

NBC-R4AC/4,0-93M/R4ACR - Patch cable



1420419

<https://www.phoenixcontact.com/us/products/1420419>

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PROFINET patch cable, shielded, star quad, AWG 22 flexible (7-wire), green, RJ45 connector/IP20, straight, to RJ45 connector/IP20, angled, length: 4. m

Your advantages

- Perfect for industrial applications
- Perfect for office, building, and protected industrial applications (e.g., in control cabinets)
- Compact angle

Commercial data

Item number	1420419
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	ABNABA
GTIN	4055626214283
Weight per piece (including packing)	291 g
Weight per piece (excluding packing)	273.541 g
Country of origin	PL

Technical data

Product properties

Product type	Data cable preassembled
Product family	RJ45 INDUSTRIAL PN4 CAT5
Sensor type	PROFINET
Number of positions	4
Connection profile	RJ45 8(4)
Shielded	yes

Insulation characteristics

Overvoltage category	I
Degree of pollution	1

Electrical properties

Rated voltage (III/3)	72 V (DC)
Rated current	1.75 A
Nominal voltage U_N	48 V
Nominal current I_N	1 A
Transmission medium	Copper
Transmission speed	100 Mbps
Transmission speed	100 Mbps

Mechanical properties

Mechanical data

Insertion force per signal contact	50.00 N
Extraction force per signal contact	30 N

Material specifications

Flammability rating according to UL 94	V2
Housing material	PA 6.6
Contact material	CuSn
Contact surface material	Ni/Au
Outer sheath, material	PUR

Connector

Connection 1

Type	Plug straight RJ45
Shielded	yes
Handle color	black
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carrier)

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	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20

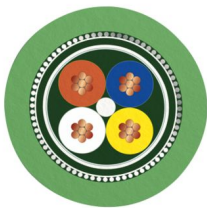
Connection 2

Type	Plug straight RJ45
Shielded	yes
Handle color	black
Material	CuSn (Contact) Ni/Au (Contact surface) PA (Contact carrier) PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20

Cable/line

Cable length	4.00 m
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PROFINET stranded CAT5 [93M]

Dimensional drawing	
Shielded	yes
UL AWM Style	20236 (80°C/30 V)
Cable weight	65 kg/km
Cable type	PROFINET stranded CAT5
Cable type (abbreviation)	93M
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps EtherCAT® CAT5 (IEC 11801), 100 Mbps
Cable structure	1x4xAWG22/7, SF/TQ
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	green RAL 6018
Thickness, outer sheath	approx. 0.90 mm
Material, inner sheath	PVC
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Material wire insulation	PE

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Wire diameter incl. insulation	approx. 1.5 mm
Single wire, color	white, yellow, blue, orange
Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Cable insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Coupling resistance	$\leq 20.00 \text{ m}\Omega/\text{m}$ (at 10 MHz)
Wave impedance	$100 \text{ }\Omega \pm 15 \text{ }\Omega$ (at 100 MHz)
Loop resistance	$\leq 120.00 \text{ }\Omega/\text{km}$
Working capacitance	52 pF
Signal runtime	5.3 ns/m
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
	76 dB (at 4 MHz)
	70 dB (at 10 MHz)
	65 dB (at 16 MHz)
	63 dB (at 20 MHz)
	60 dB (at 31.25 MHz)
	55 dB (at 62.5 MHz)
Ambient temperature (operation)	-40 °C ... 80 °C (Cable, flexible installation)
	-40 °C ... 80 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation) (Plug)	-25 °C ... 80 °C (RJ45 connector)

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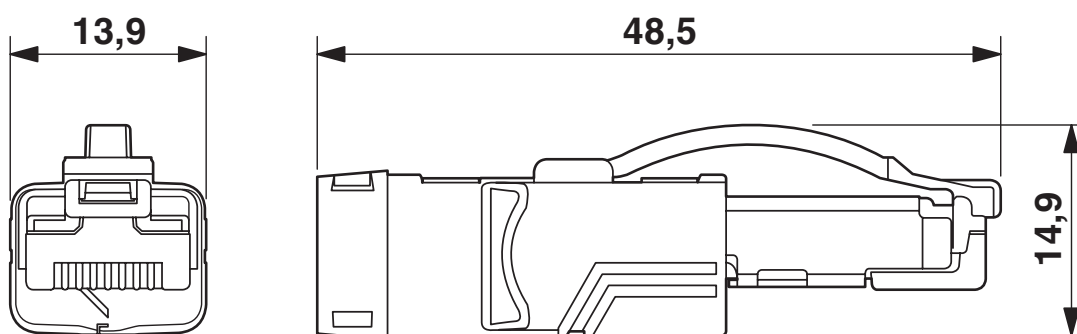


