lumbergautomation
A BELDEN BRAND

Product: RKHS 8X-RJ45 G-S478

Gigabit Ethernet Cat7 data double-ended cord set, M12 X-code female receptacle to male straight RJ45, shielded, 50 V AC / 60 V DC, 0.5 A; TPE Teal cable, 8-wires, 4x2x0.14 mm²

Product Description

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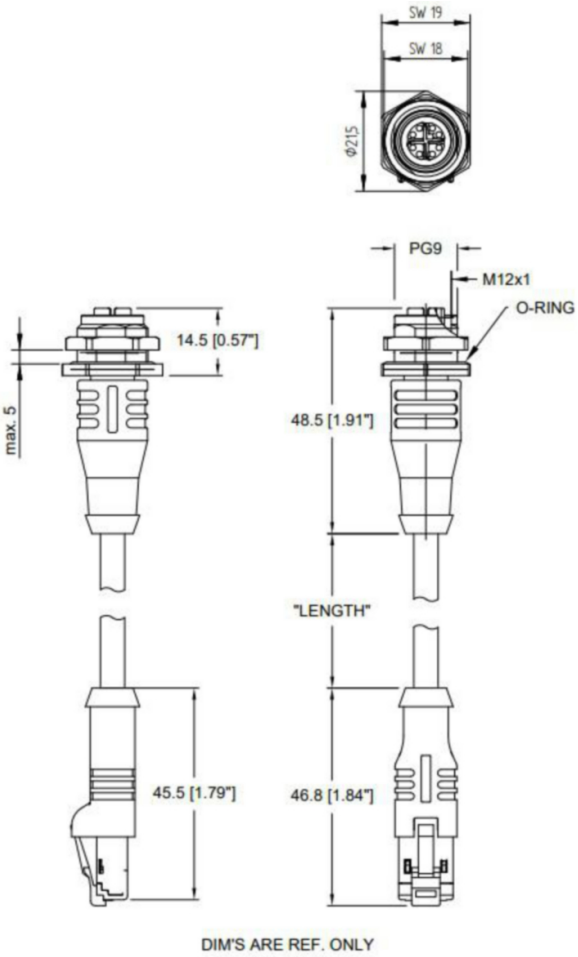
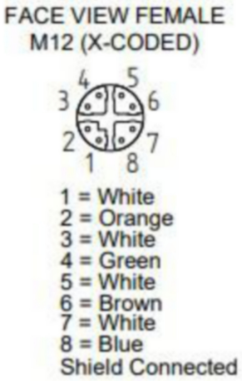
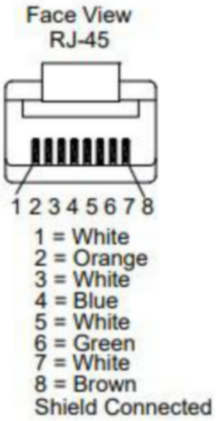
Technical Drawing







Technical Specifications

Face View Side 1

Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
white	orange	white	green	white	brown	white	blue

Face View Side 2

Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8

white	orange	white	blue	white	green	white	brown

Product Description

Product Family:	Data Connectors
Brand:	Lumberg Automation
Connector Type:	Cordset, double ended
Shielding Type:	Shielded
Voltage Rating:	60 V
Rated Impulse Voltage:	0.8 kV
Current Rating:	0.5 A
Data Transmission Type:	Gigabit Ethernet Cat7
Data Transmission Rate:	10 Gbit/s

Technical Data Side 1

Side 1 Product Sub Family:	M12 Overmolded Receptacle
Connector Design:	Straight
Attachment Type:	Coupling nut
Number of Pins:	8
Coding, Side 1:	X
Side 1 Contact Resistance:	≤ 10 mOhm
Insulation Resistance:	> 10^9 Ohm
Mating Cycles:	≤ 100
Ambient Temperature (Operation)*:	- 40 °C - + 70 °C
Protection Degree / IP Rating**:	IP65, IP67
Side 1 Design Standard:	IEC 61076-2-109
Side 1 Pollution Degree:	3 acc. to DIN EN 60664-1 (VDE 0110-1)
Side 1 Contact Plating:	Cu/Au
Contact Bearer Material:	PA
Contact Bearer Color:	Black
Flammability Class (Contact Bearer):	UL 94 V-0
Molded Body Material:	TPU
Molded Body Color:	Black
Attachment Material:	CuZn
Attachment Plating:	Nickel-plated
Shielding Material:	GD-Zn, nickel-plated
Fastening Torque (Attachment):	M 12x1: (50-60) Ncm, hand-tight

Cable Data

Cable Number:	S478
Conductor Size:	26 AWG
Number of Wires:	8
Conductor Material:	Cu
Cable Jacket Material:	TPE
Cable Jacket Color:	Teal
Cable Diameter D:	ø 6.80 ± 0.20 mm
Insulated Wire Diameter:	ø 1.05 ± 0.05 mm
Overall Shield (Cable):	Cu-ETP1 tinned
Ambient Temperature (Fixed Installation):	- 40 °C - + 70 °C
Ambient Temperature (Flex Installation):	- 40 °C - + 70 °C
Flammability Class (Cable Jacket):	IEC 60332-1-2
Core Colors:	white & blue, white & orange, white & green, white & brown

Technical Data Side 2

Side 2 Product Sub Family:	RJ45
Connector Design, Side 2:	Straight
Attachment Type, Side 2:	RJ45
Number of Pins, Side 2:	8

Coding, Side 2:	RJ45
Contact Resistance, Side 2:	≤ 20 mOhm
Insulation Resistance, Side 2:	> 10^9 Ohm
Mating Cycles, Side 2:	≤ 750
Ambient Temperature (Operation), Side 2*:	- 40 °C - + 70 °C
Protection Degree / IP Rating, Side 2**:	IP20
Design Standard, Side 2:	IEC 60603-7
Pollution Degree, Side 2:	3 acc. to DIN EN 60664-1 (VDE 0110-1)
Overvoltage Category, Side 2:	I acc. to DIN EN 60664-1 (VDE 0110-1)
Contact Plating, Side 2:	Cu/Au
Contact Bearer Material, Side 2:	PC
Contact Bearer Color, Side 2:	Clear
Molded Body Material, Side 2:	TPE
Molded Body Color, Side 2:	Black
Attachment Material, Side 2:	CuZn
Attachment Plating, Side 2:	Nickel-plated
Shielding Material, Side 2:	CuZn, tin-plated

Safety & Environmental Compliance

RoHS Compliant:	yes

Resistances

Rail:	No
Oil Resistance:	IEC 60811-2-1

Notes

Note Derating:	Notice derating

History

Update and Revision:	Revision Number: 0.16 Revision Date: 01-21-2026

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