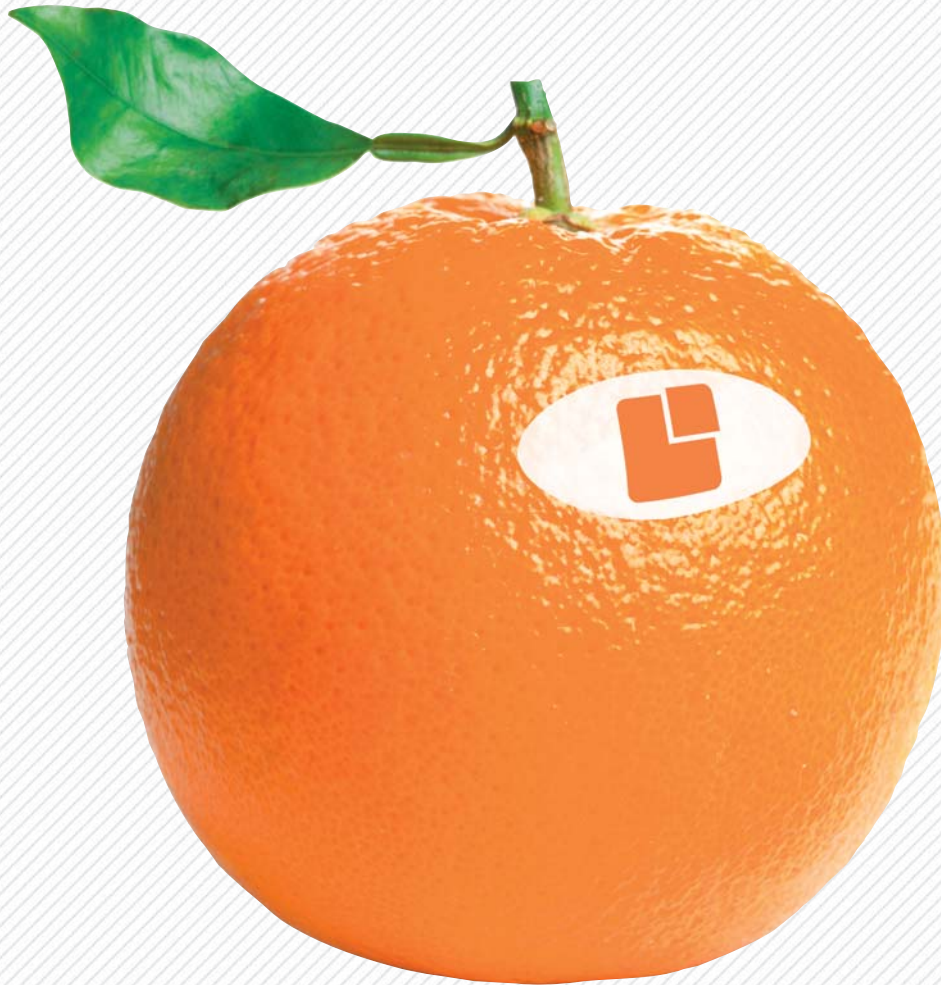




Compact Catalog

Fresh thinking
creates this world.





Lutronic

Lutronic, set up for international operations in 2016, is specialized in actuator/sensor wiring solutions in automation.

The company shares in the specific know-how of the Lumberg Group, which established the M12 circular connector as a global standard in the early 80s. Based on this, Lutronic produces and distributes quality M8 and M12 circular connectors for customized signal, data and power applications, as a sister company of the Lumberg Group.

The particular strength of Lutronic is – in addition to the standardized industrial connectors – the development and production of customized solutions for equipment manufacturers. With our own Lutronic companies in Europe, North America, China and Singapore, we serve international customers, worldwide.

Lutronic – that means:

■ Anywhere – Anytime



Lutronic –
worldwide
support.





Lutronic – that means:



- Convenient – Like a Global Furniture Store

Global availability of our products via partners and distributors.



- Thinking Globally – Acting Locally

In addition to a wide range of standard products, Lutronic offers the option of regional types.



- Your Special – Our Standard

Lutronic is an expert for customer-specific connectivity solutions with a high need for quality and attractive prices.





M8 and M12 Actuator/Sensor Cordsets

Page 9



M8 and M12 Panel Mount Connectors

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M8 and M12 Passive Distribution Boxes

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High Power LED Lights

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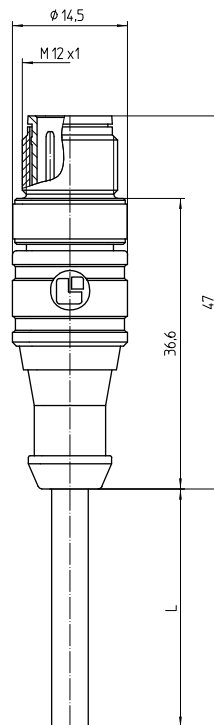


Actuator/Sensor Cordsets

M12

1210 ... 0...

Actuator/sensor cordset **PVC**
Single-ended with male connector
Threaded joint, IP 67



M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
Cable end 1: M12 male connector, straight, A-coded
Cable end 2: blunt cut
Cable: PVC, black

Pin Assignment

4 pole



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled screw CuZn, nickel-plated

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 female connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PVC
 Cable no. 910002 (4 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 250 V AC/DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

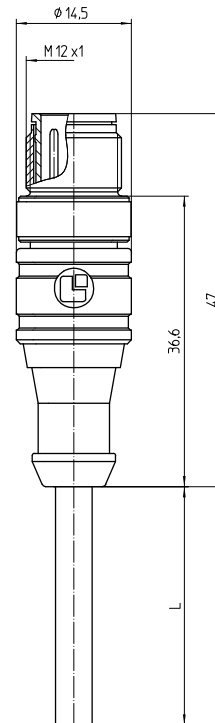
Designation	Poles	Cable	Cable Lengths [L] in m
1210 04 002 2m	4	PVC, black	2
1210 04 002 5m	4	PVC, black	5
1210 04 002 10m	4	PVC, black	10

More pole numbers and cable lengths on request.

Actuator/sensor cordset **PUR**
 Single-ended with male connector
 Threaded joint, IP 67



M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
 Cable end 1: M12 male connector, straight, A-coded
 Cable end 2: blunt cut
 Cable: PUR, black



Pin Assignment

4 pole



1 = brown
 2 = white
 3 = blue
 4 = black



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled screw CuZn, nickel-plated

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 female connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PUR
 Cable no. 910301 (4 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 250 V AC/DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

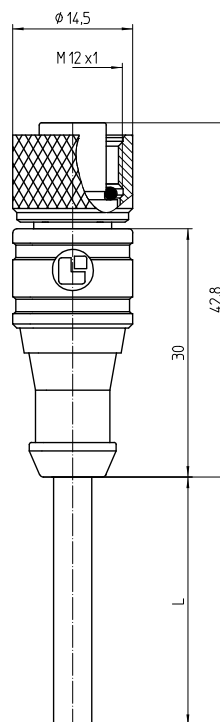
Designation	Poles	Cable	Cable Lengths [L] in m
1210 04 301 2m	4	PUR, black	2
1210 04 301 5m	4	PUR, black	5

More pole numbers and cable lengths on request.

M12

1200 ... 0...

Actuator/sensor cordset **PVC**
Single-ended with female connector
Threaded joint, IP67



M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M12 female connector, straight, A-coded

Cable end 2: blunt cut

Cable: PVC, black

Pin Assignment

4 pole



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black



Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PVC
 Cable no. 910002 (4 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 250 V AC/DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

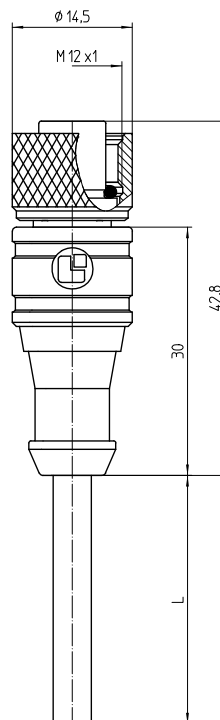
Designation	Poles	Cable	Cable Lengths [L] in m
1200 04 002 2m	4	PVC, black	2
1200 04 002 5m	4	PVC, black	5
1200 04 002 10m	4	PVC, black	10

More pole numbers and cable lengths on request.

M12

1200 ... 3...

Actuator/sensor cordset **PUR**
Single-ended with female connector
Threaded joint, IP67



M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M12 female connector, straight, A-coded

Cable end 2: blunt cut

Cable: PUR, black

Pin Assignment

4 pole



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black



Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PUR
 Cable no. 910301 (4 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 250 V AC/DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

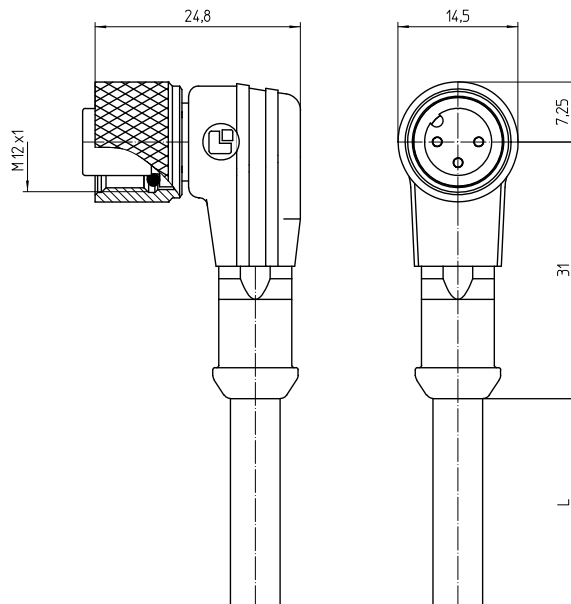
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1200 04 301 1m	4	PUR, black	1
1200 04 301 2m	4	PUR, black	2
1200 04 301 5m	4	PUR, black	5

More pole numbers and cable lengths on request.

Actuator/sensor cordset **PVC**
 Single-ended with female connector
 Threaded joint, IP67



M12 actuator/sensor cordset with overmolded
 connector, with self-locking threaded joint, IP 67

Cable end 1: M12 female connector, angled,
 A-coded

Cable end 2: blunt cut

Cable: PVC, black

Pin Assignment

4 pole



1 = brown
 2 = white
 3 = blue
 4 = black

5 pole



1 = brown
 2 = white
 3 = blue
 4 = black
 5 = green/yellow

8 pole



1 = white
 2 = brown
 3 = green
 4 = yellow
 5 = gray
 6 = pink
 7 = blue
 8 = red



Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N (4 to 5 pole)
 ≤ 23 N (8 pole)
 Withdrawal force¹ ≤ 15 N (4 to 5 pole)
 ≤ 30 N (8 pole)
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PVC
 Cable no. 910002 (4 x 0.34 mm²)
 910003 (5 x 0.34 mm²)
 910004 (8 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A (4 to 5 pole)
 2 A (8 pole)
 Rated voltage 250 V AC/DC (4 pole)
 60 V AC/DC (5 pole)
 30 V AC/DC (8 pole)
 Rated impulse voltage 2.50 kV (4 pole)
 1.50 kV (5 pole)
 0.80 kV (8 pole)
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

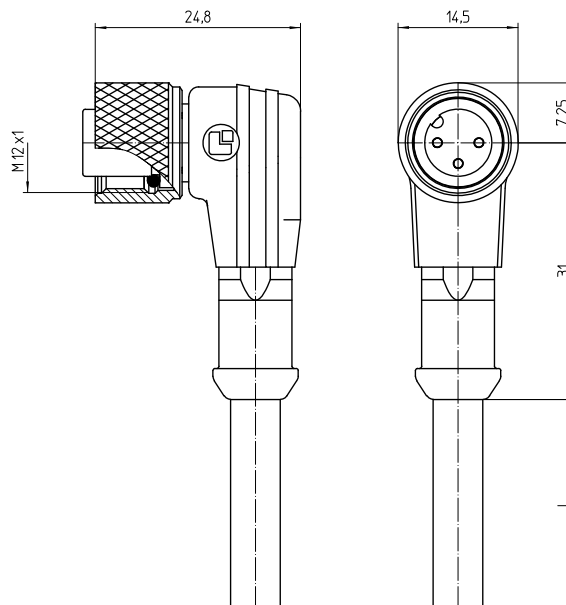
Designation	Poles	Cable	Cable Lengths [L] in m
1205 04 002 2m	4	PVC, black	2
1205 04 002 5m	4	PVC, black	5
1205 04 002 10m	4	PVC, black	10
1205 05 003 2m	5	PVC, black	2
1205 05 003 5m	5	PVC, black	5
1205 08 004 2m	8	PVC, black	2
1205 08 004 5m	8	PVC, black	5

More pole numbers and cable lengths on request.

M12

1205 ... 3...

