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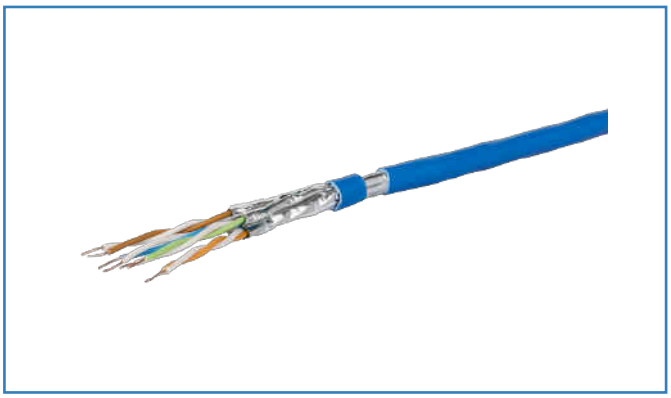
Data sheet

MC GC600 F1 23 Cat.6_A U/FTP 4P LSHF 1640 ft, class E_{ca}

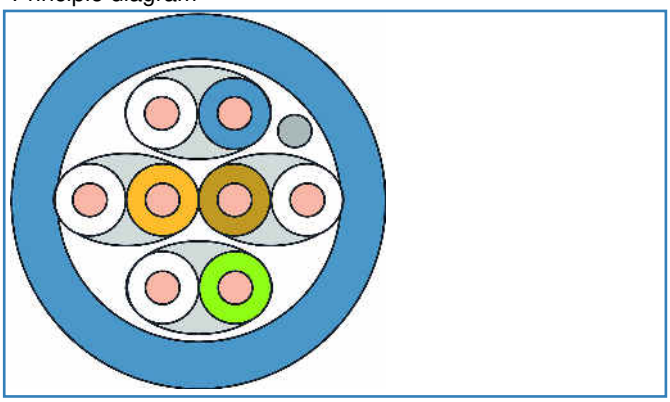
P/N 1308436A32141
EAN 4250184175391

2017-20-11

Illustrations



Principle diagram



See enlarged drawings at the end of document

Product specification

- 10 GBit installation cable, simplex
- installation cable Cat.6_A, AWG 23 U/FTP with wires shielded in pairs
- 4 pairs (PiMF)
- pair shield: plastic foil with aluminum coating
- outer diameter 7.0 mm
- color of the cable jacket: blue
- coupling attenuation greater than or equal to 55 dB
- applicable standards: EN 50173-1:2011-09; ISO/IEC 11801 Ed.2.2:2011-06; EN 50288-5-1, IEC 61156-5 and EIA/TIA 568B
- cable jacket: LSHF (LSOH)
- flame-retardant to IEC 60332-1; IEC 60754-2 and IEC 61034
- fire behaviour: Class E_{ca}(classification acc. to EN 13501-6)

Shipping Units:

sold by meter	on drum
1640 ft (500 m)	on drum
3280 ft (1000 m)	on drum

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Technical Data

General Data	
Design	Installation cables
Shielding	shielded
Transmission technology	Copper
Cable Type	U/FTP
Number of twisting elements	4
Twisting element	Pair
Color coding fiber/ wire(s)	white, orange, white, green, white, brown, white, blue
Color	blue
Cable length (m)	500.00 m
Cable length (ft)	1640.42 ft
Weight	46 kg/km

Transmission characteristics	
Category (ISO)	6_A
Transmission rate up to 10 GBit	IEEE 802.3an
Transmission values (nominal)	see table

Connections/interfaces	
Termination data, solid wire (min. - max.)	
Conductor cross section, solid wire	AWG 23/1
Core diameter (min. - max.)	
Core diameter (conductor with insulation)	1.4 mm
Core diameter (conductor with insulation)	0.055 in.
Cable sheath diameter (min. - max.)	
Cable sheath diameter	7 mm
Cable sheath diameter	0.276 in.
Copper index	21 kg/km

Electrical characteristics	
Loop resistance	max. 145 Ohm/km
Transfer impedance 1 MHz	max. 50 mOhm/m
Transfer impedance 10 MHz	max. 100 mOhm/m
Transfer impedance 30 MHz	max. 500 mOhm/m
Characteristic impedance 1-100 MHz	100+/-5 Ohm
Resistance unbalance	max. 2 %

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Technical Data

Electrical characteristics	
Coupling attenuation	min. 55 dB
Capacitance at 800 Hz	Nom. 45 nF/km
Capacitance unbalance pair to ground	max. 800 pF/km
Nominal velocity of propagation	ca.75 %
Signal propagation delay	max. 500 ns/100 m
Delay skew	max. 20 ns/100 m

Mechanical characteristics	
Tensile force	100 N
Fire load	0.203 kWh/m
Fire load	732 MJ/km
Bending radius without load	min. 28 mm
Bending radius without load	min. 1.1 in.
Bending radius with load	min. 56 mm
Bending radius with load	min. 2.2 in.

