



X67 POWERLINK/Ethernet cable

Length	Short description, model number	
	Attachment cables - RJ45 to M12	Connection cables - M12 to M12
1 m	X67CA0E41.0010	X67CA0E61.0010
2 m	X67CA0E41.0020	X67CA0E61.0020
3 m	X67CA0E41.0030	
5 m	X67CA0E41.0050	X67CA0E61.0050
10 m		X67CA0E61.0100
15 m	X67CA0E41.0150 X67CA3E41.0150	X67CA0E61.0150
20 m		X67CA0E61.0200
50 m	X67CA0E41.0500	

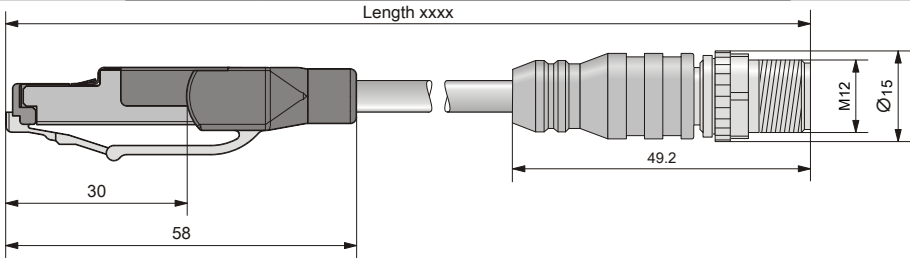
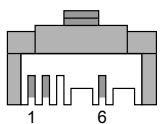
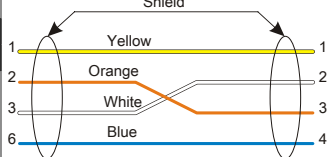
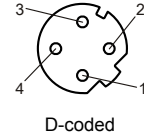



Length	Tolerances for cable lengths
0 to <10 m	+10 cm
10 m to <50 m	+2% of the length

1 X67CA0E41.xxxx and X67CA3E41.xxxx

This cable is offered in 2 variants:

- X67CA0Exx: Standard variant
- X67CA3Exx: Can be used in cable drag chains

Dimensions				
				
Pinout				
Male RJ45 connector	Pin	Description	Diagram	M12 connector
	1 - 1	TXD		 D-coded
	2 - 3	RXD		
	3 - 2	TXD\		
	6 - 4	RXD\		

1.1 Technical data

Model number	X67CA0E41.0010	X67CA0E41.0020	X67CA0E41.0030	X67CA0E41.0050
Short description				
Accessories	POWERLINK/Ethernet connection cable, RJ45 to M12, 4-pin, straight, 1 m	POWERLINK/Ethernet connection cable, RJ45 to M12, 4-pin, straight, 2 m	POWERLINK/Ethernet connection cable, RJ45 to M12, 4-pin, straight, 3 m	POWERLINK/Ethernet connection cable, RJ45 to M12, 4-pin, straight, 5 m
General information				
Note	Halogen-free			
Durability	Flame-retardant per IEC 60332-1-2			
Type	Connection cables			
Cable cross section				
AWG	4x 22 AWG			
mm ²	4x 0.34 mm ²			
Cable construction				
Complete shielding	Overlapping aluminum-clad foil, tinned copper braiding, 85% coverage			
Outer jacket				
Material	Polyurethane (PUR) GN			
Color	Green			
Labeling	B&R X67CA0E41.0010	B&R X67CA0E41.0020	B&R X67CA0E41.0030	B&R X67CA0E41.0050
Lines				
Wire insulation	Polyethylene (PE)			
Wire colors	White, yellow, blue, orange			
Type	Tinned copper stranded wire Fine stranded wire (7x 0.25 mm / 7x 30 AWG)			
Stranding	4-wire twisted pair			
Electrical characteristics				
Conductor resistance	≤120 Ω/km at 20°C			
Transfer properties	Category 5 / Class D up to 100 MHz in accordance with ISO/IEC 11801 (EN 50173-1), ISO/IEC 24702 (EN 50173-3)			
Transfer rate	10/100 Mbit/s			
Insulation resistance	≥500 MΩ/km at 20°C			
Operating conditions				
Degree of protection per EN 60529				
Cables	IP67			
Male M12 connector	IP67, only when screwed in			
RJ45 connector	IP20, only when properly connected			
Environmental conditions				
Temperature				
Transport	-40 to 70°C			
Fixed installation	-25 to 60°C			
Flexible installation	-20 to 60°C			
Mechanical properties				
Dimensions				
Length	1 m	2 m	3 m	5 m
Diameter	6.5 mm ±0.2 mm			
Bend radius				
After installation	≥7x outer diameter			
During installation	≥3x outer diameter			
Weight	0.064 kg/m			

