

## Bus system cable - VS-MSDS-MSDS-93K-LI/2,0 - 1419169

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://download.phoenixcontact.com>)



Assembled Sercos III cable, shielded, star quad, 22 AWG stranded (7-wire), RAL 3020 (traffic red), M12 plug, SPEEDCON, 4-pos. to M12 connector, SPEEDCON, length: 2 m



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	180.0 GRM
Custom tariff number	85444210
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	2 m
-----------------	-----

#### Ambient conditions

Degree of protection	IP65
	IP67

#### General data

Rated voltage	250 V
Number of positions	4
Surge voltage category	II
Pollution degree	3

#### Characteristics head 1

Head type	Plug Straight M12
-----------	-------------------

#### Characteristics head 2

Head type	Plug Straight M12
-----------	-------------------

#### Cable

## Bus system cable - VS-MSDS-MSDS-93K-LI/2,0 - 1419169

### Technical data

#### Cable

Cable type	Sercos III
Cable type (abbreviation)	93K
UL AWM style	21694 (60°C / 600 V)
Signal type/category	Sercos III CAT5 (IEC 11801:2002), 100 Mbps
	Sercos III CAT5e (TIA 568B:2001), 100 Mbps
Cable structure	1x4xAWG22/7; SF/TQ
Conductor cross section	4x 0.34 mm <sup>2</sup>
AWG signal line	22
Conductor structure signal line	7x 0.25 mm
Core diameter including insulation	approx. 1.55 mm
Wire colors	White, yellow, blue, orange
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	Star quad
Shielding	Tinned copper braided shield
External sheath, color	signal red RAL 3020
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	68 kg/km
Outer sheath, material	PVC
Material, inner sheath	PVC
Material conductor insulation	PE
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 0.5 GΩ*km
Conductor resistance	≤ 120 Ω/km
Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Signal runtime	5.3 ns/m
Coupling resistance	≤ 20.00 mΩ/m (at 10 Hz)
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)
Ambient temperature (installation)	-20 °C ... 60 °C

# Bus system cable - VS-MSDS-MSDS-93K-LI/2,0 - 1419169

## Technical data

### Cable

Ambient temperature (storage/transport)	-50 °C ... 70 °C
---	------------------

## Classifications

### eCl@ss

eCl@ss 4.0	27060307
eCl@ss 4.1	27060307
eCl@ss 5.0	27061801
eCl@ss 5.1	27060307
eCl@ss 6.0	27279218
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218

### ETIM

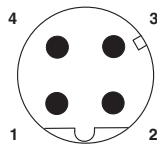
ETIM 2.0	EC000830
ETIM 3.0	EC000830
ETIM 4.0	EC002599
ETIM 5.0	EC000830

### UNSPSC

UNSPSC 6.01	26121616
UNSPSC 7.0901	26121616
UNSPSC 11	26121604
UNSPSC 12.01	26121616
UNSPSC 13.2	26121616

## Drawings

Schematic diagram



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

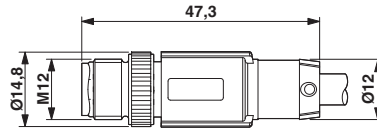
Cable cross section



Sercos III [93K]

## Bus system cable - VS-MSDS-MSDS-93K-LI/2,0 - 1419169

Dimensioned drawing



Plug, M12 x 1, straight, shielded