Materials and material properties	
Material - Conductor	Cu (copper)
Material - Conductor Insulation	Foam-Skin Polyethylen
Material - Cable jacket	LSHF (LSOH)
Material - Pair shield	plastic film
Material - Pair shield finish	Al (Aluminium)

Environmental conditions	
Temperature (min. - max.)	
Temperature - Storage °C	-20 - 60 °C
Temperature - Storage °F	-4 - 140 °F
Temperature - Operating °C	-20 - 60 °C
Temperature - Operating °F	-4 - 140 °F
Temperature - Installation °C	0 - 50 °C
Temperature - Installation °F	32 - 122 °F

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Technical Data

Approvals	
RoHS	compliant
The product meets the following standards	
Generic cabling systems	
General requirements	ISO/IEC 11801 Ed.2.2:2011-06 | DIN EN 50173-1:2011-09
Multi-element metallic cables used in analogue and digital communication and control	DIN EN 50288-5-1:2014-03
Common test methods for cables under fire conditions	
Fire behaviour - class	 Klasse E_{ca} (Klassifizierung nach EN 13501-6)
Test for vertical flame propagation for a single insulated wire or cable	IEC 60332-1
Measurement of smoke density of cables burning	IEC 61034
Determination of acidity (by measuring the pH value) and conductivity	IEC 60754-2
Classifications	
ETIM 5.0	EC000830
ETIM 6.0	EC000830
Packing details	
Type of packaging	meter / drum

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Accessories

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

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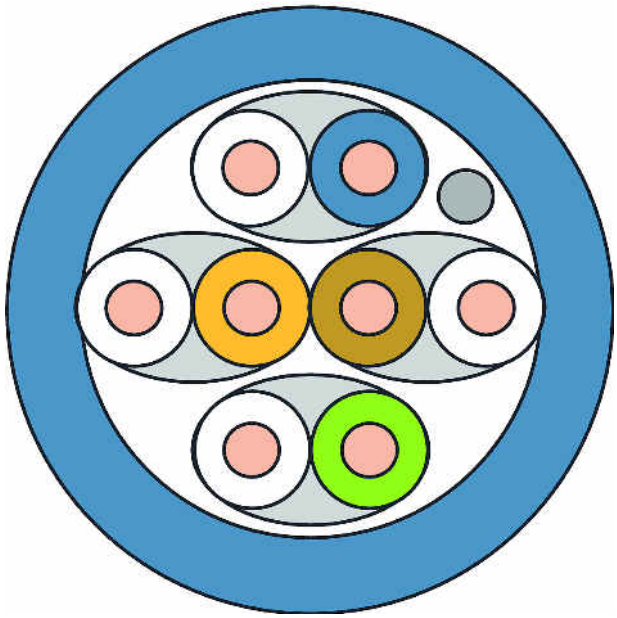
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Transmission values (nominal) as per Cat. 6_A (at 20°C)

FREQ MHz	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1.0	1.8	100	97	98	95	105	105	-
4.0	3.4	100	97	97	94	105	102	27
10.0	5.4	100	97	95	92	97	94	30
16.0	6.8	100	97	93	90	93	90	30
20.0	7.7	100	97	92	89	91	88	30
31.2	9.6	100	97	90	87	87	84	30
62.5	13.7	100	97	86	83	81	78	30
100.0	17.4	100	97	83	80	77	74	30
125.0	19.5	95	92	75	72	75	72	26
155.5	21.9	94	91	72	69	73	70	26
175.0	23.3	93	90	70	67	72	69	25
200.0	25.0	92	89	67	64	71	68	25
250.0	28.1	90	87	62	59	69	66	24
300.0	30.9	89	86	58	55	67	64	24
450.0	38.3	87	84	48	45	64	61	23
600.0	44.8	85	82	40	37	61	58	22

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