Actuator/sensor cordset **PUR**
Single-ended with female connector
Threaded joint, IP67



M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M12 female connector, angled, A-coded

Cable end 2: blunt cut

Cable: PUR, black

Pin Assignment

4 pole



1 = brown
2 = white
3 = blue
4 = black

5 pole



1 = brown
2 = white
3 = blue
4 = black
5 = green/yellow

8 pole



1 = white
2 = brown
3 = green
4 = yellow
5 = gray
6 = pink
7 = blue
8 = red

12 pole



1 = brown
2 = blue
3 = white
4 = green
5 = pink
6 = yellow
7 = black
8 = gray

9 = red
10 = violet
11 = gray/pink
12 = red/blue



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N (4 to 5 pole)
 ≤ 23 N (8 pole)
 Withdrawal force¹ ≤ 15 N (4 to 5 pole)
 ≤ 30 N (8 pole)
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PUR
 Cable no. 910301 (4 x 0.34 mm²)
 910302 (5 x 0.34 mm²)
 910303 (8 x 0.25 mm²)
 910315 (12 x 0.25 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A (4 to 5 pole)
 2 A (8 pole)
 1.5 A (12 pole)
 Rated voltage 250 V AC/DC (4 pole)
 60 V AC/DC (5 pole)
 30 V AC/DC (8 and 12 pole)
 Rated impulse voltage 2.50 kV (4 pole)
 1.50 kV (5 pole)
 0.80 kV (8 pole)
 0.50 kV (12 pole)
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

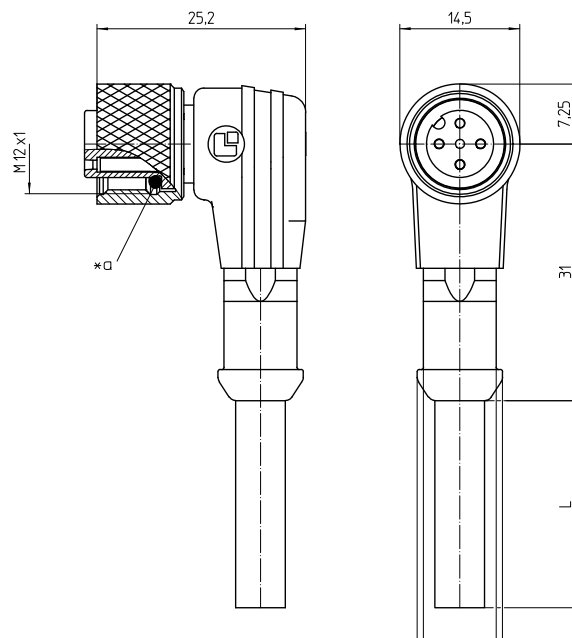
Designation	Poles	Cable	Cable Lengths [L] in m
1205 04 301 2m	4	PUR, black	2
1205 04 301 5m	4	PUR, black	5
1205 05 302 1m	5	PUR, black	1
1205 05 302 2m	5	PUR, black	2
1205 05 302 5m	5	PUR, black	5
1205 08 303 2m	8	PUR, black	2
1205 08 303 5m	8	PUR, black	5
1205 12 315 5m	12	PUR, black	5

More pole numbers and cable lengths on request.

M12

1206 ... L1 0...

Actuator/sensor cordset **PVC, LED**
Single-ended with female connector
Threaded joint, IP67



M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
Cable end 1: M12 female connector, angled, with LED L1, A-coded
Cable end 2: blunt cut
Cable: PVC, black

- *a O-ring gasket
- *c operation indicator green
- *d function indicator yellow

Pin Assignment

3 pole



1 = brown
3 = blue
4 = black



1206 ... L1 0...

M12

Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PVC
 Cable no. 910001 (3 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 10-30 V DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

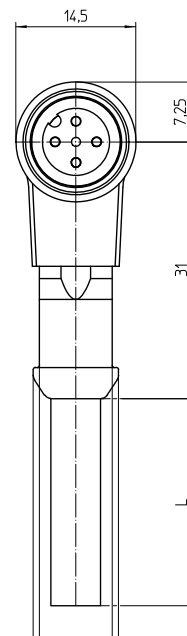
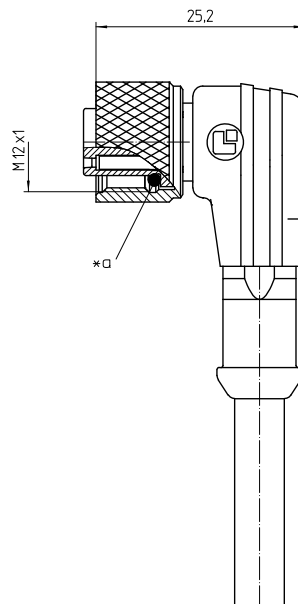
Designation	Poles	Cable	Cable Lengths [L] in m
1206 03 L1 001 2m	3	PVC, black	2
1206 03 L1 001 5m	3	PVC, black	5

More pole numbers and cable lengths on request.

M12

1206 ... L1 3...

Actuator/sensor cordset **PUR, LED**
Single-ended with female connector
Threaded joint, IP67



M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
Cable end 1: M12 female connector, angled, with LED L1, A-coded
Cable end 2: blunt cut
Cable: PUR, black

- *a O-ring gasket
- *c operation indicator green
- *d function indicator yellow

Pin Assignment

3 pole



1 = brown
3 = blue
4 = black



1206 ... L1 3...

M12

Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PUR
 Cable no. 910300 (3 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 10-30 V DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1206 03 L1 300 2m	3	PUR, black	2
1206 03 L1 300 5m	3	PUR, black	5

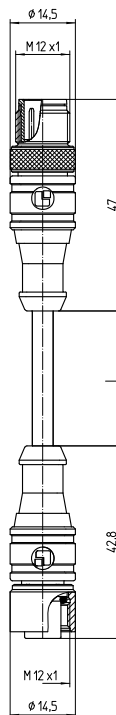
More pole numbers and cable lengths on request.

M12

1210 1200 ... 0...

Actuator/sensor cordset **PVC**
Double-ended with male and female connector
Threaded joint, IP67

CEC us [pending]



M12 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M12 male connector, straight, A-coded

Cable end 2: M12 female connector, straight, A-coded

Cable: PVC, black

Pin Assignment

4 pole, male



1 = brown
2 = white
3 = blue
4 = black

4 pole, female



5 pole, male



1 = brown
2 = white
3 = blue
4 = black
5 = green/yellow

5 pole, female





Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled screw/Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male/female connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PVC
 Cable no. 910002 (4 x 0.34 mm²)
 910003 (5 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 250 V AC/DC (4 pole)
 60 V AC/DC (5 pole)
 Rated impulse voltage 2.50 kV (4 pole)
 1.50 kV (5 pole)
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1210 1200 04 002 0.6m	4	PVC, black	0.6
1210 1200 04 002 1.5m	4	PVC, black	1.5
1210 1200 04 002 2m	4	PVC, black	2
1210 1200 04 002 5m	4	PVC, black	5
1210 1200 05 003 0.6m	5	PVC, black	0.6
1210 1200 05 003 1.5m	5	PVC, black	1.5
1210 1200 05 003 2m	5	PVC, black	2
1210 1200 05 003 5m	5	PVC, black	5

More pole numbers and cable lengths on request.

M12

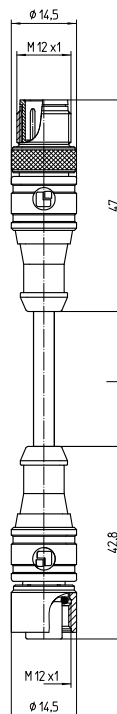
1210 1200 ... 3...

Actuator/sensor cordset **PUR**

Double-ended with male and female connector

Threaded joint, IP67

CE US [pending]



M12 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M12 male connector, straight, A-coded

Cable end 2: M12 female connector, straight, A-coded

Cable: PUR, black

Pin Assignment

4 pole, male



1 = brown
2 = white
3 = blue
4 = black

4 pole, female



5 pole, male



1 = brown
2 = white
3 = blue
4 = black
5 = green/yellow

5 pole, female





Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled screw/Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male/female connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PUR
 Cable no. 910301 (4 x 0.34 mm²)
 910302 (5 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 250 V AC/DC (4 pole)
 60 V AC/DC (5 pole)
 Rated impulse voltage 2.50 kV (4 pole)
 1.50 kV (5 pole)
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1210 1200 04 301 0.6m	4	PUR, black	0.6
1210 1200 04 301 1.5m	4	PUR, black	1.5
1210 1200 04 301 2m	4	PUR, black	2
1210 1200 04 301 5m	4	PUR, black	5
1210 1200 05 302 0.6m	5	PUR, black	0.6
1210 1200 05 302 1.5m	5	PUR, black	1.5
1210 1200 05 302 2m	5	PUR, black	2
1210 1200 05 302 5m	5	PUR, black	5

More pole numbers and cable lengths on request.

M12

1210 1205 ... 3...

Actuator/sensor cordset **PUR**

Double-ended with male and female connector

Threaded joint, IP67

CE US [pending]

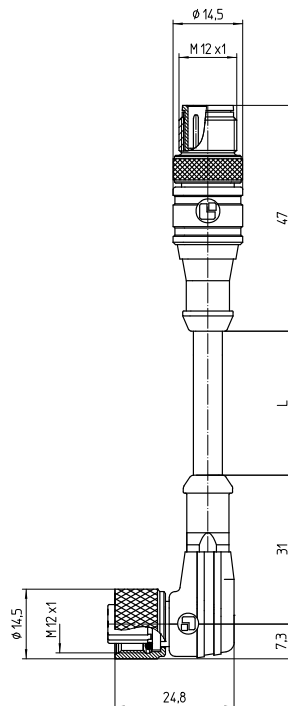


M12 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M12 male connector, straight, A-coded

Cable end 2: M12 female connector, angled, A-coded

Cable: PUR, black



Pin Assignment

4 pole, male



4 pole, female



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black



Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled screw/Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male/female connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PUR
 Cable no. 910301 (4 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 250 V AC/DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1210 1205 04 301 2m	4	PUR, black	2

More pole numbers and cable lengths on request.

M12 1210 1206 ... L1 0...

Actuator/sensor cordset **PVC, LED**

Double-ended with male and female connector

Threaded joint, IP67

CE us [pending]

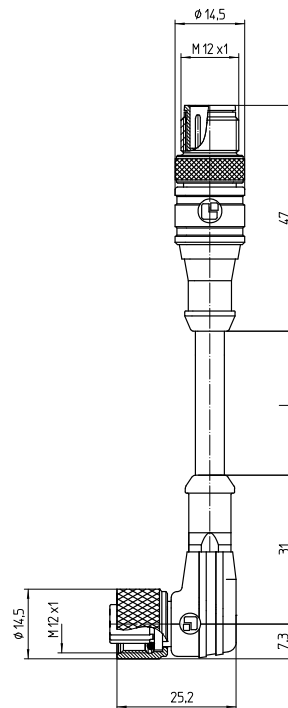


M12 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M12 male connector, straight, A-coded

Cable end 2: M12 female connector, angled, with LED L1, A-coded

Cable: PVC, black



Pin Assignment

3 pole, male

3 pole, female



1 = brown
3 = blue
4 = black



1210 1206 ... L1 0... M12

Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled screw/Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male/female connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PVC
 Cable no. 910001 (3 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 10-30 V DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1210 1206 03 L1 001 0,3m	3	PVC, black	0,3
1210 1206 03 L1 001 1m	3	PVC, black	1
1210 1206 03 L1 001 2m	3	PVC, black	2
1210 1206 03 L1 001 5m	3	PVC, black	5

More pole numbers and cable lengths on request.

M12 1210 1206 ... L1 3...

Actuator/sensor cordset **PUR, LED**

Double-ended with male and female connector

Threaded joint, IP67

CE US [pending]

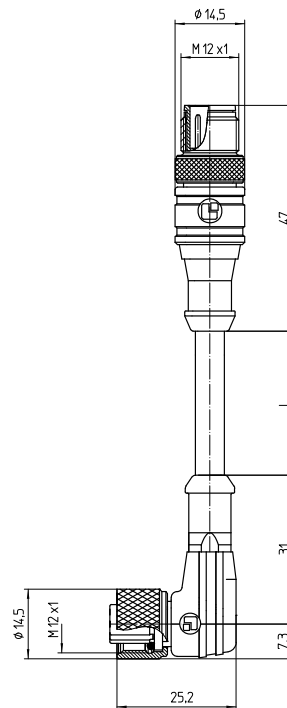


M12 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M12 male connector, straight, A-coded

Cable end 2: M12 female connector, angled, with LED L1, A-coded

Cable: PUR, black



Pin Assignment

3 pole, male

3 pole, female



1 = brown
3 = blue
4 = black



1210 1206 ... L1 3... M12

Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled screw/Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male/female connectors according to IEC 61076-2-101

Connected Cable³

Cable jacket PUR
 Cable no. 910300 (3 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 10-30 V DC
 Rated impulse voltage 2.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1210 1206 03 L1 300 0,3m	3	PUR, black	0,3
1210 1206 03 L1 300 1m	3	PUR, black	1
1210 1206 03 L1 300 2m	3	PUR, black	2
1210 1206 03 L1 300 5m	3	PUR, black	5

More pole numbers and cable lengths on request.

M12 · M8 1210 0800 ... 3...

Actuator/sensor cordset **PUR**

Double-ended with male and female connector

Threaded joint, IP67

CE US [pending]

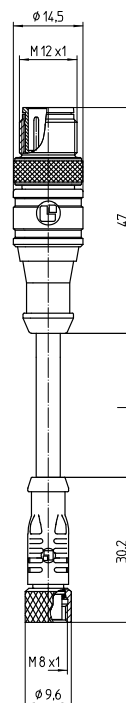


M12/M8 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M12 male connector, straight, A-coded

Cable end 2: M8 female connector, straight, A-coded

Cable: PUR, black



Pin Assignment

3 pole, male

3 pole, female



1 = brown

3 = blue

4 = black



1210 0800 ... 3... M12 · M8

Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled screw/Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N **(1210)**, ≤ 23 N **(0800)**
 Withdrawal force¹ ≤ 15 N **(1210)**, ≤ 23 N **(0800)**
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 female connectors according to IEC 61076-2-101 and M8 male connectors according to IEC 61076-2-104

Connected Cable²

Cable jacket PUR
 Cable no. 910300 (3 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1210 0800 03 300 0.6m	3	PUR, black	0.6

More pole numbers and cable lengths on request.

M12 · M8 1210 0806 ... L1 3...

