

Accessories EtherCAT Box

Accessories for EtherCAT M8

Ordering information	PUR cable, Highflex	Connector	Contacts	Length	Pict.
ZK1090-3100-0020	straight plug, open end	M8, screw type, shielded	4-pin	2.00 m	
ZK1090-3100-0050	straight plug, open end	M8, screw type, shielded	4-pin	5.00 m	
ZK1090-3131-0001	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	0.10 m	A
ZK1090-3131-0003	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	0.30 m	A
ZK1090-3131-0005	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	0.50 m	A
ZK1090-3131-0010	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	1.00 m	A
ZK1090-3131-0020	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	2.00 m	A
ZK1090-3131-0030	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	3.00 m	A
ZK1090-3131-0040	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	4.00 m	A
ZK1090-3131-0050	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	5.00 m	A
ZK1090-3131-0075	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	7.50 m	A
ZK1090-3131-0100	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	10.00 m	A
ZK1090-3131-0150	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	15.00 m	A
ZK1090-3131-0200	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	20.00 m	A
ZK1090-3131-0250	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	25.00 m	A
ZK1090-3131-0300	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	30.00 m	A
ZK1090-3131-0350	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	35.00 m	A
ZK1090-3131-0400	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	40.00 m	A
ZK1090-3131-0450	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	45.00 m	A
ZK1090-3131-0500	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	50.00 m	A
ZK1090-3132-0002	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	0.20 m	
ZK1090-3132-0004	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	0.40 m	
ZK1090-3132-0020	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	2.00 m	
ZK1090-3132-0050	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	5.00 m	
ZK1090-3132-0075	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	7.50 m	
ZK1090-3132-0100	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	10.00 m	
ZK1090-3132-0150	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	15.00 m	
ZK1090-3132-0200	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	20.00 m	
ZK1090-3132-0250	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	25.00 m	
ZK1090-3132-0300	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	30.00 m	
ZK1090-3132-0400	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	40.00 m	
ZK1090-3132-0500	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	50.00 m	
ZK1090-3161-0010	straight plug, straight plug	M8, M12, screw type, shielded	4-pin	1,00 m	
ZK1090-3161-0020	straight plug, straight plug	M8, M12, screw type, shielded	4-pin	2.00 m	
ZK1090-3161-0050	straight plug, straight plug	M8, M12, screw type, shielded	4-pin	5.00 m	
ZK1090-3191-0020	straight plug, straight plug	RJ 45, M8, screw type, shielded	4-pin	2.00 m	B
ZK1090-3191-0050	straight plug, straight plug	RJ 45, M8, screw type, shielded	4-pin	5.00 m	B
ZK1090-3291-0004	straight plug, straight socket	RJ 45, M8, screw type, shielded	4-pin	0.40 m	
ZK1090-3291-0005	straight plug, straight socket	RJ 45, M8, screw type, shielded	4-pin	0.50 m	
ZK1090-3291-0010	straight plug, straight socket	RJ 45, M8, screw type, shielded	4-pin	1.00 m	
ZK1090-3291-0020	straight plug, straight socket	RJ 45, M8, screw type, shielded	4-pin	2.00 m	
ZK1090-3291-0050	straight plug, straight socket	RJ 45, M8, screw type, shielded	4-pin	5.00 m	
ZK1090-3291-0100	straight plug, straight socket	RJ 45, M8, screw type, shielded	4-pin	10.00 m	
ZK1090-3291-0200	straight plug, straight socket	RJ 45, M8, screw type, shielded	4-pin	20.00 m	
ZK1090-3291-0250	straight plug, straight socket	RJ 45, M8, screw type, shielded	4-pin	25.00 m	

