

VS-PN-RJ45-5-Q/IP20 - RJ45 connector



1658435

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RJ45 connector, RJ45, PROFINET, CAT5 (100 Mbps), 4-position, connection method: Insulation displacement connection, material: Plastic, degree of protection: IP20

Your advantages

- Easy and time-saving assembly with IDC fast connection technology
- Can be used internationally due to EAC, UL 1863, and CAN/CSA C22.2
- Ideal companion for servicing or repairs in the field: no special tools required for mounting

Commercial data

Item number	1658435
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB10
Product key	ABNAAD
GTIN	4046356163118
Weight per piece (including packing)	10.143 g
Weight per piece (excluding packing)	9.042 g
Customs tariff number	85366990
Country of origin	CH

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Technical data

Notes

General	This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.1 Connectors for Outside Environment (Balanced cabling)
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Product properties

Product type	Data connector (cable side)
Type	RJ45
Number of positions	4
Connection profile	RJ45
No. of cable outlets	1
Shielded	yes
Cable outlet	straight
Positions/contacts	8P4C

Insulation characteristics

Overvoltage category	I
Degree of pollution	2

Electrical properties

Rated voltage (III/3)	72 V (DC)
Rated surge voltage	330 kV
Rated current	1.75 A
Contact resistance	< 20 mΩ (Contact) < 100 mΩ (shield)
Frequency range	100 MHz
Insulation resistance	> 500 MΩ (100 V)
Nominal voltage U_N	48 V
Nominal current I_N	1.75 A
Dielectric strength	1000 V DC (Conductor-Conductor) 1500 V DC (Wire/shield)
Contact resistance per contact pair	< 20 Ω
Contact resistance	> 10 mΩ (Wire – IDC) < 0.005 Ω (Litz wires – IDC)
Transmission medium	Copper
Transmission speed	100 Mbps
Transmission characteristics (category)	CAT5
Power transmission	PoE+

Connection data

Connection technology

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Connection method	Insulation displacement connection
Connection cross section AWG	22 (solid)
	22 (flexible)
Conductor cross-section	0.34 mm² ... 0.36 mm² (solid)
	0.34 mm² ... 0.36 mm² (flexible)
Cable outlet, angle	180

Interfaces

Signal type/category	PROFINET CAT5, 100 Mbps
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Dimensions

Width	14 mm
Height	14.6 mm
Length	56 mm

Material specifications

Material	Plastic
Flammability rating according to UL 94	V0
Housing material	Plastic
Cable seal material	NBR
Contact material	CuSn
Contact surface material	Au/Ni
Contact carrier material	PC
O-ring material	FPM
Locking latch material	PC
Material for screw connection	PA

Cable/line

External cable diameter	4.5 mm ... 8 mm
External cable diameter	4.5 mm ... 8 mm
Wire diameter	1.6 mm
Wire diameter including insulation	≤ 1.6 mm
Test voltage Core/Core	1000 V
Test voltage Core/Shield	1500.00 V
Halogen-free	no

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 750
Insertion force per signal contact	< 20.00 N
Extraction force per signal contact	< 20 N

Environmental and real-life conditions

Ambient conditions

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Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C

Test specification

Type of test	Vibration test
Specification	IEC 60068-2-6
Frequency	10-500 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm
Acceleration	50 m/s ²
Test duration	20 s

Mounting

Mounting type	For field assembly
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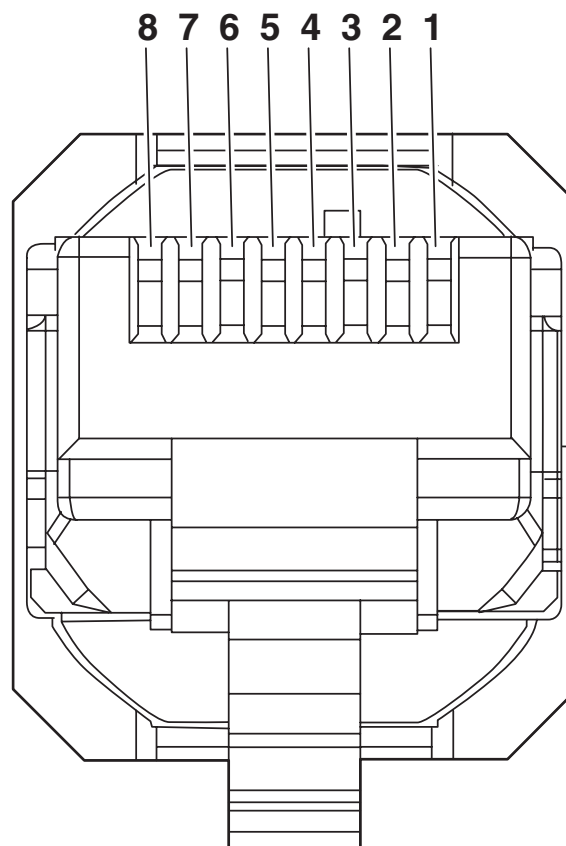
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Drawings

Schematic diagram



Connector pin assignment

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Approvals

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UL Listed

Approval ID: FILE E 335024



cUL Listed

Approval ID: FILE E 335024

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Classifications

ECLASS

ECLASS-13.0	27440114
ECLASS-15.0	27440114

ETIM

ETIM 10.0	EC002636
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)(CAS: 3147-75-9)
SCIP	e3c95714-a832-42bd-82c2-777d18a8ce59

EF3.1 Climate Change

CO2e kg	0.715 kg CO2e
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