Data sheet

MC GC1000 plus23 Cat.7 S/FTP 4P LSHF 500 m, class E_{ca}

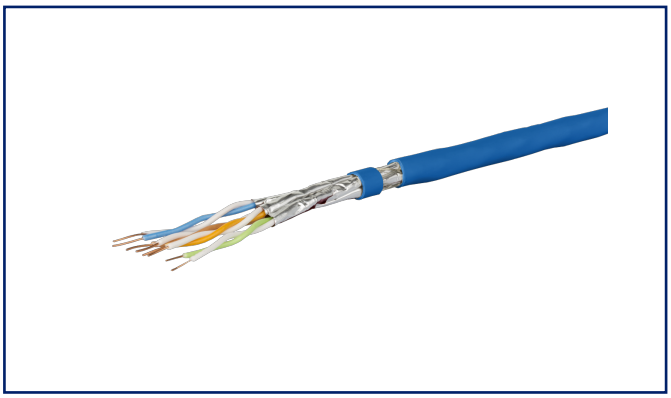
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EAN 4250184175247

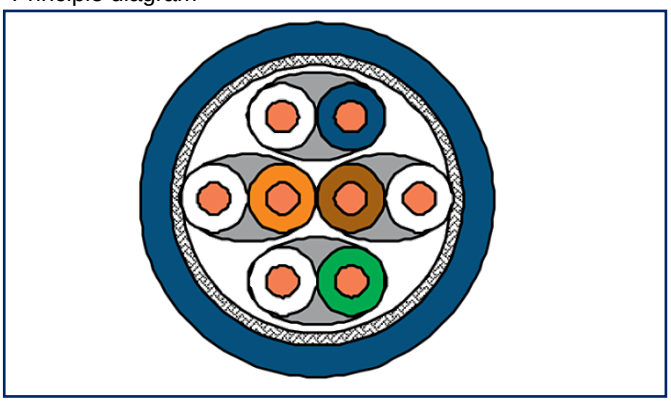
2026/10/21

Version: K

Illustrations



Principle diagram



See enlarged drawings at the end of document

Product specification

- 10 GBit installation cable, simplex
- installation cable Cat.7 AWG 23 S/FTP with wires shielded in pairs
- 4 pairs (PiMF)
- pair shield: plastic foil with aluminum coating
- overall shield: tinned copper braid
- outer diameter: 7.20 - 7.30 mm
- color of the cable jacket: blue
- coupling attenuation: 80 dB
- applicable standards: EN 50173-1, ISO/IEC 11801-1, EN 50288-4-1 and IEC 61156-5
- cable jacket: LSHF (LSOH)
- flame-retardant to IEC 60332-1, IEC 60754-2, IEC 61034 and EN 50399
- fire behaviour: Class E_{ca} (classification acc. to EN 13501-6)
- delivery unit: on drum - 500 m/1640 ft

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Technical Data

General Data	
Fields of application	Primary (Campus) Secondary (Riser) Tertiary (Horizontal)
Applications	IEEE 802.3: 10Base-T, 100Base-T, 1000Base-T, 10GBase-T IEEE 802.5: ISDN,TPDDI, ATM, CATV, IP Cameras, Broadband Video, SOHO-Cabling Power over Ethernet (PoE) / Type 1-4
Kabelaufbau	
Cable Type	S/FTP
Conductor material	Copper
Conductor class	Cl.1 = solid
Conductor surface	blank
Conductor diameter (mm)	0.57 mm
Conductor diameter (inch)	0.022 in.
AWG size	23
Core number	8
Number of twisting elements	4
Twisting element	Pair
Twisted stranding	Bundle
Shield over twisted stranding	braid
Jacket color	blue
Außendurchmesser	
Cable sheath diameter	7.2 mm - 7.3 mm
Cable sheath diameter	0.283 in. - 0.287 in.
Mechanical data	
Tensile force	110 N
Brandeigenschaften	
Flame retardant according to IEC 60332-1-2	yes
Low smoke according to EN IEC 61034-2	yes
Halogen-free according to EN IEC 60754-1	yes
Halogen-free according to EN IEC 60754-2	yes
Fire behavior according to EN 13501-6: Class	Eca
Fire load	0.163 kWh/m
Fire load	590 MJ/km