Table 1: X67CA0E41.0010, X67CA0E41.0020, X67CA0E41.0030, X67CA0E41.0050 - Technical data

Model number	X67CA3E41.0150	X67CA0E41.0150	X67CA0E41.0500
Short description			
Accessories	POWERLINK/Ethernet connection cable, RJ45, 4-pin, straight, 15 m	POWERLINK/Ethernet connection cable, RJ45 to M12, 4-pin, straight, 15 m	POWERLINK/Ethernet connection cable, RJ45 to M12, 4-pin, straight, 50 m
General information			
Note	Halogen-free		
Durability	Flame-retardant per IEC 60332-1-2		
Type	Connection cables		
Cable cross section			
AWG	4x 22 AWG		
mm ²	4x 0.34 mm ²		
Cable construction			
Complete shielding	Overlapping aluminum-clad foil, tinned copper braiding, 85% coverage		
Outer jacket			
Material	Polyurethane (PUR)		
Color	Green		
Labeling	B&R X67CA3E41.0150	B&R X67CA0E41.0150	B&R X67CA0E41.0500
Lines			
Wire insulation	Polyethylene (PE)		
Wire colors	White, yellow, blue, orange		
Type	Tinned copper stranded wire Fine stranded wire (7x 0.25 mm / 7x 30 AWG)		
Stranding	4-wire twisted pair		
Electrical characteristics			
Conductor resistance	≤120 Ω/km at 20°C		
Transfer properties	Category 5 / Class D up to 100 MHz in accordance with ISO/IEC 11801 (EN 50173-1), ISO/IEC 24702 (EN 50173-3)		
Transfer rate	10/100 Mbit/s		
Insulation resistance	≥500 MΩ/km at 20°C		
Operating conditions			
Degree of protection per EN 60529			
Cables	IP67		
Male M12 connector	IP67, only when screwed in		
RJ45 connector	IP20, only when properly connected		
Environmental conditions			
Temperature			
Transport	-40 to 70°C		
Fixed installation	-25 to 60°C		
Flexible installation ¹⁾	-20 to 60°C		
Mechanical properties			
Dimensions			
Length	15 m		50 m
Diameter	6.5 mm ±0.2 mm		
Bend radius			
After installation	≥7x outer diameter		
During installation	≥3x outer diameter		
Drag chain data			
Acceleration	4 m/s ²		-
Flex cycles	Min. 3 million		-
Speed	4 m/s		-
Weight	0.061 kg/m		0.064 kg/m

Table 2: X67CA3E41.0150, X67CA0E41.0150, X67CA0E41.0500 - Technical data

1) In cable drag chain operation

2 X67CA0E61.xxxx

Dimensions				
Length xxxx				
Pinout				
Male connector	Pin	Description	Diagram	Male connector
<p>D-coded</p>	1 - 2	TXD		<p>D-coded</p>
	2 - 1	RXD		
	3 - 4	TXD\		
	4 - 3	RXD\		