Actuator/sensor cordset **PUR, LED**

Double-ended with male and female connector

Threaded joint, IP67

CE US [pending]

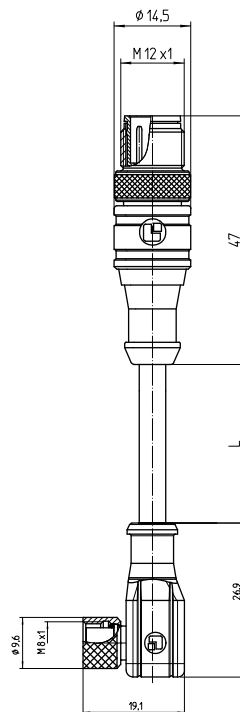


M12 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M12 male connector, straight, A-coded

Cable end 2: M8 female connector, angled, with LED L1, A-coded

Cable: PUR, black



Pin Assignment

3 pole, male

3 pole, female



1 = brown

3 = blue

4 = black



1210 0806 ... L1 3... M12 · M8

Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled screw/Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N (**1210**), ≤ 23 N (**0800**)
 Withdrawal force¹ ≤ 15 N (**1210**), ≤ 23 N (**0800**)
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 female connectors according to IEC 61076-2-101 and M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PUR
 Cable no. 910300 (3 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 10-30 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
1210 0806 03 L1 300 0,3m	3	PUR, black	0,3
1210 0806 03 L1 300 1m	3	PUR, black	1
1210 0806 03 L1 300 2m	3	PUR, black	2
1210 0806 03 L1 300 5m	3	PUR, black	5

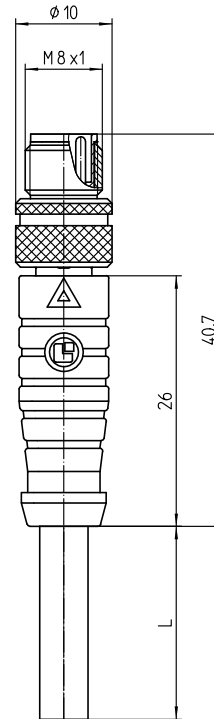
More pole numbers and cable lengths on request.

M8

0810 ... 0...

Actuator/sensor cordset **PVC**
Single-ended with male connector
Threaded joint, IP67

CE US [pending]



M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
Cable end 1: M8 male connector, straight, A-coded
Cable end 2: blunt cut
Cable: PVC, black

Pin Assignment

4 pole



1 = brown
2 = white
3 = blue
4 = black



Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled screw CuZn, nickel-plated

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 female connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PVC
 Cable no. 910002 (4 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0810 04 002 2m	4	PVC, black	2
0810 04 002 5m	4	PVC, black	5

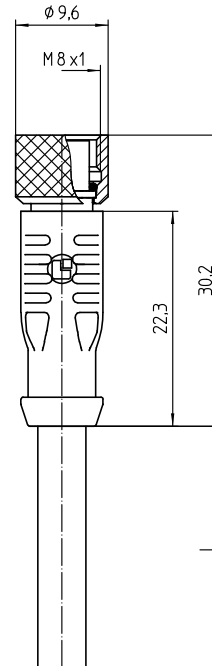
More pole numbers and cable lengths on request.

M8

0800 ... 0...

Actuator/sensor cordset **PVC**
Single-ended with female connector
Threaded joint, IP67

 [pending]



M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
Cable end 1: M8 female connector, straight, A-coded
Cable end 2: blunt cut
Cable: PVC, black

Pin Assignment

4 pole



1 = brown
2 = white
3 = blue
4 = black



0800 ... 0...

M8

Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PVC
 Cable no. 910002 (4 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0800 04 002 2m	4	PVC, black	2
0800 04 002 5m	4	PVC, black	5
0800 04 002 10m	4	PVC, black	10

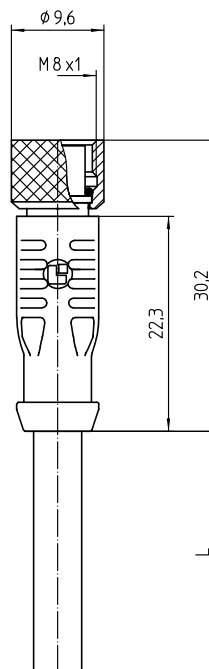
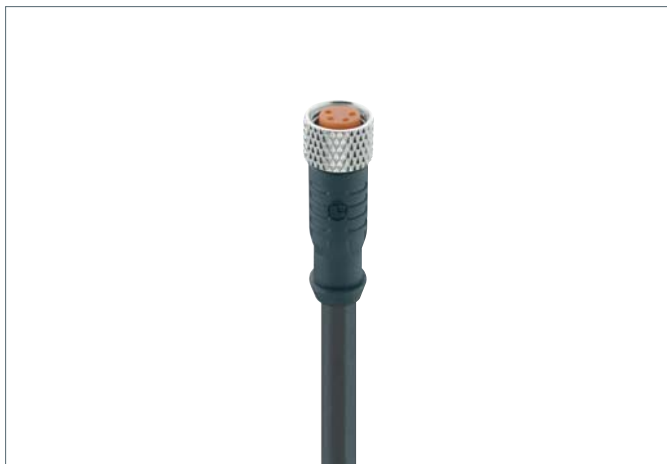
More pole numbers and cable lengths on request.

M8

0800 ... 3...

Actuator/sensor cordset **PUR**
Single-ended with female connector
Threaded joint, IP67

 [pending]



M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M8 female connector, straight, A-coded

Cable end 2: blunt cut

Cable: PUR, black

Pin Assignment

3 pole



1 = brown
3 = blue
4 = black

4 pole



1 = brown
2 = white
3 = blue
4 = black



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PUR
 Cable no. 910300 (3 x 0.34 mm²)
 910301 (4 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0800 03 300 2m	3	PUR, black	2
0800 03 300 5m	3	PUR, black	5
0800 04 301 2m	4	PUR, black	2
0800 04 301 5m	4	PUR, black	5

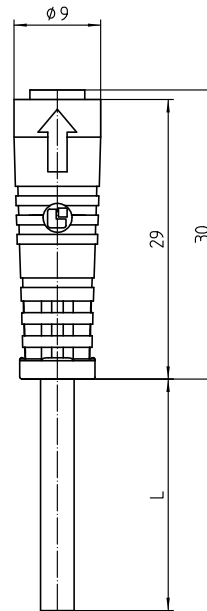
More pole numbers and cable lengths on request.

M8

0800F1 ... 0...

Actuator/sensor cordset **PVC**
Single-ended with female connector
Snap joint, IP65

 [pending]



M8 actuator/sensor cordset with overmolded connector, with snap joint, IP 65

Cable end 1: M8 female connector, straight,
A-coded

Cable end 2: blunt cut

Cable: PVC, black

Pin Assignment

4 pole



1 = brown

2 = white

3 = blue

4 = black



Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
Contact bush CuZn, pre-nickel and gold-plated
Overmolding/handle PVC, HB according to UL 94

Mechanical Data

Insertion force¹ ≤ 23 N
Withdrawal force¹ ≤ 23 N
Mating cycles ≥ 100
Protection degree² IP65
Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PVC
Cable no. 910002 (4 x 0.34 mm²)
UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
Rated current at T_{amb} 40 °C 4 A
Rated voltage 50 V AC/60 V DC
Rated impulse voltage 1.50 kV
Material group I (IEC)/0 (UL) (CTI=600)
Pollution degree 3
Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0800F1 04 002 2m	4	PVC, black	2
0800F1 04 002 5m	4	PVC, black	5
0800F1 04 002 10m	4	PVC, black	10

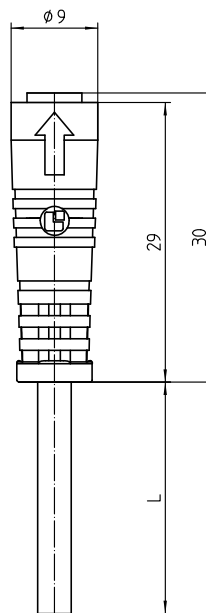
More pole numbers and cable lengths on request.

M8

0800F1 ... 3...

Actuator/sensor cordset **PUR**
Single-ended with female connector
Snap joint, IP65

 [pending]



M8 actuator/sensor cordset with overmolded connector, with snap joint, IP 65

Cable end 1: M8 female connector, straight, A-coded

Cable end 2: blunt cut

Cable: PUR, black

Pin Assignment

3 pole



1 = brown
3 = blue
4 = black

4 pole



1 = brown
2 = white
3 = blue
4 = black



0800F1 ... 3...

M8

Temperature Range

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
Contact bush CuZn, pre-nickel and gold-plated
Overmolding/handle TPU, halogen-free

Mechanical Data

Insertion force¹ ≤ 23 N
Withdrawal force¹ ≤ 23 N
Mating cycles ≥ 100
Protection degree² IP65
Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PUR
Cable no. 910300 (3 x 0.34 mm²)
910301 (4 x 0.34 mm²)
UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
Rated current at T_{amb} 40 °C 4 A
Rated voltage 50 V AC/60 V DC
Rated impulse voltage 1.50 kV
Material group I (IEC)/0 (UL) (CTI=600)
Pollution degree 3
Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0800F1 03 300 2m	3	PUR, black	2
0800F1 03 300 5m	3	PUR, black	5
0800F1 04 301 2m	4	PUR, black	2
0800F1 04 301 5m	4	PUR, black	5

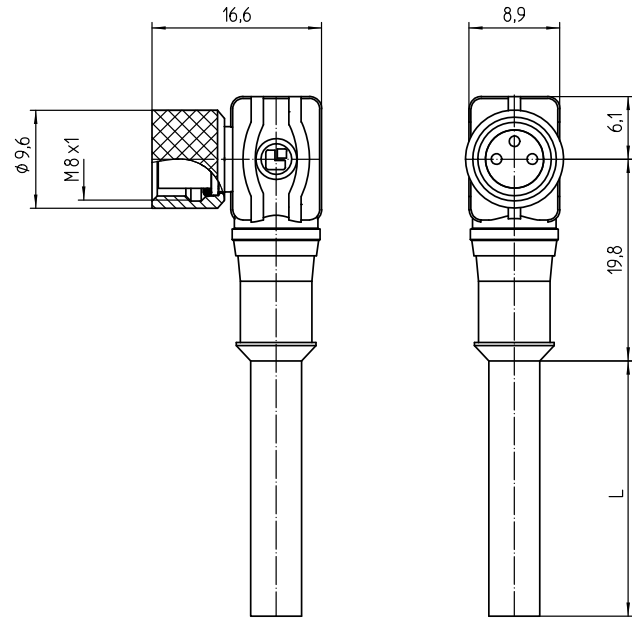
More pole numbers and cable lengths on request.

M8

0805 ... 0...

Actuator/sensor cordset **PVC**
Single-ended with female connector
Threaded joint, IP67

 [pending]



M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
Cable end 1: M8 female connector, angled, A-coded
Cable end 2: blunt cut
Cable: PVC, black

Pin Assignment

4 pole



1 = brown
2 = white
3 = blue
4 = black



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PVC
 Cable no. 910002 (4 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0805 04 002 2m	4	PVC, black	2
0805 04 002 5m	4	PVC, black	5
0805 04 002 10m	4	PVC, black	10

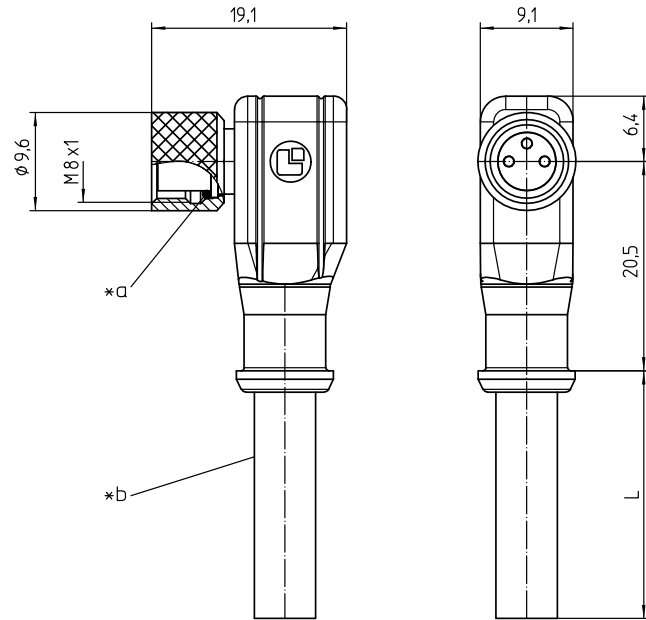
More pole numbers and cable lengths on request.

M8

0806 ... L1 0...

Actuator/sensor cordset **PVC, LED**
Single-ended with female connector
Threaded joint, IP67

CE mark [pending]



M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
Cable end 1: M8 female connector, angled, with LED L1, A-coded

Cable end 2: blunt cut

Cable: PVC, black

- *a O-ring gasket
- *c function indicator yellow
- *d operation indicator green

Pin Assignment

3 pole



- 1 = brown
- 3 = blue
- 4 = black



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle PVC, HB according to UL 94
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PVC
 Cable no. 910001 (3 x 0.34 mm²)
 UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 10-30 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0806 03 L1 001 2m	3	PVC, black	2
0806 03 L1 001 5m	3	PVC, black	5

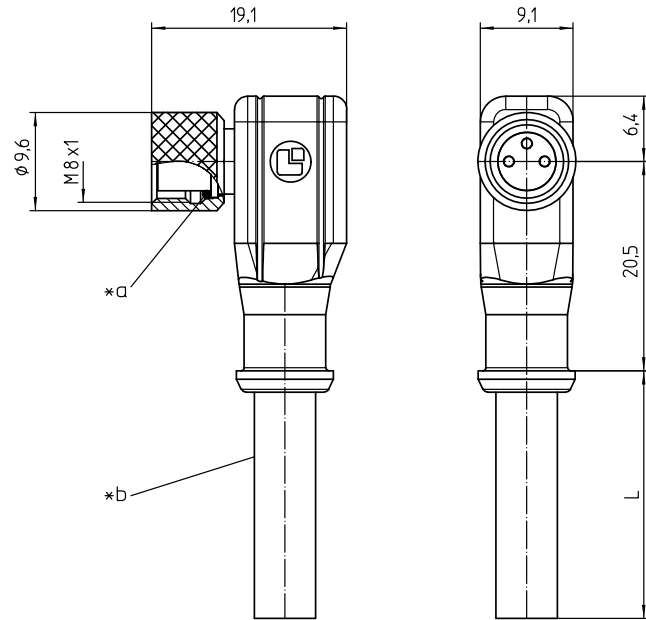
More pole numbers and cable lengths on request.

