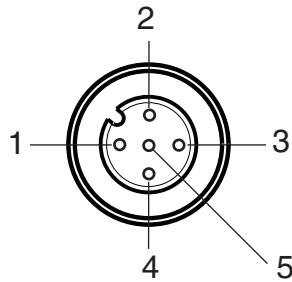


## PSEN op Cable M12 5p

### Connector pin assignment

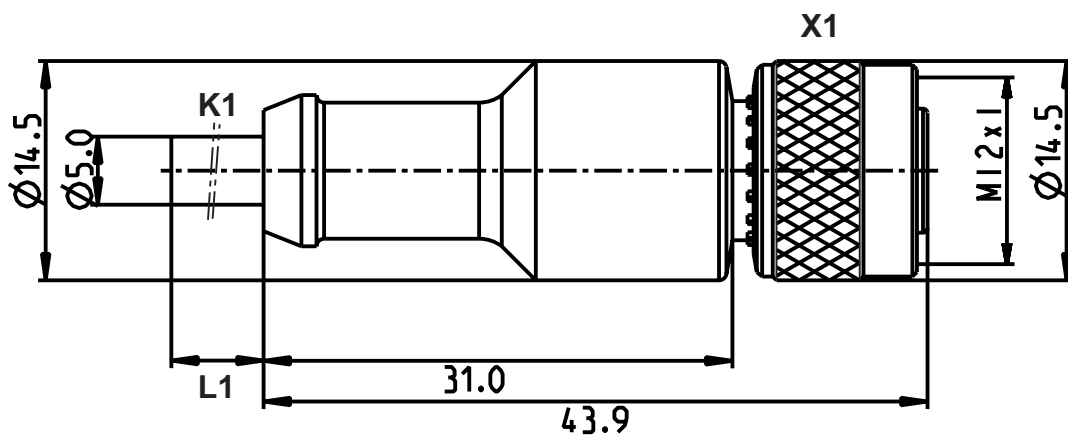
Colour coding	
1	brown
2	white
3	blue
4	black
5	grey



