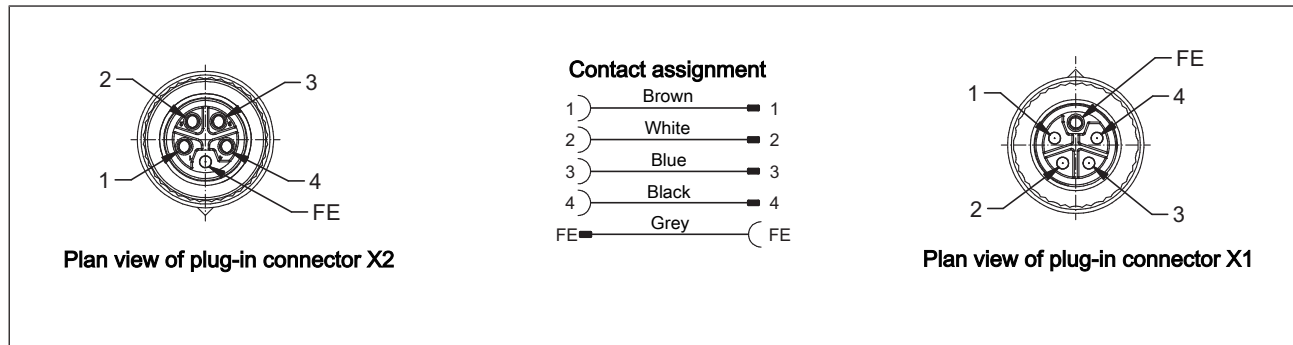


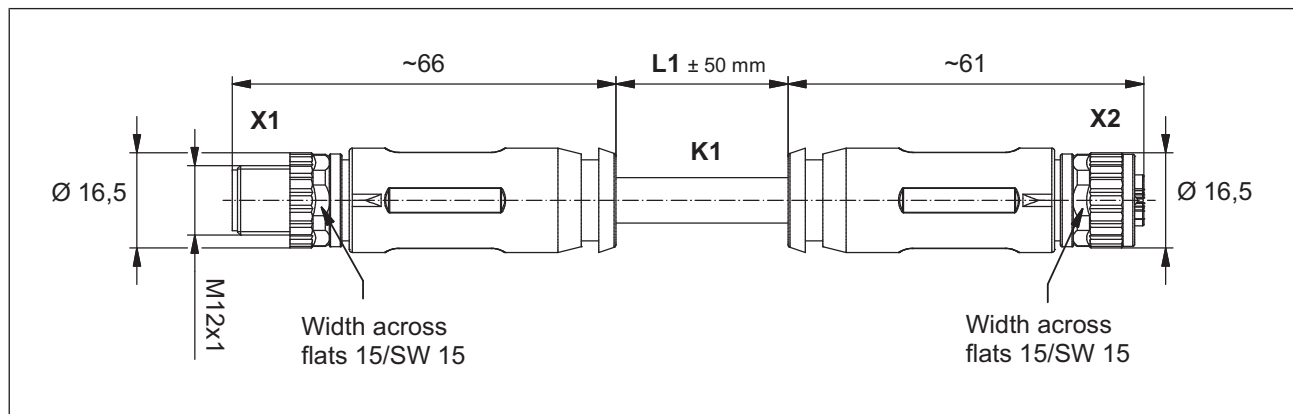
Accessories

Cable M12-M12 5p

Connector pin assignment



Dimensions



Technical details Order no. C1000010, C1000011, C1000012

General	C1000010	C1000011	C1000012
Certifications	CE, UKCA, cULus Listed	CE, UKCA, cULus Listed	CE, UKCA, cULus Listed
Electrical data	C1000010	C1000011	C1000012
Rated voltage			
Voltage UB	30 V	30 V	30 V
Rated current	12 A	12 A	12 A
Test voltage	3.000 V	3.000 V	3.000 V
Typ. conductor resistance K1	58 Ohm/km	58 Ohm/km	58 Ohm/km
Insulation resistance	100 MOhm	100 MOhm	100 MOhm
Specific volume resistance K1	$\geq 1E+16 \text{ Ohm*cm}$	$\geq 1E+16 \text{ Ohm*cm}$	$\geq 1E+16 \text{ Ohm*cm}$