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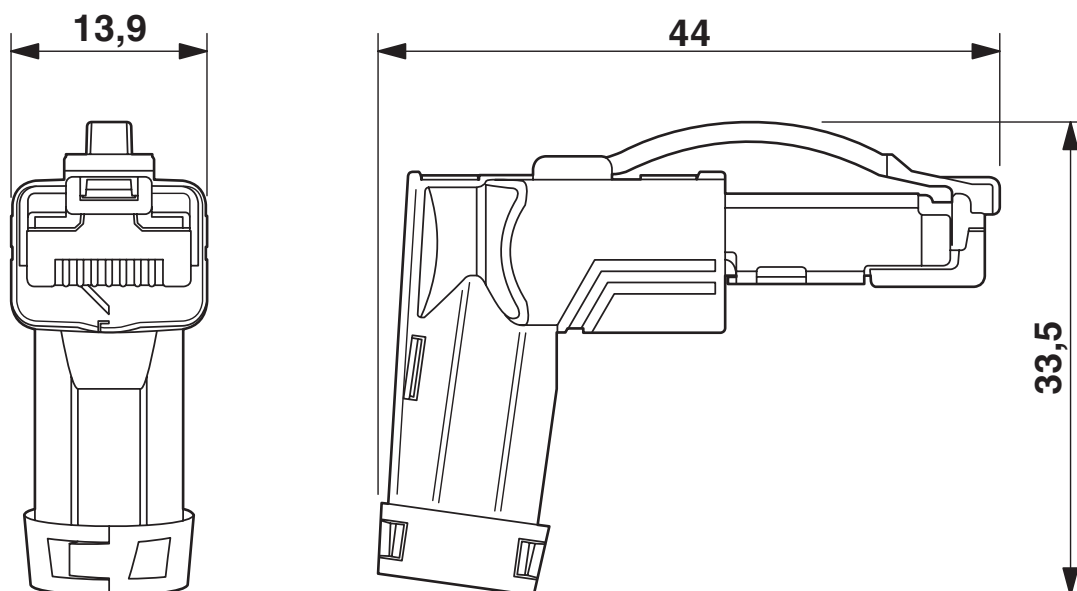
Drawings

Dimensional drawing



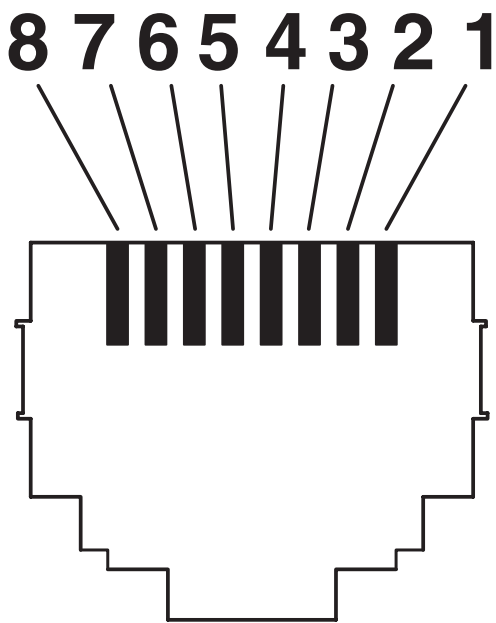
RJ45 connector, IP20

Dimensional drawing



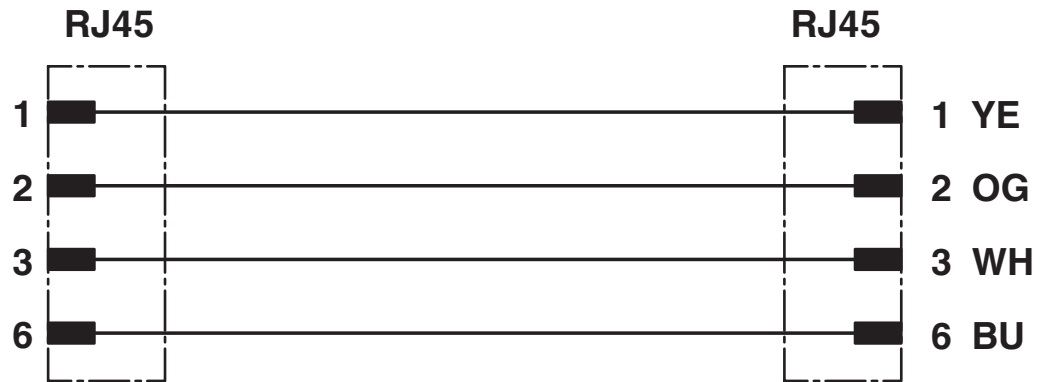
RJ45 connector, IP20, angled

Schematic diagram



Connector pin assignment plug RJ45

Circuit diagram



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Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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