M8

0806 ... L1 3...

Actuator/sensor cordset **PUR, LED**
Single-ended with female connector
Threaded joint, IP67

CE mark [pending]



M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67
Cable end 1: M8 female connector, angled, with LED L1, A-coded

Cable end 2: blunt cut

Cable: PUR, black

- *a O-ring gasket
- *c function indicator yellow
- *d operation indicator green

Pin Assignment

3 pole



- 1 = brown
- 3 = blue
- 4 = black



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PUR
 Cable no. 910300 (3 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 10-30 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0806 03 L1 300 2m	3	PUR, black	2
0806 03 L1 300 5m	3	PUR, black	5

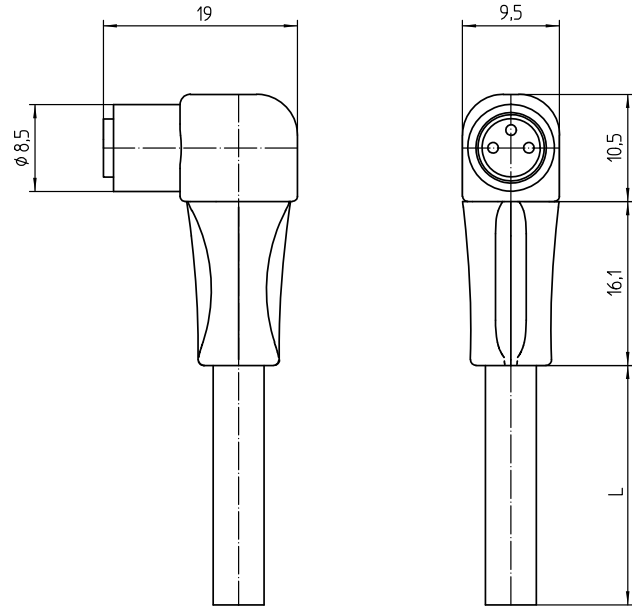
More pole numbers and cable lengths on request.

M8

0805F1... 0...

Actuator/sensor cordset **PVC**
Single-ended with female connector
Snap joint, IP65

 [pending]



M8 actuator/sensor cordset with overmolded connector, with snap joint, IP 65

Cable end 1: M8 female connector, angled, A-coded

Cable end 2: blunt cut

Cable: PVC, black

Pin Assignment

4 pole



1 = brown

2 = white

3 = blue

4 = black



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
Contact bush CuZn, pre-nickel and gold-plated
Overmolding/handle PVC, HB according to UL 94

Mechanical Data

Insertion force¹ ≤ 23 N
Withdrawal force¹ ≤ 23 N
Mating cycles ≥ 100
Protection degree² IP65
Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PVC
Cable no. 910002 (4 x 0.34 mm²)
UL style 2464

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
Rated current at T_{amb} 40 °C 4 A
Rated voltage 50 V AC/60 V DC
Rated impulse voltage 1.50 kV
Material group I (IEC)/0 (UL) (CTI=600)
Pollution degree 3
Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0805F1 04 002 2m	4	PVC, black	2
0805F1 04 002 5m	4	PVC, black	5
0805F1 04 002 10m	4	PVC, black	10

More pole numbers and cable lengths on request.

M8

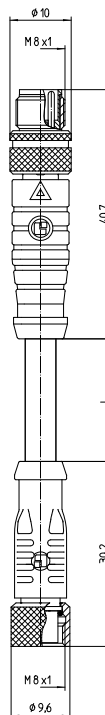
0810 0800 ... 3...

Actuator/sensor cordset **PUR**

Double-ended with male and female connector

Threaded joint, IP67

CE US [pending]



M8 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M8 male connector, straight, A-coded

Cable end 2: M8 female connector, straight, A-coded

Cable: PUR, black

Pin Assignment

4 pole, male

4 pole, female



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black



Ambient Conditions

Temperature Range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male/female connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PUR
 Cable no. 910301 (4 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0810 0800 04 301 0.6m	4	PUR, black	0.6
0810 0800 04 301 1.5m	4	PUR, black	1.5
0810 0800 04 301 2m	4	PUR, black	2
0810 0800 04 301 5m	4	PUR, black	5

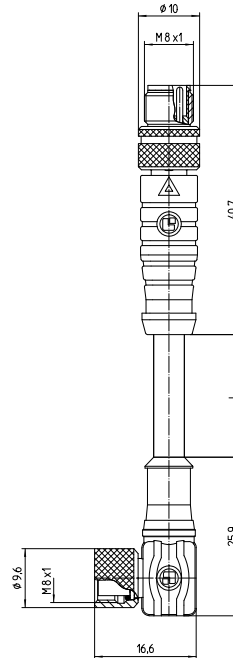
More pole numbers and cable lengths on request.

M8

0810 0805 ... 3...

Actuator/sensor cordset **PUR**
Double-ended with male and female connector
Threaded joint, IP67

 [pending]



M8 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

Cable end 1: M8 male connector, straight, A-coded

Cable end 2: M8 female connector, angled, A-coded

Cable: PUR, black

Pin Assignment

4 pole, male

4 pole, female



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black



Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male/female connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PUR
 Cable no. 910301 (4 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0810 0805 04 301 0.6m	4	PUR, black	0.6
0810 0805 04 301 1.5m	4	PUR, black	1.5
0810 0805 04 301 2m	4	PUR, black	2
0810 0805 04 301 5m	4	PUR, black	5

More pole numbers and cable lengths on request.

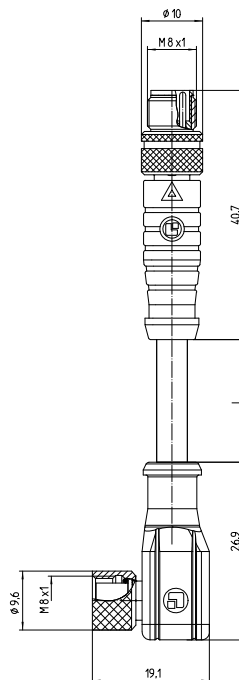
M8 0810 0806 ... L1 3...

Actuator/sensor cordset **PUR, LED**
Double-ended with male and female connector
Threaded joint, IP67

CE US [pending]



M8 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67
Cable end 1: M8 male connector, straight, A-coded
Cable end 2: M8 female connector, angled, with LED L1, A-coded
Cable: PUR, black



Pin Assignment

3 pole, male

3 pole, female



1 = brown
3 = blue
4 = black



Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body TPU GF, HB according to UL 94
 Contact bush/contact pin CuZn, pre-nickel and gold-plated
 Overmolding/handle TPU, halogen-free
 Knurled nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male/female connectors according to IEC 61076-2-104

Connected Cable³

Cable jacket PUR
 Cable no. 910300 (3 x 0.34 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 10-30 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

³ specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
0810 0806 03 L1 300 0.3m	3	PUR, black	0.3
0810 0806 03 L1 300 1m	3	PUR, black	1
0810 0806 03 L1 300 2m	3	PUR, black	2
0810 0806 03 L1 300 5m	3	PUR, black	5

More pole numbers and cable lengths on request.





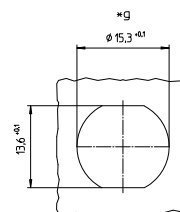
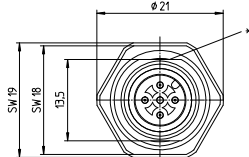
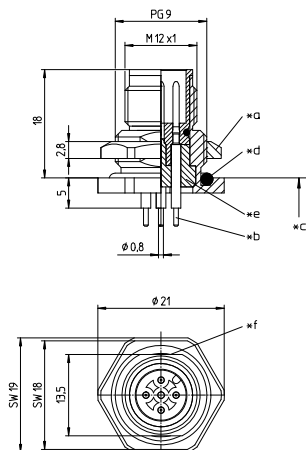
Panel Mount Connectors

M12

1231 ... T9CP

Panel mount connector
Rear side mounting
Thread PG9, IP 67

 [pending]



M12 panel mount connector, male, A-coded, IP67, for rear side mounting, thread PG9, for printed circuit boards

- *a nut
- *b solder pin for bore hole in printed circuit board Ø 1.2 mm
- *c mounting direction
- *d O-ring gasket
- *e contact area potted
- *f anti-rotation
- *g port in mounting plate

Pin Assignment and Printed Circuit Board Layouts

4 pole



5 pole



8 pole





Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body PA
 Contact pin CuZn, pre-nickel and gold-plated
 Housing CuZn, nickel-plated
 Hexagonal nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 female connectors according to IEC 61076-2-101

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage³ 60 V AC/DC
 Rated impulse voltage³ 1.50 kV
 Material group³ I (IEC)/0 (UL) (CTI=600)
 Overvoltage category³ II
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
³ acc. to IEC 60664/DIN EN 60664, CTI UL classification acc. to ANSI/UL 746A

Designation	Poles	Cable	Cable Lengths [L] in m
1231 04 T9CP	4		
1231 05 T9CP	5		
1231 08 T9CP	8		

More pole numbers on request.

M12

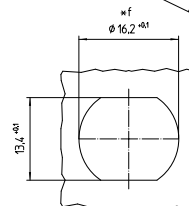
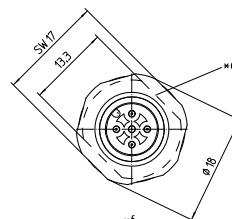
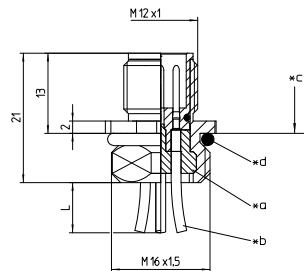
1230 ... T16CW ...

Panel mount connector
Front mounting
Thread M16, IP 67

 [pending]



M12 panel mount connector, male, A-coded, IP67, for front mounting, thread M16, with stranded wires



- *a contact area potted
- *b stranded wire
- *c mounting direction
- *d O-ring gasket
- *e anti-rotation
- *f port in mounting plate

Pin Assignment

4 pole



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black

5 pole



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black
- 5 = green/yellow

8 pole



- 1 = white
- 2 = brown
- 3 = green
- 4 = yellow
- 5 = gray
- 6 = pink
- 7 = blue
- 8 = red



Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body PA
 Contact pin CuZn, pre-nickel and gold-plated
 Housing CuZn, nickel-plated
 Hexagonal nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 female connectors according to IEC 61076-2-101

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage³ 60 V AC/DC
 Rated impulse voltage³ 1.50 kV
 Material group³ I (IEC)/0 (UL) (CTI=600)
 Overvoltage category³ II
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
³ acc. to IEC 60664/DIN EN 60664, CTI UL classification acc. to ANSI/UL 746A

Designation	Poles	Cable	Cable Lengths [L] in m
1230 04 T16CW 0.5m	4	PVC	0.5
1230 05 T16CW 0.5m	5	PVC	0.5
1230 08 T16CW 0.5m	8	PVC	0.5

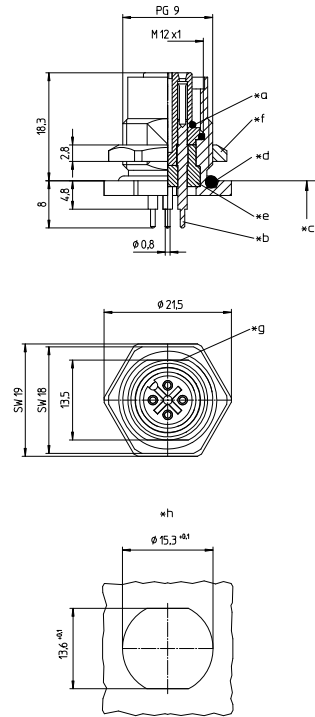
More pole numbers on request.

M12

1221 ... T9CP

Panel mount connector
Rear side mounting
Thread PG9, IP 67

CEC US [pending]



M12 panel mount connector, female, A-coded, IP67, for rear side mounting, thread PG9, for printed circuit boards

- *a O-ring gasket
- *b solder pin for bore hole in printed circuit board $\varnothing 1.2$ mm
- *c mounting direction
- *d O-ring gasket
- *e contact area potted
- *f nut
- *g anti-rotation
- *h port in mounting plate

Pin Assignment and Printed Circuit Board Layouts

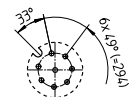
4 pole



5 pole



8 pole





Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body PA
 Contact bush CuZn, pre-nickel and gold-plated
 Housing CuZn, nickel-plated
 Hexagonal nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage³ 60 V AC/DC
 Rated impulse voltage³ 1.50 kV
 Material group³ I (IEC)/0 (UL) (CTI=600)
 Overvoltage category³ II
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
³ acc. to IEC 60664/DIN EN 60664, CTI UL classification acc. to ANSI/UL 746A

Designation	Poles	Cable	Cable Lengths [L] in m
1221 04 T9CP	4		
1221 05 T9CP	5		
1221 08 T9CP	8		

More pole numbers on request.

