ZK7672-3031-3xxx | Power cable, PUR, drag-chain suitable, 5 G 1.5 mm², key 2



B17, plug, straight, male+male, pins 5+2 – B17, plug, straight, female+female, pins 5+2



Plugs

Electrical data	Head A	Head B
Rated voltage (Ethernet)	24 V DC	24 V DC
Rated current (Ethernet)	3 A at 40 °C	3 A at 40 °C
Rated voltage (power)	60 V DC	60 V DC
Rated current (power)	10 A at 55 °C	10 A at 55 °C
Rated impulse voltage (power)	1.5 kV	
Rated impulse voltage (Ethernet)	1.0 kV	-
Contact resistance	< 10 m Ω (signal), < 5 m Ω (power)	< 10 m Ω (signal), < 5 m Ω (power)
Insulation resistance	≥ 100 M Ω (according to IEC 60512)	≥ 100 M Ω (according to IEC 60512)
Mechanical data		
Installation size	B17	B17
Connector type	plug	plug
Configuration	straight	straight
Contact type	male+male	female+ female

Number of positions (face)pins 5+2pins 5+2Mechanical codingkey 2 (400 V AC)key 2 (user-defined voltage)Wire terminationcrimp connectioncrimp connectionMating cycles\$ 100\$ 100Way of lockingbayonetbayonetBody colormetalmetalCoupling nut materialGD-Zn, NiGD-Zn, NiSealNBR, FPMNBRContact carrier materialPA, UL 94PA, UL 94Contact platingau over Niau over NiContact materialcopper alloycopper alloyEnvironmental dataShock resistance $\frac{10}{10}$ (9490 m/s²) conforms to IEC 60512-6c, full duration $\frac{10}{10}$ (11 ms; 18 shocks per direction, 3 axes)Vibration resistance $\frac{10}{10}$ (12 ms; 18 shocks per direction, 3 axes) $\frac{10}{10}$ (12 ms; 10 cycles per axis; 6 hull durationReMS compliantyesyesAmbient temperature (operation) $\frac{10}{10}$ (22 ms) (22 ms) (22 ms) (27 ms) (22 ms) (27 ms) (22 ms) (27			
Wire termination crimp connection crimp connection Mating cycles ≥ 100 ≥ 100 Way of locking bayonet bayonet Body color metal metal Coupling nut material GD-Zn, Ni GD-Zn, Ni Seal NBR, FPM NBR Contact carrier material PA, UL 94 PA, UL 94 Contact plating Au over Ni Au over Ni Contact material copper alloy copper alloy Environmental data Shock resistance 50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes 50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes 5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration Wibration resistance 5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration ReNS compliant yes yes Ambient temperature (operation) -30+80°C, -22+176°F -30+80°C, -22+176°F Protection rating IP65/67 in screwed condition (according to IEC 60529) IP65/67 in screwed condition (according to IEC 60529)	Number of positions (face)	pins 5+2	pins 5+2
Mating cycles≥ 100≥ 100Way of lockingbayonetbayonetBody colormetalmetalCoupling nut materialGD-Zn, NiGD-Zn, NiSealNBR, FPMNBRContact carrier materialPA, UL 94PA, UL 94Contact platingAu over NiAu over NiContact materialcopper alloycopper alloyEnvironmental dataShock resistance50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axesVibration resistance5 g (50 m/s²) conforms to IEC 60512-6d, full duration5 g (50 m/s²) conforms to IEC 60512-6d, full durationROHS compliantyesyesAmbient temperature (operation)-30+80°C, -22+176°F-30+80°C, -22+176°FProtection ratingIP65/67 in screwed condition (according to IEC 60529)IP65/67 in screwed condition (according to IEC 60529)	Mechanical coding	key 2 (400 V AC)	key 2 (user-defined voltage)
Way of lockingbayonetbayonetBody colormetalmetalCoupling nut materialGD-Zn, NiGD-Zn, NiSealNBR, FPMNBRContact carrier materialPA, UL 94PA, UL 94Contact platingAu over NiAu over NiContact materialcopper alloycopper alloyEnvironmental dataShock resistance50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axesVibration resistance5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz500 Hz.; 10 cycles per axis; 6 h full duration5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz500 Hz.; 10 cycles per axis; 6 h full durationROHS compliantyesyesAmbient temperature (operation)-30+80°C, -22+176°F-30+80°C, -22+176°FProtection ratingIP65/67 in screwed condition (according to IEC 60529)IP65/67 in screwed condition (according to IEC 60529)	Wire termination	crimp connection	crimp connection
Body color metal GD-Zn, Ni GD-Zn, Ni Seal NBR, FPM NBR Contact carrier material PA, UL 94 Contact plating Au over Ni copper alloy Environmental data Shock resistance Vibration resistance Ng (50 m /s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes Sg (50 m /s²) conforms to IEC 60512-6d, 10 Hz500 Hz.; 10 cycles per axis; 6 h full duration ROHS compliant yes Ambient temperature (operation) JP65/67 in screwed condition (according to IEC 60529) metal metal metal metal metal metal gD-Zn, Ni GD-Zn, Ni SD-Zn, Ni SD-Zn-Sn SD-Zn SD-	Mating cycles	≥ 100	≥ 100