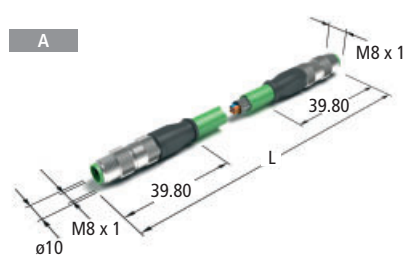
Further lengths on request

Ordering information	PVC cable	Connector	Contacts	Length
ZK1090-3100-3020	straight plug, open end	M8, screw type, shielded	4-pin	2.00 m
ZK1090-3100-3050	straight plug, open end	M8, screw type, shielded	4-pin	5.00 m
ZK1090-3131-3020	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	2.00 m
ZK1090-3131-3030	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	3.00 m
ZK1090-3131-3040	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	4.00 m
ZK1090-3131-3050	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	5.00 m
ZK1090-3131-3075	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	7.50 m
ZK1090-3131-3100	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	10.00 m
ZK1090-3131-3150	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	15.00 m
ZK1090-3131-3200	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	20.00 m
ZK1090-3131-3250	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	25.00 m
ZK1090-3131-3300	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	30.00 m
ZK1090-3131-3350	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	35.00 m
ZK1090-3131-3400	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	40.00 m
ZK1090-3131-3450	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	45.00 m
ZK1090-3131-3500	straight plug, straight plug	M8, M8, screw type, shielded	4-pin	50.00 m
ZK1090-3132-3020	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	0.20 m
ZK1090-3132-3050	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	0.50 m
ZK1090-3132-3100	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	1.00 m
ZK1090-3132-3150	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	1.50 m
ZK1090-3132-3200	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	2.00 m
ZK1090-3132-3250	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	2.50 m
ZK1090-3132-3300	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	3.00 m
ZK1090-3132-3400	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	4.00 m
ZK1090-3132-3500	straight plug, straight socket	M8, M8, screw type, shielded	4-pin	5.00 m
ZK1090-3191-3020	straight plug, straight plug	RJ 45, M8, screw type, shielded	4-pin	2.00 m
ZK1090-3191-3050	straight plug, straight plug	RJ 45, M8, screw type, shielded	4-pin	5.00 m

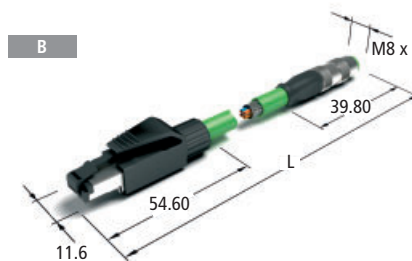
Further lengths on request

Ordering information	Plug/socket	Connector	Contacts
ZS1090-0005	Ethernet/EtherCAT plug, IP 20	RJ 45, field assembly	8-pin
ZS1090-0006	straight plug, metal housing	M8, screw type	4-pin
ZS1090-0007	straight socket, metal housing	M8, screw type	4-pin

Ordering information	Fieldbus cable for M8	Length
ZB9030	EtherCAT/Ethernet cable, PVC, thin, with shield	sold by the metre
ZB9031	EtherCAT/Ethernet cable, PUR, thin, drag chain suitable, with shield	sold by the metre
ZB9032	EtherCAT/Ethernet cable, PUR, thin, drag chain suitable, Highflex	sold by the metre



