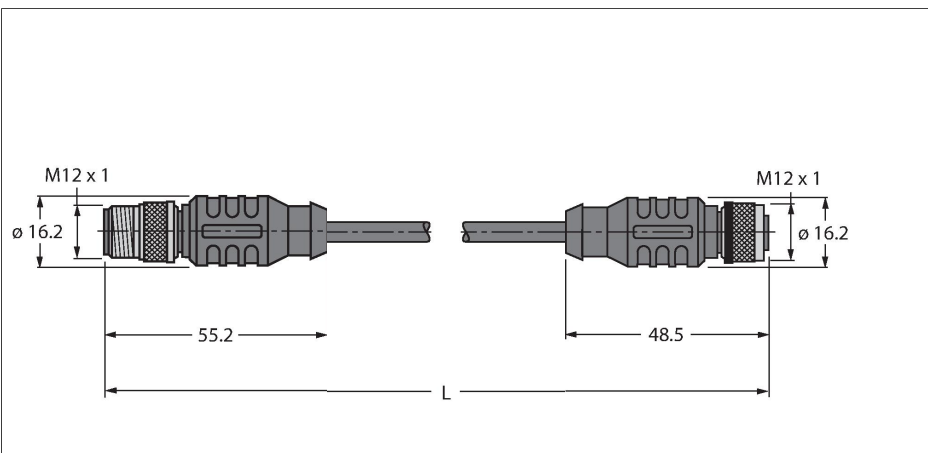


RSS-RKS-8442-3M

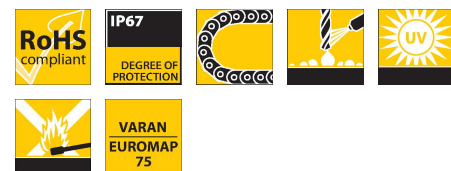
Power with Ethernet – Connection Cable



Technical data

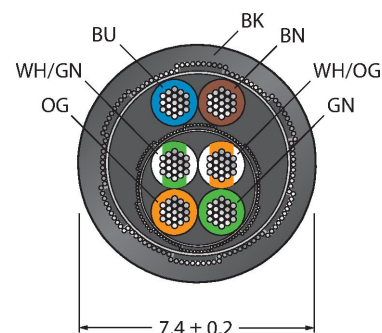
Type	RSS-RKS-8442-3M
ID	6932441
Remark to product	Characteristic Impedance: 100 Ω (±15 %); Insulation Resistance: 5 GΩ × km; Propagation Delay @100 MHz: 4.7 ns/m; Mutual Capacitance @1 kHz: 50 nF/km
Connector A	Male, M12 × 1, Straight, A-coded
Number of pins	8
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Connector body	Plastic, TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Tightening torque (range)	0.8 ... 1 Nm (observe max. torque of mating connector!)
Mechanical lifespan	> 100 Mating cycles
Pollution degree	3
Protection class	IP67, Only in screwed condition
Connector B	Female, M12 × 1, Straight, A-coded
Number of Pins	8
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Connector body	Plastic, TPU, Black
Coupling nut/retaining screw	Brass, CuZn, Nickel-plated
Seal	Plastic, FPM/FKM
Tightening torque	0.8 ... 1 Nm (observe max. torque of mating connector!)
Mechanical life	> 100 Mating cycles
Pollution degree	3

Features

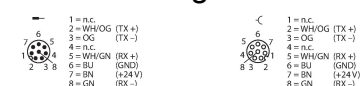


- Jacket material: TPU, color: black
- Transmission properties: CAT5e according to TIA 568B:2001
- Power pair: 2 x 22 AWG 48 x 0.1
- Data pair: 4 x 24 AWG 32 x 0.1
- Shield: tinned copper braid
- Jacket diameter: 7.4 mm
- Suitable for drag chain use
- Oil- and UV-resistant
- Flame-retardant acc. to FT2 as of UL 1581
- Free from halogen, PVC and silicone
- Cable UL-approved acc. to AWM Style 20549
- Cable according to EUROMAP 75 and VARAN
- RoHS-compliant
- Protection class IP67
- M12 female, straight, 8-pin
- M12 male, straight, 8-pin
- Cable length: 3.0 m

Cable Cross-Section



Contact assignment



Technical data

Protection class	IP67, Only when screwed together
Cable	
Network protocol	Ethernet
Cable diameter	Ø 7.4 mm ±0.20
Cable length	3 m
Cable jacket	TPU, Black
Shielding	Aluminum foil, tinned copper wire
Core insulation	PP
Data cable cores	
Core cross-section	4 x 0.2 mm ²
Arrangement of strands	32 x 0.1 mm
Power cable cores	
Core cross-section	2x 0.32 mm ²
Litz wire arrangement	48 x0.1 mm
Core colors	WH/OG, OG, WH/GN, GN
Core colors	BU, BN
Electrical properties at +20 °C	
Rated voltage	48 V
Test voltage	2000 V
Current	2 A
Insulation resistance	> 100 MΩ/km
forward resistance	≤ 5 mΩ
Mechanical and chemical properties	
Bending radius (stationary installation)	≥ 5 x Ø
Bending radius (flexible use)	≥ 10 x Ø
Bending cycles	≥ 3 million
Ambient temperature (fixed)	-20...+80 °C
Ambient temperature (drag chain)	0...+50 °C
Other Featues	
Qualified for drag chain use	yes
Halogen-free	yes
Silicone-free	yes
PVC-free	yes
UV resistance	yes
Oil-resistant	yes
Flame-retardant	yes
Approvals	Cable UL Style 20549

Circuit Diagram