Coupling nut material Seal NBR, FPM NBR Contact carrier material PA, UL 94 Contact plating Contact plating Contact material Shock resistance Since Sinc	Way of locking	bayonet	bayonet
SealNBR, FPMNBRContact carrier materialPA, UL 94PA, UL 94Contact platingAu over NiAu over NiContact materialcopper alloycopper alloyEnvironmental dataShock resistance50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axesVibration resistance5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full durationRoHS compliantyesyesAmbient temperature (operation)-30+80°C, -22+176°F-30+80°C, -22+176°FProtection ratingIP65/67 in screwed condition (according to IEC 60529)IP65/67 in screwed condition (according to IEC 60529)	Body color	metal	metal
Contact plating Au over Ni Au over Ni Contact plating copper alloy copper alloy Environmental data Shock resistance Signature (operation) 29 (50 m/s²) conforms to IEC 60512-6c, full duration full duration full duration some signature (operation) 30+80°C, -22+176°F Protection rating PA, UL 94 Au over Ni Au over Au o	Coupling nut material	GD-Zn, Ni	GD-Zn, Ni
Contact plating Au over Ni Contact material copper alloy copper alloy Environmental data Shock resistance 50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes Vibration resistance 5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration ROHS compliant yes Ambient temperature (operation) 3 u+80°C, -22+176°F Protection rating Au over Ni Copper alloy Engley 109 490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes 5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500	Seal	NBR, FPM	NBR
Contact material copper alloy copper alloy Environmental data Shock resistance 50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes Vibration resistance 5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration ROHS compliant yes yes Ambient temperature (operation) -30+80°C, -22+176°F Protection rating IP65/67 in screwed condition (according to IEC 60529) copper alloy copper avis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 10 Hz 500 Hz	Contact carrier material	PA, UL 94	PA, UL 94
Shock resistance 50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes Vibration resistance 5 g (50 m /s²) conforms to IEC 60512-6d, 11 ms; 18 shocks per direction, 3 axes 5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration RoHS compliant yes Ambient temperature (operation) 7 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration yes Yes Ambient temperature (operation) 1 P65/67 in screwed condition (according to IEC 60529) 1 P65/67 in screwed condition (according to IEC 60529)	Contact plating	Au over Ni	Au over Ni
Shock resistance 50 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes 70 g (490 m/s²) conforms to IEC 60512-6c, 11 ms; 18 shocks per direction, 3 axes 81 g (50 m /s²) conforms to IEC 60512-6d, 11 ms; 18 shocks per direction, 3 axes 82 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 83 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 84 yes 85 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration 96 yes 97 Ambient temperature (operation) 97 -30+80°C, -22+176°F 98 Protection rating 1965/67 in screwed condition (according to IEC 60529)	Contact material	copper alloy	copper alloy
Snock resistance 11 ms; 18 shocks per direction, 3 axes 11 ms; 18 shocks per direction, 3 axes 5 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration RoHS compliant yes Ambient temperature (operation) Jefs/67 in screwed condition (according to IEC 60529) 11 ms; 18 shocks per direction, 3 axes 12 g (50 m /s²) conforms to IEC 60512-6d, 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration yes yes Ambient temperature (operation) Jefs/67 in screwed condition (according to IEC 60529)	Environmental data		
Vibration resistance 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 10 Hz 500 Hz.; 10 cycles per axis; 6 h full duration yes yes -30+80°C, -22+176°F IP65/67 in screwed condition (according to IEC 60529)	Shock resistance	•	3 .
Ambient temperature (operation) -30+80°C, -22+176°F Protection rating IP65/67 in screwed condition (according to IEC 60529) IP65/67 in screwed condition (according to IEC 60529)	Vibration resistance	10 Hz 500 Hz.; 10 cycles per axis; 6 h	10 Hz 500 Hz.; 10 cycles per axis; 6 h
Protection rating IP65/67 in screwed condition (according to IEC 60529) IP65/67 in screwed condition (according to IEC 60529)	RoHS compliant	yes	yes
IEC 60529) IEC 60529)	Ambient temperature (operation)	-30+80°C, -22+176°F	-30+80°C, -22+176°F
Pollution level 3/2 (according to IEC 60664-1) 3/2 (according to IEC 60664-1)	Protection rating		
	Pollution level	3/2 (according to IEC 60664-1)	3/2 (according to IEC 60664-1)