Straight M8 screw type



Straight RJ 45/M8 screw type

For technical data sheets see www.beckhoff.com/EtherCAT-Box

Accessories for Ethernet M12

Ordering information		Pict.
ZK1090-6100-0020	EtherCAT/Ethernet cordset, d-coded M12 plug, open end, 2.0 m, IP 65/67, drag chain suitable	
ZK1090-6100-0040	EtherCAT/Ethernet cordset, d-coded M12 plug, open end, 4.0 m, IP 65/67, drag chain suitable	
ZK1090-6100-0050	EtherCAT/Ethernet cordset, d-coded M12 plug, open end, 5.0 m, IP 65/67, drag chain suitable	
ZK1090-6100-0060	EtherCAT/Ethernet cordset, d-coded M12 plug, open end, 6.0 m, IP 65/67, drag chain suitable	
ZK1090-6100-0100	EtherCAT/Ethernet cordset, d-coded M12 plug, open end, 10.0 m, IP 65/67, drag chain suitable	
ZK1090-6161-0005	EtherCAT/Ethernet cordset, d-coded M12 plug on both sides, 0.5 m, IP 65/67, drag chain suitable	C
ZK1090-6161-0010	EtherCAT/Ethernet cordset, d-coded M12 plug on both sides, 1.0 m, IP 65/67, drag chain suitable	C
ZK1090-6161-0020	EtherCAT/Ethernet cordset, d-coded M12 plug on both sides, 2.0 m, IP 65/67, drag chain suitable	C
ZK1090-6161-0025	EtherCAT/Ethernet cordset, d-coded M12 plug on both sides, 2.5 m, IP 65/67, drag chain suitable	C
ZK1090-6161-0050	EtherCAT/Ethernet cordset, d-coded M12 plug on both sides, 5.0 m, IP 65/67, drag chain suitable	C
ZK1090-6161-0100	EtherCAT/Ethernet cordset, d-coded M12 plug on both sides, 10.0 m, IP 65/67, drag chain suitable	C
ZK1090-6191-0005	EtherCAT/Ethernet cordset, d-coded M12 plug, RJ 45 plug, 0.5 m, IP 65/67, drag chain suitable	
ZK1090-6191-0020	EtherCAT/Ethernet cordset, d-coded M12 plug, RJ 45 plug, 2.0 m, IP 65/67, drag chain suitable	
ZK1090-6191-0040	EtherCAT/Ethernet cordset, d-coded M12 plug, RJ 45 plug, 4.0 m, IP 65/67, drag chain suitable	
ZK1090-6191-0050	EtherCAT/Ethernet cordset, d-coded M12 plug, RJ 45 plug, 5.0 m, IP 65/67, drag chain suitable	
ZK1090-6191-0060	EtherCAT/Ethernet cordset, d-coded M12 plug, RJ 45 plug, 6.0 m, IP 65/67, drag chain suitable	
ZK1090-6191-0100	EtherCAT/Ethernet cordset, d-coded M12 plug, RJ 45 plug, 10.0 m, IP 65/67, drag chain suitable	
ZK1090-6191-4025	EtherCAT/Ethernet cordset, d-coded M12 plug, RJ 45 plug, 2.5 m, IP 65/67, drag chain suitable	
ZK1090-6191-4035	EtherCAT/Ethernet cordset, d-coded M12 plug, RJ 45 plug, 3.5 m, IP 65/67, drag chain suitable	
ZK1090-6292-0005	EtherCAT/Ethernet cordset, d-coded M12 flange, RJ 45 plug, 0.5 m, IP 65/67, drag chain suitable	D
ZK1090-6292-0020	EtherCAT/Ethernet cordset, d-coded M12 flange, RJ 45 plug, 2.0 m, IP 65/67, drag chain suitable	D
ZK1090-6292-0050	EtherCAT/Ethernet cordset, d-coded M12 flange, RJ 45 plug, 5.0 m, IP 65/67, drag chain suitable	D
ZK1090-6292-0100	EtherCAT/Ethernet cordset, d-coded M12 flange, RJ 45 plug, 10.0 m, IP 65/67, drag chain suitable	D
ZK1090-6600-0005	EtherCAT/Ethernet cordset, d-coded M12 flange, open end, 0.5 m, IP 65/67, drag chain suitable	
ZK1090-6600-0010	EtherCAT/Ethernet cordset, d-coded M12 flange, open end, 1.0 m, IP 65/67, drag chain suitable	
ZK1090-6600-0020	EtherCAT/Ethernet cordset, d-coded M12 flange, open end, 2.0 m, IP 65/67, drag chain suitable	
ZK1090-6600-0050	EtherCAT/Ethernet cordset, d-coded M12 flange, open end, 5.0 m, IP 65/67, drag chain suitable	
ZK1090-6600-0100	EtherCAT/Ethernet cordset, d-coded M12 flange, open end, 10.0 m, IP 65/67, drag chain suitable	
ZS1090-0002	RJ 45 plug, protection class IP 65/67	A
ZS1090-0004	M12 connector, d-coded, protection class IP65/67	B
ZB9010	Industrial Ethernet/EtherCAT cable, fixed installation, CAT 5e, 4 wires, SF/UTP	
ZB9020	EtherCAT cable, drag chain suitable, \varnothing 6.5 mm	
ZK1090-6292-0000	adapter M12 socket to RJ 45 socket, straight	E
ZK1090-6294-0000	adapter M12 socket to RJ 45 socket, angled	F
ZS1090-0003	EtherCAT/Ethernet RJ 45 connector, IP 20, 4-pin, for field assembly, AWG 22-24, packing unit = 10	

Further lengths on request

A Illustrations similar



RJ 45 plug

B



M12 plug

C



EtherCAT cordset, M12 plug on both sides

D



EtherCAT cordset, M12 flange, RJ 45 plug

E



Adapter M12 socket to RJ 45, straight

F



Adapter M12 socket to RJ 45, angled

Power cables

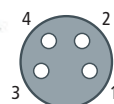
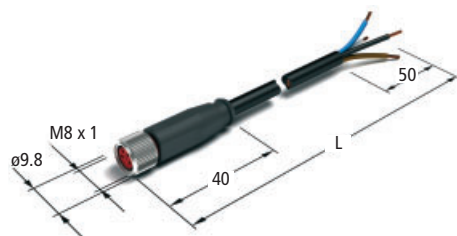
Ordering information	Power cable	Connector	Contacts	Cross-section	Length	Pict.
ZK2020-3200-0020	straight socket, open end	M8, screw type	4-pin	0.34 mm ²	2.00 m	A
ZK2020-3200-0050	straight socket, open end	M8, screw type	4-pin	0.34 mm ²	5.00 m	A
ZK2020-3200-0100	straight socket, open end	M8, screw type	4-pin	0.34 mm ²	10.00 m	A
ZK2020-3400-0020	angled socket, open end	M8, screw type	4-pin	0.34 mm ²	2.00 m	B
ZK2020-3400-0050	angled socket, open end	M8, screw type	4-pin	0.34 mm ²	5.00 m	B
ZK2020-3400-0100	angled socket, open end	M8, screw type	4-pin	0.34 mm ²	10.00 m	B
ZK2020-3132-1000	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	0.10 m	
ZK2020-3132-0001	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	0.15 m	
ZK2020-3132-0005	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	0.50 m	
ZK2020-3132-0010	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	1.00 m	
ZK2020-3132-0020	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	2.00 m	
ZK2020-3132-0025	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	2.50 m	
ZK2020-3132-0030	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	3.00 m	
ZK2020-3132-0040	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	4.00 m	
ZK2020-3132-0050	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	5.00 m	
ZK2020-3132-0075	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	7.50 m	
ZK2020-3132-0100	straight socket, straight plug	M8, screw type	4-pin	0.34 mm ²	10.00 m	
ZK2020-3334-0001	angled socket, angled plug	M8, screw type	4-pin	0.34 mm ²	0.15 m	
ZK2020-3334-0005	angled socket, angled plug	M8, screw type	4-pin	0.34 mm ²	0.50 m	
ZK2020-3334-0010	angled socket, angled plug	M8, screw type	4-pin	0.34 mm ²	1.00 m	
ZK2020-3334-0020	angled socket, angled plug	M8, screw type	4-pin	0.34 mm ²	2.00 m	
ZK2020-3334-0050	angled socket, angled plug	M8, screw type	4-pin	0.34 mm ²	5.00 m	
ZB9001	power supply cable, drag chain suitable	–	–	0.34 mm ²	–	

