

# SAC-M12FR/6,0-970/R4AQ - Bus system cable



1405483

<https://www.phoenixcontact.com/us/products/1405483>

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, VARAN, 6-position, SANTOPRENE halogen-free/TPE halogen-free, black RAL 9005, shielded, Plug straight RJ45, on Socket angled M12, cable length: 6 m

As illustrated but with angled socket

## Commercial data

Item number	1405483
Packing unit	1 pc
Minimum order quantity	25 pc
Product key	AF1CMM
GTIN	4046356746830
Weight per piece (including packing)	505 g
Weight per piece (excluding packing)	505 g
Country of origin	PL

# SAC-M12FR/6,0-970/R4AQ - Bus system cable



1405483

<https://www.phoenixcontact.com/us/products/1405483>

## Technical data

### Product properties

Product type	Data cable preassembled
Number of positions	6

### Insulation characteristics

Overvoltage category	I
Degree of pollution	1

### Interfaces

Bus system	VARAN
Signal type/category	VARAN

### Signaling

Status display	no
Status display present	no

### Electrical properties

Nominal voltage $U_N$	30 V AC
	30 V DC
Nominal current $I_N$	2 A

### Material specifications

Color	traffic gray B (RAL 7043)
Flammability rating according to UL 94	V0

### Connector

#### Connection 1

Type	Plug straight RJ45
Material	CuZn
	Ni/Au
	PC
	PA

#### Connection 2

Type	Socket angled M12
Material	CuZn
	Ni/Au
	TPU GF
	TPU, hardly inflammable, self-extinguishing
	Zinc die-cast, nickel-plated
	NBR

# SAC-M12FR/6,0-970/R4AQ - Bus system cable


1405483

<https://www.phoenixcontact.com/us/products/1405483>

## Cable/line

Cable length	6 m
--------------	-----

### VARAN [970]

Dimensional drawing	
Cable weight	81 kg/km
Number of positions	6
Shielded	yes
Cable type	VARAN [970]
Conductor structure	1x2xAWG22/19 + 1x4xAWG24/19
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor structure, voltage supply	19x 0.16 mm
AWG power supply	22
Conductor cross-section	4x 0.25 mm <sup>2</sup> (Signal line) 2x 0.38 mm <sup>2</sup> (Power supply)
Wire diameter incl. insulation	1.35 mm (Signal line) 1.5 mm (Power supply)
External cable diameter	7.80 mm ±0.2 mm
Outer sheath, material	SANTOPRENE halogen-free
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material, filler	Yarn
Material wire insulation	PP
Single wire, color	brown, blue, white/orange, white/green, green, orange
Type of pair shielding	Tinned copper braided shield, 95 % covering
Overall twist	1 star quad and 2 wires with 2 fillers
Max. conductor resistance	77 Ω/m (Data cable)
Insulation resistance	5 GΩ*km (Data cable)
Wave impedance	100 Ω ±15 %
Working capacitance	50 nF (Data cable)
Nominal voltage, cable	125 V (Data cable) 48 V (Power supply)
Test voltage	2000 V (Power supply) max. 700 V AC (Data cable)
Smallest bending radius, fixed installation	≥ 93 mm

# SAC-M12FR/6,0-970/R4AQ - Bus system cable



1405483

<https://www.phoenixcontact.com/us/products/1405483>

Smallest bending radius, movable installation	≥ 93 mm
Dynamic load capacity (bending)	Max. bending cycles: 3000000, Bending radius: 93 mm, Traversing path: 2 m, Traversing rate: 1 m/s, Acceleration: 2 m/s <sup>2</sup>
Halogen-free	in accordance with DIN EN 50267-2-1
Ambient temperature (operation)	-20 °C ... 80 °C (Cable)
Ambient temperature (installation)	0 °C ... 50 °C

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 50 °C (for installation)
	-20 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 90 °C (Plug / socket)
	-20 °C ... 70 °C (RJ45)

