Data sheet

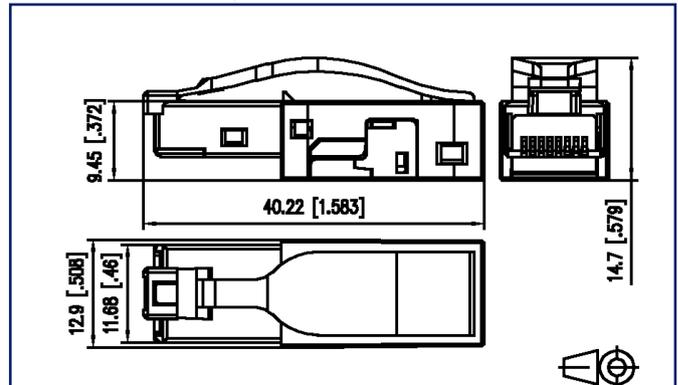## E-DAT RJ45 field plug short Cat.6 Class E$_A$

Illustrations

Dimensional drawing

c**UL**US LISTED

See enlarged drawings at the end of document

Product specification

- Cat.6 class E$_A$ plug to be assembled in the field
- compliance with class E$_A$ according to ISO/IEC 11801, DIN EN 50173-1
- suitable for 10 GBit Ethernet (IEEE 802.3an), Remote Powering (PoE, PoE plus, UPoE and 4PPoE) and HDBaseT
- 8-wire RJ45 plug for AWG 22 to be assembled in the field
- connection of AWG 26/7 - 22/7, AWG 26/1 - 22/1 possible
- solid wire Cu conductor diameter 0.409 - 0.64 mm
- stranded copper wire diameter from 0.48 to 0.76 mm
- conductor diameter up to 1.6 mm
- consists of only 2 parts
- easy assembly - connection without special tools
- zinc die-cast housing for industrial use
- with locking lever
- variants: T568A, T568B, Industry

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E-DAT RJ45 field plug short Cat.6 Class E$_A$

Technical Data

General Data

Fields of application	Industrial Ethernet
Mechanical measurement according to MICE	M1
Ingress measurement according to MICE	I1
Climatic measurement according to MICE	C1
Electromagnetic measurement according to MICE	E2
Design	plug
Shielding	shielded
Transmission technology	Copper
Color	metallike
Dimensions	
Dimension (L x W x H)	40.22 mm x 12.9 mm x 14.7 mm
Dimension (L x W x H)	1.583 in. x 0.508 in. x 0.579 in.
Field assembly ability	yes
Labeling option	on housing

Transmission characteristics

Category (ISO)	6
Class (ISO/IEC)	E$_A$
Category (TIA)	6
Remote Powering	yes
PoE	IEEE 802.3af
PoE plus	IEEE 802.3at
UPoE	yes
4PPoE	IEEE 802.3bt
HDBaseT	yes
Transmission rate up to 10 GBit	IEEE 802.3an

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Connections/interfaces

Connector technology interface 1	IDC-connection
Connector technology interface 2	RJ45 plug
Number of ports interface 2	1
Number of ports interface 2 equipped	1
Number of positions/contacts interface 1	8
Number of positions/contacts interface 2	8P/8C
Termination data, solid wire (min. - max.)	
Conductor cross section, solid wire	AWG 26/1 - AWG 22/1
Conductor cross section, solid wire	0.128 mm² - 0.324 mm²
Conductor diameter, solid wire (bare copper)	0.409 mm - 0.643 mm
Conductor diameter, solid wire (bare copper)	0.016 in. - 0.025 in.
Termination data, stranded wire (min. - max.)	
Conductor cross section, stranded wire	AWG 26/7 - AWG 22/7
Conductor cross section, stranded wire	0.141 mm² - 0.355 mm²
Conductor diameter, stranded wire (bare copper)	0.483 mm - 0.762 mm
Conductor diameter, stranded wire (bare copper)	0.019 in. - 0.03 in.
Aderdurchmesser (min.-max.)	
Core diameter (conductor with insulation)	1.6 mm
Core diameter (conductor with insulation)	0.063 in.
Cable access/outlet	180°

Electrical characteristics

Current carrying capacity	max. 1 A
Contact resistance	max. 20 mOhm
Insulation resistance	min. 500 MOhm
Dielectric strength conductor-conductor (secondary)	min. 1000 V DC
Dielectric strength conductor-shield	min. 1500 V DC

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Mechanical data

Mounting method	snap-in function
Insertion and withdrawal force	max. 30 N
Life - Number of mating cycles	min. 750

Materials and material properties

Material - Housing	GD-Zn
Material - Housing finish	copper-nickel (Ni-Cu)
Material - Insulation displacement contacts	CuSn
Material - Finish of insulation displacement contacts	Sn
Material - Contact	CuSn
Material - Contact finish	Ni + Au (nickel-gold)
Material - Shield	Cu-Ni-Zn (nickel silver)
Material - Stuffer cap	PA UL94-V0
Material - Strain relief	PA UL94-V0
Material - Latch	PA UL 94 V0
Halogen free	yes
Material - Finish	Ni (nickel)
RoHS	compliant

Environmental conditions

Temperature (min. - max.)	
Temperature - Storage °C	-40 °C - 70 °C
Temperature - Storage °F	-40 °F - 158 °F
Temperature - Operating °C	-40 °C - 70 °C
Temperature - Operating °F	-40 °F - 158 °F
Particulate ingress	IP2X
Liquid ingress/immersion	IPX0
Rapid change of temperature	-40°C to +70°C / 25cycles t = 30 min.
Damp heat	+25°C / +77°F +65°C / +149°F / 93% RH // -10°C / -14°F / 21 cycles
Flowing mixed gas	+25 °C / +77°F / 73% RH / 4 days, H2S / SO2
Vibration	50 m/s²
Shock	250 m/s²

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Approvals

UL listed (file no.)	c(UL)US LISTED	DUXR.E178484

Standards/Regulations

Generic cabling systems	
General requirements	ANSI/TIA-568-B.2-10
Office buildings	ISO/IEC 11801 Ed.2.2: 2011-06 | DIN EN 50173-2 ANSI/TIA-568-C
Industrial area	ISO/IEC 24702 | DIN EN 50173-3 ANSI/TIA-1005
Living units	ISO/IEC 15018 | DIN EN 50173-4 ANSI/TIA-570-B
Application-specific communications cabling systems	
Profinet	yes
UL standard for Communications-Circuit Accessories	UL 1863
Connectors for electronic equipment	
Free and fixed connectors	DIN EN 60603-7-51:2011-01
Interference proof	
Immunity for industrial environments	DIN EN 61000-6-2:2006-03
Emission proof	
Electromagnetic emission for residential, commercial and light-industrial environments	DIN EN 61000-6-3:2011-09
Climate tests	IEC 60512-11

Classifications

ETIM 7.0	EC001121
ETIM 8.0	EC001121
ETIM 9.0	EC001121
ETIM 10.0	EC001121

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Packing details

Type of packaging	10 pc(s) / box

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.).

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Illustrations

Dimensional drawing