

SAC-4P-M 8MS/20,0-950/M 8FS - Bus system cable



1543391

<https://www.phoenixcontact.com/us/products/1543391>

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.



Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, coding: A, on Socket straight M8, coding: A, cable length: 20 m

Your advantages

- Power cable for actuator voltage
- System cable for supply voltage and bus signal

Commercial data

Item number	1543391
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF02
Product key	AF1BJB
GTIN	4046356097550
Weight per piece (including packing)	841.5 g
Weight per piece (excluding packing)	841.5 g
Customs tariff number	85444290
Country of origin	PL

SAC-4P-M 8MS/20,0-950/M 8FS - Bus system cable



1543391

<https://www.phoenixcontact.com/us/products/1543391>

Technical data

Product properties

Product type	Data cable preassembled
Application	Standard
Sensor type	INTERBUS
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Interfaces

Bus system	INTERBUS
Signal type/category	INTERBUS

Signaling

Status display	no
Status display present	no

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Test voltage	800 V
Transmission medium	Copper

Material specifications

Flammability rating according to UL 94	HB
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Connection data

Connection assignment

Contact Color (signal designation) Contact (optional)	1 (Plug) RD (0.34 mm ²) 1 (Socket)
	3 (Plug) BU (0.34 mm ²) 3 (Socket)

SAC-4P-M 8MS/20,0-950/M 8FS - Bus system cable



1543391

<https://www.phoenixcontact.com/us/products/1543391>

	2 (Plug) YE (0.14 mm²) 2 (Socket)
	4 (Plug) GN (0.14 mm²) 4 (Socket)

Connector

Connection 1

Type	Plug straight M8
Number of positions	4
Coding type	A (Standard)

Connection 2

Type	Socket straight M8
Number of positions	4
Coding type	A

Cable/line

Cable length	20 m
--------------	------

INTERBUS [950]

Cable weight	41 kg/km
UL AWM Style	20963 (80°C/30 V)
Number of positions	4
Shielded	yes
Cable type	INTERBUS [950]
Conductor structure	2xAWG26/19+2xAWG22/19
Conductor structure signal line	19x 0.10 mm
AWG signal line	26
Conductor structure, voltage supply	19x 0.15 mm
AWG power supply	22
Conductor cross section	2x 0.14 mm² (Signal line)
	2x 0.34 mm² (Power supply)
	1x 0.38 mm² (Drain wire)
Wire diameter incl. insulation	0.97 mm (Signal line)
	1.25 mm (Power supply)
External cable diameter	5.20 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PP
Single wire, color	red-blue, green-yellow
Thickness, insulation	0.24 mm (Conductor insulation, signal line)
	0.25 mm (Conductor insulation, voltage supply)
Thickness, outer sheath	approx. 0.75 mm
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	2 pairs around a drain wire in the center to the core

SAC-4P-M 8MS/20,0-950/M 8FS - Bus system cable



1543391

<https://www.phoenixcontact.com/us/products/1543391>

Optical shield covering	85 %
Max. conductor resistance	≤ 150 Ω/km (Signal line)
	≤ 58 Ω/km (Power supply)
Insulation resistance	≥ 20 MΩ*km
Wave impedance	75 Ω ±10 Ω (Signal line)
	55 Ω ±10 Ω (Power supply)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	1000 V (50 Hz, 1 min.)
Test voltage Core/Shield	1000.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	7.5 x D
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	39 mm
Dynamic load capacity (bending)	Max. bending cycles: 1000000, Bending radius: 110 mm, Traversing path: 6 m, Traversing rate: 4 m/s, Acceleration: 4 m/s²
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-40 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)

Drawings

Dimensional drawing



Plug M8 x 1, straight, shielded

Dimensional drawing



Socket M8 x 1, straight, shielded

Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

Schematic diagram



Pin assignment M8 socket, 4-pos., view female side

SAC-4P-M 8MS/20,0-950/M 8FS - Bus system cable



1543391

<https://www.phoenixcontact.com/us/products/1543391>

Circuit diagram



Contact assignment of M8 plugs/sockets

SAC-4P-M 8MS/20,0-950/M 8FS - Bus system cable



1543391

<https://www.phoenixcontact.com/us/products/1543391>

Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1543391>



EAC-RoHS

Approval ID: RU D-DE.HB35.B.00387



cULus Listed

Approval ID: E221474

SAC-4P-M 8MS/20,0-950/M 8FS - Bus system cable



1543391

<https://www.phoenixcontact.com/us/products/1543391>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

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

UNSPSC

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

SAC-4P-M 8MS/20,0-950/M 8FS - Bus system cable



1543391
<https://www.phoenixcontact.com/us/products/1543391>

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%
EF3.0 Climate Change	
CO2e kg	9.422 kg CO2e

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