Plan view plug-in connector X1

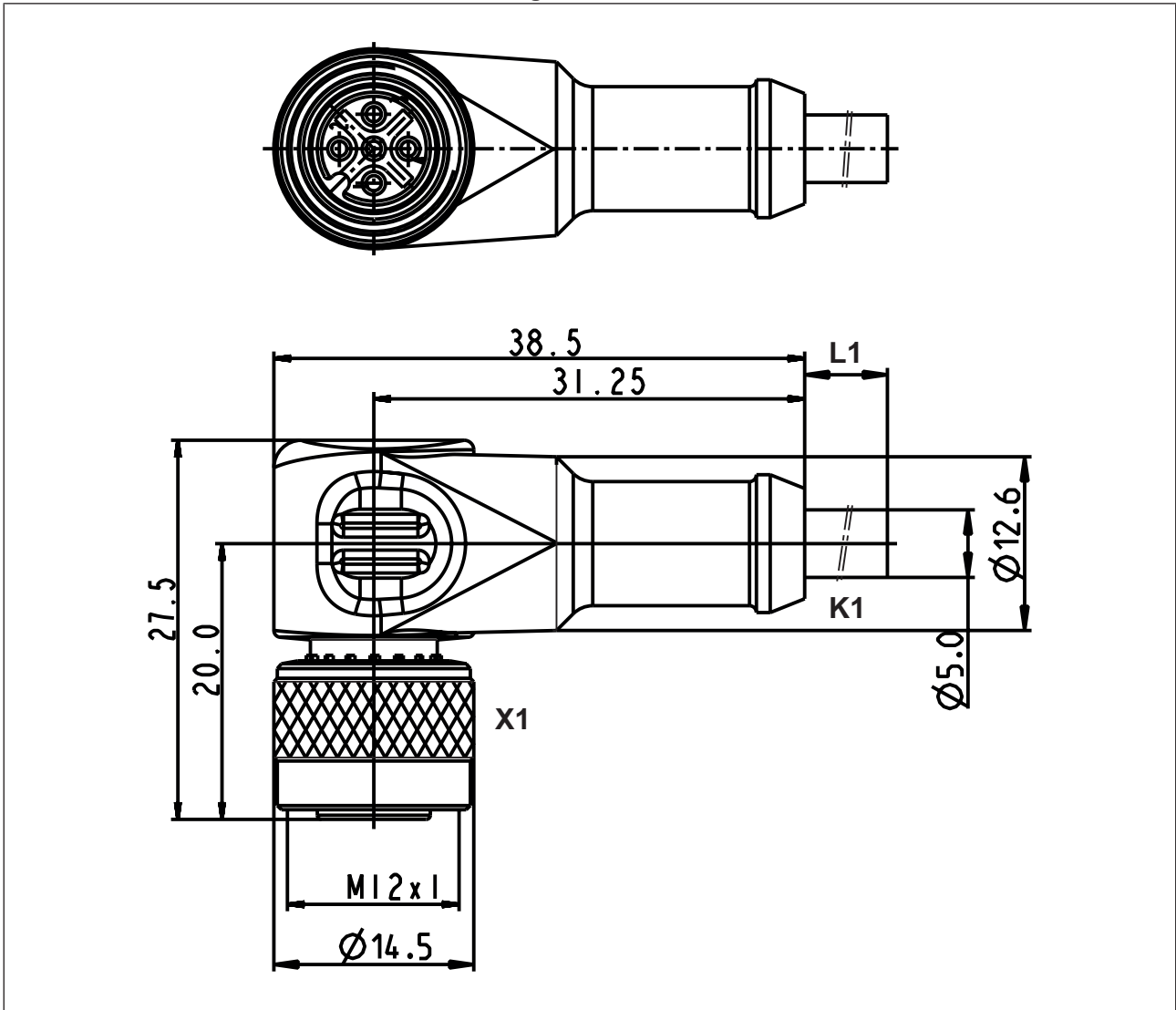
### Dimensions

► M12 female connector, straight:



PSEN op Cable M12 5p

► M12 female connector, angled:



## PSEN op Cable M12 5p

## Technical details Order no. 630297 - 630310

General	630297	630298	630310
Approvals	cULus Listed	cULus Listed	cULus Listed
Electrical data	630297	630298	630310
Rated voltage			
Voltage UB	60 V	60 V	60 V
Rated current	4 A	4 A	4 A
Test voltage	3.000 V	3.000 V	3.000 V
Typ. conductor resistance K1	79 Ohm/km	79 Ohm/km	79 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	64,6pF/m	64,6pF/m	64,6pF/m
Environmental data	630297	630298	630310
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	IP68	IP68	IP68
Housing	IP68	IP68	IP68
Mechanical data	630297	630298	630310
Plug-in connector X1	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
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

## PSEN op Cable M12 5p

Mechanical data	630297	630298	630310
Insulating cover for conductor K1	PP (9Y)	PP (9Y)	PP (9Y)
Mating cycles X1	100	100	100
Cable type K1	LiF9Y11Y	LiF9Y11Y	LiF9Y11Y
Cable length L1	30 m	20 m	3 m
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	5 mm	5 mm	5 mm
Max. cable diameter K1	5,1 mm	5,1 mm	5,1 mm
Conductor cross section K1	0,25 mm <sup>2</sup>	0,25 mm <sup>2</sup>	0,25 mm <sup>2</sup>
Conductor cross section AWG K1	24	24	24
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
Wire layer separation K1	No	No	No
No. of wires K1	5	5	5
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

