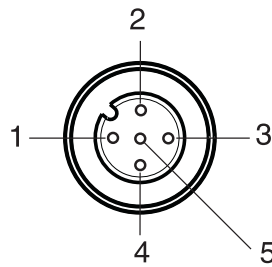


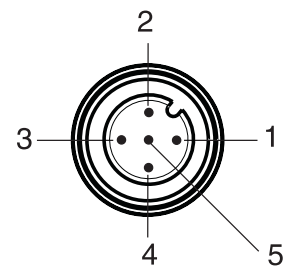
PSEN Cable M12 5p VA

Connector pin assignment

Colour coding	
1	Brown
2	White
3	Blue
4	Black
5	Grey



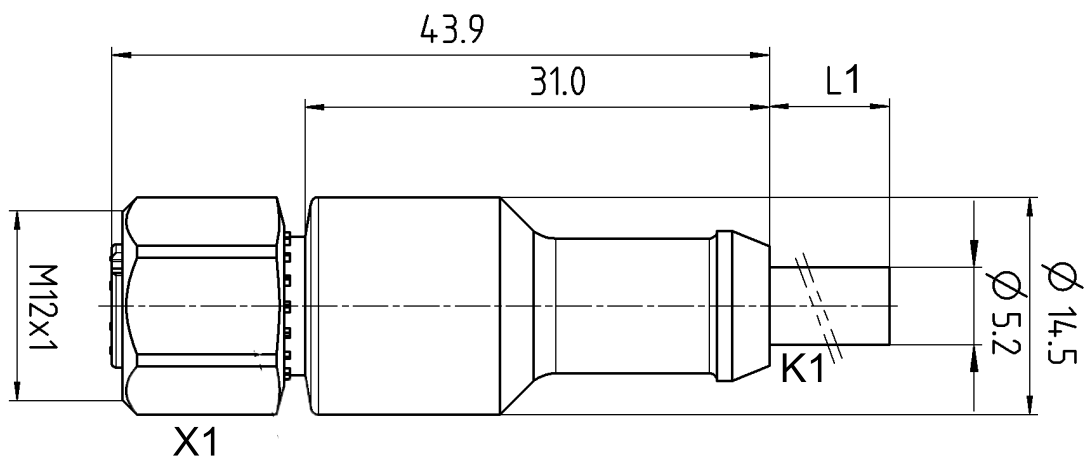
Plan view of plug-in connector X1



Plan view of plug-in connector X2

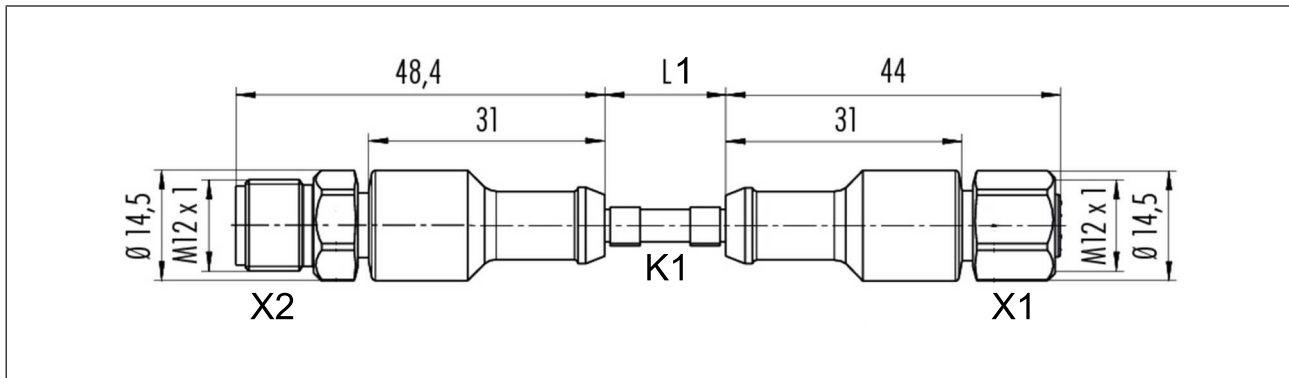
Dimensions in mm

▶ Order no. 533 170, 533 171



PSEN Cable M12 5p VA

► Order no. 533 180, 533 181



Technical details

General	533170	533171	533180	533181
Certifications	ECOLAB, cULus Listed	ECOLAB, cULus Listed	ECOLAB, cULus Listed	ECOLAB, cULus Listed
Electrical data	533170	533171	533180	533181
Rated voltage				
Voltage UB	60 V	60 V	60 V	60 V
Rated current	4 A	4 A	4 A	4 A
Test voltage	2.500 V	2.500 V	2.500 V	2.500 V
Typ. conductor resistance K1	57 Ohm/km	57 Ohm/km	57 Ohm/km	57 Ohm/km
Insulation resistance	100 MOhm	100 MOhm	100 MOhm	100 MOhm
Cable insulation resistance K1	200 MOhm x km	200 MOhm x km	200 MOhm x km	200 MOhm x km
Volume resistance	3 mOhm	3 mOhm	3 mOhm	3 mOhm
Specific cable capacitance K1	79,9 pF/m	79,9 pF/m	79,9 pF/m	79,9 pF/m
Environmental data	533170	533171	533180	533181
Temperature when using in the drag chain	-5 - 60°C	-5 - 60°C	-5 - 60°C	-5 - 60°C
Ambient temperature				
Temperature range	-40 - 105 °C	-40 - 105 °C	-40 - 105 °C	-40 - 105 °C
Temperature range (moving)	-5 - 105 °C	-5 - 105 °C	-5 - 105 °C	-5 - 105 °C

