381166930	DATA SHEET	
Valid from: 28.01.2026	**RJ45 Cat.8.1 ED-IE-AXS-8.1A-B-20-FD-FC** **RJ45 Cat.8.1 ED-IE-AXS-8.1A-B-20-FC**	

Description



- Field-assembly RJ45 plug according to IEC 60603-7-81, Cat. 8.1, shielded
- colour-coded according to EIA/TIA-568B
- For Industrial Ethernet

General characteristics

Series	RJ45, field-assembly
Number of poles	8
Temperature range	- 40°C to +85°C
Protection rating	IP 20
Shielding	shielded
For cablediameters	Ø5.5 mm to Ø10.0 mm
Insertion force	≤ 30 N
Mounting cycles (min)	≥ 750N

Product variations

article	description	pu	insulator Ø [mm]	conductor	core Ø [AWG]	core Ø [mm]
381166930	ED-IE-AXS-8.1A-B-20-FD-FC	1	0.85 – 1.1	solid	26/1 – 24/1	0.41 – 0.51
				stranded	27/7 – 24/7	0.46 – 0.61
381166931	ED-IE-AXS-8.1A-B-20-FC	1	1.0 – 1.6	solid	24/1 – 22/1	0.51 – 0.64
				stranded	27/7 – 22/7	0.46 – 0.76

Electrical characteristics

Rated voltage	50 VAC / 60 VDC (max.)
Current carrying capacity at 50°C	1A
Contact resistance	≤ 20 mΩ
Insulation resistance	≥ 500 MΩ
Voltage proof	≥ 1000V, DC Contact to Contact
	≥ 1500V, DC Contact to Shield

Mechanical characteristics

Connector housing	zinc diecast Ni plated
Insulator	PC UL94 V0, green (article 381166930)
	PC UL94 V0, crystal clear (article 381166931)
Wire presorting	PC UL94 V0, white
Part for strain relief	PC UL94 V0, black
Hook, protection cap	PBT UL94 V0, black
Screening shield	spring steel
PCB	FR4 UL94 V0, solder mask both side
Piercing contacts	Phosphorus Bronze, min. 3...6 µm Sn
Shield contact	brass 2,5 µm Ni
Contacts	spring steel 0,8 µm Au; 1,2 µm Ni

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Applicable cable

Conductor	AWG27 to AWG22
Insulator outer diameter	Ø 0.85 to Ø 1.6
Jacket outer diameter	Ø 5.5 to Ø 10.0

Standard

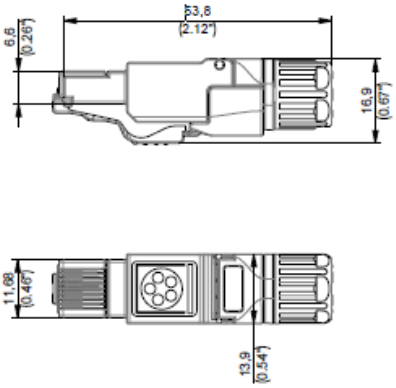
Product standard, RJ45 connector	IEC 60603-7-81
Generic cabling systems	ISO/IEC 11801-1; DIN EN 50173-1
Transmission speed up to 10Gbit	IEEE 802.3an
PoE+	IEEE 802.3at
4PPoE	IEEE 802.3bt

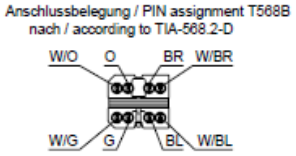
Approval

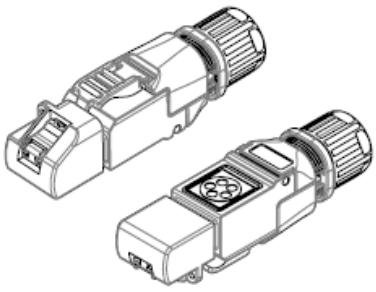
UL	E353543
UL Standard: Fire Test	UL 2043 *

*Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces.

Drawings







Info

Robust metal connector with integrated EMC cable gland

Application range

Structured building cabling and data centres
Server rooms, backbone network areas and for switch-to-switch connections

Remark

Photographs are not to scale and do not represent detailed images of the respective products.

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