Data sheet

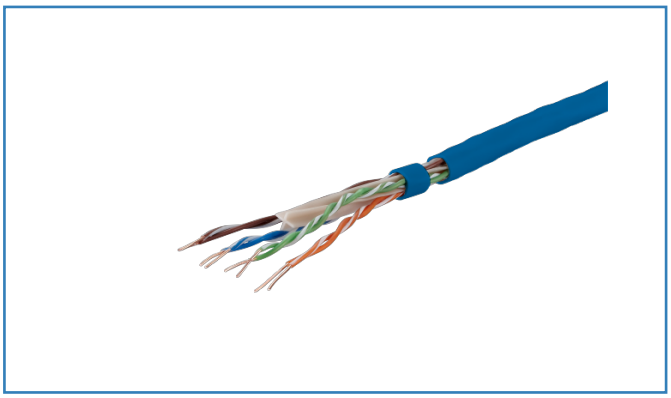
MC GC400 SL23 Cat.6 U/UTP LSHF 1000 ft, class E_{ca}

P/N 1308406032140

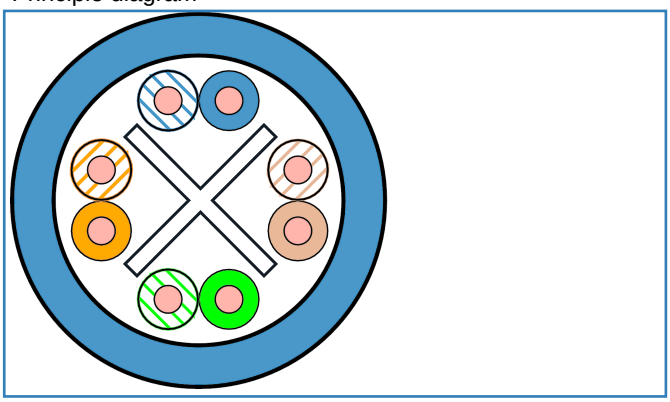
EAN 4250184175216

2017-30-06

Illustrations



Principle diagram



See enlarged drawings at the end of document

Product specification

- 1 GBit installation cable, simplex
- unshielded installation cable Cat.6 class E, AWG 23 U/UTP
- 4 pairs with separator (spline)
- outer diameter 5.3 mm
- color of the cable jacket: blue
- coupling attenuation greater than or equal to 40 dB
- applicable standards: EN 50173-1:2011-09; ISO/IEC 11801 Ed.2.2:2011-06; EN 50288-6-1, IEC 61156-5, EIA/TIA 568B-C.2
- 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:

1000 ft (305 m)	in a box
1640 ft (500 m)	on drum
3280 ft (1000 m)	on drum

© 2017 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!

METZ CONNECT GmbH | Im Tal 2 | 78176 Blumberg | Germany
Phone +49 7702 533-0 | Fax +49 7702 533-433

Data sheet

MC GC400 SL23 Cat.6 U/UTP LSHF 1000 ft, class E_{ca}

P/N 1308406032140

EAN 4250184175216

2017-30-06

Technical Data

General Data	
Design	Installation cables
Shielding	unshielded
Transmission technology	Copper
Cable Type	U/UTP
Number of twisting elements	4
Twisting element	Pair
Color coding fiber/ wire(s)	white/orange, orange, white/green, green, white/brown, brown, white/blue, blue
Color	blue
Cable length (m)	305.00 m
Cable length (ft)	1000.66 ft
Weight	36 kg/km

Transmission characteristics	
Category (ISO)	6
Class (ISO/IEC)	E
Transmission rate up to 1 GBit (Fast Ethernet)	IEEE 802.3ab
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)	0.95 mm
Core diameter (conductor with insulation)	0.037 in.
Cable sheath diameter (min. - max.)	
Cable sheath diameter	5.3 mm
Cable sheath diameter	0.209 in.
Copper index	18.1 kg/km

© 2017 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!

Data sheet

MC GC400 SL23 Cat.6 U/UTP LSHF 1000 ft, class E_{ca}

P/N 1308406032140

EAN 4250184175216

2017-30-06

Technical Data

Electrical characteristics	
Loop resistance	max. 176 Ohm/km
Characteristic impedance 1-100 MHz	100+/-5 Ohm
Resistance unbalance	max. 2 %
Coupling attenuation	min. 40 dB
Capacitance at 800 Hz	Nom 48 nF/km
Capacitance unbalance pair to ground	max. 1500 pF/km
Signal propagation delay	max. 535 ns/100 m
Delay skew	max. 20 ns/100 m
Dielectric strength conductor-conductor (primarily)	1000 V DC
Dielectric strength conductor-conductor (secondary)	1000 V DC
Dielectric strength conductor-shield	1000 V DC

Mechanical characteristics	
Tensile force	100 N
Fire load	0.087 kWh/m
Fire load	316 MJ/km
Bending radius without load	min. 21.2 mm
Bending radius without load	min. 0.83 in.
Bending radius with load	min. 42.4 mm
Bending radius with load	min. 1.67 in.

Materials and material properties	
Material - Conductor	Cu (copper)
Material - Conductor Insulation	Foam-Skin Polyethylen
Material - Cable jacket	LSHF (LSOH)

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

© 2017 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!