## PSEN op Cable M12 5p

Mechanical data	630297	630298	630310
Weight	1.026 g	668 g	115 g

### Technical details Order no. 630311 - 630347

General	630311	630312	630347
Approvals	cULus Listed	cULus Listed	cULus Listed
Electrical data	630311	630312	630347
Rated voltage			
Voltage UB	60 V	60 V	60 V
Rated current	4 A	4 A	4 A
Test voltage	3.000 V	3.000 V	3.000 V
Typ. conductor resistance			
K1	79 Ohm/km	79 Ohm/km	79 Ohm/km
Insulation resistance	100 MOhm	100 MOhm	100 MOhm
Volume resistance	3 mOhm	3 mOhm	3 mOhm
Specific volume resist- ance K1	$\geq 7E+15 \text{ Ohm*cm}$	$\geq 7E+15 \text{ Ohm*cm}$	$\geq 7E+15 \text{ Ohm*cm}$
Specific cable capacit- ance K1	64,6pF/m	64,6pF/m	64,6pF/m
Environmental data	630311	630312	630347
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	IP68	IP68	IP68
Housing	IP68	IP68	IP68
Mechanical data	630311	630312	630347
Plug-in connector X1	M12, 5-pin female con- nector	M12, 5-pin female con- nector	M12, 5-pin female con- nector
In accordance with the standard	EN 61076-2-101	EN 61076-2-101	EN 61076-2-101
Form, plug-in connector X1	Straight	Straight	Angled
Housing material X1	PUR	PUR	PUR

## PSEN op Cable M12 5p

Mechanical data	630311	630312	630347
Material of contact surface X1	<b>Au</b>	<b>Au</b>	<b>Au</b>
Material of socket	<b>CuSn</b>	<b>CuSn</b>	<b>CuSn</b>
Conductor material K1	<b>Cu</b>	<b>Cu</b>	<b>Cu</b>
Insulating cover for conductor K1	<b>PP (9Y)</b>	<b>PP (9Y)</b>	<b>PP (9Y)</b>
Mating cycles X1	<b>100</b>	<b>100</b>	<b>100</b>
Cable type K1	<b>LiF9Y11Y</b>	<b>LiF9Y11Y</b>	<b>LiF9Y11Y</b>
Cable length L1	<b>5 m</b>	<b>10 m</b>	<b>3 m</b>
Colour of external cable insulation K1	<b>Yellow, similar to RAL1003</b>	<b>Yellow, similar to RAL1003</b>	<b>Yellow, similar to RAL1003</b>
Colour of housing	<b>black</b>	<b>black</b>	<b>black</b>
Min. bending radius (fixed permanently) K1	<b>5 x Ø</b>	<b>5 x Ø</b>	<b>5 x Ø</b>
Min. bending radius (moving) K1	<b>10 x Ø</b>	<b>10 x Ø</b>	<b>10 x Ø</b>
Cable insulation material K1	<b>PUR, TPU / TPE-U</b>	<b>PUR, TPU / TPE-U</b>	<b>PUR, TPU / TPE-U</b>
Drag chain suitable K1	<b>No</b>	<b>No</b>	<b>No</b>
Cable diameter K1	<b>5 mm</b>	<b>5 mm</b>	<b>5 mm</b>
Max. cable diameter K1	<b>5,1 mm</b>	<b>5,1 mm</b>	<b>5,1 mm</b>
Conductor cross section K1	<b>0,25 mm<sup>2</sup></b>	<b>0,25 mm<sup>2</sup></b>	<b>0,25 mm<sup>2</sup></b>
Conductor cross section AWG K1	<b>24</b>	<b>24</b>	<b>24</b>
Wire colour K1	<b>Brown, white, blue, black, grey</b>	<b>Brown, white, blue, black, grey</b>	<b>Brown, white, blue, black, grey</b>
Stranding K1	<b>5 cores around filler</b>	<b>5 cores around filler</b>	<b>5 cores around filler</b>
Shielding K1	<b>No</b>	<b>No</b>	<b>No</b>
Wire layer separation K1	<b>No</b>	<b>No</b>	<b>No</b>
No. of wires K1	<b>5</b>	<b>5</b>	<b>5</b>
Approval cable K1	<b>UL AWM-Style 20233, UL/CSA</b>	<b>UL AWM-Style 20233, UL/CSA</b>	<b>UL AWM-Style 20233, UL/CSA</b>
Approval of plug-in connector X1	<b>UL94 V-0</b>	<b>UL94 V-0</b>	<b>UL94 V-0</b>
Halogen-free	<b>yes</b>	<b>yes</b>	<b>yes</b>
Silicone-free	<b>yes</b>	<b>yes</b>	<b>yes</b>