M12

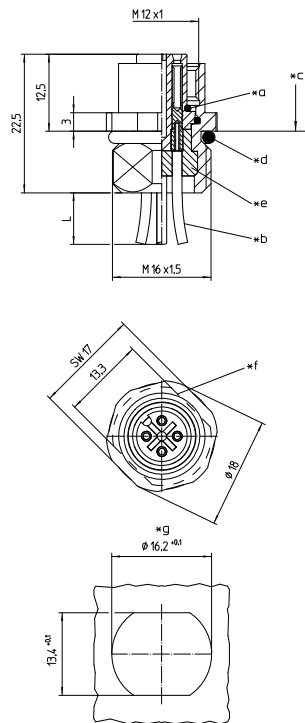
1220 ... T16CW ...

Panel mount connector
Front mounting
Thread M16, IP 67

CEC US [pending]



M12 panel mount connector, female, A-coded, IP67, for front mounting, thread M16, with stranded wires



- *a O-ring gasket
- *b stranded wire
- *c mounting direction
- *d O-ring gasket
- *e contact area potted
- *f anti-rotation
- *g port in mounting plate

Pin Assignment

4 pole



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black

5 pole



- 1 = brown
- 2 = white
- 3 = blue
- 4 = black
- 5 = green/yellow

8 pole



- 1 = white
- 2 = brown
- 3 = blue
- 4 = yellow
- 5 = gray
- 6 = pink
- 7 = blue
- 8 = red



Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body PA
 Contact bush CuZn, pre-nickel and gold-plated
 Housing CuZn, nickel-plated
 Hexagonal nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 10 N
 Withdrawal force¹ ≤ 15 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage³ 60 V AC/DC
 Rated impulse voltage³ 1.50 kV
 Material group³ I (IEC)/0 (UL) (CTI=600)
 Overvoltage category³ II
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
³ acc. to IEC 60664/DIN EN 60664, CTI UL classification acc. to ANSI/UL 746A

Designation	Poles	Cable	Cable Lengths [L] in m
1220 04 T16CW 0.5m	4	PVC	0.5
1220 05 T16CW 0.5m	5	PVC	0.5
1220 08 T16CW 0.5m	8	PVC	0.5

More pole numbers on request.

M8

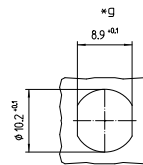
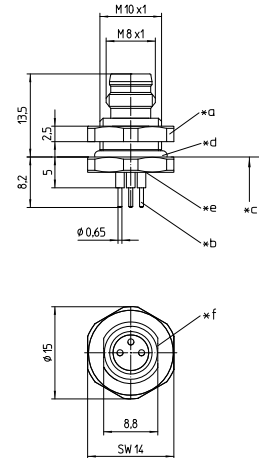
0831 ... T10CP

Panel mount connector
Rear side mounting
Thread M10, IP 67

CEC US [pending]



M8 panel mount connector, male, A-coded, IP67,
for rear side mounting, thread M10, for printed
circuit boards



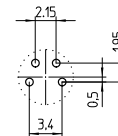
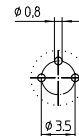
- *a nut
- *b solder pin for bore hole in printed circuit board $\varnothing 0.8$ mm
- *c mounting direction
- *d O-ring gasket
- *e contact area potted
- *f anti-rotation
- *g port in mounting plate

Pin Assignment and Printed Circuit Board Layouts

3 pole



4 pole





Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body PA
 Contact pin CuZn, pre-nickel and gold-plated
 Housing CuZn, nickel-plated
 Hexagonal nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 female connectors according to IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
0831 03 T10CP	3		
0831 04 T10CP	4		

More pole numbers on request.

M8

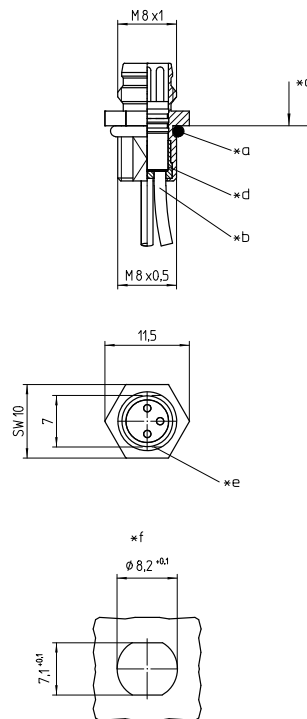
0830 ... T8CW ...

Panel mount connector
Front mounting
Thread M8, IP 67

 [pending]



M8 panel mount connector, male, A-coded, IP67,
for front mounting, thread M8, with stranded
wires



- *a O-ring gasket
- *b stranded wire
- *c mounting direction
- *d contact area potted
- *e anti-rotation
- *f port in mounting plate

Pin Assignment

3 pole



1 = brown
3 = blue
4 = black

4 pole



1 = brown
2 = white
3 = blue
4 = black



Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body PA
 Contact pin CuZn, pre-nickel and gold-plated
 Housing CuZn, nickel-plated
 Hexagonal nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 female connectors according to IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
0830 03 T8CW 0.5m	3	PVC	0.5
0830 04 T8CW 0.5m	4	PVC	0.5

More pole numbers on request.

M8

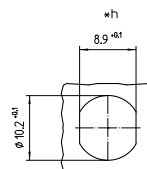
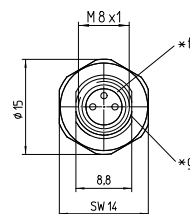
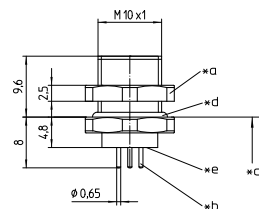
0821 ... T10CP

Panel mount connector
Rear side mounting
Thread M10, IP 67

CAI US [pending]



M8 panel mount connector, female, A-coded, IP67, for rear side mounting, thread M10, for printed circuit boards



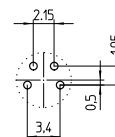
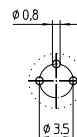
- *a nut
- *b solder pin for bore hole in printed circuit board $\varnothing 0.8$ mm
- *c mounting direction
- *d O-ring gasket
- *e contact area potted
- *f O-ring gasket
- *g anti-rotation
- *h port in mounting plate

Pin Assignment and Printed Circuit Board Layouts

3 pole



4 pole





Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body PA
 Contact bush CuZn, pre-nickel and gold-plated
 Hexagonal nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC
 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart

² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
0821 03 T10CP	3		
0821 04 T10CP	4		

More pole numbers on request.

M8

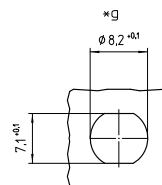
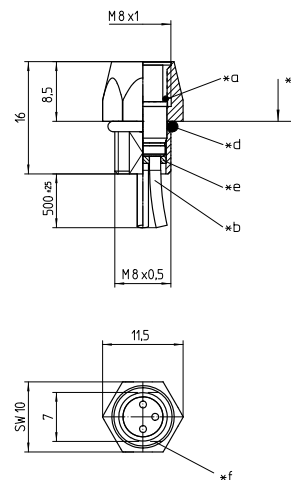
0820 ... T8CW ...

Panel mount connector
Front mounting
Thread M8, IP 67

CEC US [pending]



M8 panel mount connector, female, A-coded, IP67, for front mounting, thread M8, with stranded wires



- *a O-ring gasket
- *b stranded wire
- *c mounting direction
- *d O-ring gasket
- *e contact area potted
- *f anti-rotation
- *g port in mounting plate

Pin Assignment

3 pole



1 = brown
3 = blue
4 = black

4 pole



1 = brown
2 = white
3 = blue
4 = black



Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body PA
 Contact bush CuZn, pre-nickel and gold-plated
 Hexagonal nut CuZn, nickel-plated
 Seal FKM

Mechanical Data

Insertion force¹ ≤ 23 N
 Withdrawal force¹ ≤ 23 N
 Mating cycles ≥ 100
 Protection degree² IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 10 mΩ
 Rated current at T_{amb} 40 °C 4 A
 Rated voltage 50 V AC/60 V DC

 Rated impulse voltage 1.50 kV
 Material group I (IEC)/0 (UL) (CTI=600)
 Pollution degree 3
 Insulation resistance > 100 MΩ

¹ measured with a proper counterpart
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
0820 03 T8CW 0.5m	3	PVC	0.5
0820 04 T8CW 0.5m	4	PVC	0.5

More pole numbers on request.





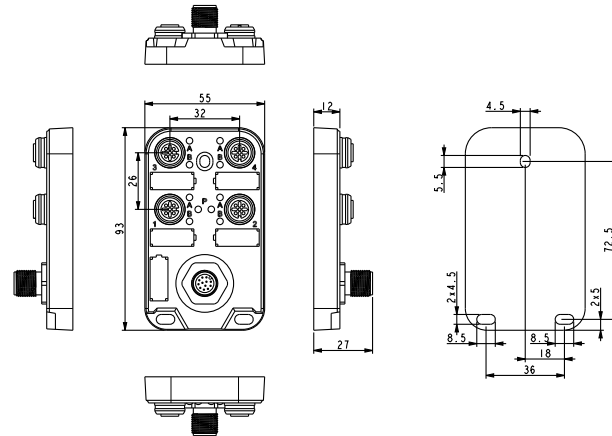
Passive Distribution Boxes

M12

5512 04L1

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]

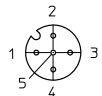


Passive distribution box M12, 4-port, single signal, with LEDs, IP67

Main connection: M12

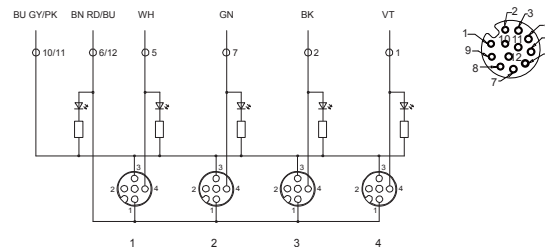
Pin Assignment

4 pole



- 1 = +
- 2 = not con.
- 3 = -
- 4 = S1
- 5 = PE

Wiring diagram





5512 04L1

M12

Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 1.5 A per port
 ≤ 4.5 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
5512 04L1	4 x 4		

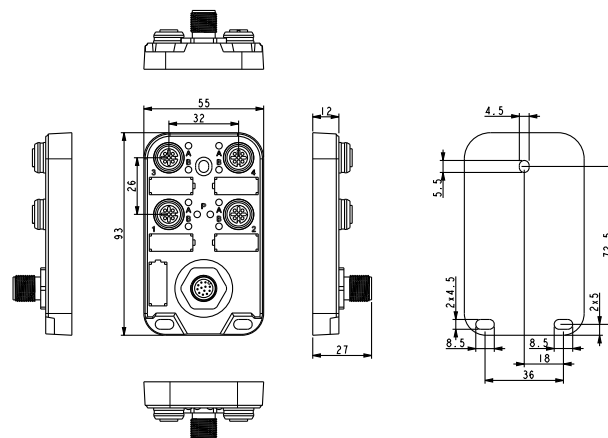
More pole numbers and cable lengths on request.

M12

5512 04DL1

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M12, 4-port, double signal, with LEDs, IP67

Main connection: M12

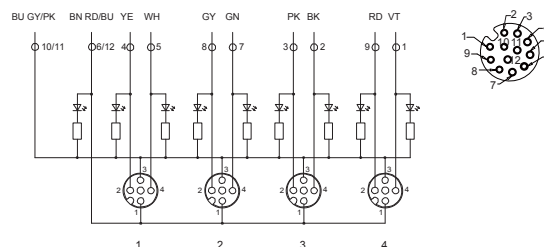
Pin Assignment

5 pole



- 1 = +
- 2 = S2
- 3 = -
- 4 = S1
- 5 = PE

Wiring diagram





Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 1.5 A per port
 ≤ 4.5 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
5512 04DL1	4 x 5		

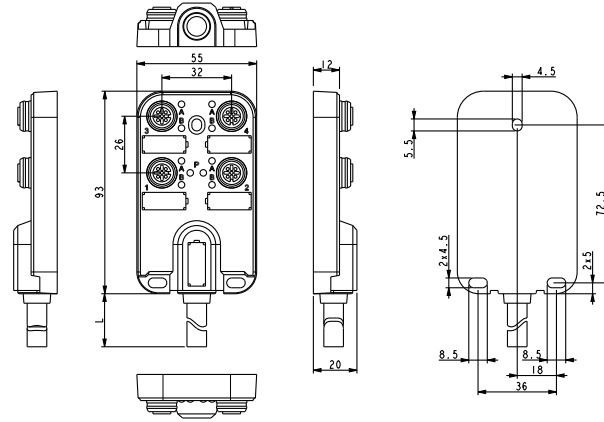
More pole numbers and cable lengths on request.

M12

5500 04L1 3...

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]

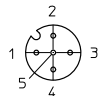


Passive distribution box M12, 4-port, single signal, with LEDs, IP67

Main connection: Cable, PUR, gray

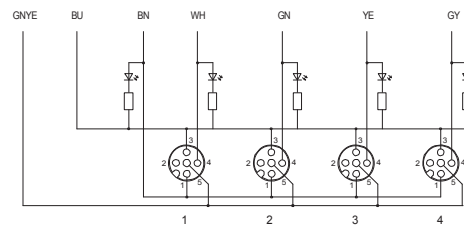
Pin Assignment

4 pole



- 1 = +
- 2 = not con.
- 3 = -
- 4 = S1
- 5 = PE

Wiring diagram





Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable²

Cable jacket PUR
 Cable no. 910311 (4 x 0.34 mm², 3 x 0.75 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 2 A per port
 ≤ 8 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
² specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
5500 04L1 311 5m	4 x 4	PUR, gray	5
5500 04L1 311 10m	4 x 4	PUR, gray	10

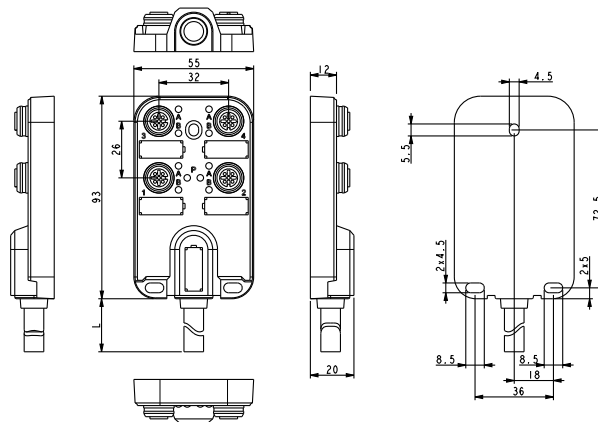
More pole numbers and cable lengths on request.