Accessories

Cable M12-M12 5p

Environmental data	C1000010	C1000011	C1000012
Ambient temperature			
Temperature range	-30 - 90 °C	-30 - 90 °C	-30 - 90 °C
Temperature range (moving)	-25 - 80 °C	-25 - 80 °C	-25 - 80 °C
Max. temperature in accordance with UL	80 °C	80 °C	80 °C
Airgap creepage			
In accordance with the standard	IEC 60664-1	IEC 60664-1	IEC 60664-1
Pollution degree	2	2	2
Protection type			
X1 when inserted	IP67 when screwed in place	IP67 when screwed in place	IP67 when screwed in place
X2 when inserted	IP67 when screwed in place	IP67 when screwed in place	IP67 when screwed in place
Mechanical data	C1000010	C1000011	C1000012
Plug-in connector X1	M12, 5-pin male connector	M12, 5-pin male connector	M12, 5-pin male connector
In accordance with the standard	EN 61076-2-111	EN 61076-2-111	EN 61076-2-111
Form, plug-in connector X1	Straight	Straight	Straight
Coding of plug-in connector X1	L-coded	L-coded	L-coded
Plug-in connector X2	M12, 5-pin female connector	M12, 5-pin female connector	M12, 5-pin female connector
In accordance with the standard	EN 61076-2-111	EN 61076-2-111	EN 61076-2-111
Form, plug-in connector X2	Straight	Straight	Straight
Coding of plug-in connector X2	L-coded	L-coded	L-coded
Material of ring nut X1	CuZn, Ni b	CuZn, Ni b	CuZn, Ni b
Material of ring nut X2	CuZn, Ni b	CuZn, Ni b	CuZn, Ni b
Housing material X1	TPU, UL94 HB	TPU, UL94 HB	TPU, UL94 HB
Housing material X2	TPU, UL94 HB	TPU, UL94 HB	TPU, UL94 HB
Material of contact surface X1	Ni b / Au 0.2 gal.	Ni b / Au 0.2 gal.	Ni b / Au 0.2 gal.
Material of contact surface X2	Ni b / Au 0.2 gal.	Ni b / Au 0.2 gal.	Ni b / Au 0.2 gal.
Material of gasket	FPM	FPM	FPM
Material of pin	CuNi	CuNi	CuNi
Material of socket	CuNi	CuNi	CuNi
Conductor material K1	Cu	Cu	Cu

Accessories

Cable M12-M12 5p

Mechanical data	C1000010	C1000011	C1000012
Insulating cover for conductor K1	PP (9Y)	PP (9Y)	PP (9Y)
Mating cycles X1	100	100	100
Mating cycles X2	100	100	100
Cable type K1	Li9Y11Y	Li9Y11Y	Li9Y11Y
Cable length L1	0,5 m	3 m	5 m
Colour of external cable insulation K1	Jet black, RAL9005	Jet black, RAL9005	Jet black, RAL9005
Colour of housing	black	black	black
Cable insulation material K1	TPU/TPE-U	TPU/TPE-U	TPU/TPE-U
Drag chain suitable K1	yes	yes	yes
Min. bending radius (fixed permanently) K1	5 x Ø	5 x Ø	5 x Ø
Min. bending radius (moving) K1	6 x Ø	6 x Ø	6 x Ø
Max. traverse path K1	100 m	100 m	100 m
Bending cycles cable K1	2.000.000	2.000.000	2.000.000
Max. traverse path K1	20 m	20 m	20 m
Bending cycles cable K1	10.000.000	10.000.000	10.000.000
Max. traverse speed K1	5 m/s	5 m/s	5 m/s
Max. acceleration K1	10 m/s ²	10 m/s ²	10 m/s ²
Cable diameter K1	7,8 mm	7,8 mm	7,8 mm
Max. cable diameter K1	8 mm	8 mm	8 mm
Conductor cross section K1	1,5 mm ²	1,5 mm ²	1,5 mm ²
Wire colour K1	Brown, white, blue, black, grey	Brown, white, blue, black, grey	Brown, white, blue, black, grey
Stranding K1	5 cores around filler	5 cores around filler	5 cores around filler
Shielding K1	No	No	No
No. of wires K1	5	5	5
Certification cable K1	UL AWM-Style 20549	UL AWM-Style 20549	UL AWM-Style 20549
Certification plug-in connector X1	UL 94 HB	UL 94 HB	UL 94 HB
Certification plug-in connector X2	UL 94 HB	UL 94 HB	UL 94 HB
Halogen-free	yes	yes	yes
Halogen-free in accordance with the standard	DIN VDE 0472-815	DIN VDE 0472-815	DIN VDE 0472-815
Silicone-free	No	No	No
Oil resistance	Resistant	Resistant	Resistant
Oil-resistance in accordance with the standard	DIN EN 60811-2-1	DIN EN 60811-2-1	DIN EN 60811-2-1

Accessories

Cable M12-M12 5p

Mechanical data	C1000010	C1000011	C1000012
Non-flammability	cULus 20549	cULus 20549	cULus 20549
Torque of the interlock screw	0.6 Nm	0.6 Nm	0.6 Nm
Weight	123 g	405 g	631 g

