#### 2171007

# **DATA SHEET**

Valid from: 17.09.2018

IE-PNA-5-M12D-S-(L\*)-Y-2-22-1-OE



# **Product description**

Industrial Ethernet Patchcord, Profinet Type A, Cat.5, straight plug M12 on open conductor end, D-coded, PVC



This datasheet is also valid for other lengths configurations. Other lengths configurations on request

#### **Product variations**

Article number	Article description	Length (L*) [m]
2171007	IE-PNA-5-M12D-S-1-Y-2-22-1-OE	1
2171008	IE-PNA-5-M12D-S-2-Y-2-22-1-OE	2
2171009	IE-PNA-5-M12D-S-3-Y-2-22-1-OE	3
2171010	IE-PNA-5-M12D-S-5-Y-2-22-1-OE	5
2171011	IE-PNA-5-M12D-S-10-Y-2-22-1-OE	10
2171012	IE-PNA-5-M12D-S-20-Y-2-22-1-OE	20

## General properties, Patchcord

Outer diameter, cable 6.5 mm
Number of cores 4
Outer sheath PVC

Outer sheath, color green similar to RAL 6018

Mating cycles, M12 connector 100
Screening SF/UTP

### General properties, cable

LAPP-Article number of cable 2170893

LAPP-Description of cable ETHERLINE Y FC Cat.5

Conductor, outer diameter ca. 0.64 mm

Conductor, material bare copper-wire
Insulation, outer diameter ca. 1.5 mm

Insulation, material PE

Core identification code acc. to IEC 708-1: white, yellow, blue, orange

Stranding star quad (optional with central filler)

Wrapping plastic tape (overlapping)

plastic laminated aluminum foil (overlapping)

Screening on top: braid of copper wire

tinned wire, coverage ca. 85%

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## Electrical properties, cable at 20°C

 $\begin{tabular}{lll} Resistance (loop) & \le 115 \ \Omega/km \\ Insulation material, specific electrical resistance & \ge 500 \ M\Omega*km \\ Characteristic impedance (1 \ MHz to 100 \ MHz) & 100 \ \Omega \pm 15 \ \Omega \\ \end{tabular}$ 

UL-Rating 600 V
Signal propagation time < 5.3 ns/m
Test voltage (rms 50 Hz, 1 min.), core-core 2000 V
Test voltage (rms 50 Hz, 1 min.), core-screening 2000 V

# Mechanical and thermal properties, cable

Minimum bending radius, during laying 15 x cable diameter Minimum bending radius, fixed installation 10 x cable diameter Permissible temperature range, during laying -20  $^{\circ}$ C to +60  $^{\circ}$ C Permissible temperature range, fixed installation -40  $^{\circ}$ C to +80  $^{\circ}$ C

Sunlight resistance sunlight resistant acc. to UL 1581 Sec. 1200

Flame propagation flame retardant acc. to UL 1685 (CSA FT 4)

Dangerous and forbidden substance acc. to RoHS

General requirements directive (2002/95/EG) are not allowed to the

manufacturing

## General properties, M12 connector

Coding

Protection degree IP67/IP69 locked connector

Rated voltage max. 250 V Rated current at 40 °C 4 A

Ambient temperature -30 °C to +90 °C

 $\begin{array}{ll} \mbox{Insulation resistance} & \geq 10^8 \, \Omega \\ \mbox{Locking nut with vibration protection} & \mbox{Yes} \\ \mbox{Tightening torque} & \mbox{1.0 Nm} \end{array}$ 

### Materials, M12 connector

Contacts, base material

Contacts, surface

Grip body

Locking nut, base material

CuZn

CuZn

CuZn

Ni

#### **Standards**

Product standard, M12 connector DIN EN 61076-2-101

### **Approvals**

UL-listed, E-File E249137

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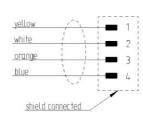
# IE-PNA-5-M12D-S-(L\*)-Y-2-22-1-OE

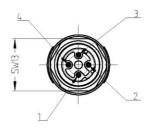


# **Drawings**









# **Application range**

Automation, industrial machinery and plant engineering

### Note

Photographs are not true to scale and do not represent detailed images of the respective products.

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