

## Bus system cable - VS-PPC/ME-MSDS-93K-LI/5,0 - 1419177

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Sercos III cable, shielded, star quad, AWG 22 stranded (7-wire), RAL 3020 (traffic red), RJ45 connector/IP67 push-pull, metal on M12 connector, D-coded, length: 5 m



### Key commercial data

Packing unit	1 pc
Custom tariff number	85444210
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	5 m
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#### General data

Number of positions	4
Signal type/category	Sercos III

#### Characteristics head 1

Head type	Plug Straight RJ45 Push Pull / IP67
No. of positions (pin connector pattern)	4
Material (component)	Metal

#### Characteristics head 2

Head type	Plug Straight M12
No. of positions (pin connector pattern)	4
Coding	D (Data)

#### Cable

Cable type	Sercos III
Cable type (abbreviation)	93K

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### Technical data

#### Cable

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

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## 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

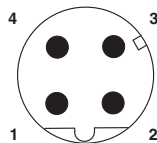
ETIM 2.0	EC000830
ETIM 3.0	EC000830
ETIM 4.0	EC002599
ETIM 5.0	EC000830

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

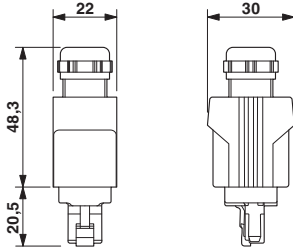
Cable cross section



Sercos III [93K]

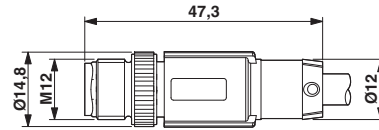
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Dimensioned drawing



Push-pull RJ45 connector IP65/67

Dimensioned drawing



M12 x 1 plug, straight