## PSEN op Cable M12 5p

<b>Mechanical data</b>	<b>630311</b>	<b>630312</b>	<b>630347</b>
Oil resistance	<b>Resistant</b>	<b>Resistant</b>	<b>Resistant</b>
Non-flammability	<b>UL VW1</b>	<b>UL VW1</b>	<b>UL VW1</b>
Material			
Housing	<b>PUR</b>	<b>PUR</b>	<b>PUR</b>
Weight	<b>173 g</b>	<b>352 g</b>	<b>115 g</b>

### Technical details Order no. 630348 - 630350

<b>General</b>	<b>630348</b>	<b>630349</b>	<b>630350</b>
Approvals	<b>cULus Listed</b>	<b>cULus Listed</b>	<b>cULus Listed</b>
<b>Electrical data</b>	<b>630348</b>	<b>630349</b>	<b>630350</b>
Rated voltage			
Voltage UB	<b>60 V</b>	<b>60 V</b>	<b>60 V</b>
Rated current	<b>4 A</b>	<b>4 A</b>	<b>4 A</b>
Test voltage	<b>3.000 V</b>	<b>3.000 V</b>	<b>3.000 V</b>
Typ. conductor resistance			
K1	<b>79 Ohm/km</b>	<b>79 Ohm/km</b>	<b>79 Ohm/km</b>
Insulation resistance	<b>100 MOhm</b>	<b>100 MOhm</b>	<b>100 MOhm</b>
Volume resistance	<b>3 mOhm</b>	<b>3 mOhm</b>	<b>3 mOhm</b>
Specific volume resistance K1	<b><math>\geq 7E+15 \text{ Ohm*cm}</math></b>	<b><math>\geq 7E+15 \text{ Ohm*cm}</math></b>	<b><math>\geq 7E+15 \text{ Ohm*cm}</math></b>
Specific cable capacitance K1	<b>64,6pF/m</b>	<b>64,6pF/m</b>	<b>64,6pF/m</b>
<b>Environmental data</b>	<b>630348</b>	<b>630349</b>	<b>630350</b>
Ambient temperature			
Temperature range	<b>-25 - 80 °C</b>	<b>-25 - 80 °C</b>	<b>-25 - 80 °C</b>
Airgap creepage			
Pollution degree	<b>3</b>	<b>3</b>	<b>3</b>
Protection type			
X1 when inserted	<b>IP68</b>	<b>IP68</b>	<b>IP68</b>
Housing	<b>IP68</b>	<b>IP68</b>	<b>IP68</b>
<b>Mechanical data</b>	<b>630348</b>	<b>630349</b>	<b>630350</b>
Plug-in connector X1	<b>M12, 5-pin female connector</b>	<b>M12, 5-pin female connector</b>	<b>M12, 5-pin female connector</b>
In accordance with the standard	<b>EN 61076-2-101</b>	<b>EN 61076-2-101</b>	<b>EN 61076-2-101</b>

