

NBC-R4AC/20,0-93K/R4AC - Patch cable



1414033

<https://www.phoenixcontact.com/us/products/1414033>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sercos III patch cable, shielded, star quad, 22 AWG stranded (7-wire), RAL 3020 (traffic red), RJ45 connector/IP20, straight to RJ45 connector/IP20, straight, length: 20 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	1414033
Packing unit	1 pc
Minimum order quantity	25 pc
Product key	ABNABA
GTIN	4055626013565
Weight per piece (including packing)	1,387.503 g
Weight per piece (excluding packing)	1,387.503 g
Country of origin	PL

NBC-R4AC/20,0-93K/R4AC - Patch cable



1414033

<https://www.phoenixcontact.com/us/products/1414033>

Technical data

Product properties

Product type	Data cable preassembled
Product family	RJ45 INDUSTRIAL PN4 CAT5
Application	Standard
Sensor type	Sercos
Number of positions	4
Shielded	yes

Insulation characteristics

Overvoltage category	I
Degree of pollution	1

Signaling

Status display	no
----------------	----

Electrical properties

Rated voltage (III/3)	72 V (DC)
Transmission medium	Copper
Transmission speed	100 Mbps
Transmission characteristics (category)	CAT5
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	V0
--	----

Connector

Connection 1

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

NBC-R4AC/20,0-93K/R4AC - Patch cable



1414033

<https://www.phoenixcontact.com/us/products/1414033>

Ambient temperature (operation)	-25 °C ... 80 °C
---------------------------------	------------------

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
Ambient temperature (operation)	-25 °C ... 80 °C

Cable/line

Cable length	20.00 m
--------------	---------

Sercos III [93K]

Dimensional drawing	
Cable weight	68 kg/km
UL AWM Style	21694 (60 °C / 600 V)
Number of positions	4
Shielded	yes
Cable type	Sercos III [93K]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Wire diameter incl. insulation	approx. 1.55 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	signal red RAL 3020
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE
Single wire, color	white, yellow, blue, orange
Thickness, outer sheath	approx. 0.90 mm
Type of pair shielding	Aluminum-lined polyester foil

NBC-R4AC/20,0-93K/R4AC - Patch cable



1414033

<https://www.phoenixcontact.com/us/products/1414033>

Overall twist	Star quad
Max. conductor resistance	$\leq 120 \Omega/\text{km}$
Insulation resistance	$\geq 0.5 \text{ G}\Omega \cdot \text{km}$
Coupling resistance	$\leq 20.00 \text{ m}\Omega/\text{m}$ (at 10 Hz)
Wave impedance	$100 \Omega \pm 15 \Omega$ (at 100 MHz)
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.)
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	46 mm
Flame resistance	according to UL 1685 (CSA FT 4)
Resistance to oil	Resistant to oil to a limited extent
Other resistance	UV resistant (according to UL 1581, Section 1200)
Ambient temperature (operation)	-40 °C ... 70 °C (cable, fixed installation)
	-40 °C ... 70 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 60 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
	IP20

NBC-R4AC/20,0-93K/R4AC - Patch cable

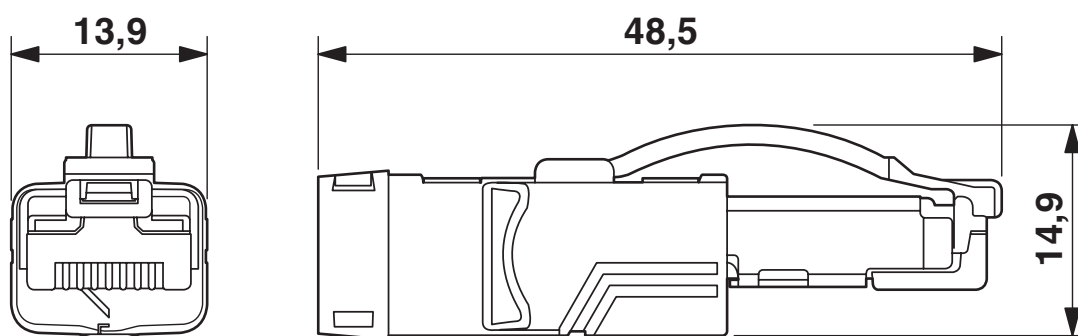


1414033

<https://www.phoenixcontact.com/us/products/1414033>

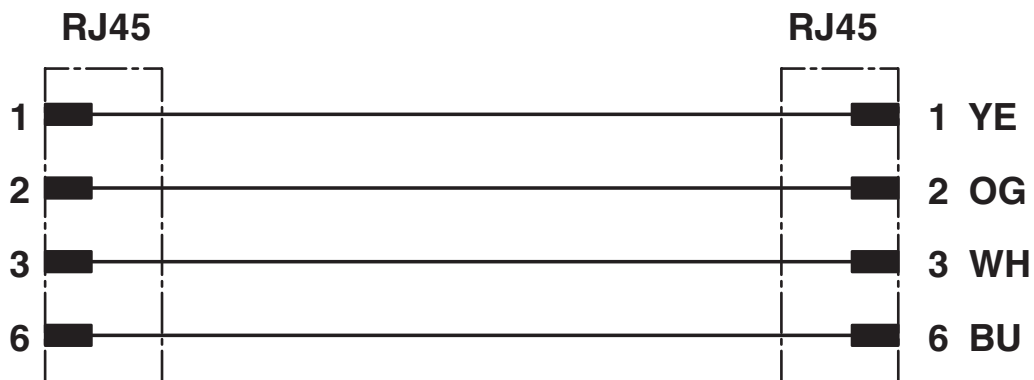
Drawings

Dimensional drawing



RJ45 connector, IP20

Circuit diagram



NBC-R4AC/20,0-93K/R4AC - Patch cable



1414033

<https://www.phoenixcontact.com/us/products/1414033>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1414033>



EAC

Approval ID: 19060508

NBC-R4AC/20,0-93K/R4AC - Patch cable



1414033

<https://www.phoenixcontact.com/us/products/1414033>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

NBC-R4AC/20,0-93K/R4AC - Patch cable



1414033

<https://www.phoenixcontact.com/us/products/1414033>

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%

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com