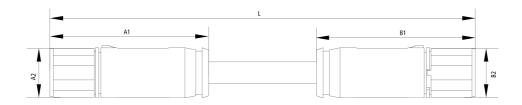
Cable

Electrical data	
Rated voltage	600 V AC/DC
Wire resistance (power)	1.50 mm ² : ≤ 13.3 Ω/km, 0.75 mm ² : ≤ 26.0 Ω/km
Test voltage	4000 V
Mechanical data	
Cross-section	2 x 0.75 mm ² (AWG18) + 5 x 1.5 mm ² (AWG16)
Outer cable diameter	12.4 mm ± 0.3 mm (0.4882" ± 0.0118")
Min. bending radius, moved	10 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Weight	158 kg/km (106.17 lb/1000 ft)
Shielding	no
Use	fixed installation
UL-Style	AWM Style 2586
Jacket color	black (similar to RAL9005)



Material jacket	PVC (polyvinyl chloride)
Wire color code	1.50 mm ² : brown, black, grey, blue, green/yellow 0.75 mm ² : white, red
Wire insulation material	TPE-o (Polyolefin blends)
Environmental data	
Operation temperature range, moved	+590°C, 41194°F
Operation temperature range, fixed installation	-40+90°C, -40+194°F
Halogen-free	yes
RoHS compliant	yes

Dimensions



Notes

- Depending on the cable length (L), the following length tolerances apply: 0 m...<0.2 m: \pm 10 mm | 0.2...4.0 m: \pm 40 mm | \geq 4.0 m: \pm 1%
- Illustrations similar
- Further cable length on request.

CE, UL	
CE	yes

Ordering information	Length
ZK7672-3031-3002	0.20 m
ZK7672-3031-3003	0.30 m
ZK7672-3031-3004	0.40 m
ZK7672-3031-3005	0.50 m
ZK7672-3031-3006	0.60 m
ZK7672-3031-3007	0.70 m
ZK7672-3031-3010	1.00 m
ZK7672-3031-3020	2.00 m
ZK7672-3031-3030	3.00 m
ZK7672-3031-3050	5.00 m

ZK7672-3031-3xxx www.beckhoff.com/ZK7672-3031-3xxx

Accessories	
ZB8801-0000	torque wrench for hexagonal plugs, adjustable
ZB8801-0002	torque cable key, M12/wrench size 13, for ZB8801-0000



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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