## PSEN op Cable M12 5p

Mechanical data	630348	630349	630350
Form, plug-in connector X1	<b>Angled</b>	<b>Angled</b>	<b>Angled</b>
Housing material X1	<b>PUR</b>	<b>PUR</b>	<b>PUR</b>
Material of contact surface X1	<b>Au</b>	<b>Au</b>	<b>Au</b>
Material of socket	<b>CuSn</b>	<b>CuSn</b>	<b>CuSn</b>
Conductor material K1	<b>Cu</b>	<b>Cu</b>	<b>Cu</b>
Insulating cover for conductor K1	<b>PP (9Y)</b>	<b>PP (9Y)</b>	<b>PP (9Y)</b>
Mating cycles X1	<b>100</b>	<b>100</b>	<b>100</b>
Cable type K1	<b>LiF9Y11Y</b>	<b>LiF9Y11Y</b>	<b>LiF9Y11Y</b>
Cable length L1	<b>5 m</b>	<b>10 m</b>	<b>30 m</b>
Colour of external cable insulation K1	<b>Yellow, similar to RAL1003</b>	<b>Yellow, similar to RAL1003</b>	<b>Yellow, similar to RAL1003</b>
Colour of housing	<b>black</b>	<b>black</b>	<b>black</b>
Min. bending radius (fixed permanently) K1	<b>5 x Ø</b>	<b>5 x Ø</b>	<b>5 x Ø</b>
Min. bending radius (moving) K1	<b>10 x Ø</b>	<b>10 x Ø</b>	<b>10 x Ø</b>
Cable insulation material K1	<b>PUR, TPU / TPE-U</b>	<b>PUR, TPU / TPE-U</b>	<b>PUR, TPU / TPE-U</b>
Drag chain suitable K1	<b>No</b>	<b>No</b>	<b>No</b>
Cable diameter K1	<b>5 mm</b>	<b>5 mm</b>	<b>5 mm</b>
Max. cable diameter K1	<b>5,1 mm</b>	<b>5,1 mm</b>	<b>5,1 mm</b>
Conductor cross section K1	<b>0,25 mm<sup>2</sup></b>	<b>0,25 mm<sup>2</sup></b>	<b>0,25 mm<sup>2</sup></b>
Conductor cross section AWG K1	<b>24</b>	<b>24</b>	<b>24</b>
Wire colour K1	<b>Brown, white, blue, black, grey</b>	<b>Brown, white, blue, black, grey</b>	<b>Brown, white, blue, black, grey</b>
Stranding K1	<b>5 cores around filler</b>	<b>5 cores around filler</b>	<b>5 cores around filler</b>
Shielding K1	<b>No</b>	<b>No</b>	<b>No</b>
Wire layer separation K1	<b>No</b>	<b>No</b>	<b>No</b>
No. of wires K1	<b>5</b>	<b>5</b>	<b>5</b>
Approval cable K1	<b>UL AWM-Style 20233, UL/CSA</b>	<b>UL AWM-Style 20233, UL/CSA</b>	<b>UL AWM-Style 20233, UL/CSA</b>



## PSEN op Cable M12 5p

Mechanical data	630348	630349	630350
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	183 g	336 g	1.023 g

### Technical details Order no. 630364 - 630365

General	630364	630365
Approvals	cULus Listed	cULus Listed
Electrical data	630364	630365
Rated voltage		
Voltage UB	60 V	60 V
Rated current	4 A	4 A
Test voltage	3.000 V	3.000 V
Typ. conductor resistance K1	79 Ohm/km	79 Ohm/km
Insulation resistance	100 MOhm	100 MOhm
Volume resistance	3 mOhm	3 mOhm
Specific volume resistance K1	$\geq 7E+15 \text{ Ohm}^*\text{cm}$	$\geq 7E+15 \text{ Ohm}^*\text{cm}$
Specific cable capacitance K1	64,6pF/m	64,6pF/m
Environmental data	630364	630365
Ambient temperature		
Temperature range	-25 - 80 °C	-25 - 80 °C
Airgap creepage		
Pollution degree	3	3
Protection type		
X1 when inserted	IP68	IP68
Housing	IP68	IP68
Mechanical data	630364	630365
Plug-in connector X1	M12, 5-pin female connector	M12, 5-pin female connector
In accordance with the standard	EN 61076-2-101	EN 61076-2-101

