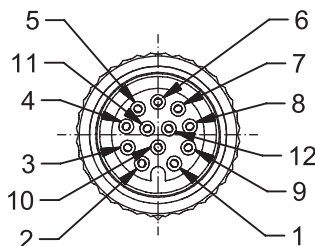


PSEN cable M12 12p

Connector pin assignment

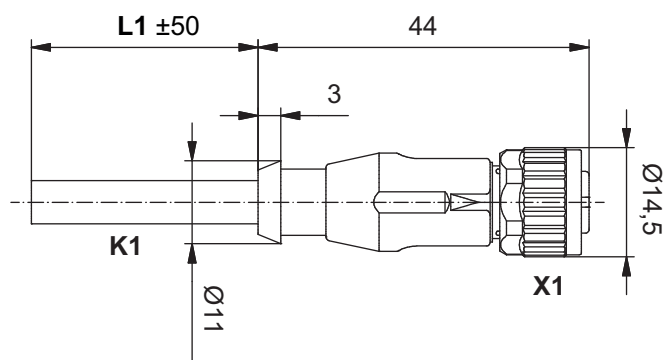
Colour coding

1	Brown
2	Blue
3	White
4	Green
5	Pink
6	Yellow
7	Black
8	Grey
9	Red
10	Purple
11	Grey-pink
12	Red-blue



Plan view of plug-in connector X1

Dimensions in mm



Accessories

PSEN cable M12 12p

Technical details Order no. 570350 - 570352

General	570350	570351	570352
Certifications	CE, UKCA, cULus Listed	CE, UKCA, cULus Listed	CE, UKCA, cULus Listed
Electrical data	570350	570351	570352
Supply voltage			
Current load capacity at UB	2 A	2 A	2 A
Rated voltage			
Voltage UB	30 V	30 V	30 V
Rated current	2 A	2 A	2 A
Test voltage	3.000 V	3.000 V	3.000 V
Typ. conductor resistance K1	Max. 78 Ohm/km	Max. 78 Ohm/km	Max. 78 Ohm/km
Insulation resistance	100 MOhm	100 MOhm	100 MOhm
Specific volume resistance K1	$\geq 1E+16$ Ohm*cm	$\geq 1E+16$ Ohm*cm	$\geq 1E+16$ Ohm*cm
Environmental data	570350	570351	570352
Ambient temperature			
Temperature range	-30 - 80 °C	-30 - 80 °C	-30 - 80 °C
Airgap creepage			
in accordance with the standard	IEC 60664-1	IEC 60664-1	IEC 60664-1
Pollution degree	2, 3	2, 3	2, 3
Protection type			
X1 when inserted	IP67 when screwed in place	IP67 when screwed in place	IP67 when screwed in place
Housing	IP67	IP67	IP67
Mechanical data	570350	570351	570352
Plug connector X1	M12, 12-pin female connector	M12, 12-pin female connector	M12, 12-pin female connector
in accordance with the standard	EN 61076-2-101	EN 61076-2-101	EN 61076-2-101
Form, plug-in connector X1	Straight	Straight	Straight
Coding of plug-in connector X1	A-coded	A-coded	A-coded
Material of ring nut X1	GD-Zn, Ni	GD-Zn, Ni	GD-Zn, Ni
Housing material X1	TPU, UL94 HB	TPU, UL94 HB	TPU, UL94 HB
Material of contact surface X1	CuZn, Ni b/Au 0.2 gal.	CuZn, Ni b/Au 0.2 gal.	CuZn, Ni b/Au 0.2 gal.
Material of gasket	FPM	FPM	FPM
Material of socket	CuZn	CuZn	CuZn