Electrical data	
Rated voltage according to IEC 61076-2-101	30 V
Contamination level according to IEC 60664-1	3/2
Insulation resistance according to IEC 60512-2	> 10 ⁹ Ω
Rated current according to IEC 61076-2-101	4 A
Volume resistance according to IEC 60512-2	< 5 mΩ

Mechanical data	
Protection class according to IEC 60529	IP 65/66/67, when screwed together
Ambient temperature	-30 °C...+80 °C



Straight connector



Socket, 4-pin



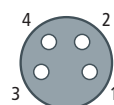
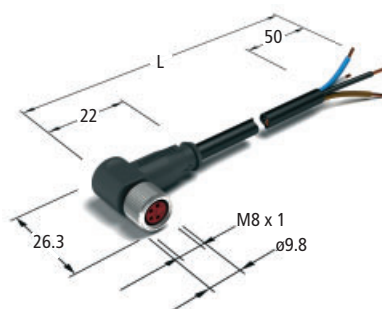
Plug, 4-pin

- 1 | brown
- 2 | white
- 3 | blue
- 4 | black

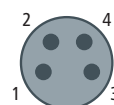
Pin assignment



Angled connector



Socket, 4-pin



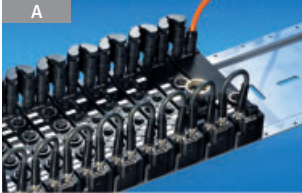
Plug, 4-pin

- 1 | brown
- 2 | white
- 3 | blue
- 4 | black

Pin assignment

Accessories EtherCAT Box and Fieldbus Box

Ordering information	Marking material	Pict.
ZS5000-0000	Fieldbus Box set M8 (contact labels, plugs)	
ZS5000-0001	Fieldbus Box set 8 mm (contact labels, plugs)	
ZS5000-0002	Fieldbus Box set M12 (contact labels, plugs)	
ZS5000-0010	plugs M8, IP 67 (50 pieces)	
ZS5000-0020	plugs M12, IP 67 (50 pieces)	
ZS5100-0000	marking labels, white, 40 pieces	
ZS5100-xxxx	printed marking labels, on request	
ZS5300-0001	mounting plate for 15 Extension Box or EtherCAT Box modules, V2A, stainless steel 500 mm	A



Mounting rail for up to
15 IE or EP modules

Sensor cables

Ordering information	Sensor cable	Connector	Contacts	Cross-section	Length	Pict.
ZK2000-2100-0020	straight plug, open end	M8, screw type	3-pin	0.25 mm ²	2.00 m	A
ZK2000-2100-0050	straight plug, open end	M8, screw type	3-pin	0.25 mm ²	5.00 m	A
ZK2000-2100-0100	straight plug, open end	M8, screw type	3-pin	0.25 mm ²	10.00 m	A
ZK2000-2300-0020	angled plug, open end	M8, screw type	3-pin	0.25 mm ²	2.00 m	B
ZK2000-2300-0050	angled plug, open end	M8, screw type	3-pin	0.25 mm ²	5.00 m	B
ZK2000-4100-0020	straight plug, open end	8 mm, snap on	3-pin	0.25 mm ²	2.00 m	C
ZK2000-4100-0050	straight plug, open end	8 mm, snap on	3-pin	0.25 mm ²	5.00 m	C
ZK2000-6100-0020	straight plug, open end	M12, screw type	4-pin	0.34 mm ²	2.00 m	D
ZK2000-6100-0050	straight plug, open end	M12, screw type	4-pin	0.34 mm ²	5.00 m	D
ZK2000-6300-0020	angled plug, open end	M12, screw type	4-pin	0.34 mm ²	2.00 m	E
ZK2000-6300-0050	angled plug, open end	M12, screw type	4-pin	0.34 mm ²	5.00 m	E
ZK2000-6300-0100	angled plug, open end	M12, screw type	4-pin	0.34 mm ²	10.00 m	E
ZK2000-6500-0005	straight plug, open end, 2 wires	M12, screw type	4-pin	0.34 mm ²	0.50 m	F
ZK2000-6500-0020	straight plug, open end, 2 wires	M12, screw type	4-pin	0.34 mm ²	2.00 m	F
ZK2000-6500-0050	straight plug, open end, 2 wires	M12, screw type	4-pin	0.34 mm ²	5.00 m	F
ZK2000-6500-0100	straight plug, open end, 2 wires	M12, screw type	4-pin	0.34 mm ²	10.00 m	F
ZK2000-7100-0020	straight plug, open end, with shield	M12, screw type	5-pin	0.34 mm ²	2.00 m	D
ZK2000-7100-0050	straight plug, open end, with shield	M12, screw type	5-pin	0.34 mm ²	5.00 m	D
ZK2000-2200-0050	straight socket, open end	M8, screw type	3-pin	0.25 mm ²	5.00 m	
ZK2000-2400-0050	angled socket, open end	M8, screw type	3-pin	0.25 mm ²	5.00 m	
ZK2000-6200-0100	straight socket, open end	M12, screw type	4-pin	0.34 mm ²	10.00 m	
ZK2000-6400-0100	angled socket, open end	M12, screw type	5-pin	0.34 mm ²	10.00 m	

