

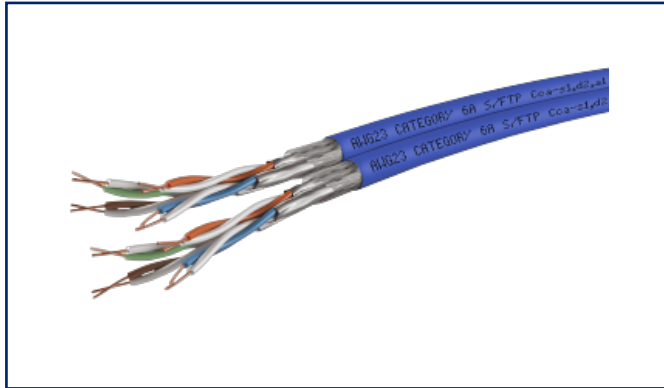
## Data sheet

**MC 550 AWG 23 Cat.6<sub>A</sub> S/FTP 2x4P LSHF-FR 500 m,  
class C<sub>ca</sub> s1 d1 a1**

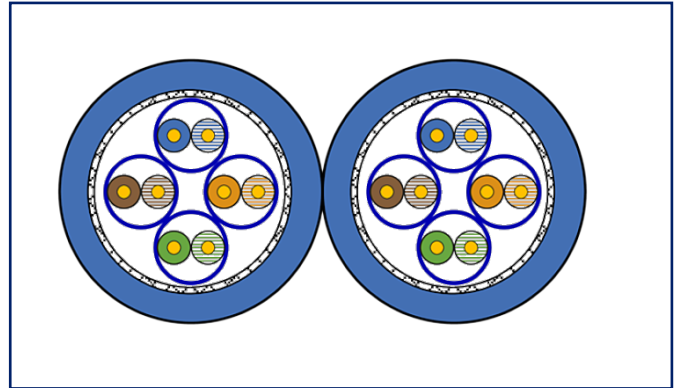
Page 1/6

P/N  
130842A6ASFCF1D  
EAN 4251394671369  
2025/07/09  
Version: G

### Illustrations



Principle diagram



See enlarged drawings at the end of document

### Product specification

- 10 GBase-T installation cable, duplex
- shielded installation cable Cat.6<sub>A</sub> Class E<sub>A</sub>, AWG 23
- 2 x 4 pairs
- outer diameter: 7.40 x 15.40 mm
- color of the cable jacket: blue
- coupling attenuation greater than or equal to 85 dB
- applicable standards: EN 50173-1, ISO/IEC 11801
- cable jacket: LSHF (LSOH)
- flame-retardant to: IEC 60332-1/EN 60332-1 and IEC 60332-3-24/EN 60332-3-24
- fire behaviour: C<sub>ca</sub> s1,d1,a1



Data sheet

**MC 550 AWG 23 Cat.6<sub>A</sub> S/FTP 2x4P LSHF-FR 500 m,  
class C<sub>ca</sub> s1 d1 a1**

P/N  
130842A6ASFCF1D  
EAN 4251394671369  
2025/07/09  
Version: G

**Technical Data**

General Data	
Fields of application	Primary (Campus) Secondary (Riser) Tertiary (Horizontal)
Applications	IEEE 802.3 :10Base-T; 100Base-TX;1000Base-T; 2.5GBase-T ; 5GBase-T ; 10GBase -T IEEE 802.3 af (PoE) / 802.3 at (PoE+) / 802.3 bt (4PPoE 90W) IEEE 802.5 / FDDI / ATM / RNIS
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	2 x 4
Twisting element	Pair
Shield over twisting element	Foil
Twisted stranding	Bundle
Shield over twisted stranding	braid
Jacket color	blue
Außendurchmesser	
Cable sheath diameter	7.40 x 15.40 mm
Cable sheath diameter	0.291 / 0.606 in.
Mechanical data	
Tensile force	190 N
Brandeigenschaften	
Flame retardant according to IEC 60332-1-2	yes
Flame retardant according to IEC 60332-3-24	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	Cca
Fire behavior according to EN 13501-6: Smoke development	s1

Data sheet

**MC 550 AWG 23 Cat.6<sub>A</sub> S/FTP 2x4P LSHF-FR 500 m,  
class C<sub>ca</sub> s1 d1 a1**

P/N  
130842A6ASFCF1D  
EAN 4251394671369  
2025/07/09  
Version: G

**Technical Data**

Brandeigenschaften	
Fire behavior according to EN 13501-6: Drip-off behavior	d1
Fire behavior according to EN 13501-6: Acid development	a1
Fire load	0.274 kWh/m
Fire load	988 MJ/km

Electrical characteristics	
Category	6 <sub>A</sub>
NVP value	78 %
Isolation class according to EN 50174	d
Loop resistance	max. 146.4 Ohm/km
Resistance unbalance	max. 2 %
Transfer impedance 1 MHz	max. 8 mOhm/m
Transfer impedance 10 MHz	max. 8 mOhm/m
Transfer impedance 30 MHz	max. 10 mOhm/m
Coupling attenuation	min. 85 dB
Capacitance unbalance pair to ground	max. 1600 pF/km
Insulation resistance	> 5000 MOhm.km

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. 60 mm
Min. permissible bending radius, flexible use/free movement (mm)	min. 60 mm
Min. permissible bending radius, stationary use/fixd installation (mm)	min. 30 mm
Min. permissible bending radius, flexible use with forced guidance (inch)	2.362 in.
Min. permissible bending radius, flexible use/free movement (inch)	2.362 in.
Min. permissible bending radius, stationary use/fixd installation (inch)	1.181 in.

