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VS-MSDS-IP20-93K-LI/2,0 - Bus system cable

1419168

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Bus system cable, Sercos CAT5 (100 Mbps), 4-position, PVC/PVC, signal red RAL 3020, Plug straight M12 SPEEDCON, coding: D / IP67, on Plug straight RJ45 / IP20, cable length: 2 m

Commercial data

Item number	1419168
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF1CJO
Product key	BF1CJO
Catalog page	Page 317 (PC-2011)
GTIN	4046356541138
Weight per piece (including packing)	167 g
Weight per piece (excluding packing)	167 g
Customs tariff number	85444210
Country of origin	PL

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Technical data

Product properties

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

Interfaces

Signal type/category	Sercos CAT5 (IEC 11801), 100 Mbps

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Transmission medium	Copper

Connector

Connection 1

Type	Plug straight M12 SPEEDCON / IP67
Number of positions	4
Locking type	SPEEDCON
Coding type	D (Data)
Handle color	black
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip body)
	Zinc die-cast, nickel-plated (Screw connection)
Degree of protection	IP67

Connection 2

Type	Plug straight RJ45 / IP20
Number of positions	4
Handle color	gray
Degree of protection	IP20

Cable/line

Cable length	2 m

Sercos III [93K]

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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
Overall twist	Star quad
Max. conductor resistance	≤ 120 Ω/km
Insulation resistance	≥ 0.5 GΩ*km
Coupling resistance	≤ 20.00 mΩ/m (at 10 Hz)
Wave impedance	100 Ω ±15 Ω (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)

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Ambient temperature (installation)	-20 °C ... 60 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 (M12 connector)
	IP20 (RJ45 connector)
Ambient temperature (operation)	-10 °C ... 60 °C (cable, fixed installation)
	-5 °C ... 50 °C (Cable, flexible installation)

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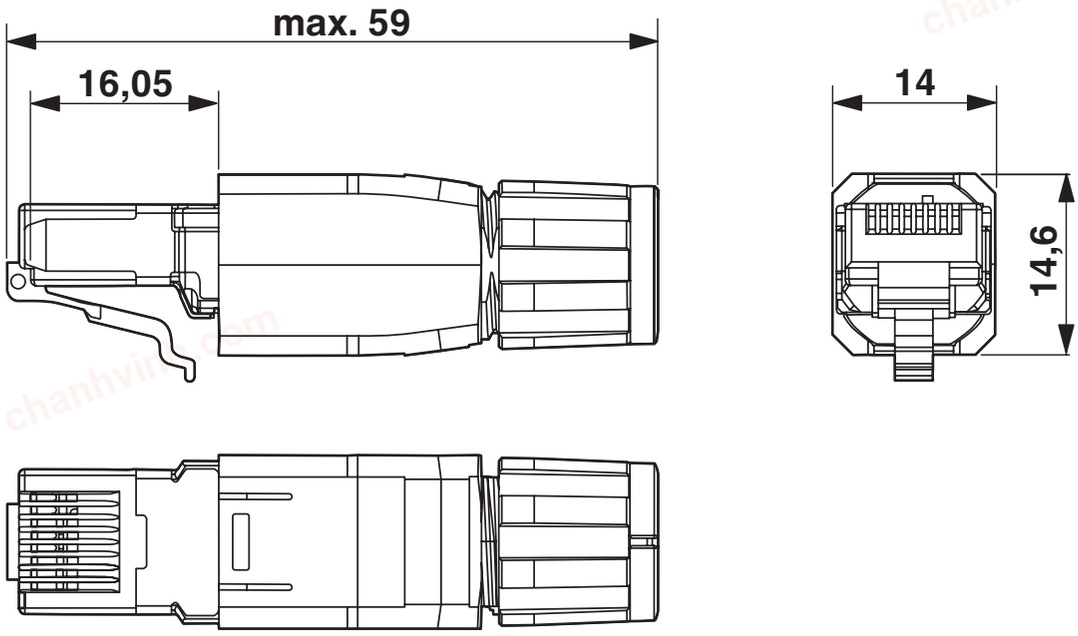
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Drawings

Dimensional drawing



RJ45 connector, IP20

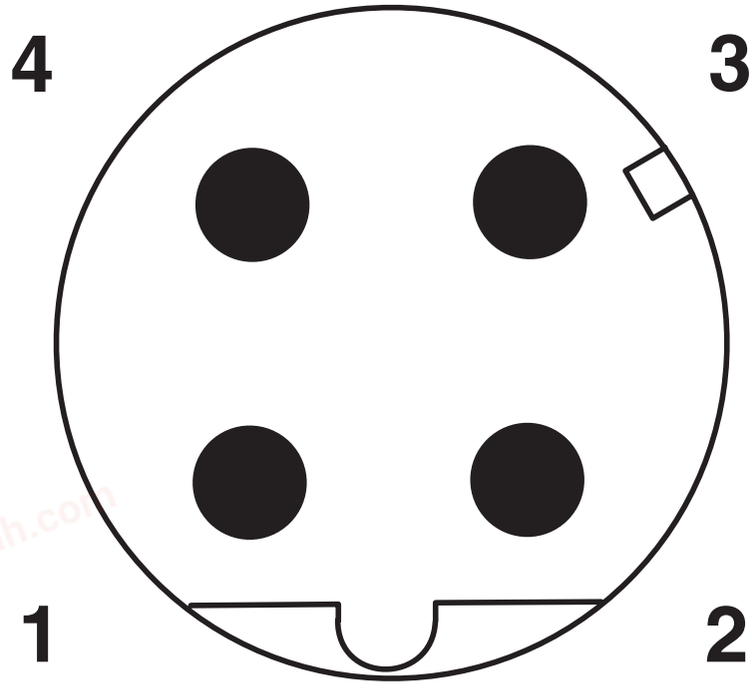
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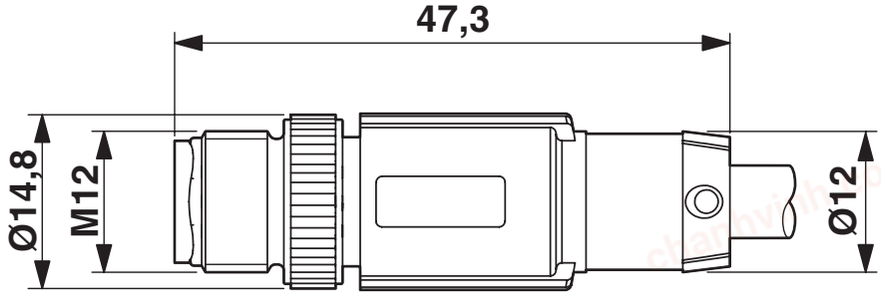
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Schematic diagram



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

Dimensional drawing



Plug, M12 x 1, straight, shielded

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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1419168

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

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Classifications

ECLASS

ECLASS-11.0	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307

ETIM

ETIM 9.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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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.)	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)(CAS: 3147-75-9)
SCIP	fe40cc93-b147-4757-b59f-1b1de2a633b7

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