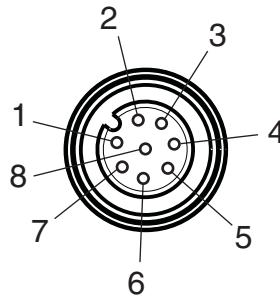


PSEN op Cable M12 8p sh

Connector pin assignment

Colour coding

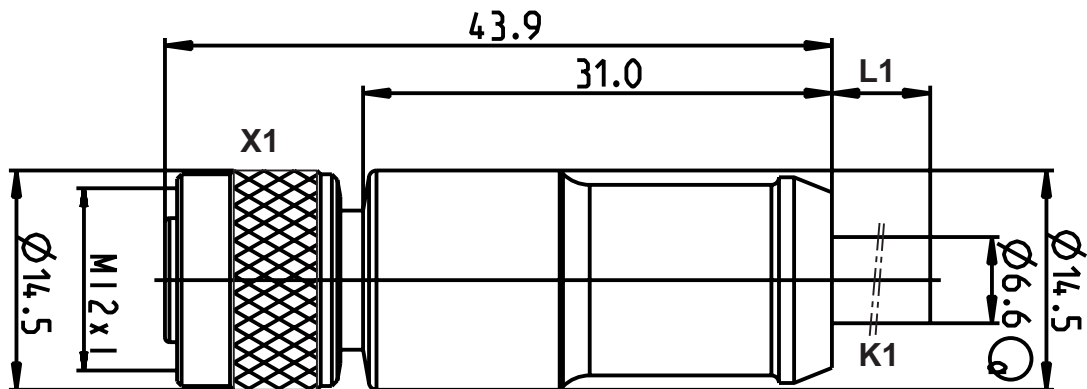
1	white
2	brown
3	green
4	yellow
5	grey
6	pink
7	blue
8	red
Shield	Shield sleeve