# SAC-M12FR/6,0-970/R4AQ - Bus system cable

1405483

<https://www.phoenixcontact.com/us/products/1405483>



## Drawings

Dimensional drawing



M12 x 1 socket, angled, shielded

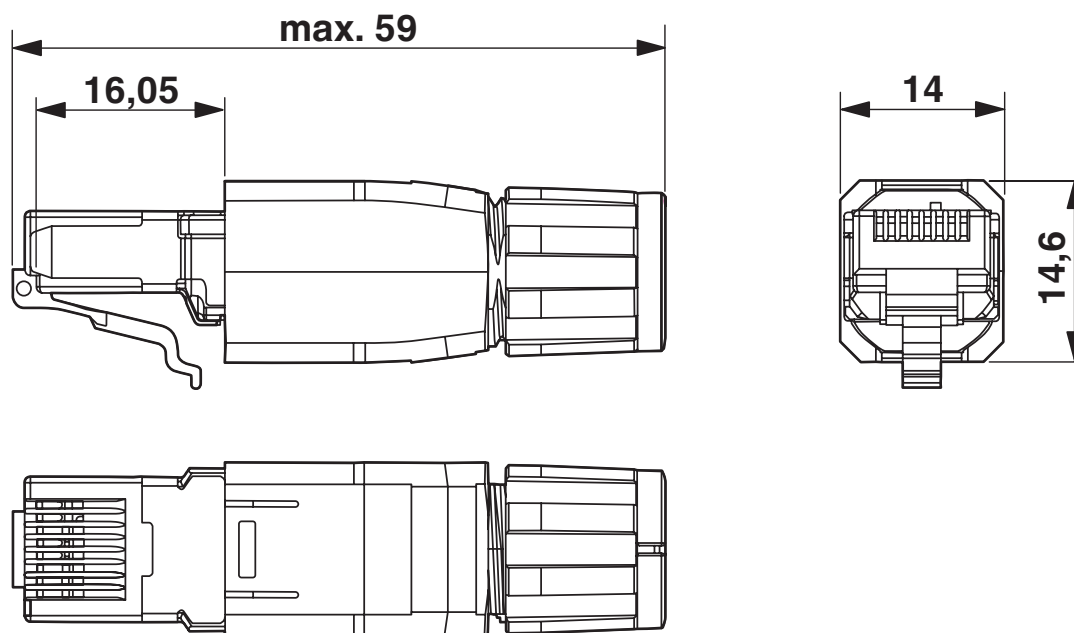
# SAC-M12FR/6,0-970/R4AQ - Bus system cable

1405483

<https://www.phoenixcontact.com/us/products/1405483>



Dimensional drawing

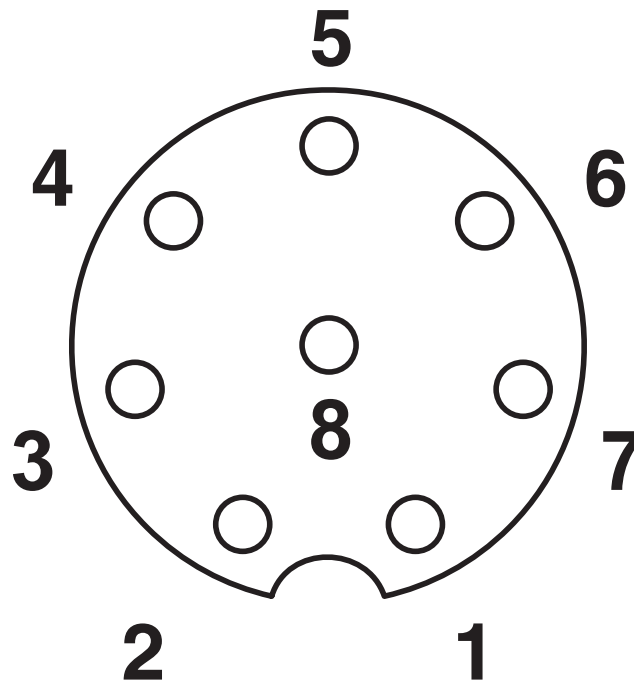


RJ45 connector, IP20

1405483

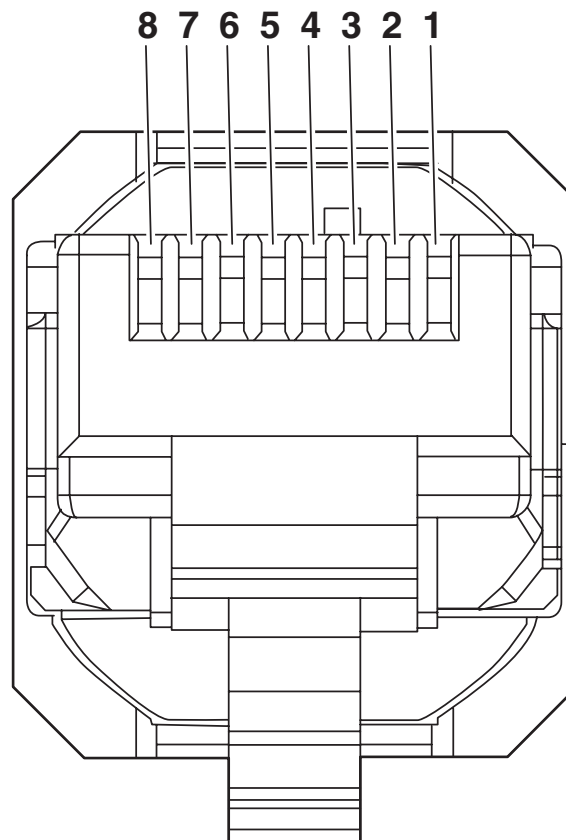
<https://www.phoenixcontact.com/us/products/1405483>

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

Schematic diagram



# SAC-M12FR/6,0-970/R4AQ - Bus system cable



1405483

<https://www.phoenixcontact.com/us/products/1405483>

## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)