M12

5500 04DL1 3...

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M12, 4-port, double signal, with LEDs, IP67

Main connection: Cable, PUR, gray

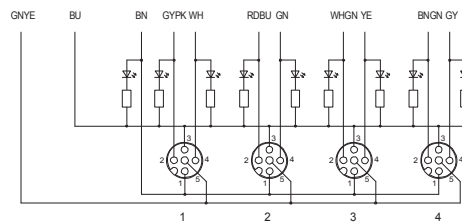
Pin Assignment

5 pole



- 1 = +
- 2 = S2
- 3 = -
- 4 = S1
- 5 = PE

Wiring diagram





Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable²

Cable jacket PUR
 Cable no. 910314 (8 x 0.34 mm², 3 x 0.75 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 2 A per port
 ≤ 8 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
² specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
5500 04DL1 314 5m	4 x 5	PUR, gray	5
5500 04DL1 314 10m	4 x 5	PUR, gray	10

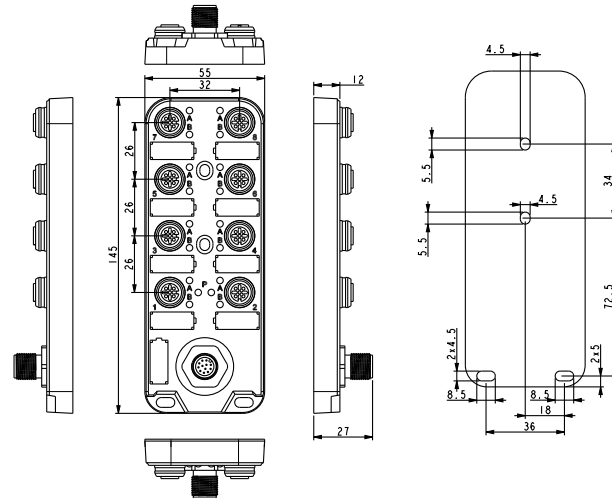
More pole numbers and cable lengths on request.

M12

5512 08L1

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M12, 8-port, single signal, with LEDs, IP67

Main connection: M12

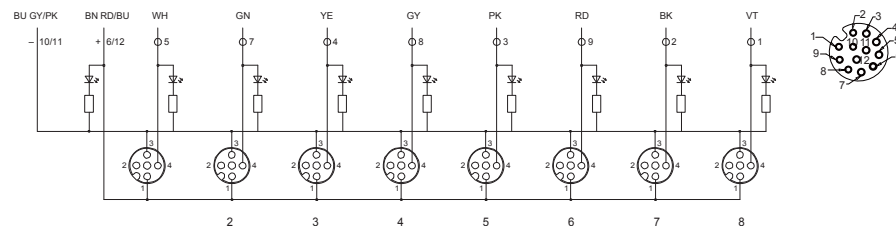
Pin Assignment

4 pole



- 1 = +
- 2 = not con.
- 3 = -
- 4 = S1
- 5 = PE

Wiring diagram





5512 08L1

M12

Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 1.5 A per port
 ≤ 4.5 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
5512 08L1	8 x 4		

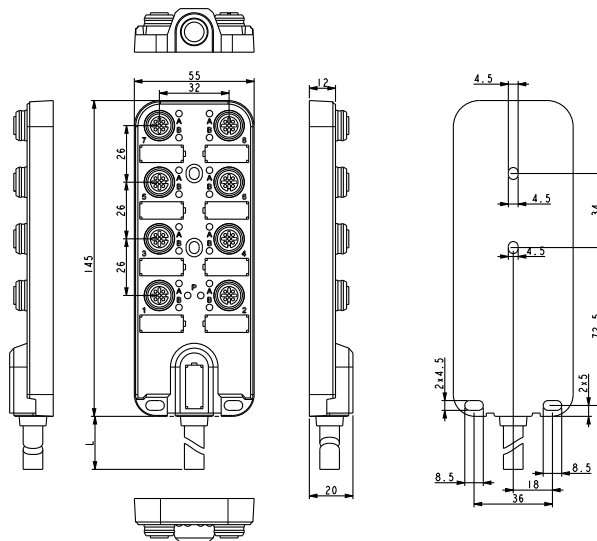
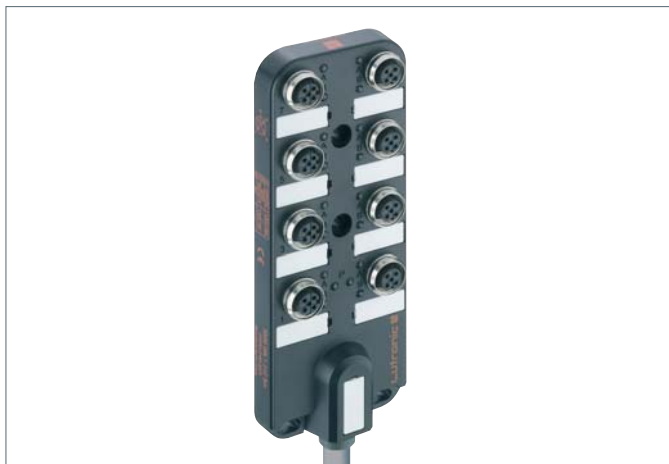
More pole numbers and cable lengths on request.

M12

5500 08L1 3...

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M12, 8-port, single signal, with LEDs, IP67

Main connection: Cable, PUR, gray

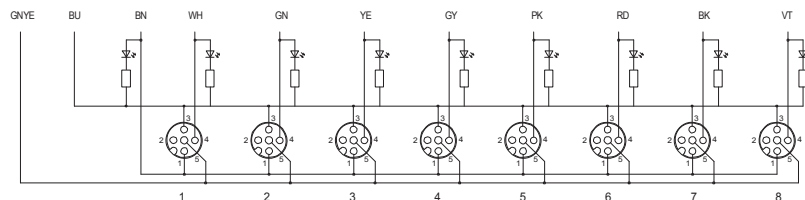
Pin Assignment

4 pole



- 1 = +
- 2 = not con.
- 3 = -
- 4 = S1
- 5 = PE

Wiring diagram





Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable²

Cable jacket PUR
 Cable no. 910312 (8 x 0.34 mm², 3 x 0.75 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 2 A per port
 ≤ 8 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
² specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
5500 08L1 312 5m	8 x 4	PUR, gray	5
5500 08L1 312 10m	8 x 4	PUR, gray	10

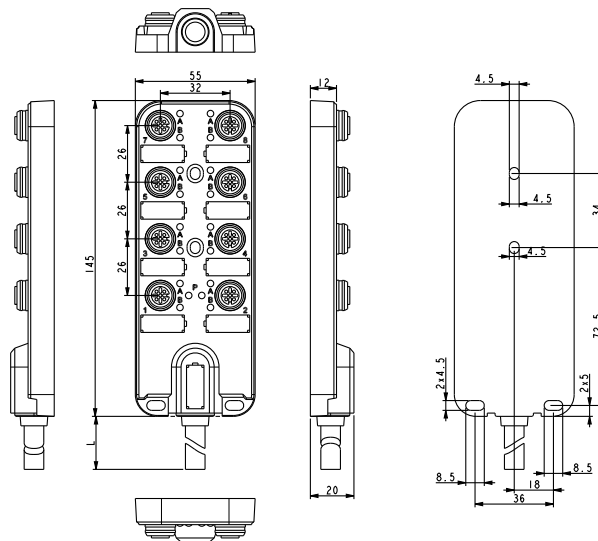
More pole numbers and cable lengths on request.

M12

5500 08DL1 3...

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M12, 8-port, double signal, with LEDs, IP67

Main connection: Cable, PUR, gray

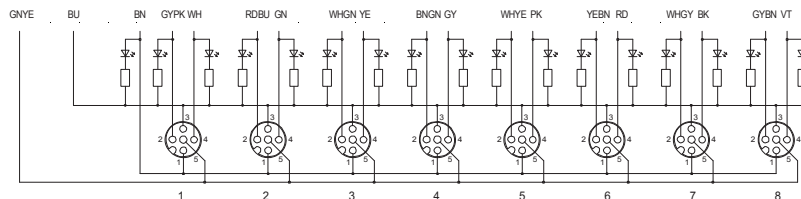
Pin Assignment

5 pole



- 1 = +
- 2 = S2
- 3 = -
- 4 = S1
- 5 = PE

Wiring diagram





Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M12 male connectors according to IEC 61076-2-101

Connected Cable²

Cable jacket PUR
 Cable no. 910313 (16 x 0.34 mm², 3 x 0.75 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 2 A per port
 ≤ 8 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
² specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
5500 08DL1 313 5m	8 x 5	PUR, gray	5
5500 08DL1 313 10m	8 x 5	PUR, gray	10

More pole numbers and cable lengths on request.

Accessories for Actuator/Sensor distribution boxes



Protecting cap, IP67, for male M12 connectors

Materials

Cap PC/ABS

Mechanical Data

Protection degree IP67

Designation	Poles	Cable	Cable Lengths [L] in m
9912 CPM0			



Accessories for Actuator/Sensor distribution boxes



Protecting cap, IP67, for female M12 connectors

Materials

Cap PC/ABS

Mechanical Data

Protection degree IP67

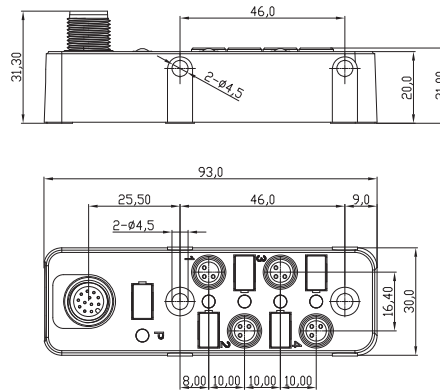
Designation	Poles	Cable	Cable Lengths [L] in m
9912 CPF0			

M8

5012 04L1

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M8, 4-port, single signal, with LEDs, IP67

Main connection: M12

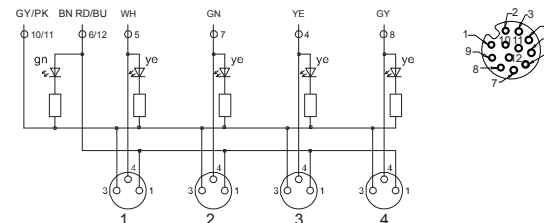
Pin Assignment

3 pole



1 = +
3 = -
4 = S1

Wiring diagram





5012 04L1

M8

Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and gold-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 1.5 A per port
 ≤ 4.5 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
5012 04L1	4 x 3		

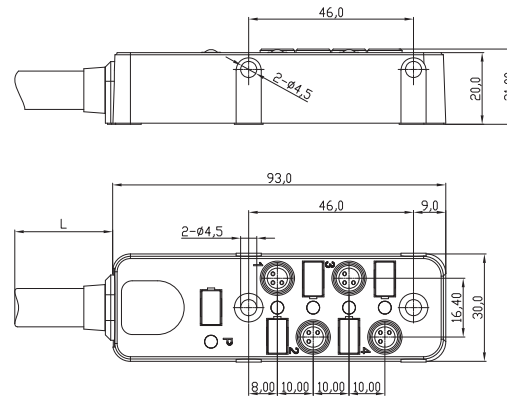
More pole numbers and cable lengths on request.

M8

5000 04L1 3...

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M8, 4-port, single signal, with LEDs, IP67

Main connection: Cable, PUR, gray

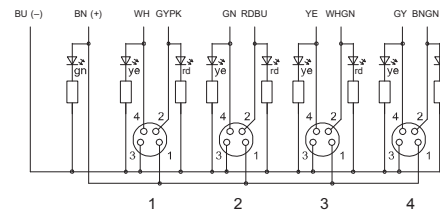
Pin Assignment

3 pole



1 = +
3 = -
4 = S1

Wiring diagram





Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable²

Cable jacket PUR
 Cable no. 910307 (4 x 0.22 mm², 2 x 0.50 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 2 A per port
 ≤ 8 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
² specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
5000 04L1 307 5m	4 x 3	PUR, gray	5
5000 04L1 307 10m	4 x 3	PUR, gray	10

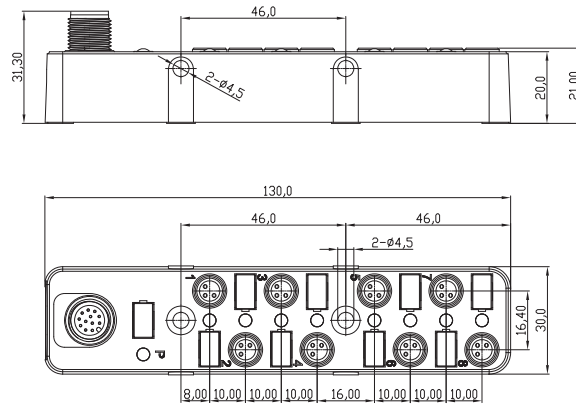
More pole numbers and cable lengths on request.