2.1 Technical data

Model number	X67CA0E61.0010	X67CA0E61.0020	X67CA0E61.0050
Short description			
Accessories	POWERLINK/Ethernet connection cable, M12, 4-pin, straight, 1 m	POWERLINK/Ethernet connection cable, M12, 4-pin, straight, 2 m	POWERLINK/Ethernet connection cable, M12, 4-pin, straight, 5 m
General information			
Note	Halogen-free		
Durability	Flame-retardant per IEC 60332-1-2		
Type	Connection cables		
Cable cross section			
AWG	4x 22 AWG		
mm ²	4x 0.34 mm ²		
Cable construction			
Complete shielding	Overlapping aluminum-clad foil, tinned copper braiding, 85% coverage		
Outer jacket			
Material	Polyurethane (PUR)		
Color	Green		
Labeling	B&R X67CA0E61.0010	B&R X67CA0E61.0020	B&R X67CA0E61.0050
Lines			
Wire insulation	Polyethylene (PE)		
Wire colors	White, yellow, blue, orange		
Type	Tinned copper stranded wire		
Stranding	Fine stranded wire (7x 0.25 mm / 7x 30 AWG)		
	4-wire twisted pair		
Electrical characteristics			
Conductor resistance	≤120 Ω/km at 20°C		
Transfer properties	Category 5 / Class D up to 100 MHz in accordance with ISO/IEC 11801 (EN 50173-1), ISO/IEC 24702 (EN 50173-3)		
Transfer rate	10/100 Mbit/s		
Insulation resistance	≥500 MΩ/km at 20°C		
Operating conditions			
Degree of protection per EN 60529			
Cables	IP67		
Male M12 connector	IP67, only when screwed in		
RJ45 connector	IP20, only when properly connected		
Environmental conditions			
Temperature			
Transport	-40 to 70°C		
Fixed installation	-25 to 60°C		
Flexible installation	-20 to 60°C		
Mechanical properties			
Dimensions			
Length	1 m	2 m	5 m
Diameter	6.5 mm ±0.2 mm		
Bend radius			
After installation	≥7x outer diameter		
During installation	≥3x outer diameter		
Weight	0.062 kg/m		

Table 3: X67CA0E61.0010, X67CA0E61.0020, X67CA0E61.0050 - Technical data

Model number	X67CA0E61.0100	X67CA0E61.0150	X67CA0E61.0200
Short description			
Accessories	POWERLINK/Ethernet connection cable, M12, 4-pin, straight, 10 m	POWERLINK/Ethernet connection cable, M12, 4-pin, straight, 15 m	POWERLINK/Ethernet connection cable, M12, 4-pin, straight, 20 m
General information			
Note	Halogen-free		
Durability	Flame-retardant per IEC 60332-1-2		
Type	Connection cables		
Cable cross section			
AWG	4x 22 AWG		
mm ²	4x 0.34 mm ²		
Cable construction			
Complete shielding	Overlapping aluminum-clad foil, tinned copper braiding, 85% coverage		
Outer jacket			
Material	Polyurethane (PUR)		
Color	Green		
Labeling	B&R X67CA0E61.0100	B&R X67CA0E61.0150	B&R X67CA0E61.0200
Lines			
Wire insulation	Polyethylene (PE)		
Wire colors	White, yellow, blue, orange		
Type	Tinned copper stranded wire Fine stranded wire (7x 0.25 mm / 7x 30 AWG)		
Stranding	4-wire twisted pair		
Electrical characteristics			
Conductor resistance	≤120 Ω/km at 20°C		
Transfer properties	Category 5 / Class D up to 100 MHz in accordance with ISO/IEC 11801 (EN 50173-1), ISO/IEC 24702 (EN 50173-3)		
Transfer rate	10/100 Mbit/s		
Insulation resistance	≥500 MΩ/km at 20°C		
Operating conditions			
Degree of protection per EN 60529			
Cables	IP67		
Male M12 connector	IP67, only when screwed in		
RJ45 connector	IP20, only when properly connected		
Environmental conditions			
Temperature			
Transport	-40 to 70°C		
Fixed installation	-25 to 60°C		
Flexible installation	-20 to 60°C		
Mechanical properties			
Dimensions			
Length	10 m	15 m	20 m
Diameter	6.5 mm ±0.2 mm		
Bend radius			
After installation	≥7x outer diameter		
During installation	≥3x outer diameter		
Weight	0.062 kg/m		

Table 4: X67CA0E61.0100, X67CA0E61.0150, X67CA0E61.0200 - Technical data