 N • during operation / maximum 500 N continuous shear force per length 100 N/cm	• at 850 nm	500 GHz·m
number of fibers / per FOC core  number of FO cores / per FOC cable  version of the FO conductor fiber  design of the FOC core  outer diameter  of the optical fibers sheath  of the optical fiber sheath  individud / of cable sheath  fibickness / of cable sheath  of the fiber-optic cable core  of the optical fiber sheath  of the fiber-optic cable sheath  fibickness / of cable sheath  of the fiber-optic cable sheath  fibickness / of cable sheath  of the fiber-optic cable sheath  fibickness / of the optical fiber sheath  of the fiber-optic cable sheath  of the strain relief  of the FOC core sheath  of the FOC core sheath  fra-LSZH  of the strain relief  color  of the FOC core sheath  green/green  bending radius  with single bend / minimum permissible  of during installation / short-term  of during operation / maximum  fool No  continuous shear force per length  100 N/cm	• at 1300 nm	1300 GHz·m
number of FO cores / per FOC cable  version of the FO conductor fiber  design of the FOC core  outer diameter  • of the optical fibers sheath • of the FOC core sheath  vidth / of cable sheath  thickness / of cable sheath  • of the fiber-optic cable core • of the optical fiber sheath  • of the foC core sheath  2.8 mm  width / of cable sheath  2.8 mm  material • of the fiber-optic cable core • of the optical fiber sheath  • of the fiber-optic cable core • of the optical fiber sheath • of the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the fiber-optic cable sheath  • of the FOC core sheath  • of the FOC core sheath  • of the strain relief  color  • of the FOC core sheath  • of the FOC core sheath  bending radius  • with single bend / minimum permissible  • during installation / short-term  • during operation / maximum  500 N  continuous shear force per length  100 N/cm	mechanical data	
version of the FO conductor fiber  design of the FOC core  outer diameter  • of the optical fibers • of the optical fiber sheath • of the FOC core sheath  width / of cable sheath  125 μm  • of the fiber-optic cable core • of the optical fiber sheath  2.8 mm  width / of cable sheath  2.8 mm  material  • of the fiber-optic cable core • of the optical fiber sheath  Quartz glass • of the optical fiber sheath  • of the fiber-optic cable sheath  LSZH • of the fiber-optic cable sheath  • of the strain relief  • of the FOC core sheath  solution  • of the FOC core sheath  bending radius  • with single bend / minimum permissible  • with single bend / minimum permissible  • during installation / short-term  • during operation / maximum  500 N  continuous shear force per length	number of fibers / per FOC core	1
design of the FOC core  outer diameter  • of the optical fibers • of the optical fiber sheath • of the FOC core sheath • of the FOC core sheath • of the FOC core sheath  thickness / of cable sheath  • of the fiber-optic cable core • of the optical fiber sheath • of the FOC core sheath • of the FOC core sheath • of the fiber-optic cable sheath • of the fiber-optic cable sheath • of the strain relief  color • of the FOC core sheath  bending radius • with single bend / minimum permissible • during installation / short-term • during operation / maximum  continuous shear force per length  100 N/cm	number of FO cores / per FOC cable	2
outer diameter  • of the optical fibers • of the optical fibers 50 µm • of the optical fiber sheath 125 µm • of the FOC core sheath 2.8 mm  width / of cable sheath 5.9 mm  thickness / of cable sheath 2.8 mm  material  • of the fiber-optic cable core Quartz glass • of the optical fiber sheath Quartz glass • of the optical fiber sheath FR-LSZH • of the fiber-optic cable sheath LSZH • of the strain relief Aramid fibers  color • of the FOC core sheath green/green  bending radius • with single bend / minimum permissible 42 mm  tensile load • during installation / short-term 500 N • during operation / maximum 500 N continuous shear force per length 100 N/cm	version of the FO conductor fiber	Multi-mode gradient fiber 50/125 μm, OM 4
<ul> <li>of the optical fibers</li> <li>of the optical fiber sheath</li> <li>of the FCC core sheath</li> <li>width / of cable sheath</li> <li>thickness / of cable sheath</li> <li>of the fiber-optic cable core</li> <li>of the optical fiber sheath</li> <li>of the optical fiber sheath</li> <li>of the FCC core sheath</li> <li>of the fiber-optic cable sheath</li> <li>of the fiber-optic cable sheath</li> <li>of the strain relief</li> <li>color</li> <li>of the FCC core sheath</li> <li>with single bend / minimum permissible</li> <li>with single bend / minimum permissible</li> <li>during installation / short-term</li> <li>during operation / maximum</li> <li>continuous shear force per length</li> <li>100 N/cm</li> </ul>	design of the FOC core	Fixed core
of the optical fiber sheath of the FOC core sheath  2.8 mm  width / of cable sheath 5.9 mm  thickness / of cable sheath 2.8 mm  material  of the fiber-optic cable core of the optical fiber sheath Quartz glass of the optical fiber sheath FR-LSZH of the fiber-optic cable sheath tof the fiber-optic cable sheath  of the FOC core sheath frequency of the strain relief Aramid fibers  color of the FOC core sheath bending radius with single bend / minimum permissible tensile load during installation / short-term during operation / maximum  500 N continuous shear force per length  125 µm 2.8 mm  Quartz glass Quartz glass  Aramid fibers  Cuartz glass  FR-LSZH LSZH Aramid fibers  color  of the FOC core sheath green/green  500 N  000 N	outer diameter	