Plan view plug-in connector X1

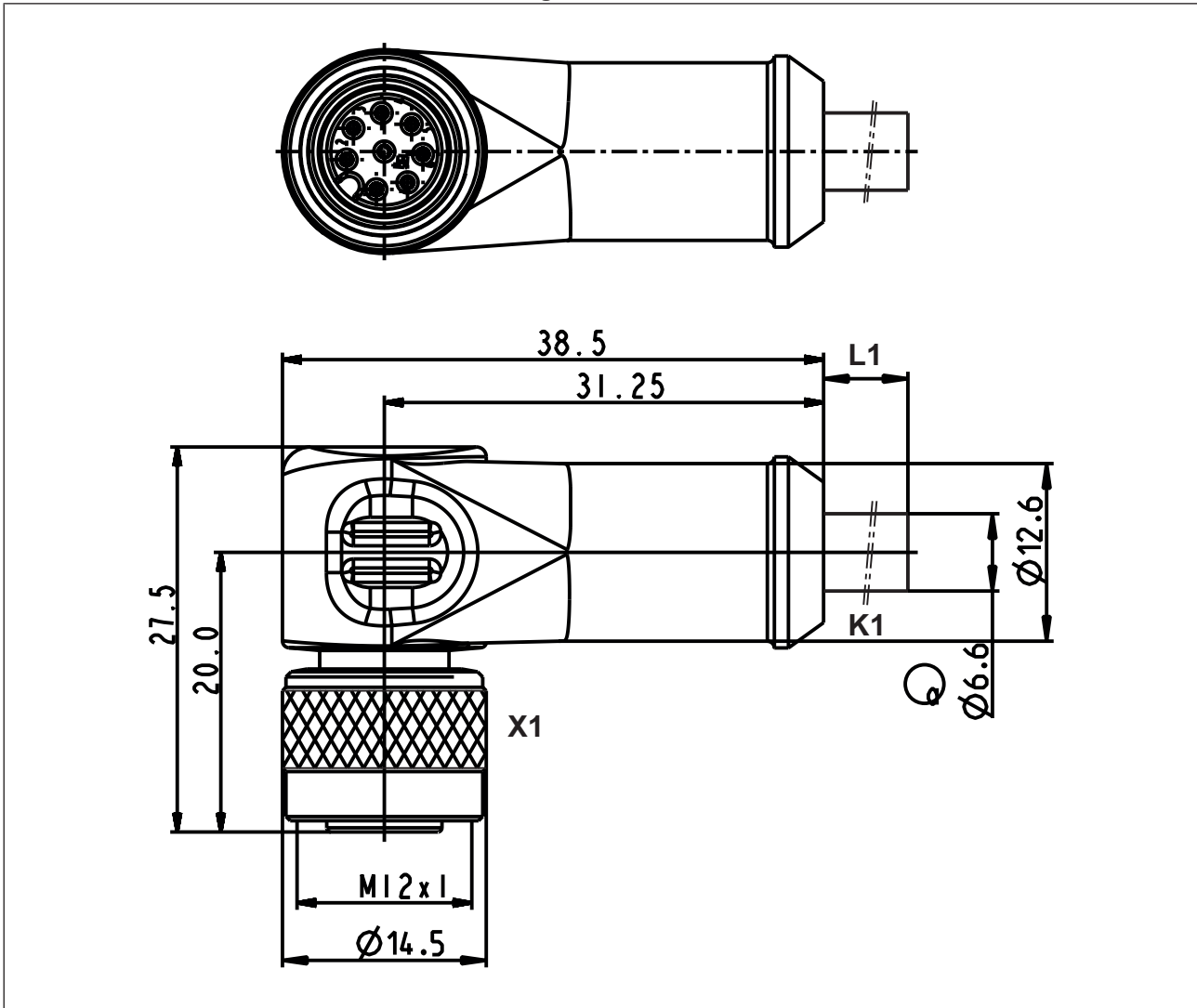
Dimensions

► M12 female connector, straight:



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► M12 female connector, angled:



Technical details Order no. 630313 - 630315

General	630313	630314	630315
Approvals	cULus Listed	cULus Listed	cULus Listed
Electrical data	630313	630314	630315
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	82 Ohm/km	82 Ohm/km	82 Ohm/km

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Electrical data	630313	630314	630315
Insulation resistance	100 MOhm	100 MOhm	100 MOhm
Volume resistance	3 mOhm	3 mOhm	3 mOhm
Specific volume resistance K1	$\geq 7E+15 \text{ Ohm*cm}$	$\geq 7E+15 \text{ Ohm*cm}$	$\geq 7E+15 \text{ Ohm*cm}$
Specific cable capacitance K1	59,8pF/m	59,8pF/m	59,8pF/m
Environmental data	630313	630314	630315
Ambient temperature			
Temperature range	-25 - 80 °C	-25 - 80 °C	-25 - 80 °C
Airgap creepage			
Pollution degree	3	3	3
Protection type			
X1 when inserted	IP67	IP67	IP67
Housing	IP67	IP67	IP67
Mechanical data	630313	630314	630315
Plug-in connector X1	M12, 8-pin female connector	M12, 8-pin female connector	M12, 8-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
Housing material X1	PUR	PUR	PUR
Material of contact surface X1	Au	Au	Au
Material of socket	CuSn	CuSn	CuSn
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	Li9YC11Y	Li9YC11Y	Li9YC11Y
Cable length L1	3 m	5 m	10 m
Material of shield surface cable K1	Sn	Sn	Sn
Colour of external cable insulation K1	Yellow, similar to RAL1003	Yellow, similar to RAL1003	Yellow, similar to RAL1003
Colour of housing	black	black	black