## PSEN op Cable M12 5p

Mechanical data	630364	630365
Form, plug-in connector X1	<b>Straight</b>	<b>Angled</b>
Housing material X1	<b>PUR</b>	<b>PUR</b>
Material of contact surface X1	<b>Au</b>	<b>Au</b>
Material of socket	<b>CuSn</b>	<b>CuSn</b>
Conductor material K1	<b>Cu</b>	<b>Cu</b>
Insulating cover for conductor K1	<b>PP (9Y)</b>	<b>PP (9Y)</b>
Mating cycles X1	<b>100</b>	<b>100</b>
Cable type K1	<b>LiF9Y11Y</b>	<b>LiF9Y11Y</b>
Cable length L1	<b>50 m</b>	<b>50 m</b>
Colour of external cable insulation K1	<b>Yellow, similar to RAL1003</b>	<b>Yellow, similar to RAL1003</b>
Colour of housing	<b>black</b>	<b>black</b>
Min. bending radius (fixed permanently) K1	<b>5 x Ø</b>	<b>5 x Ø</b>
Min. bending radius (moving) K1	<b>10 x Ø</b>	<b>10 x Ø</b>
Cable insulation material K1	<b>PUR, TPU / TPE-U</b>	<b>PUR, TPU / TPE-U</b>
Drag chain suitable K1	<b>No</b>	<b>No</b>
Cable diameter K1	<b>5 mm</b>	<b>5 mm</b>
Max. cable diameter K1	<b>5,1 mm</b>	<b>5,1 mm</b>
Conductor cross section K1	<b>0,25 mm<sup>2</sup></b>	<b>0,25 mm<sup>2</sup></b>
Conductor cross section AWG K1	<b>24</b>	<b>24</b>
Wire colour K1	<b>Brown, white, blue, black, grey</b>	<b>Brown, white, blue, black, grey</b>
Stranding K1	<b>5 cores around filler</b>	<b>5 cores around filler</b>
Shielding K1	<b>No</b>	<b>No</b>
Wire layer separation K1	<b>No</b>	<b>No</b>
No. of wires K1	<b>5</b>	<b>5</b>
Approval cable K1	<b>UL AWM-Style 20233, UL/CSA</b>	<b>UL AWM-Style 20233, UL/CSA</b>
Approval of plug-in connector X1	<b>UL94 V-0</b>	<b>UL94 V-0</b>
Halogen-free	<b>yes</b>	<b>yes</b>
Silicone-free	<b>yes</b>	<b>yes</b>
Oil resistance	<b>Resistant</b>	<b>Resistant</b>
Non-flammability	<b>UL VW1</b>	<b>UL VW1</b>
Material		
Housing	<b>PUR</b>	<b>PUR</b>
Weight	<b>1.640 g</b>	<b>1.610 g</b>

## PSEN op Cable M12 5p

### Order reference

Product type	Features	Connector X1	Connector X2	Order no.
PSEN op cable axial M12 5-pole 30m	30 m	M12 female con- nector, straight		630 297
PSEN cable M12-5sf 20m	20 m	M12 female con- nector, straight		630 298
PSEN op cable axial M12 5-pole 3m	3 m	M12 female con- nector, straight		630 310
PSEN op cable axial M12 5-pole 5m	5 m	M12 female con- nector, straight		630 311
PSEN op cable axial M12 5-pole 10m	10 m	M12 female con- nector, straight		630 312
PSEN op cable angle M12 5-pole 3m	3 m	M12 female con- nector, angled		630 347
PSEN op cable angle M12 5-pole 5m	5 m	M12 female con- nector, angled		630 348
PSEN op cable angle M12 5-pole 10m	10 m	M12 female con- nector, angled		630 349
PSEN op cable angle M12 5-pole 30m	30 m	M12 female con- nector, angled		630 350
PSEN op cable axial M12 5-pole 50m	50 m	M12 female con- nector, straight		630 364
PSEN op cable angle M12 5-pole 50m	50 m	M12 female con- nector, angled		630 365