For illustrations see [456](#)

For technical data sheets see www.beckhoff.com/EtherCAT-Box

Ordering information	Connection cable	Connector	Contacts	Cross-section	Length
ZK2000-2122-0005	straight plug, straight socket	M8, M8	3-pin	0.25 mm ²	0.50 m
ZK2000-2122-0010	straight plug, straight socket	M8, M8	3-pin	0.25 mm ²	1.00 m
ZK2000-2122-0020	straight plug, straight socket	M8, M8	3-pin	0.25 mm ²	2.00 m
ZK2000-2122-0050	straight plug, straight socket	M8, M8	3-pin	0.25 mm ²	5.00 m
ZK2000-2124-0005	straight plug, angled socket	M8, M8	3-pin	0.25 mm ²	0.50 m
ZK2000-2124-0010	straight plug, angled socket	M8, M8	3-pin	0.25 mm ²	1.00 m
ZK2000-2124-0020	straight plug, angled socket	M8, M8	3-pin	0.25 mm ²	2.00 m
ZK2000-2124-0050	straight plug, angled socket	M8, M8	3-pin	0.25 mm ²	5.00 m
ZK2000-2162-0005	straight plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	0.50 m
ZK2000-2162-0010	straight plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	1.00 m
ZK2000-2162-0020	straight plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	2.00 m
ZK2000-2162-0050	straight plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	5.00 m
ZK2000-2162-0100	straight plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	10.00 m
ZK2000-2164-0005	straight plug, angled socket	M8, M12	3-pin, 4-pin	0.25 mm ²	0.50 m
ZK2000-2164-0010	straight plug, angled socket	M8, M12	3-pin, 4-pin	0.25 mm ²	1.00 m
ZK2000-2164-0020	straight plug, angled socket	M8, M12	3-pin, 4-pin	0.25 mm ²	2.00 m
ZK2000-2164-0050	straight plug, angled socket	M8, M12	3-pin, 4-pin	0.25 mm ²	5.00 m
ZK2000-6162-0005	straight plug, straight socket	M12, M12	4-pin	0.25 mm ²	0.50 m
ZK2000-6162-0010	straight plug, straight socket	M12, M12	4-pin	0.25 mm ²	1.00 m
ZK2000-6162-0020	straight plug, straight socket	M12, M12	4-pin	0.25 mm ²	2.00 m
ZK2000-6162-0050	straight plug, straight socket	M12, M12	4-pin	0.25 mm ²	5.00 m
ZK2000-6164-0005	straight plug, angled socket	M12, M12	4-pin	0.25 mm ²	0.50 m
ZK2000-6164-0010	straight plug, angled socket	M12, M12	4-pin	0.25 mm ²	1.00 m
ZK2000-6164-0020	straight plug, angled socket	M12, M12	4-pin	0.25 mm ²	2.00 m
ZK2000-6164-0050	straight plug, angled socket	M12, M12	4-pin	0.25 mm ²	5.00 m
ZK2000-6562-0003	straight plug, straight socket	M12, 2 x M12	4-pin	0.25 mm ²	2 x 0.30 m
ZK2000-6562-0005	straight plug, straight socket	M12, 2 x M12	4-pin	0.25 mm ²	2 x 0.50 m
ZK2000-6562-0010	straight plug, straight socket	M12, 2 x M12	4-pin	0.25 mm ²	2 x 1.00 m
ZK2000-6562-0020	straight plug, straight socket	M12, 2 x M12	4-pin	0.25 mm ²	2 x 2.00 m
ZK2000-6562-0050	straight plug, straight socket	M12, 2 x M12	4-pin	0.25 mm ²	2 x 5.00 m
ZK2000-6522-0005	straight plug, straight socket	M12, 2 x M8	4-pin, 2 x 3-pin	0.25 mm ²	2 x 0.50 m
ZK2000-6522-0010	straight plug, straight socket	M12, 2 x M8	4-pin, 2 x 3-pin	0.25 mm ²	2 x 1.00 m
ZK2000-6522-0020	straight plug, straight socket	M12, 2 x M8	4-pin, 2 x 3-pin	0.25 mm ²	2 x 2.00 m
ZK2000-6522-0050	straight plug, straight socket	M12, 2 x M8	4-pin, 2 x 3-pin	0.25 mm ²	2 x 5.00 m