PSEN op Cable M12 8p sh

Mechanical data	630313	630314	630315
Min. bending radius (fixed permanently) K1	5 x Ø	5 x Ø	5 x Ø
Min. bending radius (moving) K1	10 x Ø	10 x Ø	10 x Ø
Cable insulation material K1	PUR, TPU / TPE-U	PUR, TPU / TPE-U	PUR, TPU / TPE-U
Drag chain suitable K1	No	No	No
Cable diameter K1	6,6 mm	6,6 mm	6,6 mm
Max. cable diameter K1	6,75 mm	6,75 mm	6,75 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	White, brown, green, yellow, grey, pink, blue, red	White, brown, green, yellow, grey, pink, blue, red	White, brown, green, yellow, grey, pink, blue, red
Stranding K1	8 cores around filler	8 cores around filler	8 cores around filler
Shielding K1	yes	yes	yes
Shield type K1	Wire mesh	Wire mesh	Wire mesh
Wire layer separation K1	yes	yes	yes
No. of wires K1	8	8	8
Approval cable K1	UL AWM-Style 20233, UL/CSA	UL AWM-Style 20233, UL/CSA	UL AWM-Style 20233, UL/CSA
Approval of plug-in connector X1	UL94 V-0	UL94 V-0	UL94 V-0
Halogen-free	yes	yes	yes
Silicone-free	yes	yes	yes
Oil resistance	Resistant	Resistant	Resistant
Non-flammability	UL VW1	UL VW1	UL VW1
Material			
Housing	PUR	PUR	PUR
Weight	224 g	354 g	612 g

PSEN op Cable M12 8p sh

Technical details Order no. 630316 - 630318

General	630316	630317	630318
Approvals	cULus Listed	cULus Listed	cULus Listed
Electrical data	630316	630317	630318
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	82 Ohm/km	82 Ohm/km	82 Ohm/km
Insulation resistance	100 MOhm	100 MOhm	100 MOhm
Volume resistance	3 mOhm	3 mOhm	3 mOhm
Specific volume resistance K1	$\geq 7E+15$ Ohm*cm	$\geq 7E+15$ Ohm*cm	$\geq 7E+15$ Ohm*cm
Specific cable capacitance K1	59,8pF/m	59,8pF/m	59,8pF/m
Environmental data	630316	630317	630318
Ambient temperature			
Temperature range	-25 - 80 °C	-25 - 80 °C	-25 - 80 °C
Airgap creepage			
Pollution degree	3	3	3
Protection type			
X1 when inserted	IP67	IP67	IP67
Housing	IP67	IP67	IP67
Mechanical data	630316	630317	630318
Plug-in connector X1	M12, 8-pin female connector	M12, 8-pin female connector	M12, 8-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	Angled	Angled	Angled
Housing material X1	PUR	PUR	PUR
Material of contact surface X1	Au	Au	Au
Material of socket	CuSn	CuSn	CuSn
Conductor material K1	Cu	Cu	Cu

PSEN op Cable M12 8p sh

Mechanical data	630316	630317	630318
Insulating cover for conductor K1	PP (9Y)	PP (9Y)	PP (9Y)
Mating cycles X1	100	100	100
Cable type K1	Li9YC11Y	Li9YC11Y	Li9YC11Y
Cable length L1	3 m	5 m	10 m
Material of shield surface cable K1	Sn	Sn	Sn
Colour of external cable insulation K1	Yellow, similar to RAL1003	Yellow, similar to RAL1003	Yellow, similar to RAL1003
Colour of housing	black	black	black
Min. bending radius (fixed permanently) K1	5 x Ø	5 x Ø	5 x Ø
Min. bending radius (moving) K1	10 x Ø	10 x Ø	10 x Ø
Cable insulation material K1	PUR, TPU / TPE-U	PUR, TPU / TPE-U	PUR, TPU / TPE-U
Drag chain suitable K1	No	No	No
Cable diameter K1	6,6 mm	6,6 mm	6,6 mm
Max. cable diameter K1	6,75 mm	6,75 mm	6,75 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	White, brown, green, yellow, grey, pink, blue, red	White, brown, green, yellow, grey, pink, blue, red	White, brown, green, yellow, grey, pink, blue, red
Stranding K1	8 cores around filler	8 cores around filler	8 cores around filler
Shielding K1	yes	yes	yes
Shield type K1	Wire mesh	Wire mesh	Wire mesh
Wire layer separation K1	yes	yes	yes
No. of wires K1	8	8	8
Approval cable K1	UL AWM-Style 20233, UL/CSA	UL AWM-Style 20233, UL/CSA	UL AWM-Style 20233, UL/CSA
Approval of plug-in connector X1	UL94 V-0	UL94 V-0	UL94 V-0
Halogen-free	yes	yes	yes
Silicone-free	yes	yes	yes