Accessories

PSEN cable M12 12p

Mechanical data	570350	570351	570352
Conductor material K1	Cu	Cu	Cu
Insulating cover for conductor K1	PP (9Y)	PP (9Y)	PP (9Y)
Mating cycles X1	100	100	100
Cable type K1	Li9Y11Y	Li9Y11Y	Li9Y11Y
Cable length L1	2 m	3 m	5 m
Cable length tolerance L1	+ 40 mm	+ 40 mm	+ 1 %
Colour of external cable insulation K1	Signal yellow RAL 1003	Signal yellow RAL 1003	Signal yellow RAL 1003
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	6 x Ø	6 x Ø	6 x Ø
Min. bending radius (moving) K1	12 x Ø	12 x Ø	12 x Ø
Max. traverse path K1	10 m	10 m	10 m
Bending cycles cable K1	2.000.000	2.000.000	2.000.000
Max. traverse speed K1	3 m/s	3 m/s	3 m/s
Max. acceleration K1	10 m/s ²	10 m/s ²	10 m/s ²
Cable diameter K1	5,75 mm	5,75 mm	5,75 mm
Max. cable diameter K1	5,9 mm	5,9 mm	5,9 mm
Conductor cross section K1	0,25 mm ²	0,25 mm ²	0,25 mm ²
Conductor cross section AWG K1	24	24	24
Wire colour K1	Brown, blue, white, green, pink, yellow, black, grey, red, violet, grey-pink, red-blue	Brown, blue, white, green, pink, yellow, black, grey, red, violet, grey-pink, red-blue	Brown, blue, white, green, pink, yellow, black, grey, red, violet, grey-pink, red-blue
Shielding K1	No	No	No
No. of wires K1	12	12	12
Certification cable K1	UL AWM-Style 20233	UL AWM-Style 20233	UL AWM-Style 20233
Certification plug-in connector X1	UL 94	UL 94	UL 94
Halogen-free	Yes	Yes	Yes
Silicone-free	Yes	Yes	Yes
Oil resistance	DIN EN 60811-404 (168h 100°C)	DIN EN 60811-404 (168h 100°C)	DIN EN 60811-404 (168h 100°C)
Non-flammability	UL 758/1581/2556 Cable Flame, UL VW1, FT1, UL94-V0	UL 758/1581/2556 Cable Flame, UL VW1, FT1, UL94-V0	UL 758/1581/2556 Cable Flame, UL VW1, FT1, UL94-V0

Accessories

PSEN cable M12 12p

Mechanical data	570350	570351	570352
Material			
Housing	TPU, UL94	TPU, UL94	TPU, UL94
Torque of the interlock screw	0.6 Nm	0.6 Nm	0.6 Nm
Weight	88 g	135 g	230 g

Accessories

PSEN cable M12 12p

Technical details Order no. 570353 - 570355

General	570353	570354	570355
Certifications	CE, UKCA, cULus Listed	CE, UKCA, cULus Listed	CE, UKCA, cULus Listed
Electrical data	570353	570354	570355
Supply voltage			
Current load capacity at UB	2 A	2 A	2 A
Rated voltage			
Voltage UB	30 V	30 V	30 V
Rated current	2 A	2 A	2 A
Test voltage	3.000 V	3.000 V	3.000 V
Typ. conductor resistance K1	Max. 78 Ohm/km	Max. 78 Ohm/km	Max. 78 Ohm/km
Insulation resistance	100 MOhm	100 MOhm	100 MOhm
Specific volume resistance K1	$\geq 1E+16$ Ohm*cm	$\geq 1E+16$ Ohm*cm	$\geq 1E+16$ Ohm*cm
Environmental data	570353	570354	570355
Ambient temperature			
Temperature range	-30 - 80 °C	-30 - 80 °C	-30 - 80 °C
Airgap creepage			
in accordance with the standard	IEC 60664-1	IEC 60664-1	IEC 60664-1
Pollution degree	2, 3	2, 3	2, 3
Protection type			
X1 when inserted	IP67 when screwed in place	IP67 when screwed in place	IP67 when screwed in place
Housing	IP67	IP67	IP67
Mechanical data	570353	570354	570355
Plug connector X1	M12, 12-pin female connector	M12, 12-pin female connector	M12, 12-pin female connector
in accordance with the standard	EN 61076-2-101	EN 61076-2-101	EN 61076-2-101
Form, plug-in connector X1	Straight	Straight	Straight
Coding of plug-in connector X1	A-coded	A-coded	A-coded
Material of ring nut X1	GD-Zn, Ni	GD-Zn, Ni	GD-Zn, Ni
Housing material X1	TPU, UL94 HB	TPU, UL94 HB	TPU, UL94 HB
Material of contact surface X1	CuZn, Ni b/Au 0.2 gal.	CuZn, Ni b/Au 0.2 gal.	CuZn, Ni b/Au 0.2 gal.
Material of gasket	FPM	FPM	FPM
Material of socket	CuZn	CuZn	CuZn