For further connection cables see next page

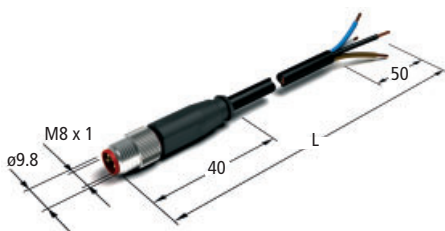
Ordering information	Connection cable	Connector	Contacts	Cross-section	Length
ZK2000-2322-0005	angled plug, straight socket	M8, M8	3-pin	0.25 mm ²	0.50 m
ZK2000-2322-0010	angled plug, straight socket	M8, M8	3-pin	0.25 mm ²	1.00 m
ZK2000-2322-0020	angled plug, straight socket	M8, M8	3-pin	0.25 mm ²	2.00 m
ZK2000-2322-0050	angled plug, straight socket	M8, M8	3-pin	0.25 mm ²	5.00 m
ZK2000-2324-0005	angled plug, angled socket	M8, M8	3-pin	0.25 mm ²	0.50 m
ZK2000-2324-0010	angled plug, angled socket	M8, M8	3-pin	0.25 mm ²	1.00 m
ZK2000-2324-0020	angled plug, angled socket	M8, M8	3-pin	0.25 mm ²	2.00 m
ZK2000-2324-0050	angled plug, angled socket	M8, M8	3-pin	0.25 mm ²	5.00 m
ZK2000-2362-0005	angled plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	0.50 m
ZK2000-2362-0010	angled plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	1.00 m
ZK2000-2362-0020	angled plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	2.00 m
ZK2000-2362-0050	angled plug, straight socket	M8, M12	3-pin, 4-pin	0.25 mm ²	5.00 m
ZK2000-2364-0005	angled plug, angled socket	M8, M12	3-pin, 4-pin	0.25 mm ²	0.50 m
ZK2000-2364-0010	angled plug, angled socket	M8, M12	3-pin, 4-pin	0.25 mm ²	1.00 m
ZK2000-2364-0020	angled plug, angled socket	M8, M12	3-pin, 4-pin	0.25 mm ²	2.00 m
ZK2000-2364-0050	angled plug, angled socket	M8, M12	3-pin, 4-pin	0.25 mm ²	5.00 m
ZK2000-2132-0010	straight plug, straight socket	M8, M8	3-pin, 4-pin	0.25 mm ²	1.00 m
ZK2000-2132-0020	straight plug, straight socket	M8, M8	3-pin, 4-pin	0.25 mm ²	2.00 m
ZK2000-4132-0020	straight plug, straight socket	8 mm, snap on, M8, screw type	3-pin, 4-pin	0.25 mm ²	2.00 m
ZK2000-6362-0010	angled plug, straight socket	M12, M12	4-pin	0.34 mm ²	1.00 m
ZK2000-6362-0050	angled plug, straight socket	M12, M12	4-pin	0.34 mm ²	5.00 m

Further cables on request

Ordering information	Only for combi I/Os (IP/IE240x)	Connector	Contacts	Cross-section	Length	Pict.
ZK2000-5100-0020	straight plug, open end	8 mm, snap on	4-pin	0.25 mm ²	2.00 m	C
ZK2000-5100-0050	straight plug, open end	8 mm, snap on	4-pin	0.25 mm ²	5.00 m	C
ZK2000-3100-0020	straight plug, open end	M8, screw type	4-pin	0.25 mm ²	2.00 m	A
ZK2000-3100-0050	straight plug, open end	M8, screw type	4-pin	0.25 mm ²	5.00 m	A
ZK2000-3300-0020	angled plug, open end	M8, screw type	4-pin	0.25 mm ²	2.00 m	B
ZK2000-3300-0050	angled plug, open end	M8, screw type	4-pin	0.25 mm ²	5.00 m	B
ZK2000-3300-0100	angled plug, open end	M8, screw type	4-pin	0.25 mm ²	10.00 m	B

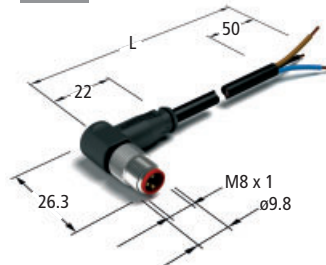
Ordering information	Sensor cable	Contacts	Cross-section	Length
ZB9002	sensor cable, drag chain suitable	3-pin	0.25 mm ²	sold by the metre

