## Product description

Industrial Ethernet Patchcord, Profinet Type A, Cat.5, straight plug RJ45 on straight plug RJ45, PVC

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

## Product variations

| Article number | Article description | Length (L*) [m] |
|---|---|---|
| 2171179 | IE-PNA-5-RJ45-1-Y-2-22-1-RJ45 | 1 |
| 2171180 | IE-PNA-5-RJ45-2-Y-2-22-1-RJ45 | 2 |
| 2171181 | IE-PNA-5-RJ45-3-Y-2-22-1-RJ45 | 3 |
| 2171182 | IE-PNA-5-RJ45-5-Y-2-22-1-RJ45 | 5 |
| 2171183 | IE-PNA-5-RJ45-10-Y-2-22-1-RJ45 | 10 |
| 2171184 | IE-PNA-5-RJ45-20-Y-2-22-1-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 |

## 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) |
| Screening | plastic laminated aluminum foil (overlapping)<br>on top: braid of copper wire<br>tinned wire, coverage ca. 85% |



We reserve all rights according to DIN ISO 16016.

## Electrical properties, cable at 20°C

| | |
| --- | --- |
| Resistance (loop) | ≤ 115 Ω/km |
| Insulation material, specific electrical resistance | ≥ 500 MΩ*km |
| Characteristic impedance (1 MHz to 100 MHz) | 100 Ω ± 15 Ω |
| 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 ˚C to +60 ˚C |
| Permissible temperature range, fixed installation | -40 ˚C to +80 ˚C |
| Sunlight resistance | sunlight resistant acc. to UL 1581 Sec. 1200 |
| Flame propagation | flame retardant acc. to UL 1685 (CSA FT 4) |
| General requirements | Dangerous and forbidden substance acc. to RoHS directive (2002/95/EG) are not allowed to the manufacturing |

## 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 | ≥ $10^8$ Ω |

## Materials, RJ45 connector

| | |
| --- | --- |
| Contacts, base material | CuZn |
| Contacts, surface | Au |
| Grip body | TPU |

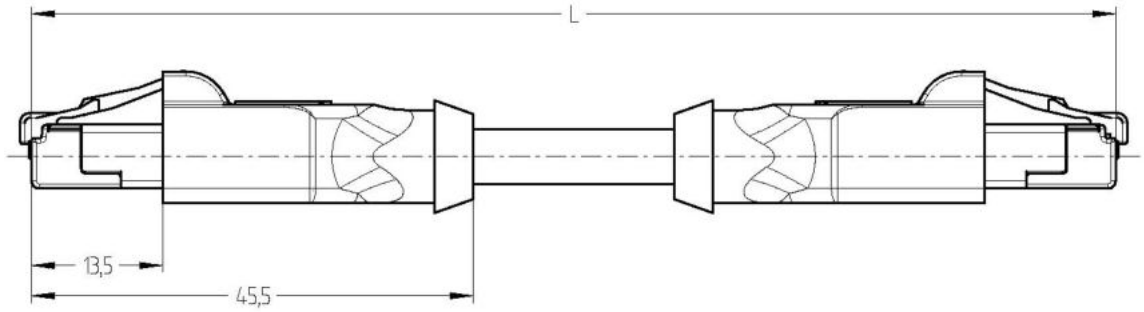
## Standards

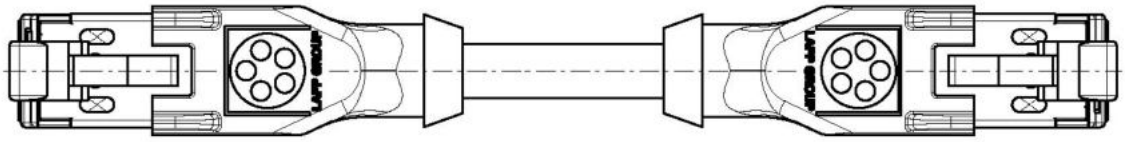
| | |
| --- | --- |
| Product standard, RJ45 connector | DIN EN 60603-7-51 |



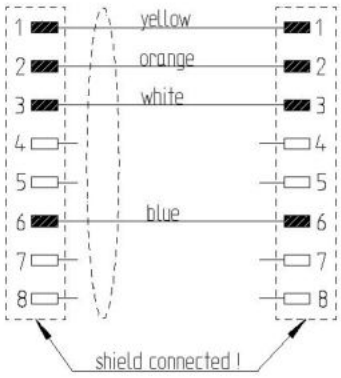
We reserve all rights according to DIN ISO 16016.

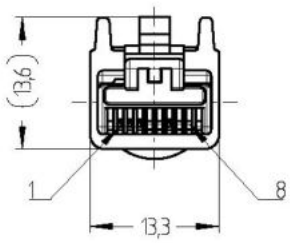
## Drawings



Contact Configuration




## 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.



We reserve all rights according to DIN ISO 16016.