M8

5012 08L1

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M8, 8-port, single signal, with LEDs, IP67

Main connection: M12

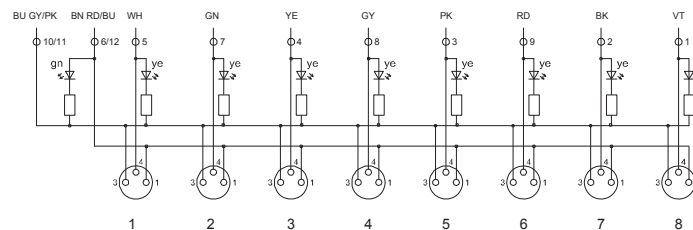
Pin Assignment

3 pole



1 = +
3 = -
4 = S1

Wiring diagram





5012 08L1

M8

Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and gold-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 1.5 A per port
 ≤ 4.5 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
5012 08L1	8 x 3		

More pole numbers and cable lengths on request.



Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable²

Cable jacket PUR
 Cable no. 910308 (8 x 0.22 mm², 2 x 0.50 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 2 A per port
 ≤ 8 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
² specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
5000 08L1 307 5m	8 x 3	PUR, gray	5
5000 08L1 307 10m	8 x 3	PUR, gray	10

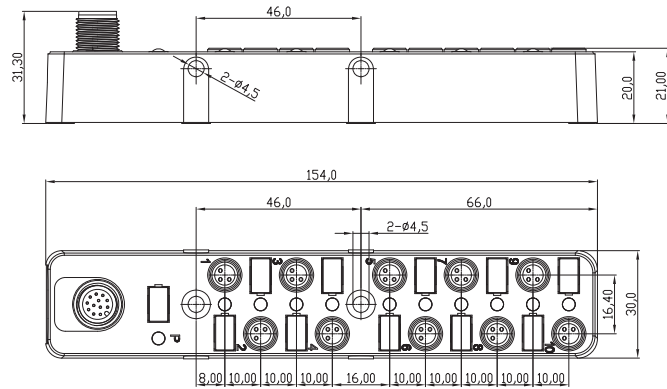
More pole numbers and cable lengths on request.

M8

5012 10L1

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M8, 10-port, single signal, with LEDs, IP67

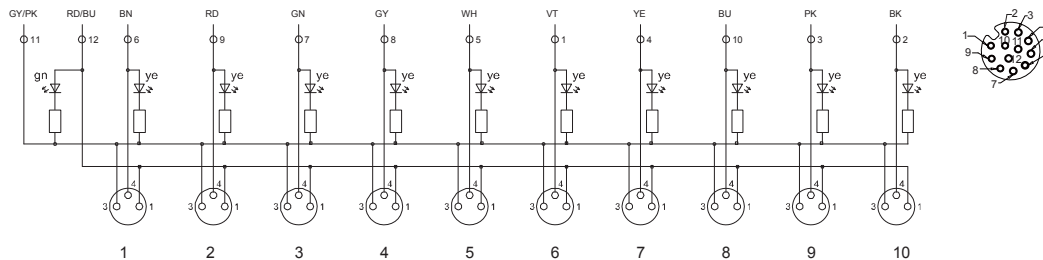
Main connection: M12

Pin Assignment Wiring diagram

3 pole



1 = +
3 = -
4 = S1





5012 10L1

M8

Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and gold-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 1.5 A per port
 ≤ 4.5 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Designation	Poles	Cable	Cable Lengths [L] in m
5012 10L1	10 x 3		

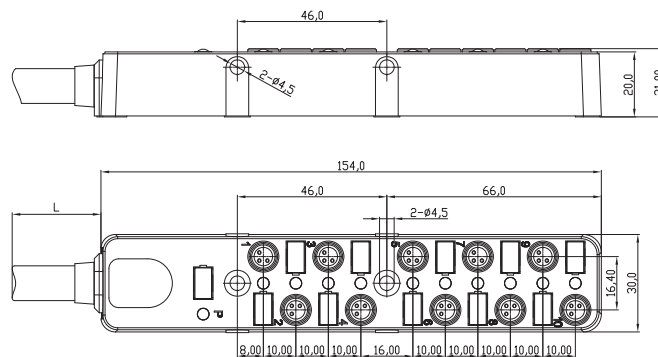
More pole numbers and cable lengths on request.

M8

5000 10L1 3...

Actuator/Sensor distribution boxes

CE | cRU_{us} [pending]



Passive distribution box M8, 10-port, single signal, with LEDs, IP67

Main connection: Cable, PUR, gray

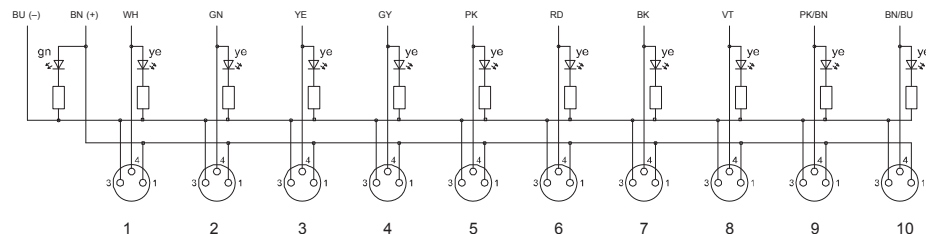
Pin Assignment

3 pole



- 1 = +
- 3 = -
- 4 = S1

Wiring diagram





Temperature Range

Temperature range -40 °C/+80 °C

Materials

Insulating body PA, V-2 according to UL94
 Contact CuZn, pre-nickel and tin-plated
 Connector thread CuZn, nickel-plated
 Housing PC/ABS
 Resistance Good resistance against chemicals and oils. Resistance against aggressive media to be individually verified for each application

Mechanical Data

Protection degree¹ IP67
 Mating connectors M8 male connectors according to IEC 61076-2-104

Connected Cable²

Cable jacket PUR
 Cable no. 910317 (10 x 0.22 mm², 2 x 0.50 mm²)
 UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance ≤ 5 mΩ
 Nominal current ≤ 2 A per port
 ≤ 8 A per port
 Nominal voltage 10–30 V DC (24 V DC)

¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart
² specifications on page 125

Designation	Poles	Cable	Cable Lengths [L] in m
5000 10L1 317 5m	10 x 3	PUR, gray	5
5000 10L1 317 10m	10 x 3	PUR, gray	10

More pole numbers and cable lengths on request.

Accessories for Actuator/Sensor distribution boxes



Protecting cap, IP67, for male M8 connectors

Materials

Cap PC/ABS

Mechanical Data

Protection degree IP67

Designation	Poles	Cable	Cable Lengths [L] in m
9908 CPM0			



Accessories for Actuator/Sensor distribution boxes



Protecting cap, IP67, for female M8 connectors

Materials

Cap PC/ABS

Mechanical Data

Protection degree IP67

Designation	Poles	Cable	Cable Lengths [L] in m
9908 CPF0			

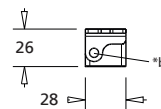
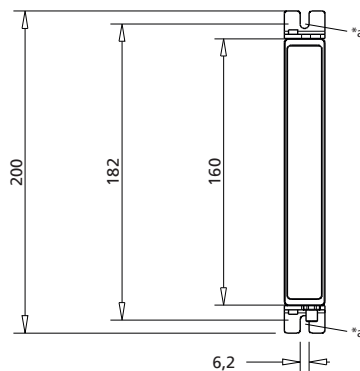




High Power LED Lights

6157 8055 S01 4W

High-power LED lights

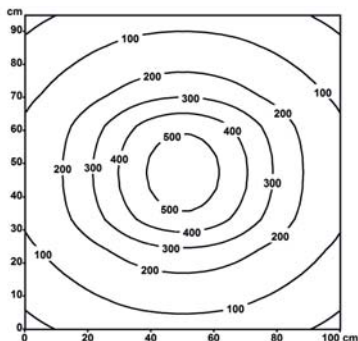


Linear LED light, 4 W, 160 mm length, with solid aluminum housing and frosted tempered glass, IP67, with male M8 connector

*a for fixation by means of screws M5 or M6, max. bolt head diameter 12 mm
*b hinged fixation

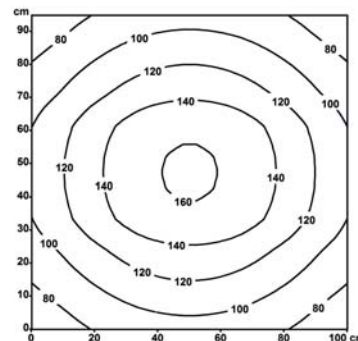
Illuminance with measuring distance 50 cm

Em: 206 lx
Emax: 561 lx
Emin: 47 lx



Illuminance with measuring distance 100 cm

Em: 117 lx
Emax: 163 lx
Emin: 68 lx

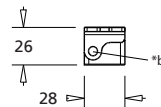
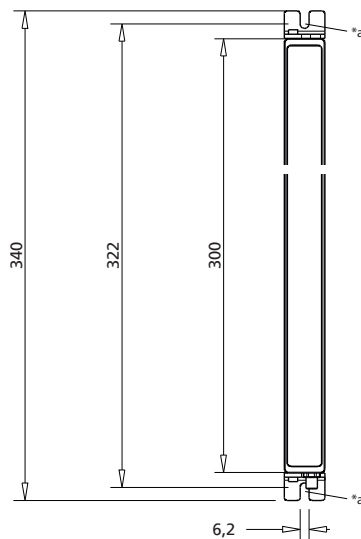


6157 8055 S03 8W

High-power LED lights



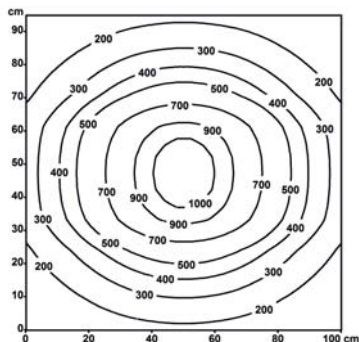
Linear LED light, 8 W, 300 mm length, with solid aluminum housing and frosted tempered glass, IP67, with male M8 connector



*a for fixation by means of screws M5 or M6, max. bolt head diameter 12 mm
*b hinged fixation

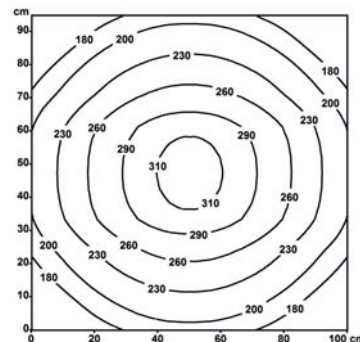
Illuminance with measuring distance 50 cm

Em: 432 lx
Emax: 1.077 lx
Emin: 109 lx



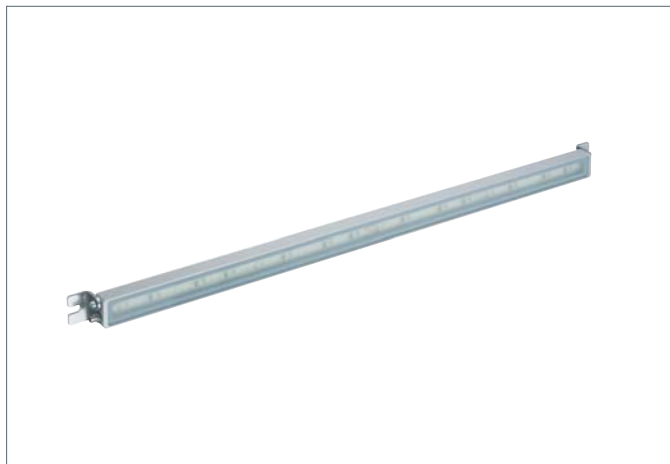
Illuminance with measuring distance 100 cm

Em: 234 lx
Emax: 318 lx
Emin: 143 lx

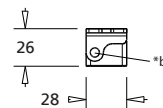
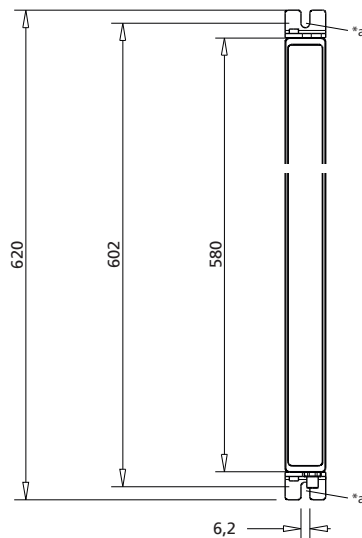


6157 8055 S06 16W

High-power LED lights



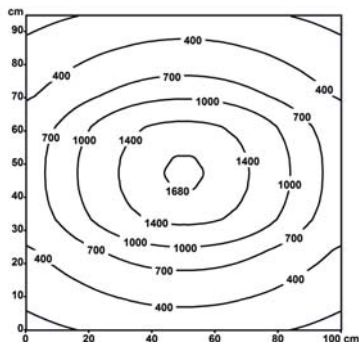
Linear LED light, 16 W, 580 mm length, with solid aluminum housing and frosted tempered glass, IP67, with male M8 connector



*a for fixation by means of screws M5 or M6, max. bolt head diameter 12 mm
*b hinged fixation

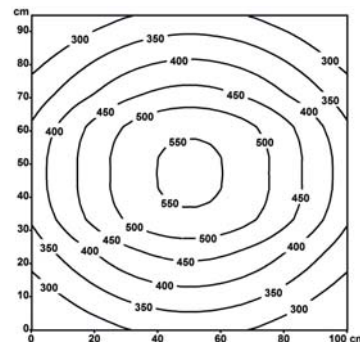
Illuminance with measuring distance 50 cm

