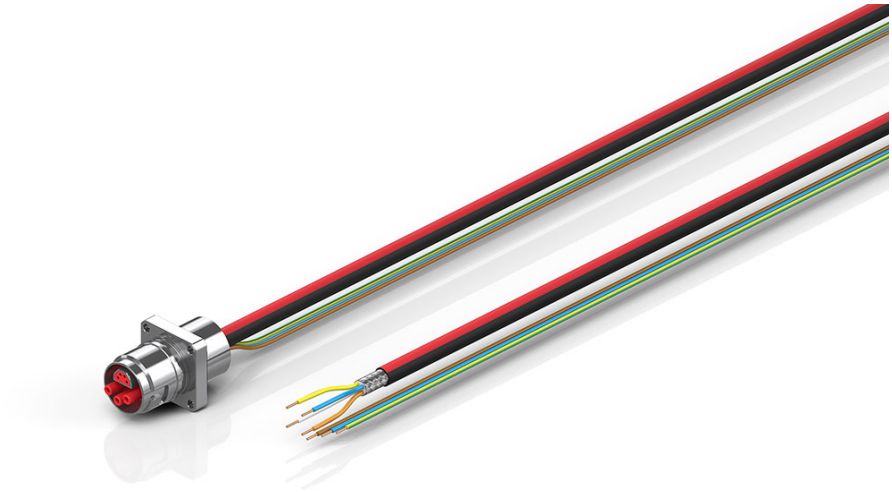
ZK7206-AG12-0xxx | B17, ECP cable, PUR, 3 G 1.5 mm² + (1 x 4 x AWG22), drag-chain suitable, key 1 (24 V DC)

B17, square flange, straight, short, female+ female, pins 2+PE+4, EtherCAT P-coded



Plugs

Electrical data	
Rated voltage (Ethernet)	24 V DC
Rated current (Ethernet)	3 A at 40°C
Rated voltage (power)	630 V AC / 850 V DC, 600V AC / DC (UL)
Rated current (power)	15.5 A at 45°C
Rated impulse voltage (power)	6.0 kV
Rated impulse voltage (Ethernet)	1.0 kV
Voltage proof (contact/contact)	1.5 kV (power - Ethernet), 3.31 kV AC (power), 1.0 kV AC (Ethernet)
Shielding (Ethernet)	yes
Contact resistance	< 10 mΩ (signal), < 5 mΩ (power)
Insulation resistance	≥ 100 MΩ (according to IEC 60512)
Mechanical data	
Installation size	B17

Connector type	square flange
Configuration	straight, short
Contact type	female+ female
Number of positions (face)	pins 2+PE+4
Coding	EtherCAT P-coded
Mechanical coding	key 1 (24 V DC)
Wire termination	crimp connection
Mating cycles	≥ 100
Way of locking	bayonet
Weight	0.170 kg (0.375 lb)
Flange housing material	GD-Zn, Ni
Seal	NBR, FPM
Contact carrier material	PA 6, UL 94 V0
Contact carrier color (Ethernet)	red
Contact carrier color (power)	red
Contact plating	Au over Ni
Contact material	copper alloy
Environmental data	
Shock resistance	50 g (490 m/s^2) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes
Vibration resistance	5 g (50 m /s^2) conforms to IEC 60512-6d, 10 Hz. ... 500 Hz.; 10 cycles per axis; 6 h full duration
RoHS compliant	yes
Ambient temperature (operation)	-30...+80°C, -22...+176°F
Protection rating	IP65/67 in screwed condition (according to IEC 60529)
Pollution level	3/2 (according to IEC 60664-1)
Approvals	UL 2237: File E484763

Cable

Electrical data	
Rated voltage (Ethernet)	max. 300 V (peak value, not for high voltage purposes)
Rated voltage (power)	600 V
Operating voltage	≤ 125 V (peak value, not for high voltage purposes)
Attenuation of shielding	≥ 65 dB (30...100 MHz)
Insulation resistance	≥ 5GΩ * km
Unbalanced capacitance to ground	≤ 2000 pF/km
Mutual capacitance	48 nF/km

Characteristic impedance (Ethernet)	100 Ω ±15 Ω
Loop resistance	≤ 110.8 Ω/km
Signal running time (Ethernet)	5.3 ns/m
Electrical parameters (Ethernet)	Cat.5e, according to EN 50288-2-2
Test voltage	1000 V, 50 Hz, 1 min. (wire/wire and wire/screen)
Mechanical data	
Cable structure (Ethernet)	star quad
Conductor construction (power)	19 x 0.30 mm
Cross-section (power)	3 x 1.5 mm² (approx. AWG16)
Cross-section (Ethernet)	1 x 4 x 0.34 mm² (AWG22)
Outer cable diameter	6.5 mm ± 0.2 mm (0.2559" ± 0.0079")
Min. bending radius, moved	8 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Weight	72 kg/km (48,38 lb/1000 ft)
Conductor material (Ethernet)	tinned copper
Shielding	aluminum-clad foil, braiding of tinned copper wires, coupling
Optical covering factor of shielding (Ethernet)	≥ 85 %
Use	drag-chain suitable
Max. acceleration	3 m/s²
Max. speed	3 m/s
Max. travel distance	4.5 m
Max. number of cycles	3 million
Jacket color	black (similar to RAL 9005) with red stripe (similar to RAL 3020)
Material jacket	PUR (polyurethane)
Wire color code	yellow, orange, white, blue (Ethernet) green/yellow, blue, brown (Power)
Wire insulation material	PP polypropylene (Ethernet), PPE polyphenyl ether (Power)
Printing on the jacket	Beckhoff Automation GmbH & Co. KG - Germany - EtherCATp Cat5e AWG22/7 E170315 AWM 20549 AWM I/II A/B 80°C 300 V MM/YY RoHS
Printing color	white
Environmental data	
Operation temperature range, moved	-30...+70°C, -22...+158°F
Operation temperature range, fixed installation	-40...+80°C, -40...+176°F
UV resistance	good
Oil resistance	according to IEC 60811-2-1 or according to DIN VDE 0282 part 10
Flame-retardant	Horizontal flame test according to UL 1581 part 1090
Halogen-free	according to IEC 60754 or DIN VDE 0472 part 815

