chanhvinh.com

SAC-4P-1,0-731/FS SCO RAIL - Sensor/actuator cable

1466072

https://www.phoenixcontact.com/in/products/1466072

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.



Sensor/actuator cable, 4-position, PE-X halogen-free, black, free cable end, on Socket straight M12 SPEEDCON, coding: A, cable length: 1 m, For railway applications

Commercial data

Item number	1466072
Packing unit	1 pc
Minimum order quantity	100 pc
Note	Made to order (non-returnable)
Sales key	*****
Product key	AF1CCA
GTIN	4063151858186
Weight per piece (including packing)	58.2 g
Weight per piece (excluding packing)	58.2 g
Customs tariff number	85444290
Country of origin	PL

chanhvinh.com

SAC-4P-1,0-731/FS SCO RAIL - Sensor/actuator cable

1466072

https://www.phoenixcontact.com/in/products/1466072

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Railway applications
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	PA 6.6
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Signaling

Status display	no
Status display present	No

Connector

Connection 1

Type	free cable end

Connection 2

Type	Socket straight M12 SPEEDCON
Number of positions	4

chanhvinh.com

SAC-4P-1,0-731/FS SCO RAIL - Sensor/actuator cable

1466072

https://www.phoenixcontact.com/in/products/1466072

Locking type	SPEEDCON
Coding type	A

Cable/line

Cable length	1 m

RADOX® black [731]

Cable weight	43 kg/km
Number of positions	4
Shielded	no
Cable type	RADOX® black [731]
Conductor structure signal line	19x 0.18 mm
AWG signal line	20
Conductor cross section	4x 0.5 mm²
Wire diameter incl. insulation	1.43 mm
External cable diameter	5.00 mm ±0.2 mm
Outer sheath, material	PE-X
External sheath, color	black
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE-X
Single wire, color	white 1, white 2, white 3, white 4
Overall twist	4 wires, twisted
Max. conductor resistance	≤ 40.1 Ω/km
Nominal voltage, cable	600 V AC (Core-ground, U_0)
	1000 V AC (Core-ground, U)
	≤ 720 V AC (core-ground)
	≤ 1200 V AC (Core-ground, U_m)
	≤ 900 V DC (Core-ground, V_0)
	≤ 1500 V DC (Line-line)
Test voltage	3500 V AC (50 Hz, 5 min.)
	8400 V DC (50 Hz, 5 min.)
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	4 x D
Smallest bending radius, fixed installation	15 mm
Smallest bending radius, movable installation	20 mm
Halogen-free	in accordance with EN 50267-2-1
Flame resistance	IEC 60332-1-2
	EN 50266
	EN 50305, 9.1.2
	NF C32-070, 2.1
	NF C32-070, 2.2
	UL 1685, 12 (FT4)
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Fume corrosiveness	EN 50267-2-2

chanhvinh.com

Fume toxicity	BS 6853 B.1
	EN 50305, 9.2
Concentration of fumes	BS 6853 D.8.7
	EN 61034-2
	UL 1685, 12 (FT4)
Resistance to oil	according to IRM 902, 72 h at 100 °C
Fire protection in rail vehicles	BS 6853 (Category Ia, Ib, II)
	GM/RT 2130 (Category Ia, Ib, II)
	EN 45545 (Risk level HL1 - HL3)
	DIN 5510 (Fire protection level 1, 2, 3, 4)
	NF F16-101 (Category A1, A2, B)
	NF F16-101 (Class C/F1)
	NFPA 130
	UNI CEI 11170 (Risk level LR1 - LR4)
Other resistance	Resistance to fuels (according to IRM 903, 168 h at 70 °C)
Ambient temperature (operation)	-50 °C ... 120 °C (cable, fixed installation)
	-25 °C ... 90 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-40 °C ... 85 °C (Plug / socket)

Standards and regulations

M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Shock, vibration
Standards/specifications	EN 50155

chanhvinh.com

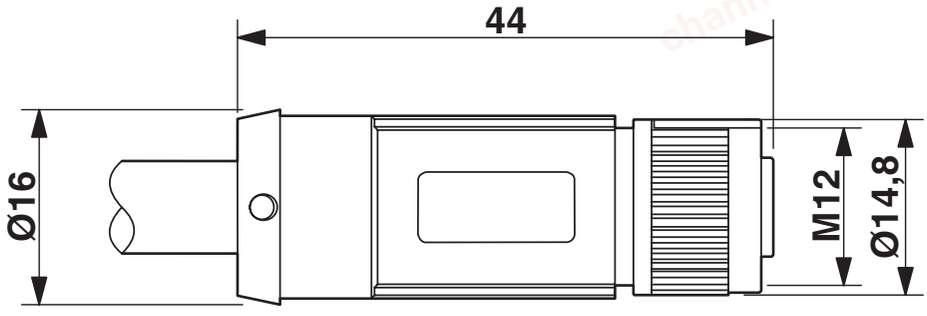
SAC-4P-1,0-731/FS SCO RAIL - Sensor/actuator cable

