

Network cable - VS-M8MS-M8MS/93B-0,5 - 1402448

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Network cable, Ethernet (100 Mbps), PROFINET (100 Mbps), EtherCAT® (100 Mbps), 4-position, PVC/PVC, green RAL 6018, Plug straight M8 / IP67, coding: A, on Plug straight M8 / IP67, coding: A, cable length: 0.5 m



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 616058
GTIN	4046356616058
Weight per Piece (excluding packing)	60.000 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	0.5 m
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Ambient conditions

Degree of protection	IP65
	IP67

General data

Rated current at 40°C	3 A
Rated voltage	30 V AC
	30 V DC
Number of positions	4
Signal type/category	Ethernet, 100 Mbps

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Technical data

General data

	PROFINET, 100 Mbps
	EtherCAT [®] , 100 Mbps
Standards/regulations	M8 connector IEC 61076-2-104
Overvoltage category	II
Degree of pollution	3
Transmission speed	100 Mbps

Characteristics head 1

Head type	Plug straight M8 / IP67
No. of positions (pin connector pattern)	4 (4)
Coding	A (Standard)
Color	black
Material (component)	CuSn (Contact)
	Ni/Au (Contact surface)
	TPU GF (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip)
	CuZn (nickel-plated) (Screw connection)
Shielded	yes
Insulation resistance	≥ 100 MΩ
Insertion/withdrawal cycles	≥ 100
Torque	0.2 Nm
Ambient temperature (operation)	-25 °C ... 90 °C

Characteristics head 2

Head type	Plug straight M8 / IP67
No. of positions (pin connector pattern)	4 (4)
Coding	A (Standard)
Color	black
Material (component)	CuSn (Contact)
	Ni/Au (Contact surface)
	CuZn (nickel-plated) (Screw connection)
	TPU GF (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip)
Shielded	yes
Insulation resistance	≥ 100 MΩ
Insertion/withdrawal cycles	≥ 100
Torque	0.2 Nm
Ambient temperature (operation)	-25 °C ... 90 °C

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Technical data

Standards and Regulations

Standards/specifications	M8 connector IEC 61076-2-104
Flammability rating according to UL 94	HB

Cable

Cable type	PROFINET PVC stranded CAT5
Cable type (abbreviation)	93B
UL AWM style	21694
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
	EtherCAT® CAT5 (IEC 11801), 100 Mbps
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
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)

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Cable

	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)
Ambient temperature (installation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-50 °C ... 70 °C
Shielded	yes

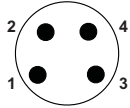
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

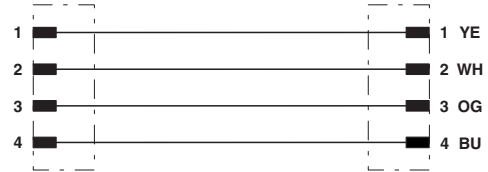
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Schematic diagram



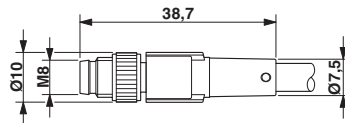
Pin assignment M8 plug, 4-pos., view male side

Circuit diagram



Contact assignment of M8 plugs

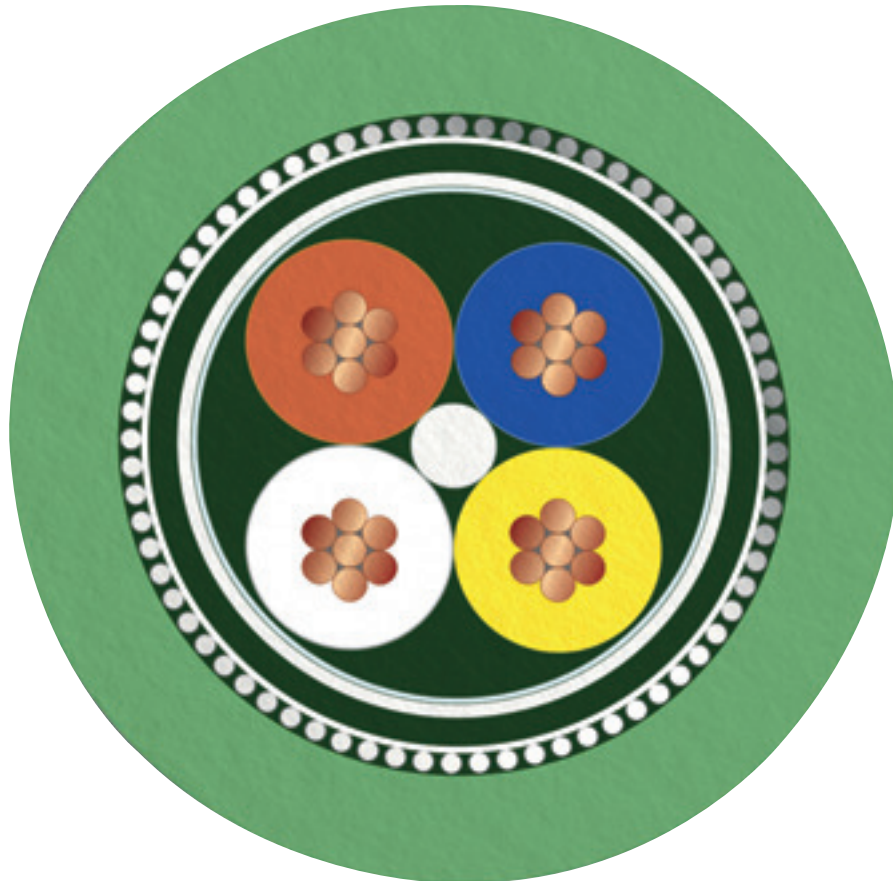
Dimensional drawing



M8 x 1 male plug, straight version

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Cable cross section



PROFINET PVC stranded CAT5 [93B]

Classifications

eCl@ss

eCl@ss 10.0.1	27060308
eCl@ss 11.0	27060307
eCl@ss 4.0	24010400
eCl@ss 4.1	24010400
eCl@ss 5.0	19030300
eCl@ss 5.1	19030300
eCl@ss 6.0	27060300
eCl@ss 7.0	27060308
eCl@ss 9.0	27060308

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Classifications

ETIM

ETIM 4.0	EC002599
ETIM 6.0	EC001262
ETIM 7.0	EC001262

UNSPSC

UNSPSC 6.01	26121609
UNSPSC 7.0901	26121609
UNSPSC 11	26121609
UNSPSC 12.01	26121609
UNSPSC 13.2	26121604
UNSPSC 18.0	26121604
UNSPSC 19.0	26121604
UNSPSC 20.0	26121604
UNSPSC 21.0	26121604

Approvals

Approvals

Approvals

EAC-RoHS

Ex Approvals

Approval details

EAC-RoHS		RU D- DE.HB35.B.00385
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