

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



1658435

<https://www.phoenixcontact.com/us/products/1658435>

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RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 4, 100 Mbps, CAT5, material: Plastic, connection method: Insulation displacement connection, cable outlet: straight, color: traffic grey A RAL 7042, PROFINET

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)	9.9 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
Sensor type	PROFINET
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
Transmission speed	100 Mbps
Power transmission	PoE+

Connection data

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Connection technology

Connection method	Insulation displacement connection
Connection cross section AWG	22 (solid)
	22 (flexible)
Conductor cross section	0.34 mm ² ... 0.36 mm ² (solid)
	0.34 mm ² ... 0.36 mm ² (flexible)
Cable outlet, angle	180

Dimensions

Width	14 mm
Height	14.6 mm
Length	56 mm

Material specifications

Color	traffic grey A RAL 7042
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
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

Test specification

Type of test	Vibration test
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Specification	IEC 60068-2-6
Frequency	10-500 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm
Acceleration	50.00 m/s ²
Test duration	20.00 s

Ambient conditions

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

Mounting

Mounting type	For field assembly
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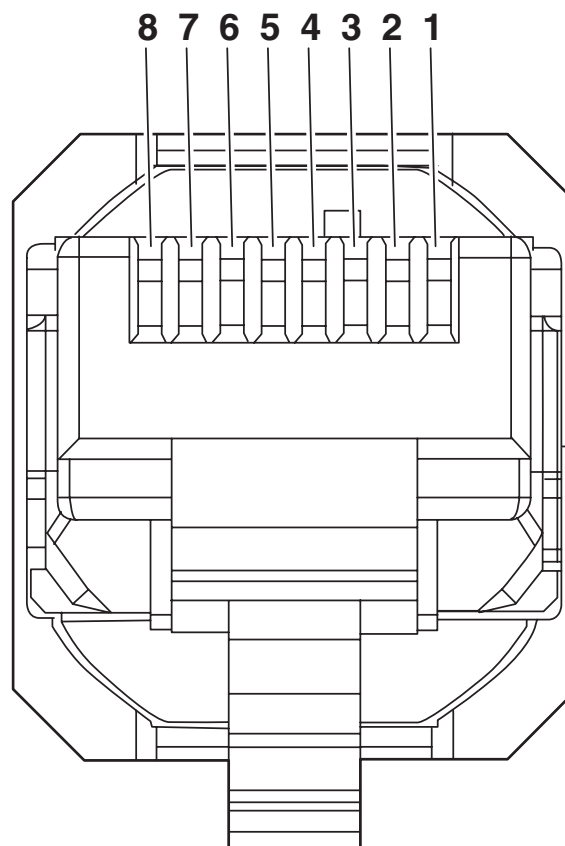
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Drawings

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 9.0	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

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