Data sheet

**MC 550 AWG 23 Cat.6<sub>A</sub> S/FTP 2x4P LSHF-FR 500 m,  
class C<sub>ca</sub> s1 d1 a1**

P/N  
130842A6ASFCF1D  
EAN 4251394671369  
2025/07/09  
Version: G

**Technical Data**

**Anwendungseigenschaften / Umgebungsbedingungen**

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
---------------------------------------------------------------------	----------------

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	Cell polyethylene
----------------------------	-------------------

Material - protective jacket	LSOH-FR
------------------------------	---------

Material - Pair shield	Aluminium/Polyester
------------------------	---------------------

Material - Pair shield finish	Aluminium/Polyester
-------------------------------	---------------------

Material - Main shield	Cu (copper) braid
------------------------	-------------------

Material - Main shield finish	Sn
-------------------------------	----

**Geltende Normen**

General requirements	ISO/IEC 11801 DIN EN 50173-1 ANSI/TIA-568.2-D
----------------------	-----------------------------------------------------

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	EN 50288-10-1 IEC 61156-5
-----------------------------------------------------------------------------	------------------------------

**Classifications**

ETIM 8.0	EC003249
----------	----------

ETIM 9.0	EC003249
----------	----------

ETIM 10.0	EC003249
-----------	----------

Data sheet

Page 5/6

**MC 550 AWG 23 Cat.6<sub>A</sub> S/FTP 2x4P LSHF-FR 500 m,  
class C<sub>ca</sub> s1 d1 a1**

P/N  
130842A6ASFCF1D  
EAN 4251394671369  
2025/07/09  
Version: G

## Technical Data

### Packing details

Type of packaging	500 meter / drum
GTIN13	4251394671369

### 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. At METZ CONNECT's request, the Customer shall submit and make available meaningful evidence (e.g. test and laboratory protocols, certifications, etc.).

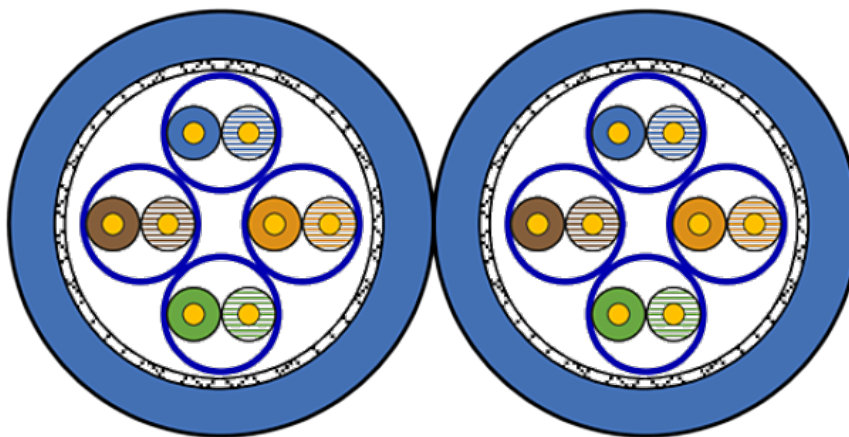
Data sheet

**MC 550 AWG 23 Cat.6<sub>A</sub> S/FTP 2x4P LSHF-FR 500 m,  
class C<sub>ca</sub> s1 d1 a1**

P/N  
130842A6ASFCF1D  
EAN 4251394671369  
2025/07/09  
Version: G

**Illustrations**

Principle diagram



**Elektrische Daten**

Übertragungseigenschaften bei 20 °C

F (MHz)	Attenuation (dB/100m)		NEXT (dB)		PS-NEXT (dB)		ELFEXT (dB/100m)		PS-ELFEXT (dB/100m)		Return loss (dB)		PS-ANEXT	
	Typ.Wert	Max.Wert*	Typ.Wert	Min.Wert*	Typ.Wert	Min.Wert*	Typ.Wert	Min.Wert*	Typ.Wert	Min.Wert*	Typ.Wert	Min.Wert*	Typ.Wert	Min.Wert*
4	3,6	3,8	95	65,3	92	63,3	85	58	82	55	26	23	85	76,5
10	5,5	5,9	95	59,3	92	57,3	85	50	82	47	28	25	85	72,5
20	7,9	8,4	95	54,8	92	52,8	84	44	81	41	28	25	85	69,5
62,5	14,5	15	95	47,4	92	45,4	82	34,1	79	31,1	26	21,5	85	64,5
100	18,5	19,1	95	44,3	92	42,3	78	30	75	27	24	20,1	85	62,5
250	29,6	31,1	88	38,3	85	36,3	62	22	59	19	22	17,3	73	56,5
500	42,9	45,3	84	33,8	81	31,8	56	16	53	13	19	17,3	68	52
550**	50	-	83	-	80	-	55	-	52	-	18	-	67	-

Kategorie 6<sub>A</sub> nach IEC 61156-5 Ed.2