PSEN op Cable M12 8p sh

Mechanical data	630316	630317	630318
Oil resistance	Resistant	Resistant	Resistant
Non-flammability	UL VW1	UL VW1	UL VW1
Material			
Housing	PUR	PUR	PUR
Weight	227 g	358 g	696 g

Technical details Order no. 630328 - 630368

General	630328	630329	630368
Approvals	cULus Listed	cULus Listed	cULus Listed
Electrical data	630328	630329	630368
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	82 Ohm/km	82 Ohm/km	82 Ohm/km
Insulation resistance	100 MOhm	100 MOhm	100 MOhm
Volume resistance	3 mOhm	3 mOhm	3 mOhm
Specific volume resistance K1	$\geq 7E+15 \text{ Ohm} \cdot \text{cm}$	$\geq 7E+15 \text{ Ohm} \cdot \text{cm}$	$\geq 7E+15 \text{ Ohm} \cdot \text{cm}$
Specific cable capacitance K1	59,8pF/m	59,8pF/m	59,8pF/m
Environmental data	630328	630329	630368
Ambient temperature			
Temperature range	-25 - 80 °C	-25 - 80 °C	-25 - 80 °C
Airgap creepage			
Pollution degree	3	3	3
Protection type			
X1 when inserted	IP67	IP67	IP67
Housing	IP67	IP67	IP67
Mechanical data	630328	630329	630368
Plug-in connector X1	M12, 8-pin female connector	M12, 8-pin female connector	M12, 8-pin female connector
In accordance with the standard	EN 61076-2-101	EN 61076-2-101	EN 61076-2-101

PSEN op Cable M12 8p sh

Mechanical data	630328	630329	630368
Form, plug-in connector X1	Straight	Angled	Straight
Housing material X1	PUR	PUR	PUR
Material of contact surface X1	Au	Au	Au
Material of socket	CuSn	CuSn	CuSn
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	Li9YC11Y	Li9YC11Y	Li9YC11Y
Cable length L1	30 m	30 m	50 m
Material of shield surface cable K1	Sn	Sn	Sn
Colour of external cable insulation K1	Yellow, similar to RAL1003	Yellow, similar to RAL1003	Yellow, similar to RAL1003
Colour of housing	black	black	black
Min. bending radius (fixed permanently) K1	5 x Ø	5 x Ø	5 x Ø
Min. bending radius (moving) K1	10 x Ø	10 x Ø	10 x Ø
Cable insulation material K1	PUR, TPU / TPE-U	PUR, TPU / TPE-U	PUR, TPU / TPE-U
Drag chain suitable K1	No	No	No
Cable diameter K1	6,6 mm	6,6 mm	6,6 mm
Max. cable diameter K1	6,75 mm	6,75 mm	6,75 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	White, brown, green, yellow, grey, pink, blue, red	White, brown, green, yellow, grey, pink, blue, red	White, brown, green, yellow, grey, pink, blue, red
Stranding K1	8 cores around filler	8 cores around filler	8 cores around filler
Shielding K1	yes	yes	yes
Shield type K1	Wire mesh	Wire mesh	Wire mesh
Wire layer separation K1	yes	yes	yes