Data sheet

MC GC400 SL23 Cat.6 U/UTP LSHF 1000 ft, class E_{ca}

P/N 1308406032140
EAN 4250184175216

2017-30-06

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 TIA/EIA 568-C.2
Multi-element metallic cables used in analogue and digital communication and control	DIN EN 50288-6-1
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

© 2017 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!

Data sheet

MC GC400 SL23 Cat.6 U/UTP LSHF 1000 ft, class E_{ca}

P/N 1308406032140

EAN 4250184175216

2017-30-06

Accessories

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

© 2017 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!

Data sheet

MC GC400 SL23 Cat.6 U/UTP LSHF 1000 ft, class E_{ca}

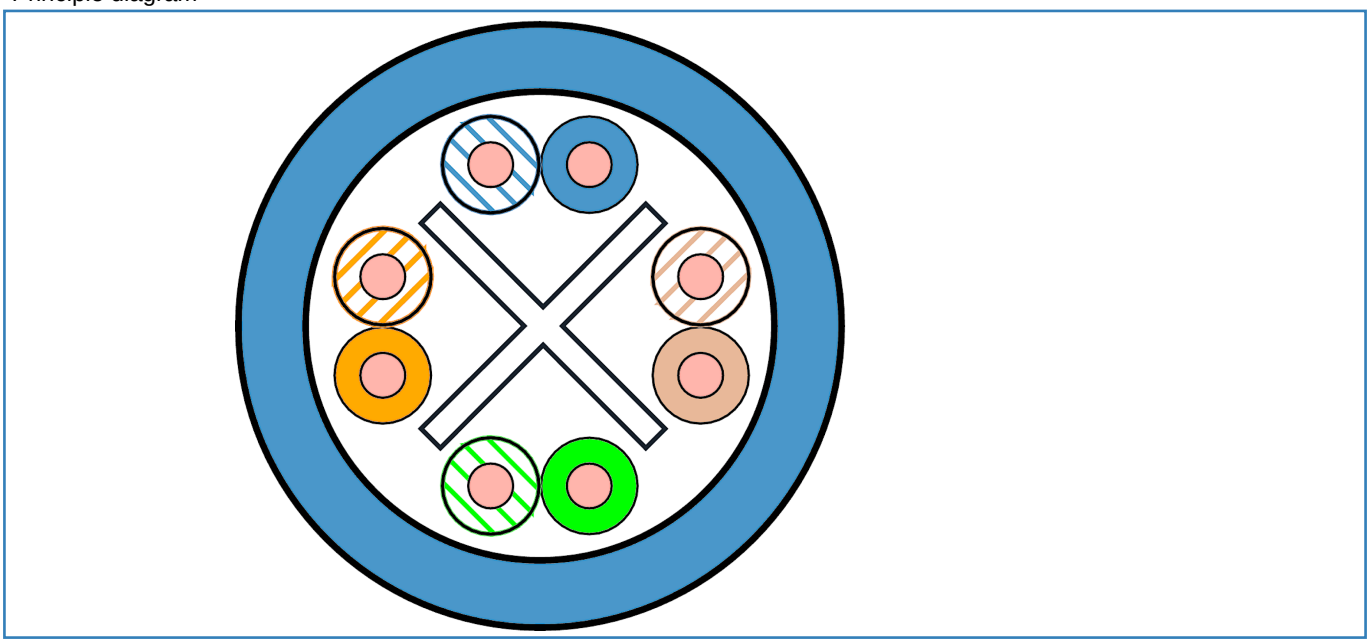
P/N 1308406032140

EAN 4250184175216

2017-30-06

Illustrations

Principle diagram



© 2017 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!

Data sheet

MC GC400 SL23 Cat.6 U/UTP LSHF 1000 ft, class E_{ca}

P/N 1308406032140

EAN 4250184175216

2017-30-06

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

FREQ MHz	Attenuation (dB/100 m)	NEXT (dB/100 m)	PS-NEXT (dB)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ELFEXT (dB/100 m)	PS-ELFEXT (dB/100 m)	Return loss (min. dB)
1.0	1.9	78	75	76.1	73.1	82	80	20
4.0	3.8	69	66	65.2	62.2	70	68	23
10.0	6.0	63	60	57.0	54.0	62	60	25
16.0	7.6	60	57	52.3	49.3	58	56	25
20.0	8.5	59	56	50.0	47.0	56	54	25
31.2	10.7	56	53	45.0	42.0	52	50	23.6
62.5	15.1	51	48	36.0	33.0	46	44	21.5
100.0	19.1	48	45	28.9	25.9	42	40	20.1
125.0	21.3	47	44	25.2	22.2	40	38	19.5
155.5	23.8	45	42	21.3	18.3	38	36	18.8
175.0	25.3	44	41	19.1	16.1	37	35	18.4
200.0	27.0	44	41	16.5	13.5	36	34	18.0
250.0	32.0	42	39	10.0	7.0	34	32	17.3
300.0	36.1	41	38	4.8	1.8	32	30	-
400.0	41.7	39	36	-2.7	-5.7	30	28	-

© 2017 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!