

Bus system cable - SAC-4P-M12MSD/15,0-933/M12MSD - 1524404


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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Bus system cable, PROFINET CAT5 (100 Mbps), 4-position, PVC, green RAL 6018, shielded, Plug straight M12, D-coded, on Plug straight M12, D-coded, cable length: 15 m



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 021487
GTIN	4046356021487

Technical data

Dimensions

Length of cable	15 m
-----------------	------

Ambient conditions

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

General

Note	This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 10.1 Cord Sets for Balanced Cabling
Rated current at 40°C	4 A
Rated voltage	48 V AC 60 V DC
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	D - data
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
Status display	No

Bus system cable - SAC-4P-M12MSD/15,0-933/M12MSD - 1524404

Technical data

General

Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

Standards and Regulations

Flammability rating according to UL 94	V0
--	----

Cable

Cable type	PROFINET PVC stranded CAT5
Cable type (abbreviation)	93B
Cable abbreviation	2YY(ST)CY
UL AWM style	21694
Cable structure	1x4xAWG22/7; SF/TQ
Conductor cross section	4x 0.34 mm ²
AWG signal line	22
Conductor structure signal line	7x 0.25 mm
Core diameter including insulation	1.55 mm
Wire colors	White, yellow, blue, orange
Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	85 %
External sheath, color	green RAL 6018
Outer sheath thickness	approx. 0.9 mm
External cable diameter D	6.5 mm ±0.2 mm
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Cable weight	67 kg/km
Outer sheath, material	PVC
Material, inner sheath	PVC
Material conductor insulation	PE
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 500 MΩ*km
Loop resistance	≤ 120.00 Ω/km

Bus system cable - SAC-4P-M12MSD/15,0-933/M12MSD - 1524404

Technical data

Cable

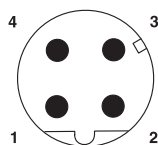
Wave impedance	100 Ω ±15 Ω (at 100 MHz)	
Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)	
	76 dB (at 4 MHz)	
	70 dB (at 10 MHz)	
	65 dB (at 16 MHz)	
	63 dB (at 20 MHz)	
	60 dB (at 31.25 MHz)	
	55 dB (at 62.5 MHz)	
	50 dB (at 100 MHz)	
	Attenuation	2.1 dB (with 1 MHz)
		4 dB (at 4 MHz)
6.3 dB (at 10 MHz)		
8 dB (at 16 MHz)		
9 dB (at 20 MHz)		
11.4 dB (at 31.25 MHz)		
16.5 dB (at 62.5 MHz)		
21.3 dB (at 100 MHz)		
Signal speed		0.66 c
Signal runtime	5.3 ns/m	
Coupling resistance	≤ 20.00 mΩ/m (at 10 MHz)	
Nominal voltage, cable	600 V	
Test voltage Core/Core	2000 V (50 Hz, 1 min.)	
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)	
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)	

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

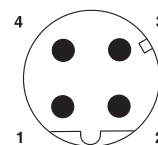
Drawings

Schematic diagram



Pin assignment M12 male connector, 4-pos., D-coded, male side

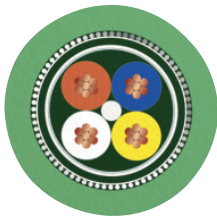
Schematic diagram



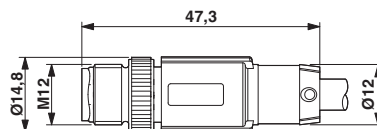
Pin assignment M12 male connector, 4-pos., D-coded, male side

Bus system cable - SAC-4P-M12MSD/15,0-933/M12MSD - 1524404

Cable cross section



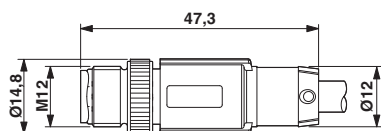
Dimensional drawing



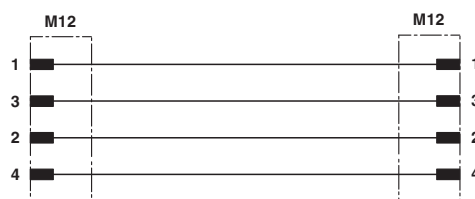
PROFINET PVC stranded CAT5 [93B]

Plug, M12 x 1, straight, shielded

Dimensional drawing



Circuit diagram



Plug, M12 x 1, straight, shielded

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>