



Data Sheet	2171049
IE-PNC-5-M12D-S-...-P-2-22-7-M12D-S	Valid from: 13.03.2013

Description

Patch cord for Industrial Ethernet, PROFINET Type C,
2pair, AWG22/7 (stranded wire), Cat.5 acc. to EN 50288-2-1,
PUR, straight M12 male D-coded on straight M12 male D-coded,
Length (L*) see table (see sketch)

Article number	Article description	Length (L*)
2171049	IE-PNC-5-M12D-S-1-P-2-22-FD-M12D-S	1
2171050	IE-PNC-5-M12D-S-2-P-2-22-FD-M12D-S	2
2171051	IE-PNC-5-M12D-S-3-P-2-22-FD-M12D-S	3
2171052	IE-PNC-5-M12D-S-5-P-2-22-FD-M12D-S	5
2171053	IE-PNC-5-M12D-S-10-P-2-22-FD-M12D-S	10
2171054	IE-PNC-5-M12D-S-20-P-2-22-FD-M12D-S	20

Mechanical characteristics Assembling

Number of contacts	4
Number of connectors	2
Shielding	Yes
Mating cycles	≤ 100
Cable outlet	straight

General characteristics cable

design

Article number of cable	2170894
conductor	bare copper, fine-wire stranded, 7 x 0.25 mm Ø
Insulation	PE, ca. 1,5 mm outer Ø
Core identification code	acc. to IEC 708-1: white, yellow, blue, orange
Stranding	star quad (optional with central filler)
Wrapping	Plastic tape (overlapping)
Inner sheath	halogen free compound FRNC, ca. Ø 3,9 mm
Screening	plastic laminated aluminum foil
	on top:
	braid of copper wire, tinned wire 0,10 mm – 0,15 mm,
	coverage 85 % ±5 %
Outer sheath	PUR halogen free and flame retardant compound,
	green RAL 6018, sheaththickness
	ca. 0.9 mm, outer Ø: ca. 6.5 mm

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Electrical characteristics at 20° C

Resistance (loop)	max. 120 Ω /km
Insulation resistance	min. 500 M Ω xkm
Characteristic impedance	100 Ω $\pm$ 15 Ω (1MHz up to 100 MHz)
UL-rating	600 V
Signal propagation time	<5.3 ns/m
Mutual capacitance	Nom. 52 nF/km (800 MHz)
Velocity of propagation	Ca. 0.67 c
Delay difference	<30 ns/100m
Test voltage (rms 50 Hz, 1 minute)	core/core: 700 V core/screening: 700 V

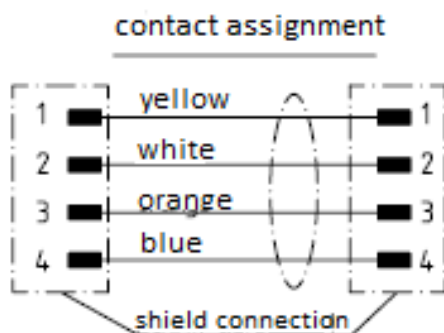
Mechanical and thermal properties

Minimum bending radius cable	8 x cable $\varnothing$
Permissible temperature range laying:	during laying: -20° C up to +60° C fixed installation: -30° C up to +70° C
Flame propagation	flame retardant acc. To UL 1581 (VW-1)
Halogen free	halogen free acc. to VDE 0472-815
General requirements	Patch cords acc. to RoHS directive 2002/95/EG. (RoHS relevant substances are not allowed and restricted for use)

General characteristics connector

standards	M12-connector acc. to IEC 61076-2-101
coding	D - Standard
Protection class	IP67 after assembly
Status display	no

Technical drawings



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