PSEN Cable M12 5p VA

Environmental data	533170	533171	533180	533181
Airgap creepage				
Overvoltage category	II	II	II	II
Pollution degree	3	3	3	3
Rated impulse withstand voltage	1,5 kV	1,5 kV	1,5 kV	1,5 kV
Protection type				
X1 when inserted	IP69K	IP69K	IP69K	IP69K
X2 when inserted	–	–	IP69K	IP69K
Housing	IP69K	IP69K	IP69K	IP69K
Mechanical data	533170	533171	533180	533181
Plug-in connector X1	M12, 5-pin female connector	M12, 5-pin female connector	M12, 5-pin female connector	M12, 5-pin female connector
In accordance with the standard	EN 61076-2-101	EN 61076-2-101	EN 61076-2-101	EN 61076-2-101
Form, plug-in connector X1	Straight	Straight	Straight	Straight
Plug-in connector X2	–	–	M12, 5-pin male connector	M12, 5-pin male connector
In accordance with the standard	–	–	EN 61076-2-101	EN 61076-2-101
Form, plug-in connector X2	–	–	Straight	Straight
Material of ring nut X1	Stainless steel 1.4404	Stainless steel 1.4404	Stainless steel 1.4404	Stainless steel 1.4404
Material of ring nut X2	–	–	Stainless steel 1.4404	Stainless steel 1.4404
Housing material X1	PP	PP	PP	PP
Housing material X2	–	–	PP	PP
Material of contact surface X1	Au	Au	Au	Au
Material of contact surface X2	–	–	Au	Au
Material of gasket	EPDM	EPDM	EPDM	EPDM
Material of pin	–	–	CuZn	CuZn
Material of socket	CuSn	CuSn	CuSn	CuSn
Conductor material K1	Cu	Cu	Cu	Cu
Insulating cover for conductor K1	PVC Y17 (105°)	PVC Y17 (105°)	PVC Y17 (105°)	PVC Y17 (105°)
Mating cycles X1	100	100	100	100
Mating cycles X2	–	–	100	100
Cable length L1	5 m	10 m	5 m	10 m

PSEN Cable M12 5p VA

Mechanical data	533170	533171	533180	533181
Colour of external cable insulation K1	Signal yellow, RAL1003	Signal yellow, RAL1003	Signal yellow, RAL1003	Signal yellow, RAL1003
Colour of housing	Light grey	Light grey	Light grey	Light grey
Cable insulation material K1	PVC YM3 (105°)	PVC YM3 (105°)	PVC YM3 (105°)	PVC YM3 (105°)
Drag chain suitable K1	yes	yes	yes	yes
Min. bending radius (fixed permanently) K1	5 x Ø	5 x Ø	5 x Ø	5 x Ø
Min. bending radius (moving) K1	10 x Ø	10 x Ø	10 x Ø	10 x Ø
Max. traverse path K1	5 m	5 m	5 m	5 m
Bending cycles cable K1	2.000.000	2.000.000	2.000.000	2.000.000
Max. traverse path K1	2 m	2 m	2 m	2 m
Max. traverse speed K1	3,3 m/s	3,3 m/s	3,3 m/s	3,3 m/s
Max. acceleration K1	5 m/s ²	5 m/s ²	5 m/s ²	5 m/s ²
Cable diameter K1	5,2 mm	5,2 mm	5,2 mm	5,2 mm
Max. cable diameter K1	5,4 mm	5,4 mm	5,4 mm	5,4 mm
Conductor cross section K1	0,34 mm ²	0,34 mm ²	0,34 mm ²	0,34 mm ²
Conductor cross section AWG K1	22	22	22	22
Wire colour K1	Brown, white, blue, black, grey	Brown, white, blue, black, grey	Brown, white, blue, black, grey	Brown, white, blue, black, grey
Stranding K1	Cores stranded in concentrical layers	Cores stranded in concentrical layers	Cores stranded in concentrical layers	Cores stranded in concentrical layers
Shielding K1	No	No	No	No
No. of wires K1	5	5	5	5
Certification cable K1	UL AWM-Style 2517 VW1	UL AWM-Style 2517 VW1	UL AWM-Style 2517 VW1	UL AWM-Style 2517 VW1
Halogen-free	No	No	No	No
Silicone-free	yes	yes	yes	yes
Oil resistance	Resistant	Resistant	Resistant	Resistant
Non-flammability	EN 50265-2-2, IEC 60332-2, UL VW1, VDE 0482-265-2-2	EN 50265-2-2, IEC 60332-2, UL VW1, VDE 0482-265-2-2	EN 50265-2-2, IEC 60332-2, UL VW1, VDE 0482-265-2-2	EN 50265-2-2, IEC 60332-2, UL VW1, VDE 0482-265-2-2
Torque of the interlock screw	approx. 50 cNM	approx. 50 cNM	approx. 50 cNM	approx. 50 cNM
Weight	218 g	433 g	228 g	438 g

PSEN Cable M12 5p VA

Order reference

Product type	Features	Connector X1	Connector X2	Connector X3	Order no.
PSEN cable M12-5sf VA 5m	5 m	M12, 5-pin female connector, straight, stainless steel threaded ring			533 170
PSEN cable M12-5sf VA 10m	10 m	M12, 5-pin female connector, straight, stainless steel threaded ring			533 171
PSEN cable M12-5sf/M12-5sm VA 5m	5 m	M12, 5-pin female connector, straight, stainless steel threaded ring	M12, 5-pin male connector, straight, stainless steel threaded ring		533 180
PSEN cable M12-5sf/M12-5sm VA 10m	10 m	M12, 5-pin female connector, straight, stainless steel threaded ring	M12, 5-pin male connector, straight, stainless steel threaded ring		533 181