Em: 741 lx
Emax: 1.718 lx
Emin: 180 lx



Illuminance with measuring distance 100 cm

Em: 409 lx
Emax: 564 lx
Emin: 244 lx





6157 8055 S06 16W

Temperature Range

Temperature range ≤ 50 °C

Materials

Housing aluminum, anodized
Lamp cover tempered glass, frosted

Mechanical Data

Protection degree IP67
Weight ca. 520 g
Mating connectors M8 female connectors acc. to IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Power consumption 16 W
Connected load 24 V DC (-10 %/+15 %)
Nominal current 0.67 A
Appliance class III

Associated products

Illuminant LED, energy efficiency class A+
Luminaire luminous flux ca. 1.680 lm
Luminaire luminous efficacy ca. 105 lm/W
Light color daylight white
Color temperature ca. 5.500 K
Color rendering index > 80
Light distribution direct, wide radiation, > 120°

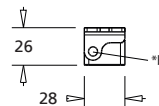
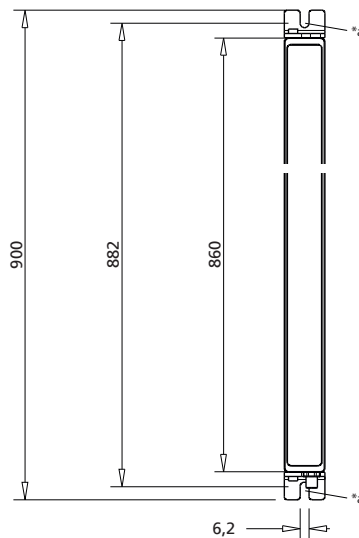
Designation	Poles	Cable	Cable Lengths [L] in m
6157 8055 S06 16W			

6157 8055 S09 24W

High-power LED lights



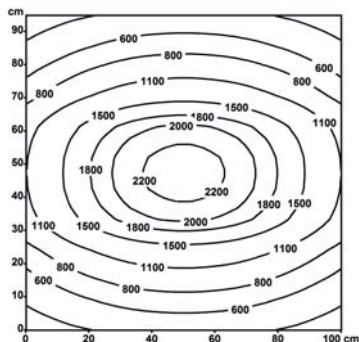
Linear LED light, 24 W, 860 mm length, with solid aluminum housing and frosted tempered glass, IP67, with male M8 connector



*a for fixation by means of screws M5 or M6, max. bolt head diameter 12 mm
*b hinged fixation

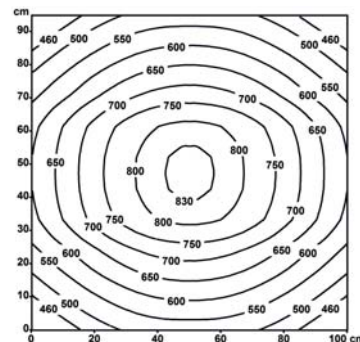
Illuminance with measuring distance 50 cm

Em: 1.168 lx
Emax: 2.300 lx
Emin: 348 lx

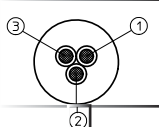
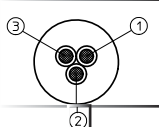
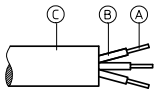
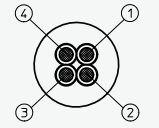
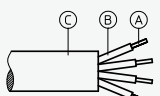
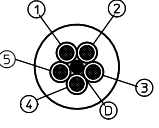
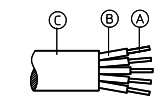
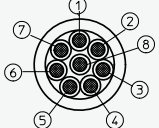
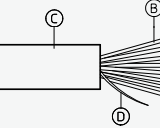
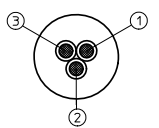
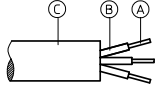
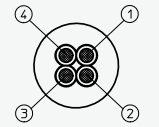
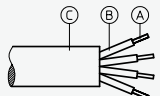
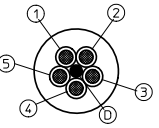
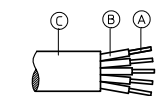
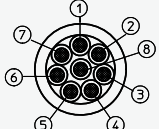
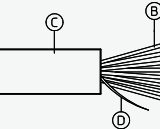


Illuminance with measuring distance 100 cm

Em: 645 lx
Emax: 841 lx
Emin: 417 lx



Cable Specifications

Code	Cable No.	Cable Type	UL Style	Approvals	Construction			
						A = Conductor B = Insulation C = Jacket D = Wrapping	Single Core	
							Conductor Construction	Surface
001	910001	LiYY	2464	cULus			42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
002	910002	LiYY	2464	cULus			42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
003	910003	LiYY	2464	cULus			42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
004	910004	LiYY	2464	cULus			32 x 0.10 mm = 0.25 mm ² (AWG 24)	blank
300	910300	Li9YH-11YH	20549	cULus			42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
301	910301	Li9YH-11YH	20549	cULus			42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
302	910301	Li9YH-11YH	20549	cULus			42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
303	910303	Li9YH-11YH	20549	cULus			32 x 0.10 mm = 0.25 mm ² (AWG 24)	blank



	Construction							Remarks	Code
	Single Core			Shielding	Jacket				
	Insulation				Material	Ø	Surface		
Material	Ø	Colors		Material	Ø	Surface	Color		
PVC	1.50 ±0.05 mm	brown/blue/black	-	PVC	5.00 ±0.2 mm	matt	black RAL 9005	001	
PVC	1.50 ±0.05 mm	brown/white/blue/black	-	PVC	5.20 ±0.2 mm	matt	black RAL 9005	002	
PVC	1.50 ±0.05 mm	brown/white/blue/black/ green yellow	-	PVC	5.70 ±0.2 mm	matt	black RAL 9005	003	
PVC	1.30 ±0.05 mm	white/brown/green/yellow/ gray/pink/blue/red	-	PVC	6.00 ±0.2 mm	matt	black RAL 9005	004	
PP	1.30 ±0.05 mm	brown/blue/black	-	PUR	4.30 ±0.2 mm	matt	black RAL 9005	entire cable halogen-free	300
PP	1.30 ±0.05 mm	brown/white/blue/black	-	PUR	4.70 ±0.2 mm	matt	black RAL 9005	entire cable halogen-free	301
PP	1.30 ±0.05 mm	brown/white/blue/black/ green yellow	-	PUR	5.70 ±0.2 mm	matt	black RAL 9005	entire cable halogen-free	302
PP	1.17 ±0.05 mm	white/brown/green/yellow/ gray/pink/blue/red	-	PUR	6.00 ±0.2 mm	matt	black RAL 9005	entire cable halogen-free	303

Kabelspezifikationen

Code	Cable No.	Cable Type	UL Style	Approvals	Construction			
							Single Core	
							Conductor	Surface
						Construction	Surface	
307	910307	Li9YH-11YH	20549	cULus			44 x 0.08 mm = 0.25 mm ² (AWG 24) 100 x 0.08 mm = 0.50 mm ² (AWG 21)	blank
308	910308	Li9YH-11YH	20549	cULus			44 x 0.08 mm = 0.25 mm ² (AWG 24) 100 x 0.08 mm = 0.50 mm ² (AWG 21)	blank
311	910311	Li9YH-11YH	20549	cULus			65 x 0.08 mm = 0.34 mm ² (AWG 22) 150 x 0.08 mm = 0.75 mm ² (AWG 20)	blank
312	910312	Li9YH-11YH	20549	cULus			65 x 0.08 mm = 0.34 mm ² (AWG 22) 150 x 0.08 mm = 0.75 mm ² (AWG 20)	blank
313	910313	Li9YH-11YH	20549	cULus			65 x 0.08 mm = 0.34 mm ² (AWG 22) 150 x 0.08 mm = 0.75 mm ² (AWG 20)	blank
314	910314	Li9YH-11YH	20549	cULus			65 x 0.08 mm = 0.34 mm ² (AWG 22) 150 x 0.08 mm = 0.75 mm ² (AWG 20)	blank
315	910315	Li9YH-11YH	20549	cULus			32 x 0.10 mm = 0.25 mm ² (AWG 24)	blank
317	910317	Li9YH-11YH	20549	cULus			44 x 0.08 mm = 0.25 mm ² (AWG 24) 100 x 0.08 mm = 0.50 mm ² (AWG 21)	blank



	Construction							Remarks	Code
	Single Core			Shielding	Jacket				
	Insulation				Material	Ø	Surface		
Material	Ø	Colors		Material	Ø	Surface	Color		
PP	1.25 ±0.10 mm 1.60 ±0.10 mm	white/green/yellow/gray (0.22 mm ²) brown/black (0.50 mm ²)	-	PUR	6.80 ±0.3 mm	matt	gray RAL 7001	entire cable halogen-free	307
PP	1.25 ±0.10 mm 1.60 ±0.10 mm	white/green/yellow/gray/pink/ red/blue/violet (0.22 mm ²) brown/black (0.50 mm ²)	-	PUR	8.00 ±0.3 mm	matt	gray RAL 7001	entire cable halogen-free	308
PP	1.60 ±0.10 mm 1.90 ±0.10 mm	white/green/yellow/gray (0.34 mm ²) brown/blue/green/yellow (0.75 mm ²)	-	PUR	8.00 ±0.4 mm	matt	gray RAL 7001	entire cable halogen-free	311
PP	1.60 ±0.10 mm 1.90 ±0.10 mm	white/green/yellow/gray/pink/ red/black/violet (0.34 mm ²) blue/brown/green-yellow (0.75 mm ²)	-	PUR	9.60 ±0.4 mm	matt	gray RAL 7001	entire cable halogen-free	312
PP	1.60 ±0.10 mm 1.90 ±0.10 mm	green/white-green/yellow/brown- gray/pink-gray/white/red-blue/ gray/white-yellow/pink/yellow- brown/red/white-gray/black/ gray-brown/violet (0.34 mm ²) yellow/green/brown/blue (0.75 mm ²)	-	PUR	10.00 ±0.35 mm	matt	gray RAL 7001	entire cable halogen-free	313
PP	1.60 ±0.10 mm 1.90 ±0.10 mm	white/green/yellow/gray/gray- pink/red-blue/white-green/ brown-green (0.34 mm ²) brown/blue/yellow/green (0.75 mm ²)	-	PUR	9.60 ±0.4 mm	matt	gray RAL 7001	entire cable halogen-free	314
PP	1.17 ±0.05 mm	brown/blue/white/green/pink/ yellow/black/gray/red/violet/ gray-pink/red-blue	-	PUR	6.40 ±0.2 mm	matt	black RAL 9005		315
PP	1.25 ±0.10 mm 1.60 ±0.10 mm	white/green/yellow/gray/pink/ red/blue/violet/gray-pink/red- blue (0.22 mm ²) brown/blue (0.50 mm ²)	-	PUR	8.00 ±0.3 mm	matt	gray RAL 7001	entire cable halogen-free	317

Wire sections

For an easy orientation this table matches American Wire Gauge (AWG) values with the wire section in square millimeters.

AWG	Metric Equivalent (mm ²)
16	1,50
18	1,00
20	0,75
21	0,50
22	0,34
24	0,25
26	0,14

IMPORTANT NOTICES

Lutronic products can be used according to the characteristics specified in the data sheet. Beyond that, all applicable regulations, standards and directives for the use of these products and for the intended application must be obeyed by the user. It is the user's responsibility to ensure the appropriateness of a chosen Lutronic product for the intended application.

Due to continuous development of Lutronic products, serving technical progress, the descriptions and data provided herein are for information only and subject to change without notice.

We will be pleased to discuss detailed requirements.



INTERNATIONAL PROTECTION CLASSES ACCORDING TO DIN EN 60529 (IEC 529/VDE 047 T1)

Protection Classes

CODE LETTERS
(International
Protection)

FIRST INDEX FIGURE
(foreign bodies protection)

SECOND INDEX FIGURE
(water protection)

IP

6

8



INDEX	DEGREE OF PROTECTION
0	 No protection against accidental contact, no protection against solid foreign bodies
1	 Protection against contact with any large area by hand and against solid foreign bodies with $\varnothing > 50$ mm
2	 Protection against contact with the fingers, protection against solid foreign bodies with $\varnothing > 12$ mm
3	 Protection against tools, wires or similar objects with $\varnothing > 2.5$ mm, protection against solid foreign bodies with $\varnothing > 2.5$ mm
4	 As 3, however $\varnothing > 1$ mm
5	 Full protection against contact, protection against interior injurious dust deposits
6	 Total protection against contact, protection against penetration of dust

INDEX	DEGREE OF PROTECTION
0	 No protection against water
1	 Protection against vertical water drips
2	 Protection against diagonal water drips (up to a 15° angle)
3	 Protection against diagonal water drips (up to a 60° angle)
4	 Protection against water (out of a nozzle) from all directions
5	 Full protection against contact, protection against interior injurious dust deposits
6	 Protection against ingress of water in case of temporary flooding
7	 Protection against ingress of water in case of temporary immersion
8	 Protection against ingress of water in case of continuous immersion, requirements under agreement of user and manufacturer
9	 Protected against close-range high pressure, high temperature spray downs

Diagram in accordance with DIN VDE 470-1, DIN EN 60529, IEC 60529

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[885030A09M020](#) [1200650174](#) [1200651332](#) [1200651713](#) [1200660171](#) [1200660208](#) [1200660343](#) [1200660804](#) [1200660845](#) [1200660926](#)
[1200660977](#) [1200661173](#) [1200661354](#) [120066-1712](#) [1200720053](#) [1200720099](#) [1200720153](#) [1200720172](#) [1200720217](#) [1200720226](#)
[1200720251](#) [1200720285](#) [1200720296](#) [1200720404](#) [1200730148](#) [1200730378](#) [1200800231](#) [1200860112](#) [1200860121](#) [1200860125](#)
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