of the FOC core sheath     width / of cable sheath     thickness / of cable sheath     and the fiber-optic cable core     of the optical fiber sheath     of the FOC core sheath     of the FOC core sheath     of the fiber-optic cable sheath     of the strain relief     of the strain relief     color     of the FOC core sheath     preen/green  bending radius     with single bend / minimum permissible  tensile load     during installation / short-term     of uring operation / maximum     continuous shear force per length  2.8 mm  5.9 mm  Quartz glass Quartz glass Quartz glass Aramid fibers  FR-LSZH LSZH Aramid fibers  color  green/green  500 N  500 N	<ul> <li>of the optical fibers</li> </ul>	50 μm
width / of cable sheath  thickness / of cable sheath  2.8 mm  material  of the fiber-optic cable core of the optical fiber sheath Ouartz glass of the FOC core sheath FR-LSZH of the fiber-optic cable sheath LSZH of the strain relief Aramid fibers  color of the FOC core sheath green/green  bending radius with single bend / minimum permissible tensile load of during installation / short-term output during operation / maximum fiber soon N  continuous shear force per length  5.9 mm  5.9 mm  Cuartz glass Quartz glass Aramid fibers  FR-LSZH FR	<ul> <li>of the optical fiber sheath</li> </ul>	125 µm
thickness / of cable sheath  material  of the fiber-optic cable core of the optical fiber sheath of the FOC core sheath of the fiber-optic cable sheath of the fiber-optic cable sheath of the strain relief color of the FOC core sheath of the FOC core sheath of the strain relief color of the FOC core sheath green/green  bending radius of the single bend / minimum permissible tensile load of during installation / short-term of during operation / maximum of the shear force per length of the fock o	of the FOC core sheath	2.8 mm
material  of the fiber-optic cable core of the optical fiber sheath Quartz glass of the FOC core sheath FR-LSZH of the fiber-optic cable sheath LSZH of the strain relief Aramid fibers  color of the FOC core sheath green/green  bending radius with single bend / minimum permissible tensile load of during installation / short-term of during operation / maximum functional fibers  500 N continuous shear force per length 100 N/cm	width / of cable sheath	5.9 mm
of the fiber-optic cable core     of the optical fiber sheath     Quartz glass     of the FOC core sheath     of the fiber-optic cable sheath     of the strain relief     of the strain relief     of the FOC core sheath     of the FOC core sheath     of the strain relief     of the strain relief     color     of the FOC core sheath     bending radius     with single bend / minimum permissible     tensile load     during installation / short-term     oduring operation / maximum     oduring operation / maximum     soon N     continuous shear force per length	thickness / of cable sheath	2.8 mm
<ul> <li>of the optical fiber sheath</li> <li>of the FOC core sheath</li> <li>of the fiber-optic cable sheath</li> <li>of the strain relief</li> <li>color</li> <li>of the FOC core sheath</li> <li>green/green</li> <li>bending radius</li> <li>with single bend / minimum permissible</li> <li>tensile load</li> <li>during installation / short-term</li> <li>during operation / maximum</li> <li>continuous shear force per length</li> <li>Quartz glass</li> <li>FR-LSZH</li> <li>LSZH</li> <li>Aramid fibers</li> <li>green/green</li> <li>42 mm</li> <li>500 N</li> <li>100 N/cm</li> </ul>	material	
of the FOC core sheath     of the fiber-optic cable sheath     of the strain relief     Aramid fibers  color     of the FOC core sheath     bending radius     with single bend / minimum permissible  tensile load     during installation / short-term     during operation / maximum  continuous shear force per length  FR-LSZH  LSZH  Aramid fibers  green/green  42 mm  500 N  500 N	<ul> <li>of the fiber-optic cable core</li> </ul>	Quartz glass
<ul> <li>of the fiber-optic cable sheath</li> <li>of the strain relief</li> <li>Aramid fibers</li> </ul> color <ul> <li>of the FOC core sheath</li> <li>bending radius</li> <li>with single bend / minimum permissible</li> <li>tensile load</li> <li>during installation / short-term</li> <li>during operation / maximum</li> <li>continuous shear force per length</li> </ul> LSZH Aramid fibers Green/green 42 mm 500 N 500 N 100 N/cm 100 N/cm 100 N/cm	<ul> <li>of the optical fiber sheath</li> </ul>	Quartz glass
of the strain relief     color     of the FOC core sheath	<ul> <li>of the FOC core sheath</li> </ul>	FR-LSZH
color  • of the FOC core sheath  bending radius  • with single bend / minimum permissible  tensile load  • during installation / short-term  • during operation / maximum  continuous shear force per length  green/green  42 mm  42 mm  500 N  100 N/cm	<ul> <li>of the fiber-optic cable sheath</li> </ul>	LSZH
of the FOC core sheath     bending radius         with single bend / minimum permissible         tensile load             during installation / short-term             during operation / maximum             continuous shear force per length	of the strain relief	Aramid fibers
bending radius  • with single bend / minimum permissible  tensile load  • during installation / short-term  • during operation / maximum  500 N  continuous shear force per length  100 N/cm	color	
with single bend / minimum permissible	of the FOC core sheath	green/green
tensile load  • during installation / short-term 500 N  • during operation / maximum 500 N  continuous shear force per length 100 N/cm	bending radius	
<ul> <li>during installation / short-term</li> <li>during operation / maximum</li> <li>continuous shear force per length</li> <li>100 N/cm</li> </ul>	with single bend / minimum permissible	42 mm
• during operation / maximum 500 N  continuous shear force per length 100 N/cm	tensile load	
continuous shear force per length 100 N/cm	<ul> <li>during installation / short-term</li> </ul>	500 N
	during operation / maximum	500 N
ambient conditions	continuous shear force per length	100 N/cm
	ambient conditions	

