

Basic features

Application	Ethernet, CAT 6A
Approval/Conformity	CE cULus WEEE

Electrical connection

Bending radius min., fixed cable	4 x D
Bending radius min., flexible cable	8 x D
Cable	PUR Shielded Green, 20 m
Cable diameter D	6.20 mm ±0.20 mm
Cable, bending cycles min.	1 mil.
Cable, note	Ethernet, CAT 7 by IEC 60332-1
Conductor cross-section	26 AWG
Connection 1	M12x1-Male, straight, 8-pin, X-coded
Connection 2	M12x1-Male, straight, 8-pin, X-coded
Number of conductors	8
System	Molded/Molded
Torsion stress, cable	1 million cycles (+/-180°/m)

Electrical data

Conductor construction	4x2 twisted-pair
Conductor resistance	≤ 145 Ohm/km at 20 °C
Coupling resistance max.	1Ω /m at 100 MHz
Isolation resistance	≥ 150 MOhm x km at 20 °C
Operating capacitance	nom. 46nF/km at 1kHz
Operating voltage Ub	60 VDC / 50 VAC
Rated current (40 °C)	0.5 A
Surge impedance	100 Ohm ±22 Ohm at 100 MHz
Transfer rate	10 Gbit/s

Environmental conditions

Cable temperature, fixed routing	-40...80 °C
Cable temperature, flexible routing	-30...70 °C
IP rating	IP67/IP67

Material

Cable jacket material, note	Shielded
Cable jacket, material	PUR
Cable shield	Aluminum foil and copper braid
Material contact carrier	PA/PA
Material contacts	Brass/Brass
Material cover nut	Brass nickel-plated/Brass nickel-plated
Material grip	PUR/PUR

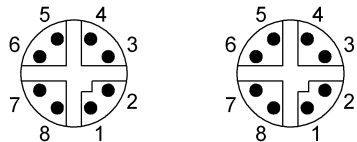
Mechanical data

Acceleration max., drag chain	4 m/s ²
Cable jacket, color	Green
Cable length L	20.00 m
Tightening torque pigtail	0.6 Nm/0.6 Nm
Traverse speed max., drag chain	4 m/s

Remarks

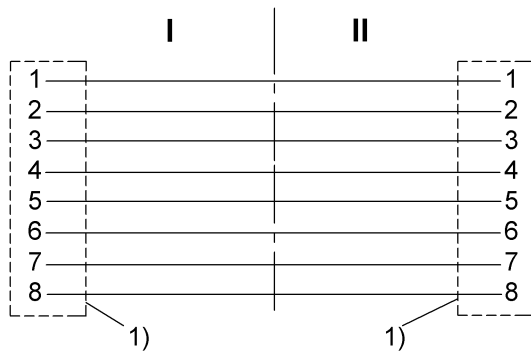
Flame resistance acc. to IEC 60332-1
 Halogen-free per IEC 60754
 Enclosure rating per IEC 60529, only in screwed state with the associated mating piece.
 360° shield on cover nut

Connector Drawings



- | | |
|---------------|---------------|
| I | II |
| PIN 1: white | PIN 1: white |
| PIN 2: orange | PIN 2: orange |
| PIN 3: white | PIN 3: white |
| PIN 4: green | PIN 4: green |
| PIN 5: white | PIN 5: white |
| PIN 6: brown | PIN 6: brown |
| PIN 7: white | PIN 7: white |
| PIN 8: blue | PIN 8: blue |

Wiring Diagrams (Schematic)



1) Shield on cover nut