Accessories

PSEN cable M12 12p

Mechanical data	570353	570354	570355
Conductor material K1	Cu	Cu	Cu
Insulating cover for conductor K1	PP (9Y)	PP (9Y)	PP (9Y)
Mating cycles X1	100	100	100
Cable type K1	Li9Y11Y	Li9Y11Y	Li9Y11Y
Cable length L1	10 m	20 m	30 m
Cable length tolerance L1	+ 1 %	+ 1 %	+ 1 %
Colour of external cable insulation K1	Signal yellow RAL 1003	Signal yellow RAL 1003	Signal yellow RAL 1003
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	6 x Ø	6 x Ø	6 x Ø
Min. bending radius (moving) K1	12 x Ø	12 x Ø	12 x Ø
Max. traverse path K1	10 m	10 m	10 m
Bending cycles cable K1	2.000.000	2.000.000	2.000.000
Max. traverse speed K1	3 m/s	3 m/s	3 m/s
Max. acceleration K1	10 m/s²	10 m/s²	10 m/s²
Cable diameter K1	5,75 mm	5,75 mm	5,75 mm
Max. cable diameter K1	5,9 mm	5,9 mm	5,9 mm
Conductor cross section K1	0,25 mm²	0,25 mm²	0,25 mm²
Conductor cross section AWG K1	24	24	24
Wire colour K1	Brown, blue, white, green, pink, yellow, black, grey, red, violet, grey-pink, red-blue	Brown, blue, white, green, pink, yellow, black, grey, red, violet, grey-pink, red-blue	Brown, blue, white, green, pink, yellow, black, grey, red, violet, grey-pink, red-blue
Shielding K1	No	No	No
No. of wires K1	12	12	12
Certification cable K1	UL AWM-Style 20233	UL AWM-Style 20233	UL AWM-Style 20233
Certification plug-in connector X1	UL 94	UL 94	UL 94
Halogen-free	Yes	Yes	Yes
Silicone-free	Yes	Yes	Yes
Oil resistance	DIN EN 60811-404 (168h 100°C)	DIN EN 60811-404 (168h 100°C)	DIN EN 60811-404 (168h 100°C)
Non-flammability	UL 758/1581/2556 Cable Flame, UL VW1, FT1, UL94-V0	UL 758/1581/2556 Cable Flame, UL VW1, FT1, UL94-V0	UL 758/1581/2556 Cable Flame, UL VW1, FT1, UL94-V0

Accessories

PSEN cable M12 12p

Mechanical data	570353	570354	570355
Material			
Housing	TPU, UL94	TPU, UL94	TPU, UL94
Torque of the interlock screw	0.6 Nm	0.6 Nm	0.6 Nm
Weight	448 g	884 g	1.320 g