A Illustrations similar



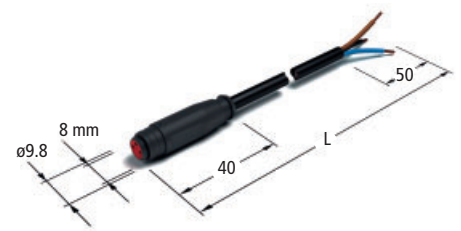
Straight M8 screw type

B



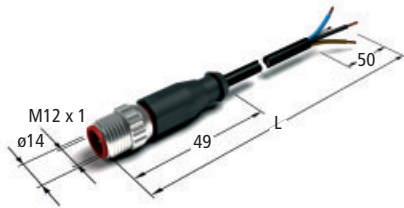
Angled M8 screw type

C



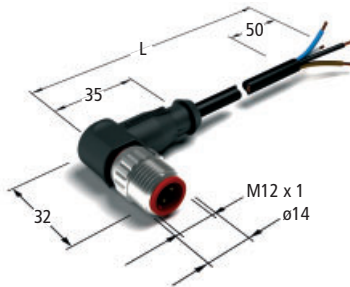
Straight 8 mm screw type

D Illustrations similar



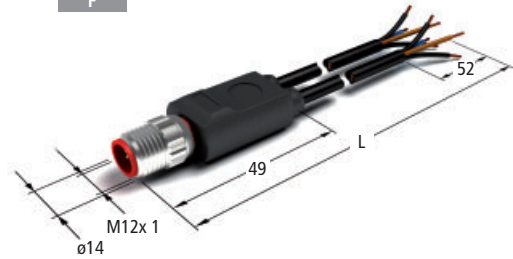
Straight M12 screw type

E

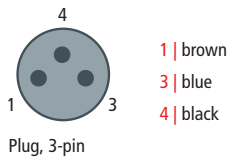


Angled M12 screw type

F

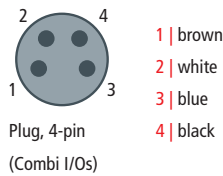


A, B, C



Pin assignment

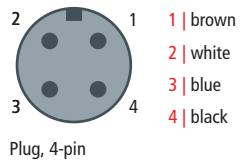
A, B, C



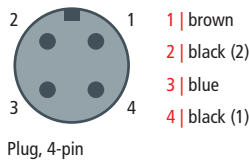
D



D, E



F



Electrical data	
Rated voltage according to IEC 61076-2-101	3-pin M8/8 mm: 60 V 4-pin M8/8 mm: 30 V 4-pin M12: 250 V 5-pin M12: 60 V
Contamination level according to IEC 60664-1	3/2
Insulation resistance according to IEC 60512-2	> 10 ⁹ Ω
Rated current according to IEC 61076-2-101	4 A
Volume resistance according to IEC 60512-2	< 5 mΩ
Mechanical data	
Protection class according to IEC 60529	IP 65/66/67, when screwed together
Ambient temperature	-25 °C...+80 °C

For technical data sheets see www.beckhoff.com/EtherCAT-Box

Sensor/power leads accessories for field assembly

Ordering information	Plug/socket	Connection	Connector	Contacts	Pict.
ZS2000-1213	straight plug	IDC	M8, screw type	3-pin	
ZS2000-1313	straight plug	IDC	M8, screw type	4-pin	
ZS2000-1613	straight plug	IDC	M12, screw type	4-pin	
ZS2000-1223	straight socket	IDC	M8, screw type	3-pin	
ZS2000-1323	straight socket	IDC	M8, screw type	4-pin	
ZS2000-2311	straight plug	soldered	M8, screw type	4-pin	A
ZS2000-2331	angled plug	soldered	M8, screw type	4-pin	B
ZS2000-2221	straight socket	soldered	M8, screw type	3-pin	C
ZS2000-2321	straight socket	soldered	M8, screw type	4-pin	C
ZS2000-2241	angled socket	soldered	M8, screw type	3-pin	D
ZS2000-2341	angled socket	soldered	M8, screw type	4-pin	D
ZS2000-2610	straight plug	screwed	M12, screw type	4-pin	E
ZS2000-2710	straight plug	screwed	M12, screw type	5-pin	E
ZS2000-2630	angled plug	screwed	M12, screw type	4-pin	F
ZS2000-2730	angled plug	screwed	M12, screw type	5-pin	F
ZS2000-2620	straight socket	screwed	M12, screw type	4-pin	G
ZS2000-2720	straight socket	screwed	M12, screw type	5-pin	G
ZS2000-2640	angled socket	screwed	M12, screw type	4-pin	H
ZS2000-2740	angled socket	screwed	M12, screw type	5-pin	H
ZS2000-2210	straight plug	screwed	M8, screw type	3-pin	I
ZS2000-2310	straight plug	screwed	M8, screw type	4-pin	I
ZS2000-2220	straight socket	screwed	M8, screw type	3-pin	J
ZS2000-2320	straight socket	screwed	M8, screw type	4-pin	J
ZS2000-3712	straight plug for thermocouples with temperature compensation element	screwed	M12, screw type	5-pin	
ZS2000-3711	straight plug for small cable cross sections	screwed	M12, screw type	5-pin	
ZS2000-4722	Y distributor M12-ST-2xM12	–	–	4-pin	
ZS2000-5911	straight plug	soldered	M23, screw type	12-pin	
ZS2000-5911	straight plug	soldered	M23, screw type	12-pin	