Attenuation

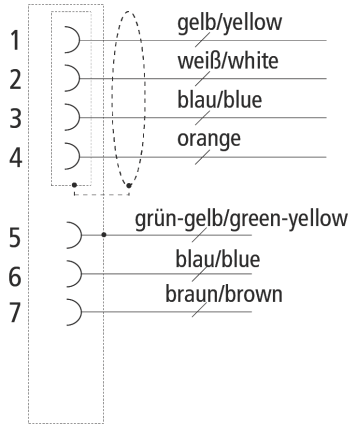
Max. insertion loss

Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	-	4.9	7.8	9.9	11.1	14.1	20.4	26.4
[db/100 ft]	-	1.5	2.4	3	3.4	4.3	6.2	8

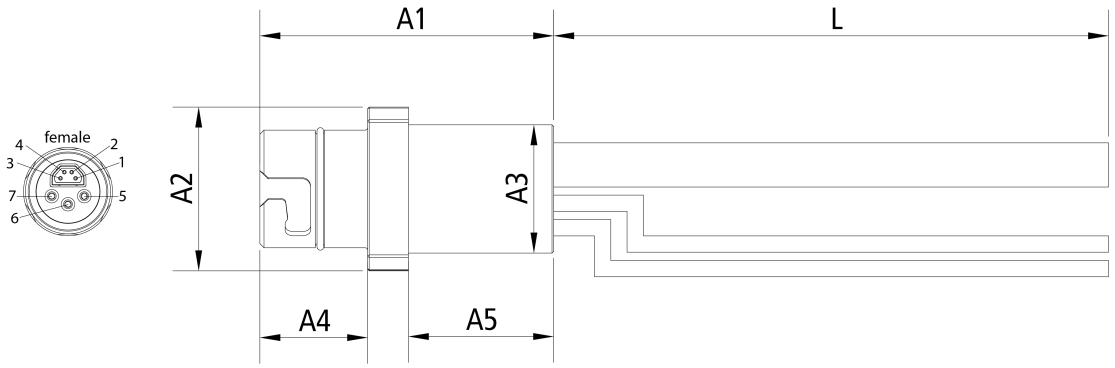
Min. near-end crosstalk attenuation

Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	-	56.3	50.3	47.2	45.8	42.9	38.4	35.3
[db/100 ft]	-	17.2	15.3	14.4	14	13.1	11.7	10.8

Pin assignment



Dimensions



A1	42.00 mm
A2	25.00 mm
A3	20.00 mm
A4	20.30 mm
A5	14.00 mm

Mechanical coding

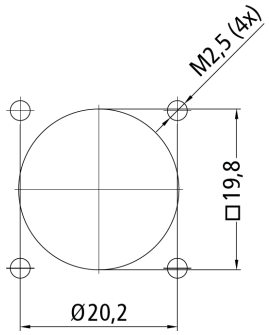
Mechanical keying uses defined keyways that only allow insertion and subsequent locking rotation when correctly aligned. For more information, please refer to the keying guide for correct use.

Notes

- Depending on the cable length (L), the following length tolerances apply:
0 m...3.0 m: + 100 mm | 3.0...10.0 m: ± 100 mm | ≥ 10.0 m: ± 2%
- Illustrations similar
- Further cable length on request. The last three digits of the ordering information is the cable length in decimeters, e.g. ZKxxxx-xxxx-x020 = cable length 2.00 m
- The design of the pre-assambled cable shown here may differ from the products supplied, despite technically identical specifications.

CE, UL	
CE	yes

Installation dimensions



Ordering information	Length
ZK7206-AG12-0010	1.00 m

Further length on request

Accessories	
ZS7200-B001	B17 protection cap, socket/flange, plastic, IP67, packaging unit = 10 pieces, including loss protection
ZS7200-B002	B17 protection cap, socket/flange, metal, IP67, packaging unit = 5 pieces, including loss protection
ZS7200-B005	B17 color coding connector/square flange, red, packaging unit = 10 pieces
ZS7200-B006	B17 color coding connector/square flange, yellow, packaging unit = 10 pieces
ZS7200-B007	B17 color coding connector/square flange, blue, packaging unit = 10 pieces
ZS7200-B008	B17 color coding connector/square flange, green, packaging unit = 10 pieces
ZS7200-B015	B17 color coding connector/square flange, orange, packaging unit = 10 pieces

ZS7200-B016	B17 color coding connector/square flange, gray, packaging unit = 10 pieces



Products marked with a crossed-out wheeled bin shall not be discarded with the normal waste stream. The device is considered as waste electrical and electronic equipment. The national regulations for the disposal of waste electrical and electronic equipment must be observed.

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