Accessories

PSEN cable M12 12p

Technical details Order no. 570356, 570363

General	570356	570363
Certifications	CE, UKCA, cULus Listed	CE, UKCA, cULus Listed
Electrical data	570356	570363
Supply voltage		
Current load capacity at UB	2 A	2 A
Rated voltage		
Voltage UB	30 V	30 V
Rated current	2 A	2 A
Test voltage	3.000 V	3.000 V
Typ. conductor resistance K1	Max. 78 Ohm/km	Max. 78 Ohm/km
Insulation resistance	100 MOhm	100 MOhm
Specific volume resistance K1	$\geq 1\text{E}+16 \text{ Ohm}\cdot\text{cm}$	$\geq 1\text{E}+16 \text{ Ohm}\cdot\text{cm}$
Environmental data	570356	570363
Ambient temperature		
Temperature range	-30 - 80 °C	-30 - 80 °C
Airgap creepage		
in accordance with the standard	IEC 60664-1	IEC 60664-1
Pollution degree	2, 3	2, 3
Protection type		
X1 when inserted	IP67 when screwed in place	IP67 when screwed in place
Housing	IP67	IP67
Mechanical data	570356	570363
Plug connector X1	M12, 12-pin female connector	M12, 12-pin female connector
in accordance with the standard	EN 61076-2-101	EN 61076-2-101
Form, plug-in connector X1	Straight	Straight
Coding of plug-in connector X1	A-coded	A-coded
Material of ring nut X1	GD-Zn, Ni	GD-Zn, Ni
Housing material X1	TPU, UL94 HB	TPU, UL94 HB
Material of contact surface X1	CuZn, Ni b/Au 0.2 gal.	CuZn, Ni b/Au 0.2 gal.
Material of gasket	FPM	FPM
Material of socket	CuZn	CuZn
Conductor material K1	Cu	Cu
Insulating cover for conductor K1	PP (9Y)	PP (9Y)
Mating cycles X1	100	100
Cable type K1	LI9Y11Y	LI9Y11Y
Cable length L1	50 m	80 m
Cable length tolerance L1	+ 1 %	+ 1 %
Colour of external cable insulation K1	Signal yellow RAL 1003	Signal yellow RAL 1003

Accessories

PSEN cable M12 12p

Mechanical data	570356	570363
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	6 x Ø	6 x Ø
Min. bending radius (moving) K1	12 x Ø	12 x Ø
Max. traverse path K1	10 m	10 m
Bending cycles cable K1	2.000.000	2.000.000
Max. traverse speed K1	3 m/s	3 m/s
Max. acceleration K1	10 m/s²	10 m/s²
Cable diameter K1	5,75 mm	5,75 mm
Max. cable diameter K1	5,9 mm	5,9 mm
Conductor cross section K1	0,25 mm²	0,25 mm²
Conductor cross section AWG K1	24	24
Wire colour K1	Brown, blue, white, green, pink, yellow, black, grey, red, violet, grey-pink, red-blue	Brown, blue, white, green, pink, yellow, black, grey, red, violet, grey-pink, red-blue
Shielding K1	No	No
No. of wires K1	12	12
Certification cable K1	UL AWM-Style 20233	UL AWM-Style 20233
Certification plug-in connector X1	UL 94	UL 94
Halogen-free	Yes	Yes
Silicone-free	Yes	Yes
Oil resistance	DIN EN 60811-404 (168h 100°C)	DIN EN 60811-404 (168h 100°C)
Non-flammability	UL 758/1581/2556 Cable Flame, UL VW1, FT1, UL94-V0	UL 758/1581/2556 Cable Flame, UL VW1, FT1, UL94-V0
Material		
Housing	TPU, UL94	TPU, UL94
Torque of the interlock screw	0.6 Nm	0.6 Nm
Weight	1.756 g	3.990 g

PSEN cable M12 12p

Order reference

Product type	Features	Connector X1	Connector X2	Connector X3	Order no.
PSEN cable M12-12sf 2m	2 m	M12, 12-pin female connector, straight			570350
PSEN cable M12-12sf 3m	3 m	M12, 12-pin female connector, straight			570351
PSEN cable M12-12sf 5m	5 m	M12, 12-pin female connector, straight			570352
PSEN cable M12-12sf 10m	10 m	M12, 12-pin female connector, straight			570353
PSEN cable M12-12sf 20m	20 m	M12, 12-pin female connector, straight			570354
PSEN cable M12-12sf 30m	30 m	M12, 12-pin female connector, straight			570355
PSEN cable M12-12sf 50m	50 m	M12, 12-pin female connector, straight			570356
PSEN cable M12-12sf 80m	80 m	M12, 12-pin female connector, straight			570363