A Illustrations similar



Straight plug, soldered, M8

B



Angled plug, soldered, M8

C



Straight socket, soldered, M8

D



Angled socket, soldered, M8

E



Straight plug, screwed, M12

F



Angled plug, screwed, M12

G



Straight socket, screwed, M12

H



Angled socket, screwed, M12

I



Straight plug, screwed, M8

J

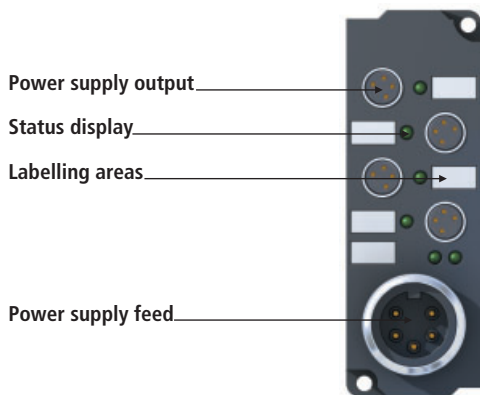


Straight socket, screwed, M8

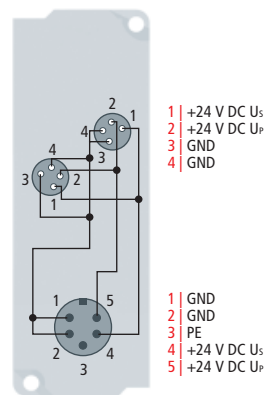
Power distribution box

Technical data	ZS2020-4304	ZS2020-4308
Number of outputs	4	8
Power supply connection	7/8" connector, 5-pin	
Outgoing circuits	M8, screw type, 4-pin	
Current load	$I_N = 4 \text{ A}$	
Dimensions (W x H x D)	30 mm x 86 mm x 31 mm	30 mm x 126 mm x 31 mm
Operating temperature	0...+55 °C	
Storage temperature	-25...+85 °C	
Protection class	IP 65/66/67 (according to EN 60529)	
Installation position	variable	

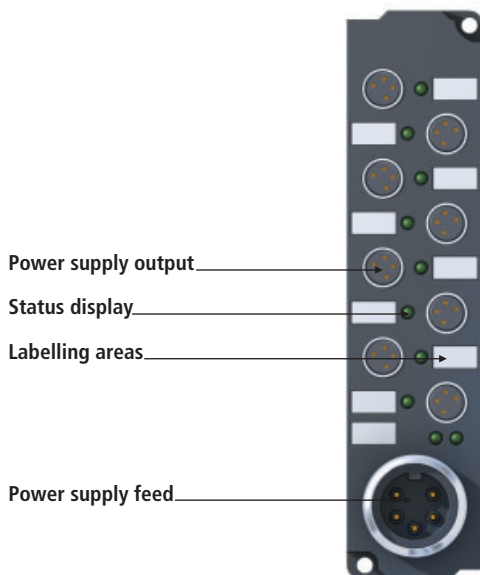
Ordering information	
ZS2020-4304	power distribution box, 4 x M8, 4-pin, 1 x 7/8" 5-pin
ZS2020-4308	power distribution box, 8 x M8, 4-pin, 1 x 7/8" 5-pin
ZS2020-2820	7/8" straight socket, field assembly, 5-pin
ZS2020-2810	7/8" straight connector, field assembly, 5-pin
ZS2020-2840	7/8" angled socket, field assembly, 5-pin
ZS2020-2830	7/8" angled connector, field assembly, 5-pin



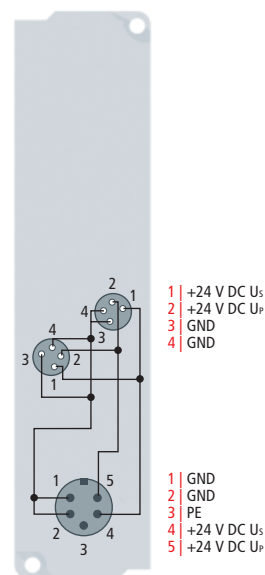
Power distribution box ZS2020-4304



Connector assignment



Power distribution box ZS2020-4308



Connector assignment