1466072

https://www.phoenixcontact.com/in/products/1466072

Drawings

Dimensional drawing



M12-SPEEDCON socket, straight

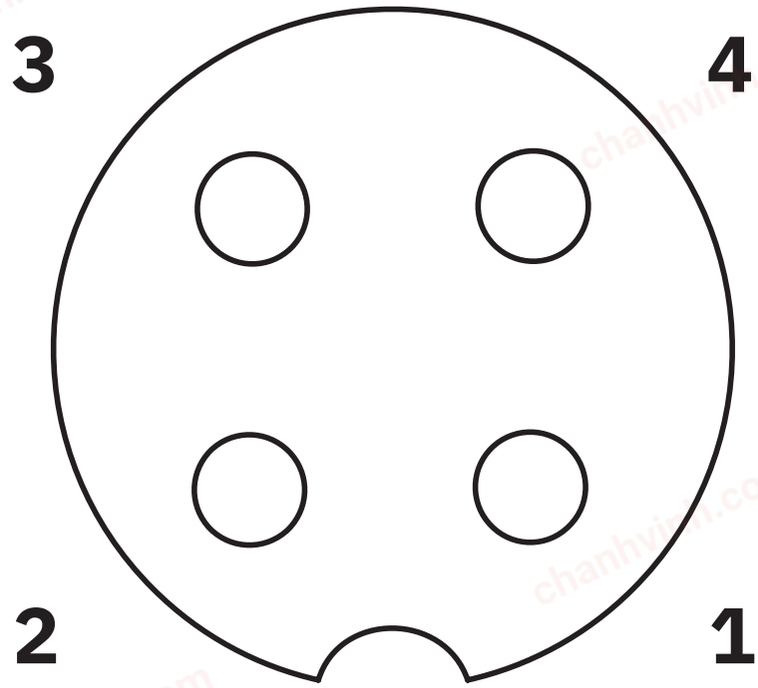
chanhvinh.com

SAC-4P-1,0-731/FS SCO RAIL - Sensor/actuator cable

1466072

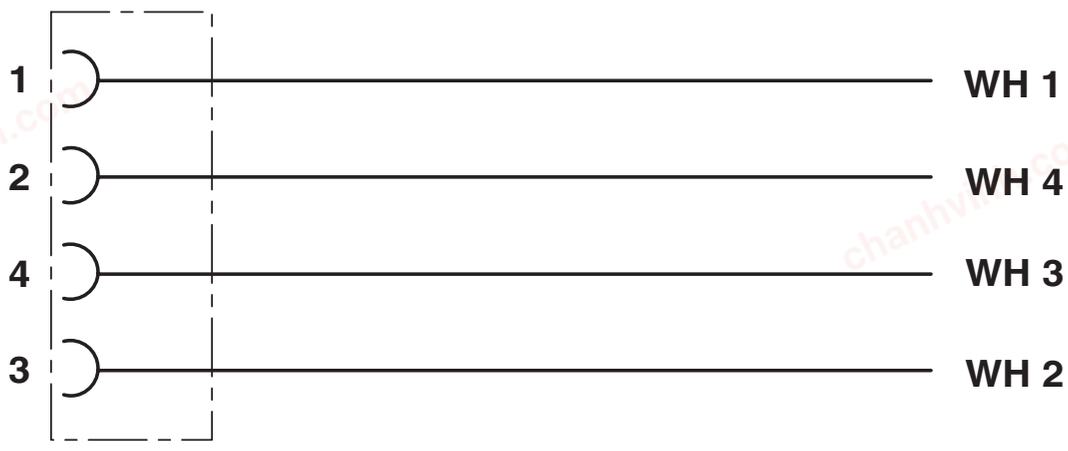
https://www.phoenixcontact.com/in/products/1466072

Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

Circuit diagram



Contact assignment of the M12 socket

chanhvinh.com

SAC-4P-1,0-731/FS SCO RAIL - Sensor/actuator cable

1466072

https://www.phoenixcontact.com/in/products/1466072

Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

ETIM

ETIM 9.0	EC001855

chanhvinh.com

SAC-4P-1,0-731/FS SCO RAIL - Sensor/actuator cable

1466072

https://www.phoenixcontact.com/in/products/1466072

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.)	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1)
SCIP	390140fd-7838-46f0-9c3f-2a00e4bcc568

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

PHOENIX CONTACT (I) Pvt. Ltd.
A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420
info@phoenixcontact.co.in