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Technical Data

Electrical characteristics	
Category	7
NVP value	79 %
Isolation class according to EN 50174	d
Loop resistance	max. 154 Ohm
Transfer impedance 10 MHz	max. 10 mOhm/m
Coupling attenuation	80 dB
Signal propagation delay	max. 427 ns/100 m
Delay skew	max. 12 ns/100 m
Insulation resistance	5000 MOhm.km
Test voltage (DC, 1 min) Core/core	1000 V
Test voltage (DC, 1 min) Core/shield	1000 V
Anwendungseigenschaften / Umgebungsbedingungen	
Permitted type of installation in the ground	Installation pipe for underground installation
Functional integrity according to IEC 60331-23	no
Oil-resistant according to EN IEC 60811-404	no
Min. permissible bending radius, flexible use with forced guidance (mm)	min. 57.6 mm
Min. permissible bending radius, flexible use/free movement (mm)	min. 57.6 mm
Min. permissible bending radius, stationary use/fixed installation (mm)	min. 28.8 mm
Min. permissible bending radius, flexible use with forced guidance (inch)	2.268 in.
Min. permissible bending radius, flexible use/free movement (inch)	2.268 in.
Min. permissible bending radius, stationary use/fixed installation (inch)	1.134 in.
Zulässige Kabelaußentemperatur bei Montage/Handling	
Zulässige Kabelaußentemperatur bei Montage/Handling	0 °C - 50 °C
Permissible external cable temperature during installation/handling	32 °F - 122 °F

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Technical Data

Anwendungseigenschaften / Umgebungsbedingungen	
Zulässige Kabelaußentemperatur nach Montage ohne Erschütterung	
Permissible external cable temperature after installation without vibration	-20 °C - 60 °C
Permissible external cable temperature after installation without vibration	-4 °F - 140 °F
UV-resistance	no
Materials and material properties	
Material - core insulation	Foam-Skin Polyethylen
Material - protective jacket	LSHF
Material - Pair shield	plastic film
Material - Pair shield finish	Al (Aluminium)
Material - Main shield	Cu (copper) braid
Material - Main shield finish	Sn
Geltende Normen	
General requirements	ISO/IEC 11801 DIN EN 50173-1
PoE	IEEE 802.3af
PoE plus	IEEE 802.3at
UPoE	yes
4PPoE	IEEE 802.3bt
Multi-core metallic data & control cables for analog & digital transmission	DIN EN 50288-4-1 IEC 61156-5
Classifications	
ETIM 8.0	EC003249
ETIM 9.0	EC003249
ETIM 10.0	EC003249
Packing details	
Type of packaging	500 meter / drum
GTIN13	4250184175247

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Technical Data

Application note

This product is a standard product of METZ CONNECT. METZ CONNECT is not aware of the specific intended use of the goods by the Customer or any customers of the Customer. The Customer guarantees that it has fully and sufficiently tested the use of the goods and any product modifications, product changes or product enhancements with regard to the specific intended use in accordance with the state of the art or in any other way.

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Accessories

P/N	Designation
140302-01-E	Jokari dismantle tool

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Accessories from

P/N	Designation
130E507032-E	$C6_A$ RJ45 field plug ultra short

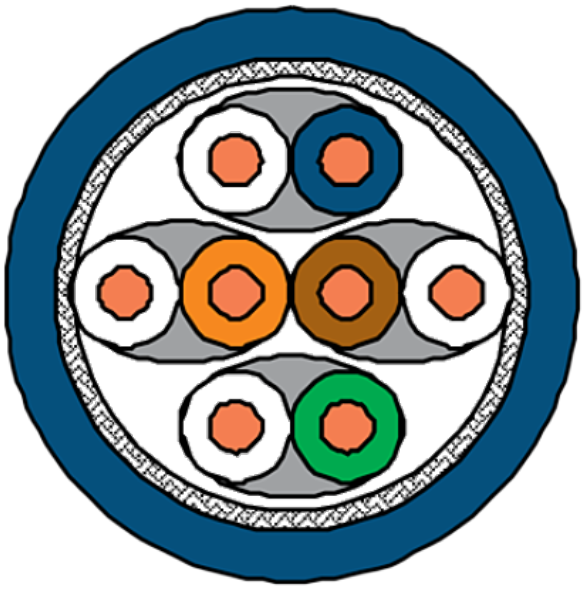
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Illustrations

Principle diagram



Elektrische Daten

Cat.7 Übertragungseigenschaften bei 20°C (Nominal)

F (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ACRF (dB/100m)	PS-ACRF (dB/100m	Return loss (dB)
1	1,8	100	97	98	95	105	102	-
4	3,3	100	97	97	94	105	102	27
10	5,2	100	97	95	92	97	94	30
16	6,6	100	97	93	90	93	90	30
20	7,4	100	97	93	90	91	88	30
31,2	9,3	100	97	91	88	87	84	30
62,5	13,4	100	97	87	84	81	78	30
100	17,2	100	97	83	80	77	74	30
125	19,4	95	92	76	73	75	72	26
155,5	21,8	94	91	72	69	73	70	26
175	23,3	93	90	70	67	72	69	25
200	25,1	92	89	67	64	71	68	25
250	28,4	90	87	62	59	69	66	24
300	31,4	89	86	58	55	67	64	24
450	39,5	87	84	48	45	64	61	23
600	46,6	85	82	38	35	61	58	22
750	53,2	83	80	30	27	59	56	21
900	59,2	82	79	23	20	58	55	20
1000	63,1	81	78	18	15	57	54	20

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