2171272

DATA SHEET

Valid from: 18.09.2018

IE-PNC-5-M12D-A-(L*)-P-2-22-FD-RJ45



Product description

Industrial Ethernet Patchcord, Profinet Type C, Cat.5, angled plug M12 (D-coded) on straight plug RJ45, PUR, for drag chain



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

Product variations

Article number	Article description	Length (L*) [m]
2171272	IE-PNC-5-M12D-A-1-P-2-22-FD-RJ45	1
2171273	IE-PNC-5-M12D-A-2-P-2-22-FD-RJ45	2
2171274	IE-PNC-5-M12D-A-3-P-2-22-FD-RJ45	3
2171275	IE-PNC-5-M12D-A-5-P-2-22-FD-RJ45	5
2171276	IE-PNC-5-M12D-A-10-P-2-22-FD-RJ45	10
2171277	IE-PNC-5-M12D-A-20-P-2-22-FD-RJ45	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 connector100Mating cycles, RJ45 connector750ScreeningSF/UTP

General properties, cable

LAPP-Article number of cable 2170894

LAPP-Description of cable ETHERLINE FD P FC Cat. 5

Conductor, outer diameter ca. 0.75 mm

Conductor, material tinned copper, fine-wire stranded

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 Wrapping plastic tape

plastic laminated aluminum foil

Screening on top: braid of copper wire

tinned wire, coverage ca. 85%

Creator: MANA2/PDP	Document: DB2171272EN	Page 1 of 3
Released: IVSE1/PDP	Version: 03	

2171272

DATA SHEET

Valid from: 18.09.2018

IE-PNC-5-M12D-A-(L*)-P-2-22-FD-RJ45



Electrical properties, cable at 20°C

$$\label{eq:continuous_problem} \begin{split} &\text{Resistance (loop)} &\leq 120 \ \Omega/\text{km} \\ &\text{Insulation material, specific electrical resistance} &\geq 0.5 \ G\Omega^*\text{km} \\ &\text{Characteristic impedance (1 MHz to 100 MHz)} & 100 \ \Omega \pm 15 \ \Omega \\ &\text{Signal propagation time} &< 5.3 \ \text{ns/m} \\ &\text{Test voltage (rms 50 Hz, 1 min.), core-core} & 700 \ V \\ &\text{Test voltage (rms 50 Hz, 1 min.), core-screening} & 700 \ V \\ \end{split}$$

Mechanical and thermal properties, cable

 $\begin{array}{lll} \mbox{Minimum bending radius, during laying} & 8 \times \mbox{cable diameter} \\ \mbox{Minimum bending radius, fixed installation} & 5 \times \mbox{cable diameter} \\ \mbox{Permissible temperature range, during laying} & -20 \ ^{\circ}\mbox{C to } +60 \ ^{\circ}\mbox{C} \\ \mbox{Permissible temperature range, fixed installation} & -30 \ ^{\circ}\mbox{C to } +70 \ ^{\circ}\mbox{C} \\ \end{array}$

Sunlight resistance sunlight resistant acc. to UL 1581 Sec. 1200
Flame propagation flame retardant acc. to UL 1581 (VW-1)
Halogen free halogen free acc. to VDE 0472-815

Dangerous and forbidden substance acc. to RoHS directive (2002/95/EG) are not allowed to the

manufacturing

General properties, M12 connector

General requirements

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 CuZn
Contacts, surface Au
Grip body TPU
Locking nut, base material CuZn

General properties, RJ45 connector

Protection degree IP20
Rated voltage max. 50 V
Rated current at 40 °C 1 A

Ambient temperature -40 °C to +70 °C

Insulation resistance $\geq 10^8 \Omega$

Materials, RJ45 connector

Contacts, base material CuZn

Creator: MANA2/PDP	Document: DB2171272EN	Dage 2 of 2
Released: IVSE1/PDP	Version: 03	Page 2 of 3

2171272

DATA SHEET

Valid from: 18.09.2018

IE-PNC-5-M12D-A-(L*)-P-2-22-FD-RJ45

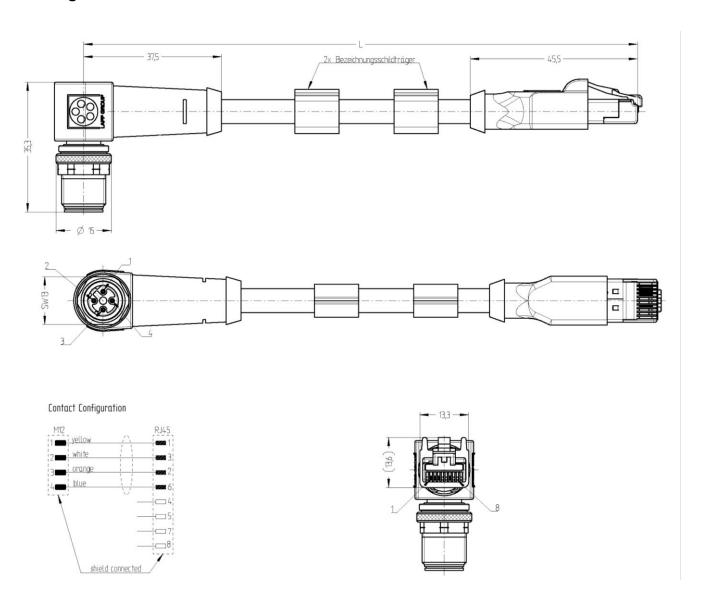


Contacts, surface Grip body Au TPU

Standards

Product standard, M12 connector Product standard, RJ45 connector DIN EN 61076-2-101 DIN EN 60603-7-51

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.

Creator: MANA2/PDP	Document: DB2171272EN	Page 3 of 3
Released: IVSE1/PDP	Version: 03	