ambient temperature	
<ul> <li>during operation</li> </ul>	-30 +70 °C
during storage	-30 +70 °C
<ul> <li>during transport</li> </ul>	-30 +70 °C
during installation	-5 +50 °C
fire behavior	flame-resistant acc. to IEC 60332-3-22 (Cat. A)
protection class IP	IP20
product features, product functions, product components / ge	neral
product feature	
<ul><li>halogen-free</li></ul>	Yes
• silicon-free	Yes
product component / rodent protection	No
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	WH
<ul> <li>according to IEC 81346-2:2019</li> </ul>	WHA
further information / internet links	
internet link	
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://support.industry.siemens.com/cs/ww/en/view/109766358
<ul> <li>to web page: selection aid TIA Selection Tool</li> </ul>	https://www.siemens.com/tstcloud
<ul> <li>to website: Industrial communication</li> </ul>	https://www.siemens.com/simatic-net
<ul> <li>to web page: SiePortal</li> </ul>	https://sieportal.siemens.com/
<ul> <li>to website: Image database</li> </ul>	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information / header	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

#### Approvals / Certificates

**General Product Approval** 

**Environment** 







Manufacturer Declaration Declaration of Conformity Confirmation

### **Industrial Communication**

PROFINET

last modified: 8/9/2024 🖸