PSEN op Cable M12 8p sh

Mechanical data	630328	630329	630368
No. of wires K1	8	8	8
Approval cable K1	UL AWM-Style 20233, UL/CSA	UL AWM-Style 20233, UL/CSA	UL AWM-Style 20233, UL/CSA
Approval of plug-in connector X1	UL94 V-0	UL94 V-0	UL94 V-0
Halogen-free	yes	yes	yes
Silicone-free	yes	yes	yes
Oil resistance	Resistant	Resistant	Resistant
Non-flammability	UL VW1	UL VW1	UL VW1
Material			
Housing	PUR	PUR	PUR
Weight	2.050 g	2.021 g	2.970 g

Technical details Order no. 630369

General	
Approvals	cULus Listed
Electrical data	
Rated voltage	
Voltage UB	30 V
Rated current	2 A
Test voltage	3.000 V
Typ. conductor resistance K1	82 Ohm/km
Insulation resistance	100 MOhm
Volume resistance	3 mOhm
Specific volume resistance K1	>= 7E+15 Ohm*cm
Specific cable capacitance K1	59,8pF/m
Environmental data	
Ambient temperature	
Temperature range	-25 - 80 °C
Airgap creepage	
Pollution degree	3
Protection type	
X1 when inserted	IP67
Housing	IP67

PSEN op Cable M12 8p sh

Mechanical data	
Plug-in connector X1	M12, 8-pin female connector
In accordance with the standard	EN 61076-2-101
Form, plug-in connector X1	Angled
Housing material X1	PUR
Material of contact surface X1	Au
Material of socket	CuSn
Conductor material K1	Cu
Insulating cover for conductor K1	PP (9Y)
Mating cycles X1	100
Cable type K1	Li9YC11Y
Cable length L1	50 m
Material of shield surface cable K1	Sn
Colour of external cable insulation K1	Yellow, similar to RAL1003
Colour of housing	black
Min. bending radius (fixed permanently) K1	5 x Ø
Min. bending radius (moving) K1	10 x Ø
Cable insulation material K1	PUR, TPU / TPE-U
Drag chain suitable K1	No
Cable diameter K1	6,6 mm
Max. cable diameter K1	6,75 mm
Conductor cross section K1	0,25 mm²
Conductor cross section AWG K1	24
Wire colour K1	White, brown, green, yellow, grey, pink, blue, red
Stranding K1	8 cores around filler
Shielding K1	yes
Shield type K1	Wire mesh
Wire layer separation K1	yes
No. of wires K1	8
Approval cable K1	UL AWM-Style 20233, UL/CSA
Approval of plug-in connector X1	UL94 V-0
Halogen-free	yes
Silicone-free	yes
Oil resistance	Resistant
Non-flammability	UL VW1

PSEN op Cable M12 8p sh

Mechanical data

Material

Housing

PUR

Weight

2.960 g

Order reference

Product type	Features	Connector X1	Connector X2	Order no.
PSEN op cable axial M12 8-p. shield. 3m	3 m	M12 female con- nector, straight		630 313
PSEN op cable axial M12 8-p. shield. 5m	5 m	M12 female con- nector, straight		630 314
PSEN op cable axial M12 8-p. shield. 10m	10 m	M12 female con- nector, straight		630 315
PSEN op cable angle M12 8-p. shield. 3m	3 m	M12 female con- nector, angled		630 316
PSEN op cable angle M12 8-p. shield. 5m	5 m	M12 female con- nector, angled		630 317
PSEN op cable angle M12 8-p. shield. 10m	10 m	M12 female con- nector, angled		630 318
PSEN op cable axial M12 8-p. shield. 30m	30 m	M12 female con- nector, straight		630 328
PSEN op cable angle M12 8-p. shield. 30m	30 m	M12 female con- nector, angled		630 329
PSEN op cable axial M12 8-p. shield. 50m	50 m	M12 female con- nector, straight		630 368
PSEN op cable angle M12 8-p. shield. 50m	50 m	M12 female con- nector, angled		630 369