Technical details Order no. C1000013, C1000014

General	C1000013	C1000014
Certifications	CE, UKCA, cULus Listed	CE, UKCA, cULus Listed
Electrical data	C1000013	C1000014
Rated voltage		
Voltage UB	30 V	30 V
Rated current	12 A	12 A
Test voltage	3.000 V	3.000 V
Typ. conductor resistance K1	58 Ohm/km	58 Ohm/km
Insulation resistance	100 MOhm	100 MOhm
Specific volume resistance K1	$\geq 1E+16$ Ohm*cm	$\geq 1E+16$ Ohm*cm
Environmental data	C1000013	C1000014
Ambient temperature		
Temperature range	-30 - 90 °C	-30 - 90 °C
Temperature range (moving)	-25 - 80 °C	-25 - 80 °C
Max. temperature in accordance with UL	80 °C	80 °C
Airgap creepage		
In accordance with the standard	IEC 60664-1	IEC 60664-1
Pollution degree	2	2
Protection type		
X1 when inserted	IP67 when screwed in place	IP67 when screwed in place
X2 when inserted	IP67 when screwed in place	IP67 when screwed in place
Mechanical data	C1000013	C1000014
Plug-in connector X1	M12, 5-pin male connector	M12, 5-pin male connector
In accordance with the standard	EN 61076-2-111	EN 61076-2-111
Form, plug-in connector X1	Straight	Straight
Coding of plug-in connector X1	L-coded	L-coded
Plug-in connector X2	M12, 5-pin female connector	M12, 5-pin female connector
In accordance with the standard	EN 61076-2-111	EN 61076-2-111
Form, plug-in connector X2	Straight	Straight
Coding of plug-in connector X2	L-coded	L-coded
Material of ring nut X1	CuZn, Ni b	CuZn, Ni b
Material of ring nut X2	CuZn, Ni b	CuZn, Ni b

Accessories

Cable M12-M12 5p

Mechanical data	C1000013	C1000014
Housing material X1	TPU, UL94 HB	TPU, UL94 HB
Housing material X2	TPU, UL94 HB	TPU, UL94 HB
Material of contact surface X1	Ni b / Au 0.2 gal.	Ni b / Au 0.2 gal.
Material of contact surface X2	Ni b / Au 0.2 gal.	Ni b / Au 0.2 gal.
Material of gasket	FPM	FPM
Material of pin	CuNi	CuNi
Material of socket	CuNi	CuNi
Conductor material K1	Cu	Cu
Insulating cover for conductor K1	PP (9Y)	PP (9Y)
Mating cycles X1	100	100
Mating cycles X2	100	100
Cable type K1	Li9Y11Y	Li9Y11Y
Cable length L1	10 m	20 m
Colour of external cable insulation K1	Jet black, RAL9005	Jet black, RAL9005
Colour of housing	black	black
Cable insulation material K1	TPU/TPE-U	TPU/TPE-U
Drag chain suitable K1	yes	yes
Min. bending radius (fixed permanently) K1	5 x Ø	5 x Ø
Min. bending radius (moving) K1	6 x Ø	6 x Ø
Max. traverse path K1	100 m	100 m
Bending cycles cable K1	2.000.000	2.000.000
Max. traverse path K1	20 m	20 m
Bending cycles cable K1	10.000.000	10.000.000
Max. traverse speed K1	5 m/s	5 m/s
Max. acceleration K1	10 m/s ²	10 m/s ²
Cable diameter K1	7,8 mm	7,8 mm
Max. cable diameter K1	8 mm	8 mm
Conductor cross section K1	1,5 mm ²	1,5 mm ²
Wire colour K1	Brown, white, blue, black, grey	Brown, white, blue, black, grey
Stranding K1	5 cores around filler	5 cores around filler
Shielding K1	No	No
No. of wires K1	5	5
Certification cable K1	UL AWM-Style 20549	UL AWM-Style 20549
Certification plug-in connector X1	UL 94 HB	UL 94 HB
Certification plug-in connector X2	UL 94 HB	UL 94 HB
Halogen-free	yes	yes
Halogen-free in accordance with the standard	DIN VDE 0472-815	DIN VDE 0472-815
Silicone-free	No	No

Accessories

Cable M12-M12 5p

Mechanical data	C1000013	C1000014
Oil resistance	Resistant	Resistant
Oil-resistance in accordance with the standard	DIN EN 60811-2-1	DIN EN 60811-2-1
Non-flammability	cULus 20549	cULus 20549
Torque of the interlock screw	0.6 Nm	0.6 Nm
Weight	1.196 g	3.456 g

Order reference

Product type	Features	Connector X1	Connector X2	Connector X3	Order no.
Cable/PW/ M12-5SMX/ M12-5SFX/L/ 0,5/1Q50/BK	0.5 m	M12, 5-pin male con- nector, straight	M12, 5-pin fe- male con- nector, straight		C1000010
Cable/PW/ M12-5SMX/ M12-5SFX/L/ 003/1Q50/BK	3 m	M12, 5-pin male con- nector, straight	M12, 5-pin fe- male con- nector, straight		C1000011
Cable/PW/ M12-5SMX/ M12-5SFX/L/ 005/1Q50/BK	5 m	M12, 5-pin male con- nector, straight	M12, 5-pin fe- male con- nector, straight		C1000012
Cable/PW/ M12-5SMX/ M12-5SFX/L/ 010/1Q50/BK	10 m	M12, 5-pin male con- nector, straight	M12, 5-pin fe- male con- nector, straight		C1000013
Cable/PW/ M12-5SMX/ M12-5SFX/L/ 020/1Q50/BK	20 m	M12, 5-pin male con- nector, straight	M12, 5-pin fe- male con- nector, straight		C1000014